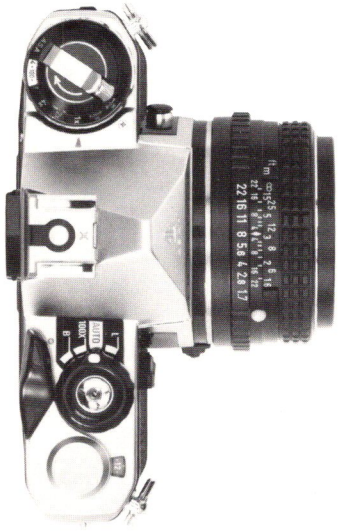
PENTAX

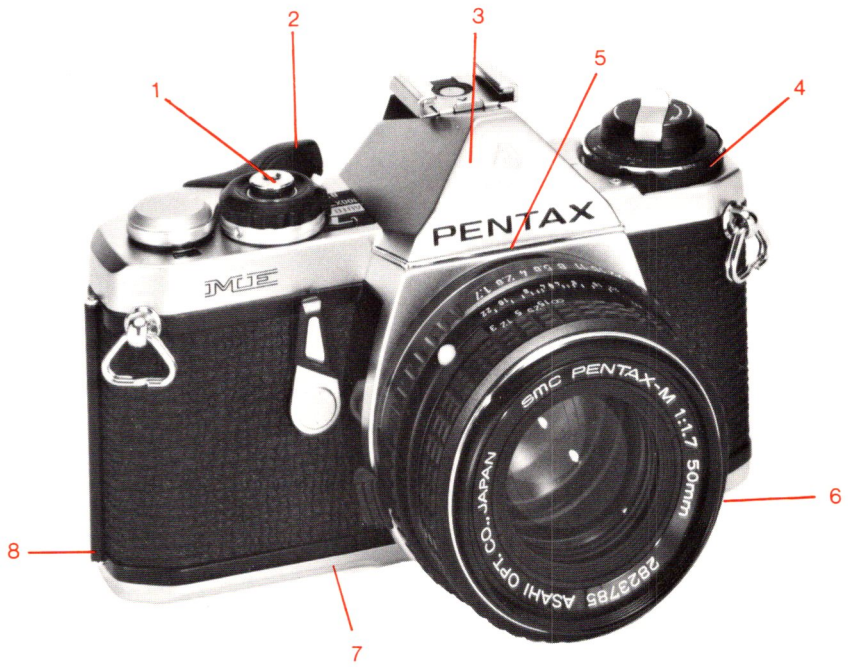
dealer catalog

PENTAX
ME Camera

ME with SMC Pentax-M 40mm f/2.8 lens illustrated actual size.



The petite ME with its rounded corners and contoured edges fits perfectly in one's hands, with all the controls falling in the right places. The ME is more than a compact and lightweight automatic camera, it is human-engineered for the ultimate in handling ease.



1. Shutter release/meter switch, fully automatic, Seiko stepless shutter 8 seconds to 1/1000 second and 1/100 sec. (manual override.) and B.
2. Film advance (fast, smooth 135° throw).
3. Large, bright viewfinder with LED shutter speed indicators.
4. Automatic exposure compensation dial (± 2 f/stops)
5. GPD (Gallium Arsenide Phosphorous Diode) metering (fast - accurate)
6. New compact 'M' lenses (bayonet mount — Super-Multi-Coated)
7. Winder ME easily attaches to camera.
8. "Magic Needle" film loading.

Introducing the smallest, lightest automatic 35mm SLR — the Pentax ME.

The new Pentax ME is also the most advanced 35mm SLR, with:

- Gallium Arsenide Phosphide Photo Diodes (GPD) for instant accurate metering.
- Light Emitting Diode — LED — exposure indicators, for an exposure indicator that is always visible.
- Seiko MFC Shutter — an accurate, durable metal focal plane shutter.
- Winder ME for automatic film advance at 1.5 frames per second.

The Pentax ME is backed by the complete Pentax System with over 40 Super-Multi-Coated Pentax lenses and accessories to fit any photographic situation.

The Pentax ME is designed to deliver best results for both the advanced photographer and the novice. All you do is focus and shoot.

Cat. No.	
06000	ME Body, Chrome (MP/SI)
06010	ME Body, Black (MP/SI)
37382	Winder ME
20167	40mm SMC Pentax-M f/2.8 lens
20947	SMC Pentax 50mm f/1.2 lens
20867	SMC Pentax-M 50mm f/1.4 lens
20877	SMC Pentax-M 50mm f/1.7 lens
32730	Soft Case for ME
32741	Front for SMCP 50mm f/1.2 for Soft Case ME
32742	Front for Soft Case and SMCP-M 40mm f/2.8 lens.
32750	Back Cover for Soft Case ME

For additional cases for ME, refer to Accessories Section.

PENTAX
ME Camera

Specifications

Type

35mm full-frame SLR camera with aperture preferred automatic exposure, electronic focal-plane shutter and open-aperture center-weighted Through-The-Lens metering.

Lens mount

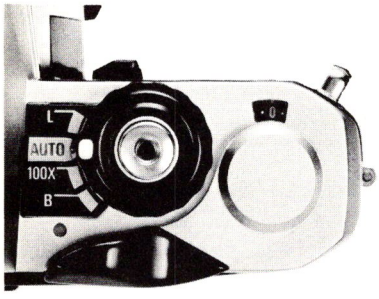
Pentax bayonet mount.

Standard lenses

SMC Pentax-M 40mm f/2.8
SMC Pentax 50mm f/1.2
SMC Pentax-M 50mm f/1.4
SMC Pentax-M 50mm f/1.7

Shutter

Seiko MFC vertical-run metal focal-plane shutter; automatic exposure electronically controlled between 8 and 1/1000 sec.; manual mechanical speed of 1/100 sec. plus B; provided with shutter button lock and "Cocked" indicator.



Flash synchronization

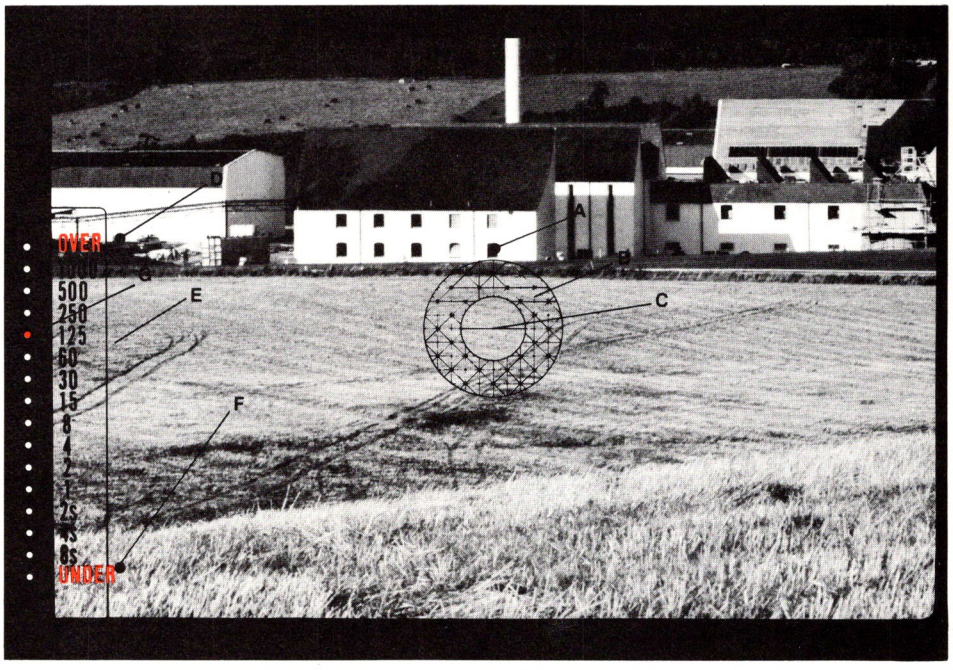
X socket on front of camera body, plus X-contact accessory hot shoe; X flash synchronization at 1/100 sec.

Self-timer

Delays shutter release 4 ~10 seconds.

Viewfinder

Silver-coated pentaprism finder; split-image microprism focusing screen; 92% of picture-taking area visible and 0.97X magnification (with 50mm lens at infinity), -1.0 diopter eyepiece. LED diodes inside viewfinder indicate automatically selected speeds, plus over and underexposure warning. Correction lens adapter M, Magnifier M and Right-Angle Finder-M fit the viewfinder frame.



ME Viewfinder

- **A** Mat Focusing Screen
- **B** Micro-Prism Collar
- **C** Split-Image Focusing Aid
- **D** Overexposure Warning
- **E** Shutter Speed Scale
- **F** Underexposure Warning
- **G** Light Emitting Diode

Mirror and diaphragm

Instant-return mirror and automatic diaphragm.

Film wind and rewind

Single-stroke rapid wind lever, plastic-tipped tipped for winding comfort. 135° throw with angle of 30°. Rapid rewind crank for speedy film rewind.

Film loading

New magic-needle quick/sure loading.

Automatic winder

ME camera body accepts the new 1.5 frames-per-second Winder ME, for consecutive or single frame exposure operation.

Exposure counter

Automatic reset type.

Exposure meter

Open-aperture, center-weighted Through-The-Lens meter, with GPD cells for fast meter response, with LED exposure readout; rapid wind lever and shutter release button acting as meter switch.

Exposure range; EV1-19 (ASA 100 f/1.4). Film speed range: aasa 12-1600. Exposure compensation dial: ¼ x, ½ x, 1x, 2x, 4x.

Battery
Two 1.5V silver oxide batteries (S76); LED's double as battery check lamp, blinking when time to replace.
Back cover
Standard back with memo holder, interchangeable with Dial Data ME for data recording of film.
Body size
131.2mm x 82.5mm x 49.5mm
5.16" x 3.24" x 1.94"
Body weight
460 grams; 16.22 oz.
All ME Cameras are supplied with:

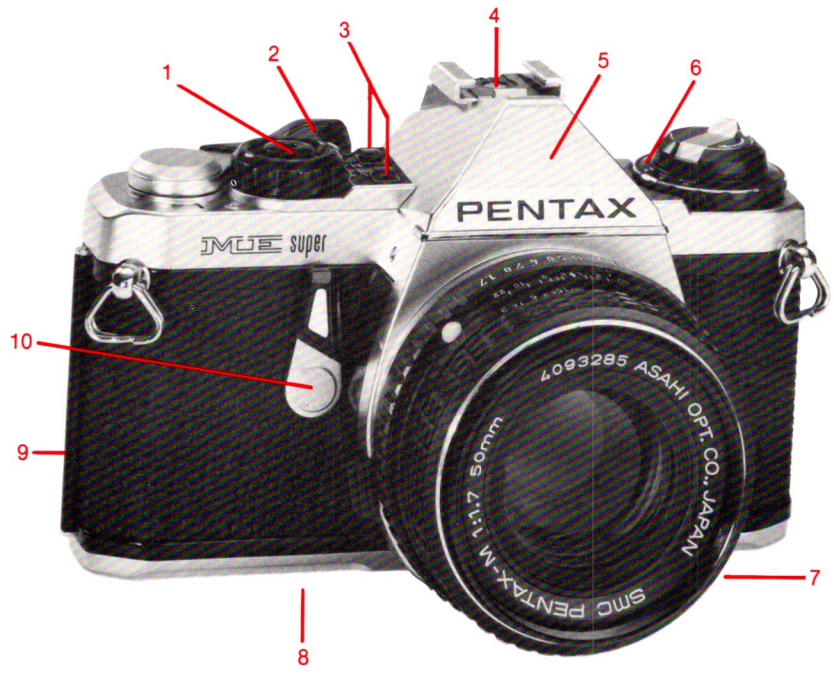
- Eyepiece Blind — for accurate exposure metering when the eye is away from the viewfinder.
- Tripod Spacer Ring — used with very compact or large diameter lenses on a tripod, or to protect the camera from long tripod screws.
- Neck Strap with shoulder pad.

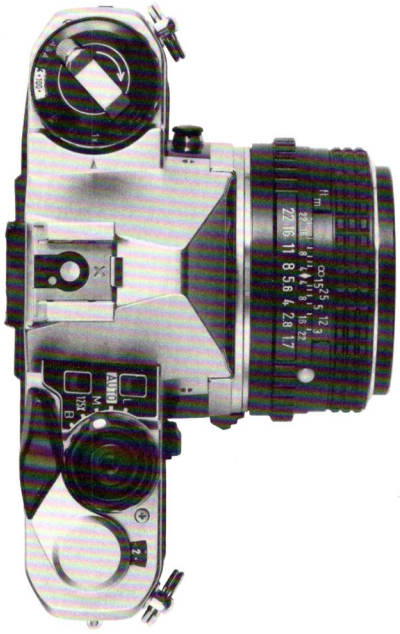
For replacement of supplied accessory items, refer to Special Products Section.

PENTAX

ME SUPER Camera

1. Shutter Release Button / Meter Switch
2. Rapid Wind Lever
3. ElectroTouch Manual Shutter Speed Control Button
4. Hot Shoe / Dedicated Flash contacts
5. Silvered pentaprism; GPD metering.
6. Exposure Compensation Dial.
7. Compact M Series lenses with bayonet mount.
8. Accepts New, compact Winder ME-II for automatic winding at 2 fps.
9. Magic Needle Film Loading
10. Self Timer





- Introducing the ME SUPER—Fully Automatic 35mm SLR With Exclusive ElectroTouch™ Override
- Aperture-preferred automatic exposure control with Gallium (GPD) cells for fastest response; 5 position Exposure Compensation Dial
- Full Range of Manual Shutter Speeds At the Push of a Button with coupled TTL Exposure Measurement
- Extensive Tri-color Viewfinder Display
- Dedicated Flash Operation
  Automatically synchronizes at 1/125 second with ready light in viewfinder when Pentax dedicated flash is at full charge
- Accepts the new Winder ME-II for automatic single frame film advance or sequence shots as fast as two frames per second
- MFC-E2 All Metal Shutter
  Top Shutter Speed of 1/2000 second
- Exclusive Pentax Magic Needle Loading
  For quick and sure loading
- Backed by the famous Pentax System with more than 40 Super-Multi-Coated Pentax lenses, and hundreds of accessories to fit virtually any photographic situation.

Cat. No.	
06100	ME SUPER Body, Chrome (MP / SI)
06110	ME SUPER Body, Black (MP / SI)
37386	Winder ME-II
32730	Soft Case ME
20167	SMC Pentax-M 40mm f/2.8 lens
20677	SMC Pentax-M 50mm f/2.0 lens
20877	SMC Pentax-M 50mm f/1.7 lens
20867	SMC Pentax-M 50mm f/1.4 lens
20947	SMC Pentax 50mm f/1.2 lens
32741	Front for Soft Case ME and SMCP 50mm f/1.2 lens.
32742	Front for Soft Case ME and SMCP-M 40mm f/2.8 lens
32750	Back Cover for Soft Case ME

PENTAX

ME SUPER Camera

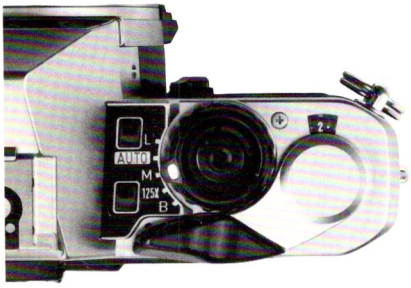
Specifications

Type
35mm full-frame, single lens reflex camera with aperture-preferred automatic exposure control and ElectroTouch push button manual override with coupled TTL exposure measurement. Built-in automatic flash synchronization with Pentax dedicated flash units.

Lens Mount
Pentax Bayonet Mount. Full automatic diaphragm coupling. Screw mount lenses may be used with Mount Adapter B.

Standard Lenses
SMC Pentax-M 40mm f/2.8
SMC Pentax-M 50mm f/2.0
SMC Pentax-M 50mm f/1.7
SMC Pentax-M 50mm f/1.4
SMC Pentax 50mm f/1.2

Shutter

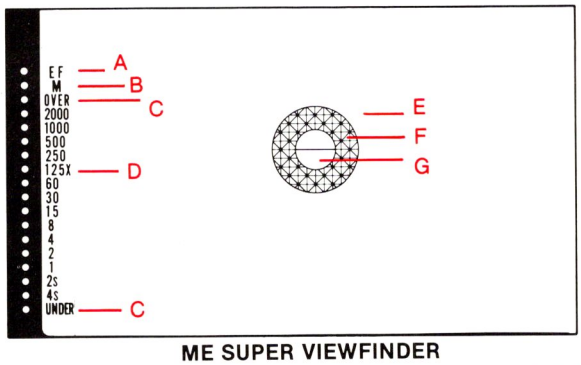


Seiko MFC-E2 vertical-run metal focal plane shutter; automatic exposure electronically controlled in stepless range from 4 seconds to 1/2000 second; full range of 14 manual shutter speed electronically timed from 4 seconds to 1/2000 second, controlled by dual pushbutton action; mechanical speeds of 1/125 second and B operational without batteries; shutter release lock provided; 5 position shutter mode selector.

Flash Synchronization
Synchronizes automatically at 1/125 second with all Pentax dedicated flash units mounted on hot shoe (X) contact in both "AUTO" or MANUAL ("M") modes; Green LED's light and flash in viewfinder to indicate flash has reached full charge (LED's do not light when mode selector is set to 125X or B); Direct "X" synchronization for non-dedicated, cordless flash units provided by hot shoe (X) contact, and by X sync terminal on camera body with mode selector at 125X setting.

Self Timer
Located on camera body, delays shutter from 4 to 10 seconds; may be interrupted, and is manually activated.

Exposure Metering
Open aperture, center-weighted, through-the-lens light measurement by Gallium Arsenide Phosphide Photo Diode (GPD) cells; Exposure range from EV 1 to EV 19 (ASA 100 f/1.4); Meter activated by light pressure on shutter release with automatic shut off after 20 seconds.



ME SUPER VIEWFINDER

A. Exposure Compensation (factor) LED indicator.
B. Manual Mode and flash-ready LED indicator.
C. Over- / Under-exposure LED indicators (AUTO); MANUAL TTL exposure indicators.
D. Shutter speed scale; Flash sync speed and flash-ready LED
E. Matte Focusing Screen
F. Micro-prism Collar
G. Split-image focusing aid.

Film Speed Range
ASA 12—1600.

Exposure Compensation
Up to ± 2EV automatic exposure compensation by setting dial control with indices at ¼X, ½X, 1X, 2X, 4X; Red LED viewfinder indicator blinks to indicate when dial is off "1X" normal exposure position; Exposure compensation is operational only in "AUTO" mode.

Viewfinder
Silver-coated pentaprism finder with split-image/microprism/matte focusing screen; 92% of picture-taking area is visible with 0.95X relative magnification (50mm lens at infinity setting); LED viewfinder display; −1.0 diopter eyepiece with optional correction eyepieces (Correction Lens Adapter M) available as accessories.

Viewfinder Display
18 LED's displayed in 3 colors; 14 shutter speeds indicated with color-coded display: Green LED's indicate hand-holdable speeds from 1/60th to 1/2000 second; Yellow LED's indicate slow speed warnings from 4 seconds to 1/30th second; Red LED's indicate Over-and Under-Exposure in AUTO mode, and work with green and yellow LED's in MANUAL mode to determine correct TTL exposure; Constant green LED "M" indicates manual mode; Flashing green LED "M" with green LED at "125" indicates full flash recycle in either AUTO or MANUAL mode with Pentax dedicated flash units.

Film Loading
Pentax Magic Needle Loading System

Film Transport
Single-stroke, rapid wind lever with plastic tip for winding comfort. 135° throw with 30° standoff angle. Film Transport Indicator confirms advance and rewind of film. Film rewind with rapid rewind crank and film release button. Accepts Winder ME and Winder ME-II for automatic film wind.

Exposure Counter
Additive film counter moves from loading indicator to "36"; color coded at positions "0", "20", "24" and "36"; resets to beginning automatically when camera is opened.

Battery
Two 1.5V silver-oxide batteries (S76 or equivalent) power all electronic systems in both AUTO and MANUAL modes. Automatic and constant battery check: Viewfinder LED's blink when time to replace batteries.

Back Cover
Standard camera back with spring catch; built-in Film Memo Holder. Back is interchangeable with Dial Data ME for data recording of film.

Body Size
131.5mm x 83mm x 49.5mm
5.2″ x 3.3″ x 1.9″

Body Weight
445 grams
15.7 oz.

Other
All ME SUPER cameras are supplied with:
- Eyepiece Blind—for accurate exposure metering when the eye is away from the viewfinder.
- Tripod Spacer Ring—used with very compact or large diameter lenses on a tripod, or to protect the camera from long tripod screws.
- Neck strap with shoulder pad.

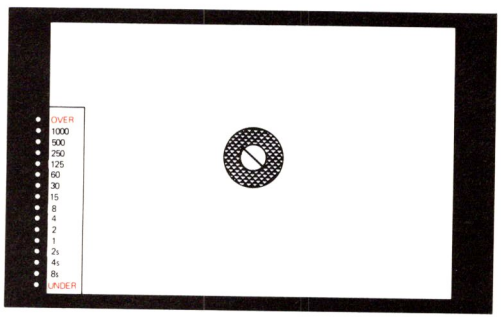
For replacement of supplied accessory items, refer to Special Products Section.

PENTAX ME "SE"

A deluxe special edition of the Pentax ME

All the Features of the Famous Pentax ME, Plus . . .

- Custom Covered in a Rich Chestnut Brown
- Diagonal Split-Image, Micro-Prism Focusing
- Two Year Pentax Warranty



ME "SE" Viewfinder with the new Diagonal Split-Image, Micro-Prism for all position focusing.

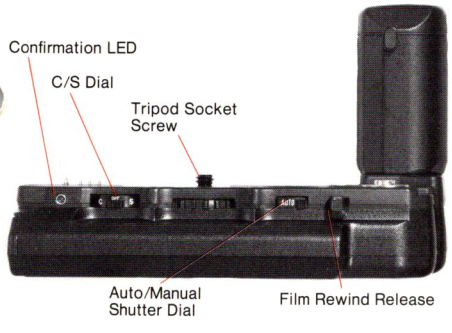
Available in limited quantities

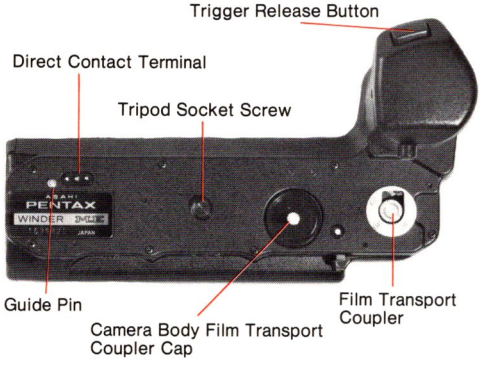
Cat. No.
06040 Pentax ME "SE" camera body (MP/SI)
32730 Soft Case for ME "SE"

R

PENTAX

Winder ME





Automatic Winding

One of the most exciting features of the ME is the fact that it will accept Winder ME for automatic film transport. The winder attaches to the tripod socket of the ME quickly and easily, and enables the photographer to follow the fastest action, shooting at about 1.5 frames per second (fps). And, at the mere switch of a dial, it is possible to change from shooting consecutive exposures to shooting one frame at a time.

The Winder ME together with the automatic exposure of the ME camera now allow the photographer the opportunity of easily and automatically recording not only fast action, but also the fleeting expressions of a child at play — as quickly as the expressions change, they are recorded with the Winder ME.

The Winder is extremely compact and lightweight. The Winder has a large grip which is contoured to fit the right hand, and is equipped with its own Trigger Release Button which is instantly accessible to the index finger, thus the balance, rapid handling capabilities, and ease of operation are fully retained.

A special case is available to fit the ME Camera with the Winder ME attached, and the Winder ME may be modified by a Pentax Service Center for remote operation.

Not everyone needs the Winder ME, but even if you do not use it, it is nice to know that your camera is strong enough to function perfectly thousands and thousands of times in rapid succession.

Specifications

Type

Automatic film winder designed for exclusive use with the Pentax ME.

C/S Dial

Set three-position C/S Dial to C for consecutive exposure operation up to 1.5 fps; set dial to S for single-frame exposure operation (automatic transport, one frame at a time); set to OFF to extinguish power.

Usable Shutter Speeds

All shutter speeds, but B (Bulb).

Power Source

6 penlight batteries. (AA) (E91 or equiv.)

Shutter Release

Shutter is released with the built-in Trigger Release Button of the Winder ME Grip. May be modified for remote release.

Confirmation of Proper Functioning

An LED found to the left of the C/S Dial lights whenever Winder ME functions (transports film) properly.

Attachment Method

Attaches to the Tripod Socket in the base plate of the camera; Guide Pins assure correct alignment.

Tripod Socket

Built-in Tripod Socket allows Winder ME to be attached to a tripod.

Dimensions

145mm(L) x 90.5mm(H) x 78mm(D), 5.7″ x 3.6″ x 3.07″

Weight

275g, 9.7 oz.

Additional

Built-in receptor to store Film Transport Coupler Cap of camera body.

Cat. No.

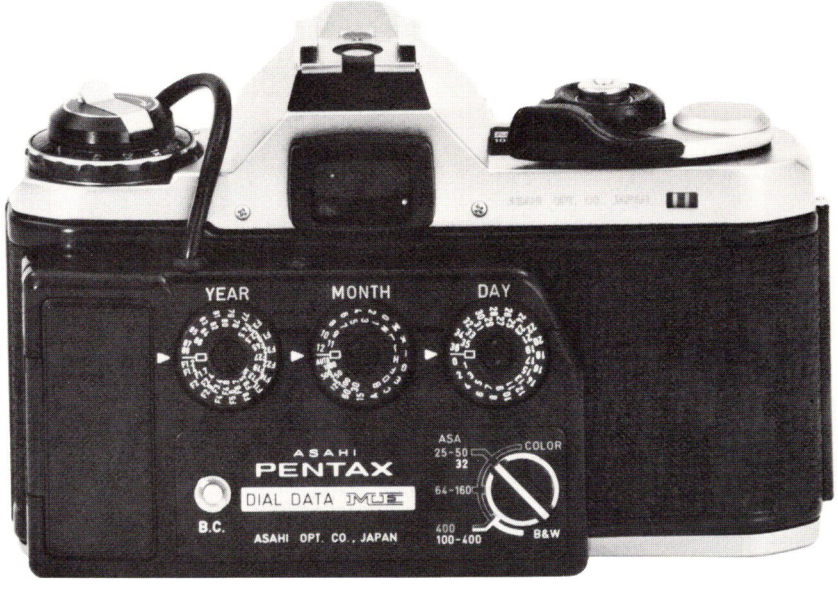
37382 Winder ME
32703 Soft Case for ME/MX w/winder

For remote release modification and/or replacement of supplied parts items, refer to Special Products Section.

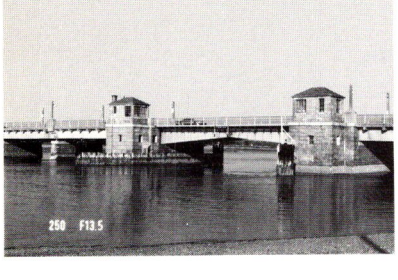
PENTAX

DIAL DATA ME

The Dial Data ME can be set to record the date (day, month, year) the aperture, shutter speed and frame number, or an alphanumerical code selected by the user, in the lower left corner of the (horizontal) photograph or transparency.
Virtually unlimited uses can be found, by using different codes, for index specimens; product catalogs; aircraft; construction progress; forensic identification; and scientific testing.
The Dial Data ME accessory back is an invaluable tool for commercial, legal and scientific applications, as well as a great convenience for the serious photographer.



Record those "Special Days" —birthdays, graduation, even the summer vacation, easily with the Dial Data ME.



Exposure documentation is useful for many exposure testing procedures. The frame number may also be added, and all information may be cropped out of the final print if desired.

DIAL DATA ME Specifications:

Type:
Designed for exclusive use with the Pentax ME.

Attachment:
Instantly interchangeable with standard Back Cover of Pentax ME. Sync cord connects to camera terminal.

Available Data:
Data selected from three dials of which the left dial is used to imprint the year (77-88) or aperture, (f/1.2-f/45); the central dial for the month (0-12), shutter speed, (1/15th-1/1000 plus "Auto") or letters of the alphabet (A-M); and the right dial for the day of the month or frame number (0-36).

ASA Range:
Three settings available for black and white and color film, ASA 25-400.

Confirmation:
Confirmation of the imprinting of data is possible by observing an LED which flashes during the moment the data is imprinted.

Battery Check:
LED flashes upon depressing B. C. Button if battery voltage is sufficient.

Power Source:
Three 1.5V (AA) silver oxide batteries (S76 or equivalent).

Additional:
Imprinting may be switched off. Imprinting of data when using Winder ME is possible.

Cat. No.
37136 Dial Data Back ME
32734 Soft Case for ME w/Dial Data Back

PENTAX

Winder ME II

Here's the perfect accessory for any photographer who likes to be where the action takes place. Capturing the fast action of sports or the fleeting expressions of a child at play becomes quick and easy by simply attaching the compact, lightweight Winder ME II.

Designed to complement the Pentax ME SUPER as well as the Pentax ME and "Limited Edition" MV-1 35mm SLR models, the Winder ME II synchronizes at all shutter speeds (except "B") and lets the photographer take single frame shots with automatic film advance or sequential exposures at a top rate of two frames per second (fps).

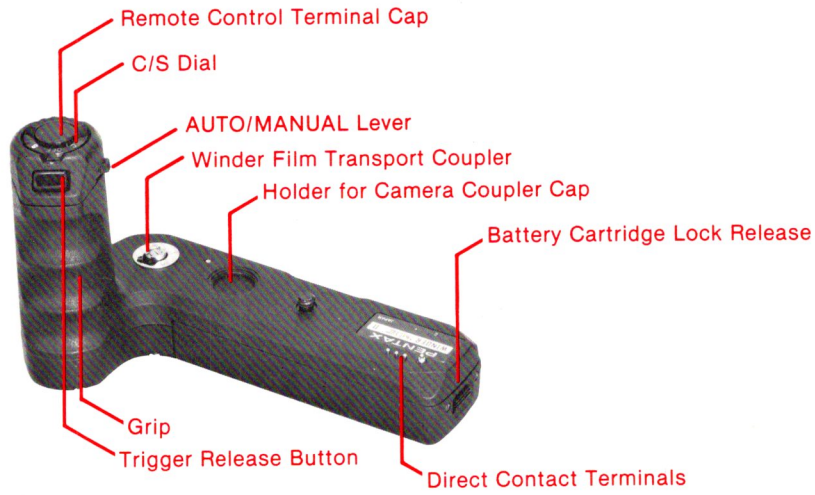
Attaching quickly and easily to the base of the camera in seconds, the Winder ME II provides the added versatility of a hand-contoured grip with built-in trigger release and all operational controls at the photographer's fingertips. It features a cartridge-style battery case to make battery loading fast and easy. A Light Emitting Diode (LED) acts as a film advance indicator and an optional remote control adapter adds to the unit's flexibility.

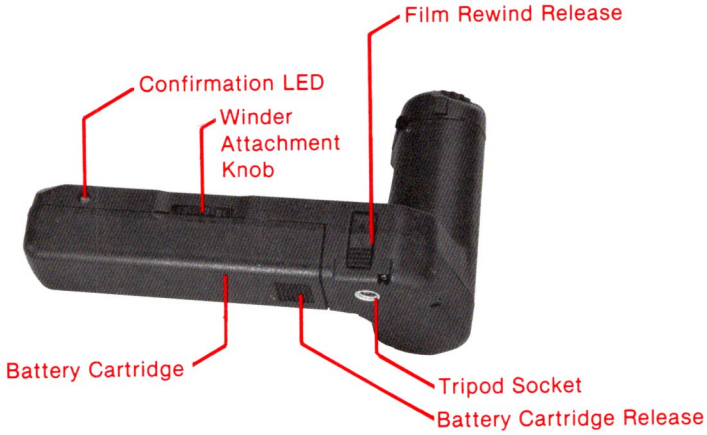
Powered by only four 1.5-volt AA alkaline batteries, the Pentax Winder ME II will deliver automatic film advance operation for a minimum of 20 rolls of 36-exposure film per set of batteries, and years of reliable, trouble-free picture-taking fun. A special case is available to fit the MV-1 with the Winder ME II attached.

For complete specifications see reverse side.

PENTAX

Winder ME II





Specifications

Type
Automatic film winder designed for use with the Pentax ME, ME SUPER and MV-1.

C/S Dial
Set the three position C/S Dial to C for consecutive exposure operation up to 2 frames-per-second (fps); set the dial to S for single-frame exposure operation (automatic transport, one frame at a time); set to OFF to extinguish power.

Usable Shutter Speeds
All shutter speeds, including AUTO (full range of automatic speeds), except B (Bulb). Operates at all MANUAL shutter speeds with ME SUPER, except B. Synchronizes at 100X with ME and MV-1, and at 125X with ME SUPER.

Power Source
4 penlight (AA) batteries. (E91 or equivalent). Transports a minimum of 20 rolls of 36-exposure film under normal operating coonditions.

Shutter Release
Shutter is released with the built-in Trigger Release Button on the Winder ME II Grip. Film is advanced automatically after shutter has operated (when set to S, film is advanced after Trigger Release Button is released). Shutter may also be released by using Shutter Release Buttton of camera, however automatic transport will not be performed. Remote release available.

Remote Control
Remote control terminal located on winder grip. Accepts optional accessory Remote Control Cord for remote release and winder operation.

Confirmation
A red LED indicator located to the left of the attachment knob flashes at the instant the shutter is released and when film is being transported.

Film Rewind
After last exposure, film is rewound by pressing Film Rewind Release Lever located on back of winder.

Attachment of Winder
Attaches to Tripod Socket in baseplate of camera. Camera Body Film Transport Coupler Cap is removed from baseplate of camera and stored in built-in receptor in Winder. Guide Pins assure correct alignment.

Tripod Socket
Built-in Tripod Socket allows Winder ME II to be attached to a tripod.

Dimensions
144mm (L) x 89mm (H) x 69mm (D)
5.6″ (L) x 3.5″ (H) x 2.7″ (D)

Weight
270 grams (9.5 ounces)

Cat. No.

37386	Winder ME II
32703	Soft Case for ME/ ME SUPER/MV-1 with Winder

For replacement of supplied parts items, refer to Special Products Section.

Availability of Remote Control Cord for Winder ME II to be announced.

PENTAX

Winder ME II

Here's the perfect accessory for any photographer who likes to be where the action takes place. Capturing the fast action of sports or the fleeting expressions of a child at play becomes quick and easy by simply attaching the compact, lightweight Winder ME II.

Designed to complement the Pentax ME SUPER and ME-F as well as the Pentax MG and MV-1, ME 35mm SLR models, the Winder ME II synchronizes at all shutter speeds (except "B") and lets the photographer take single frame shots with automatic film advance or sequential exposures at a top rate of two frames per second (fps).

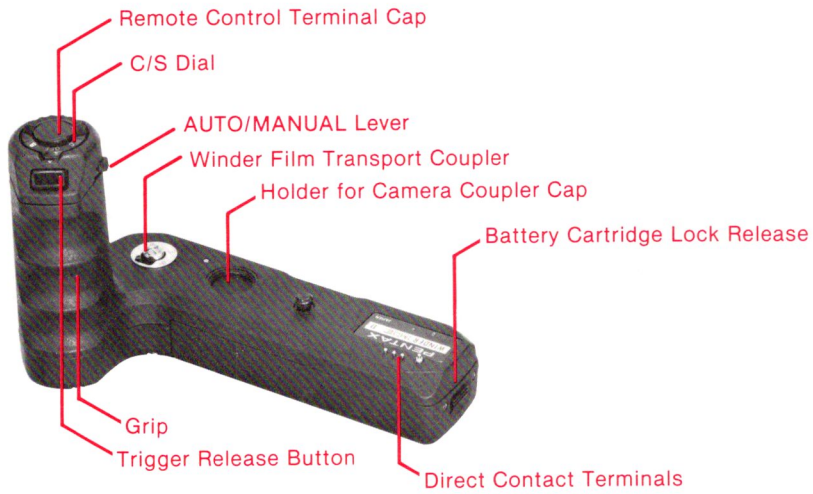
Attaching quickly and easily to the base of the camera in seconds, the Winder ME II provides the added versatility of a hand-contoured grip with built-in trigger release and all operational controls at the photographer's fingertips. It features a cartridge-style battery case to make battery loading fast and easy. A Light Emitting Diode (LED) acts as a film advance indicator and an optional remote control adapter adds to the unit's flexibility.

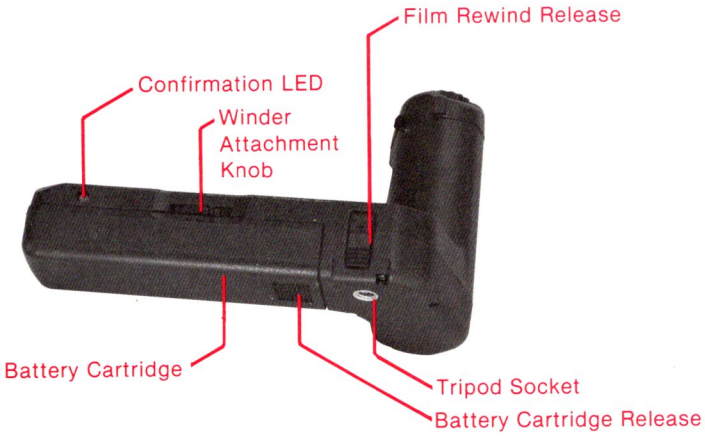
Powered by only four 1.5-volt AA alkaline batteries, the Pentax Winder ME II will deliver automatic film advance operation for a minimum of 20 rolls of 36-exposure film per set of batteries, and years of reliable, trouble-free picture-taking fun. A special case is available to fit the camera with the Winder ME II attached.

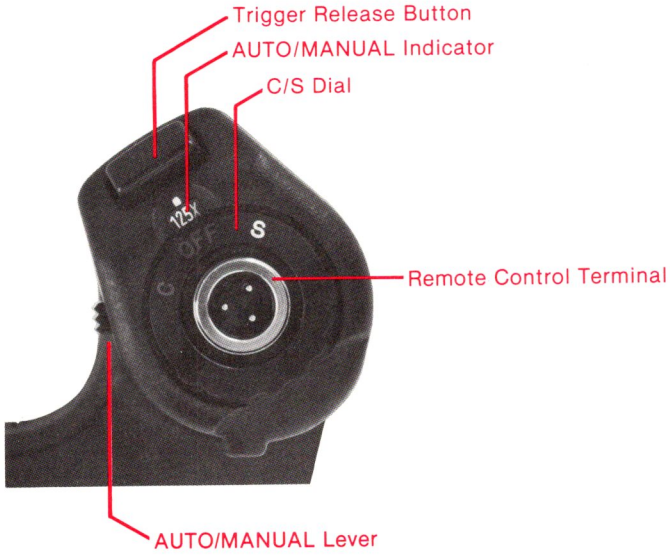
For complete specifications see reverse side.

PENTAX

Winder ME II







Specifications

Type
Automatic film winder designed for use with the Pentax ME SUPER, ME-F, ME, MG and MV-1.

C/S Dial
Set the three position C/S Dial to C for consecutive exposure operation up to 2 frames-per-second (fps); set the dial to S for single-frame exposure operation (automatic transport, one frame at a time); set to OFF to extinguish power.

Usable Shutter Speeds
All shutter speeds, including AUTO (full range of automatic speeds), except B (Bulb). Operates at all MANUAL shutter speeds with ME SUPER and ME-F, except B. Synchronizes at 100X with MG, ME, and MV-1, and at 125X with ME SUPER and ME-F.

Power Source
4 penlight (AA) batteries. (E91 or equivalent). Transports a minimum of 20 rolls of 36-exposure film under normal operating conditions.

Shutter Release
Shutter is released with the built-in Trigger Release Button on the Winder ME II Grip. Film is advanced automatically after shutter has operated (when set to S, film is advanced after Trigger Release Button is released). Shutter may also be released by using Shutter Release Buttton of camera, however automatic transport will not be performed. Remote release available.

Remote Control
Remote control terminal located on winder grip. Accepts optional accessory Remote Control Cord for remote release and winder operation.

Confirmation
A red LED indicator located to the left of the attachment knob flashes at the instant the shutter is released and when film is being transported.

Film Rewind
After last exposure, film is rewound by pressing Film Rewind Release Lever located on back of winder.

Attachment of Winder
Attaches to Tripod Socket in baseplate of camera. Camera Body Film Transport Coupler Cap is removed from baseplate of camera and stored in built-in receptor in Winder. Guide Pins assure correct alignment.

Tripod Socket
Built-in Tripod Socket allows Winder ME II to be attached to a tripod.

Dimensions
144mm (L) x 89mm (H) x 69mm (D)
5.6″ (L) x 3.5″ (H) x 2.7″ (D)

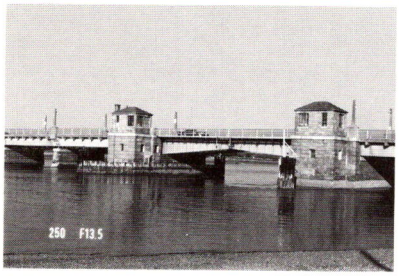
Weight
270 grams (9.5 ounces)

Cat. No.	
37386	Winder ME II
32703	Soft Case for ME/ ME SUPER/MV-1/MG/ME with Winder ME II
37361	Remote Control Cord for Winder ME-II

PENTAX
DIAL DATA ME

The Dial Data ME can be set to record the date (day, month, year) the aperture, shutter speed and frame number, or an alphanumerical code selected by the user, in the lower left corner of the (horizontal) photograph or transparency.
Virtually unlimited uses can be found, by using different codes, for index specimens; product catalogs; aircraft; construction progress; forensic identification; and scientific testing.
The Dial Data ME accessory back is an invaluable tool for commercial, legal and scientific applications, as well as a great convenience for the serious photographer.

Record those "Special Days" —birthdays, graduation, even the summer vacation, easily with the Dial Data ME.



Exposure documentation is useful for many exposure testing procedures. The frame number may also be added, and all information may be cropped out of the final print if desired.

DIAL DATA ME Specifications:

Type:
Designed for use with Pentax ME SUPER, ME-F, MG, MV-1, ME.

Attachment:
Instantly interchangeable with standard Back Cover. Sync cord connects to camera terminal. Hot shoe adapter 2P required for MG, MV-1.

Available Data:
Data selected from three dials of which the left dial is used to imprint the year (80-91) or aperture, (f/1.2-f/45); the central dial for the month (0-12), shutter speed, (1/15th-1/1000 plus "Auto") or letters of the alphabet (A-M); and the right dial for the day of the month or frame number (0-36).

ASA Range:
Three settings available for black and white and color film, ASA 25-400.

Confirmation:
Confirmation of the imprinting of data is possible by observing an LED which flashes during the moment the data is imprinted.

Battery Check:
LED flashes upon depressing "B.C." Button if battery voltage is sufficient.

Power Source:
Three 1.5V (AA) silver oxide batteries (S76 or equivalent).

Additional:
Imprinting may be switched off. Imprinting of data when using Winder ME-II is possible.

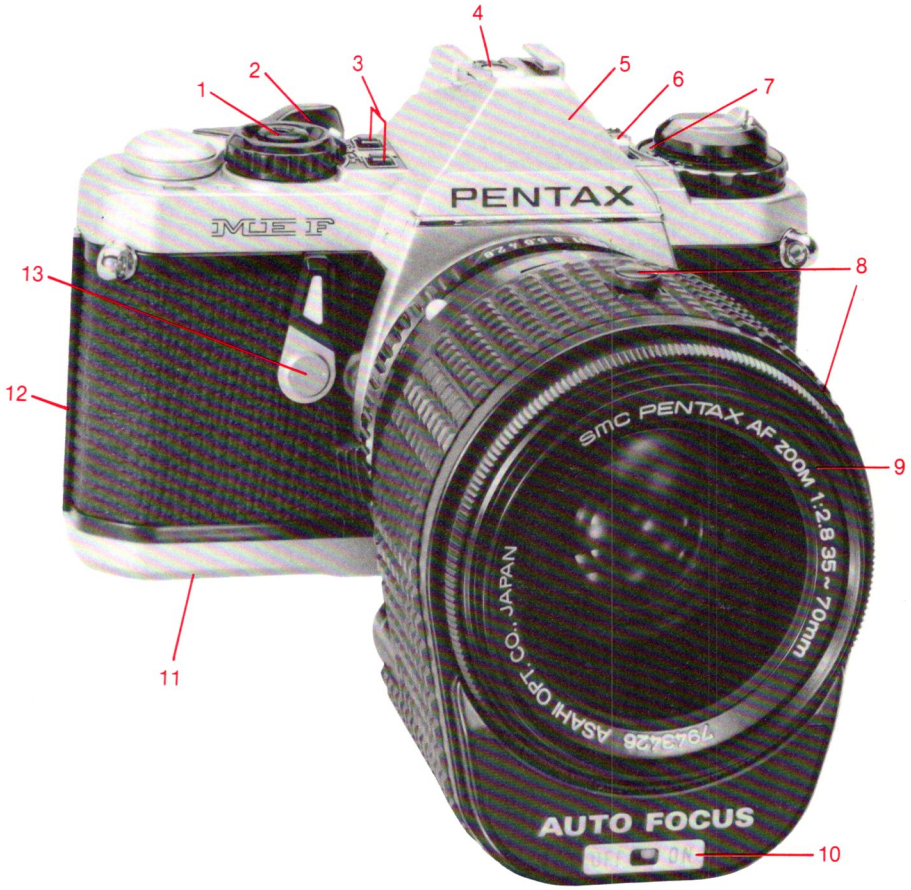
Cat. No.	
37136	Dial Data Back ME
32734	Soft Case for ME SUPER/ME-F/MG/MV-1/ME with Dial Data Back ME
31014	Hot Shoe Adapter 2-P

PENTAX

ME F Camera

Pentax proudly introduces a major design and engineering breakthrough. The Pentax ME-F. Auto Focus with a new AF ZOOM 35mm ~ 70mm . . . Confirmed Focus™ with more than 30 Pentax lenses . . . Complete through-the-lens auto focus!

1. Shutter Release Button/Meter Switch
2. Rapid Wind Lever
3. Manual Shutter Speeds Control Buttons
4. Hot Shoe/Dedicated Flash Contacts
5. Silvered pentaprism; GPD metering.
6. 3 position Electro Focus Switch
7. Exposure Compensation Dial
8. Auto Focusing Buttons
9. Pentax AF ZOOM 35 ~ 70mm f/2.8 Auto Focus Lens
10. Focus Motor Power Switch
11. Accepts Compact Winder ME-II for automatic winding at 2 fps.
12. Magic Needle Film Loading
13. Self Timer.

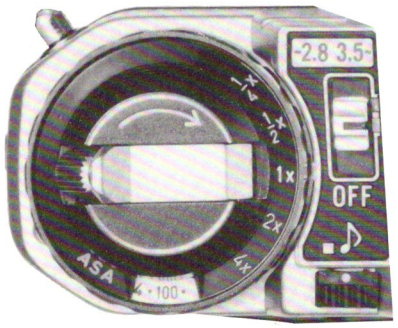


- SLR photography's *first* Through-The-Lens Electronic Focus Control System providing electronic Confirmed Focus with interchangeable lenses.
- Complete Auto Focus with the New Pentax AF 35mm ~70mm Auto Focus Zoom Lens
- Aperture-preferred automatic exposure control
- Full Manual Override with 14 viewfinder LED Shutter Speeds
- Accepts all Pentax Dedicated Flash Units
- Fully Automatic Film Advance with Winder ME-II

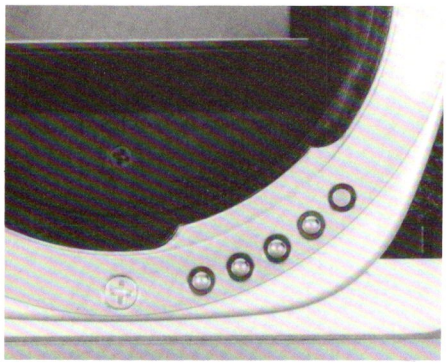
Cat. No.	
09700	ME-F Body, Chrome (MP/SI)
27217	SMC Pentax-AF ZOOM 35mm ~70mm f/2.8 w/o case
20877	SMC Pentax-M 50mm f/1.7
20867	SMC Pentax-M 50mm f/1.4
20677	SMC Pentax-M 50mm f/2
20947	SMC Pentax 50mm f/1.2
20167	SMC Pentax-M 40mm f/2.8
32870	Soft Case for ME-F with 50mm 2 1.7; 1.4 lens.
32881	Front for AF 35 ~ 70 Zoom for Soft Case ME-F
32885	Back for Soft Case ME-F
32742	Front for SMCP-M 40mm f/2.8
34801	58mm Round rubber lenshood for SMCP-AF ZOOM 35 ~ 70mm
33731	Lens Case for SMCP-AF 35 ~ 70mm f/2.8 lens
37136	Dial Data Back

PENTAX

ME F Camera



The focus switch offers two positions to vary image sensor sensitivity for both large and small aperture lenses. A second switch shuts off the audible "beep" when not needed.



The ME-F's Bayonet-F Mount offers all the precision features of the renowned Pentax Bayonet Mount, with the added benefit of TTL Auto-Focus.

When the automatic film winder and the new Pentax 35~70mm auto focus lens are used together with the ME-F, your picture taking becomes totally automated, freeing you to concentrate solely on composing your photographs. Clearly, a new level of photographic freedom has been reached.

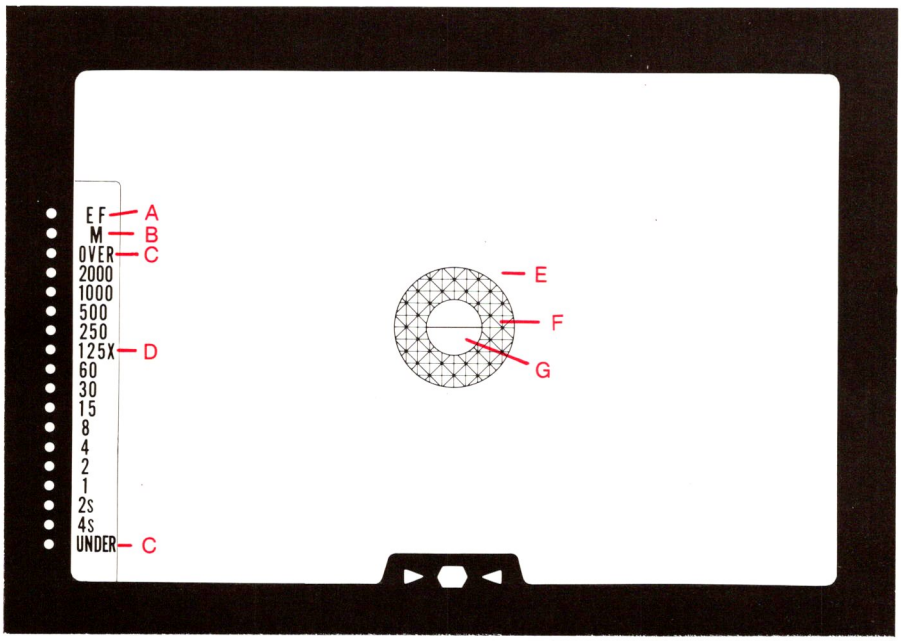
Thru-The-Lens (TTL) AUTO FOCUS

When the ME-F is used with the new Pentax AF 35mm~70mm Auto Focus Zoom Lens, the camera's revolutionary built-in electronic focusing system offers complete TTL auto focus control. The new Through-The-Lens Auto Focus System which places the control inside the camera where it belongs, and the power system on the lens is the most suitable type for SLR photography. It's far more accurate and compact than external-type auto focus, and creates the first truly practical auto focus lens design.

TTL Electronic CONFIRMED FOCUS™

The world's first built-in electronic Thru-The-Lens focus confirmation system. When used with any of over 30 SMC Pentax Lenses, the Electronic Confirmed Focus System inside the ME-F provides a visible viewfinder LED and an audible "in focus" confirmation to provide both fast focusing and pinpoint accuracy in virtually all photographic situations.

January, 1982



ME-F VIEWFINDER

A. Exposure Compensation (factor) LED indicator.
B. Manual Mode and flash-ready LED indicator.
C. Over- /Under-exposure LED indicators (AUTO); MANUAL TTL exposure indicators.
D. Shutter speed scale; Flash sync speed and flash-ready LED
E. Matte Focusing Screen
F. Micro-prism Collar
G. Split-image focusing aid.

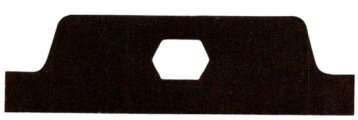
Confirmed Focus With SMC Pentax Lenses

Simply Turn the Lens in the Direction of the Arrow —Video and Audio Signals Confirm When You're "In-Focus".

When used with your standard lens and more than 30 other SMC Pentax Interchangeable lenses ranging from wide-angle to telephoto, the ME-F's new Through-The-Lens Electronic Focus Control System even tells you which direction to focus the lens!

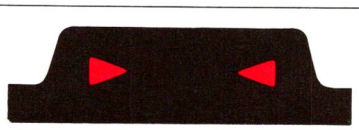
Simply center your subject in the viewfinder so that it bisects the split-image center line, and focus the lens in the direction of the arrow. When you've "zeroed-in" on the point of correct focus, the large green LED at the bottom of the viewfinder lights up and, at the same time an audible signal sounds its "beep", confirming that the subject is in focus.

Front Focus—turn lens to the right

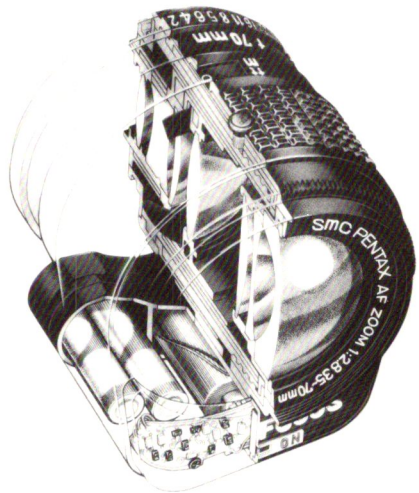


Correct Focus

Back Focus—turn lens to the left



Out of Range Warning—Lighting is insufficient and/or contrast is too flat or is extremely contrasty: focus in conventional manner.



SMC PENTAX AF ZOOM 35mm ~ 70mm f/2.8

Specifications

Type
Pentax Bayonet-F Mount for all Pentax Bayonet Mount cameras and Pentax Bayonet-F Mount cameras. Combined focus/zoom collar for single touch push/pull zoom action.

Focusing
Complete TTL auto focus with Pentax ME-F and may be focused manually. Manual focus with conventional Pentax Bayonet Mount cameras.

Minimum Aperture
f/22

Construction
7 elements in 7 groups.

Diaphragm
Fully automatic.

Minimum Focusing Distance
1.2 meters (3.9 feet).

Angles of View
63.0° at 35mm
34.5° at 70mm

Dimensions
73.0mm (2.9″) Maximum Diameter
76.5mm (3.0″) Minimum Length (excluding mount).

Power Source
Four 1.5v (AAA size) batteries (E92 or equivalent) power micromotor.

Switches/Controls
Focus motor power switch; focus buttons (two) on lens.

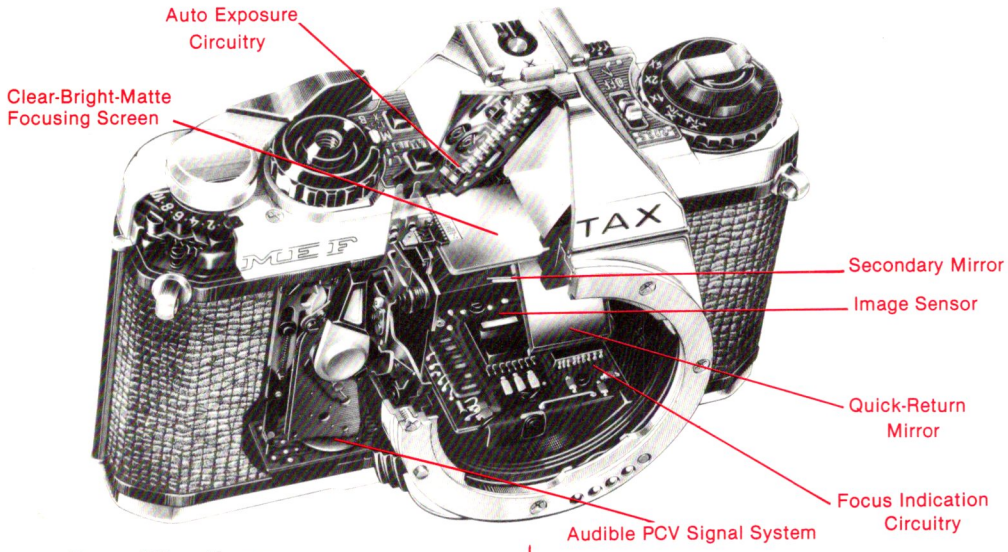
Filter Size
58mm (requires 67mm when using optional lens hood)

Lens Hood
58mm

Weight
580 grams (20.5 oz) without batteries.

PENTAX

ME F Camera



Specifications

Type
35mm full-frame, single lens reflex camera with aperture-preferred automatic exposure control and Confirmed Focus providing focus guidance and confirmation with SMC Pentax lenses (24mm ~ 300mm); Full Auto Focus with Pentax AF lenses. Full manual exposure override with coupled TTL exposure measurement. Built-in automatic flash synchronization with Pentax dedicated flash units.

Lens Mount
Pentax Bayonet-F Mount. Accepts all Pentax bayonet-mount lenses and Pentax Auto Focus (AF) lenses. Full automatic diaphragm coupling. Screw mount lenses may be used with Mount Adapter B.

Standard Lenses
SMC Pentax AF Zoom 35 ~ 70mm f/2.8
SMC Pentax-M 50mm f/1.7
SMC Pentax-M 50mm f/1.4
SMC Pentax-M 50mm f/2.0
SMC Pentax 50mm f/1.2
SMC Pentax-M 40mm f/2.8

Shutter
Seiko MFC-E2 vertical-run metal focal plane shutter; automatic exposure electronically controlled in a stepless range from 4 seconds to 1/2000 second; full range of 14 manual shutter speeds electronically timed from 4 seconds to 1/2000 second, controlled by dual pushbutton action; mechanical speeds of 1/125 second and B operational without batteries; shutter release lock provided; 5 position shutter mode selector.

Focus Control
Through-The-Lens Electronic Focus Control (TTL-EFC). Microcomputer circuitry in camera body and MOS sensor measure subject contrast; LED's in viewfinder indicate focus direction and focus confirmation with conventional SMC Pentax lenses from 24mm to 300mm focal lengths. Full auto focus is provided with Pentax AF lenses. Exposure range for TTL/EFC system from EV 4 to EV 16 (ASA 100 f/1.4). 3 position electro focus switch varies image sensor sensitivity to match selected lens. LED's in viewfinder indicate when subject is out of range of TTL-EFC system indicating conventional focusing is required. Beeping PCV signal audibly confirms focus; may be switched off. TTL-EFC system is activated and displayed in viewfinder by light pressure on shutter release with automatic shut off after 10 seconds. Full Auto Focus with Pentax AF lenses is activated by depressing focus button on AF lens which activates TTL-EFC system and viewfinder display.

Flash Synchronization
Synchronizes automatically at 1/125 second with all Pentax dedicated flash units mounted on hot shoe (X) contact in both "AUTO" or MANUAL ("M") modes; Green LED's light and flash in viewfinder to indicate flash has reached full charge (LED's do not light when mode selector is set to 1/125X or B); Direct "X" sychronization for non-dedicated, cordless flash units provided by hot shoe (X) contact, and by X sync terminal on camera body with mode selector at 1/125X setting. Optional Hot Shoe Adapter 2P provides X sync terminal at hot shoe in addition to (X) hot shoe contact.

Self Timer
Located on camera body, delays shutter from 4 to 10 seconds; may be interrupted, and is manually activated.

Exposure Metering
Open aperture, center-weighted, through-the-lens light measurement by Gallium Arsenide Phosphide Photo Diode (GPD) cells; Exposure range from EV 1 to EV 19 (ASA 100 f/1.4); Meter activated by light pressure on shutter release with automatic shutoff after 10 seconds.

Film Speed Range
ASA 12-1600.

Exposure Compensation
Up to ± 2EV automatic exposure compensation by setting dial control with indices at ¼X, ½X, 1X, 2X, 4X; Red LED viewfinder indicator ("EF") blinks to indicate when compensation dial is off "1X" normal exposure position; Exposure compensation is operational only in "AUTO" mode.

Viewfinder
Silver-coating pentaprism finder with split-image/microprism/matte focusing screen; 92% of picture-taking area is visible with 0.87X relative magnification (50mm lens at infinity setting); LED viewfinder display; −1.0 diopter eyepiece with optional correction eyepieces (Correction Lens Adapter M) available as accessories.

Viewfinder Display
21 LED's displayed in 3 colors; 14 shutter speeds indicated with color coded display: Green LED's indicate hand-holdable speeds from 1/60th to 1/2000 second; Yellow LED's indicate slow speed warning from 4 seconds to 1/30th second; Red LED's indicate Over-and-Under Exposure in AUTO mode, and work as indicators in MANUAL mode to determine correct TTL exposure; Constant green LED "M" indicates MANUAL mode; Flashing green LED "M" with constant green LED at "125" indicates full flash recycle in either AUTO or MANUAL mode with Pentax dedicated flash units. Large triangular red LED's at bottom of viewfinder signal focus direction with TTL-EFC focus system, both LED's light to indicate subject is out of range of system, and that conventional focusing is required. Large green LED at bottom of viewfinder lights to confirm and indicate when subject is in correct focus.

Film Loading
Pentax Magic Needle Loading System.

Film Transport
Single-stroke, rapid wind lever with plastic tip for winding comfort. 135° throw with 30° standoff angle. Film Transport Indicator confirms advance and rewind of film. Film rewind with rapid rewind crank and film release button. Accepts Winder ME-II for automatic film wind.

Exposure Counter
Additive film counter moves from loading indicator to "36"; color coded at positions "0", "20", "24" and "36"; resets to beginning automatically when camera is opened.

Battery
Four 1.5V silver-oxide batteries (S76 or equivalent) power all electronic focus and exposure systems in both AUTO and MANUAL modes. Automatic and constant battery check: Viewfinder LED's (shutter speed display) blink when time to replace batteries.

Back Cover
Standard camera back with spring catch; built-in Film Memo Holder. Back is interchangeable with Dial Data ME for data recording of film.

Body Size
132mm x 87.5mm x 49.5mm
5.2″ x 3.5″ x 1.9″

Body Weight
480 grams (without batteries)
16.9 oz.

Other
All ME-F cameras are supplied with:

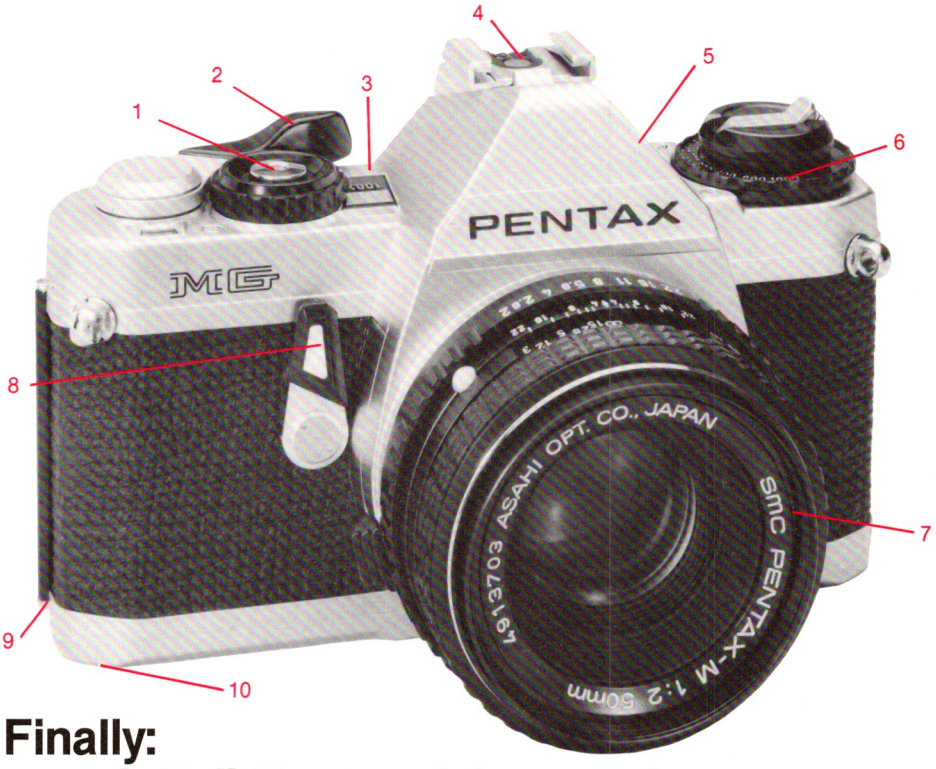
- Eyepiece Blind—for accurate exposure metering when the eye is away from the viewfinder.
- Tripod Spacer Ring—used with very compact or large diameter lenses on a tripod, or to protect the camera body from long tripod screws.
- Neck strap with shoulder pad.

For replacement of supplied accessory items, refer to Special Products Section.

PENTAX

MG Camera

1. Shutter Release Button/Meter Switch
2. Rapid Wind Lever
3. 3 Position Shutter Mode Selector
4. Hot Shoe/Dedicated Flash Contacts
5. Silver-coated Pentaprism; SPD Metering
6. ASA/Exposure Compensation Dial.
7. Compact M-Series Lenses with Bayonet Mount.
8. Self Timer
9. Magic Needle Film Loading
10. Accepts Compact Winder ME-II for automatic winding at 2 fps.



The dedicated flash operation of the MG automatically synchronizes the camera at 1/100 second with all Pentax dedicated flash units.

An LED ready light inside the viewfinder indicates when the flash is at full charge.

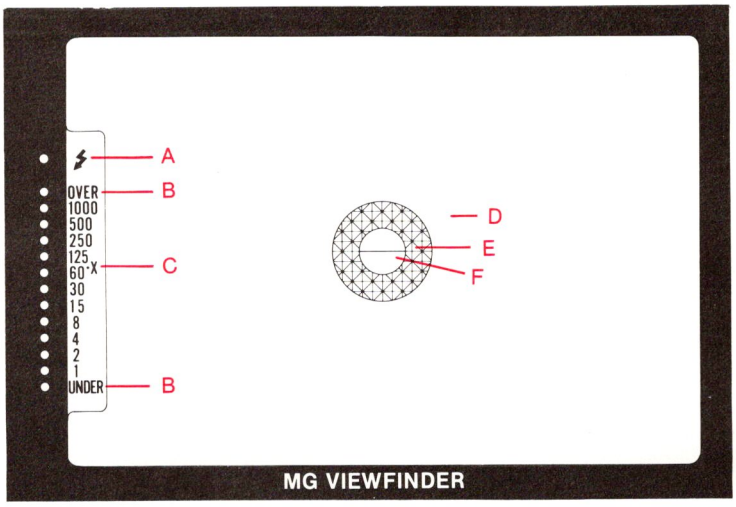
Finally:
A Full Featured Automatic At an Affordable Price!

- Aperture-preferred automatic exposure control with SPD cells for fast response.
- Comprehensive Tri-color Viewfinder Display
- Dedicated Flash Operation
  Automatically synchronizes shutter; ready light in viewfinder when Pentax dedicated flash is at full charge
- Accepts Winder ME-II for automatic single frame film advance or sequence shots as fast as two frames per second
- Seiko MFC All Metal Shutter
  Top Shutter Speed of 1/1000 second
- Exclusive Pentax Magic Needle Loading
  For quick and sure loading
- Backed by the famous Pentax System with more than 40 Super-Multi-Coated Pentax lenses and hundreds of accessories to fit virtually any photographic situation.

Cat. No.	
09600	MG Body, Chrome (MP/SI)
37386	Winder ME-II
32730	Soft Case for MG
20677	SMC Pentax-M 50mm f/2 lens
20167	SMC Pentax-M 40mm f/2.8 lens
20877	SMC Pentax-M 50mm f/1.7 lens
20867	SMC Pentax-M 50mm f/1.4 lens
20947	SMC Pentax 50mm f/1.2 lens
37136	Dial Data Back for MG
31014	Hot Shoe Adapter 2P

PENTAX

MG Camera



MG VIEWFINDER

A. Dedicated Auto Flash Ready Indicator
B. Over- /Under-exposure LED indicators
C. Shutter speed scale; Flash sync indicator.
D. Matte Focusing Screen
E. Micro-prism collar
F. Split-image focusing aid.

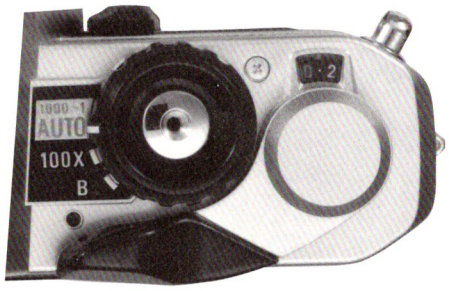
Specifications

Type
35mm full-frame, single lens reflex camera with aperture-preferred automatic exposure control. Built-in automatic flash synchronization with Pentax dedicated flash units.

Lens Mount
Pentax Bayonet Mount. Full automatic diaphragm coupling. Screw mount lenses may be used with Mount Adapter B.

Standard Lenses
SMC Pentax-M 40mm f/2.8
SMC Pentax-M 50mm f/2
SMC Pentax-M 50mm f/1.7
SMC Pentax-M 50mm f/1.4
SMC Pentax 50mm f/1.2

Shutter



Seiko MFC vertical-run metal focal plane shutter; automatic exposure electronically controlled in stepless range from 1 second to 1/1000 second; mechanical speeds of 1/100 second and B operational without batteries; 3 position shutter mode selector.

Flash Synchronization
Synchronizes automatically at 1/100 second with all Pentax dedicated flash units mounted on hot shoe (X) contact in AUTO mode; Red LED flashes in viewfinder to indicate flash has reached full charge, and Green LED indicates shutter speed automatically set to "X" speed (LED's do not light when mode selector is set to 100X or B); direct "X" synchronization for non-dedicated, cordless flash units provided by hot shoe (X) contact, and by cord connection to optional Hot Shoe Adapter 2P with mode selector at 100X position.

Self-Timer
Located on camera body, delays shutter from 4 to 10 seconds; may be interrupted and is manually activated.

Exposure Metering
Open aperture, center-weighted, through-the-lens light measurement by Silicon Photo Diode (SPD) cells; Exposure range from EV 2 to EV 19 (ASA 100 f/1.4); Meter activated by light pressure on shutter release with automatic shutoff after 20 seconds.

Film Speed Range
ASA 25-1600

Exposure Compensation
ASA Dial provides indication for exposure compensation; index ring on ASA dial indicates ¼X, ½X, 1X, 2X and 4X.

Viewfinder
Silver-coated pentaprism finder with split-image/microprism/matte focusing screen; 92% of picture-taking area is visible with 0.87X relative magnification (50mm lens at infinity setting); −1.1 diopter eyepiece with optional correction eyepieces (Correction Lens Adapter M) available as accessories.

Viewfinder Display
14 LED's displayed in 3 colors; 11 shutter speeds indicated with color-coded display; Green LED's indicate hand-holdable speeds from 1/60th to 1/1000 second; Yellow LED's indicate slow speed warning from 1 second to 1/30 second; Red LED's indicate Over-and-Under-Exposure; Flashing Red LED at electronic flash symbol (⚡) indicates full flash recycle, and Green LED lights at "X" setting (1/100 second) indicating shutter speed has been automatically set with use of any Pentax dedicated flash unit, with shutter selector in AUTO mode.

Film Transport
Single-stroke rapid wind lever with plastic tip for winding comfort. 135° throw with 30° standoff angle; built-in shutter cocked indicator. Film rewind with rapid rewind crank and film release button. Accepts Winder ME-II for automatic film wind (will also accept Winder ME).

Exposure Counter
Additive film counter moves from loading indicator to "36"; color coded at positions "0", "20", "24" and "36"; reset to beginning automatically when camera back is opened.

Battery
Two 1.5V silver-oxide batteries (S-76 or equivalent) power all electronic systems. Automatic and constant battery check: Viewfinder LED's blink when time to replace batteries.

Back Cover
Standard camera back with spring catch. Back is interchangeable with new Dial Data Back for cordless data recording of film (also accepts Dial Data Back ME with Hot Shoe Adapter 2P).

Other
All MG Cameras are supplied with:

- Eyepiece Blind—for accurate exposure metering when the eye is away from the viewfinder.
- Tripod Spacer Ring—used with very compact or large diameter lenses on a tripod, or to protect the camera from long tripod screws.
- Neck strap with shoulder pad.

Body Size
132mm x 85mm x 49.5mm
5.2″ x 3.3″ x 1.9″

Body Weight
420 grams (w/o batteries)
14.8 ounces

425 grams (w/batteries)
14.9 ounces

Availability of cordless Dial Data Back to be announced.

PENTAX

MV Camera

MV with SMC Pentax-M 50mm f/2 lens

The Pentax MV is one of the smallest, lightest, handiest fully-automatic 35mm SLR's, designed to fit comfortably in the hands of the photographer with all controls just where they should be for fast, responsive handling.

1. Shutter release/meter switch activating fully automatic stepless Seiko all-metal focal-plane shutter with speeds continuously variable from 1 to 1/1000 second plus B and 1/100 second mechanical speeds.
2. Film advance lever with 30° standoff, 135° throw for fast, convenient, smooth operation.
3. Large, bright aluminum coated viewfinder with LED exposure and flash indicators.
4. Center-weighted metering system using SPD (silicon photo diode) sensoring system — fast, superbly accurate, highly sensitive, free from "memory."
5. Pentax Bayonet Mount — provides positive, fast interchange of lenses, including Pentax compact M-series lenses.
6. "Magic Needle" film loading ends fumbling, assures virtually foolproof loading.
7. Hot shoe with flash contact. Accepts Pentax dedicated flash units which sets correct flash synchronization automatically. Also accepts manual flash units for synchronization at the 1/100 second mechanical speed.

Introducing the Pentax MV, a full-fledged member of the Pentax M family, sharing the outstanding engineering, superb design and matchless performance which make Pentax one of the world's finest cameras. Accepts the ultra-sharp, brilliant Pentax SMC lenses. The fully automatic Pentax MV, with a full range of automatic features, is today's finest camera value.

Features of the Pentax MV include:

- Silicon Photo Diode (SPD) light sensor system for fast, reliable exposure control free from "memory" which could affect metering accuracy.
- Light Emitting Diodes (LED'S) providing operating signals visible in the viewfinder. LED's include Green for correct exposure, Red for overexposure, and Yellow for exposure setting slower than 1/30 second, too slow for successful hand-held photography.
- Seiko all-metal focal plane shutter, continuously variable speeds from 1 to 1/1000 second, world famous for durability, accuracy and reliability under a wide range of climatic conditions.
- Full aperture metering system eliminates need to stop down lens to take exposure reading, thus providing faster, more convenient focusing and framing at maximum aperture.

The Pentax MV is an integral part of the complete Pentax system of fine photography. One of the greatest assets of this system is the range of more than 40 Super-Multi-Coated Pentax lenses. It was Pentax which developed modern multi-coating and the Pentax Super-Multi-Coated treatment remains the world's best approach to multi-layer coating. Flare is virtually eliminated while contrast and brilliance are significantly enhanced. There is also a full system of accessories for virtually any photographic assignment.

Cat No.

08010	MV Body, Black (MP/SI)
32730	Soft Case ME, MV camera
20167	SMC Pentax-M 40mm f/2.8 lens
20947	SMC Pentax 50mm f/1.2 lens
20867	SMC Pentax-M 50mm f/1.4 lens
20877	SMC Pentax-M 50mm f/1.7 lens
20677	SMC Pentax-M 50mm f/2 lens

All MV Cameras are supplied with:

- Eyepiece Blind—for accurate exposure metering when the eye is away from the viewfinder.
- Tripod Spacer Ring—used with very compact or large diameter lenses on a tripod, or to protect the camera from long tripod screws.
- Neck strap with shoulder pad.

For additional cases for MV, refer to Accessories Section

PENTAX

MV Camera

Specifications

Type:

35mm single lens reflex, automatic exposure, electronic focal-plane shutter, built-in automatic flash synchronization with Pentax dedicated flash units. Open aperture, center weighted, through-the-lens metering.

Lens Mount:

Pentax Bayonet Mount

Standard Lens:

SMC Pentax-M 40mm f/2.8
SMC Pentax-M 50mm f/2
SMC Pentax-M 50mm f/1.7
SMC Pentax-M 50mm f/1.4
SMC Pentax 50mm f/1.2

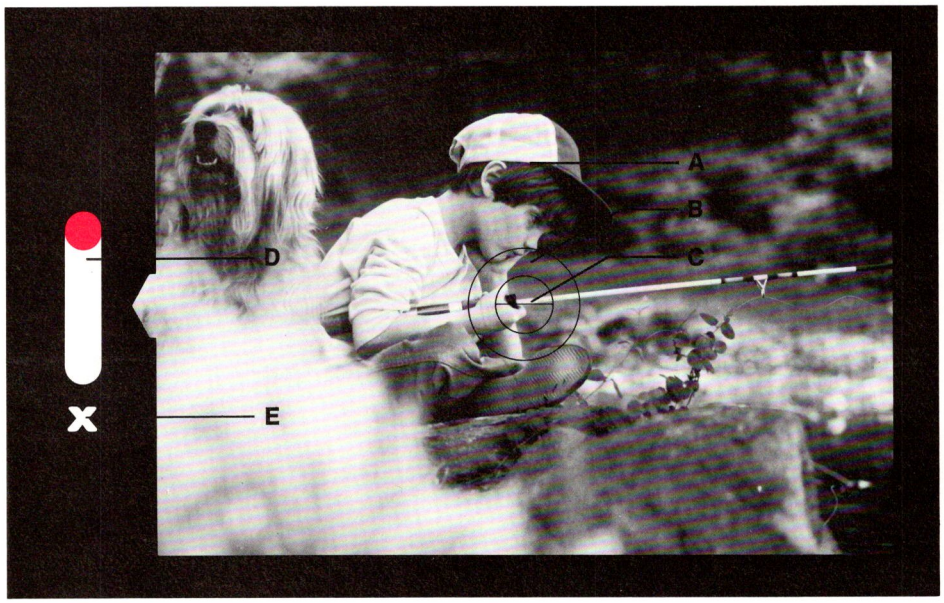
Shutter:

Seiko MFC vertical-run focal-plane shutter, automatic exposure electronically controlled, steplessly variable speeds from 1 to 1/1000 second, manual speed of 1/100 second and "B" (operates without batteries at manual settings).

Automatic synchronization using Pentax dedicated flash units. Hot shoe contact automatically sets correct shutter speed when camera is set on "Auto." Special "X" LED indicator in viewfinder signals when flash unit is charged. Manual flash synchronization for other cordless automatic flash units by setting mode selector dial to 1/100 second. Optional hot shoe adapter 2P provides "X" sync terminal at hot shoe in addition to ("X") hot shoe contact.

Viewfinder:

Aluminum coated pentaprism finder with split-image/microprism focusing screen shows 92% of picture area. Relative Magnification .85X (with 50mm lens at infinity setting);—1.0 diopter eyepiece. Correction Lens Adapter-M fits the eyepiece.



Viewfinder Indicators:

Three LED Stop/Go indicator system. Red signals overexposure, Green signals exposures from 1/30 to 1/1000 second; Yellow signals show exposure (longer than 1/30 second). Red "X" LED signal indicates fully charged dedicated automatic thyristor electronic flash units.

Mirror and Diaphragm:

Instant-return mirror, automatic diaphragm for full-aperture viewing and focusing.

Film Transport:

Single-stroke lever wind, 135-degree throw with 30-degree stand-off angle, rapid rewind crank. Additive film counter, moves from 1 to 36, resets to zero automatically when camera is unloaded. Exclusive Pentax "Magic Needle" loading method.

Exposure Metering System:

Full-aperture, center-weighted, through-the-lens meter with SPD light sensor. Metering range, EV 3-19 (with 50mm f/1.4 lens, ASA 100). ASA range, 25-1600.

MV Viewfinder:

- **A** Mat Focusing Screen
- **B** Microprism Collar
- **C** Split-Image Focusing Aid
- **D** Light Emitting Diodes
  Red = Overexposure
  Green = Correct Exposure (1/30 to 1/1000 second)
  Yellow = Exposure setting longer than 1/30 second; use tripod or electronic flash
- **E** "X" LED indicates when flash is charged

Battery:

Two 1.5V silver-oxide batteries (S76 or equivalent).

Back Cover:

Standard camera back with spring catch.

Body Size:

132mm x 84mm x 49.5mm (5.2" x 3.3" x 1.9")

Body weight:

420 grams (14.8 ounces) without lens

PENTAX

MV-1 Camera

1. Shutter Release Button/Meter Switch
2. Rapid Wind Lever
3. 3 Position Shutter Mode Selector
4. Hot Shoe / Dedicated Flash Contacts
5. Aluminum-coated Pentaprism; SPD Metering
6. ASA / Exposure Compensation Dial
7. Compact M Series Lenses With Bayonet Mount
8. Accepts Compact Winder ME-II for automatic winding at 2 fps
9. Magic Needle Film Loading
10. Self Timer

- The MV-1, an economically-priced fully automatic 35mm SLR that's as easy to use as crossing the street
- Aperture-preferred automatic exposure control coupled with an easy to use "Stop-Go" tri-color viewfinder LED display
- Automatically synchronizes at 1/100th second with ready light in viewfinder when Pentax "dedicated" flash is at full charge
- The added versatility of accepting the Winder ME—II for automatic single frame film advance or sequence shots as fast as two frames per second
- Back is fully interchangeable with the Dial Data ME Back for sophisticated alpha-numeric data recording
- Other features include a 4~10 second delay self-timer and film memo holder
- Backed by the famous Pentax System with more than 40 Super-Multi-Coated Pentax lenses and hundreds of accessories to fit virtually any photographic situation

Cat. No.	
08510	MV-1 Body, Black (MP/SI) *(Limited Availability)*
37386	Winder ME-II
32730	Soft Case ME, MV-1 camera
20167	SMC Pentax-M 40mm f/2.8 lens
20677	SMC Pentax-M 50mm f/2 lens
20877	SMC Pentax-M 50mm f/1.7 lens
20867	SMC Pentax-M 50mm f/1.4 lens
20947	SMC Pentax 50mm f/1.2 lens
37136	Dial Data Back ME for MV-1
31014	Hot Shoe Adapter 2-P

Soft Case ME and ME Case Accessories accept the MV-1. Refer to Accessories Section.

PENTAX

MV-1 Camera

SPECIFICATIONS

Type
35mm full-frame, single lens reflex camera with aperture-preferred automatic exposure control. Built-in automatic flash synchronization with Pentax dedicated flash units.

Lens Mount
Pentax Bayonet Mount. Full automatic diaphragm coupling. Screw mount lenses may be used with Mount Adapter B.

Standard Lenses
SMC Pentax-M 40mm f/2.8
SMC Pentax-M 50mm f/2
SMC Pentax-M 50mm f/1.7
SMC Pentax-M 50mm f/1.4
SMC Pentax 50mm f/1.2

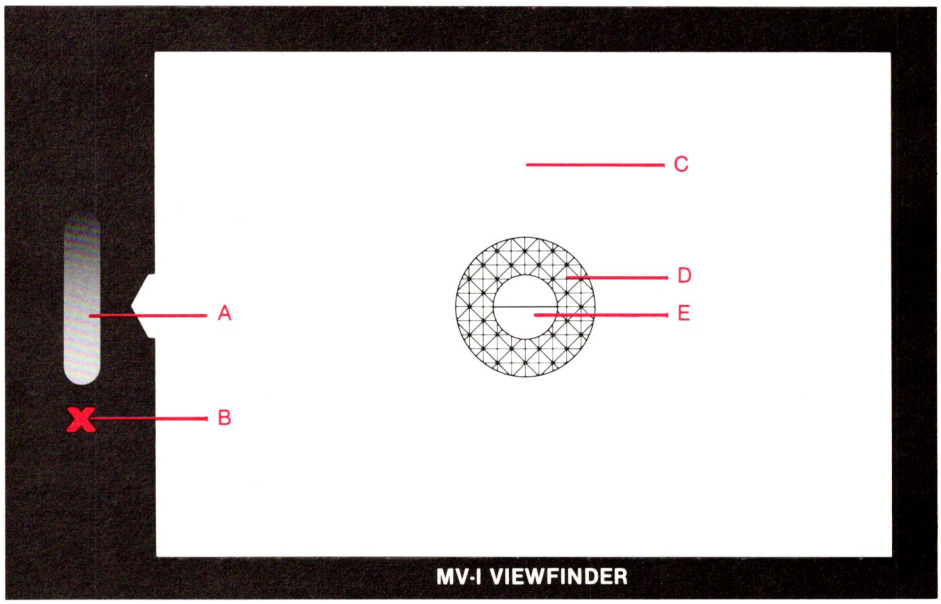
Shutter
Seiko MFC vertical-run metal focal plane shutter; automatic exposure electronically controlled in stepless range from 1 second to 1/1000 second; mechanical speeds of 1/100 second and B operational without batteries; 3 position shutter mode selector.

Flash Synchronization
Synchronizes automatically at 1/100 second with all Pentax Dedicated flash units mounted on hot shoe (X) contact in AUTO mode; Red LED "X" lights in viewfinder to indicate flash has reached full charge (LED does not light when mode selector is set to 100X or B); Direct."X" synchronization for non-dedicated, cordless flash units provided by hot shoe (X)contact with mode selector at 100X setting; Optional Hot Shoe Adapter 2P available as accessory providing X sync terminal in addition to Hot Shoe.

Self Timer

Located on camera body, delays shutter from 4 to 10 seconds; may be interrupted, and is manually activated.

Exposure Metering
Open aperture, center-weighted, through-the-lens light measurement by Silicon photo-diode (SPD); Exposure range from EV 3 to EV 19 (ASA 100 f/1.4); Meter activated by light pressure on shutter release.



A. LED Display, Red-Yellow-Green "Stop / Go"
B. Flash-ready LED
C. Matte Focusing Screen
D. Micro-prism Collar
E. Split-image focusing aid

Film Speed Range
ASA 25—1600

Exposure Compensation
ASA Dial provides indication for exposure compensation; index ring on ASA dial indicates ¼X, ½X, 1X, 2X and 4X.

Viewfinder
Aluminum-coated pentaprism finder with split-image / microprism / matte focusing screen; 92% of picture-taking area is visible with 0.85X relative magnification (50mm lens at infinity setting); LED viewfinder display; — 1.0 diopter eyepiece. Optional correction eyepieces (Correction Lens Adapter M) available as accessories.

Viewfinder Display
4 LED's displayed in three colors; Three Red-Yellow-Green "Stop/Go" Indicator System; Red signals overexposure; Green signals "hand-held" exposure from 1/30 second to 1/1000 second; Yellow signals slow exposure warning, exposure longer than 1/30 second and precaution for hand-held exposure. Red "X" LED signal indicates full flash recycle with Pentax dedicated flash units with shutter selector in AUTO mode.

Film Loading
Pentax Magic Needle Loading System

Film Transport
Single-stroke, rapid wind lever with plastic tip for winding comfort. 135° throw with 30° stand-off angle. Film rewind with rapid rewind crank and film release button. Accepts Winder ME and Winder ME-II for automatic film wind.

Exposure Counter
Additive film counter moves from loading indicator to "36"; color coded at positions "0", "20" and "24" and "36"; resets to beginning automatically when camera back is opened.

Battery
Two 1.5V silver-oxide batteries (S76 or equivalent) power all electronic systems.

Back Cover
Standard camera back with spring catch; built-in Film Memo Holder. Back is interchangeable with Dial Data ME for data recording of film. Optional Hot Shoe Adapter 2P is required for use of Dial Data Back ME.

Body Size
132mm x 84mm x 49.5mm
5.2″ x 3.3″ x 1.9″

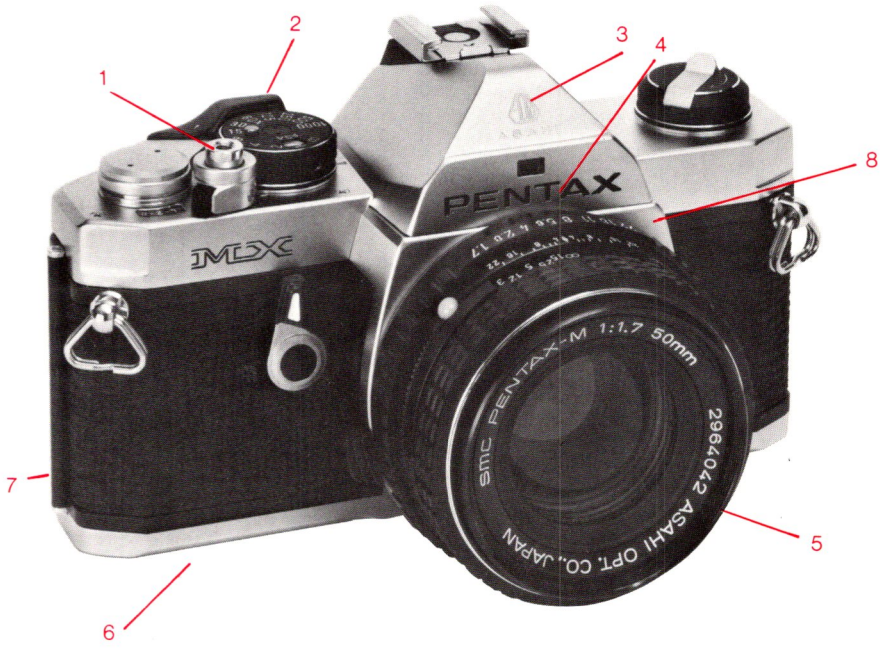
Body Weight
420 grams
14.8 ounces

Other
Supplied in black finish.
All MV-1 cameras are supplied with:

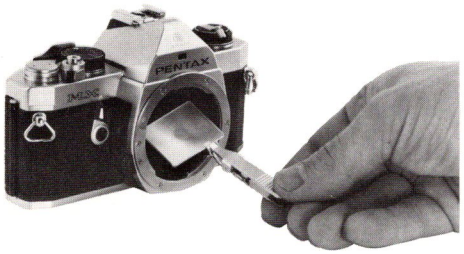
- Eyepiece Blind—for accurate exposure metering when the eye is away from the viewfinder.
- Tripod Spacer Ring—used with very compact or large diameter lenses on a tripod, or to protect the camera from long tripod screws.
- Neck strap with shoulder pad.

PENTAX

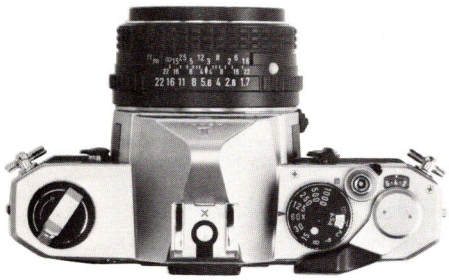
MX Camera



1. Shutter release, focal plane shutter with mirror dampening system. (1 to 1/1000 sec)
2. 160°Ratchet Type film advance (smooth—fast)
3. Large, bright viewfinder with LED metering, shutter speed & aperture readings.
4. GPD (Gallium Arsenide Phospherous Diode) metering (fast —accurate)
5. Interchangeable 'M' compact lenses (bayonet mount—Super-Multi-Coated)
6. Winder MX and Motor Drive MX easily attaches directly to camera.
7. "Magic Needle" film loading.
8. Interchangeable focusing screens.



Nine Interchangeable Focusing Screens

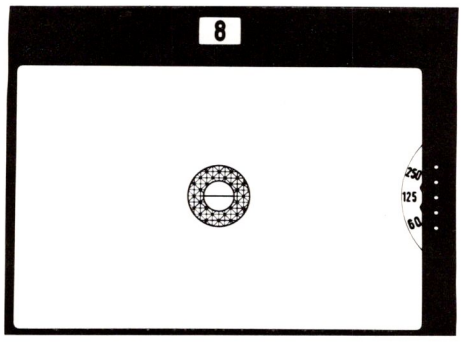


The human engineered design of the Pentax MX allows smooth handling and professional ease of operation.

The Pentax MX is the smallest and lightest professional motor drive 35mm SLR available.

Plus, it has the most advanced features of a 35mm SLR...

- GPD metering for instant accurate response
- Full information viewfinder



- Tri Color LED exposure read out
- Interchangeable focusing screens
- Winder MX (2 fps) or MX Motor Drive (5 fps)

The MX is backed by the full line of Pentax accessories and over 40 Super-Multi-Coated Pentax lenses, including the new compact M Series lenses.

Cat. No.	
05000	MX Body, Chrome (MP/SI)
05010	MX Body, Black (MP/SI)
37381	Winder MX
20167	40mm SMC Pentax-M f/2.8 lens
20947	SMC Pentax 50mm f/1.2 lens
20867	SMC Pentax-M 50mm f/1.4 lens
20877	SMC Pentax-M 50mm f/1.7 lens
20677	SMC Pentax-M 50mm f/2 lens
32700	Soft Case for MX
32711	Front for SMCP 50mm f/1.2 for Soft Case MX
32712	Front for Soft Case MX and SMCP-M 40mm f/2.8
32720	Back Cover for Soft Case MX
30831	Focusing Screen SA-1 for MX
30833	Focusing Screen SA-3 for MX
30834	Focusing Screen SB-1 for MX
30835	Focusing Screen SC-1 for MX
30832	Focusing Screen SD-1 for MX
30839	Focusing Screen SD-11 for MX
30837	Focusing Screen SE for MX
30838	Focusing Screen SG for MX
30836	Focusing Screen SI for MX

For additional cases for MX refer to Accessories Section.

PENTAX

MX Camera

Specifications

Type
35mm full-frame SLR camera with open-aperture center-weighted Through-The-Lens meter.

Lens Mount
Pentax bayonet mount.

Standard lenses
SMC Pentax-M 40mm f/2.8
SMC Pentax 50mm f/1.2
SMC Pentax-M 50mm f/1.4
SMC Pentax-M 50mm f/1.7
SMC Pentax-M 50mm f/2

Shutter
Horizontal-run, rubberized silk focal-plane shutter; speeds from 1 to 1/1000 sec. plus B; shutter release lock and "Cocked" indicator.

Flash synchronization
FP and X-sync terminals, plus accessory/hot shoe; 1/60 sec. X synchronization.

Self-timer
Delays shutter release by 8—15 seconds; self-timer start button provided.

Viewfinder
Silver-coated pentaprism finder; split-image microprism focusing screen (9 interchangeable screens); 95% of picture-taking area visible and 0.95x relative magnification with 50mm lens at infinity setting); −1.0 diopter eyepiece. Information viewfinder shows f/stop, shutter speed and tri-colored LED read-out dots. Correction Lens Adapter M, Magnifier M and Right Angle Finder M fit the viewfinder frame.

Mirror and diaphragm
Instant return mirror and automatic diaphragm. Depth-of-field preview with self-timer lever.

Film wind and rewind
Ratchet-type rapid wind lever, plastic-tipped for winding comfort. 162° throw with a stand-off angle of 20°. Rewind crank for speedy film rewind.

Film loading
New magic-needle quick/sure loading.

Automatic winder
MX camera body accepts Winder MX for up to 2 frames-per-second (single-frame and consecutive exposure operation possible) and Motor Drive MX for up to 5 frames per second (single-frame and consecutive exposure operation possible), for automatic, speedy film wind and shutter cocking.

Exposure counter
Automatic reset type.

Exposure meter
Open-aperture, center-weighted Through-The-Lens meter, with GPD cells for fast light response, with tri-colored LED exposure read-out, rapid wind lever and shutter release button acting as meter switch. Exposure range: EV1-19 (ASA 100, f/1.4). Film speed range: ASA 25-1600.

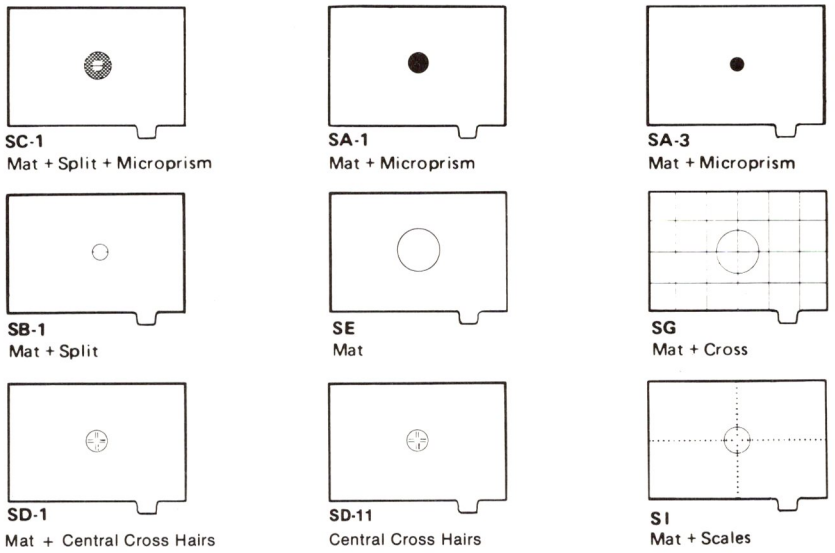
Power source
Two 1.5V silver oxide batteries (S76).

Back cover
Standard back with memo holder, interchangeable with Bulk Film Magazine 250 (MX); Dial Data MX for data recording on film.

Body size
135.8mm x 82.5mm x 49.3mm,
5.35" x 3.25" x 1.94"

Body weight
495g., 17.5oz.

All MXCameras are supplied with:
- Tripod Spacer Ring —used with very compact or large diameter lenses on a tripod, or to protect the camera from long tripod screws.
- Neck Strap with shoulder pad.



FOCUSING SCREEN TYPES

SC-1 This is the standard screen of the MX which is equipped with a central split-image spot surrounded by a micro-prism collar in a ground glass field. Its three-way focusing capabilities make it the most versatile of the available screens.

SA-1 The same screen as the SC-1, but with a central micro-prism grid for the photographer who finds the split-image distracting and desires a plain screen with the emphasis on a large ground glass area. The versatility of the screen equals that of the SC-1.

SA-3 Similar to SA-1, but the angle formed by the prisms in the micro-prism grid is greater, which simplifies focusing with high speed (f/1.2-f/2.8) lenses.

SB-1 Like the SA-1 screen this focusing screen is designed for the photographer who desires a relatively plain screen. But a split-image circle is used instead of a micro-prism grid. It is as versatile as the SC-1.

SE An all mat ground glass. Because of the absence of a split-image or micro-prism focusing aid which blacks out at small apertures, this screen is ideally suited for focusing with ultra telephoto lenses having apertures of f/5.6 or smaller. It is also well suited for work with macro lenses, or even for general purpose work when the photographer favors a plain focusing screen.

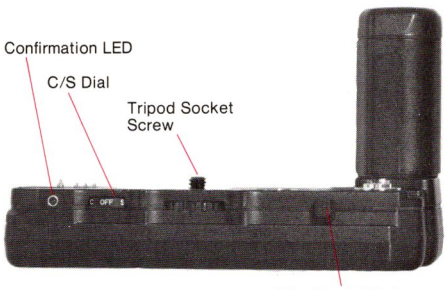
SG The same as the SE screen but with etched lines forming 6mm squares. It is useful in architectural photography, especially when working with the SMC Pentax shift lens, as the etched lines serve as guide lines to assure that the lines of the subject appear parallel and perpendicular. The points of the grid are also useful as a compositional aid.

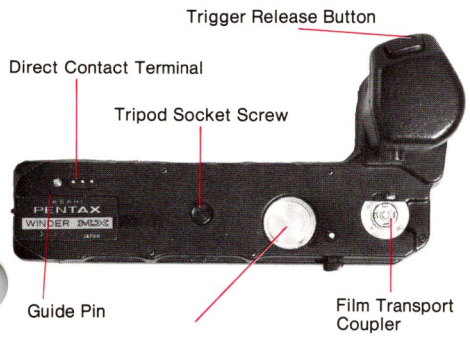
SD-1 An all mat focusing screen with central cross hairs. Ideal for photo-micrography and astrophotography. Also suitable for macrophotography when working with a dark viewfinder because of the large magnification.

SD-11 The same flexibility as the SD-1, this model eliminates the matte field and provides central cross hairs on a ground glass background for focusing ease.

SI An all mat screen, the same as SE, but with the addition of engraved scales. Designed for use with bellows and microscopes, as the scales can be used to learn the subject size and image magnification.

PENTAX
Winder MX





Camera Body Film Transport Coupler Cap Holder

Automatic Winding
Winder MX is designed specifically for the Pentax MX and Data MX, attaching to the Tripod Socket in the base plate of the camera in a matter of seconds. A Guide Pin assures perfect registration between camera and auto winder, and both are electrically connected automatically for cordless operation. The large grip of compact and lightweight Winder MX affords a sure hold for the right hand, and its Trigger Release Button is readily accessible to the index finger for rapid operation.

Specifications

Type
Automatic film winder designed for exclusive use with the Pentax MX and Data MX.

C/S Dial
Set three-position C/S Dial to C for consecutive exposure operation up to 2 fps; set dial to S for single-frame exposure operation (automatic transport, one frame at a time); set to OFF to extinguish power.

Usable Shutter Speeds
All shutter speeds, except B (Bulb)

Power Source
4 penlight batteries. (AA) (E91 or equiv.)

Shutter Release
Shutter is released with the built-in Trigger Release Button of the Winder MX Grip. May be modified for remote release.

Confirmation of Proper Functioning
An LED found to the left of the C/S Dial lights whenever Winder MX functions (transports film) properly.

Attachment Method
Attaches to the Tripod socket in the base of the camera; Guide Pins assure correct alignment.

Tripod Socket
Built-in Socket allows Winder MX to be attached to a tripod.

Dimensions
14mm L x 84mm H x 67mm D,
5.7" x 3.3" x 2.6"

Weight
230g, 9.5 oz.

Additional
Built-in receptor to store Film Transport Coupler Cap of camera body.

Cat No.

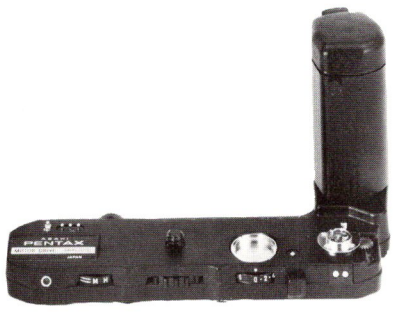
37381 Winder MX
32703 Soft Case for MX w/winder

PENTAX

MOTOR DRIVE MX

The Ultimate Professional Motor Drive System

Vast avenues of photographic opportunities are unleashed by the MX Motor Drive System. Weighing in at a mere 8 ounces, and measuring an incredible 1/2 inch in height (excluding grip), this powerful motor will deliver up to 5 fps (frames-per-second) with any of three power sources. When used with the NiCad Battery Pack M an extremely compact and lightweight package is available for the photographer on the move. When the unit is set for single-frame exposure, the film is automatically advanced and the shutter cocked the instant you release your finger from the Trigger Release Button, leaving you prepared to respond to any photographic situation at once. And, by setting the unit for consecutive exposures and shooting a burst at five frames per second (or at any steplessly variable speed of 1-5 fps) the fastest action can be shown in individual sequence. The built-in grip with Trigger Release Button assures steady and comfortable handling under almost any conditions, and remote control accessories allow motorized operation should the nature of the photo assignment be hazardous, or otherwise require the photographer to be away from the camera.
Whether operating one camera, or several for multiple coverage; using AA penlight batteries or conventional AC power, the MX Motor Drive System is your key to assured success.



The heart of the MX Motor Drive System is the incredibly small MX Motor.

SPECIFICATIONS:
Type:
Designed for exclusive use with the Pentax MX and Data MX.
Usable Shutter Speeds:
All shutter speeds, except B (Bulb) (5 fps from 1/60-1/1000 sec)
C/S Dial:
Choice of single-frame exposure (automatic transport, one frame at a time) or consecutive exposures in a steplessly variable range of 1-5 fps.
Power Source:
15V DC NiCad Battery Pack M; 18V DC Battery Grip M (12 AA batteries, E91 or equiv.); AC Power Pack M.
Battery Chargers:
Charge Pack M; AC Power Pack M
Shutter Release:
By the Trigger Release Button built-in Motor Drive MX Grip; Battery Grip M; NiCad Battery Pack M; and Power Pack M; Also Remote Trigger Connector.
Exposure Counter:
Subtractive type with automatic stop at zero

Remote Control:
3m (9.8 ft) and 10m (32.8 ft) Power Cables M available for remote control. Remote Trigger Connector
Confirmation LED:
Red LED illuminates to confirm release of shutter and transport of film.
Tripod Socket:
Located on base of Motor Drive MX and NiCad Battery Pack M; Built-in receptor for storage of camera body coupler cap.
Other Accessories:
Bulk Film Magazine 250 — interchanges with back cover of MX and Data MX for cordless connection, providing up to 250 exposures. Dial Data Back MX.
Dimensions & Weight:
MX Motor Drive
143mm (W) x 71mm (H) x 64mm (D); 225g
5.6" (W) x 2.8" (H) x 2.5" (D); 7.9oz.
MX Body + Motor Drive MX
141.5mm (W) x 95.5mm (H) x 70mm (D); 727g
5.6" (W) x 3.8" (H) x 2.8" (D); 25.6oz.

Cat. No.
37114 Motor Drive MX
37135 Dial Data Back MX

NiCad Battery Pack M

The compact size and light weight of this rechargable battery pack offers maximum handling ease and mobility for keeping pace with fast action. Because of it's snug design, the motorized MX camera and NiCad pack will allow use of the vertical format as easily as the horizontal. In addition it will easily fit into a camera bag. A tripod socket is built in the base of the pack allowing the MX Camera and NiCad pack to be directly attached to a tripod or copy stand. One full charge will transport up to 40 or more 36-exposure rolls of film.

Dimensions & Weight:
MX Body +Motor Drive MX+NiCad Pack M
141.5mm (W) x 118.6mm (H) x 77mm (D);
5.6" (W) x 4.7" (H) x 3.1" (D); 927g (32.7oz)

Cat. No.
37231 NiCad Battery Pack M (Motor Drive MX) (Requires either Charge Pack-M or Power Pack-M for recharging)

Power Pack M

Operating on standard AC current, Power Pack M is a natural for studio applications of the Motor Drive MX. When used with the Bulk Film Magazine 250, hundreds of consecutive exposures can be taken without fear of battery failure from other battery packs. Power Pack M will even recharge the NiCad Battery Pack M, although a full charge will take 10-15 hours to do so. Incorporating a built-in timer, a stepless range of time delay from 5 to 120 seconds allows unmanned continuous photography. A Trigger Release Button is located on Power Pack M and remote control sockets and terminals are provided allowing remote operations hundreds of yards away.

Cat. No.
37202 Power Pack M (AC)

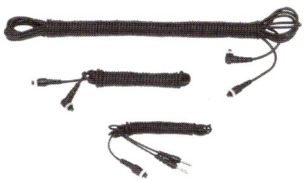
Battery Grip M

Serving as a sturdy grip and power source for the Motor Drive Unit, the Battery Grip M has its own Trigger Release Button for optimum handling ease. Twelve "AA" penlight batteries (MN1500 or equiv.) will transport approximately 100 rolls of 36 exposure film (2.5 X more film than with NiCad Battery Pack M.) And since penlight batteries are easy to obtain and are quite portable, depleted batteries can be replaced with fresh ones in a few moments time, even in the middle of a shooting session. For added convenience, batteries may be preloaded in an additional holder.

Dimensions & Weight:
MX Body+Motor Drive MX+Battery Grip M
141.5mm (W) x 239mm (H) x 78mm (D);
5.6" (W) x 9.4" (H) x 3.1" (D);
1158g (40.8oz) w/batteries.

Cat. No.
37123 Battery Grip M (batteries not included)

For ordering information for additional battery holders refer to Special Products Section.



Power Cable M (3M) (10M)
Remote Trigger Connector M

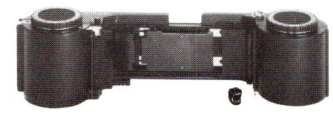
Two power cables are available in 3m (9.8 feet) and 10m (32.8 feet) lengths for remote control operation of the MX Motor Drive. The cables attach to either the MX Motor Drive unit, or to any of the three power sources available. To use the MX Motor Drive with Battery Grip M on a tripod, a power cable is required. In addition to the Trigger Release Buttons located on the Motor Drive Unit and power sources, the Remote Trigger Connector may be employed to trigger the unit, and by using multiple connectors, two or more cameras can be used at remote distances simultaneously. By connecting standard electrical cable to the contacts of the Remote Trigger Connector the camera can be operated remotely hundreds of yards away.

Cat. No.
37215 Power Cable M (3M)
37216 Power Cable M (10M)
37380 Remote Trigger Connector M

Charge Pack M

Designed for fast 6 hour charging of NiCad Battery Pack M. When connected to the NiCad Battery Pack M and standard AC current a red indicator lamp will confirm that the unit is charging. (120V).

Cat. No.
37142 Charge Pack M



Bulk Film Magazine 250 (MX)
Bulk Film Cartridge
Cartridge Loader 250

Designed to meet the needs of the photographer requiring continuous exposures in conjunction with the Motor Drive MX, or for copying large quantities of documents, the Bulk Film Magazine 250 allows you to take up to 250 exposures without reloading. When used in conjunction with the timer of Power Pack M, it is possible to shoot for more than 8 hours at 1 frame per 120 seconds, allowing analysis of a subject over a predetermined period of time. The Bulk Film Magazine 250 is supplied with two Bulk Film Cartridges, and additional Cartridges may be preloaded for easy reloading. With the use of Cartridge Loader 250, Bulk Film Cartridges are easily darkroom loaded to the number of exposures desired from 100' bulk film rolls by merely turning the handle of the loader. The Bulk Film Magazine 250 is instantly interchangeable with the back cover of the MX and Data MX. For additional versatility a coupler is supplied with the Bulk Film Magazine 250 which makes it possible to use the Magazine without the Motor

Dimensions & Weight
Bulk Film Magazine 250
289.5mm (11.4") (W) x 81mm (3.2") (H) x 66mm (2.6") (D) 125 g (4.4 oz)

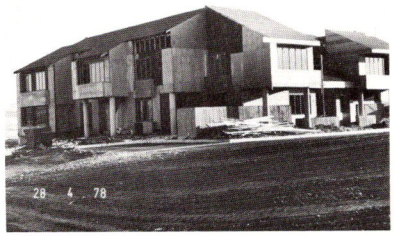
Cat. No.
37163 Bulk Film Magazine 250 (MX)
37170 Bulk Film Cartridge 250
37180 Cartridge Loader 250

PENTAX

DIAL DATA MX

The Dial Data MX can be set to record the date (day, month, year) the aperture, shutter speed and frame number, or an alphanumerical code selected by the user, in the lower left corner of the (horizontal) photograph or transparency.
Virtually unlimited uses can be found, by using different codes, for index specimens; product catalogs; aircraft; construction progress; forensic identification; and scientific testing.
The Dial Data MX accessory back is an invaluable tool for commercial, legal and scientific applications, as well as a great convenience for the serious photographer.

For other data recording capabilities refer to specifications for the Data MX Camera.



Construction progress photographs are aided tremendously by the recorded day, month and year.

DIAL DATA MX

Specifications:

Type:
Designed for exclusive use with the Pentax MX and Data MX.

Attachment:
Instantly interchangeable with standard Back Cover of Pentax MX, and Data MX. Sync cord connects to camera terminal.

Available Data:
Data selected from three dials of which the left dial is used to imprint the year (80-91) or aperture (f/1.2-f/45); the central dial for the month (0-12), shutter speed, (1/15th-1/1000 plus "Auto") or letters of the alphabet (A-M); and the right dial for the day of the month or frame number (0-36).

ASA Range:
Three settings available for black and white and color film, ASA 25-400.

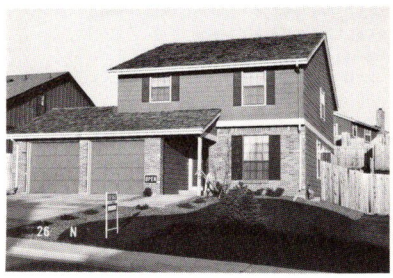
Confirmation:
Confirmation of the imprinting of data is possible by observing an LED which flashes during the moment the data is imprinted.

Battery Check:
LED flashes upon depressing "B.C." Button if battery voltage is sufficient.

Power Source:
Three 1.5V (AA) silver oxide batteries (S76 or equivalent).

Additional:
Imprinting may be switched off. Imprinting of data when using Winder MX or Motor Drive MX is possible.

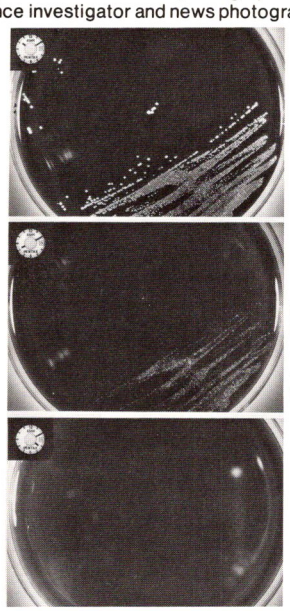
Cat. No.
37135 Dial Data Back MX
32704 Soft Case for MX w/Dial Data Back



By selecting an alphanumerical code, (26-N as shown above) this real estate agent can group locations and sales information as well as provide an easy indentification number.

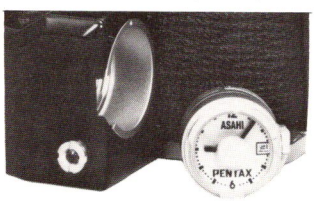
PENTAX
DATA MX

Accident recording and investigation depend upon accurate data recording. The Data MX greatly assists the forensic photographer, insurance investigator and news photographer.

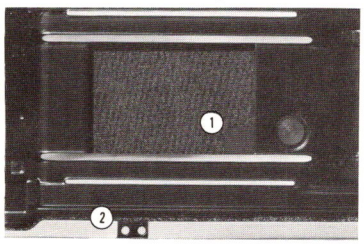


Photos by K. Tidmore

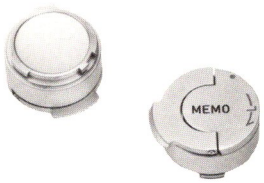
Macrophotographic recording of staphylococcus aureus culture. The time interval is easily read allowing rapid identification of the culture growth pattern.



The built-in watch of the Data MX. The central ground glass portion is used for penciling in additional data, and is easily erased.



Retractable Shield Plate (1) and electrical contacts (2) are integral parts of the Data MX camera body. Standard MX Back Cover may be used on Data MX Body in place of Data MX back.



Data Recording Memo Plate enables recording of data other than the time. Fine ground glass for easy penciling and erasure of selected data.

Record the second, minute, hour, day, month and year — Data MX from Pentax

Now complete data recording capabilities are yours with the remarkable Pentax Data MX Camera.

In addition to all the features of the famous MX Camera, the Data MX will record the date and time (hour, minute and second) at the very instant the photograph is taken. The recorded data is printed in the upper left corner of the printed photograph.

A 21 jewel, 3 hand calender watch is contained within the Data Recording Unit, and features a central ground glass area on the watch face, on which the year, month and am/pm can be penciled in.

The watch is illuminated when a lamp inside the Data Recording unit flashes as the shutter is depressed. A convex lens projects the image of the watch onto the bottom right hand corner of the film from behind. A small, retractable, Shield Plate located behind the shutter of the Data MX body prevents this corner of the film from receiving the normal exposure. Thus, no matter how strong the normal exposure may be in that area, the watch image will always appear clear and sharp.

A special Data Recording Memo Plate, supplied with the Data MX is interchangeable with the watch. The entire surface of this plate is fine ground glass allowing you to pencil in, and imprint any type of data, such as place, names, or other identification.

The cordless connection between the Data Recording Unit and the Data MX Camera Body enables any of the three flash connections (X, FP, Hot-Shoe) to be freely used, and the trim design of the Data Unit allows the camera to be used either horizontally or vertically with complete freedom of operation.

Conventional camera use is easily accomplished. By raising the Shield Plate and removing the battery, the full frame can be used, or, the Data MX back may be interchanged with the Standard MX back cover, reducing the size of the camera to that of the small Pentax MX.

The flash duration of the Data Recording Lamp is extremely short, allowing full use of the 5 frame-per-second Motor Drive MX, or the 2 frame-per-second Winder MX to freely record data.

Whether you are recording scientific studies which span a matter of seconds; recording progress at construction sites; documenting accidents or criminal investigation scenes; evaluating sporting events or recording a wedding, the Data MX from Pentax is your camera of assured success.

Specifications:

Design:
Designed as an exclusive Data MX Camera Body. All other specifications identical to MX body, and all MX accessories, including Dial Data MX back are accepted by Data MX. Data MX back will not operate when used on (non-Data) MX body.

Data Recording Unit:
Built-in 21 jewel watch indicates date, hour, minute, second and has a central ground-glass area for penciling in additional data (i.e., year and month); watch is interchangeable with supplied Data Recording Plate, the entire surface of which is ground glass for penciling in of any desired data. Cordless connection of data recording unit to camera body.

ASA Range:
Three settings for black and white film (ASA 100, 200, 400) and two settings for color film (ASA 64/100, 400).

Data Position:
Upper left corner as seen through the viewfinder.

Data Size:
A circle of 3.8mm (.2") diameter on the film surface.

Confirmation:
Data imprinting confirmed by flash of LED.

Battery Check:
LED flashes when battery check button pressed if battery voltage is sufficient.

Power Source:
One 6v silver oxide battery (Eveready 544 or equivalent), provision for remote battery cord.

Back Cover:
Interchangeable with Standard MX Back Cover, Dial Data MX and MX Bulk Film Magazine 250.

Weight:
29.5oz (836g) with 50mm f/1.4 and battery.

Dimensions:
5.3" L x 3.3" H x 4.5" D (with 50mm f/1.4)
135.5mm x 82.5mm x 113.5mm

Other:
Supplied with all MX Body accessories.

Cat. No.
05200 Data MX Body, Chrome (MP/SI)
30606 Standard Back Cover for MX

PENTAX

'K' Cameras

Human engineered to combine advanced technology and the maximum in operational features with a superbly designed camera that fits the hand as though it were a permenent fixture. Pentax 'K' cameras are compact and rugged. And there is one to suit everyone's need.

"K" CAMERAS COMPARED

TYPE	SHUTTER, SPEEDS	FLASH SYNCH	EXPOSURE METERING	VIEWFINDER DATA	DEPTH-OF-FIELD PREVIEW	MOTORIZED ADVANCE	ASA INDEX	MIRROR LOCK-UP	SHUTTER RELEASE LOCK	DIMENSIONS (width x height x depth) in inches	WEIGHT (oz.)
K1000 Built-in through-the-lens open-aperture light-metering	Horizontal-run, focal plane; rubberized silk curtains; 1 to 1/1000 sec. plus "B"	Xsynch hot shoe, plus X synch PC contact; X synch at 1/60 sec.	CdS averaging metering at full aperture; needle centering type, coupled directly to aperture, film speed and shutter speed settings; built-in Photoswitch	Pentaprism finder with microprism or split-image focusing screen; life-size image in viewfinder with 55mm lens at infinity			20 to 3200 ASA			With f/2 lens: 5.6 x 3.6 x 3.7	With f/2 lens: 29.3; body only: 21.4
KM Built-in through-the-lens open-aperture light-metering	Horizontal-run, focal-plane; rubberized silk curtains; 1 to 1/1000 sec. plus "B"	X synch hot shoe; plus separate PC contacts for X and FP synch; X synch at 1/60 sec.	CdS averaging metering at full aperture; needle centering type, coupled directly to aperture, film speed and shutter speed settings; built-in Photoswitch	Pentaprism finder with microprism or split-image focusing screen; 0.87X image magnification with 50mm lens at infinity, life size with 55mm	Yes	Motor drive body available	20 to 3200 ASA			With 50mm f/1.4 lens: 5.6 x 3.6 x 3.7	With 50mm f/1.4 lens: 31; body only: 21.8
KX Built-in through-the-lens open-aperture metering	Horizontal-run focal-plane; rubberized silk curtains; 1 to 1/1000 sec. plus "B"	X synch hot shoe plus separate PC contacts for X and FP synch; X synch at 1/60 sec.	Silicon photo diode center-weighted metering at full aperture; match-needle type, coupled directly to aperture, film speed and shutter speed settings; meter switch built into shutter button and film advance lever	Pentaprism full-information viewfinder with microprism or split-image focusing screen; shutter speed and f/stop displayed in viewfinder; 0.88X image magnification with 50mm lens at inf., life-size with 55mm	Yes	Motor drive body available	8 to 6400 ASA	Yes	Yes	With 50mm f/1.4 lens: 5.6 x 3.6 x 3.7	With 50mm f/1.4 lens: 31.4; body only: 22.1
K2 Switchable to fully automatic or match-needle manual operation; built-in through-the-lens open-aperture metering	Vertical-run, five-blade metal focal-plane; stepless in automatic mode; electronically timed; 8 to 1/1000 sec. plus "B"	X synch hot shoe plus separate PC contacts for X and FP synch; X synch at 1/125 sec.	Silicon photo diode; through-the-lens center-weighted metering at full aperture; aperture-preferred automatic; match-needle manual, coupled directly to aperture, film speed and shutter speed settings Exposure Override: ± 2 f/stops	Full information, with f/stop and shutter-speed read-out; automatic or manual function mode indicated; microprism or split image focusing screen; 0.88X image magnification with 50mm lens at infinity, life-size with 55mm lens	Yes		8 to 6400 ASA	Yes	Yes	With 50mm f/1.4 lens: 5.7 x 3.6 x 3.7	With 50mm f/1.4 lens: 33.7; body only: 24.2
K2DMD Switchable fully automatic or match-needle manual operation; built-in, through-the-lens open-aperture metering; interchangeable optional data back; motor drive accessory	Vertical-run, five-blade metal focal-plane; stepless speeds in both automatic and manual operating modes are electronically timed from 8 to 1/1000 sec., plus "B"	X synch hot shoe plus separate PC contacts for X and FP synch; X synch at 1/125 sec.	Silicon photo diode; through-the-lens center-weigbted metering at full aperture; aperture-preferred on "Auto," match-needle on manual, coupled directly to aperture, film speed and shutter speed settings; Photo Memory Lock holds exposure settings 10 minutes when mirror is locked in up position; battery check button and LED battery check lamp Exposure Override: ± 2 f/stops	Full information viewfinder with f/stop and shutter-speed read-out; manual or "Auto" operating mode indicated; exposure compensation warning visible; combination split-image and microprism focusing screen; 0.88X image magnification with 50mm lens at infinity, life-size with 55mm; built-in eyepiece blind controlled by shutter dial	Yes	Motor Drive "MD" accessory provides single frame or sequence operation from ½ to 2 frames per second with continuously variable rate; no mirror lock-up needed; one set of 12 1.5 volt batteries lasts for up to 1400 exposures	8 to 6400 ASA	Yes	Yes	With 50mm f/1.4 lens: 5.7 x 3.6 x 3.6	With 50mm f/1.4 lens: 33.6; body only: 24.3

PENTAX
K1000

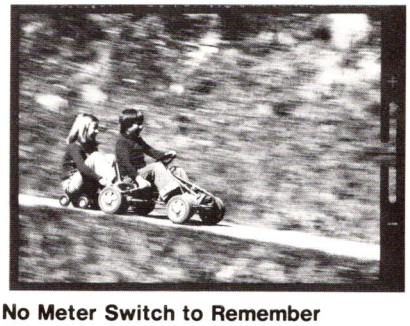
Beautiful Photographs. . . Inexpensively

• A Full System Camera
Sharing the same Pentax bayonet mount as other Pentax SLR cameras, the K1000 can utilize any one of over 40 SMC Pentax interchangeable lenses, ranging from a 15mm ultra-wide angle to 2000mm telephoto, including the new M compact lenses for extra lightweight and convenience. A full accessory system is also provided which includes a wide range of close-up, critical focusing, special effects and professional accessories —all on stand-by in case you really want to get serious about photography.

• Renowned Pentax Shutter
The K1000 employs a rubberized silk focal-plane shutter developed by Pentax for optimum durability and accuracy. Tested time and time again, it travels across the image plane with clockwork precision at speeds up to an amazing 1/1000 second.

• Full Range of Shutter Speeds/Extensive ASA Range
In addition to the top speed of 1/1000 second for rapid action scenes, the shutter-speed dial features a minimum speed of 1 second for making exposures in dim light. The camera's extensive ASA film speed range covering ASA 20 to 3200 permits you to use both slow reversal film or to "push" fast film to its limit for shooting in the dimmest of lighting.

• Large, Bright Viewfinder
Focusing, composing and viewing are simplified by the large, bright focusing screen with a center focusing spot. As the metering system takes readings at full aperture, the finder never gets dark.



• No Meter Switch to Remember
K1000 owners don't have to worry about wasted batteries as there's no switch to remember. A convenient photoswitch turns the exposure meter on for you when you remove the lens cap and off again when you replace the cap after shooting. And correct exposure is assured by the simple-to-operate "zero method" metering system. Merely turn either the aperture ring or the shutter speed dial until the needle in the finder is centered between the two brackets. The two CdS metering cells —one on each side of the viewfinder eyepiece —do the rest for you to make correct exposures a breeze.

• Convenient Electronic Flash Hook-Up
For daylight fill-in flash and other situations where a flash unit is required to highlight the details of your subject, a special bracket or "hot shoe" has been provided. The hot shoe synchronizes cordlessly with compact electronic flash units, and with the larger professional models on the market as well. For units requiring cord hook-up, a separate terminal (X-sync) is provided.

• Red "Shutter Cocked" Indicator
The "shutter cocked" indicator automatically turns red when the shutter is cocked to warn you not to press the shutter unless planning to take a picture.

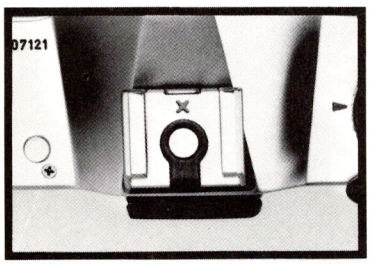
• Large, Legible Exposure Counter
The exposure counter of the K1000 features large numerals to immediately inform you of the number of exposures you have made. The counter automatically resets when you open the camera back.

PENTAX

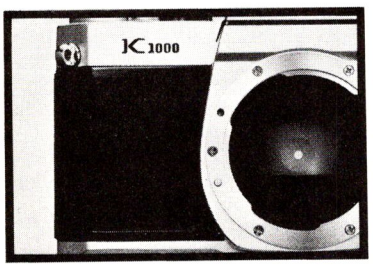
K1000

Features galore

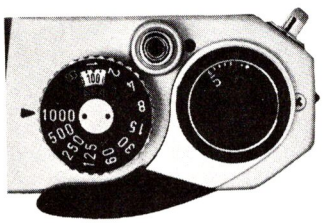
Whether you are using a slow reversal film or "pushing" fast film to its limit, the K1000 can handle it, for it has an extensive ASA range of 20-3200.
Moreover, when the film is transported, the "Shutter-Cocked Indicator" automatically turns red warning the photographer not to depress the shutter release button unless intending to take a picture. And, of course, each time the film is transported, the exposure counter advances one notch informing the user of the number of exposures already taken.
Upon opening the camera back, the exposure counter automatically returns to the "start" position.



Hot shoe for cordless electronic flash operation.



Non-slip texturized body surface for a secure grip.



Seen on the top are the "soft-touch" shutter release button, red shutter-cocked indicator, legible exposure counter, and comprehensive shutter speed dial.

K1000 Viewfinder

K1000 SPECIFICATIONS:

Type
35mm SLR with built-in through-the-lens exposure meter.

Film and Negative Size
35mm film. 24mm x 36mm.

Standard Lens
SMC Pentax-M 50mm f/2 with fully-automatic diaphragm.
Filter size: 49mm
Minimum focusing distance: 45cm (1.5')

Shutter
Rubberized silk focal plane shutter.
Speeds: B, 1 to 1/1000 sec.

Viewfinder
Pentaprism finder with cross-microprism or split-image focusing screen.
0.88x relative magnification with 50mm standard lens focused at infinity setting.
Dioptry-1.0. Accessory focusing screens available.

Reflex Mirror
Instant-return type with special shock absorbers for minimum vibration.

Lens Mount
Pentax bayonet mount.

Film Advance
Ratchet-type rapid-wind lever. 160° throw and 10° stand-off. "Cocked" indicator alongside shutter release button.

Exposure Counter
Automatic reset.

Film Rewind
Rapid-rewind crank for speedy film take-up.

Flash Synchronization
X contact hot shoe for cordless flash connection. PC contact.
X synchronization at 1/60 sec.

Exposure Meter
CdS meter measures the average brightness of the ground glass at full aperture, and couples directly to the aperture, shutter and film speed settings. Merely centering the needle assures correct exposure. Film speed from 20 to 3200 ASA. EV 3-18 with ASA 100 film. Powered by one 1.5V silver oxide battery. (S76 type). Built-in photoswitch.

Dimensions
With SMC Pentax-M 50mm f/2.0 lens:
143mm (5.6″) W x 91.4mm (3.6″) H x91mm (3.6″) D.

Weight
837g (29.5 ozs.) with 50mm f/2 lens.
610g (21.5 ozs.) without lens.

Other
Supplied with strap and shoulder pad and battery.

Cat. No.	
04500	K1000 Body, Chrome, Microprism
04520	K1000 Body, Chrome, Split-Image.
32630	Soft Case for K1000.
20677	SMCP-M 50mm f/2 lens

PENTAX K1000 "SE"

A very special edition of the Pentax K1000.

All the Features of the Renowned Pentax K1000, Plus...

- Custom Covered in a Rich Chestnut Brown
- Combination Split-Image, Micro-Prism Focusing
- Two Year Pentax Limited Warranty

Cat. No.	
04540	K1000 "SE" Body (MP/SI)
32630	Soft Case for K1000 "SE"
20677	SMCP-M 50mm f/2 lens

PENTAX
KM

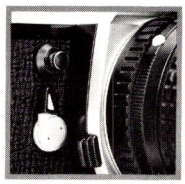
The KM, like the K 1000, is essentially the world's best-selling Spotmatic F updated with a bayonet mount and the result of Pentax's long experience in perfecting the full-frame-averaging through-the-lens metering system. Optimum exposure is determined simply and clearly, solely by adjusting the aperture ring so that the needle rests at the center of the scale. A convenient Photoswitch turns on the exposure meter when the lens cap is removed.

Incoming light is measured on a full-frame-averaging basis, using the entire ground glass area at full aperture.

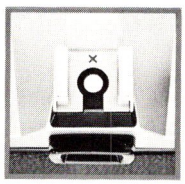
The Photoswitch automatically turns on the light meter as the KM's lens cap is removed.

Correct exposures are achieved by centering the exposure meter needle on the scale in the viewfinder.

The exposure meter is powered by one 1.5V silver oxide battery. It is strongly resistant to sudden changes in voltage or temperature.



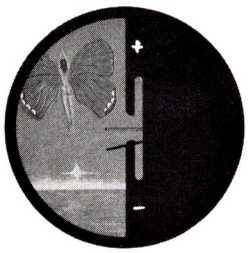
Depth-of-field can be confirmed by depressing the preview button. The self-timer is conveniently sized and located for easy use. The K bayonet mount is exceptionally easy to use.



X contact hot shoe on pentaprism for cordless flash connection.

Threaded FP and X terminals to prevent accidental disconnection of flash cord.

PENTAX
KM



When the meter needle is close to the (+) mark, you will get an over-exposure. If the needle is close to the (—) mark, you will get an under-exposure. In either case, change the shutter speed or the aperture to bring the needle to the center for correct exposure.

KM SPECIFICATIONS

Type
35mm SLR with built-in through-the-lens exposure meter.

Film and Negative Size
35mm film. 24mm x 36mm.

Standard Lenses
SMC Pentax 50mm f/1.2, 50mm f/1.4 and 55mm f/1.8 with fully-automatic diaphragm. Filter size: 52mm. Minimum focusing distance: 45cm (1.5 ft.).

Shutter
Rubberized silk focal plane shutter. Speeds: B, 1 to 1/1000 sec.

Self-timer
Built-in self-timer with interrupt function. Releases shutter in 5 - 13 sec.

Viewfinder
Pentaprism finder with cross-microprism or split-image focusing screen. 0.87x magnification with 50mm lenses (life-size with 55mm lens). Dioptry —1.0.

Reflex Mirror
Instant-return type with special shock absorbers for minimum vibration.

Lens Mount
Pentax bayonet mount.

Film Advance
Ratchet-type rapid-wind lever. 160° throw and 10° stand-off. "Cocked" indicator alongside shutter release button.

Exposure Counter
Automatic reset.

Film Rewind
Rapid-rewind crank for speedy film take-up.

Flash Synchronization
X contact hot shoe for cordless flash connection.
FP + X contacts for conventional flash cord connection.
X synchronization at 1/60 sec.

Exposure Meter
CdS meter measures the average brightness of the ground glass at full aperture, and couples directly to aperture, shutter and film speed settings. Film speed from 20 to 3200 ASA. EV 3 - 18 with ASA 100 film and 50mm lens. Powered with one 1.5V silver oxide battery. (S76 type) Built-in photoswitch.

Loaded Film Indicator
Reminder dial below film rewind knob, with settings for 20 or 36 (exposures), for daylight or tungsten color, or black and white film.

Dimensions
With 50mm f/1.4 lens: width 143mm (5.6″) x height 91.4mm (3.6″) x depth 94mm (3.7″).

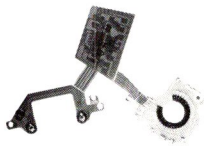
Weight
887g (31 ozs.) with 50mm f/1.4 lens.

Cat. No.

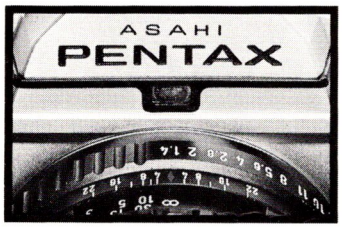
01100 Pentax KM Motor Drive Body, chrome.
32610 Soft camera case for the Pentax KM

PENTAX
KX

The KX utilizes a through-the-lens, open aperture, match-needle, metering system which offers the incredible accuracy and sensitivity of silicon photo diodes. Futhermore, the viewfinder of the KX tells all: Set the desired shutter speed and the transparent blue indicator needle moves to the selected position, serving as a reminder; next, match needles for correct exposure by rotating the aperture ring and the small window above the viewfinder informs the photographer of the position of the aperture ring. Thus, either shutter speed or aperture can be adjusted without removing the camera from one's eye.



A key feature of the KX: the through-the-lens metering circuit is coupled via a flexible circuit to two Silicon Photo Diodes and the capacitor of an Integrated Circuit.



Outside view of the KX's tiny window. Through this window, by means of a bar prism, the photographer, looking through the viewfinder, can actually read the selected f-stop off the aperture ring.

The preselected shutter speed is indicated by the blue needle. Rotate aperture ring to match needles, and the selected aperture appears in the window above the viewfinder.

PENTAX

KX

KX SPECIFICATIONS

Type
35mm SLR wth built-in through-the-lens exposure meter.

Film and Negative Size
35mm film, 24mm x 36mm.

Standard Lenses
SMC Pentax 50mm f/1.2,
50mm f/1.4 and 55mm f/1.8 with fully-automatic diaphragm.
Filter size: 52mm. Minimum aperture: f/22.
Minimum focusing distance: 45cm (1.5 ft.).

Shutter
Horizontal run, focal-plane shutter of rubberized silk.
Speeds: B, 1 - 1/1000 sec.
Shutter button lock provided.

Self-Timer
Built-in self-timer with interrupt function.
Releases shutter in 5 - 13 sec.

Viewfinder
Silver coated pentaprism finder with cross-microprism or split-image focusing screen. Aperture setting on lens visible in viewfinder. Shutter speed setting indicated by blue needle. 0.88x magnification with 50mm lenses (life-size with 55mm lens). Dioptry —0.8. 93% field of view.

Focusing
Microprism and split-image screens standard plus custom screens.

Reflex Mirror
Instant-return type with mirror lock-up provision.

Lens Mount
Pentax bayonet mount.

Film Advance
Ratchet-type rapid-wind lever. 160° throw and 20° stand-off. "Cocked" indicator alongside shutter release button.

Exposure Counter
Automatic reset.

Film Rewind
Rapid-rewind crank for speedy film take-up.

Flash Synchronization
X contact hot shoe for cordless flash connection. FP + X contacts for conventional flash cord connection.
X synchronization at 1/60 sec.

Exposure Meter
Silicon-Photo-Diode meter measures the entire area of ground glass with emphasis on central portion at full aperture.
Couples directly to shutter, aperture and film speed settings. Match-needle method.
EV1 - 18 with ASA 100 film and 50mm lens.
Film speed from 8 to 6400 ASA. Powered by two 1.5V silver oxide batteries (S76 type).

Memo Holder
Square metal sleeve for holding type/speed tab from top of film box.

Dimensions
With 50mm f/1.4 lens: width 143m (5.6″) x height 91.4mm (3.6″) x depth 94mm (3.7″).

Weight
896g (31.4 ozs.) with 50mm f/1.4 lens.
631g (22.1 ozs.) without lens.

Cat. No.	
02000	Pentax KX chrome body with body cap, strap and batteries.
02010	Pentax KX black body with body cap, strap and batteries.
02100	Pentax KX Motor Drive Body, chrome.
02130	Pentax KX Motor Drive Body, black.
32610	Soft camera case for Pentax KX.

PENTAX

motor drive system

MD-II for KX and KM

02100
37161
37111
37121

02100
37111
37121

Pentax Motor Drive

The Pentax Motor Drive camera combines classic Pentax balance, lightweight and dependability with the speed and flexibility of a motorized film advance.

The Pentax Motor Drive can be added to the Pentax KX or KM Motor Drive Camera body without any special tools or modifications. The Motor bolts directly to the base plate to provide both single frame or continuous film advance up to three frames per second.

A motor drive system increases the photographers' capabilities. The camera is always advanced and ready for the next shot. It becomes very easy to capture the decisive moment, the fleeting expression and the unexpected event that separates a snapshot from a great photograph.

The motor drive can also be set to capture an entire sequence of events, occuring rapidly (3 frames per second) or slowly (time lapse photography with accessory timers).

The motor drive camera can also be placed in positions where no photographer could ever go and then fired remotely to record the action from a very unusual viewpoint.

The Pentax KX & KM Motor Drive cameras have the same specifications as the standard Pentax KX & KM. Plus, it can be attached to the Pentax Motor Drive II and Pistol Grip II for motorized film advance. They are also backed by the complete system of motor drive accessories.

SPECIFICATIONS

With 50mm Super-Multi-Coated Pentax f/1.4

Dimensions

5⅝″x10½″x3⅝″,
11⅜″x10½″x3⅝″ (with bulk film back)

Weight

3 lbs., 5 oz., with NiCad Battery

Exposure Modes

manual-single; motorized-single; motorized-consecutive at 3 frames per second

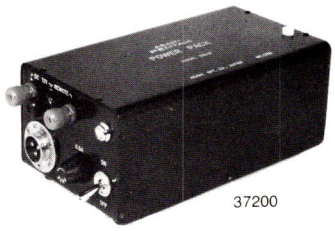
Power Supply

NiCad battery (2000 exposures at normal taking speed between charges)
Eight AA batteries in 7018 Holder
AC Power Pack

Cat. No.

02100	Pentax KX Motor Drive Camera Body
02130	Pentax KX Black Motor Drive Camera Body
01100	Pentax KM Motor Drive Camera Body
37111	Motor Drive II
37121	Pistol Battery Grip II
37140	Battery Charger (12V)
37240	Battery Checker (12V)
37280	"AA" Battery holder
37213	Remote Cord II (3meter)
37161	Bulk Film Back II (For up to 250 exposures)
37170	250 Film Cartridge Second Timer
37180	250 Cartridge Loader Minute Timer
37200	AC Power Pack Hour Timer
37150	Relay Pack
37155	Refconverter II for Bulk Film Magazine

37121



37200

37111

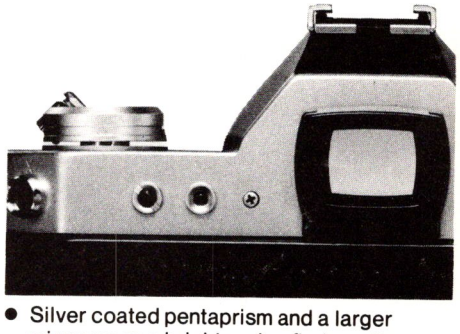
PENTAX
K2

The K2 is first and foremost a precision camera designed for operating ease, accurate performance, durability, stability, and reliability. The Seiko MF shutter (a compact, metal focal-plane shutter consisting of 5 fan-like leaves) has been created especially for the K2. The K2 offers 2 exposure determination systems: fully -automatic or match-needle operation. Either system can be used at speeds from 1/1000 sec. to 8 sec. From its new shutter to its new exterior finish, the K2 makes the most of its extremely advanced design in every situation, under practically any conditions.

K2 FEATURES

- Automatic stepless shutter speeds from 8 seconds to 1/1000 second.
- A full range of manual electronic shutter speeds from 1/1000 to 8 second, plus B.
- New ten bladed vertical running metal shutter.
- Electronic flash sync at 1/125 second.

- Fast response silicon photo diode adjusts quickly to abrupt light changes.
- 4x to 1/4x exposure factor dial to compensate for difficult lighting situations.
- Mirror lock-up switch to minimize vibrations.
- Human engineered for surer, easier and faster handling.
- Over 40 matching Pentax bayonet lenses with sure grip focusing ring and improved Super-Multi-Coating.



- Silver coated pentaprism and a larger mirror mean a brighter viewfinder with no mirror cut-off when using telephoto lenses.
- A complete system of accessories for every photographic situation.
- 5.7" wide, 3.6" high and 3.7" deep with the SMCP-M 50mm f/1.4 lens
- The body only is a light 23.9oz (680g); With the 50mm f/1.4 lens 33.4ozs. (946g).
- Center weighted metering.
- 8-6400 ASA range to handle today's films.
- Automatic metering for fast action, plus match needle for manual metering.
- Depth-of-field preview.

PENTAX

K2

K2 SPECIFICATIONS

Type
35mm SLR with through-the-lens exposure meter and vertically moving electronic focal-plane shutter.
Exposure control fully-automatic or manual.

Film and Negative Size
35mm film. 24mm x 36mm.

Standard Lenses
SMC Pentax-M 50mm f/1.2, 50mm f/1.2mm f/1.4 and 50mm f/1.7 with fully-automatic diaphragm. Minimum aperture: f/22. Filter size: 49mm. Minimum focusing distance:45cm (1.5ft.)

Shutter
Vertical run, metal focal-plane shutter. Shutter button lock provided. Automatic electronic shutter: stepless between 8 and 1/1000 sec. Manual electronic shutter:
8, 4, 2, 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250, 1/500, 1/1000 sec. Manual mechanical shutter: B, 1/125 and 1/1000 sec. (when battery is dead.)

Flash Synchronization
X contact hot shoe for cordless flash connection. FP & X contacts for conventional flash cord connection. X synchronization at 1/125 sec.

Self-timer
Built-in self-timer with interrupt function. 5~9 sec. delay after tripping shutter release.

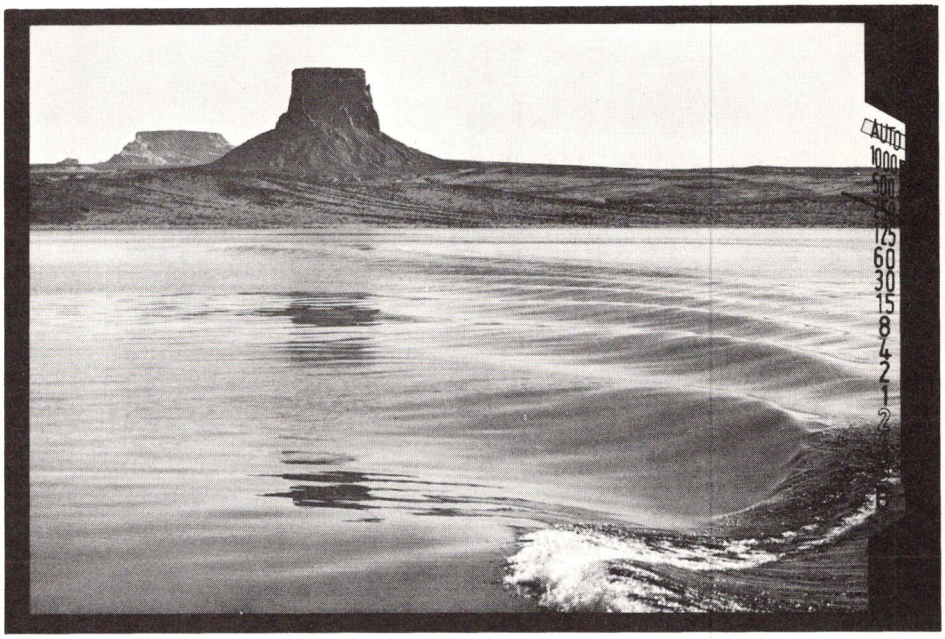
Viewfinder
Silver coated pentaprism finder with microprism focusing screen. 0.88x magnification with 50mm lenses. 95% field of view. Dioptry -0.8.

Focusing
Microprism screen standard plus accessory screens.

Reflex Mirror
Swing-up-and-back, instant-return type, with mirror lock-up lever, and special shock absorbers for minimum vibration.

Film Advance
Single-stroke wind liver. 130° throw and 25° stand-off.

Memo/Film Tab Holder



Exposure Counter
Automatic reset.

Film Rewind
Rapid-rewind crank lifts clear of body.

Lens Mount
Pentax bayonet mount. Rotation: 65°.

Exposure Meter
Silicon-Photo-Diode-activated, aperture-preferred meter measures the entire area of ground glass with emphasis on central portion at full lens aperture. Match-needle operation for correct exposure on manual. Couples directly to shutter, aperture and film speed settings. Shutter speed and auto/manual setting visible in viewfinder.

Exposure Control
Exposure factor control dial: 4x, 2x, 1x, ½ x, ¼ x for exposure compensation control.

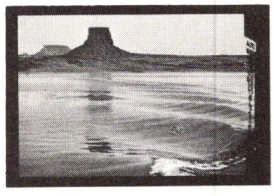
Power Source
Two 1.5V silver oxide batteries (S76 or equiv.)

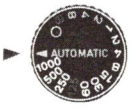
Meter Switch
Meter is ON when shutter button is depressed halfway. Also, when film wind lever is pulled out 25° and shutter button is depressed halfway, meter stays ON. Battery check button and lamp provided.

Dimensions
With 50mm f/1.4 lens: 144mm (5.7") W x 92mm (3.6") H x 94mm (3.7") D.

Weight
946g (33.4 ozs.) with 50mm f/1.4 lens.
680g (23.9 ozs.) without lens.

Other
Supplied with strap, shoulder pad and batteries.





When shooting on AUTOMATIC, the blue needle indicates AUTO on top. When the meter is switched on, the black needle indicates a correct shutter speed.

When shooting on manual, the blue needle indicates the shutter speed chosen. To obtain optimum exposure, match the black needle with the blue one by turning either the aperture ring or the shutter speed dial.

Cat. No.

03000 Pentax K2 chrome body with body cap and microprism focusing screen, strap and batteries.

03010 Pentax K2 black body with body cap and microprism focusing screen, strap and batteries.

32600 Soft camera case for Pentax K2

For replacement of supplied accessories and information on accessory focusing screens, refer to Special Products Section.

R

PENTAX
K2DMD

K2 DATA MOTOR DRIVE

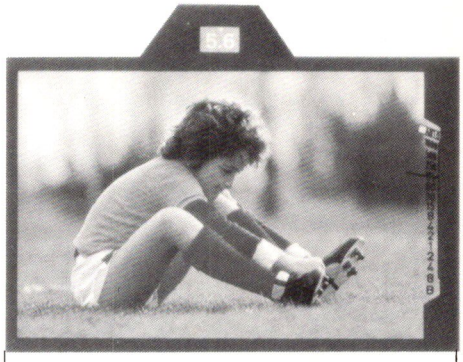
Both Data Recording and Motor Drive capabilities are built-in to the K2DMD, making this the ultimate professional camera.

The K2DMD is the finest fully automatic SLR camera in the world, built with precision and engineered for durability. Yet it maintains the ease of use and compact styling that has made Pentax cameras world renowned.

Like the K2, the K2DMD is fully automatic, utilizes a stepless electronic Seiko metal focal-plane shutter (with full manual overide capabilities) and an extremely fast and accurate silicon photo diode metering system. It also offers a full range of manual shutter speeds from 8 seconds to 1/1000 second, plus B; electronic flash sync at 1/125 second; an exposure compensation dial that permits automatic over/under exposure up to 2 f/stops and a large, bright, silver coated pentaprism for easy viewing and focusing.

In addition to data recording and motor drive capabilities, the K2DMD incorporates several other features, unique in the line to the K2DMD:

- A full information viewfinder that shows whether the camera is being used on automatic or manual; whether the exposure compensation feature is in use; what shutter speed has been selected and what lens aperture is in use.
- Unique exposure control with use of a "Memory Lock." This enables the user to lock in an exposure reading and reposition the subject in the viewfinder to compensate for harsh lighting conditions.



The Viable Viewfinder. In the above example, the following information is available at a glance: The aperture is f/5.6, no compensation is being used, the camera is set to AUTO, the automatic exposure is approximately 1/125, and the subject is properly composed and focused.

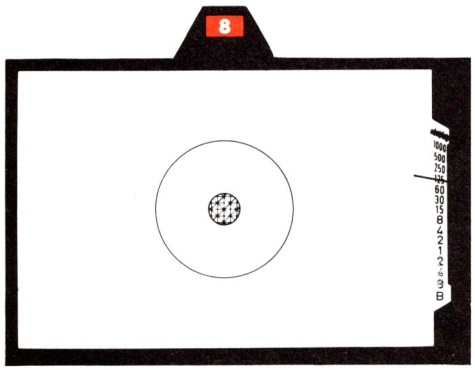
- An automatic "Shutter Lock" that prevents the user from using the camera in the automatic mode when batteries are too weak.
- A built-in Eyepiece Blind.
- Accessory backs.

Cat. No.

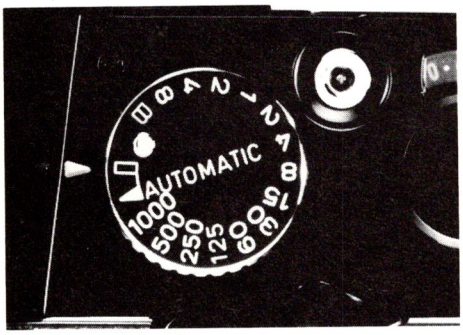
03310 Pentax K2DMD Black body with body cap, strap and batteries.

32600 Soft leather camera case for Pentax K2DMD

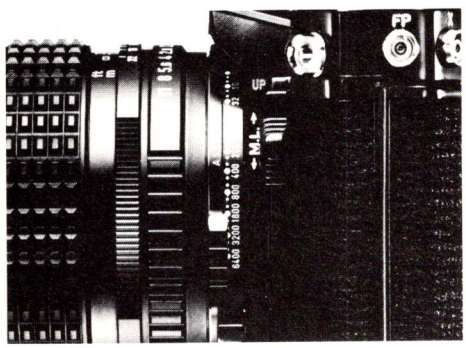
PENTAX
K2 DMD



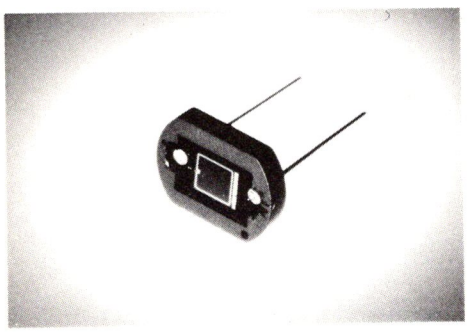
As a warning and reminder, the aperture read-out changes from white to orange whenever exposure compensation is utilized.



Setting the Shutter Speed Dial to this position closes the built-in Eyepiece Blind.



The Mirror Lock-Up and Photo Memory Lock Lever.



Fast response silicon photo diode adjusts quickly to abrupt light changes.

Specifications:

Camera Type
Aperture-Priority AE 35mm SLR with manual override and built-in provisions for motor drive and data recording.

Shutter
Electronically controlled Seiko MF vertically moving, metal focal plane shutter.

Automatic:	Stepless range of 1/1000 - 8 seconds. 1/1000 - 8 seconds & B.
Manual:	
Mechanical Shutter:	B, 1/125 sec. (no batteries and dial set to 1/125 - 1 sec), 1/1000 sec. (no batteries and dial set to 1/1000 - 1/250 sec.).

Synchronization
Hot Shoe with built-in circuit breaker, FP and X threaded terminals, X-sync at 1/125 sec.

Self-Timer
5~9 sec. delay, starts with Shutter Release Button, can be stopped while operating and by-passed.

Viewfinder
Silvered pentaprism for brilliamt viewing, Spilt-Micro focusing aid, magnification of .88x with 50mm lens at infinity. 95% of picture taking area visible, eyepiece of-0.8 diopter, built-in Eyepiece Blind. Auto/Manual Indicator, Aperture, Shutter Speed Indicator for both auto and manual operation, and Exposure Compensation Warning visible in Viewfinder. Match-Needle operation possible for manual exposure control. Accessory focusing screens available.

Mirror
Extra-large, swing back mirror for elimination of mirror cut-off and with provision for Mirror Lock-up.

Exposure Measurement
Silicon Photo Diode open-aperture, center-weighted through-the-lens exposure measurement for aperture-priority AE or match-needle manual exposure control. ±2 EV exposure compensation provision, Photo Memory Lock (automatic exposure temporarily memorized when Mirror Lock-Up Lever is held downward or memorized approximately 10 minutes when mirror is locked in the upraised position), exposure measurement range of EV 1 - 18 (f/1.4 lens, 100 ASA) ASA range of 8 - 6400, meter switch incorporated into Film Advance Lever and Shutter Release Button.

Film Advance Lever
Plastic thumb grip, single stroke 135° throw with stand-off angle of 25°.

Exposure Counter
Additive type with automatic reset.

Film Rewind
Rapid Rewind Crank built into Rewind Knob.

Lens Mount
Pentax Bayonet Mount.

Power Source
Two 1.5V silver oxide batteries (S76 or equiv.) which last approximately one year with normal use, Battery Check Lamp (LED) to test battery condition, automatic "Shutter-Lock" when attempting to use camera with batteries of insufficient voltage, serving as warning to replace batteries.

Back Cover
Back Cover has built-on film tab holder and is interchangeable with data back, opens by pulling up Rewind Knob.

Built-in Coupling
Shutter Release Pin, Film Transport Coupler, and direct contact terminals which couple to motor drive. Built-in Data Light Shield which couples to Data Switch, and direct contact terminal which couples to data back.

Dimensions
With 50mm f/1.4 lens: 144mm (5.7") W x 92mm (3.6") H x 94mm (3.7") D

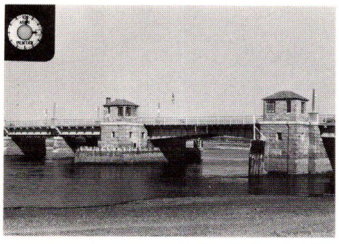
Weight
953g (33.6 oz) with 50mm f/1.4 lens. 668g (24.3 oz) without lens and batteries.

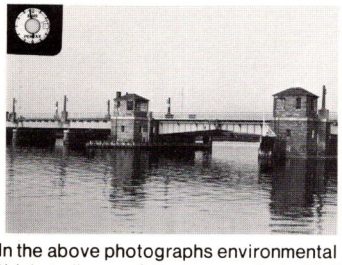
Additional Features
Built-on Tripod Socket, Depth of Field Preview Button, lenses provided with upraised dots for instant matching and mounting to camera body, reinforced neck strap lugs, all black body, texturized body surface for sure grip.

For Data Recording and Motor Drive operations, refer to following pages.

For replacement of supplied accessory items, and information on accessory focusing screens, refer to Special Products Section.

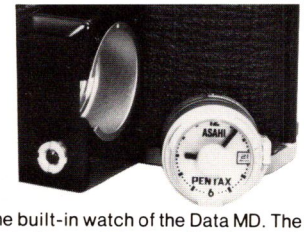
PENTAX
Data MD



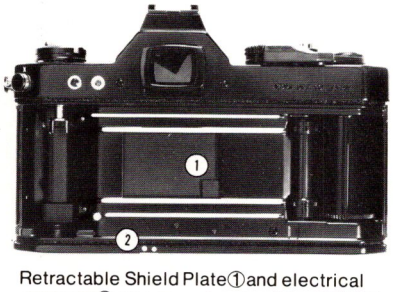


In the above photographs environmental tidal studies are fully documented with time and date.

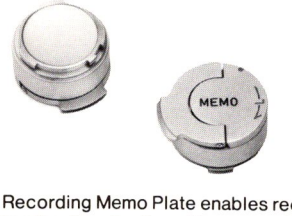
Criminal investigations, insurance damage claims and similar applications are immeasurably assisted by the comprehensive data recording capabilities of the Data K2DMD.



The built-in watch of the Data MD. The central ground glass portion is used for penciling in additional data, and is easily erased.



Retractable Shield Plate①and electrical contacts②are integral parts of the K2DMD camera body. Standard Back Cover may be used on K2DMD Body in place of Data MD Back.



Data Recording Memo Plate enables recording of data other than the time. Fine ground glass for easy penciling and erasure of selected data.

Record the second, minute, hour, day, month and year — Data K2DMD from Pentax.

Now complete data recording capabilities are yours with the remarkable Pentax Data MD Back for the K2DMD camera body.
In addition to all the features of the famous K2DMD Camera, the Data Back MD will record the date and time (hour, minute and second) at the very instant the photograph is taken. The recorded data is printed in the upper left corner of the printed photograph.
A 21 jewel, 3 hand calender watch is contained within the Data Recording Unit, and features a central ground glass area on the watch face, on which the year, month and am/pm can be penciled in.
The watch is illuminated when a lamp inside the Data Recording unit flashes as the shutter is depressed. A convex lens projects the image of the watch onto the bottom right hand corner of the film from behind. A small, retractable, Shield Plate located behind the shutter of the K2DMD body prevents this corner of the film from receiving the normal exposure. Thus, no matter how strong the normal exposure may be in that area, the watch image will always appear clear and sharp.
A special Data Recording Memo Plate, supplied with the Data MD Back is interchangeable with the watch. The entire surface of this plate is fine ground glass allowing you to pencil in, and imprint any type of data, such as place, names, or other identification.
The cordless connection between the Data Recording Unit and the K2DMD Camera Body enables any of the three flash connections (X, FP, Hot-Shoe) to be freely used, and the trim design of the Data Unit allows the camera to be used either horizontally or vertically with complete freedom of operation.
Conventional camera use is easily accomplished. By turning the Data Switch on the base of the K2DMD body to the "off" position, the Shield Plate is raised, and by removing the battery from the Data MD Back, the full frame can be used, or the Standard Back Cover for the K2DMD may be easily interchanged.
The flash duration of the Data Recording Lamp is extremely short, allowing full use of the 2 frame-per-second Motor Drive MD to freely record data.
Whether you are recording scientific studies which span a matter of seconds, recording progress at construction sites, documenting accidents or criminal investigation scenes, evaluating sporting events or recording a wedding, the Data MD Back with the K2DMD from Pentax is your camera of assured success.

Specifications:

Design:
Designed for exclusive use with Pentax K2DMD.
Data Recording Unit:
Built-in 21 jewel watch indicates date, hour, minute, second and has a central ground-glass area for penciling in additional data (i.e., year and month); watch is interchangeable with supplied Data Recording Plate, the entire surface of which is ground glass for penciling in of any desired data. Cordless connection of data recording unit to camera body.
ASA Range:
Three settings for black and white film (ASA 100, 200, 400) and 2 settings for color film (ASA 64/100, 400).
Data Position:
Upper left corner of film frame.
Data Size:
A circle of 3.8mm (.2") diameter on the film surface.
Confirmation:
Data imprinting confirmed by flash of LED.
Battery Check:
LED flashes when battery check button pressed if battery voltage is sufficient.
Power Source:
One 6v silver oxide battery (Mallory PX28 or equiv.); provision for remote battery cord.
Back Cover:
Interchangeable with Standard K2DMD Back Cover.
Weight:
36.8oz (1045g) with 50mm f/1.4 lens on K2DMD. (without batteries)
Dimensions:
5.7"L x 3.6"H x 4.8"D (with K2DMD and 50mm f/1.4 lens.
144mm (L) x 92.2mm (H) x 123mm (D)

Cat. No.
37131 Data Back MD

For replacement of supplied accessories, refer to Special Products Section.

PENTAX
Motor Drive MD

Vast avenues of photographic opportunities are unleashed by the K2DMD Motor Drive System. With only a small addition in weight and size, one can easily convert the full-featured K2DMD camera to a motorized, instantly responsive professional camera. The powerful micro-motor of the compact Motor Drive MD unit propels the film at a rate of ½ to 2 frames-per-second with any of three power sources. When used with the NiCad Battery Pack M an extremely compact and lightweight package is available for the photographer on the move. When the unit is set for single-frame exposure, the film is automatically advanced and the shutter cocked the instant you release your finger from the Trigger Release button, leaving you prepared to respond to any photographic situation at once. A single touch switches the operation from single frame to continuous mode enabling fast action to be captured in individual sequence at 2 fps.. The built-in grip with Trigger Release Button assures steady and comfortable handling under almost any conditions, and remote control accessories allow motorized operation should the nature of the photo assignment be hazardous, or otherwise require the photographer to be away from the camera.
Whether operating one camera, or several for multiple coverage; using AA penlight batteries or conventional AC power the K2DMD Motor Drive System is the ultimate in reliability and the pinnacle in precision motor drive cameras.

The powerful micro motor of the compact Motor Drive MD, the heart of the K2DMD motor drive system, propels the film at a rate of ½ -2 fps. Furthermore, a single touch is all that is required to changeover from single-frame to consecutive exposure operation. Also found on this unit are the exposure counter, trigger release, remote control socket, tripod socket, and rewind lever.

Specifications:

Design:
Designed for exclusive use with the Pentax K2DMD.

Usable Shutter Speeds:
Single-Frame Exposures: A stepless range of 1/1000-8 sec. for AUTO and a range of 1/1000-8 sec., B (Bulb) for MANUAL.

Consecutive Exposures: 1/1000-1/60 sec. (AUTO or MANUAL) at 1 fps; 1/1000-1 sec. (AUTO or MANUAL) at 1/2 fps; all AUTO and MANUAL speeds (except bulb "B") at longer intervals.

C/S Dial:
Choice of single-frame exposure (automatic transport, one frame at a time) or consecutive exposures in a steplessly variable range of 1/2-2 fps.

Power Source:
15vDC NiCad Battery Pack M; 18vDC Battery Grip M; AC Power Pack M.

Battery Chargers:
Charge Pack M; Power Pack M (AC).

Shutter Release:
By the Trigger Release Button built-in K2DMD Motor Drive MD Grip; Battery Grip M; NiCad Battery Pack M; and Power Pack M; Also Remote Trigger Connector M.

Exposure Counter:
Subtractive type with automatic stop at zero.

Remote Control:
3m(9.8 ft) and 10m (32.8 ft) Power Cable M available for remote control. Remote Trigger Connector.

Tripod Socket:
Located on base of Motor Drive MD and NiCad Battery Pack M.

Other Accessories:
Data Back MD.

Dimensions & Weight:
MD Motor Drive 142.3mm (5.6") (W) x 88.3mm (3.5") (H) x 75.6mm (2.9") (D); 343g (12.1oz)
K2DMD Body +Motor Drive MD 148.5mm (5.9") (W) x 110.5mm (4.4") (H) x 75.6mm (2.9") (D) 1038g (36.6oz).

Cat. No.
37113 Motor Drive MD

Motor Drive MD

NiCad Battery Pack M

The compact size and light weight of this rechargeable battery pack offers maximum handling ease and mobility for keeping pace with fast action. Because of its snug design, the motorized K2DMD camera and NiCad pack will allow use of the vertical format as easily as the horizontal. In addition it will easily fit into a camera bag. A tripod socket is built in the base of the pack allowing the K2DMD camera and NiCad Pack to be directly attached to a tripod or copy stand. One full charge will transport up to 40 or more 36-exposure rolls of film.

Dimensions and Weight:
K2DMD Body + Motor Drive MD + NiCad Pack M 148.5mm (W) x 133.8mm (H) x 80mm (D)
5.9″ (W) x 5.3″ (H) x 3.2″ (D) 1,238g (43.7 oz)
K2DMD as above and Data Back MD 148.5mm (W) x 133.8mm (H) x 106mm (D)
5.9″ (W) x 5.3″ (H) x 4.2″ (D) 1,340g (47.2 oz)

Cat. No.
37231 NiCad Battery Pack M (Motor Drive MD) (Requires either Charge Pack-M or Power Pack-M)

Charge Pack M

Designed for fast 6 hour charging of NiCad Battery Pack M. When connected to the NiCad Battery Pack M and standard AC current, a red indicator lamp will confirm that the unit is charging. (120v).

Cat. No.
37142 Charge Pack M

Battery Grip M

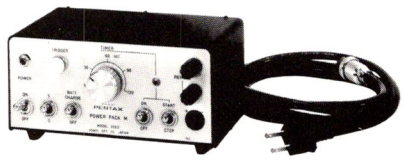
Serving as a sturdy grip and power source for the Motor Drive Unit, the Battery Grip M has its own Trigger Release Button for optimum handling ease. Twelve "AA" penlight batteries (MN1500 or equiv.) will transport approximately 100 rolls of 36 exposure film (2.5X more film than with NiCad Battery Pack M). And since penlight batteries are easy to obtain and are quite portable, depleted batteries can be replaced with fresh ones in a few moments time, even in the middle of a shooting session. For added convenience, batteries may be preloaded in an additional holder.

Dimensions and Weight:
K2DMD Body + Motor Drive MD + Battery Grip M 148.5mm (W) x 254.2mm (H) x 82mm (D)
5.9″ (W) x 10.1″ (H) x 3.3″ (D) 1,515g (53.4 oz), (with batteries)
K2DMD Body as above & Data Back MD 148.5mm (W) x 254.2mm (H) x 106mm (D)
5.9″ (W) x 10.1″ (H) x 4.2″ (D) 1,617g (57.1 oz), (with batteries)

Cat. No.
37123 Battery Grip M (batteries not included)

For ordering information for additional battery holders refer to Special Products Section.

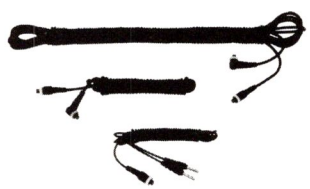
Note: All components listed on this page are also compatable with Motor Drive MX.



Power Pack M

Operating on standard AC Current, Power Pack M is a natural for studio applications of the Motor Drive MD. When producing large quantities of photographs such as copying or slide duplication, hundreds of rolls of film can be taken without fear of battery failure from other battery packs. Power Pack M will even recharge the NiCad Battery Pack M, although a full charge will take 10-15 hours. Incorporating a built-in timer, a stepless range of time delay from 5 to 120 seconds allows unmanned, continuous photography. A Trigger Release Button is located on Power Pack M and remote control sockets and terminals are provided allowing remote operations hundreds of yards away.

Cat. No.
37202 Power Pack M



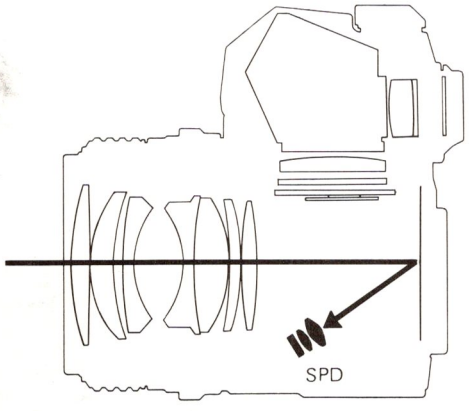
Power Cable M (3m) (10m) Remote Trigger Connector M

Two power cables are available in 3m (9.8 feet) and 10m (32.8 feet) lengths for remote control operation of the MD Motor Drive. The cables attach to either the K2DMD Motor Drive unit, or to any of the three power sources available. To use the K2DMD Motor Drive with Battery Grip M on a tripod, a power cable is required. In addition to the Trigger Release Buttons located on the Motor Drive Unit and power sources, the Remote Trigger Connector may be used to trigger the MD Motor Drive, and by using multiple connectors, two or more cameras (K2DMD and/or MX cameras with motor drives) can be used at remote distances simultaneously.
By connecting standard electrical cable to the contacts of the Remote Trigger Connector M, the camera can be operated remotely hundreds of yards away.

Cat. No.
37215 Power Cable M (3m)
37216 Power Cable M (10m)
37380 Remote Trigger Connector M

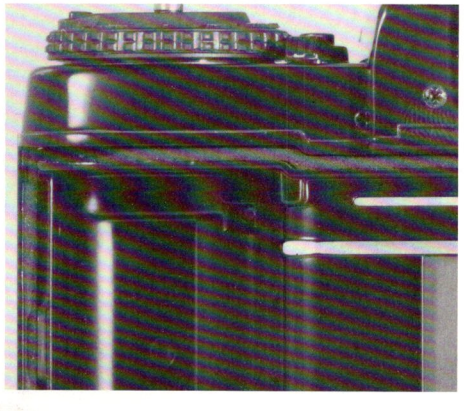
PENTAX

LX SLR Camera



I.D.M. Light Measurement
The superbly accurate Integrated Direct Metering System of the Pentax LX measures light reflected directly off the film plane to ensure precise automatic exposure measurement even as the image is being captured on film. Because the new generation Silicon Photo Diode is seated in the camera body beneath the unique dual-system mirror, no exposure compensation is required with accessory viewfinders or focusing screens and no blind is required for long time exposures or remote-control photography.

Electro-Mechanical Shutter
Because of its electro-mechanical shutter design, the Pentax LX allows the photographer the flexibility to use all speeds from 1/2000th of a second to "X" (1/75th second) even if the batteries fail!



Moisture and Dust Resistance
Special sealings and gaskets have been used in all key parts of the camera body and interchangeable finders for added resistance to moisture and dust. Even the film advance incorporates sealed ball bearings for trouble-free film transport.

A New Dimension In Professional Photography

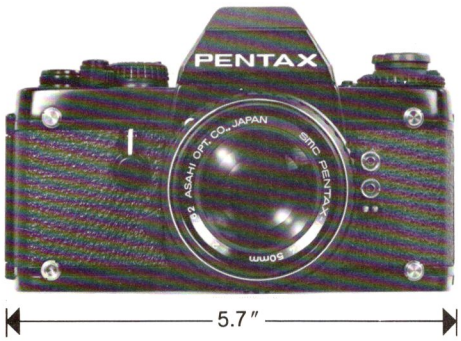
- Unique LX Integrated Direct Metering light measurement system reads directly off the film plane in automatic for unparalleled exposure accuracy regardless of how rapidly or subtly lighting may change.
- Pentax-engineered dual-system instant return mirror transmits significantly more light to the camera's new generation SPD cell for ultra-sensitive, ultra-accurate center-weighted manual readings.
- Exclusive Pentax titanium electro-mechanical shutter delivers electronically-controlled stepless speeds from 1/2000th second to a full 125 seconds.
- Full range of manual speeds from 1/2000th second to "X" (1/75th second) available...even if the batteries fail!
- A complete system of interchangeable viewfinders and focusing screens...including the unique Pentax System Finder with its fully interchangeable eyepieces.
- Fully integrated auto flash control reads both ambient light and electronic flash at the film plane with versatile new AF-280T or powerful AF-400T units.
- Two-way exposure counter provides exact frame location at all times and makes random access multiple exposures quick and easy.
- Special sealings and gaskets at key finder and body locations provide added resistance against moisture and dust.
- Full data viewfinder display includes aperture, color-coded shutter speed scale, exposure compensation warning, over- and under-exposure warnings...and more!

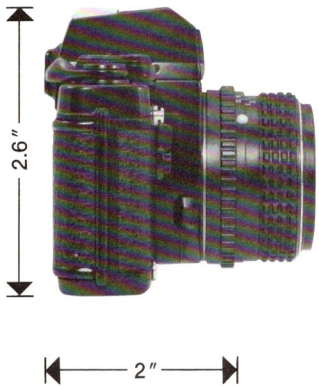
ORDERING INFORMATION

Cat. No.	
09010	LX Body, Black
30961	Eye-Level Finder FA-1 w/Hot Shoe
20947	SMCP 50mm f/1.2 Standard Lens
20867	SMCP-M 50mm f/1.4 Standard Lens
20877	SMCP-M 50mm f/1.7 Standard Lens
20677	SMCP-M 50mm f/2 Standard Lens
32810	Soft Case LX
37125	Accessory Grip B

PENTAX

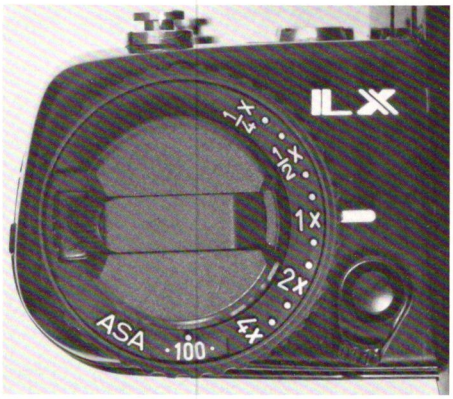
LX SLR Camera





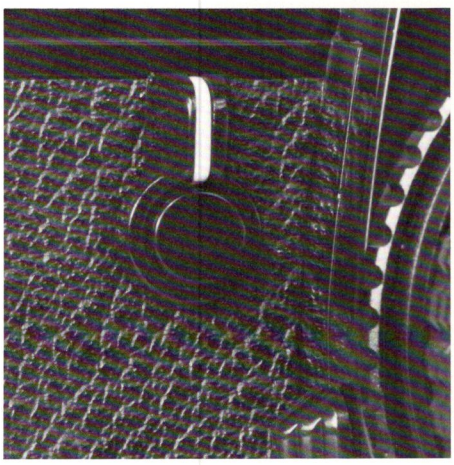
New Levels of Handling Ease
Weighing a mere 28 ounces and measuring just 5.7″ × 2.6″ × 2″ with standard FA-1 Finder and 50mm f/1.4 lens, the LX opens up a new dimension in small, light and rugged professional systems cameras. All controls are positioned for maximum ease of operation and convenience. Because light is measured in the body, the need for special finder couplings and bulky accessories has been eliminated ensuring a camera with superb balance and handling ease with both eye-level and waist-level finders.

Integrated Auto Flash Control
Because the new AF-280T and AF-400T flash units fully integrate with the camera's I.D.M. light measurement system, both ambient lighting and electronic flash are metered at the film plane allowing the camera to control the flash output for proper exposures.



Exposure Compensation Dial
The conveniently located exposure compensation dial lets the photographer override the automatic exposure by a full ± 2 EV in one third increments. A warning in the viewfinder is provided as an added safeguard.

Random Access Multiple Exposures
A quick press of the Film Rewind Button at the base of the LX disengages both film advance and exposure counter for fast and easy multiple exposures. The random access feature of the two-way exposure counter even allows for multiple exposures on any frame in the roll.



Multi-Function Lever
With this one handy control the photographer can take advantage of the LX's 4-10 second delay self timer, preview a scene's depth of field or lock the mirror up to minimize vibration for sharp, crisp images in precision applications such as photomicrography.

LX SLR Camera

Specifications

Type
35mm full-frame single lens reflex camera with fully interchangeable finders and focusing screens, IDM off-the-film plane aperture-preferred automatic or full manual exposure measurement, TTL integrated auto flash control with Pentax "T"-type flash models, and auto flash synchronization with Pentax "T"-type and dedicated flash units.

Lens Mount
Pentax Bayonet Mount with fully automatic diaphragm coupling. Screw mount lenses adaptable with Mount Adapter K.

Standard Lens
SMC Pentax 50mm f/1.2
SMC Pentax-M 50mm f/1.4
SMC Pentax-M 50mm f/1.7
SMC Pentax-M 50mm f/2
SMC Pentax-M 40mm f/2.8

Shutter
Electro-mechanical horizontally-run titanium focal plane shutter; automatic exposure electronically controlled in stepless range from 125 seconds to 1/2000th second; manual speeds mechanically controlled from 1/2000th second to "X" (1/75th second) and electronically controlled from 1/60th second to 4 seconds; mechanical speeds and "B" (Bulb) operational without batteries; shutter lock provided; shutter dial locks at "automatic" with pushbutton release; built-in curtain blind for use with Watch Data LX.

Flash Control
TTL measurement of ambient and electronic flash lighting directly off film plane with "T"-type Pentax flash models providing auto flash sync at "X" and visible ready light/exposure check in viewfinder when flash reaches full charge; automatic flash sync and visible viewfinder ready light with other Pentax dedicated flash models.

Flash Synchronization
FP terminal and X terminal with contacts for TTL integrated automatic flash control at camera front; FA-1 standard Finder features built-in X-sync hot shoe with TTL contacts.

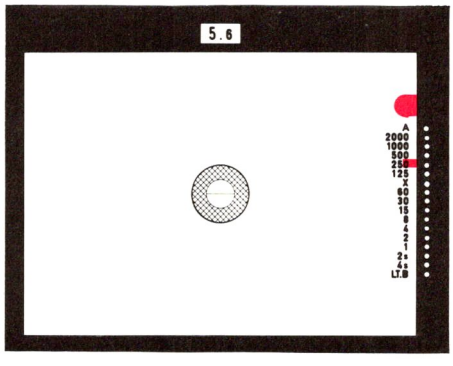
Self-Timer/Preview
Multi-Function Lever provides 4 to 10 second delay manually activated self-timer, depth of field preview and mirror-lock capability.

Exposure Control
Open aperture, center-weighted, through-the-lens light metering for both automatic and manual modes. Integrated Direct Metering (IDM) system measures light at the film plane via Silicon Photo Diode (SPD); high speed measurements for automatic operation are made off digital pattern on front shutter curtain, slow speed measurements off curtain pattern and film; automatic electronic flash/ambient light measurement with TTL "T"-type flash models. Exposure range from EV 1 to EV 19 (ASA 100, f/1.4); stepless automatic exposure range extends to EV −5.5 to EV 20 (125 seconds at f/1.2 to 1/2000th second at f/22 at ASA 100 under normal temperatures and humidity). Meter activated by light pressure on shutter release with automatic shut off after approximately 25 seconds.

Film Speed Range
ASA 6—3200.

Exposure Compensation
Up to plus or minus 2 EV automatic exposure compensation in automatic mode by dial control; dial indexed at ¼X, ½X, 1X, 2X and 4X with click stops at ⅓ EV positions; red flag appears in viewfinder to indicate dial is off "1X" normal exposure position; dial lock provided at "1X" with push button release.

Viewfinder
Standard FA-1 Interchangeable Eye-Level Pentaprism Finder features silver-coating and shows 98% vertical, 95% horizontal of picture area plus full data viewfinder display; built-in diopter correction by adjustment screw. Finder removable by release lever.



Viewfinder Display
Tri-color display for TTL measured shutter speeds with green LEDs indicating hand-holdable speeds from 1/2000th second to 1/30th second, yellow LEDs as slow speed warning from 1/15th second to 4 seconds, and red LEDS to indicate over or under exposure and X sync ready light with TTL and dedicated flash units; blue flag indicates automatic at "A" and manually selected shutter speeds; aperture visible in all finder models except FE-1, FA-2 and FF-1.

Focusing Screen
SC-21 standard with center split-image spot surrounded by microprism collar on ground glass field; fully interchangeable with 8 other focusing screen models through the lens mount.

Film Loading
Pentax Magic Needle Loading System.

Film Transport
Single-stroke or Ratchet-Type rapid wind lever with 120° throw and 25° standoff angle; built-in shutter cocked indicator. Accepts Winder LX and Motor Drive LX for automatic film advance and automatic rewind capability.

Exposure Counter
Additive two-way exposure counter moves from loading indicator to "36" with color-coded indexes at "0", "20", "24" and "36"; operates in reverse to indicate precise film location for rewind or tracking of multiple exposures.

Film Rewind
Crank type. Film Rewind Button doubles as multiple exposure button to disengage film advance mechanism. Automatic rewind with Winder LX and Motor Drive LX.

Power Source
Two 1.5-volt silver-oxide batteries (S76 or equivalent) power all electronic systems in equivalent) power all electronic systems in both automatic and manual modes; LED flickers in viewfinder to indicate low battery condition; mirror locks when batteries fail, with reset via moving shutter dial to mechanical speed setting.

Mirror
Large swing-back type, instant-return mirror to virtually eliminate image cutoff with most lenses; lock provision via Multi-Function Lever.

Back Cover
Standard camera back with spring catch, built-in Film Memo Holder. Back is fully interchangeable with Dial Data LX, Watch Data LX and LX Bulk Film Magazine.

Body Size
144.5mm W × 65mm H × 50mm D (5.7″ × 2.6″ × 2″) Height extends to 90.5mm (3.6″) with standard FA-1 Finder attached.

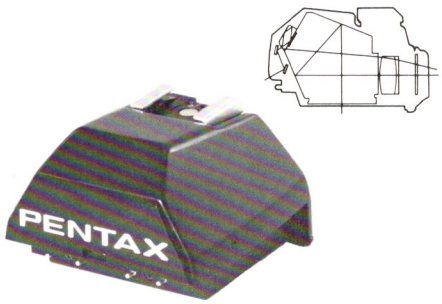
Weight
565 grams (20 ounces) with standard FA-1 Finder.

Other Features
Optional hand grips, special gaskets to minimize entry of dust and moisture, rubber fittings at base for stability on flat surfaces, interchangeable strap fasteners, Tripod Spacer Ring for use with very compact or large diameter lenses, neck strap with shoulder pad.

PENTAX

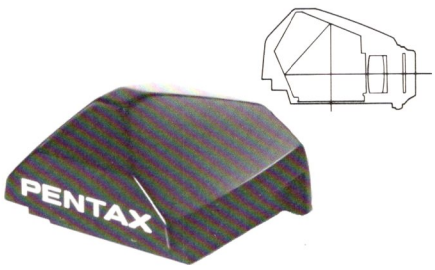
LX Finder System

LX System viewfinders can be interchanged in seconds for incredible composition and focusing versatility. Each Finder model provides special gaskets along the base to further enhance the camera's resistance to moisture and dust. And because the I.D.M. system measures light in the body, no exposure compensation is required regardless of the Finder used.



FA-1 Eye-Level Finder
Ideal as the standard LX viewfinder, the FA-1 combines eye-level pentaprism viewing with built-in diopter correction from −1.5 to 0, a full data viewfinder display and a TTL-coupled "X" sync hot shoe for the ultimate in flash convenience.

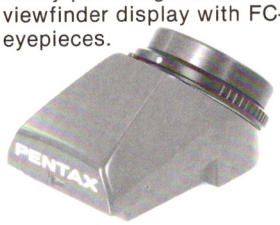
FA-1W Eye-Level Finder
The same features as the FA-1 Finder with an extended diopter correction range from −3 to +1 inclusive.



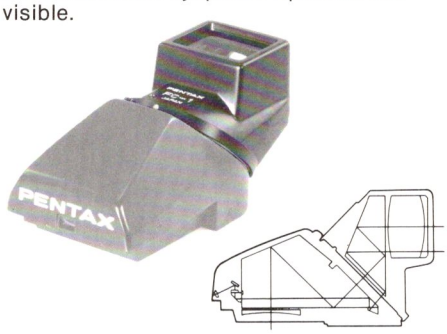
FA-2 Eye-Level Finder
The versatility of the FA-1 Finder without the built-in hot shoe for electronic flash. Bright eye-level pentaprism viewing, built-in diopter correction within a −1.5 to 0 range and a full readout of all viewfinder information excluding aperture.

Even standard pentaprism finders have been improved by incorporating built-in diopter correction for the ultimate in focusing accuracy.

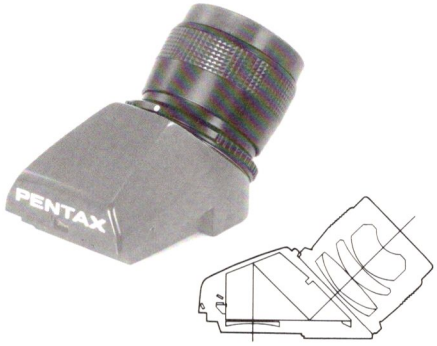
FB-1 System Finder Base
A virtual viewing system within a system, this exclusive Pentax Finder Base accepts any of 3 optional viewing eyepieces. Each eyepiece bayonet mounts quickly and easily providing full data readout of the viewfinder display with FC-1 and FD-1 eyepieces.



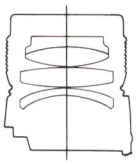
FD-2 Standard Eyepiece
Provides a convenience 45° viewing angle to eliminate the fatigue often experienced in photomicrography and copy work. Ideal as a waist-level eyepiece. Aperture not visible.



FC-1 Action Eyepiece
Rotates a full 180° for total viewing angle control from waist-level to eye-level. Designed to deliver full image visibility with the eye up to 2 inches away from the Finder.



FD-1 Magni-Eyepiece
A magnifiying eyepiece with built-in diopter correction from −5 to +3 inclusive plus a convenient 45° viewing angle.



FE-1 Magni-Finder
Combines the benefits of waist-level viewing with high image magnification making it excellent for close-up photography or any situation where critical focusing is important. Built-in diopter correction from −5 to +4 inclusive and full data viewfinder readout (not including aperture).

FF-1 Waist-Level Finder
A space saving Finder that folds almost flat yet pops up in an instant to provide bright, clear waist-level viewing. All finder data except aperture visible.

ORDERING INFORMATION

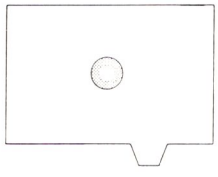
Cat. No.	
30961	FA-1 Eye-Level Finder with Hot Shoe
30962	FA-2 Eye-Level Finder
30963	FA-1W Eye-Level Finder with Hot Shoe
30964	FB-1 System Finder Base
30981	FC-1 Action Eyepiece (for FB-1 Base)
30982	FD-1 Magni-Eyepiece (for FB-1 Base)
30983	FD-2 Standard Eyepiece (for FB-1 Base)
30965	FE-1 Magni-Finder
30966	FF-1 Waist-Level Finder
30971	Case for Finders
30972	Case for System Finder with Eyepiece

PENTAX

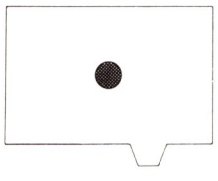
LX Focusing Screens

For added flexibility, twelve different LX interchangeable focusing screens are available to meet photographic demands from fast action sports to photomicrography and astrophotography.

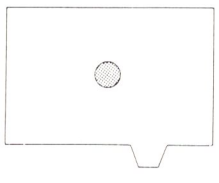
Screens can be changed easily through the mirror housing of the LX body and each features a new Pentax coating which enhances light transmission to ensure the brightest possible viewfinder image.



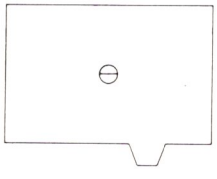
SC-21
The standard LX screen, this versatile model provides a central split-image spot surrounded by a microprism collar on a ground glass field. An excellent all around focusing aid.



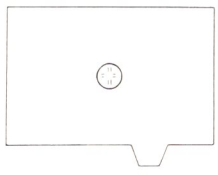
SA-21
A highly versatile yet simple screen comprised of a center microprism grid on a ground glass field. Ideal for general applications with most lenses.



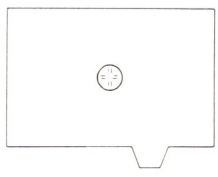
SA-23
Similar to the SA-21, this screen provides sharper microprism angles to simplify focusing with relatively high speed lenses (f/1.2 to f/2.8).



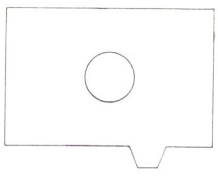
SB-21
For the photographer who prefers a relatively plain screen, this model provides the accuracy of a split-image center spot on a ground glass field.



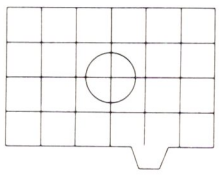
SD-21
An excellent choice for photomicrography or astrophotography, this screen provides central cross hairs on an all matte field. Also suitable for photomacrography where lighting is dim.



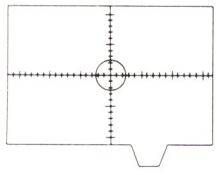
SD-11
The same flexibility as the SD-21, this model eliminates the matte field and provides central cross hairs on a ground glass background for focusing ease.



SE-20
This all matte ground glass screen is especially well suited for focusing with super telephoto lenses with apertures of f/5.6 or smaller, photomacrography and general applications where composition without distraction is of primary concern.



SG-20
Designed to provide a focusing aid allowing alignment of architectural subjects or for multiple exposures, this model is similar to the SE-20 but provides etched crosslines in 6mm squares.



SI-20
In high magnification photography with bellows and microscopes, this screen with its engraved scales allows the photographer to determine image magnification and subject size through the viewfinder.

The three focusing screens listed below are designed for exclusive use in the LX with lenses having a focal length of 200mm or more.

SC-26 A central split image circle surrounded by a ground-glass field
SA-26 A central microprism grid surrounded by a ground glass field
SE-25 A all matte ground-glass screen

Each screen comes with a special tool to make interchanging screens safe, quick and easy.

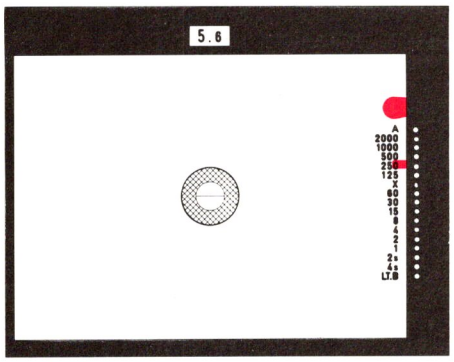
ORDERING INFORMATION

Cat. No.	
30861	Focusing Screen SC-21 (Replacement)
30862	Focusing Screen SA-21
30863	Focusing Screen SA-23
30864	Focusing Screen SB-21
30865	Focusing Screen SD-21
30839	Focusing Screen SD-11
30866	Focusing Screen SE-20
30867	Focusing Screen SG-20
30868	Focusing Screen SI-20
30881	Focusing Screen SC-26
30882	Focusing Screen SA-26
30883	Focusing Screen SE-25

PENTAX

LX TTL Flash Control

When used with the versatile new TTL automatic electronic flash units from Pentax, the LX provides the convenience and operating ease of through-the-lens measured automatic flash control. Because TTL units fully integrate with the camera's I.D.M. light measurement system, both ambient lighting and electronic flash are metered at the film plane allowing the camera to control the flash output for proper exposures of any subject in the unit's range regardless of the f/stop set on the lens. This integrated flash operation eliminates the need for exposure compensation or bothersome calculations when using flash with filters, close-up accessories or special tele/wide adapters, or when bouncing flash off ceilings, walls or other reflective surfaces. For added control, a special circuit in the LX assures that flash is fired only when needed.



In addition to TTL flash capability, the LX also incorporates automatic flash synchronization at "X" (1/75th second) and provides a viewfinder flash ready light with all Pentax TTL and "dedicated" flash models. With the TTL units, the viewfinder ready doubles as an automatic exposure check which operates when the camera is fired.

When used in the TTL mode with the Pentax LX, the film plane measured automatic exposure range of the new AF-280T Automatic Electronic Flash is from 0.8 feet to 65.6 feet with an f/1.4 lens and ASA 100 film.

The powerful new AF-400T Automatic Electronic Flash provides a wide variety of power source options and TTL operation with the LX from 0.8 feet to 108.2 feet with an f/1.2 lens and ASA 100 film.

Pentax AF-280T
TTL Coupled Thyristor Automatic Electronic Flash

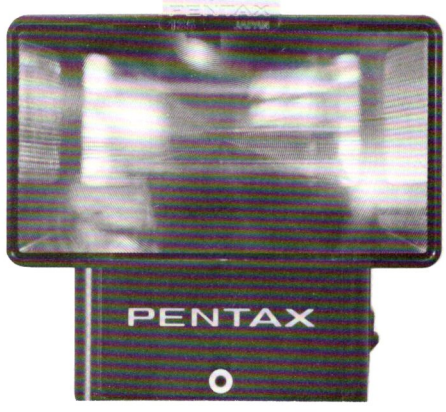
This new thyristor shoe-mount automatic electronic flash from the innovators at Pentax features a powerful ASA 100 guide number of 92 yet is extremely compact, lightweight and well-balanced. When used with the Pentax LX, the AF-280T provides full TTL integration including film plane measured automatic exposure control, automatic shutter speed synchronization at "X," viewfinder ready light and auto exposure viewfinder confirmation. With cameras such as the ME Super, MV or MV-1, full "dedicated" features are retained for maximum flash versatility and, of course, the AF-280T is fully compatible with all other Pentax 35mm SLR cameras.

The AF-280T and Pentax LX work together to deliver an automatic exposure range with film plane measured accuracy of from 0.8 feet to 65.6 feet with an f/1.4 lens and ASA 100 film. In standard automatic it allows the photographer to select from two auto f/stop ranges for depth of field control and provides a maximum automatic operating distance of 24 feet.

This functional unit also delivers dual manual control with ASA guide numbers of 92 in "High" and 25 in "Low." Both these manual positions provide for "dedicated" flash operation but an override allows for total manual control and synchronization at speeds other than "X."

Enhancing the unit's versatility even further is the fully rotating, bounce flash head which provides for – 15° to 90° angles in the vertical position and a full 180° in the horizontal.

The AF-280T features a fully rotating bounce flash head for complete lighting control and flexibility.

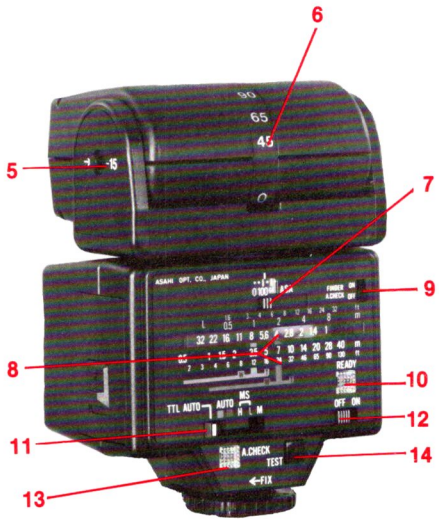


Optional accessories include the AFW-1 Wide Angle Adapter and the AFT-1 Tele Adapter.

For complete specifications and ordering information, see reverse side.

PENTAX

LX Electronic Flash



1. Rotating Bounce Flash Head
2. Auto Sensor
3. Battery Compartment
4. Hot Shoe with Lock
5. Flash Head Lock Lever
6. Flash Head Angle Scale
7. ASA Selector and Scale
8. Aperture/Distance Scales
9. Viewfinder Auto Check Switch
10. Ready Light
11. Flash Mode Selector
12. On/Off Switch
13. Auto Exposure Check Lamp
14. Open Flash Button

Specifications

Type
Compact, cordless, TTL coupled "dedicated" electronic flash unit featuring film plane measured auto exposure control with the LX, two standard auto operating ranges, dual level synchronized manual and full manual override. Provides automatic shutter speed setting and viewfinder ready light with compatible Pentax cameras; also provides viewfinder auto exposure confirmation with LX.

Apertures on AUTO

	ASA 100	ASA 400
TTL	All	All
Red	f/4	f/8
Green	f/8	f/16

Guide Numbers (ft.)

Manual Position	ASA 100	ASA 400
High	92	184
Low	25	50

TTL Auto Operating Range
0.8 to 65.6 feet with 50mm f/1.4 standard lens (ASA 100)

Non-TTL Auto Operating Ranges
3.5 to 24 feet (Red)
1.6 to 11.5 feet (Green)

Auto Sensor Angle
20 Degrees

Color Temperature
Equivalent to daylight

Recycle Times
10 seconds with Alkaline batteries
8 seconds with NiCad batteries
(Approximate times for full power flash recycle with fresh batteries)

Flash Duration
1/1500 to 1/30,000 second

Number of Flashes
Up to 150 with Alkaline batteries
Up to 120 with NiCad batteries
(Based on full power flashes with fresh or fully charged batteries)

Power Source
Four 1.5v AA-size Alkaline or NiCad batteries

Angles of Illumination
Covers 28mm camera lens

Bounce Capability
Head rotates a full 180° with detents at each 45° position; vertical adjustment from −15° to 90° with click stops at 0°, 45° and 65°. Lock release allows head to be set for −15° close-up position.

Other Features
Auto Exposure Check Lamp (LX viewfinder confirmation with On/Off Switch)
Ready Light indicates full charge
Open Flash Button
Hot Shoe Locking Mechanism

Size
80mm W × 116mm H × 68mm D
3.1″ W × 4.6″ H × 2.7″ D

Weight
300 grams (10.6 ounces) without batteries

Optional Accessories
AFW-1 Wide Angle Adapter
AFT-1 Telephoto Adapter

ORDERING INFORMATION

Cat. No.	
30381	AF-280T Electronic Flash with Case
30382	Case for AF-280T (replacement)
30018	AFW-1 Wide Angle Adapter for AF-200S and AF-280T
30019	AFT-1 Telephoto Adapter for AF-200S and AF-280T

The AFT-400T is the perfect complement to the extensive Pentax LX Professional 35mm SLR System.

Power supply options for the AF-400T include the Grip Battery Pack, the TR Power Pack, both 510V and 240/270V Power Packs and an AC Adapter.

Pentax AF-400T

TTL Coupled Thyristor Automatic Electronic Flash

The new AF-400T has been designed for the photographer who requires maximum light output with total automatic and manual exposure control plus a wide variety of internal and external power source options. This handsomely-styled handle-mount unit delivers with an ASA 100 guide number of 130, fully integrated TTL automatic exposure control with the Pentax LX for film plane measurement accuracy, a choice of three standard automatic operating ranges, and four manual power settings for creative lighting flexibility in both the "dedicated manual" and standard manual operating modes.

When used with the LX, the AF-400T delivers film plane measured automatic operation from 0.8 to an amazing 108.2 feet with the 50mm f/1.2 standard lens and ASA 100 film. Three auto exposure ranges for non-TTL control are provided with a maximum auto operating distance of 33 feet. In manual, the photographer can select full power, 1/4 power, 1/16 power or 1/25 power electing to use either the "dedicated" features of manual synch or the total exposure control of full manual override.

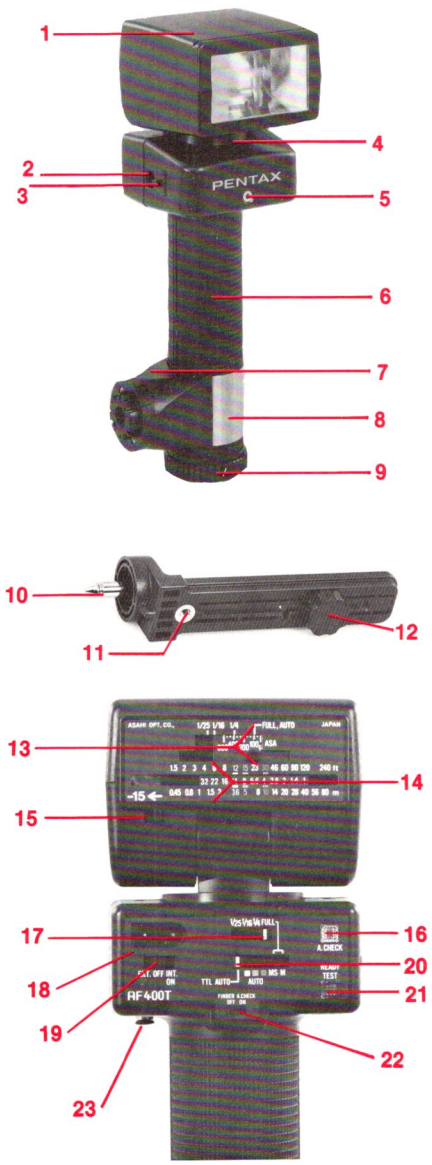
The functional design of the AF-400T is enhanced by its quick release bracket, handle-mount styling and by the availability of a wide choice in power supply options. The Grip Battery Pack combines the portability and convenience of AA Alkaline or NiCad cells with the handling ease of direct to handle mounting. The TR Power Pack converts the power of six "C" size Alkaline cells to the voltage required for the flash unit while the Power Pack 510V and Power Pack 240/270V provide the fast recycling and high number of flashes available only with laminated dry batteries.

For additional supplemental lighting flexibility, the head of the AF-400T rotates a full 180° and provides bounce angles from −15° to 90°.

For complete specifications and ordering information, see reverse side.

PENTAX

LX Electronic Flash



1. Rotating Bounce Flash Head
2. 4-Pin Sync Cord Socket
3. Sync Cord Lock Release
4. Flash Head Angle Scale
5. Auto Sensor
6. Grip
7. Bracket Lock (rear)
8. Bracket Clamp
9. Bottom Cover
10. Bracket Pin
11. Tripod Socket
12. Tripod Screw
13. ASA Selector and Scale
14. Aperture/Distance Scales
15. Flash Head Lock Lever
16. Auto Exposure Check Lamp
17. Manual Power Selector
18. External Power Socket
19. Power Switch
20. Flash Mode Selector
21. Ready Light
22. Viewfinder Auto Check Switch
23. Standard PC Sync Socket

Specifications

Type
Grip style TTL coupled "dedicated" electronic flash unit featuring film plane measured auto exposure control with the LX, three standard auto operating ranges, and four level manual operation with manual sync or full manual override. 4-Pin Sync Cord A provides full TTL/Dedicated coupling with Pentax LX; full dedicated operation with ME Super, MV, MV-1 and similar cameras is available with optional 4-Pin Sync Cord B; compatible with other cameras with readily available optional PC Sync Cord.

Apertures on AUTO

	ASA 100	ASA 400
TTL	All	All
Red	f/4	f/8
Green	f/8	f/16
Yellow	f/11	f/22

Guide Numbers (ft.)

Manual Position	ASA 100	ASA 400
Full	130	260
1/4	66	132
1/16	33	66
1/25	26	52

TTL Auto Operating Range
0.8 to 108.2 feet with 50mm f/1.2 standard lens (ASA 100)

Non-TTL Auto Operating Ranges
4.1 to 32.8 feet (Red)
2.1 to 16.4 feet (Green)
1.5 to 11.8 feet (Yellow)

Auto Sensor Angle
20 Degrees

Color Temperature
Equivalent to daylight

Recycle Times
0.2 to 12 seconds depending upon subject distance, condition of batteries and type of cells used.

Flash Duration
1/1500 to 1/30,000 second

Number of Flashes
Up to 800+ depending upon subect distance, condition of batteries and type of cells used.

Power Sources
Grip Battery Pack—6 1.5V AA Alkaline or NiCad Batteries
TR Power Pack—6 "C" Cell Alkaline or NiCad Batteries
Power Pack 510V—510 volt laminated dry battery
Power Pack 240/270V—Either 240V or 270V laminated dry battery
AC Adapter—100V or 120V Adapters available individually

Angles of Illumination
45° vertical, 60° horizontal

Bounce Capability
Head rotates a full 180° with detents at each 45° position; vertical adjustment from −15° to 90° with click stops at 0°, 45° and 65°. Lock release allows head to be set for −15° close-up position.

Other Features
Auto Exposure Check Lamp (LX viewfinder confirmation with On/off Switch)
Ready Light indicates full charge
Open Flash Button

Size
86mm W × 260mm H × 92mm D
3.4″ W × 10.2″ H × 3.6″ D

Weight
770 grams (27.2 ounces) less battery grip and mounting bracket

Optional Accessories
4-Pin Sync Cord B for Hot Shoe cameras
AFW-2 Wide Angle Adapter
AFT-2 Telephoto Adapter
AC Adapter 100V
AC Adapter 120V
Power Pack 510V
Power Pack 240/270V
TR Power Pack
Grip Battery Pack
Bracket
4-Pin Sync Cord A (for LX)

ORDERING INFORMATION

Cat. No.	
30391	AF-400T Kit consisting of: AF-400T, 4P Sync Cord A, Bracket and Grip Battery Pack
30390	AF-400T with Clamp
37341	4P Sync Cord A for AF-400T
37342	4P Sync Cord B for AF-400T
37343	4P Sync Cord C for AF400T (For PC Terminal/Non TTL)
37344	4P Sync Cord A-5m (16.5 ft.) For AF400T For PC Terminal
30392	Bracket for AF-400T
30393	AC Adapter 100V for AF-400T
30395	AC Adapter 120V for AF-400T
37205	Power Pack 510V for AF-400T
37206	Power Pack 240/270V for AF-400T
37208	TR Power Pack for AF-400T
37394	Grip Battery Pack for AF-400T

PENTAX

LX Motor Drive System

LX Camera With Motor Drive LX and NiCad Battery Pack M

Whether it's the fast action of sports or the hectic pace of a political campaign, the photographer will truly appreciate the versatility and compact styling of the Motor Drive LX. This precision unit offers a selection of single frame operation or sequential photographs at speeds up to 5 frames per second (without locking up the mirror) or as slow as 0.5 frames per second. Even film rewinding has been automated allowing the photographer to rewind a full 36 exposure film cassette at the touch of a lever in less than 10 seconds.

The Motor Drive LX mounts quickly and easily to the base of the camera via the tripod socket. The shutter can be triggered by the camera Shutter Release Button, by the release on the optional Battery Grip M or by remote control with the optional Remote Control Accessories.

For power, there is a variety of options to meet the photographer's needs. The Battery Grip M carries 12 1.5-volt AA-size batteries. The NiCad Battery Pack M and LX is fully rechargeable in 6 hours and provides the ultimate in compactness. The Power Pack M offers the convenience of using household current.

Also included in the LX Motor Drive System is the 250 Exposure Bulk Film Back which interchanges quickly and easily with the camera's standard back for flexibility on the sports field or in the science laboratory.

Specifications

Type
Designed for exclusive use with the Pentax LX.

Usable Shutter Speeds
All continuously variable speeds from 125 seconds to 1/2000th second in automatic; all manual speeds from 4 seconds to 1/2000th second (except B).

C/S Dial
Four position outer dial provides for consecutive operation ("C"), single frame operation ("S"), power off with lock release button, and power rewind ("R"). Inner thumbwheel control provides for continously variable consecutive exposure control from 0.5 fps to 5 fps.

Power Sources
15V DC NiCad Battery Pack LX;
15V DC NiCad Battery Park M; 18V Battery Grip M (12 AA batteries, E91 or equivalent); AC Power Pack M

Battery Chargers
Charge Pack M; AC Power Pack M

Shutter Release
By the Shutter Release Button on the LX or by release mechanism on power source unit; remotely via Remote Trigger Cord M.

Exposure Counter
Employs two-way exposure counter built into Pentax LX.

Film Rewind
Automatic via film rewind lever on Motor Drive LX with C/S Dial at "R". Rewinds 36 exposure cassette in less than 10 seconds.

Remote Control
3m (9.8 ft.) and 10m (32.8 ft.) Power Cords M available for remote control operation. Trigger Cord M provides remote control at distances over 10m.

Confirmation LED
Red LED flickers to confirm shutter release and film transport. Glows continuously as end of film indicator.

Tripod Socket
Located on base of Motor Drive LX. Accepts NiCad Battery Pack M or Battery Pack M for direct cordless contact.

Other Features
Built-in sockets to hold camera film advance and auto rewind caps.
Built-in Remote Control Socket.

Size
146mm W × 31mm H × 36mm D
5.7″ W × 1.2″ H × 1.4″ D

Weight
240 grams (8.5 ounces)

ORDERING INFORMATION

Cat. No.
37100 Motor Drive LX with 3m Power Cord

See reverse side for details on power sources and other motor drive accessories.

PENTAX

LX Motor Drive System

NiCad Battery Pack LX

NiCad Battery Pack M

Extremely compact and lightweight, this rechargeable battery pack is the perfect complement to the Pentax LX/Motor Drive combination ensuring maximum handling ease and convenience. It attaches quickly and securely to the Motor Drive via the tripod socket eliminating the need for cumbersome cords yet can be used remotely using the 3m or 10m Power Cord M and built-in shutter release. One full charge will transport a minimum of 20 rolls of 36-exposure film.

Dimensions and Weight
139mm W × 21.5mm H × 40mm D; 187 grams
5.5″ W × 0.8″ H × 1.6″ D; 6.6 ounces

Cat. No.
37231 NiCad Battery Pack M (for MX/LX) (Requires either Charge Pack M or Power Pack M for recharging)
37232 NiCad Battery Pack LX (same requirements as above)

Power Pack M

This off camera power supply unit operates on 120V AC current making it ideal for studio applications or for use with the Bulk Film Back LX for hundreds of uninterrupted exposures. Can also be used to deliver charging power to the NiCad Battery Pack M (10-15 hours for full charge). The Power Pack M incorporates a built-in timer with a stepless range of time delay from 5 to 120 seconds, a Trigger Release Button and remote control sockets and terminals for external applications.

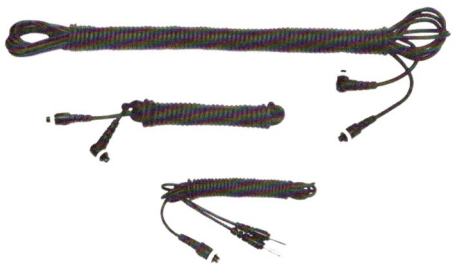
Cat. No.
37202 Power Pack M (AC)

Battery Grip M

Providing both a convenient, rugged grip and 18V power supply for the LX Motor Drive, the Battery Grip M features cordless contact and a built-in trigger release for the ultimate in handling ease. Operating on 12 AA-size 1.5v batteries in a quick load holder, this portable power source will transport a minimum of 30 rolls of 36 exposure film with fresh alkaline cells.

Dimensions and Weight
78mm W × 143mm H × 53mm D; 203 grams
3.1″ W × 5.6″ H × 2.1″ D; 7.1 ounces
(Weights are less batteries)

Cat. No.
37123 Battery Grip M (batteries not included)



Power Cord M (3M) (10M)
Remote Trigger Connector M

To provide remote control operation of the Motor Drive LX, both 3m (9.8 feet) and 10m (32.8 feet) power cords are available. Power cords attach to either the Motor Drive itself or to any of the optional power source units. The Remote Trigger Connector M can be used to fire the Motor Drive and, by using multiple connectors, can operate two or more cameras simultaneously at remote distances. Using standard electrical cable on the Connector contacts, a camera can be fired from hundreds of yards away.

Cat. No.
37215 Power Cord M (3M)
37216 Power Cord M (10M)
37380 Remote Trigger Connector M

Charge Pack M

Designed to provide a fast 6 hour charge for the NiCad Battery Pack M. A red indicator lamp glows to confirm recharging when the unit is connected between AC current and the NiCad Battery Pack.

Cat. No.
37142 Charge Pack M

Bulk Film Magazine LX
Bulk Film Cartridge
Cartridge Loader 250

Designed for the photographer who requires continous exposures when using the Motor Drive LX for sports action, document copying or scientific applications, the Bulk Film Magazine LX provides for up to 250 exposures without reloading. Using the Power Pack M, it is possible to shoot for more than 8 hours at 1 frame per 120 seconds allowing analysis of a subject over a predetermined period of time. The Bulk Film Magazine LX comes with two Bulk Film Cartridges with additional cartridges available as optional accessories. Employing the Cartridge Loader 250, cartridges can be loaded in the darkroom from 100′ bulk film rolls quickly and conveniently. The Bulk Film Magazine LX interchanges easily with the standard back of the LX and, for added versatility, a coupler is supplied for manual operation of the back without the Motor Drive unit.

Dimensions and Weight
268mm W × 81mm H × 66mm D; 1010 grams
10.6″ W × 3.2″ H × 2.6″ D; 35.6 ounces
Weight includes unloaded cartridges.

Cat. No.
37158 Bulk Film Magazine LX (250 exposure)
37170 Cartridge for Bulk Film Magazine
37180 Cartridge Loader for Bulk Film Magazine

PENTAX

Winder LX

Pentax LX with Winder LX

Powered by only four 1.5-volt AA penlight batteries, the Winder LX can record the action at speeds up to two frames per second while retaining full synchronization with all LX shutter speeds (except "B"). For added convenience, the Winder LX also provides single frame capability with automatic film advance plus a special auto rewind feature that lets you rewind a full 36-exposure cassette in under 10 seconds.

Attaching quickly to the tripod socket on the camera base, special gaskets enhance resistance to moisture and dust for added reliability and durability. Other features include an LED which flashes when the film stops automatically at the end of the cassette and optional remote control capability.

Specifications

Type
Automatic film winder designed for exclusive use with the Pentax LX.

C/S Dial
Three position dial provides for consecutive exposure operation up to 2 frames per second on "C", single frame operation on "S", and power "Off."

Usable Shutter Speeds
All continuously variable speeds from 125 seconds to 1/2000th second in automatic; all manual speeds from 4 seconds to 1/2000 second (except B).

Power Source
Four 1.5 volt AA Alkaline batteries. Transports a minimum of 20 rolls of 36-exposure film under normal operating conditions.

Shutter Release
By the Shutter Release Button on the LX. Remote release available.

Confirmation LED
Red LED flickers to confirm shutter release and film transport. Glows continuously as end of film indicator.

Film Rewind
Automatic via film rewind lever on Winder LX. Rewinds 36 exposure cassette in less than 10 seconds.

Attachment Method
Attaches to tripod socket in baseplate of camera. Guide pins ensure correct alignment.

Tripod Socket
Built-in tripod socket allows Winder LX to be mounted on standard tripod.

Other Features
Built-in sockets to hold camera film advance and auto rewind caps.
Built-in Remote Control Socket.
Quick release battery holder.

Dimensions
146mm W × 39mm H × 44mm D
5.7″ W × 1.5″ H × 1.7″ D

Weight
286 grams (10.1 ounces)

ORDERING INFORMATION

Cat. No.
37387 Winder LX

PENTAX

Dial Data LX

By taking full advantage of the interchangeable back of the Pentax LX, the photographer can quickly and easily convert the camera into a sophisticated data recording device capable of imprinting valuable information directly on the finished photograph. The alpha-numeric capabilities of the Dial Data LX and its ease of operation make it the ideal accessory for the architectural photographer, the industrial photo specialist or anyone requiring or desiring accurate tracking of a process or event.

Providing three alpha-numeric wheels indexed in numbers from "0" to "36", letters from "A" to "M", shutter speeds from 4 seconds to 1/2000th plus AUTO, a full range of f/stops and a great deal more, the Dial Data LX is particularly good for recording year-month-day information as well as for recording exposure information directly in the photograph. It is powered by three 1.5-volt batteries and can be set for two black & white ASA ranges as well as for three color ranges. A built-in battery check and confirmation LED are also provided.

Specifications

Type
Designed for exclusive use with the Pentax LX.

Attachment
Instantly interchangeable with standard back cover of Pentax LX with direct cordless synchronization.

Available Data
Data can be selected from three dials. Year Dial may be used to imprint the years from 80-91 (1980-1991) or f/stop numbers from f/1.2 to f/45. Month Dial allows for months of the year (0-12), shutter speeds from 4 seconds to 1/2000th second plus "Auto" and the letters from "A" to "M." Day Dial provides days from 1-31 and numbers from 0 to 36.

Recording System
Internal recording lamp projects data onto the reverse side of the film.

ASA Range
Three settings available for black and white and color film, ASA 25-400.

Confirmation LED
Flashing LED on back of Dial Data LX confirms imprint of data at the moment of exposure.

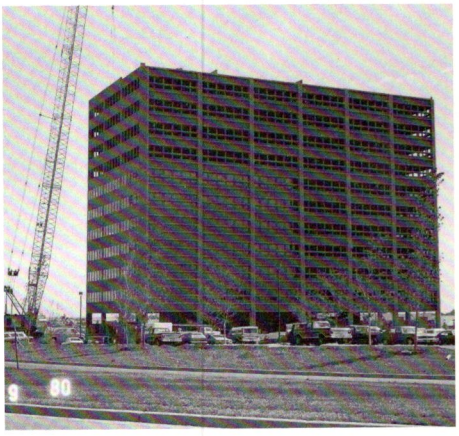
Battery Check
LED flashes when battery check button is pressed indicating sufficient battery power.

Power Source
Three 1.5 volt Silver Oxide or Alkaline batteries.

Other Features
Mounts without interference when using flash, tripod or other accessories.
Records data in synchronization with Winder LX or Motor Drive LX at full operating speeds.

Dimensions
147mm W × 53mm H × 29mm D
5.8″ W × 2.1″ H × 1.1″ D

Weight
105 grams (2.7 ounces)



ORDERING INFORMATION

Cat. No.
37146 Dial Data LX (with batteries)

PENTAX

LX Watch Data

Ideal for the biomedical, forensic, evidentiary, architectural or industrial photographic specialist, the Watch Data LX and Pentax LX camera combine to create an excellent, superbly accurate data recording system which imprints the face of a 21-jewel, 3-hand calendar timepiece directly in the upper left hand corner of the photograph. The timepiece itself displays the exact date, hour, minute and second the photograph is taken along with a central ground-glass area which can be used to pencil in additional data such as year and month. The watch is fully interchangeable with a Data Recording Plate which provides a full ground glass surface for penciling in any data needed.

Three settings are provided on the Watch Data LX for black & white films and two settings are included for color films. Powered by a single 6-volt Silver Oxide or Alkaline cell, this unique accessory features a built-in confirmation LED and battery check for added convenience. A Film Blind to block the corner of the frame is built directly into the shutter mechanism on the LX camera so no further accessories are required.

Specifications

Type
Designed for exclusive use with the Pentax LX.

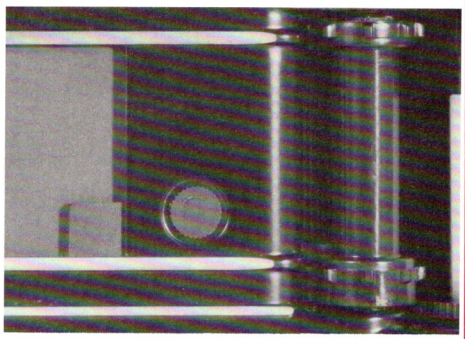
Attachment
Instantly interchangeable with standard back cover of Pentax LX with direct cordless synchronization.

Data Recording Unit
Removable 21-jewel watch indicates date, hour, minute, second and has central ground-glass area for penciling in added data (e.g., year and month); watch is interchangeable with supplied Data Recording Plate, an all ground glass accessory for penciling in any desired data.

ASA Range
Three settings for black and white film (ASA 100, 200, 400) and two settings for color film (ASA 64/100, 400).

Data Position
Upper left corner of the photograph as seen through the viewfinder.

Data Size
A circle of 3.8mm (.2″) diameter on the film surface.



A film blind inside the camera lowers to block the recording area.

Confirmation LED
Flashing LED on back of unit confirms imprint of data at the moment of exposure.

Battery Check
LED flashes when battery check button is pressed to indicate sufficient power.

Power Source
One 6-volt Silver Oxide Battery (Eveready 544 or equivalent) or Alkaline Battery (Eveready 537 or equivalent); provision for remote battery cord.

Dimensions
147mm W × 54mm H × 113.5mm D
5.7″ W × 2.1″ H × 4.4″ D

Weight
125 grams (4.4 ounces) without batteries

ORDERING INFORMATION

Cat. No.
37132 Watch Data LX (with watch, data recording plate and battery.

PENTAX

LX Accessories

GRIPS

Accessory Grip B
This hand-contoured interchangeable grip attaches quickly and easily to the Pentax LX and provides superb handling ease and balance with all LX system accessories.

Cat. No.
37125 Accessory Grip B for LX

Accessory Grip A
For maximum comfort and ease of handling matched to the individual photographer's needs, the Accessory Grip A can be custom contoured and shaped to the user's hand. It attaches directly to the accessory lugs on the camera front and is fully interchangeable with the Accessory Grip B.

Cat. No.
37124 Accessory Grip A for LX

STRAPS

The Pentax LX has been designed with a system of lugs on the camera body that allows the photographer to carry the camera either horizontally or vertically for maximum convenience. All straps feature universal-type fasteners which rotate a full 360° and maximize protection to the camera finish. Straps can be removed or changed quickly and easily with a coin.

Cat. No.
32954 Strap LX with Fasteners (replacement)
32953 Strap LX without Fasteners
37310 Fastener Only for LX (one piece)
32952 Fashion Strap LX without Fasteners

CASES

Soft Case LX
The Soft Case LX represents the ultimate in carrying convenience, protection and luxury for the LX System photographer. Created of real leather, the front cover is fully interchangeable to provide for covers capable of handling longer lenses.

Cat. No.
32810 Soft Case LX
32820 Front Cover for Soft Case LX
32811 Front Cover T2 for Soft Case LX
32812 Front Cover T3 for Soft Case LX
32825 Back Cover for Soft Case LX
32147 Back Cover for LX w/Dial Data Back
32520 Soft Case for Data LX
32521 Front Cover Data LX
32522 Back Cover Data LX
33919 Blimp Case for LX or M Camera Bodies w/Finder & Winder or MD & Battery Pack (NiCad)

Holster Case LX-T
Ideal for the photographer on the move, this custom-designed case holds the Pentax LX camera body with long lens attached on a belt or with the strap.

Cat. No.
33918 Holster Case LX-T

OTHER

In addition to the general accessories in the Pentax LX System, replacement items and minor accessories are available for the photographer's convenience.

Cat. No.
31007 Body Mount Cap for LX
31030 Body Top Cap for LX
31031 Finder Bottom Cap for LX Finders
31032 Base Mount Cap for FB-1 Finder
31033 Eyepiece Mount Cap for FB-1 Eyepieces FC-1, FD-1, FD-2
30951 Shutter Button Attachment
30871 Diopter Adjuster (replacement)
31018 SYNC Terminal Cap
37352 Remote Battery Cord LX

PENTAX®

Profit Maker Promotions

Introducing The Pentax LX

A Remarkable Photographic Instrument

A new dimension in a professional 35mm SLR photographic system.

Unique I.D.M. system measures light directly off the film plane in automatic for unparalleled exposure accuracy.

Battery-less shutter speeds from 1/2000th to 1/75th second ("X").

Special sealings and gaskets for added resistance to moisture and dust.

Complete system of interchangeable finders, focusing screens, TTL flash units, motor drive and winder accessories and data recording units.

Special Introductory Promotion Package—Save 5%!

Buy ONE or more LX System Introductory Packages as outlined on the reverse side and receive 5% off the combined Individual Net pricing.

Combined Individual Net Pricing	$2,379.50
Package Promotion Net	**$2,262.83**

Important! All additional LX System Accessories added to the initial qualifying Promotional Package order outlined above will also qualify for a 5% discount from the Individual Net Price (see Dealer Pricing Schedule booklet dated October 1, 1980). Accessories ordered after the initial Promotion Package order is placed will be at Individual Net Pricing.

Effective October 1, 1980 through January 25, 1981

LX Camera Body Promotion—Save 5%!

After placing an initial qualifying Promotional Package order, all additional LX Bodies purchased during the Promotion Period will qualify for Promotion Net Pricing at $460.00 each.

For complete specifications on each individual item, see the LX Professional 35mm SLR System catalog section of your Pentax Dealer Catalog.

LX Introductory Promotional Package

Quantity	Product Code	Description	Individual Net	Promotion Net
2	09010	LX Body Only	($ 483.00)	($ 460.00)
		x 2 units	966.00	920.00
1	30961	FA-1 Eye-Level Finder	63.00	
1	30962	FA-2 Eye-Level Finder	49.00	
1	30964	FB-1 System Finder Base	98.00	
1	30981	FC-1 Action Eyepiece for FB-1	45.00	
1	30982	FD-1 Magni-Eyepiece for FB-1	61.00	
1	30983	FD-2 Standard Eyepiece for FB-1	22.00	
1	30965	FE-1 Waist-Level Magni Finder	84.00	
1	37387	Winder LX	154.00	
1	37100	Motor Drive LX	258.00	
1	37146	Dial Data LX	95.00	
1	30839	SD-11 Focusing Screen	13.00	
1	30862	SA-21 Focusing Screen	15.00	
1	30863	SA-23 Focusing Screen	15.00	
1	30864	SB-21 Focusing Screen	15.00	($1,413.50)
1	30865	SD-21 Focusing Screen	15.00	less 5%
1	30866	SE-20 Focusing Screen	15.00	
1	30867	SG-20 Focusing Screen	15.00	
1	30868	SI-20 Focusing Screen	15.00	1,342.83
1	30381	AF-280T Electronic Flash	93.00	
1	30391	AF-400T Electronic Flash Kit consisting of AF-400T, bracket, Grip Battery Pack and cord	229.00	
1	37124	Accessory Grip A	7.50	
1	37125	Accessory Grip B	5.00	
1	32810	Soft Case LX	32.00	
			$2,379.50	$2,262.83

YOU SAVE $116.67
or 5%!

Note: No co-op advertising redemption will be allowed on Pentax LX Bodies or System Accessories.

Pentax Dealer Pricing Addendum

EFFECTIVE September 21, 1981

Please insert this addendum in your Summer/Fall 1981 Pentax Promotions and Buyer's Guide

LX Finder Accessories

Product Code	Description	Suggested List	Individual Net	Promotion Net
30966	Waist-Level Folding Finder FF-1 (30965/6 supplied with 31031 Finder Bottom Cap)	$ 87.00	$ 47.00	

LX Focusing Screens

Product Code	Description	Suggested List	Individual Net	Promotion Net
30881	Focusing Screen SC-26 (LX)	$ 30.00	$ 15.00	
30882	Focusing Screen SA-26 (LX)	30.00	15.00	
30883	Focusing Screen SE-25 (LX)	30.00	15.00	

Lens Hoods

Product Code	Description	Suggested List	Individual Net	Promotion Net
34421	Lens Hood for SMCP-M* 300mm F/4.0	$ 30.00	$ 15.00	

SMC Pentax Accessory Lenses (Bayonet)

Product Code	Description	Suggested List	Individual Net	Promotion Net
27447	SMCP-M Zoom 80-200mm f/4.5 (w/o case)	$402.00	$241.00	**229.00**

Note: This lens will no longer be sold with case as product code 27440.

Correction—6X7 Lens and Finder Cases

Product Code	Description	Suggested List	Individual Net	Promotion Net
37764	Case for 6x7 TTL Pentaprism Finder	$ 30.00	$ 15.00	

Note: This product is incorrectly listed as product code 37966.

PENTAX
SYSTEM 10

The Pentax System 10 World of Pocketable Pleasure

Every few years a new concept evolves that adds a completly new dimension to the world of photography. Meet the latest — the Pentax SYSTEM 10.

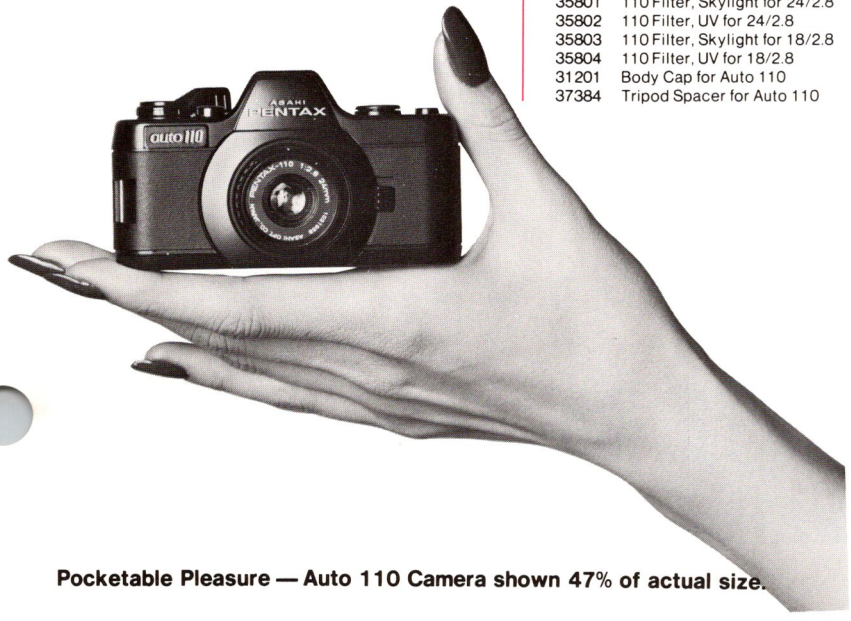
The System 10 is built around the Pentax Auto 110. A fully automatic 110 pocket camera that fits neatly into the palm of your hand. It's a precision-engineered single-lens reflex camera scaled exactly along the lines of the popular 35mm SLR camera. As such, it combines both the compactness and easy cartridge loading of the 110 film format with many of the systems advantages found only on the latest 35mm SLRs. It features the Pentax-110 Bayonet Mount for quick lens changes with Pentax-110 accessory wide-angle and telephoto lenses. And, it also features thru-the-lens viewing with a large pentaprism viewfinder and a split-image focusing screen. Also, like the latest 35mm SLRs, it features a fully automatic silicon photo diode (SPD) metering system that works in conjunction with an electronic programmed shutter to select both shutter speed and lens aperture, And there's much, much more. The SYSTEM 10 features *systems* options such as its own automatic winder for easy automatic film wind. Then, for low-light flash photography, there's the AF 130P, its own exclusive electronic flash unit. And for people who like to experience the realm of close-up and special effects photography, SYSTEM 10 also features accessory close-up lenses for macrophotography, assorted filters, plus lens hoods and eyepiece diopter correction lenses. In addition, there's an assortment of cases for camera, individual accessories or the entire system . . .

Featuring just about everything a camera its size could offer, the Pentax SYSTEM 10 welcomes you to its truly unique world of pocketable pleasure!

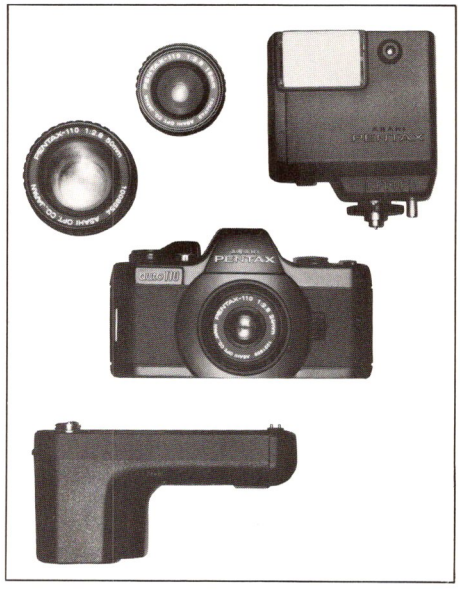
Pentax SYSTEM 10 Kits are handsomely packaged to include the complete assortment of accessories, or the System 10 major components.

Cat. No.
07100 System 10 Complete Kit.
Cat. No. Consists of:

07031	Auto 110 Camera w/Pentax-110 24mm f/2.8 lens w/Case & Strap
25107	Pentax-110 18mm f/2.8 lens
25507	Pentax-110 50mm f/2.8 lens
37385	Winder 110
30013	AF-130P Electronic Flash
30014	Case for AF-130P
34501	110 Lens Hood for 24/2.8
34521	110 Lens Hood for 18/2.8
34511	110 Lens Hood for 50/2.8
30460	110 Close-Up Lens S31 for 24/2.8
30461	110 Close-Up Lens S16 for 24/2.8
30462	110 Close-Up Lens W21 for 18/2.8
30463	110 Close-Up Lens T86 for 50/2.8
30464	110 Close-Up Lens T43 for 50/2.8
35801	110 Filter, Skylight for 24/2.8
35802	110 Filter, UV for 24/2.8
35803	110 Filter, Skylight for 18/2.8
35804	110 Filter, UV for 18/2.8
31201	Body Cap for Auto 110
37384	Tripod Spacer for Auto 110



Pocketable Pleasure — Auto 110 Camera shown 47% of actual size.



Cat. No.
07200 System 10 Major Components Kit.
Cat. No. Consists of:

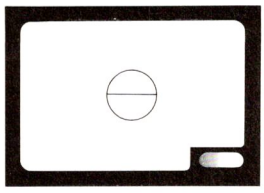
07031	Auto 110 Camera w/Pentax-110 24mm f/2.8 lens w/Case & Strap
25107	Pentax-110 18mm f/2.8 lens
25507	Pentax-110 50mm f/2.8 lens
37385	Winder 110
30013	AF-130P Electronic Flash
30014	Case for AF-130P

PENTAX
SYSTEM 10

The Pentax Auto 110
A Pocket Full of Miracles

• Programmed Electronic Shutter Makes Exposure Setting A Thing Of The Past

Photography with the Auto 110 is simplicity itself thanks to employment of a programmed electronic shutter — the optimum exposure system for this type of camera. Manual shutter speed and lens aperture setting have both been eliminated entirely, leaving exposure determination to the camera's infinitely faster electronic circuitry. The Auto 110's thru-the-lens instantaneous-response SPD light metering system takes a center-weighted, open-aperture light reading when the shutter button is depressed; and works with the shutter to automatically select the shutter speed and lens aperture for you depending on the lighting conditions. To further facilitate compactness and handling ease, aperture settings are built-in the body diaphragm which replaces individual lens diaphragms and makes Pentax-110 interchangeable lenses incredibly light. Aperture and shutter speed range is from a fast 1/750 sec. at f/13.5 to 1 second at f/2.8 for low-light photography.



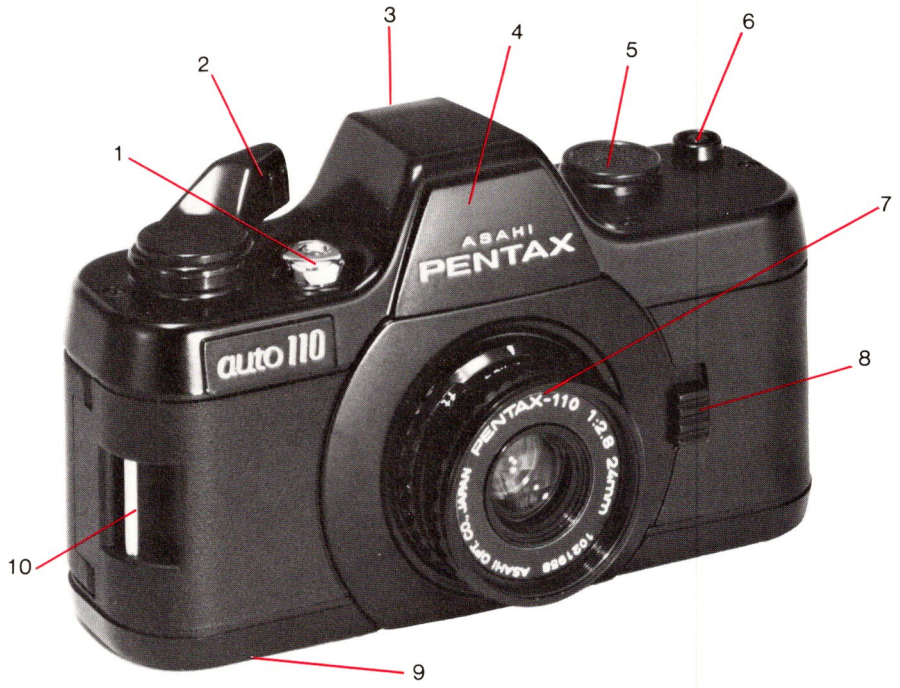
• Large, Bright Pentaprism Viewfinder

The Auto 110 viewfinder has a 0.75X magnification and shows 87% of the picture area — as much as viewfinders found on some 35mm SLRs, and much more than those found on rangefinder cameras three times its size. Exposure information is provided by two LED (light-emitting diode) indicators at the lower right hand corner of the viewfinder. When the green LED lights up, it indicates that exposure is adequate and gives you the go ahead to shoot.

Outdoors at night or dusk, or indoors in dimly lit rooms, the yellow LED indicator in the viewfinder will light. This indicates that the shutter speed selected by the camera will be too slow for correct exposure without picture blur, and warns you to use a tripod or switch to electronic flash for better results.

• 35mm SLR Focusing, Too...

Focusing with the Auto 110 is easy, and, like its 35mm SLR big brother, extremely precise. For quick focus, you merely turn the focusing ring on the lens until the images come in sharp on any part of the viewing screen. And for pinpoint focus, you can adjust the images in the split-image focusing spot in the center of the finder until the two join exactly. Accessory eyepiece diopter correction lenses are also available from -3 to +5 diopters for persons needing eyesight correction.

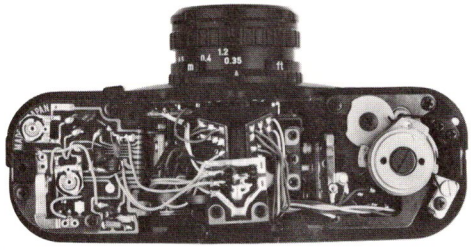


The World's First 110 SLR Camera with Interchangeable Lenses — Shown Actual Size!

1. Shutter release/meter switch, fully automatic programmed shutter and aperture. 1/750 sec to 1 second; f/13.5 to f/2.8.
2. Film advance (two 145° throw)
3. Large, bright viewfinder with LED display and split-image focusing screen.
4. SPD (Silicon Photo Diode) metering for fast response.
5. Flash sync shoe for Electronic Flash.
6. Flash contact pin for Electronic Flash.
7. Pentax-110 Bayonet Mount lenses.
8. Lens release button.
9. Winder 110 attaches easily to Auto 110 camera.
10. Wrist strap hook.

• Easy Cartridge Loading, Automatic Film Speed Setting

There's no film loading hassle with the Auto 110. Just open the back cover, pop in a 110 film cartridge and reclose the cover. The film speed is set automatically for all available ASA film speeds, permitting use of both popular ASA 100 film and high-speed ASA 400. It also accepts black and white films and slower slide films. You can easily tell what exposure you are on by the number visible in the large, back cover window.



Inner workings of the Auto 110

Specifications

Type: TTL metering 110 SLR camera with bayonet mount (80-degree setting angle).
Film: Cartridge-loading 110 film (13mm x 17mm format); ASA film speed set automatically for film in use.
Lens: Pentax-110 24mm f/2.8; Focusing range: 0.35m ~∞ (1.1 ft. ~ ∞).
Viewfinder: Eye-level pentaprism finder with quick-return mirror; green and yellow LEDs indicate adequate/inadequate exposure for hand-held shooting (i.e. above/below 1/30th sec.); Magnification: 0.75X showing 87% of picture area; central split-image focusing spot surrounded by matte field.
Exposure Metering: Center-weighted, TTL metering at full aperture using SPD cell; EV Range: 3-17 (24mm f/2.8 lens; ASA 100).
Shutter/Automatic Diaphragm: Programmed electronic behind-the-lens shutter with programmed body diaphragm; Range: 1/750 sec. at f/13.5 to 1 second at f/2.8.
Other Features: Two-stroke film advance lever, sync terminal for automatic flash sync with electronic flash; tripod socket, lens release button, battery holder tray, exposure count using back cover window, winder capability.
Power Source: Two 1.5V silver oxide batteries (S76 or equiv.)
Size: 56mm (H) x 99mm (W) x 45mm (D) (2.2" x 3.9" x 1.8") with lens.
Weight: 172 grams (6.1 ozs) with lens.

Cat. No.

07031 Auto 110 Camera with Pentax-110 24mm f/2.8 lens with Case, Strap, front lens cap.

07010 Auto 110 Camera Body Only w/body cap.

AF-100P Automatic Electronic Flash Unit

A palm-sized fully automatic electronic flash designed exclusively for use with the Auto 110, the AF-100P is an ideal alternative to the System 10's AF-130P because of its extremely small size. It can deliver fully automatic flash pictures anywhere within its automatic operating range of from 2.6 to 12 feet and recycles as fast as 7 seconds with fresh batteries. Measuring a mere 1.9″ H x 2.5″ W x 1.9″ D and weighing only 3.5 ounces including batteries, this compact flash can deliver up to 150 automatic flash pictures from only two 1.5 volt AAA alkaline cells.

Specifications

Type
Compact Automatic flash with direct contact for exclusive use on Auto 110.

Guide Number
33 (ASA 100 in feet)

Operating Distance Range
2.6—12 feet
(0.8—3.6 meters)

Beam Angle
45° vertical, 55° horizontal
Sufficient for Pentax-110 18mm f/2.8 wide-angle lens.

Sensor Reception Angle
Approximately 18 degrees

Number of Flashes
150 with alkaline batteries

Recycle Time
7 seconds with fresh batteries

Color Temperature
Equivalent to daylight

Power Source
Two 1.5v (AAA size) batteries (E92 or equivalent)

Mounting
Special mount for Auto 110 camera only.

Synchronization
Automatically sets camera at 1/30 second shutter speed and f/2.8 with ASA 64, ASA 100 or ASA 125 film, at 1/125 second shutter speed and f/5.6 with ASA 400 film.

Size
49mm (1.9″) H x 63mm (2.5″) W x 48.5mm (1.9″) D

Weight
82 grams (2.9 ounces) without batteries

Other
Combined test button/ready lamp; power switch; camera flash cap holder

Cat. No.

30047	AF-100P Electronic Flash w/Case
30048	Case (Replacement) for AF-100P

PENTAX
System 10

CASES

Deluxe Attache Case

The Deluxe Attache Case is capable of handling the complete System 10 outfit —camera, winder, flash, filters and accessories—all in one fully protected, readily accessible location. Handsomely styled of reinforced aluminum, the Deluxe Attache Case is accented with rugged stainless steel key locks and provides precut thick foam inserts to maximize protection against damage from shock or weather extremes.

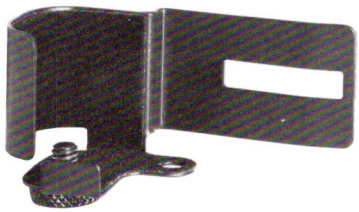
Cat. No.
30646 Deluxe Attache Case for System 10 Complete Kit
30645 Fashion Attache Case for System 10 Complete Kit

Mini Bag

For the System 10 photographer with accesories, the Mini Bag with its unique blue and white Pentax design provides convenient storage for camera with winder or flash plus two accessory lenses. A built-in belt loop enhances its carrying convenience.

Cat. No.
84596 Mini Bag for Auto 110

ACCESSORIES



Belt Clip

An excellent choice for the System 10 photographer on the move, the rugged Pentax Belt Clip attaches securely to the camera's tripod socket and slips quickly and easily over the belt for maximum carrying freedom.

Cat. No.
80210 Belt Clip for Auto 110

Pentax 110
Zoom 20mm ~ 40mm f/2.8

Photographed with Pentax-110 Zoom Lens at the 20mm focal length.

Above photograph taken at the 40mm focal length shows the creative flexibility of the Pentax-110 Zoom 20mm ~ 40mm f/2.8 lens.

Designed to complement the ultra-compact styling of the Auto 110 camera, the extremely compact and lightweight Pentax-110 Zoom Lens is an excellent alternative to the System's standard 24mm lens.

This special Tripod Spacer for the Auto 110 allows the Pentax-110 Zoom Lens to be used on a tripod without difficulty.

at 40mm

at 20mm

The Pentax-110 Zoom 20mm ~ 40mm f/2.8 delivers the ideal focal length range for the photographer who is constantly on the move by providing everything from a wide angle view at 20mm (comparable to a 40mm lens in the 35mm format) to a medium telephoto view at 40mm (comparable to an 80mm lens in the 35mm format) in one extremely compact, lightweight optic. Because of this versatility, and because the lens also features a fast f/2.8 maximum aperature, the Pentax-110 20mm ~ 40mm f/2.8 Zoom is an excellent alternative to the System's standard 24mm lens.

For even more flexibility and creative photographic control, the 20mm ~ 40mm Zoom accepts 49mm filters and lens accessories to further expand the capabilities of 110 photography. A Pentax 49mm Polarizing Filter, for example, can be added to deliver breathtaking effect not before possible while the Auto 110's unique programmed shutter aperture control ensures correct exposures. . . automatically!

Specifications

Minimum Aperture
f/13.5
Construction
8 elements in 8 groups
Diaphragm
Fully automatic
Minimum Focusing Distance
0.7m (2.5 feet)
Angles of View
57.5° (at 20mm)
31° (at 40mm)
Dimensions
54mm (2.1″) Maximum Diameter
45.2mm (1.8″) Minimum Length
Weight
174 grams (6.1 ounces)
Filter Size
49mm
Lens Hood
49mm

ORDERING INFORMATION

Cat. No.
25707 Pentax-110 Zoom 20mm ~ 40mm f/2.8
37384 110 Tripod Spacer

All Pentax-110 accessory lenses are supplied with front and rear lens caps.

PENTAX

System 10

Pentax 110 70mm f/2.8 Telephoto Versatility

Natural looking portraits and candids are easy with this medium telephoto lens for the Auto 110 camera. With an angle view of 17.2° (comparable to a 150mm in the 35mm format), this System 10 telephoto can make distant objects appear three times closer than the "standard" 24mm lens making it ideal for the backpacker or vacationer.

To further increase the versatility of this telephoto, it accepts 49mm filters and lens accessories including Pentax T-160 and T-80 Close-up Lenses.

Specifications

Minimum Aperture
f/13.5
Construction
6 elements in 5 groups
Diaphragm
Fully automatic
Minimum Focusing Distance
1.5m (5 feet)
Angle of View
17.2°
Dimensions
51mm (2″) Maximum Diameter
50.5mm (2″) Minimum Length
Weight
169 grams (6 ounces)
Filter Size
49mm
Lens Hood
49mm

Photographed with Pentax-110 24mm "standard" lens.

Identical subject with Pentax-110 70mm f/2.8 Telephoto.

ORDERING INFORMATION

Cat. No.
25607 Pentax-110 70mm f/2.8
37384 110 Tripod Spacer

Pentax 110 Pan Focus 18mm f/2.8 "No Focus" Wide Angle!

For the ultimate in picture-taking ease with the Auto 110 camera, this unique wide angle lens eliminates the need for fumbling with focus controls yet is designed to ensure sharp, crisp images whether the photograph is a panoramic landscape or candid.

An ideal combination, the Pentax-110 18mm f/2.8 Pan Focus is available in a special Auto 110 camera/lens package to deliver "point and shoot" picture taking convenience right out of the box!

Specifications

Minimum Aperture
f/13.5
Construction
6 elements in 6 groups
Diaphragm
Fully automatic
Focusing Range
1.75m (6 feet) to infinity
Angle of View
61.5°
Dimensions
34mm (1.3″) Maximum Diameter
21mm (.8″) Length
Weight
29 grams (1.1 ounces)
Filter Size
30.5mm
Lens hood
30.5mm

ORDERING INFORMATION

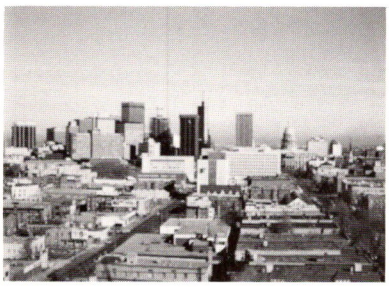
Cat. No.
25117 Pentax-110 Pan Focus 18mm f/2.8
07061 Auto 110 Camera with Pentax-110 Pan Focus 18mm f/2.8 lens, strap and case.

All Pentax-110 accessory lenses are supplied with front and rear lens caps.

Pentax 110 Interchangeable Lenses

Photographs of same subject through each Pentax-110 Lens

18mm Wide-angle Lens



24mm Standard Lens

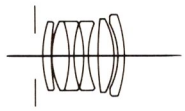
50mm Telephoto Lens

Also on hand to expand the range of your photographical pleasure with the AUTO 110 are Pentax-110 bayonet-mount interchangeable lenses. In addition to the 24mm f/2.8 standard lens (equivalent to a 50mm standard lens in the 35mm format), the 18mm f/2.8 wide-angle and the 50mm f/2.8 telephoto Pentax-110 interchangeable lenses are also available. The largest of these three lenses is even smaller than a pipe bowl; while the combined weight of all three is 94 grams (3.3 oz.) —making Pentax-110 lenses truly the world's lightest interchangeable lenses!

- **Pentax-110 24mm f/2.8 Standard Lens**

The most compact of the three lenses in the series, the standard lens weighs an unbelievable 13 grams (1/2 oz.). Recommended for general shooting, it features natural perspective with a focal length equivalent to a 50mm lens in the 35mm format.

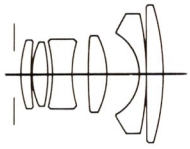
Cat. No.
25207 Pentax-110 24mm f/2.8 Lens



- **Pentax-110 18mm f/2.8 Wide-Angle Lens**

Wide-angle lenses produce a wider angle of view than the standard lens, enabling you to get more into the picture. With a focal length equivalent to a 35mm wide-angle lens in the 35mm format, the 110-18mm lens is ideal for panoramic scenic shots, group portraits and sweeping special effects.

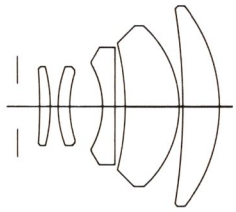
Cat. No.
25107 Pentax-110 18mm f/2.8 Lens



- **Pentax-110 50mm f/2.8 Telephoto Lens**

Telephoto lenses are used to reach out and bring distant subjects closer. The Pentax-110 50mm lens has a focal length approximately equivalent to a 100mm telephoto lens in the 35mm format, making this lens ideal for close portraits, sports events, candid shots as well as general telephoto use.

Cat. No.
25507 Pentax-110 50mm f/2.8 Lens



All Pentax-110 accessory lenses are supplied with front and rear lens caps.

Pentax-110 Lens Specifications

• Type • Name of Lens	• Minimum Aperture	• Angle of View (Degrees)	• Lens Construction (Groups-Elements)	• Minimum Focusing Distance • m.	• ft.	• Maximum Diameter & Min. Length (Ømm x mm)	• Weight • gr.	• ozs.	• Filter Size (mm)
Wide-Angle 110-18mm f/2.8	13.5	61.5	6-6	.25	.8	34 x 21	28	1.0	30.5
Standard 110-24mm f/2.8	13.5	47	5-6	.35	1.1	29.6 x 12.8	13	.5	25.5
Telephoto 110-50mm f/2.8	13.5	24	5-5	.9	3	43 x 27.2	53	1.9	37.5

PENTAX
SYSTEM 10

WINDER 110

- **Automatic Film Advance, Built-in Grip**

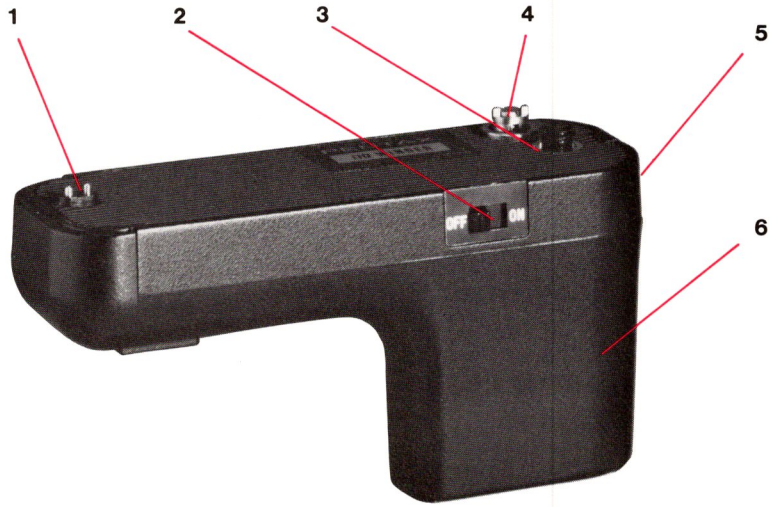
The compact 110 Winder unit attaches easily to the tripod socket at the base of the camera in seconds. The battery-powered winder advances the film a frame at a time after you release the shutter and features its own built-in grip to provide a firm hold.

- **Readies Film Automatically for the First Exposure**

After you insert a new film cartridge into the camera, just switch the winder on. The film automatically winds on to the first exposure and you are ready to take your first picture.

- **Winds Film Out at the End of the Roll — Automatically!**

Then, after you have shot your last exposure, the 110 Winder winds the film out to the end of the roll for you. You only have to open the back cover and remove the film for processing.

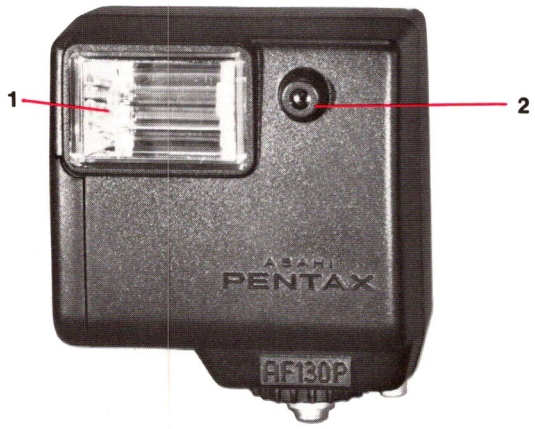


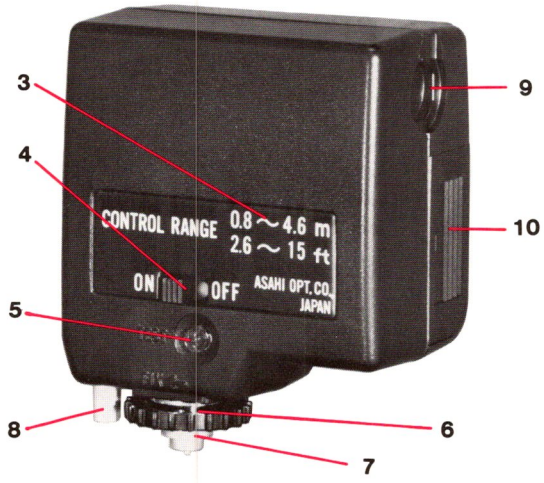
1. **Contact pins**
2. **Power switch**
3. **Attachment screw**
4. **Film drive coupler**
5. **Lock dial**
6. **Handgrip**

Winder 110 Specifications

Type: Battery-powered film winder for exclusive use with Auto 110.
Film Advance Mode: Winds film a frame at a time after shutter release.
Mounting: Mounts to camera tripod socket at base of camera.
Synchronization: Operates at all shutter speeds.
Power Source: Two 1.5v (AA) batteries (E91 or equivalent).
Other: Tripod socket; built-in grip.
Size: 52mm H (2") x 35mm D (1.4") x 100mm W (3.9").
Weight: 112 grams (4.0 ounces) without batteries.

Cat. No.
37385 Winder 110





1. **Flash head**
2. **Automatic sensor**
3. **Flash range scale**
4. **Power switch**
5. **Test button/ready lamp**
6. **Mounting-lock dial**
7. **Flash-snyc shoe**
8. **Contact pin**
9. **Camera flash cap holder**
10. **Battery compartment**

AF 130P AUTO FLASH

- **Perfect Flash Exposures**

For photography outdoors at night, in low light, or indoors in dimly lit rooms, the System 10 features the AF 130P Auto Flash Unit. The AF 130P connects to the Auto 110 camera with its own, exclusive flash sync terminal and synchronizes automatically with the shutter system as soon as it is switched on. Use the AF 130P anytime that the yellow LED in the viewfinder lights indicating a low light reading. The unit produces vivid and striking flash photos of your subject.

- **Auto Sensor Assures Correct Exposures**

The AF 130P features its own built-in light sensor. The sensor eye located on the front of the unit measures the distance to the subject and cuts off the flash at the right moment to assure perfect flash exposures with every shot. The flash unit's effective automatic flash range is an extensive 0.8m to 4.6m (2.6 ft - 15 ft).

AF 130P Specifications

Type: Direct contact automatic flash for exclusive use with Auto 110.
Guide Number: 43 (ASA 100 in feet).
Operating Distance Range: 2.6 - 15 feet (.8 - 4.6 meters).
Beam Angle: Sufficient for Pentax-110 18mm f/2.8 wide-angle lens.
Sensor Reception Angle: 18 degrees.
Number of Flashes: 250 with alkaline batteries.
Recycle Time: 7 seconds with fresh batteries.
Color Temperature: Equivalent to daylight.
Power Source: Two 1.5v (AA) batteries (E91 or equivalent).
Mounting: Special mount for Auto 110 camera only.
Synchronization: Automatically sets camera at 1/30 sec shutter speed and f/2.8 with ASA 64, ASA 100 or ASA 125 film, at 1/125 sec shutter speed and f/5.6 with ASA 400 film.
Size: 71mm (2.8") H x 63mm (2.5") W x 41mm (1.6")D.
Weight: 102 grams (3.6 ounces) without batteries.
Other: Combined test button/ready lamp; power switch; camera flash cap holder.

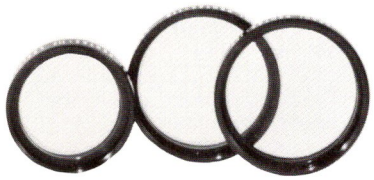
Cat. No.
30013 AF-130P Electronic Flash
30014 Case for AF 130P

PENTAX
System 10

LENS ACCESSORIES

Lens Accessories Further Expand Range of Application

An assortment of accessories is also available for each of the Pentax-110 interchangeable lenses. **Close-Up attachment lenses** are available for each of the three master lenses to enable a variety of close-up applications. In addition, there are **Skylight** and **UV** filters for the standard and wide-angle lenses, and folding rubber **lens hoods** for each lens.



Filters

• Type	• Lens	• Size	• Cat. No.
UV	24mm f/2.8	25.5mm	**35802**
Skylight	24mm f/2.8	25.5mm	**35801**
UV	18mm f/2.8	30.5mm	**35804**
Skylight	18mm f/2.8	30.5mm	**35803**
UV	50mm f/2.8	37.5mm	**35806**
Skylight	50mm f/2.8	37.5mm	**35805**

Close-Up Lenses

• No.	• Lens	• Focusing Range	• Magnification	• Cat. No.
S31	24mm f/2.8	20~36cm	.16~.08	**30460**
S16	24mm f/2.8	15~20cm	.24~.16	**30461**
W21	18mm f/2.8	16~26cm	.18~.09	**30462**
T86	50mm f/2.8	48.5~91.9cm	.13~.06	**30463**
T43	50mm f/2.8	34.4~48.9cm	.19~.12	**30464**

Lenshoods

Cat. No.
34501 110 Lens Hood for 24mm f/2.8
34521 110 Lens Hood for 18mm f/2.8
34511 110 Lens Hood for 50mm f/2.8
34891 110 Lens Hood for 70mm
34892 110 Lens Hood for 110 Zoom

CASES

Soft pouch cases have been custom designed to fit the Auto 110 camera and an electronic flash unit. In addition a deluxe hard case is available which will hold all of the System 10 accessories, with room for extra film.

Cat. No.
32850 Case for Auto 110 Camera
30014 Case for AF-130P
30641 System 10 Gadget Bag

A case and wrist strap are supplied with every Auto 110 camera.

33510 Case for Auto 110 w/50mm
33520 Case for 110 70mm or 110 Zoom

ACCESSORIES

An assortment of accessories is available for the System 10. **Eyepiece Diopter Correction Lenses** are available for those requiring eyesight correction. A special **Tripod Spacer** allows the Pentax-110 50mm f/2.8 lens to be used on a tripod without difficulty. In addition, replacement **lens caps** and **wrist straps** are available.

Cat. No.
30750 110 Diopter Correction Lens -5
30751 110 Diopter Correction Lens -4
30752 110 Diopter Correction Lens -3
30753 110 Diopter Correction Lens -2
30754 110 Diopter Correction Lens -1
30755 110 Diopter Correction Lens +1
30756 110 Diopter Correction Lens +2
30757 110 Diopter Correction Lens +3
32960 Wrist Strap for Auto 110 Camera *(replacement)*
32961 Chain Strap for Auto 110 (Neck)
37384 110 Tripod Spacer for 50mm f/2.8
31201 Body Cap for Auto 110 Camera
31210 110 Lens Cap for 24mm f/2.8
31211 110 Lens Cap for 18mm f/2.8
31212 110 Lens Cap for 50mm f/2.8
31200 110 Rear Lens Cap

110 EQUIPMENT

Code	Description	Suggested List	Individual Net
	AUTO 110 CAMERAS		
07031	Auto 110 Camera with 24mm f/2.8 lens with Case & Strap	249.00	149.00
07010	Auto 110 Camera Body	207.00	124.20
	INTERCHANGEABLE LENSES		
25207	110 24mm f/2.8 Standard Lens	48.00	29.00
25107	110 18mm f/2.8 Lens	68.00	41.00
25507	110 50mm f/2.8 Lens	68.00	41.00
	WINDER		
37385	Winder 110	68.00	41.00
	ELECTRONIC FLASH		
30013	AF-130P	42.00	25.00
	CASES		
32850	Case for Auto 110 Camera	11.00	5.80
30014	Case for AF-130P	4.00	2.00

☞ New Product ⬇ Price decrease ⬆ Price increase

Code	Description	Suggested List	Individual Net
30641	Gadget Bag for Auto 110 Camera	39.00	24.90
84585	Black Gadget Bag for Auto 110	31.00	19.00

CLOSE-UP LENSES

30460	110 Close-Up Lens S31 (24/2.8)	22.00	11.00
30461	110 Close-Up Lens S16 (24/2.8)	22.00	11.00
30462	110 Close-Up Lens W21 (18/2.8)	22.00	11.00
30463	110 Close-Up Lens T86 (50/2.8)	22.00	11.00
30464	110 Close-Up Lens T43 (50/2.8)	22.00	11.00

FILTERS

35801	110 Filter, Skylight (24/2.8)	13.00	6.50
35802	110 Filter, UV (24/2.8)	13.00	6.50
35803	110 Filter, Skylight (18/2.8)	13.00	6.50
35804	110 Filter, UV (18/2.8)	13.00	6.50

LENS HOODS

34501	110 Lens Hood (24/2.8)	4.00	2.00
34521	110 Lens Hood (18/2.8)	4.00	2.00
34511	110 Lens Hood (50/2.8)	4.00	2.00

OTHER ACCESSORIES

31201	Body Cap for Auto 110 Camera	4.00	2.40
31210	110 Lens Cap (24/2.8)	3.00	1.50
31211	110 Lens Cap (18/2.8)	3.00	1.50
31212	110 Lens Cap (50/2.8)	3.00	1.50
31200	110 Rear Lens Cap	3.00	1.50
32960	Wrist Strap for Auto 110 Camera	4.50	2.90
37384	110 Tripod Spacer	7.00	4.50
30750	110 Diopter Correction Lens, -5	7.00	4.50
30751	110 Diopter Correction Lens, -4	7.00	4.50
30752	110 Diopter Correction Lens, -3	7.00	4.50
30753	110 Diopter Correction Lens, -2	7.00	4.50
30754	110 Diopter Correction Lens, -1	7.00	4.50
30755	110 Diopter Correction Lens, +1	7.00	4.50
30756	110 Diopter Correction Lens, +2	7.00	4.50
30757	110 Diopter Correction Lens, +3	7.00	4.50

SYSTEM 10 KITS

07200	**System 10 Major Components Kit**	498.00	273.00
	Consists of:		
07011	Auto 110 Camera with 24mm f/2.8 lens w/strap		
32850	Case for Auto 110 Camera		
25107	110 18mm f/2.8 lens		
25507	110 50mm f/2.8 lens		
37385	Winder 110		
30013	AF-130P Electronic Flash		
30014	Case for AF-130P		
07100	**System 10 Complete Kit**	683.00	347.90
	Consists of:		
07011	Auto 110 Camera with 24mm f/2.8 lens w/strap		
32850	Case for Auto 110 Camera		
25107	110 18mm f/2.8 lens		
25507	110 50mm f/2.8 lens		
37385	Winder 110		
30013	AF-130P Electronic Flash		
30014	Case for AF-130P		
34501	110 Lens Hood 24/2.8		
34521	110 Lens Hood 18/2.8		
34511	110 Lens Hood 50/2.8		
30460	110 Close-Up Lens S31 (24/2.8)		
30461	110 Close-Up Lens S16 (24/2.8)		
30462	110 Close-Up Lens W21 (18/2.8)		
30463	110 Close-Up Lens T86 (50/2.8)		
30464	110 Close-Up Lens T43 (50/2.8)		
35801	110 Filter, Skylight (24/2.8)		
35802	110 Filter, UV (24/2.8)		
35803	110 Filter, Skylight (18/2.8)		
35804	110 Filter, UV (18/2.8)		
31201	Body Cap for Auto 110		
37384	Tripod Spacer for Auto 110		

☞ New Product ⬇ Price decrease ⬆ Price increase

PENTAX

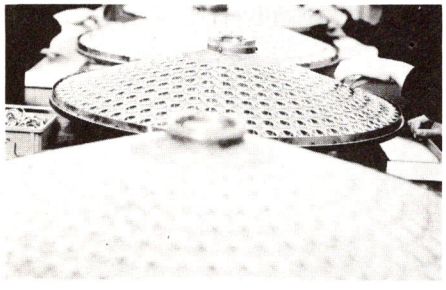
SMC lenses (Super-Multi-Coated)

improved to do an even better job of taming flare and glare

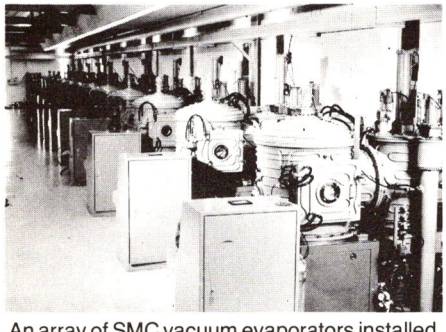
PENTAX

SMC lenses (Super-Multi-Coated)

improved to do an even better job of taming flare and glare



Lenses undergoing Super-Multi-Coating process.



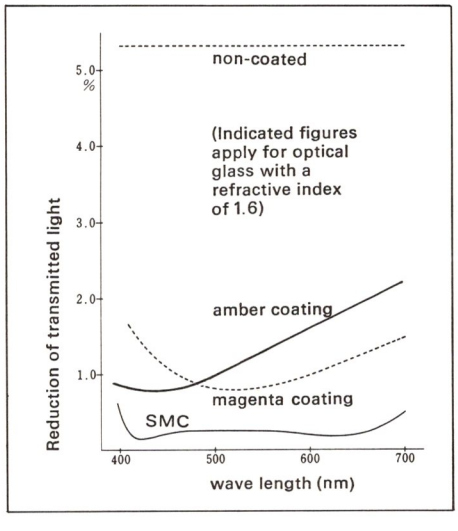
An array of SMC vacuum evaporators installed in response to improved SMC technology.

A Guide to Super-Multi-Coating

SMC stands for Super Multi-Coated, Pentax's unique technological breakthrough in lens coating which first appeared on all Takumar lenses in June of 1972.

Since that time, multi-coating has appeared on many lenses of both camera manufacturers and independent lens makers, but with varying degrees of quality. SMC Pentax lenses offer optimum quality, for they are produced by the originator and world's most experienced manufacturer of multi-coated optics.

On the average, between four and eight percent of the light rays perpendicularly passing through a glass surface are lost due to surface reflections. With conventional lens coating, it is possible to reduce the amount of light lost in transmittance to one or two percent.

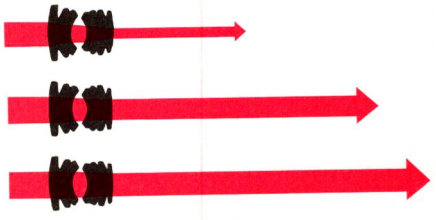


However, because of the complex optical designs of photographic lenses, there is still a 10 — 20% loss of transmitted light in conventionally coated lenses. Moreover, in addition to the loss of light, conventionally coated lenses suffer from flare and ghost images, the result of which is loss of contrast and sharpness as well as the appearance of distracting bright spots in the shape of the diaphragm blades.

Pentax's extremely effective seven-layer Super Multi-Coating reduces loss of light transmittance to a mere 0.2 — 0.3%, and whether used on optical glass of a low or high refractive indices, its effectiveness remains consistent.

By reducing the amount of surface reflection, light transmission is increased. Therefore, the amount of light transmitted through an SMC Pentax lens is greater than that of a conventionally coated lens of the same aperture.

There is a dramatic decrease in flare and ghost images which is especially noticeable in backlit photographs. Photographs taken with front lighting also benefit by increased contrast and superior color rendition.



The gain in light transmission, and thus in effective lens speed, is considerable. With a complex 12-element lens, for example, transmission may increase as much as 50% over that of a similar but conventionally coated lens.

Now, Super Multi-Coating has been expanded. First, the full range of 7 layers has been applied to most glass surfaces within the lens.
(Previously, some surfaces had been merely single-coated.) And second, SMC has been applied even to those glass surfaces which are thereafter cemented together.
(Previously, these had not been coated at all.)

Thus, with the new SMC Pentax lenses, even slight reflections are minimized. Pictures are sharper; color rendition is excellent; more detail is retained; and the reproduction of black tones — often a problem — is strikingly successful.

Rev. 2-82

PENTAX

SMC-A Bayonet Lenses

SMCP-A 15mm f/3.5

Minimum Aperture: 22
Lens Construction: 12 groups 13 elements
Angle of View: 111°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.3m (1.0 ft.)
Filter Size: Built-in; UV, Y2, O2, Skylight
Lens Hood: N/A
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 80mm x 81.5mm (3.1" x 3.2")
Weight: 595g (20.9 oz)
Catalog No.: 22010 SMCP-A 15mm f/3.5 w/case

SMCP-A Fish-Eye 16mm f/2.8

Minimum Aperture: 22
Lens Construction: 7 groups 9 elements
Angle of View: 180°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.2m (0.7 ft.)
Filter Size: Built-in; Skylight, Y2, O2 — w/gelatin filter clip at rear
Lens Hood: N/A
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 65mm x 56mm (2.6" x 2.2")
Weight: 320g (11.3 oz)
Catalog No.: 21300 SMCP-A Fish-Eye 16mm f/2.8 w/case

SMCP-A 20mm f/2.8

Minimum Aperture: 22
Lens Construction: 9 groups 10 elements
Angle of View: 94°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.25m (0.8 ft.)
Filter Size: 67mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 70mm x 43.5mm (2.8" x 1.7")
Weight: 245g (8.6 oz)
Catalog No.: 22870 SMCP-A 20mm f/2.8 w/case

PENTAX

SMC-A Bayonet Lenses

SMCP-A 28mm f/2

Minimum Aperture: 22
Lens Construction: 7 groups 8 elements
Angle of View: 75°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.3m (1.0 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 63mm x 41.5mm (2.5" x 1.6")
Weight: 215g (7.5 oz)
Catalog No.: 22950 SMCP-A 28mm f/2 w/case

SMCP-A 50mm f/1.2

Minimum Aperture: 22
Lens Construction: 6 groups 7 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 52mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 64.5mm x 47.5mm (2.5" x 1.9")
Weight: 345g (12.1 oz)
Catalog No.: 20987 SMCP-A 50mm f/1.2 w/o case

SMCP-A 50mm f/2

Minimum Aperture: 22
Lens Construction: 5 groups 5 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 63mm x 31mm (2.5" x 1.2")
Weight: 145g (5.1 oz)
Catalog No.: 20697 SMCP-A 50mm f/2 w/o case

PENTAX

SMC-A Bayonet Lenses

SMCP-A* 85mm f/1.4

Minimum Aperture: 22
Lens Construction: 6 groups 7 elements
Angle of View: 28.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.85m (2.8 ft.)
Filter Size: 67mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 74mm x 66mm (2.9" x 2.6")
Weight: 555g (19.5 oz)
Catalog No.: 23070 SMCP-A* 85mm f/1.4 w/case

SMCP Soft 85mm f/2.2

Minimum Aperture: 5.6
Lens Construction: 1 group 2 elements
Angle of View: 28.5°
Diaphragm: Manual
Minimum Focusing Distance: 0.57m (1.9 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 72mm x 51.5mm (2.8" x 2.0")
Weight: 235g (8.3 oz)
Catalog No.: 23160 SMCP Soft 85mm f/2.2 w/case

SMCP-A* 135mm f/1.8

Minimum Aperture: 22
Lens Construction: 6 groups 7 elements
Angle of View: 18°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.2m (3.9 ft.)
Filter Size: 77mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 80mm x 97.5mm (3.1" x 3.8")
Weight: 865g (30.5 oz)
Catalog No.: 23530 SMCP-A* 135mm f/1.8 w/case

PENTAX

SMC-A Bayonet Lenses

SMCP-A* 200mm f/2.8 ED

Minimum Aperture: 32
Lens Construction: 6 groups 6 elements
Angle of View: 12.5º
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.8m (5.9 ft.)
Filter Size: 77mm
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 91mm x 137.5mm (3.6'' x 5.4'')
Weight: 850g (29.9 oz)
Catalog No.: 24130 SMCP-A* 200mm f/2.8 ED w/case

SMCP-A* Macro 200mm f/4 ED

Minimum Aperture: 32
Lens Construction: 9 groups 10 elements
Angle of View: 12.5º
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.55m (1.8 ft.)
Maximum Magnification: 1.0x
Filter Size: 58mm
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 70.5mm x 145mm (2.8'' x 5.7'')
Weight: 895g (31.5 oz)
Catalog No.: 28800 SMCP-A* Macro 200mm f/4 ED w/case

SMCP-A* 300mm f/2.8 ED(IF)

Minimum Aperture: 32
Lens Construction: 8 groups 8 elements
Angle of View: 8.2º
Diaphragm: Fully Automatic
Minimum Focusing Distance: 3.0m (9.8 ft.)
Filter Size: 49mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 133mm x 236mm (5.2'' x 9.3'')
Weight: 2,970g (104.8 oz)
Catalog No.: 24380 SMCP-A* 300mm f/2.8 ED(IF) w/case

PENTAX

SMC-A Bayonet Lenses

SMCP-A* 400mm f/2.8 ED(IF)

Minimum Aperture: 32
Lens Construction: 8 groups 8 elements
Angle of View: 6.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 4.0m (13.1 ft.)
Filter Size: 49mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 164mm x 325mm (6.5" x 12.8")
Weight: 6,000g (211.6 oz)
Catalog No.: 24590 SMCP-A* 400mm f/2.8 ED(IF) w/case

SMCP-A 400mm f/5.6

Minimum Aperture: 45
Lens Construction: 6 groups 7 elements
Angle of View: 6.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 2.8m (9.2 ft.)
Filter Size: 77mm
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 85mm x 277mm (3.3" x 10.9")
Weight: 1,240g (43.7 oz)
Catalog No.: 24570 SMCP-A 400mm f/5.6 w/case

SMCP 500mm f/4.5

Minimum Aperture: 45
Lens Construction: 4 groups 4 elements
Angle of View: 5°
Diaphragm: Manual
Minimum Focusing Distance: 10m (32.8 ft.)
Filter Size: 52mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 126.5mm x 440mm (4.9" x 17.3")
Weight: 3,370g (118.9 oz)
Catalog No.: 24740 SMCP 500mm f/4.5 w/case

PENTAX

SMC-A Bayonet Lenses

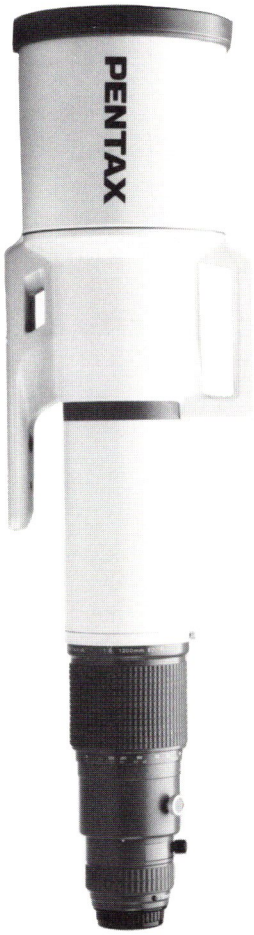
SMCP 1000mm f/8

Minimum Aperture: 45
Lens Construction: 5 groups 5 elements
Angle of View: 2.5º
Diaphragm: Manual
Minimum Focusing Distance: 30m (98.4 ft.)
Filter Size: 52mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 143mm x 738mm (5.6'' x 29.0'')
Weight: 5,290g (186.6 oz)
Catalog No.: 24940 SMCP 1000mm f/8 w/case

DISCONTINUED PRODUCT – FOR REFERENCE ONLY

SMCP-A* 1200mm f/8 ED(IF)

Minimum Aperture: 45
Lens Construction: 8 groups 9 elements
Angle of View: 2.1º
Diaphragm: Fully Automatic
Minimum Focusing Distance: 8m (26.2 ft.)
Filter Size: 49mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 170mm x 684mm (6.7'' x 26.9'')
Weight: 8,580g (302.6 oz)
Catalog No.: 24970 SMCP-A* 1200mm f/8 ED(IF) w/case



SMCP Reflex 1000mm f/11

Minimum Aperture: —
Lens Construction: 6 groups 8 elements
Angle of View: 2.5º
Diaphragm: ND (Controlled by neutral density filters)
Minimum Focusing Distance: 8m (26.2 ft.)
Filter Size: 52mm (rear) & Built-in; ND x1, x2.8, x2, x4 & Skylight, Y2, R2
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 119mm x 248mm (4.7'' x 9.8'')
Weight: 2,300g (81.1 oz)
Catalog No.: 24960 SMCP Reflex 1000mm f/11 w/case

PENTAX
SMC-A Bayonet Lenses

SMCP Reflex 2000mm f/13.5

Minimum Aperture: —
Lens Construction: 6 groups 8 elements
Angle of View: 1.2°
Diaphragm: ND (controlled by neutral density filters)
Minimum Focusing Distance: 20m (65.6 ft.)
Filter Size: 52mm (rear) & Built-in; NDx1, x2.8, x2, x4 & Skylight, Y2, R2
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 180mm x 530mm (7.0" x 20.8")
Weight: 8,000g (282.2 oz)
Catalog No.: 24980 SMCP Reflex 2000mm f/13.5 w/case

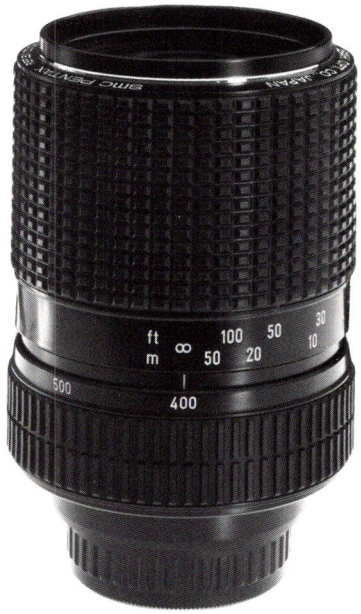
SMCP Zoom 135mm-600mm f/6.7

Minimum Aperture: 45
Lens Construction: 12 groups 15 elements
Angle of View: 18°-4.1°
Diaphragm: Manual
Minimum Focusing Distance: 6m (19.7 ft.)
Filter Size: 52mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 105mm x 589mm (4.1" x 23.2")
Weight: 4,070g (143.6 oz)
Catalog No.: 27640 SMCP Zoom 135-600mm f/6.7 w/case

DISCONTINUED PRODUCT – FOR REFERENCE ONLY

SMCP Reflex Zoom 400mm f/8-600mm f/12

Minimum Aperture: —
Lens Construction: 7 groups 12 elements
Angle of View: 6.2°-4.1°
Diaphragm: ND (controlled by neutral density filters)
Minimum Focusing Distance: 3m (9.8 ft.)
Filter Size: 67mm front-Exclusive 40.5mm rear mount filters; (normal, sky, Y8, R60, ND 2x, 2.8x, 4x)
Lens Hood: Exclusive-supplied with Lens
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 82mm x 108mm (3.2" x 4.3")
Weight: 730g (25.7 oz)
Catalog No.: 27940 SMCP Reflex Zoom 400mm f/8-600mm f/12 w/hood, seven 40.5mm filters, & case

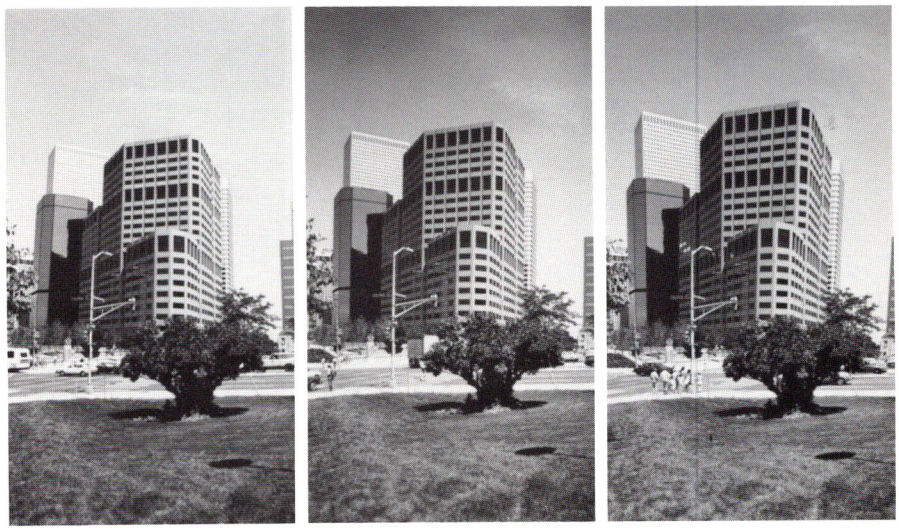


PENTAX
SMC-A Bayonet Lenses

Ideal for architectural photography, this lens corrects converging perspective lines to give the subject a more normal appearance.

SMCP Shift 28mm f/3.5

Minimum Aperture: 32
Lens Construction: 11 groups 12 elements
Angle of View: 75°
Diaphragm: Manual
Minimum Focusing Distance: 0.3m (1.0 ft.)
Maximum Shift: 11mm; Click-Stops at one-millimeter intervals
Lens Rotation: 360°; Click-Stops at 30° intervals
Filter Size: Built-in, Y2, O2, Skylight-w/gelatin filter clip at rear
Lens Hood: N/A
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 80mm x 92.5mm (3.1" x 3.6")
Weight: 610g (21.5 oz)
Catalog No.: 22561 SMCP Shift 28mm f/3.5 w/case



PENTAX

FA-Series Auto Focus Lenses

SMCP-FA 24mm f/2 AL (IF)

Minimum Aperture: 22
Lens Construction: 9 groups 11 elements
Angle of View: 84°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.3m (1.0 ft.)
Filter Size: 67mm
Lens Hood: Exclusive - supplied w/lens
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 72.5mm x 65.5mm (2.9″ x 2.6″)
Weight: 405g (14.3 oz)
Catalog No: 22630 SMCP-FA 24mm f/2 AL (IF) w/case and hood

SMCP-FA 28mm f/2.8 AL

Minimum Aperture: 22
Lens Construction: 5 groups 5 elements
Angle of View: 75°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.3m (1.0 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 65mm x 40.5mm (2.5″ x 1.6″)
Weight: 185g (6.5 oz)
Catalog No: 22527 SMCP-FA 28mm f/2.8 AL w/o case

SMCP-FA 50mm f/1.4

Minimum Aperture: 22
Lens Construction: 6 groups 7 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 65mm x 37mm (2.5″ x 1.5″)
Weight: 220g (7.8 oz)
Catalog No: 20817 SMCP-FA 50mm f/1.4 w/o case

PENTAX

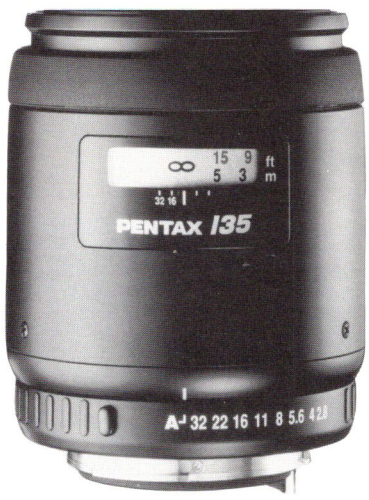
FA-Series Auto Focus Lenses

SMCP-FA 50mm f/1.7

Minimum Aperture: 22
Lens Construction: 5 groups 6 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 65mm x 37mm (2.5″ x 1.5″)
Weight: 170g (6.0 oz)
Catalog No: 20907 SMCP-FA 50mm f/1.7 w/o case

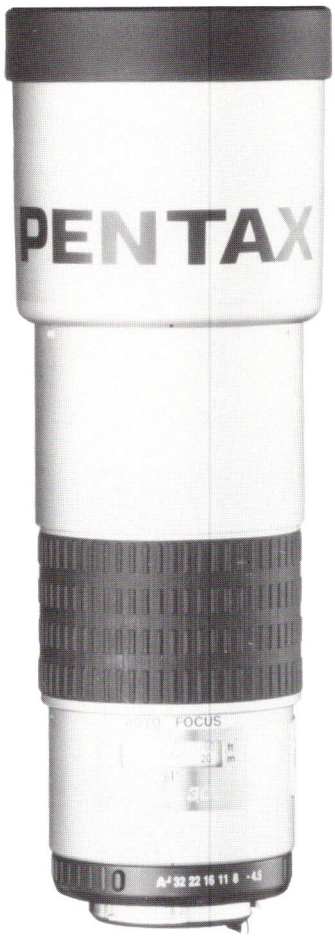
SMCP-FA 135mm f/2.8 (IF)

Minimum Aperture: 22
Lens Construction: 7 groups 8 elements
Angle of View: 18°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.7m (2.3 ft.)
Filter Size: 52mm
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 65mm x 80mm (2.5″ x 3.1″)
Weight: 375g (13.2 oz)
Catalog No: 23427 SMCP-FA 135mm f/2.8 (IF) w/o case



SMCP-FA 300mm f/4.5 ED (IF)

Minimum Aperture: 22
Lens Construction: 7 groups 9 elements
Angle of View: 8.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 2.0m (6.6 ft.)
Filter Size: 67mm
Lens Hood: Exclusive - supplied w/lens
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 72.5mm x 160mm (2.9″ x 6.3″)
Weight: 935g (33 oz)
Catalog No: 24400 SMCP-FA 300mm f/4.5 ED (IF) w/case and hood



PENTAX

FA-Series Auto Focus Lenses

SMCPA-FA* 200mm f/2.8 ED (IF)

Minimum Aperture: 32
Lens Construction: 8 groups 9 elements
Angle of View: 12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.2m (4.7″)
Maximum Magnification (Macro Range): 0.14
Filter Size: 77mm
Lens Hood: Exclusive - supplied w/lens
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 82.5mm x 134mm (3.2″ x 5.3″)
Weight: 783g (25.2 oz) wo/hood
900g (28.9 oz) w/hood
Catalog No: 24140 SMCPA-FA 200mm f/2.8 ED (IF) with case

SMCPA-FA* 85mm f/1.4 (IF)

Minimum Aperture: 22
Lens Construction: 7 groups 8 elements
Angle of View: 28.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.85m (3.3″)
Maximum Magnification (Macro Range): 0.10
Filter Size: 67mm
Lens Hood: Exclusive - supplied w/lens
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 78.9mm x 70mm (3.1″ x 2.8″)
Weight: 549.5g (17.7 oz) wo/hood
678.5g (21.8 oz) w/hood
Catalog No: 23080 SMCPA-FA 85mm f/1.4 (IF) with case

PENTAX

FA-Series Auto Focus Lenses

SMCP-FA* Zoom 28mm-70mm f/2.8 AL

Minimum Aperture: 22
Lens Construction: 11 groups 14 elements
Angle of View: 75°-34.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.43m (1.4 ft.)
Macro Magnification: 0.25x
Filter Size: 67mm
Lens Hood: PH-RBC77 (Supplied w/lens)
Lens Case: S120-150 (Supplied w/lens)
Maximum Diameter & Length:
84.7mm x 104.2mm (104.5 x 149.5 w/hood)
3.3" x 4.1" (4.1" x 5.9" w/hood)
Weight: 800g (28.2 oz.) w/hood
Tripod Mount: no
Front Case Size:

PZ-1	L
PZ-20/10	N/A
P-30T	N/A
K-1000	N/A

Catalog No.: 27660 SMCP-FA* Zoom 28-70mm f/2.8 AL w/case
UPC Code: 027075036765

SMCP-FA* Zoom 80mm-200mm f/2.8 ED(IF)

Minimum Aperture: 32
Lens Construction: 13 groups 16 elements
Angle of View: 30.5°-12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.4m (4.6 ft.)
Macro Magnification: 0.19x
Filter Size: 77mm
Lens Hood: PH-RBC77 (Supplied w/lens)
Lens Case: S120-230 (Supplied w/lens)
Maximum Diameter & Length:
87.3mm x 191.5mm (104.5" x 237.5" w/hood)
3.4" x 7.5" (4.1" x 9.4" w/hood)
Weight: 1,507g (52.7 oz.) w/hood,
1,591g (55.7 oz.) w/tripod mount
Tripod Mount: yes
Front Case Size: None Available
Catalog No.: 27590 SMCP-FA* Zoom 80-200mm f/2.8 ED(IF) w/case
UPC Code: 027075036734

SMCP-FA* 300mm f/2.8 2.8 ED(IF)

Minimum Aperture: 32
Lens Construction: 7 groups 10 elements
Angle of View: 8.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 2m (6.6 ft.)
Macro Magnification: 0.17x
Filter Size: Front-112 Inner-43 (Exclusive)
Lens Hood: Built-in
Lens Case: Exclusive (Supplied w/lens)
Maximum Diameter & Length:
123mm x 256mm (135 x 340 w/hood)
4.8" x 10" (5.3" x 13.4" w/hood)
Weight: 2,680g (93.8 oz.) w/hood,
2,980g (104.3 oz.) w/tripod mount
Tripod Mount: yes
Front Case Size: None Available
Catalog No.: 24370 SMCP-FA* 300mm f/2.8 ED(IF) w/case
UPC Code: 027075036703

PENTAX

FA-Series Auto Focus Lenses

SMCP-FA Soft 85mm f/2.8

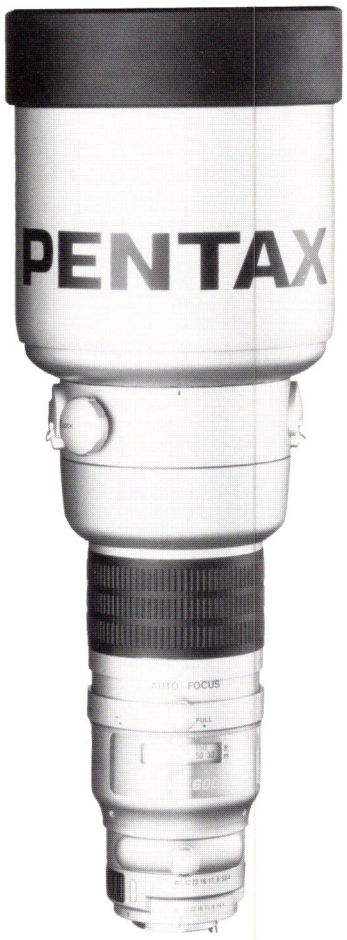
Minimum Aperture: 32
Lens Construction: 4 groups 5 elements
Angle of View: 28.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.5m (1.6 ft.)
Macro Magnification: 0.25x
Filter Size: 52mm
Lens Hood: MH-RB52
Lens Case: S80-120
Maximum Diameter & Length:
66mm x 60mm
Weight: 305g
Catalog No.: 23190 SMCP-FA 85mm Soft f/2.8
UPC Code: 027075038974

PENTAX

FA-Series Auto Focus Lenses

SMCP-FA 600mm f/4 ED (IF)

Minimum Aperture: 32
Lens Construction: 7 groups 9 elements
Angle of View: 4.1°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 5.0m (16.4 ft.)
Filter Size: 43mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive
Maximum Diameter & Length: 176mm x 456.5mm (6.9″ x 18″)
Weight: 6450g (227.5 oz)
Catalog No: 24870 SMCP-FA 600mm f/4 ED (IF) w/case and tripod mount



SMCP-FA Macro 50mm f/2.8

Minimum Aperture: 32
Lens Construction: 7 groups 8 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.195m (0.6 ft.)
Macro Magnification: 1.0x
Filter Size: 52mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 68mm x 70mm (2.7″ x 2.8″)
Weight: 385g (13.6 oz)
Catalog No: 28170 SMCP-FA Macro 50mm f/2.8 w/case

SMCP-FA Macro 100mm f/2.8

Minimum Aperture: 32
Lens Construction: 8 groups 9 elements
Angle of View: 24.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.306m (1.0 ft.)
Micro Magnification: 1.0x
Filter Size: 58mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 74mm x 103.5mm (2.9″ x 4.0″)
Weight: 600g (21.2 oz)
Catalog No: 28930 SMCP-FA Macro 100mm f/2.8 w/case

PENTAX

FA-Series Auto Focus Lenses

SMCP-FA Zoom 28mm-80mm f/3.5–4.7

Minimum Aperture: 22-32
Lens Construction: 8 groups 8 elements
Angle of View: 75°–30.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.4m (1.3 ft.)
Macro Magnification: 0.25x
Filter Size: 58mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 71mm x 83.5mm (2.8″ x 3.3″)
Weight: 380g (13.4 oz)
Catalog No: 27537 SMCP-FA Zoom 28–80mm f/3.5–4.7 w/o case

SMCP-FA Zoom 70mm-200mm f/4–5.6

Minimum Aperture: 32-45
Lens Construction: 8 groups 10 elements
Angle of View: 34.5°–12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.1m (3.6 ft.)
Macro Magnification: 0.25x
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 73mm x 116.5mm (2.9″ x 4.6″)
Weight: 465g (16.4 oz)
Catalog No: 27427 SMCP-FA Zoom 70–200mm f/4–5.6 w/o case

SMCP-FA Zoom 250mm-600mm f/5.6 ED (IF)

Minimum Aperture: 32
Lens Construction: 16 groups 18 elements
Angle of View: 9.9°–4.1°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 3.5m (11.5 ft.)
Macro Magnification: 0.2x
Filter Size: 43mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive
Maximum Diameter & Length: 134mm x 442mm (5.3″ x 17.4″)
Weight: 5050g (178.1 oz)
Catalog No: 27910 SMCP-FA Zoom 250–600mm f/5.6 ED (IF) w/case and tripod mount

PENTAX

FA-Series Auto Focus Lenses

SMCP-FA Zoom 28mm-105mm f/4-f/5.6

Minimum Aperture: 22-32
Lens Construction:
11 groups 13 elements
Angle of View: 75°-23.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance:
.43m (1.4')
Macro Magnification:.33x
Filter Size: 58mm
Lens Hood:
See chart in 35mm Accessories Section
Lens Case:
See chart in 35mm Accessories Section
Maximum Diameter and Length:
72.5mm x 95.5mm (2.8" x 3.7")
Weight:: 445g (15.7 oz.)
Catalog No: 27667 SMCP FA Zoom 28-105mm f/4-f/5.6 w/o case

SMCP-FA Zoom 100mm-300mm f/4.5-f/5.6

Minimum Aperture: 32-38
Lens Construction:
8 groups 12 elements
Angle of View: 24.5°-8.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance:
1.5m (4.9')
Macro Magnification: 0.25
Filter Size: 58mm
Lens Hood:
See chart in 35mm Accessories Section
Lens Case:
See chart in 35mm Accessories Section
Maximum Diameter and Length: 73mm x 145.5mm (2.9" x 5.7")
Weight:: 605g (21.3 oz.)
Catalog No: 27927 SMCP FA Zoom 100-300mm f/4.5-f/5.6 w/o case

PENTAX

FA-Series Auto Focus Lenses

SMCP-FA Zoom 28mm-70mm f/4 AL

Minimum Aperture: 22
Lens Construction: 7 groups 9 elements
Angle of View: 75°-34.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.4m (1.3 ft.)
Maximum Magnification: 0.23x
Filter Size: 52mm
Lens Hood: RH-RB52
Maximum Diameter & Length:
65.5mm x 66mm (2.55" x 2.6")
Weight: 240g (8.4 oz.)
Catalog No.: 27531 SMCP-FA Zoom 28-70mm f/4 AL
UPC Code: 027075038998

Power zoom function is not available.

SMCP-FA Zoom 28mm-80mm f/3.5-4.7

Minimum Aperture: 22-32
Lens Construction: 8 groups 8 elements
Angle of View: 75°-30.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.4m (1.3 ft.)
Macro Magnification: 0.25x
Filter Size: 58mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length:
71mm x 83.5mm (2.8" x 3.3")
Weight: 380g (13.4 oz.)
Catalog No.: 27537 SMCP-FA Zoom 28-80mm f/3.5-4.7 w/o case

Discontinued

SMCP-FA Zoom 28mm-105mm f/4-f/5.6

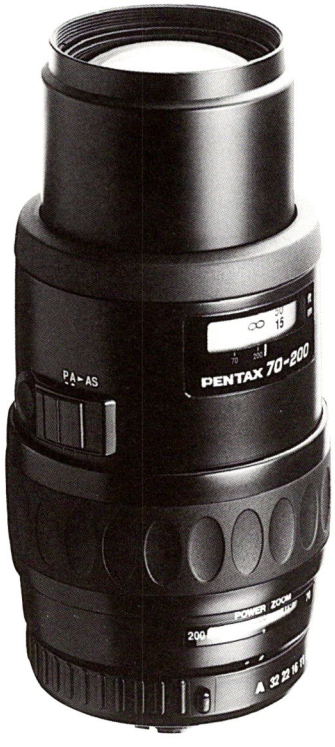
Minimum Aperture: 22-32
Lens Construction: 11 groups 13 elements
Angle of View: 75°-23.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: .43m (1.4 ft.)
Macro Magnification: 33x
Filter Size: 58mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length:
72.5mm x 95.5mm (2.8" x 3.7")
Weight: 445g (15.7 oz.)
Catalog No.: 27667 SMCP-FA Zoom 28-105mm f/4-f/5.6 w/o case

PENTAX

FA-Series Auto Focus Lenses

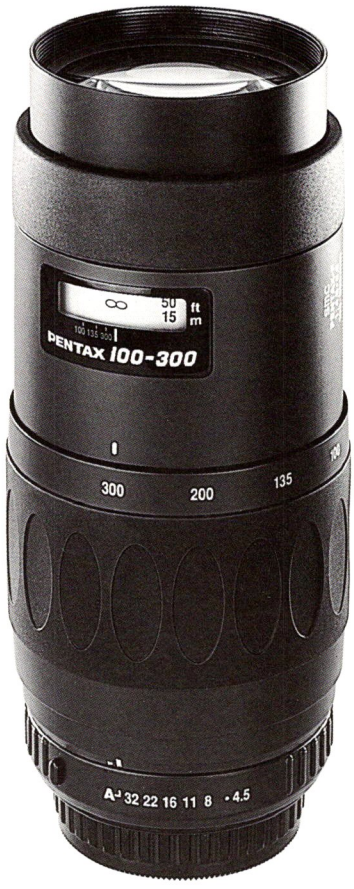
SMCP-FA Zoom 70mm-200mm f/4-5.6

Minimum Aperture: 32-45
Lens Construction: 8 groups 10 elements
Angle of View: 34.5°-12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.1m (3.6 ft.)
Macro Magnification: 0.25x
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 73mm x 116.5mm (2.9" x 4.6")
Weight: 465g (16.4 oz.)
Catalog No.: 27427 SMCP-FA Zoom 70-200mm f/4-5.6 w/o case



SMCP-FA Zoom 100mm-300mm f/4.5-f/5.6

Minimum Aperture: 32-38
Lens Construction: 8 groups 12 elements
Angle of View: 24.5°-8.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.5m (4.9 ft.)
Macro Magnification: 0.25x
Filter Size: 58mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 73mm x 145.5mm (2.9" x 5.7")
Weight: 605g (21.3 oz.)
Catalog No.: 27927 SMCP-FA Zoom 100-300mm f/4.5-f/5.6 w/o case



SMCP-FA Zoom 250mm 600mm f/5.6 ED (IF)

Minimum Aperture: 32
Lens Construction: 16 groups 18 elements
Angle of View: 9.9°-4.1°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 3.5m (11.5 ft.)
Macro Magnification: 0.2x
Filter Size: 43mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive
Maximum Diameter & Length: 134mm x 442mm (5.3" x 17.4")
Weight: 5050g (178.1 oz.)
Catalog No.: 27910 SMCP-FA Zoom 250-600mm f/5.6 ED (IF) w/case and tripod mount

PENTAX

F-Series Auto Focus Lenses

SMCP-F 28mm f/2.8

Minimum Aperture: 22
Lens Construction: 7 groups 7 elements
Angle of View: 75°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.3m (1.0 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 64mm x 37mm (2.5'' x 1.5'')
Weight: 180g (6.3 oz)
Catalog No.: 22517 SMCP-F 28mm f/2.8 w/o case

SMCP-F 50mm f/1.4

Minimum Aperture: 22
Lens Construction: 6 groups 7 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 65mm x 37mm (2.5'' x 1.5'')
Weight: 230g (8.1 oz)
Catalog No.: 20827 SMCP-F 50mm f/1.4 w/o case

SMCP-F 50mm f/1.7

Minimum Aperture: 22
Lens Construction: 5 groups 6 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 65mm x 37mm (2.5'' x 1.5'')
Weight: 200g (7.0 oz)
Catalog No.: 20837 SMCP-F 50mm f/1.7 w/o case

PENTAX

F-Series Auto Focus Lenses

SMCP-F 135mm f/2.8

Minimum Aperture: 32
Lens Construction: 7 groups 8 elements
Angle of View: 18°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.7m (2.3 ft.)
Filter Size: 52mm
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 68mm x 80mm (2.7" x 3.15")
Weight: 400g (14.0 oz)
Catalog No.: 23417 SMCP-F 135mm f/2.8 w/o case

SMCP-F* 300mm f/4.5 ED(IF)

Minimum Aperture: 32
Lens Construction: 7 groups 9 elements
Angle of View: 8.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 2.0m (6.6 ft.)
Filter Size: 67mm
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 84mm x 160mm (3.3" x 6.3")
Weight: 880g (30.8 oz)
Catalog No.: 24320 SMCP-F* 300mm f/4.5 ED(IF) w/case

SMCP-F* 600mm f/4 ED(IF)

Minimum Aperture: 32
Lens Construction: 7 groups 9 elements
Angle of View: 4.1°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 5.0m (16.4 ft.)
Filter Size: 43mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 181mm x 457mm (7.13" x 17.10")
Weight: 6,830g (239 oz)
Catalog No.: 24880 SMCP-F* 600mm f/4 ED(IF) w/case

PENTAX

F-Series Auto Focus Lenses

SMCP-F Macro 50mm f/2.8

Minimum Aperture: 32
Lens Construction: 7 groups 8 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.195m (0.6 ft.)
Maximum Magnification: 1.0x
Filter Size: 52mm
Lens Hood: Not Needed
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 68mm x 70mm (2.7'' x 2.8'')
Weight: 385g (13.5 oz)
Catalog No.: 28180 SMCP-F Macro 50mm f/2.8 w/case

SMCP-F Macro 100mm f/2.8

Minimum Aperture: 32
Lens Construction: 8 groups 9 elements
Angle of View: 24.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.306m (1.0 ft.)
Maximum Magnification: 1.0x
Filter Size: 58mm
Lens Hood: Not Needed
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 74mm x 103.5mm (2.9'' x 4.0'')
Weight: 590g (20.8 oz)
Catalog No.: 28990 SMCP-F Macro 100mm f/2.8 w/case

SMCP-F Zoom 24mm-50mm f/4

Minimum Aperture: 22
Lens Construction: 10 groups 11 elements
Angle of View: 84°-47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.4m (1.3 ft.)
Filter Size: 58mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 69.5mm x 67mm (2.7'' x 2.6'')
Weight: 380g (13.4 oz)
Catalog No.: 27007 SMCP-F Zoom 24-50mm f/4 w/o case

PENTAX

F-Series Auto Focus Lenses

SMCP-F Zoom 28mm-80mm f/3.5-4.5

Minimum Aperture: 22-32
Lens Construction: 9 groups 12 elements
Angle of View: 75º-30.5º
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.8m (2.6 ft.)
0.4m at macro (1.3 ft.)
Macro Magnification: 0.25x
Filter Size: 58mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 69.5mm x 75mm (2.7" x 2.10")
Weight: 395g (13.8 oz)
Catalog No.: 27187 SMCP-F Zoom 28-80mm f/3.5-4.5 w/o case

SMCP-F Zoom 35mm-70mm f/3.5-4.5

Minimum Aperture: 22-32
Lens Construction: 8 groups 8 elements
Angle of View: 63º-34.5º
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.7m (2.3 ft.)
0.32m at macro (1.0 ft.)
Macro Magnification: 0.25x
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 67mm x 50mm (2.6" x 1.10")
Weight: 235g (8.2 oz)
Catalog No.: 27177 SMCP-F Zoom 35-70mm f/3.5-4.5 w/o case

SMCP-F Zoom 35mm-105mm f/4-5.6

Minimum Aperture: 22
Lens Construction: 12 groups 14 elements
Angle of View: 63º-23.5º
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.4m (4.6 ft.)
0.42m at macro (1.4 ft.)
Macro Magnification: 0.25x
Filter Size: 58mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 72mm x 71mm (2.8" x 2.7")
Weight: 345g (12.1 oz)
Catalog No.: 27477 SMCP-F Zoom 35-105mm f/4-5.6 w/o case

PENTAX

F-Series Auto Focus Lenses

SMCP-F Zoom 35mm-80mm f/4-5.6

Minimum Aperture: 22
Lens Construction: 6 groups 7 elements
Angle of View: 63°-30.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.4m (1.3 ft.)
Filter Size: 49mm
Lens Hood: RH-RA49mm (optional)
Lens Case: S80-80 (optional)
Maximum Diameter & Length:
65mm x 58.2mm (2.5" x 2.3")
Weight: 185g (6.5 oz.)
Tripod Mount: no

Front Case Size:		
	PZ-1	M
	PZ-20/10	S
	P-30T	P-S
	K-1000	Standard Case

Catalog No.: 27179 SMCP-F Zoom 35-80mm f/4-5.6 w/o case
UPC Code: 027075034655

SMCP-F Zoom 80mm-200mm f/4.7-5.6

Minimum Aperture: 32
Lens Construction: 7 groups 11 elements
Angle of View: 30.5°-12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.1m (3.6 ft.)
Maximum Magnification: 0.25x
Filter Size: 49mm
Lens Hood: RH-RB49mm (optional)
Lens Case: S80-120 (optional)
Maximum Diameter & Length:
65mm x 99.4mm (2.5" x 3.9")
Weight: 295g (10.4 oz.)
Tripod Mount: no

Front Case Size:		
	PZ-1	L
	PZ-20/10	L
	P-30T	L2
	K-1000	N/A

Catalog No.: 27567 SMCP-F Zoom 80-200mm f/4.7-5.6 w/o case
UPC Code: 027075036246

SMCP-F Zoom 100mm-300mm f/4.5-5.6

Minimum Aperture: 32
Lens Construction: 8 groups 12 elements
Angle of View: 24.5°-8.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.5m (4.9 ft.)
Maximum Magnification: 0.25x
Filter Size: 58mm
Lens Case: S80-160
Maximum Diameter & Length:
71.5mm x 154.5mm (2.8" x 6")
Weight: 605g (21.18 oz.)
Catalog No.: 27931
SMCP-F Zoom 100-300mm
UPC Code: 027075039032

PENTAX
F-Series Auto Focus Lenses

SMCP-F Zoom 35mm-135mm f/3.5-4.5

Minimum Aperture: 22-32
Lens Construction: 12 groups 16 elements
Angle of View: 63º-18º
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.6m (5.2 ft.)
0.75m at macro (2.5 ft.)
Macro Magnification: 0.25x
Filter Size: 58mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 71mm x 91.5mm (2.8" x 3.6")
Weight: 485g (17.1 oz)
Catalog No.: 27197 SMCP-F Zoom 35-135mm f/3.5-4.5 w/o case

SMCP-F Zoom 70mm-210mm f/4-5.6

Minimum Aperture: 32-45
Lens Construction: 9 groups 13 elements
Angle of View: 34.5º-11.8º
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.1m (3.6 ft.)
Maximum Magnification: 0.25x
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 71mm x 98.5mm (2.8" x 3.9")
Weight: 555g (19.6 oz)
Catalog No.: 27357 SMCP-F Zoom 70-210mm f/4-5.6 w/o case

SMCP-F* Zoom 250mm-600mm f/5.6 ED(IF)

Minimum Aperture: 32
Lens Construction: 15 groups 17 elements
Angle of View: 9.9º-4.1º
Diaphragm: Fully Automatic
Minimum Focusing Distance: 3.5m (11.5 ft.)
Filter Size: 43mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 149mm x 439mm (5.9" x 17.3")
Weight: 5,400g (190 oz)
Catalog No.: 27900 SMCP-F* Zoom 250-600mm f/5.6 ED(IF) w/case

PENTAX

F-Series Auto Focus Lenses

SMCP-F Soft 85mm F/2.8

Minimum Aperture: 32
Lens Construction: 4 groups 5 elements
Angle of View: 28.5°
Diaphragm: Manual f/2.8-f/5.6
Automatic f/5.6-f/32
Minimum Focusing Distance: 0.5m (1.6 ft.)
Filter Size: 52mm
Lens Hood: RH-RA52
Lens Case: S80-120
Maximum Diameter & Length: 66mm x 60mm (2.6″ x 2.4″)
Weight: 300g (10.6 oz)
Catalog No.: 23180 SMCP-F Soft 85mm f/2.8 w/case & hood

AF 1.7X Adapter

Purpose: Will convert K and KA mount lenses with a maximum aperture of f/2.8 or larger for auto-focus operation with Pentax AF cameras.
Lens Construction: 4 groups 6 elements
Diameter & Length: 64mm x 26mm (2.5″ x 1.0″)
Weight: 135g (4.8 oz)
Case: S70-70 (S)
Usable Lenses: See Chart
Catalog No.: 30925 AF 1.7X Adapter w/o case

K_A-Mount Lenses Usable in AF mode with AF Adapter 1.7X

SMC Pentax-A Fish-eye 16mm f/2.8
SMC Pentax-A 20mm f/2.8
SMC Pentax-A 24mm f/2.8
SMC Pentax-A 28mm f/2
SMC Pentax-A 28mm f/2.8
SMC Pentax-A 35mm f/2
SMC Pentax-A 35mm f/2.8
SMC Pentax-A 50mm f/1.2
SMC Pentax-A 50mm f/1.4
SMC Pentax-A 50mm f/1.7
SMC Pentax-A 50mm f/2
SMC Pentax-A 85mm f/1.4
SMC Pentax-A 100mm f/2.8
SMC Pentax-A 135mm f/1.8
SMC Pentax-A 135mm f/2.8
SMC Pentax-A 200mm f/2.8 ED
SMC Pentax-A300mm f/2.8 ED(IF)
SMC Pentax-A 400mm f/2.8 ED(IF)
SMC Pentax-A Zoom 35mm-105mm f/3.5 (excluding macro range)

PENTAX

SMC lenses
(Super-Multi-Coated)

Pentax Bayonet-Mount Lens Specifications

With the introduction of the new SMC Pentax-M lenses, there are now more than 40 superb Super-Multi-Coated quick-change bayonet-mount Pentax lenses. They give you the optical power to reach into the fantastic world of fish-eye, ultra-wide, extreme telephoto, macro, zoom and shift-control photography.

•Type	•Name of Lens	•Minimum Aperture	•Angle of View (Degrees)	•Lens Construction (Groups-Elements)	•Diaphragm	•Minimum Focusing Distance •m.	•ft.	•Maximum Diameter & Minimum Length (ϕmm x mm)	•Weight •gr.	•oz.	•Filter Size (mm)
FISH-EYE	SMC Pentax Fish-Eye 17mm f/4	22	180	7–11	FA	0.2	0.66	64.5 x 34	234	8.19	BI
ULTRA-WIDE-ANGLE	SMC Pentax 15mm f/3.5	22	111	12–13	FA	0.3	1.0	80 x 81.5	550	19.25	BI
	SMC Pentax 18mm f/3.5	22	100	11–12	FA	0.25	0.79	63 x 61.5	328	11.48	BI
	• SMC Pentax-M 20mm f/4	22	94	8–8	FA	0.25	0.9	63 x 29.5	150	5.29	49
	SMC Pentax 24mm f/2.8	22	84	8–9	FA	0.25	0.79	63 x 41.5	195	6.88	52
WIDE-ANGLE	SMC Pentax 28mm f/2	22	75	8–9	FA	0.30	1.0	62.5 x 69	400	14.11	52
	• SMC Pentax-M 28mm f/2.8	22	75	7–7	FA	0.30	1.0	63 x 31	156	5.50	49
	• SMC Pentax-M 28mm f/3.5	22	75	6–6	FA	0.30	1.0	63 x 31.5	180	6.35	49
	SMC Pentax 30mm f/2.8	22	72	7–7	FA	0.30	1.0	63 x 39.5	215	7.52	52
	• SMC Pentax-M 35mm f/2	22	62	7–7	FA	0.30	1.0	63 x 42	206	7.27	49
	• SMC Pentax-M 35mm f/2.8	22	62	6–6	FA	0.30	1.0	63 x 35.5	174	6.14	49
STANDARD	• SMC Pentax-M 40mm f/2.8	22	56	4–5	FA	0.60	2.0	63 x 18	111	3.91	49
	SMC Pentax 50mm f/1.2	22	46	6–7	FA	0.45	1.5	65 x 48.5	391	13.79	52
	• SMC Pentax-M 50mm f/1.4	22	46	6–7	FA	0.45	1.5	63 x 37	238	8.4	49
	• SMC Pentax-M 50mm f/1.7	22	46	5–6	FA	0.45	1.5	63 x 31	185	6.53	49
	• SMC Pentax-M 50mm f/2	22	46	5–5	FA	0.45	1.5	63 x 31	165	6.0	49
TELEPHOTO	• SMC Pentax-M 85mm f/2	22	29	4–5	FA	0.85	2.8	62.5 x 46	250	8.82	49
	• SMC Pentax-M 100mm f/2.8	22	24.5	5–5	FA	1.0	3.3	62.5 x 55.7	224	7.90	49
	• SMC Pentax-M 120mm f/2.8	32	21	5–5	FA	1.2	4	62.5 x 63	275	9.52	49
	SMC Pentax 135mm f/2.5	32	18	6–6	FA	1.5	5	67.5 x 85.9	483	17.04	58
	• SMC Pentax-M 135mm f/3.5	32	18	5–5	FA	1.5	5	62.5 x 65.7	276	9.74	49
	• SMC Pentax-M 150mm f/3.5	32	17	5–5	FA	1.8	6	62.5 x 75	290	10.23	49
	SMC Pentax 200mm f/2.5	32	12	6–6	FA	2.0	6.5	89 x 145	950	33.51	77
	• SMC Pentax-M 200mm f/4	32	12	5–6	FA	2	6.5	63.5x111	400	14.11	52
ULTRA TELEPHOTO	SMC Pentax 300mm f/4	32	8	5–7	FA	4	13	85 x 188	1,020	35.98	77
	• SMC Pentax-M 400mm f/5.6	45	6	5–5	FA	5	17	85 x 276.5	1,220	43.0	77
	SMC Pentax 500mm f/4.5	45	5	4–4	M	10	35	126.5 x 440	3,366	118.72	52
	SMC Pentax 1000mm f/8	45	2.5	5–5	M	30	100	143 x 738	5,294	186.72	52
	SMC Pentax Reflex 1000mm f/11	—	2.5	4–6	ND	8	27	119 x 248	2,300	80.5	BI/52
	SMC Pentax Reflex 2000mm f/13.5	—	1.3	4–6	ND	20	66	180 x 530	8,000	282.2	BI/52
ZOOM	• SMC Pentax-M Zoom 24mm ~ 35mm f/3.5	22	82.5–64.5	9–9	FA	0.5	2	64 x 48	290	10.23	58
	• SMC Pentax-M Zoom 28mm f/3.5 ~ 50mm f/4.5	22	75 – 46	10–10	FA	0.6	2.1	65 x 52	315	11.11	52
	• SMC Pentax-M Zoom 35mm f/2.8 ~ 70mm f/3.5	22	62 – 34.5	7–7	FA	1	3.5	67 x 76	470	16.58	67*
	• SMC Pentax-M Zoom 40mm f/2.8 ~ 80mm f/4	22	57.2–30.9	7–7	FA	1.2	4	65.5 x 76	395	13.93	49
	SMC Pentax Zoom 45mm ~ 125mm f/4	22	50.5–20	11–14	FA	1.5	5	69 x 127	612	21.42	67*
	• SMC Pentax-M Zoom 75mm ~ 150mm f/4	32	32.1–16.5	9–12	FA	1.2	4	63.5 x 111	465	16.40	49
	• SMC Pentax-M Zoom 80mm ~ 200mm f/4.5	32	30–12	12–15	FA	1.6	5.5	65 x141.5	555	19.57	52
	SMC Pentax Zoom 135mm ~ 600mm f/6.7	45	18–4	12–15	M	6	20	105 x 582	4,070	142.5	52
MACRO	• SMC Pentax-M Macro 50mm f/4	32	46	3–4	FA	0.234	0.77	63 x 42.5	167	5.89	49
	• SMC Pentax-M Macro 100mm f/4	32	24.5	3–5	FA	0.45	1.48	64.6 x 77.5	357	12.59	49
	SMC Pentax Bellows 100mm f/4	32	24.5	3–5	FA/M	—	—	60 x 40	186	6.51	52
SHIFT	SMC Pentax Shift 28mm f/3.5	32	75	11–12	M	0.3	1.0	80 x 92.5	611	21.39	BI

BI .... Filters built-in **FA** .... Fully automatic **M** .... Manual **ND** .... ND filters built-in •....Compact lens
Note: Lens length does not include mount portion.

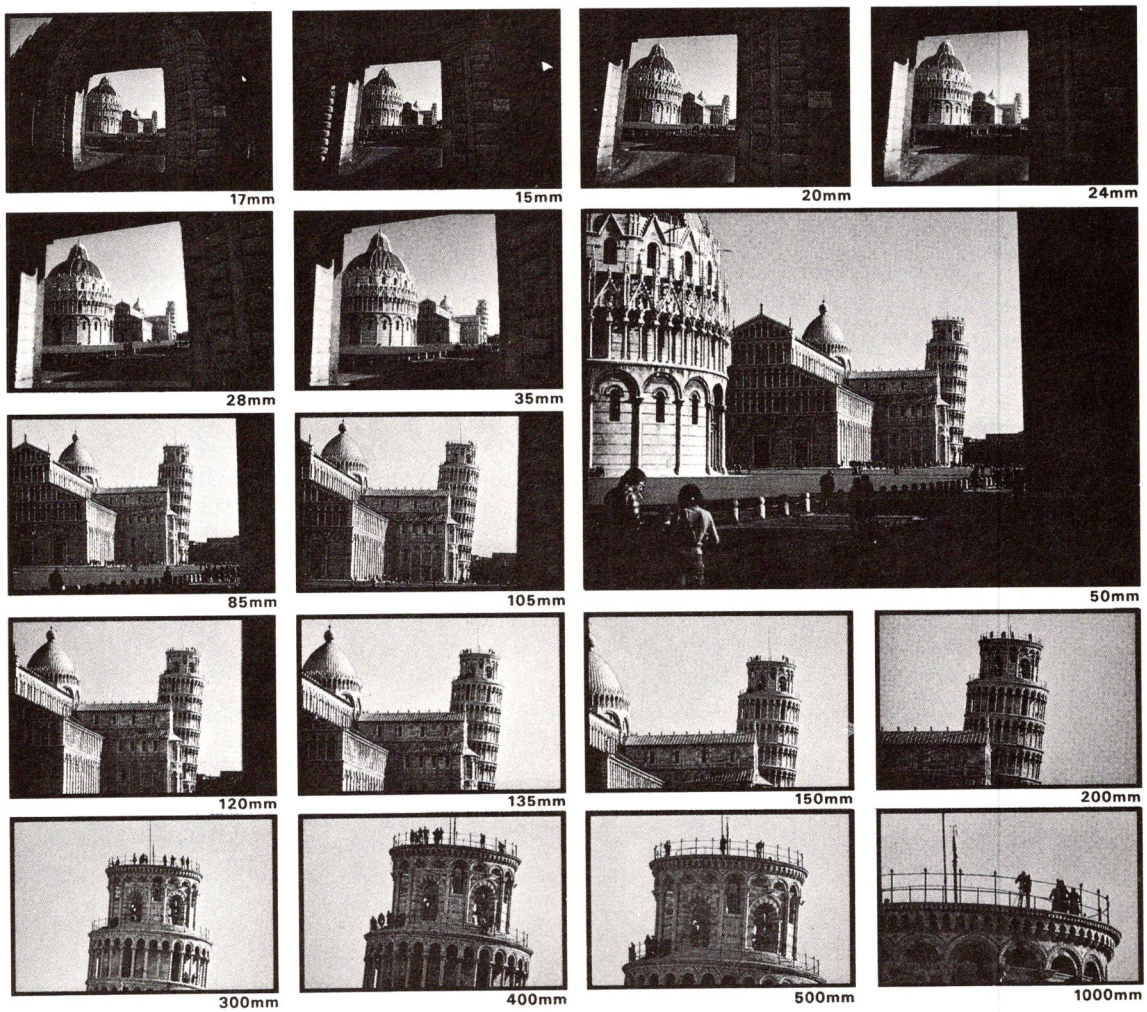
* FILTER SIZE WITH LENS HOOD, 58mm
WITHOUT HOOD

PENTAX

SMC lenses

(Super-Multi-Coated)

Change in Angle of View of SMC Pentax Lenses



PENTAX

SMC Bayonet Lenses
(Super-Multi-Coated)

SMC Pentax-M Lenses

The new high-performance SMC Pentax-M miniaturized lenses are among the smallest, slimmest and lightest interchangeable lenses in the world of 35mm SLR photography. They were made primarily to match the feel and dimensions of the M- series cameras. But they fit all Pentax Bayonet Mount cameras as well. The SMC Pentax-M lenses, despite their diminutive size, are uncompromised optics, unsurpassed by conventional larger lenses. SMC Pentax-M lenses provide impeccable color rendition, crisp contrast and nearly total suppression of flare & ghost images. Exemplifying their total convenience design, most SMC Pentax-M lenses accept the same 49mm diameter filters. These new compact lenses are easily identified throughout these pages as **SMCP-M.**

LENSES SO COMPACT—TWO WILL FIT IN A POCKET! With SMCP-M lenses, carrying two or three accessory lenses with you is a pleasure. Available in all popular lengths, two SMCP-M lenses weigh less than 1 conventional lens.

- **What Focal Length Should I Purchase at First?**

It would be inadvisable for a beginner who is accustomed to using only the standard lens, to suddenly purchase an ultra wide-angle or ultra telephoto lens, for the enormous difference in angle of view would most likely confuse him. The key to success, in any field, is to advance a step at a time.

Those lenses considered to be ultra wide-angle are the 20mm, 18mm and 15mm; we can also include the 17mm Fish-Eye. Lenses representing ultra telephoto are the 500mm, 1000mm and 2000mm focal lengths.

Thus, the beginner will select the 28 or 35mm as his first wide-angle and the 85, 105, 120, or 135mm as his first telephoto lens.

- **What about Lens Speed?**

The maximum aperture of a lens is often referred to as the "speed" of a lens. An f/2 lens, for example, is said to be "faster" than an f/4 lens since faster shutter speeds are usually used at larger lens openings; just how much more or less light enters the lens, when f/2 is compared to other maximum apertures, is indicated in the chart below.

For example, if a picture is taken with an f/2 lens at f/2 (diaphragm completely open), and the same picture is taken with an f/4 lens at f/4, only 1/4 of the amount of light will reach the film with the f/4 lens. Therefore, the shutter speed must be 4X longer to compensate for the loss of light. Of course, if both of the above lenses are used at the same aperture, for example f/8, the amount of light reaching the film will be exactly the same. More about the relationship between aperture and shutter speed is explained in your Pentax camera instruction manual.

Generally speaking, if one desires to take pictures indoors, with the camera handheld and without the use of a flash unit, an f/2 or "faster" (f/1.4, f/1.2) lens will be required. For brightly lit interiors, an f/2.5 or f/2.8 lens should suffice. If the lens is just to be used outdoors, a maximum aperture of f/3.5, f/4, or f/4.5 will be sufficient.

Thus, if you wish to purchase an SMC Pentax 35mm lens, you have a choice of an f/2 or f/2.8. Similarly, if you wish to buy a 135mm lens, you can select from the f/2.5 and f/3.5 lenses.

- **Dimensions and Weight**

Thirty three of the SMC Pentax lenses are so compact and lightweight that they do not require the use of a tripod. For hand-holdable lenses, you can choose from the 17mm Fish Eye to the 300mm telephoto. Also included are eight compact zoom lenses.

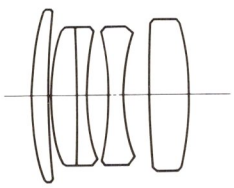
Maximum Aperture	1.2	1.4	2	2.5	2.8	3.5	4	4.5	5.6	8
Amount of light	2.8x	2x	1x	Approx. 2/3x	1/2x	Approx. 1/3x	1/4x	1/5x	1/8x	1/16x

PENTAX

SMC Standard (Normal) Bayonet Lenses

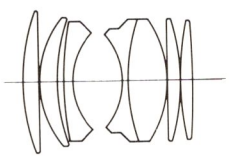
SMC Pentax-M 40mm f/2.8

The incredible standard lens everyone is talking about.



The Smallest 40mm Lens in 35mm SLR Photography. This dramatic example of miniaturization sets a new trend and level of excellence in standard lenses. Ultra-compact, it protrudes less than ¾ inch from the mounting plane and weighs only 3¾ ounces. It covers a 56° angle of view, 10° more than a 50mm lens, and focuses to 2 feet. Lens construction is 5 elements in 4 groups.

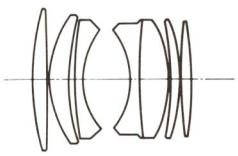
Cat. No.
20167 SMCP-M 40mm f/2.8



SMC Pentax 50mm f/1.2

After years of research, Pentax succeeded in introducing the world's first f/1.2 lens in the 50mm focal length. Moreover it has unsurpassed contrast and resolution for a lens of this aperture. Uses 52mm filter size.

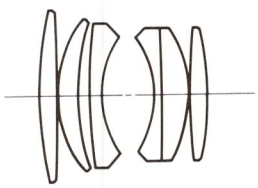
Cat. No.
20947 SMCP 50mm f/1.2



SMC Pentax-M 50mm f/1.4

Measures only 1½ inches from Mounting Plane to Front Rim. This high-speed, high-resolution standard lens weighs less than 8½ ounces. It has 7 elements in 6 groups, focuses down to 18 inches and covers a 46° field of view.

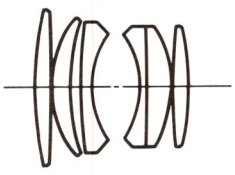
Cat. No.
20867 SMCP-M 50mm f/1.4



SMC Pentax-M 50mm f/1.7

Combines Speed and Small Size. Less than 1¼ inches long and weighing 6½ ounces, this sharp, compact lens is 20% lighter than the SMC Pentax-M 50mm f/1.4. Construction is 6 elements in 5 groups. Closest focusing distance is 18 inches and angle of view is 46°.

Cat. No.
20877 SMCP-M 50mm f/1.7



SMC Pentax-M 50mm f/2

Slightly longer in focal length than the 40mm standard lens, this lens offers more pleasing perspective for portraiture. Additionally, it is "fast" enough for use in dim light without the need of flash.

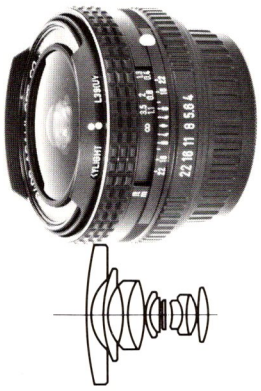
Cat. No.
20677 SMCP-M 50mm f/2

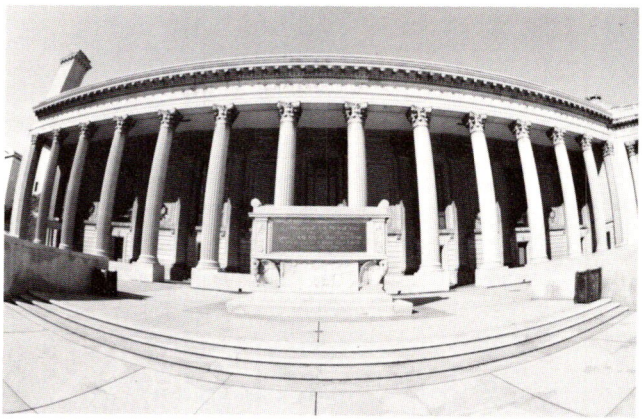
All Super-multi-coated Standard Pentax lenses include a front and rear lens cap.

Rev. 2-82

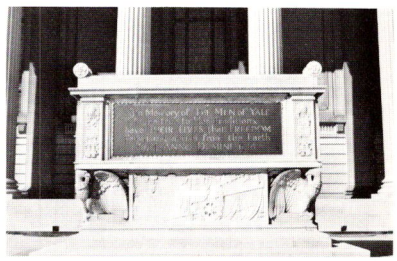
SMC Ultra Wide Angle Bayonet Lenses

Fish-Eye Lens





The amazing 180° angle of view is shown above, taken with the SMC Pentax Fish-Eye 17mm f/4 lens. Photo at right taken from same distance with a standard SMCP-M 50mm f/1.7 lens.



SMC Pentax Fish-Eye 17mm f/4

Attractive features of the SMC Pentax 17mm f/4 Fish-Eye include its extremely compact size and close focusing ability of 20cm. Moreover, it has four built-in filters (UV, Skylight, Y2, O2) which can instantly be dialed into place. Gelatin filters can also be slipped into the built-on gelatin filter holder at the rear of the lens.

Cat. No.
21240 SMCP Fish-Eye 17mm f/4 with Case

SMC Pentax 15mm f/3.5

This is an ultra wide-angle lens with a 111° diagonal field of view and a 100.5° horizontal field of view. An angle of view so large that it will encompass the tallest building or engulf a sweeping landscape. All traces of distortion, even at the edges, have been virtually eliminated because of its unique aspherical design. In addition to a colorless filter, there are four built-in filters; UV, Skylight, Y2, O2.

Cat. No.
22040 SMCP 15mm f/3.5 w/Case

SMC Pentax 18mm f/3.5

This SMC Pentax 18mm f/3.5 rectilinear lens has an angle of view of 100° (Diagonal) lying midway between the 15mm f/3.5 and the 20mm f/4 lenses. There are four built-in filters, cloudy, skylight, Y2, O2, and a provision for gelatin filters at the rear of the lens. (It is significant that this is the first 18mm ultra wide-angle lens of any manufacturer to incorporate built-in filters.) Accepts 58mm lens hood.

Cat. No.
22160 SMCP 18mm f/3.5 w/Case

SMC Pentax-M 20mm f/4

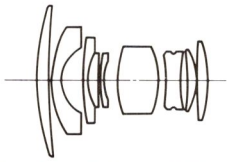
A very compact ultra-wide-angle lens approximately 50% lighter than the standard 20mm f/4 wide-angle lens. Useful for almost every type of wide-angle photography, especially when photographing sweeping landscapes and towering structures, or when desiring extensive depth of field. 49mm screw-in filter diameter.

Cat. No.
22830 SMCP-M 20mm f/4.0 w/Case

All Super-multi-coated Pentax ultra wide angle lenses include a front and rear lens cap and are supplied with a custom hard case with strap.

PENTAX

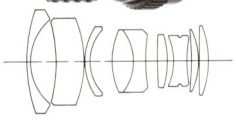
SMC Wide-Angle Bayonet Lenses



SMC Pentax 24mm f/2.8

This 24mm optic offers a maximum aperture of f/2.8, which not only makes available-light photography more accessible to the photographer, but also enables simplified focusing because of the greater depth-of-field and brighter image. Moreover, despite its large maximum aperture, it weighs about the same as the standard SMC Pentax-M 50mm lens.

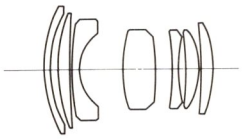
Cat. No.
22680 SMCP 24mm f/2.8 w/ Case



SMC Pentax-M 28mm f/2

You will find the extra coverage of 75° and the high speed of f/2 ideal when working indoors. And needless to add, a lens of this focal length is an absolute must when photographing sweeping landscapes and architecture. Lying exactly midway between 35mm wide-angle and 20mm ultra wide-angle lenses, the 28mm lens offers the best of both worlds. Handling is as easy as a 35mm lens, and yet the exciting perspective associated with ultra wide-angle lenses is also possible. Moreover, the incredibly extensive depth-of-field inherent in a lens of this focal length can be exploited to create uncannily striking effects. Getting to know the SMC Pentax-M 28mm f/2 high speed wide-angle lens is getting to know the thrilling world of creative photography. Uses 49mm filter size.

22980 SMCP-M 28mm f/2.0 w/Case



SMC Pentax-M 28mm f/2.8

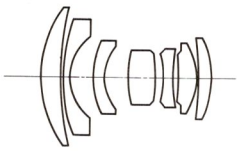
The "Classic" Wide-Angle Lens. Weighs only 5½ ounces and is less than 1¼ inches long. This short-barrel retrofocus lens has a 7-group, 7-element construction, and 75° angle of view. It focuses down to less than 1 foot.

Cat. No.
22967 SMCP-M 28mm f/2.8 w/o Case.

All Super-multi-coated Pentax wide angle lenses include a front and rear lens cap.

PENTAX

SMC Wide Angle Bayonet Lenses



SMC Pentax 30mm f/2.8

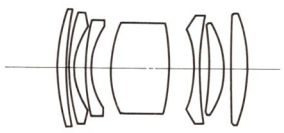
The 30mm f/2.8 SMCP lens bridges the gap between the 28 and 35mm SMCP lenses. Its angle of view is 72°. This new focal length lens rounds out the broad line of wide-angle Pentax lenses. 52mm filter size.

Easy Snap Mark for Easy Snapshots
With its deep depth-of-field, this 30mm wide-angle lens is excellent for taking snapshots, and offers superior convenience in photographing cramped interiors and in shooting moving subjects. Just set it to the easy snap mark and shoot.

What is the Easy-Snap Mark?
As wide-angle lenses generally have very deep depth-of-fields, it is possible to take pictures without adjusting the focus just by stopping down the diaphragm beyond certain limits. For handling ease and convenience, the 30mm f/2.8 has an easy-snap mark set to an aperture of f/8 and a focusing distance of 3.3m.

Cat. No.
22440 SMCP 30mm f/2.8 w/Case

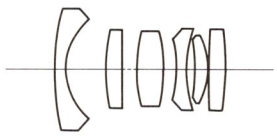
R. Barnaby



SMC Pentax-M 35mm f/2

A Masterpiece of Optical Design. This popular wide-angle focal length lens is 33% shorter, 36% lighter than its famous SMC Pentax counterpart. Construction is 7 elements in 7 groups, and the lens covers a 62° angle of view and focuses down to less than 1 foot.

Cat. No.
22760 SMCP-M 35mm f/2 w/Case



SMC Pentax-M 35mm f/2.8

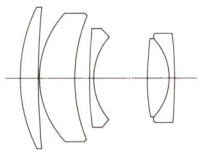
Lighter Weight, Lower Cost. One stop slower than the f/2, this superb 6-group, 6-element lens weighs 1½ ounces less. Field of view and closest focusing distance are the same as those of its faster companion.

Cat. No.
22780 SMCP-M 35mm f/2.8 w/Case

All Super-multi-coated Pentax Wide Angle lenses include a front and rear lens cap.

PENTAX

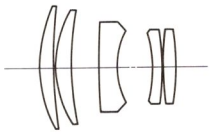
SMC Telephoto Bayonet Lenses



SMC Pentax-M 85mm f/2

Creates a soft-focus effect in the areas just beyond the depth-of-field. Ideal for portraiture, indoors or out. The moderate distance required between the photographer and the subject makes this lens particularly excellent for pictures of children, animals, night time street scenes, illuminated buildings, and for theater and ceremonial pictures.

Cat. No.
23060 SMCP-M 85mm f/2 w/hood and Case

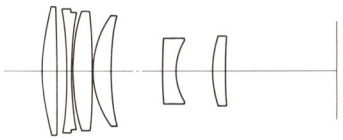


SMC Pentax-M 100mm f/2.8

Shorter than most 85mm Lenses. Less than 2½ inches long, this ideal telephoto lens weighs under 8 ounces. It has a 5-group, 5-element design, covers a 24.5° field and focuses down to 3.3 feet.

Cat. No.
23660 SMCP-M 100mm f/2.8 w/Hood & Case.

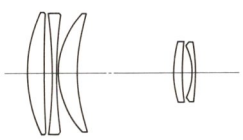
All Super-multi-coated Pentax Telephoto lenses include a front and rear lens cap.



SMC Pentax 135mm f/2.5

With its 2.7X magnification and maximum aperture of f/2.5, this lens is highly suited for available light photography such as sports events and performances where flash photography is prohibited. Moreover, the greater magnification, shallow depth of field, and bright viewing characteristic of this lens join hands to make focusing, even in dimly-lit quarters, a simple task. Uses 58mm filter sizes.

Cat. No.
23840 SMCP 135mm f/2.5 w/Hood & Case



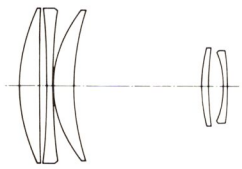
SMC Pentax-M 135mm f/3.5

Well Balanced and Lighweight, Medium Telephoto. Featuring a built-in lens hood, this popular focal length telephoto is only 2½ inches long and weighs less than 10 ounces. It covers an 18° field of view, has a 5-group, 5-element construction and focuses to 5 feet.

Cat. No.
23467 SMCP-M 135mm f/3.5 w/Built-In Hood (w/o Case)

PENTAX

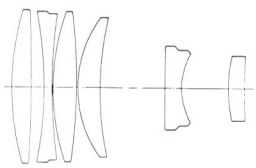
SMC Telephoto Bayonet Lenses



SMC Pentax-M 150mm f/3.5

21mm shorter and 50g lighter than its highly popular predecessor, this new, compact 150mm lens weighs less than the standard SMC Pentax 50mm f/1.2 lens while offering 3x magnification. You will find this handholdable telephoto lens the ideal solution for following action, as well as useful for candid photography, portraiture, and "close-ups" of distant subjects. Moreover, while its size has been reduced, the already outstanding optical performance of the previous model has been further enhanced in the compact SMC Pentax-M 150mm f/3.5 telephoto lens.

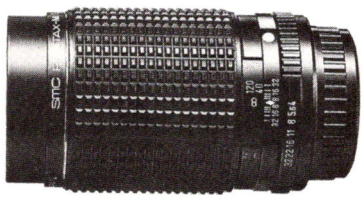
Cat. No.
23760 SMCP-M 150mm f/3.5 w/Built-In Hood & Case

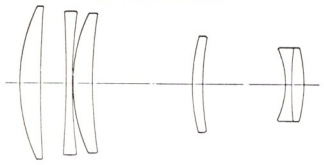


SMC Pentax 200mm f/2.5

In testimony of its role as a leader in the field of optics and ever mindful of the needs of the professional photographer, Pentax has introduced the first 200 lens with an f/2.5 maximum aperture. This ultra high-speed telephoto lens is well suited for available light photography, such as at indoor and nighttime sporting events. Even when used wide-open, its 6 element, 6-group optical design ensures high contrast and definition, as well as attractive out-of-focus highlights.

Cat. No.
24240 SMCP 200mm f/2.5 w/Built-in Hood & Case

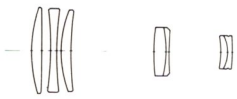




SMC Pentax-M 200mm f/4

A Triumph of Miniaturization. A telephoto lens providing 4X magnification compared to the standard 50mm focal length, it is less than 4½ inches long and weighs just over 14 ounces. Covering a 12° angle of view, it focuses to 6½ feet. Its 6 elements are arranged in 5 groups. Built-In Hood.

Cat. No.
24267 SMCP-M 200mm f/4 w/Built-In Hood (w/o Case)



SMC Pentax 300mm f/4

The SMC Pentax 300mm f/4 makes an excellent introduction to the world of ultra telephoto lenses. Its strong magnification (6X), narrow angle of view, and shallow depth of field combine with the compression effect, readily noticeable in a lens of this focal length, to create powerful images. Focusing and handheld shooting are easily accomplished because of the large maximum aperture of f/4. Uses 77mm filter size.

Cat. No.
24340 SMCP 300mm f/4 w/Built-In Hood & Case

● **ULTRA-TELEPHOTO**

SMC Pentax-M 400mm f/5.6

Smaller and lighter in keeping with the concept of Pentax-M series compact SLR's, this new 400mm provides the telephoto power needed for a wide variety of applications from sports to news and nature photography. With 5 elements in 5 groups this lens weighs 1220 grams (43 ounces) and focuses as close as 5 meters (16.4 feet). It features a built-in hood and uses 77mm filter size.

Cat. No.
24560 SMCP-M 400mm f/5.6 w/Built-in Hood & Case
33452 Lens Case for SMCP-M 400mm f/5.6 (replacement)

SMCP-M* (M-Star) 300mm f/4

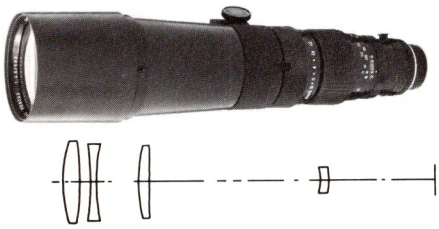
This lens is a compact 300mm f/4, measuring only 131.5mm in length. Handheld tele-photography is easy with this telephoto. The effective use of low dispersion glass ensures crisp definition and excellent color rendition, superior to that of conventional 300mm lenses.

Cat. No.
24360 SMCP-M* 300mm f/4 with Built-in Hood and Case

All Super-multi-coated Pentax Telephoto lenses include a front and rear lens cap.

PENTAX

SMC Ultra-Telephoto Bayonet Lenses



SMC Pentax 500mm f/4.5

An incredibly fast lens (f/4.5) for this focal length, and designed with professional photographers in mind. A large, sturdy tripod is essential. Because the narrow 5° angle of view sometimes makes it difficult to align the lens with the subject, the SMC Pentax 500mm f/4.5 has a built-on sight to simplify the photographer's task. It also has a built-on, rugged tripod collar and lenshood. Comes with case and lenshood. Uses 52mm filter size. (Rear mount).

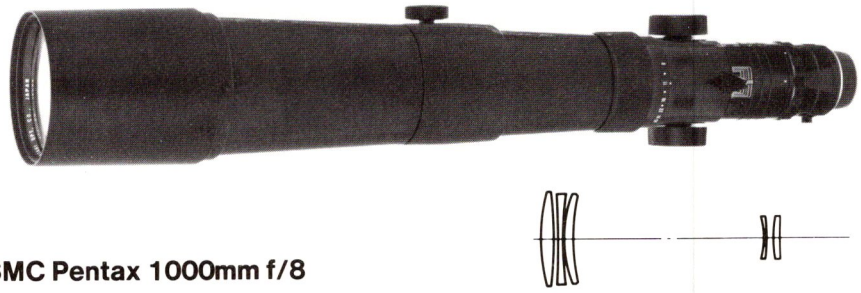
Cat. No.
24740 SMCP 500mm f/4.5 w/Built-In Hood & Case

SMC Pentax Reflex 1000mm f/11

The Reflex 1000mm f/11 is approximately 1/3 that of the SMC Pentax 1000mm f/8 in length, and less than half of it in weight. In addition to its highly welcome portability, this reflex optic focuses down to 8m, equalling the minimum focusing distance of most 400mm lenses while offering 2.5x additional magnification.

Cat. No.
24960 SMCP Reflex 1000mm f/11 w/Built-In Hood & Case

All Super-Multi-coated Pentax Ultra-Telephoto lenses include a front and rear lens cap.



SMC Pentax 1000mm f/8

The 20X magnification of this lens makes it possible to easily recognize someone photographed 200 meters (656 ft.) away from the camera. Focusing is simplified by the wide aperture of f/8 and the rack and pinion focusing system. Sharpness is assured when using the wooden tripod specially designed for this lens by Pentax. It has a built-in efficient lenshood, robust tripod collar, and accurate sight. Supplied with case and lenshood. Uses 52mm filter size (Rear mount).

Cat. No.
24940 SMCP 1000mm f/8 w/ Built-In Hood & Case

Tripod 1000

Specifically designed for the SMCP 1000mm f/8.0 lens, this sturdy, wood and metal construction tripod will ensure vibration-free photography when utilizing this ultra-telephoto lens. Fully adjustable, Tripod 1000 features adjustable height from 36 in. to 53 inches. It is supplied with a sturdy case, and measures 45" in height when collapsed.

Cat. No.
99040 Tripod 1000 for SMCP 1000mm f/8

PENTAX

SMC Macro Bayonet Lenses

Macro Lenses

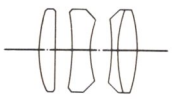
Ordinary lenses are designed to produce optimum sharpness over a range from several meters to infinity. Consequently, there is a drop in resolution when they are used at close distances, such as from 1/10 lifesize to lifesize. Macro lenses, on the other hand, are of special lens construction and optical design to produce optimum sharpness at close distances (usually 1/10—1/5 lifesize). For copy work, macro lenses offer corner-to-corner sharpness, even when used wide open. Furthermore, the optical performance of macro lenses at far distances, including infinity, nearly match that of ordinary lenses. Therefore, the SMC Pentax-M 50mm macro lens can be used in place of the standard lens. Similarly, the SMC Pentax-M 100mm macro lens can be used instead of the standard 100mm telephoto lens, for general purpose photography in addition to macrophotography.

Both the SMC Pentax-M 50 and 100mm macro lenses focus to ½ Lifesize. When combined with the respective 50mm or 100mm Life-Size Auto Extension Tube, it is possible to photograph at a 1:1 (lifesize) reproduction ratio. For maximum convenience these adapters retain full-aperture metering as well as diaphragm automation.

Since macro lenses are often used for copy work, distortion is kept to a minimum (0.1%), so that straight lines appear straight — right to the edges.

As both SMC Pentax-M macro lenses have a lens construction of three groups, there are relatively few reflecting surfaces, and the close proximity of the lens groups also considerably reduces the possibility of internal reflections. The combination of this, coupled with Pentax SMC Super-Multi-Coating makes it almost impossible for photographs to be marred by flare when using the SMC Pentax-M macro lenses.

Due to the fact that both macro lenses have their front elements substantially recessed, there ordinarily is no need to use a lenshood.



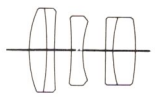
SMC Pentax-M Macro 50mm f/4

Designed for Convenient Close-Ups. Highly corrected for close-up photography, this versatile macro also makes an excellent all-around standard lens. It focuses from infinity to as close as 9-1/4 inches, and when used with a Reverse Adapter can make larger-than-life-size images. Construction is 4 elements in 3 groups, and the angle of view is 46°.

Cat. No.

28160 SMCP-M Macro 50mm f/4 w/Case

30551 Life-Size Auto Extension Tube (B) 50mm f/Case



SMC Pentax-M Macro 100mm f/4

Ideal for Copying and Portraiture. This lens allows twice the working distance of the Macro 50mm for a given image size. The extra distance helps prevent perspective exaggeration with closeups of three-dimensional subjects, and provides greater freedom to arrange lights and reflectors. The optical design of the Macro 100mm lens renders reversing the lens with extension tubes meaningless. Lens construction is 5 elements in 3 groups, closest working distance is less than 1½ feet and the field of view is 24.5°.

Cat. No.

28960 SMCP-M Macro 100mm f/4 w/Hood & Case

30551 Life-Size Auto Extension Tube (B) 50mm w/Case

30556 Life-Size Auto Extension Tube (B) 100mm w/Case

All Super-multi-coated Pentax Macro lenses include a front and rear lens cap and are supplied with a custom hard case with strap.

PENTAX

SMC Zoom Bayonet Lenses

An Introduction to Zoom Lenses

By moving some of the elements toward the optical axis, the focal length of a zoom lens can be changed. Another characteristic of zoom lenses is the fact that the point of focus is maintained throughout the entire zoom range. That is, there is no need to refocus each time the focal length is changed. Additional noteworthy points regarding zoom lenses are indicated below.

- The focal length of zoom lenses is continuously variable. Therefore, in the SMC Pentax 45 ~125mm zoom lens, for example, the focal length can be varied in the following manner, 45, 46,47, 48, 49, 50 ..... 125mm. The characteristic of zoom lenses allows one to frame the subject in the viewfinder of the camera precisely as one wishes. In addition to permitting the photographer to crop right in the viewfinder, zoom lenses offer the option of changing the perspective and the camera-to-subject distance.
- The cost of a zoom lens is less than the cost of all the separate focal length lenses embodied in the zoom lens. As a concrete example, the cost of the SMC Pentax 45~125mm zoom lens is less than the total cost of the following SMC Pentax-M lenses: 50, 85, 100, and 120mm. Of course, the SMC Pentax 45~125mm zoom lens not only contains all of the above focal lengths, but every focal length in between as well.
- The size and weight of a zoom lens is less than that of the total number of separate focal length lenses it incorporates. For example, although the SMC Pentax 45~125mm zoom lens weighs 612 grams, the total weight of the 50mm f/1.4, 85mm, 100mm, and 120mm lenses is nearly the weight of the 45~125mm zoom lens.
- Although most zoom lenses have separate control rings for focusing and zooming, most SMC Pentax zoom lenses have a single control ring so that the photographer is always prepared to instantly adjust focus, or focal length, or both. Independent focusing is incorporated in short focal length zoom lenses to allow for maximum precision. Normal focal length zoom lenses which utilize two separate control rings are especially difficult to handle when photographing moving subjects. With an SMC Pentax zoom lens, however, a mere twist on the large, easy-to-grasp control ring will adjust focus, and a simple push or pull on the same control ring will change the focal length.
- Dividing the shortest focal length of a zoom lens into the longest gives what is called the zoom ratio. The zoom ratio of the 45~125mm is 2.8 (125÷45=2.8). Large zoom ratio lenses are very versatile; however, the larger the zoom ratio, the larger the physical dimensions of the lens. For handheld shooting, a moderate zoom ratio of 2~3X is best.

SMC Pentax-M 24mm ~ 35mm f/3.5

A new generation in wide angle zoom lenses. An ideal choice for the enthusiast whose range of interests covers architectural and landscape photography as well as general wide angle applications, this superb lens provides the focal length versatility, quick handling and optical quality needed to meet the challenge of hard professional use. Utilizes 58mm filter size.

Cat. No.

27040 SMCP-M Zoom 24 ~ 35mm f/3.5 w/Case

33770 Lens Case for SMCP-M Zoom 24~35mm f/3.5 (replacement)

34740 Round 58mm Lens Hood for SMCP-M 24~35mm f/3.5 w/Case

34980 Case for 58mm Lens Hood for 24 ~ 35mm (replacement)

All Super-Multi-Coated Pentax Zoom lenses include a front and rear lens cap.

SMC Pentax-M Zoom 24 ~ 50mm f/4

This lens offers a wide range of photographic possibilities (from ultra-wide-angle 24mm to standard/normal 50mm). With a minimum focusing distance of 0.4 meters, this lens incorporates the ability to focus close to your subject, something not generally found on lenses of this type. This lens is extremely compact, further enhancing its versatility.

Cat. No.

27070 SMC Pentax-M Zoom 24 ~ 50mm f/4 w/case

SMC Pentax-M Zoom 28mm f/3.5~50mm f/4.5

An extremely practical wide-angle zoom lens offering wide angle 28mm coverage to standard focal length 50mm coverage, and all focal lengths in between.

Pentax space-age computerized optics enable this lens to maintain superb image rendition and maximum performance at all focal length settings. Highly compact and lightweight, it can be left on the camera as a standard lens, and is especially convenient in situations where carrying two or three of its counterpart lenses is impractical.

Cat. No.

27060 SMCP-M Zoom 28mm f/3.5 ~50mm f/4.5 w/Case

PENTAX

SMC Zoom Bayonet Lenses

SMC Pentax-M Zoom 35mm f/2.8 ~70mm f/3.5

This exciting new zoom lens covers an extremely practical focal length from 35mm wide angle to 70mm telephoto, as well as all the "standard" focal lengths inbetween. Extremely compact for such a class of lens, and weighing only 470g (16.6oz) it is highly portable and convenient for both wide angle photography, standard framing, and telephoto portraits. Many photographers choose to keep this lens on their camera as a standard lens. With 7 elements in 7 groups, and a 2:1 zoom ratio it features high resolution and contrast over the entire zooming range, while "single action" zooming and focusing allows for maximum operating ease. Uses 58mm filter size. Requires 67mm filter size when using optional lens hood.

Cat. No.
27200 SMCP-M Zoom 35mm f/2.8 ~70mm f/3.5 w/ Case

SMC Pentax-M 40mm f/2.8 ~80mm f/4.0

Zoom versatility plus. . . a close focusing zoom! Combining the convenience of a wide angle to telephoto focal length range with close focusing, this compact zoom features the added plus of an exceptionally fast f/2.8 maximum lens speed to make it an ideal choice for any photographer who demands optical superiority, mechanical reliability, fast handling and photographic versatility. In conventional use it focuses as close as 1.2m (4 feet), and in the Macro position it focuses 0.37m (14½ inches)! Weighing a mere 13.9 ounches (395 grams) this compact lens uses 49mm filter size.

Cat. No.
27867 SMCP-M Zoom 40mm f/2.8 80mm f/4.0 w/o Case
33701 Lens Case for SMCP-M Zoom 40mm f/2.8 80MM F/4.0
34780 Round 49mm Lens Hood for SMCP-M Zoom 40mm 80mm w/Case

SMC Pentax Zoom 45~125mm f/4

A multi-purpose lens capable of doing the work of several lenses: 50 and 55mm standard lenses, as well as 85, 100, and 120mm telephoto lenses (and everything in-between). Zooming ratio is 3:1, and a broad focal length of 45mm to 125mm can be achieved in spite of its relatively short barrel. Useful for a wide scope of photographic assignments: landscapes, action shots, portraiture, travel shots, etc.

Cat. No.
27740 SMCP Zoom 45~125mm f/4 w/Hood & Case

All Super-multi-coated Pentax Zoom lenses include a front and rear lens cap.

SMC Pentax-M Zoom 75 ~150mm f/.4

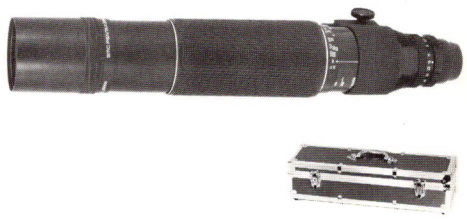
Designed for maximum convenience and responsiveness in the photographer's hands, this zoom has the medium telephoto focal length versatility to meet a wide variety of picture-taking needs from sports action and nature to candids and portraits. Weighing only 465 grams (16.4 ounces) this compact lens focuses as close as 1.2 meters (4 feet) and features a built-in hood. Utilizes 49mm filter size.

Cat. No.
27627 SMCP-M Zoom 75mm ~150mm f/4.0 w/Built-In Hood w/o Case
33710 Lens Case for SMCP-M Zoom 75 ~150mm f/4.0

SMC Pentax-M Zoom 80 ~ 200mm f/4.5

For today's age of compact cameras and lenses. Weighing only 555 grams (19.6 oz) and a mere 141.5mm long, the 80mm~200mm zoom is a highly mobile variable focal length lens. It is easily hand-held and ideal for sports as well as the quick-action demands of wildlife and on-the-spot news photography. It is also an excellent lens for candid portraits. The ideal zoom for photographers on the go.

Cat. No.
27447 SMCP-M Zoom 80~200mm f/4.5 w/Built-In Hood (w/o Case)



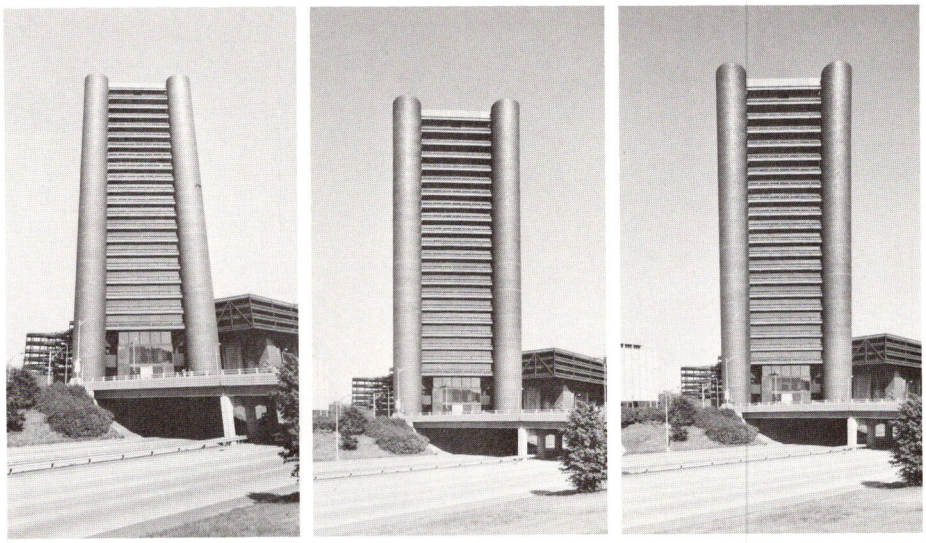
SMC Pentax Zoom 135mm-600mm f/6.7

With a maximum aperture of f/6.7, it is an extremely fast lens considering the fact that it has a zoom ration of 4.4X and an ultra telephoto length of 600mm. Because of the complicated lens construction of 15 elements in 12 groups, there would be more than a 30% drop in transmittance were it not for SMC Super-Multi-Coating.
An attachment lens is supplied to bring the minimum focusing distance down to 3.35 meters. This lens has a robust tripod collar, provision to freely rotate the camera 360°, and accepts 52mm screw-in filters mounted in the rear, as do the SMC Pentax 500 and 1000mm lenses. The lens should be used on a professional-type, sturdy tripod such as the Pentax Tripod 1000. Supplied with lenshood and professional, sturdy aluminum case. Accepts 52mm filters on rear mount.

Cat. No.
27640 SMCP Zoom 135~600mm f/6.7 w/Built-In Hood & Metal Case

PENTAX

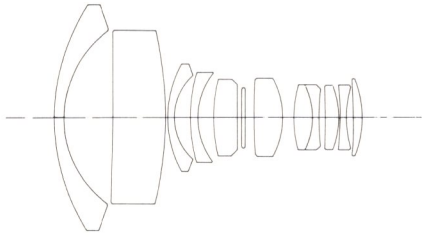
Shift Lens



Converging lines in left photo when taken with a conventional 28mm lens. Center photograph taken with SMC Pentax 28mm f/3.5 Shift lens corrects the convergence. Right photo taken with 28mm shift lens by over-correcting causing converging lines at bottom of photograph.

SMC Pentax Shift 28mm f/3.5

A problem constantly plaguing photographers, especially in architectural photography, is that of converging lines. This problem particularly asserts itself when working with wide-angle lenses — the very lenses required for the photographing of interiors and imposing structures. The SMC Pentax Shift Lens is the intelligent solution to the above dilemma. More than merely a solution, it serves as a creative tool.



For maximum flexibility, Pentax offers a shift lens with the extra 75° coverage of a 28mm lens — the number of such lenses available today can be counted on the fingers of one hand. Not only extra coverage, but extra light transmission as well, thanks to a large maximum aperture of f/3.5 and new, improved Super-Multi-Coating. Small apertures have not been neglected either; a minimum aperture of f/32 provides extended depth of field control.

And, of course,there are sufficient movements to cover virtually any requirement — a maximum shift of 11mm and 360° rotation of the lens with 12 click-stops at 30° intervals. For utmost handling ease, a large, easy-to-rotate collar is used for shifting, instead of the small and cumbersome geared knobs photographers have had to contend with until now.

Furthermore, in addition to a built-on lens hood, there are three built-in filters; Y-48 (Y-2), O-56 (O-2), Skylight. There is also a gelatin filter holder built onto the rear of the lens. Supplied with lens case, front and rear lens caps.

Cat. No.
22561 SMCP Shift 28mm f/3.5 w/Case

All Super-multi-coated Pentax Shift lenses include a front and rear lens cap and are supplied with a custom hard case with strap.

PENTAX

Bellows Bayonet Lenses

SMCP Bellows 100mm f/4

Minimum Aperture: 32
Lens Construction: 3 groups 5 elements
Angle of View: 24.5º
Diaphragm: Fully Automatic/Manual
Minimum Focusing Distance: —
Filter Size: 52mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 60mm x 40mm (2.4'' x 1.6'')
Weight: 185g (6.5 oz)
Catalog No.: 28240 SMCP Bellows 100mm f/4 w/hood & case

SMC Pentax Bellows 100mm f/4

The ideal macro lens
You will find the 100mm focal length ideal for macrophotography. There is no fear of casting a shadow on the subject or frightening insects away because of the close proximity of the lens. Moreover, the increased distance between the camera and subject simplify the setting up of lights. You will also enjoy the pleasing perspective obtained from a 100mm lens. Finally, to ensure that you have ample depth of field in your close-ups, the SMC Pentax Bellows lens is provided with a minimum aperture of f/32. Uses 52mm filters.

Instant adjustments possible
As the SMC Pentax Bellows lens is focused, the bellows-extension is automatically indicated on the Pentax bellows scale. It is therefore possible, by referring to the table shown below, to instantly set the bellows and lens to the proper position to fill the frame with the subject, such as a stamp. The subject-to-film distance and exposure factor for the same subject are also indicated. The bellows and lens can also be preset for any magnification desired.

A bellows unit such as this Pentax Auto Bellows (A) shown above is required to focus this SMC Pentax Bellows Lens.

Magnification	Bellows Extension	Area Covered	Subject-to-film Distance	Exposure Factor
0.02	40mm	1797.1x1198.1mm	518.7cm	x1.0
0.12	50	299.5x 199.7	104.4	x1.3
0.22	60	163.4x 108.9	67.6	x1.6
0.32	70	112.3x 74.9	54.5	x1.9
0.42	80	85.6x 57.1	48.1	x2.2
0.52	90	69.1x 46.1	44.5	x2.6
0.62	100	58.0x 38.6	42.4	x2.9
0.72	110	49.9x 33.3	41.2	x3.4
0.82	120	43.8x 29.2	40.5	x3.8
0.92	130	39.1x 26.0	40.2	x4.3
1.02	140	35.2x 23.5	40.1	x4.8
1.12	150	32.1x 21.4	40.2	x5.3
1.22	160	29.5x 19.6	40.5	x5.8
1.32	170	27.2x 18.2	40.9	x6.4
1.42	180	25.3x 16.9	41.4	x7.0
1.52	190	23.6x 15.8	41.9	x7.6
1.62	200	22.2x 14.8	42.5	x8.3

PENTAX

SMC-A Rear Converters

SMC-A Rear Converter 1.4XL

Lens Construction: 5 groups 5 elements
Diameter & Length: 65.5mm x 28.5mm (2.6" x 1.1")
Weight: 175g (6.2 oz)
Case: HB-90
Usable Lenses: See Chart
Catalog No.: 30928 SMC-A Rear Converter 1.4XL

SMC-A Rear Converter 2.0 XL

Lens Construction: 5 groups 6 elements
Diameter & Length: 65.5mm x 63mm (2.6" x 2.5")
Weight: 255g (9 oz)
Case: HB-120
Usable Lenses: See Chart
Catalog No.: 30936 SMC-A Rear Converter 2.0XL w/case

SMC-A Rear Converter 1.4XS

Lens Construction: 4 groups 5 elements
Diameter & Length: 64.5 mm x 21.5mm (2.5" x 0.8")
Weight: 145g (5.1 oz)
Case: HB-90
Usable Lenses: See Chart
Catalog No.: 30926 SMC-A Rear Converter 1.4XS w/case

SMC-A Rear Converter 2.0XS

Lens Construction: 6 groups 7 elements
Diameter & Length: 64.5mm x 39mm (2.5" x 1.5")
Weight: 210g (7.4 oz)
Case: HB-90
Usable Lenses: See Chart
Catalog No.: 30934 SMC-A Rear Converter 2.0XS w/case

Usable Lenses with Rear Converter-A

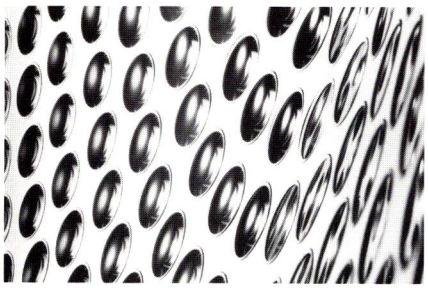
	1.4x-S	2x-S	1.4x-L	2x-L
A-15/3.5	X	X	X	X
A-16/2.8 FE	O	O	X	X
A-20/2.8	O	O	X	X
A-24/2.8	O	O	X	X
A-28/2	O	O	X	X
A-28/2.8	O	O	X	X
F-28/2.8	O	O	X	X
A-35/2	O	O	X	X
A-35/2.8	O	O	X	X
A-50/1.2	O	O	X	X
A-50/1.4	O	O	X	X
F-50/1.4	O	O	X	X
A-50/1.7	O	O	X	X
F-50/1.7	O	O	X	X
A-50/2	O	O	X	X
A*-85/1.4	O	O	X	X
A-100/2.8	O	O	X	X
A*-135/1.8	O	O	X	X
A-135/2.8	O	O	X	X
F-135/2.8	O	O	X	X
A*-200/2.8	O	O	X	X
A-200/4	O	O	X	X
A*-300/2.8	O	O	O*	O*
A*-300/4	O	O	X	X
F*-300/4.5	O	O	X	X
A*-400/2.8	X	O	O*	O*
A-400/5.6	X	O	X	O
A-500/4.5	X	O	O	O
F*-600/4	X	O	O*	O*
A*600/5.6	X	O	O*	O*
-1000/8	X	O	O	O
-1000/11	X	O	X	X
A*-1200/8	X	X	O	O
-2000/13.5	X	O	X	X
A-24-50/4	O	O	X	X
F-24-50/4	O	O	X	X
A-28-80/3.5-4.5	O	O	X	X
F-28-80/3.5-4.5	O	O	X	X
A-28-135/4	O	O	X	X
A-35-70/4	O	O	X	X
A-35-70/3.5-4.5	O	O	X	X
F-35-70/3.5-4.5	O	O	X	X
A-35-105/3.5	O	O	X	X
F-35-105/4-5.6	O	O	X	X
A-35-135/3.5-4.5	O	O	X	X
F-35-135/3.5-4.5	O	O	X	X
A-35-210/3.5-4.5	O	O	X	X
A-70-210/4	O	O	X	X
F-70-210/4-5.6	O	O	X	X
F-135-600/6.7	X	O	X	O
F*-250-600/5.6	X	X	O	O
-400-600/8-12	X	O	O	X
A-Macro 50/2.8	O	O	X	X
F-Macro 50/2.8	O	O	X	X
A-Macro 100/2.8	O	O	X	X
F-Macro 100/2.8	O	O	X	X
A-Macro 100/4	O	O	X	X
A-Macro 200/4	X	O	O	O
A-Shift 28/3.5	O	O	X	X
A-Soft 85/2.2	O	O	O	O
A-Bellows 100/4	O	O	X	X

0* - Better performance can be achieved
0 - Usable
X - Not usable

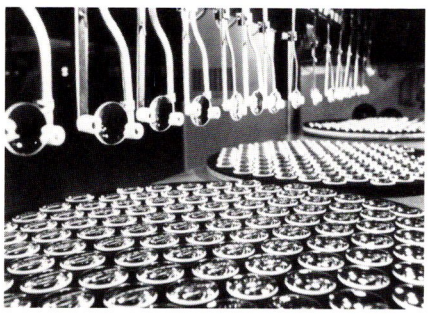
PENTAX

SMC Lenses (Super-Multi-Coated)

improved to do an even better job of taming flare and glare



Lenses undergoing Super-Multi-Coating process.

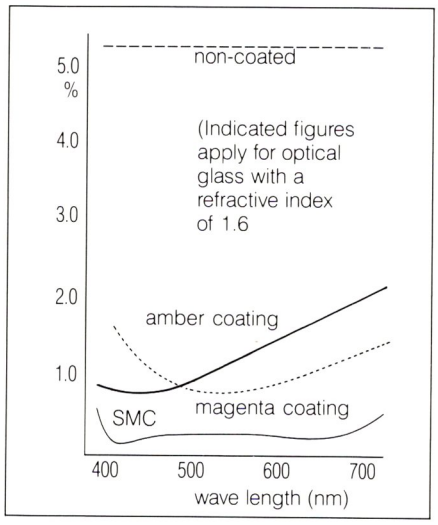


A Guide to Super-Multi-Coating

SMC stands for Super Multi-Coated, Pentax's unique technological breakthrough in lens coating which first appeared on all Takumar lenses in June of 1972.

Since that time, multi-coating has appeared on many lenses of both camera manufacturers and independent lens makers, but with varying degrees of quality. SMC Pentax lenses offer optimum quality, for they are produced by the originator and world's most experienced manufacturer of multi-coated optics.

On the average, between four and eight percent of the light rays perpendicularly passing through a glass surface are lost due to surface reflections. With conventional lens coating, it is possible to reduce the amount of light lost in transmittance to one or two percent.



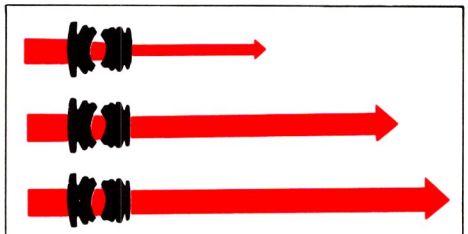
Reduction of transmitted light

However, because of the complex optical designs of photographic lenses, there is still a 10-20% loss of transmitted light in conventionally coated lenses. Moreover, in addition to the loss of light, conventionally coated lenses suffer from flare and ghost images, the result of which is loss of contrast and sharpness as well as the appearance of distracting bright spots in the shape of the diaphragm blades.

Pentax's extremely effective seven-layer Super Multi-Coating reduces loss of light transmittance to a mere 0.2-0.3%, and whether used on optical glass of a low or high refractive indices, its effectiveness remains consistent.

By reducing the amount of surface reflection, light transmission is increased. Therefore, the amount of light transmitted through an SMC Pentax lens is greater than that of a conventionally coated lens of the same aperture.

There is a dramatic decrease in flare and ghost images which is especially noticeable in backlit photographs. Photographs taken with front lighting also benefit by increased contrast and superior color rendition.



The gain in light transmission, and thus in effective lens speed, is considerable. With a complex 12-element lens, for example, transmission may increase as much as 50% over that of a similar but conventionally coated lens.

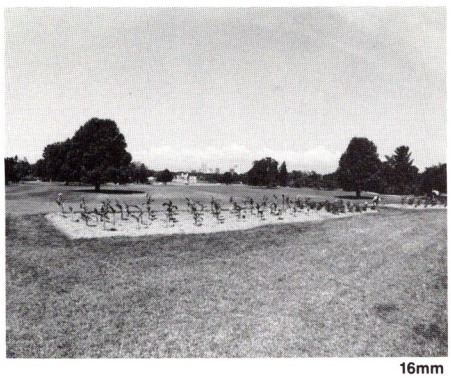
Now, Super Multi-Coating has been expanded. First, the full range of 7 layers has been applied to most glass surfaces within the lens. (Previously, some surfaces had been merely single-coated.) And second, SMC has been applied even to those glass surfaces which are thereafter cemented together. (Previously, these had not been coated at all.)

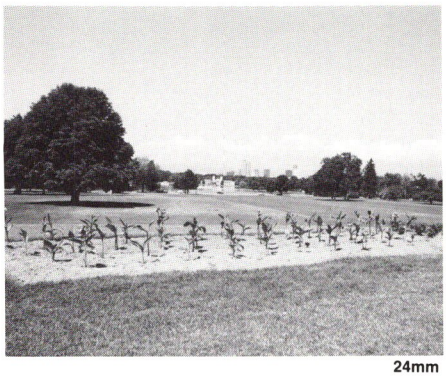
Thus, with the new SMC Pentax lenses, even slight reflections are minimized. Pictures are sharper; color rendition is excellent; more detail is retained; and the reproduction of black tones — often a problem — is strikingly successful.

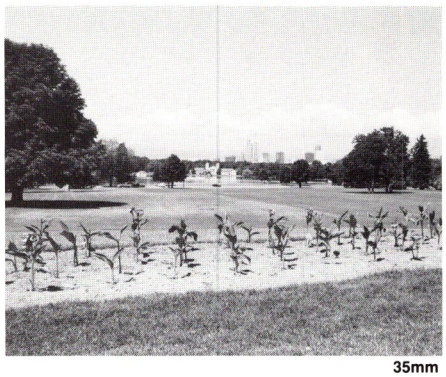
PENTAX

SMC Lenses
(Super-Multi-Coated)

Change in Angle of View of SMC Pentax Lenses


16mm

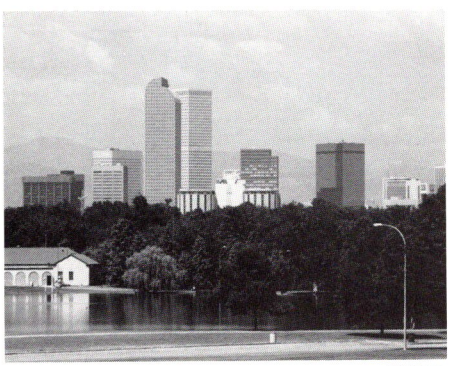

24mm

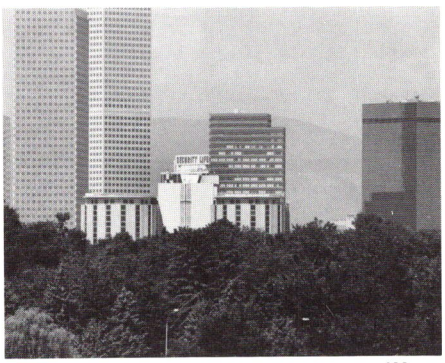

35mm

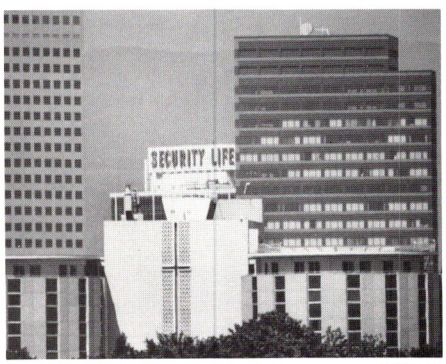
50mm

85mm

135mm


200mm


400mm



1000mm

PENTAX

Discontinued A-Series Lenses

Type	Name of Lens	Minimum Aperture	Angle of View (Degrees)	Lens Construction (Groups-Elements)	Minimum Focusing Distance		Maximum Diameter & Minimum Length (mm/inches)	Weight		Filter Size (mm)
					m.	ft.		gr.	oz.	
STANDARD	SMC Pentax-A 50mm f/1.7	22	47	5-6	0.45	1.5	63 x 31 / 2.5 x 1.2	165	5.8	49
	SMC Pentax-A 50mm f/1.4	22	47	6-7	0.45	1.5	63 x 37 / 2.5 x 1.5	235	8.3	49
WIDE-ANGLE	SMC Pentax-A 24mm f/2.8	22	84	8-9	0.25	0.8	63 x 41.5 / 2.5 x 1.6	205	7.2	52
	SMC Pentax-A 28mm f/2.8	22	75	7-7	0.3	1.0	63 x 36.5 / 2.5 x 1.4	170	6	49
	SMC Pentax-A 35mm f/2	22	63	7-7	0.3	1.0	63 x 41.5 / 2.5 x 1.6	205	7.2	49
	SMC Pentax-A 35mm f/2.8	22	63	6-6	0.3	1.0	63 x 36.5 / 2.5 x 1.4	170	6	49
TELEPHOTO	SMC Pentax-A 100mm f/2.8	22	24.5	5-5	1	3.3	63 x 56 / 2.5 x 2.2	260	9.1	49
	SMC Pentax-A 135mm f/2.8	32	18	4-4	1.2	3.9	65 x 76.5 / 2.6 x 3.0	340	11.9	52
	SMC Pentax-A 200mm f/4	32	12.5	6-6	1.9	6.2	63.5 x 111 / 2.5 x 4.4	410	14.5	52
	SMC Pentax-A* 300mm f/4	32	8.3	7-8	4	13.1	84.5 x 132 / 3.3 x 5.2	850	29.9	77
	SMC Pentax-A* 600mm f/5.6 ED(IF)	45	4.1	6-8	5.5	18	133 x 386 / 5.2 x 15.2	3,280	115.7	49R
MACRO	SMC Pentax-A Macro 50mm f/2.8	22	47	4-6	0.24	0.8	63 x 50 / 2.5 x 2	220	7.8	49
	SMC Pentax-A Macro 100mm f/2.8	22	24.5	7-7	0.31	1.0	74 x 93 / 2.9 x 3.7	505	17.8	49
	SMC Pentax-A Macro 100mm f/4	32	24.5	3-5	0.45	1.5	64.5 x 78 / 2.5 x 3.0	340	12	49
ZOOM	SMC Pentax-A 24-50mm f/4	22	84-47	10-11	0.4	1.3	64 x 67.5 / 2.5 x 2.7	375	13.2	58
	SMC Pentax-A 28-80mm f/3.5-4.5	22	75-30.5	9-12	0.4	1.3	63 x 75 / 2.5 x 3.0	355	12.5	58
	SMC Pentax-A 28-135mm f/4	22	75-18	15-17	1.7	5.6	80 x 112 / 3.1 x 4.4	820	28.9	77
	SMC Pentax-A 35-70mm f/4	22	63-34.5	7-7	0.25	0.8	65 x 62 / 2.6 x 2.4	330	11.6	58
	SMC Pentax-A 35-70mm f/3.5-4.5	22	63-34.5	8-8	0.7	2.3	66 x 55 / 2.6 x 2.2	265	9.3	49
	SMC Pentax-A 35-105mm f/3.5	22	63-23.5	13-15	1.5	4.9	70 x 97.5 / 2.8 x 3.8	615	21.7	67
	SMC Pentax-A 35-135mm f/3.5-4.5	22	63-18	12-16	1.6	5.2	63 x 91.5 / 2.5 x 3.6	450	15.9	58
	SMC Pentax-A 35-210mm f/3.5-4.5	22	63-11.8	14-17	1.6	5.2	70.4 x 125.7 / 2.8 x 4.9	775	27.3	67
	SMC Pentax-A 70-210mm f/3.5-4.5	32	34.5-12	10-13	1.2	3.9	72 x 149 / 2.8 x 5.9	680	24	58

PENTAX

Discontinued M-Series Bayonet Mount Lenses

Type	Name of Lens	Minimum Aperture	Angle of View (Degrees)	Lens Construction (Groups-Elements)	Diaphragm	Minimum Focusing Distance		Maximum Diameter & Minimum Length (mm x mm)	Weight		Filter Size (mm)
						m.	ft.		gr.	oz.	
FISH-EYE	SMC Pentax Fish Eye 17mm f/4	22	180	7-11	FA	0.2	0.66	64.5 x 34	234	8.19	BI
ULTRA-WIDE-ANGLE	SMC Pentax 15mm f/3.5	22	111	12-13	FA	0.3	1.0	80 x 81.5	550	19.25	BI
	SMC Pentax 18mm f/3.5	22	100	11-12	FA	0.25	0.79	63 x 61.5	328	11.48	BI
	•SMC Pentax-M 20mm f/4	22	94	8-8	FA	0.25	0.9	63 x 29.5	150	5.29	49
	SMC Pentax 24mm f/2.8	22	84	8-9	FA	0.25	0.79	63 x 41.5	195	6.88	52
WIDE-ANGLE	•SMC Pentax-M 28mm f/2	22	75	7-8	FA	0.30	1.0	63 x 41.5	215	7.58	49
	•SMC Pentax-M 28mm f/2.8	22	75	7-7	FA	0.30	1.0	63 x 31	156	5.50	49
	SMC Pentax 30mm f/2.8	22	72	7-7	FA	0.30	1.0	63 x 39.5	215	7.52	52
	•SMC Pentax-M 35mm f/2	22	62	7-7	FA	0.30	1.0	63 x 42	206	7.27	49
	•SMC Pentax-M 35mm f/2.8	22	62	6-6	FA	0.30	1.0	63 x 35.5	174	6.14	49
STANDARD	•SMC Pentax-M 40mm f/2.8	22	56	4-5	FA	0.60	2.0	63 x 18	111	3.91	49
	SMC Pentax 50mm f/1.2	22	46	6-7	FA	0.45	1.5	65 x 48.5	391	13.79	52
	•SMC Pentax-M 50mm f/1.4	22	46	6-7	FA	0.45	1.5	63 x 37	238	8.4	49
	•SMC Pentax-M 50mm f/1.7	22	46	5-6	FA	0.45	1.5	63 x 31	185	6.53	49
TELEPHOTO	•SMC Pentax-M 85mm f/2	22	29	4-5	FA	0.85	2.8	62.5 x 46	250	8.82	49
	•SMC Pentax-M 100mm f/2.8	22	24.5	5-5	FA	1.0	3.3	62.5 x 55.7	224	7.90	49
	•SMC Pentax-M 120mm f/2.8	32	21	5-5	FA	1.2	4	62.5 x 63	275	9.52	49
	SMC Pentax 135mm f/2.5	32	18	6-6	FA	1.5	5	67.5 x 85.9	483	17.04	58
	•SMC Pentax-M 135mm f/3.5	32	18	5-5	FA	1.5	5	62.5 x 65.7	276	9.74	49
	•SMC Pentax-M 150mm f/3.5	32	17	5-5	FA	1.8	6	62.5 x 75	290	10.23	49
	SMC Pentax 200mm f/2.5	32	12	6-6	FA	2.0	6.5	89 x 145	950	33.51	77
	•SMC Pentax-M 200mm f/4	32	12	5-6	FA	2	6.5	63.5 x 111	400	14.11	52
ULTRA TELEPHOTO	•SMC Pentax-M★ 300mm f/4	32	8.3	7-8	FA	4	13	84 x 132	825	29.1	77
	SMC Pentx 300mm f/4	32	8	5-7	FA	4	13	85 x 188	1,020	35.98	77
	•SMC Pentax-M 400mm f/5.6	45	6	5-5	FA	5	17	85 x 276.5	1,220	43.0	77
ZOOM	•SMC Pentax-M Zoom 24mm-35mm f/3.5	22	82.5-64.5	9-9	FA	0.5	2	64 x 48	290	10.23	58
	•SMC Pentax-M Zoom 28mm f/3.5-50mm f/4.5	22	75-46	10-10	FA	0.6	2.1	65 x 52	315	11.11	52
	•SMC Pentax AF Zoom 35mm-70mm f/2.8	22	63-34.5	7-7	FA	1.2	4	73 x 76.5	580	20.46	67
	•SMC Pentax-M Zoom 35mm f/2.8-70mm f/3.5	22	62-34.5	7-7	FA	1	3.5	67 x 76	470	16.58	67*
	•SMC Pentax-M Zoom 40mm f/2.8-80mm f/4	22	57.2-30.9	7-7	FA	1.2	4	65.5 x 76	395	13.93	49
	SMC Pentax Zoom 45mm-125mm f/4	22	50.5-20	11-14	FA	1.5	5	69 x 127	612	21.42	67*
	•SMC Pentax-M Zoom 75mm-150mm f/4	32	32.1-16.5	9-12	FA	1.2	4	63.5 x 111	465	16.40	49
	•SMC Pentax-M Zoom 80mm-200mm f/4.5	32	30-12	12-15	FA	1.6	5.5	65 x 141.5	555	19.57	52
MACRO	•SMC Pentax-M Macro 50mm f/4	32	46	3-4	FA	0.234	0.77	63 x 42.5	167	5.89	49
	•SMC Pentax-M Macro 100mm f/4	32	24.5	3-5	FA	0.45	1.48	64.6 x 77.5	357	12.59	49

BI—Filters built-in FA—Fully Automatic M—Manual ND—ND Filters built-in •—Compact lens
Note: Lens length does not include mount portion.

*FILTER SIZE WITH LENS HOOD, 58mm
WITHOUT HOOD

SMC Takumar Lenses

Pentax Screw-Mount Lens Specifications

Cat. No.	Lens	Diaphragm	Lens Elements	Lens Type	Min. Aperture	Minimum Focal Dist.		Angle of View	Weight		Filter Diameter for Threaded Filters	Lens-hood Size (In mm)	Length		Diameter	
						Feet	Meters		Ozs.	Gm.			In.	mm	In.	mm
22550	28mm SMCT f/3.5	Fully-Auto.	7	Wide Angle Retrofocus	f/16	1.3	0.40	75°	7.5	212	49	51 S.O.*	1.6	41.5	2.3	57.1
22351	35mm SMCT f/3.5	Fully-Auto.	5	Wide Angle Retrofocus	f/16	1.5	0.45	63°	5.3	149	49	49 T	1.3	34	2.2	56.5
28151	50mm SMCT Macro f/4	Fully-Auto.	4	Macro	f/22	0.77	0.23	46°	8.5	242	49	Not Required	2.1	54.5	2.4	61
23450	135mm SMCT f/3.5	Fully-Auto.	4	Tele-photo	f/22	5	1.5	18°	11.7	331	49	49 T*	3.5	87.5	2.3	59.5
24050	200mm SMCT f/4	Fully-Auto.	5	Tele-photo	f/22	8.2	2.5	12°	19.7	561	58	58 T*	5.4	136	2.5	64.5

*Lenshood Supplied w/Lens — T-Threaded — S.O.-Slip-on

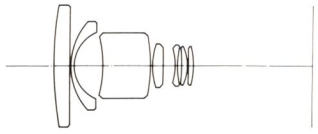
PENTAX

Specifications of Discontinued Pentax Screw Mount Lenses

Lens	Dia-phragm	Lens Ele-ments	Min. Aper-ture	Minimum Focal Distance		Angle of View	Weight		Filter Diamter for Threaded Filters	Lens-hood Size (mm)	Length (Minimum)		Diameter (Maximum)	
				Feet	Meters		Ozs.	Gr.			In.	mm	In.	mm
15mm SMCT f/3.5	FA	13	f/22	1	0.30	110°	20	570	Sky, UV Y2, O2 built-in	—	3.26	81.5	3.2	80
17mm SMCT f/4.0	FA	11	f/22	0.66	0.20	180°	7.98	228	UV, Y2 O2 built-in	—	1.25	31.7	2.6	66.2
20mm SMCT f/4.5	FA	11	f/16	0.65	0.20	94°	8.79	251	77	* 58 T	1.75	44.8	2.3	60
24mm SMCT f/3.5	FA	9	f/16	0.8	0.25	84°	8.71	247	58	* 60 SO	1.8	46.5	2.4	62
28mm Super Takumar f/3.5	FA	7	f/16	1.3	0.40	75°	9.17	260	58	60 SO	1.85	47	2.4	61
35mm Super Takumar f/2.0	FA	8	f/16	1.5	0.45	63°	14	398	70 SO	70 SO	2.60	66	2.8	70
35mm Super Takumar f/3.5	FA	5	f/16	1.5	0.45	63°	5.4	152	49	49 T	1.70	43	2.2	56.5
45mm–125mm SMCT Zoom f/4.0	FA	14	f/22	6	2	50.5° 20°	21.2	605	67	* 58 T	5.1	127	2.7	68.4
50mm SMCT f/1.4	FA	7	f/16	1.5	0.45	46°	8.1	231	49	49 T	1.5	38.5	2.4	60.5
50mm Super Takumar f/1.4	FA	7	f/16	1.5	0.45	46°	8.6	245	49	49 T	1.5	38.5	2.3	59.5
55mm SMCT f/1.8	FA	6	f/16	1.5	0.45	43°	7.1	202	49	49 T	1.5	38	2.3	57.7
55mm Super Takumar f/1.8	FA	6	f/16	1.5	0.45	43°	7.6	215	49	49 T	1.4	36	2.2	57
55mm SMCT f/2.0	FA	6	f/16	1.5	0.45	43°	7.1	202	49	49 T	1.5	38.2	2.3	59
70mm–150mm Super Takumar Zoom f/4.5	FA	14	f/22	11.5	3.5	35° 16°	42.6	1,209	67	* 67 T	8.8	224	2.9	74.5
85mm–210mm SMCT Zoom f/4.5	FA	11	f/22	12	3.5	29° 11°	24.9	705	58	* 58 T	8.7	217.5	2.7	66.5
85mm SMCT f/1.8	FA	6	f/16	2.75	0.85	29°	11.9	341	58	58 T	2.3	57	2.6	66
85mm Super Takumar f/1.9	FA	5	f/16	2.75	0.85	29°	10.8	305	58	58 T	2.3	58	2.6	67
85mm Ultra Achromatic Takumar f/4.5	FA	5	f/22	2	0.6	29°	8.7	248	49	49 T	2.4	60.3	2.3	58.5
100mm SMCT Bellows f/4.0	Pre-set	5	f/22	—	—	24°	5.0	142	49	* 49 T	1.4	36.6	2.2	55.5
105mm Super Takumar f/2.8	FA	5	f/22	4	1.2	23°	10.2	290	49	* 49 T	2.5	64	2.3	58
120mm SMCT f/2.8	FA	5	f/22	4	1.2	20°	11.9	340	49	* 49 T	2.9	73	2.3	57.6
135mm–600 SMCT Zoom f/6.7	Man.	15	f/45	20	6	18° 4°	141.7	4,050	49 (Rear)	BI	23	585	4.1	105
135mm SMCT f/2.5	FA	5	f/22	5	1.5	18°	16.6	470	58	* 58 T	3.2	85.9	2.7	67.5
135mm Super Takumar f/2.5	FA	5	f/22	5	1.5	18°	15.8	448	58	* 58 T	3.14	80	2.6	65.5
135mm Super Takumar f/3.5	FA	4	f/22	4.9	1.5	18°	12.1	343	49	* 49 T	3.5	88	2.3	58
150mm SMCT f/4.0	FA	5	f/22	6	1.8	16.5°	11.3	324	49	* 49 T	3.7	94.8	2.2	57.6
200mm Tele Takumar f/5.6	Pre-set	5	f/22	8.2	2.5	12°	13.1	370	49	* 49 T	4.4	113	2.2	55
200mm Super Takumar f/4.0	FA	5	f/22	8.2	2.5	12°	19.4	550	58	* 58 T	5.4	136	2.6	66
300mm SMCT f/4.0	FA	5	f/22	18	5.5	8°	33.1	946	77	BI	7.2	186	3.3	85
300mm Ultra Achromatic Takumar f/5.6	Pre-set	5	f/22	16	4.85	8°	29.1	825	58	BI	8.89	225.9	2.67	67.9
300mm Tele Takumar f/6.3	Pre-set	5	f/22	18	5.5	8°	25.1	729	58	* 58	7.19	182.5	2.56	65
400mm Tele Takumar f/5.6	Man.	5	f/45	26	8	6°	46	1,300	77	BI	10.8	275	3.34	85
400mm SMCT f/5.6	Man.	5	f/45	30.5	10	6°	45	1,300	77	BI	10.8	276	3.4	85
500mm Tele Takumar f/4.5	Man.	4	f/45	30.5	10	5°	123	3,500	49 (Rear)	BI	17.3	440	5	126.5
500mm SMCT f/4.5	Man.	4	f/45	32.8	10	5°	122.5	3,500	49 (Rear)	BI	17.3	440	5	126.8
1000mm Tele Takumar f/8.0	Man.	5	f/45	98	30	2.5°	Lens 194 Tripod 229	5,500 6,500	49 (Rear)	BI	29.1	738	5.7	143
1000mm SMCT f/8.0	Man.	5	f/45	98	30	2.5°	Lens 192.5 Tripod	5,500	49 (Rear)	BI	28.5	724	5.7	143
50mm Macro Takumar f/4.0	Pre-set	4	f/22	0.74	0.225	46°	9.34	265	49	Not Required	2.2	56	2.3	59
100mm Bellows Takumar f/4.0	Pre-set	5	f/22	—	—	24.5°	4.9	138.5	49	* 49 T	1.4	36	2.1	54.5
100mm SMCT Macro f/4.0	FA	5	f/22	1.5	0.45	24.5°	12.4	350	49	* 49 T	3.7	81.5	2.6	65.5

*Lens hood supplied with lens — SMCT-Super-Multi-Coated Takumar — T-Threaded filter — SO-Slip on — BI-Built-in — FA-Fully automatic — Man-Manual

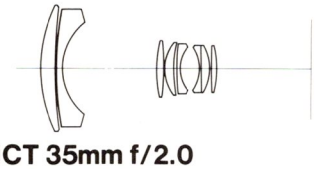
Screw Mount Lenses



SMCT 28mm f/3.5

The "Classic" Wide-Angle Lens. This superb lens enables the user to obtain dramatic wide angle effect and expand the field of view to an ideal 75° while being able to limit one's investment and overall camera bulk. Has 7 elements and utilizes 49mm filters.

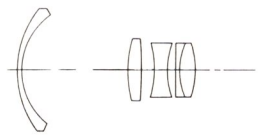
Cat. No.
22550 SMCT 28mm f/3.5 w/Hood and case



SMCT 35mm f/2.0

One of the fastest wide-angle lenses ever produced. It provides edge-to-edge sharp resolution at full aperture, making it the perfect lens for photographing large groups, buildings, sports events and other large events.

Cat. No.
22750 SMCT 35mm f/2.0 w/Hood and case.



SMCT 35mm f/3.5

A Medium speed lens with unusually high resolution. Extremely useful for scenic, industrial and architectural photography. Compact and light in weight.

Cat. No.
22351 SMCT 35mm f/3.5 w/case

Each screw mount lens is packed in a handsome, rugged, custom-padded, black leather carrying case, unless otherwise noted. Each lens is also supplied with both front and rear lens caps.
Lenshoods are included where indicated.

For replacement of supplied accessory items, refer to Special Products Section.

For use of screw mount lenses on Pentax Bayonet Mount cameras, refer to Accessories Section.

PENTAX

Screw Mount Lenses

Each screw mount lens is packed in a handsome, rugged, custom-padded, black leather carrying case, unless otherwise noted. Each lens is also supplied with both front and rear lens caps.
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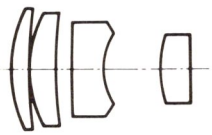
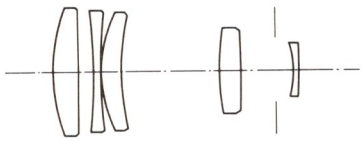


SMCT 135mm f/3.5

Produces a brilliant image over the entire picture area even with the diaphragm fully open. As this lens allows the camera to be hand-held, it is ideal for close-ups of inaccessible animals, plants, architectural details, etc., which must be photographed from a distance. The lens is recommended as an excellent choice for your first telephoto lens.

Cat. No.

23450 SMCT 135mm f/3.5 w/Hood and case

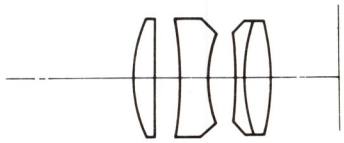


SMCT 200mm f/4.0

Very light-weight, this 5 element optic is suitable for hand-held photography and is compact and easy to use. With it's 12.5° angle of view it is excellent for wild-life, sports and action photography.

Cat. No.

24050 SMCT 200mm f/4.0 w/Hood and case



SMCT Macro 50mm f/4.0

Designed originally for excellence in macrophotographic use, this highly versatile lens can also be used as a standard focal length lens. In combination with Reverse Adapter S, it can also provide greater-than-life-size magnification.

Cat. No.

28151 SMCT Macro 50mm f/4.0

For use of screw mount lenses on Pentax Bayonet Mount cameras, refer to Accessories Section.

Pentax filters are manufactured with the same high performance optical standards that have made Pentax lenses the basis of comparison throughout the world. A full range is offered to suit every application.

SMC

Super-Multi-Coated Pentax Filters are designed specifically for Super-Multi-Coated lenses, but can be used with any lens. SMC Filters minimize reflections and glare that might be introduced by a filter.

Fantasic Color Filters.
This series consist of two filters which may be continuously varied to produce each of the colors in their spectrum. Effects previously requiring a combination of gelatin filters can now be easily accomplished with either of these filters while looking through the viewfinder. Both color and monochrome effects may be produced.

Magic Image Attachments.
This series consist of five prism filters made of high quality optical glass for producing various multiple images and illusory effects using different focusing techniques. Each fits over the lens and is equipped with a rotating ring to vary the position of the subject while sighting through the finder. Magic Image Attachments may also be used together with Fantasic Color Filters for even greater depths of creativity.

Fluorescent Light Filter.
A special color correction filter for using daylight color film with fluorescent lighting. Eliminates the greenish tint produced when color films are used with white fluorescent lighting to give a beautiful daylight effect with natural colors. Essential for indoor photography with fluorescent lighting in this era of high-speed color films. Also effective for fluorescent colors other than white.

CAT. NO.
35278 FLR 49mm
35288 FLR 52mm

Filter Applications

U.V., Ultra Violet.
Absorbs ultra-violet light rays. Helps to prevent haze in distant scenes. Can be used at all times without exposure factor, thus giving good protection to the lens. Primary use—B&W Film. Exposure Factor 1.

Ghostless U.V.
A "ghost" image is the image light reflected back to the filter surface, re-transmitted through the lens, forming a duplicate image on the film plane. Use this filter to eliminate ghost images. This filter also provides the same protection as the above UV filter. Primary use—B&W Film. Exposure Factor 1.

Y-1 (Y44), Light Yellow. (6)
Gives a slight emphasis on total separation between sky and clouds. Good choice for those who desire a subtle change in blue absorption. Primary use—B&W Film. Exposure Factor 1.5.

Y-2 (Y48), Medium Yellow. (8)
Most popular of all filters for B&W Photography. Gives most accurate total rendition for panchromatic film. Primary use—B&W Film. Exposure Factor 2.

O-2 (O56), Medium Orange. (23A)
Absorbs ultra-violet and blue light, thus making blue tones appear darker. Excellent for marine scenes, aerial photography and copying. Primary use—B&W Film. Exposure Factor 3.

Y-G, Yellow Green.
Ideal outdoor filter to render more pleasing flesh tones in portraits against the sky than you can obtain with a yellow filter. Also renders beautiful black and white pictures of landscapes, flowers, blossoms and natural sky appearance. Primary use —B&W Film. Exposure Factor 2.

R-2 (R60), Medium Red. (25)
Use with panchromatic or infra-red films to achieve maximum contrast. This filter will create dramatic sky effects, simulating moonlight scenes in mid-day by slight under-exposure. Cuts through fog, haze and mist by absorbing excessive blue and ultra-violet light rays. Excellent copying filter for blue prints. Primary use — B&W Film. Exposure factor 6.

Skylight (1A).
Recommended for use outdoors at all times to reduce excess blue and to add warmth to your subjects. Also use in open shade to reduce blue. Gives truer flesh tones when an excess of blue is prevalent. Primary use—Daylight Color Reversal Film. Exposure Factor 1.

Cloudy (81A).
Slight warming filter. Cuts through haze, and prevents excessive bluish results, thereby giving warm tones in open shade and cloudy days. More effective haze-cutting than the Skylight filter. Primary use —Daylight Color Reversal Film. Exposure Factor 1.5.

Morning & Evening (82A).
Slight cooling filter. Using this filter early in the morning and late in the afternoon to prevent excessive warm rendition, shade and cloudy days. More effective haze-cutting than the Skylight filter. Primary use—Daylight Color Reversal Film. Exposure Factor 1.5.

Flash (80C).
Use with clear wire-filled flash bulbs . . . not with blue flash bulbs. More effective than the Morning & Evening filter in preventing excessive warmth. Primary use —Daylight Color Reversal Film. Exposure Factor 2.

Flood (80B).
Photo flood tends to render excessive warm effect on your color film. Use this filter to "cool" it down to get correct color rendition. Primary use—Daylight Color Reversal Film. Exposure Factor 3.

Circular Polarizer
Designed for use with LX in manual mode to obtain correct exposure reading. Do not use conventional Polarizer w/LX in manual mode.

Polarizer.
Eliminates unwanted surface reflections and glare. Primary use—B&W and Color Film. Exposure Factor 2½ ~ 3.

Fantasic Color Filter R/B
This filter fits over the lens and enables continuous variation of colors from red to violet and then to blue. (Available in 49mm and 52mm filter sizes.

Fantasic Color Filter R/G
As the filter ring is rotated, Fantasic Color Filter R/G changes color from red to amber and then to green. (Available in 49mm and 52mm filter sizes)

Magic Image Attachment 5C
Five prism facets with a flat center area produce six images of the highlighted subject in the center.

Magic Image Attachment 4C.
Four prism facets with a flat center area rendering five images of the main subjects.

Magic Image Attachment 2C.
Two prism facets and a flat center area give three images of the subject.

Magic Image Attachment 6M.
Five parallel prism facets are arranged on an arch on one-half of the filter while the other half is flat, giving six images of the subject.

Magic Image Attachment CF.
This central focusing attachment gives a sharp image in the center part of the picture and produces a soft and hazy effect on the periphery.

(Magic Image Attachments are available in 49mm and 52mm filter sizes.)

PENTAX

Accessories

• FILTERS

TYPE	SIZE AND CATALOG NUMBER									
	Fantasic 49mm	SMC 49mm	49mm	Fantasic 52mm	SMC 52mm	52mm	SMC 58mm	SMC 67mm	SMC 77mm	77mm
Ultra Violet (UV)		35601	35011		35401		35431	35451	35481	
Ghostless (UV)			35018							
Light Yellow (Y-1)			35014							
Medium Yellow (Y-2)		35602	35012		35402		35432	35452	35482	
Yellow-Green (Y-G)			35015							
Medium Red (R-2)		35604	35016		35406		35436	35454	35484	
Medium Orange (O-2)		35603	35013		35403		35433	35453	35483	
Polarizer			35019							
Circular Polarizer			35094			35266				35182
Skylight		35605	35111		35501		35531	35551	35581	
Ghostless Skylight			35116							
Cloudy (81A)		35606	35112		35502		35532	35552	35582	
Morning & Evening (82A)			35113							
Flash (80C)			35114							
Flood (80B)			35115							
Fantasic (R/B)	35276			35286						
Fantasic (R/G)	35277			35287						
Fluorescent Light (FLR)			35278		35288					

All Pentax Filters are supplied with a plastic case.

Note: basic filter size for Pentax cameras are:
M Series lenses: 49mm
Other Bayonet Mount lenses: 52mm
Screw-Mount lenses: 49mm

For replacement of supplied accessory items, refer to Special Products Section.

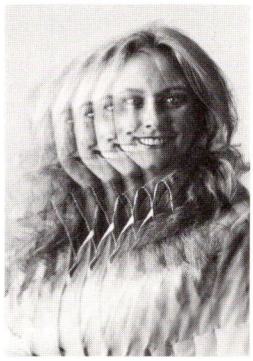
MAGIC IMAGE ATTACHMENTS

Cat. No.

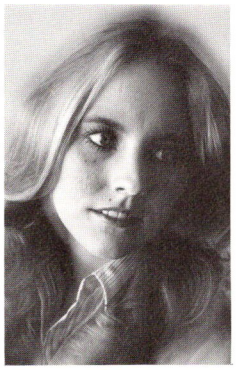
35271 49mm (5C) w/zippered case
35272 49mm (4C) w/zippered case
35273 49mm (2C) w/zippered case
35274 49mm (6M) w/zippered case
35275 49mm (CF) w/plastic case
35281 52mm (5C) w/zippered case
35282 52mm (4C) w/zippered case
35283 52mm (2C) w/zippered case
35284 52mm (6M) w/zippered case
35285 52mm (CF) w/plastic case

2C: Two prism facets and a flat center area give three images of the subject.

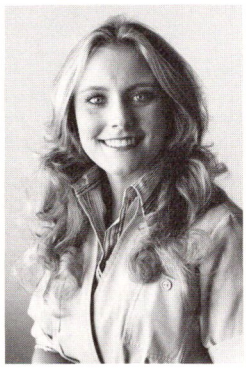
5C: Five prism facets with a flat center area produces six images of the highlighted subject in the center.



6M: Five parallel prism facets are arranged on an arch on one-half of the filter while the other half is flat, giving six images of the subject.



CF: This central focusing attachment gives a sharp image in the center part of the picture and produces a soft and hazy effect on the periphery.

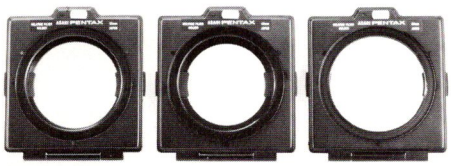


Conventional photograph without attachments.

4C: Four prism facets with a flat center area rendering five images of the main subjects.

- Filters

- Lens Accessories



Gelatin Filter Holder

The Pentax Gelatin Filter Holder accepts three-inch square Kodak or other gelatin filters. The accessory filter frame is used in conjunction with the holder, while the Kodak gelatin filter frame can also be used. Once the filter is inserted into its frame it is simply sandwiched in the holder —a feature which makes filter changes extremely easy.
The holder mounts conveniently to the front of the lens in the same manner as a spring-mounted lens hood. Four sizes are available: 49mm, 52mm, 58mm, and 77mm.

Cat. No.

35241 Gelatin Filter Holder w/Frame 49mm
35242 Gelatin Filter Holder w/Frame 52mm
35243 Gelatin Filter Holder w/Frame 58mm
35244 Gelatin Filter Holder w/Frame 77mm
35246 Frame for Gelatin Filter Holder

For Gelatin Filter Holders for use with the Pentax 6x7, refer to 6x7 Accessories section.

Lens Hoods

The main purpose of a lens hood is to shield the lens from the light outside the picture area, which might otherwise cause unwanted reflections inside the lens.
In addition, a lenshood protects the lens against dust, dirt and fingerprints — it even helps keep out the rain. Therefore, this lens accessory is often used simply for lens protection.
Using a spring mechanism, Pentax lens hoods fit directly onto the rim of the lens. They will not slip off easily, even if the camera is handled roughly.
Because of the rectangular picture format, rectangular lens hoods are better suited to 35mm cameras than round hoods, however a round hood can be conveniently stored by reversing it over the front of the lens (however, at this time the lens cap cannot be attached). In addition to the metal lens hoods, a flexible, rubber lens hood is also available — ideal for avoiding the bumps and bruises of rough handling.

Cat. No.

49mm Lens Hoods: (for most SMCP-M Lenses)

34020 Round w/Case for SMCP-M 40mm/2.8; 50mm/1.4; 50mm/1.7; 50mm/2.0
34021 Rectangular w/Case for above lenses.
34260 Rubber, round hood for above lenses.
34110 Rectangular w/Case for SMCP-M 28mm/2.8; 28mm/3.5; 35mm/2.0; 35mm/2.8
34200 Round w/Case for SMCP-M 20mm/4.0
34391 Round for SMCP-M 85mm/2.0; 100mm/2.8; SMCP-M Macro 100mm/4.0

52MM Lens Hoods: (for SMCP lenses except where indicated)

34000 Round w/Case for SMCP 50mm/1.2; 55mm/1.4; 55mm/1.8; Bellows 100mm/4.0
34060 Rectangular Hood-A w/Case for SMCP 28mm/3.5; 35mm/2.0; 35mm/3.5
34061 Rectangular Hood-B w/Case for SMCP 24mm/2.8
34300 Round for SMCP 120mm/2.8; 135mm/3.5; 150mm/4.0
34380 Round for SMCP 85mm/1.8; 105mm/2.8; SMCP Macro 100mm/4.0
34760 Round w/Case for SMCP-M Zoom 28mm~50mm

58mm Lens Hoods:

34090 Rectangular w/Case for SMCP 20mm/4.0; 24mm/3.5
34390 Round for SMCP 135mm/2.5; 200mm/4.0; Zoom 85mm~210mm/4.5
34730 Round for SMCP Zoom 45mm~125mm/4.0
34740 Round w/Case for SMCP-M 24 ~ 35mm/3.5 zoom
34790 Round w/Case for SMCP-M 24 ~ 50/4 zoom

60mm Lens Hoods

34801 Round Rubber Slip-On Hood (60mm Outside Diameter) For SMCP-AF Zoom 35 ~ 70/2.8

67mm Lens Hoods:

34751 Round for SMCP Zoom 85mm~210mm/3.5
34770 Round for SMCP-M 35 ~ 70/2.8

77mm Lens Hoods

34421 Round w/Case for SMCP-M* 300/4

PENTAX

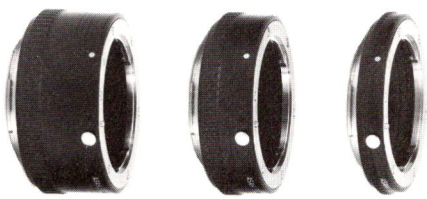
Accessories

- **Close-Up Accessories**

Auto Extension Tube Set

The Auto Extension Tube Set consists of three different tubes (12mm, 19mm, 26mm), which can be used either individually or in combination. Life-size magnification can be provided by attaching the #3 tube to the SMC Pentax-M Macro 50mm f/4.0 lens, or by attaching all three tubes to the SMC Pentax-M Macro 100mm f/4.0 lens. This set allows you the convenience of automatic diaphragm operation and open-aperture metering.

Cat. No.
30535 Auto Extension Tube Set (B) w/Case
30530 Auto Extension Tube Set (S) w/Case



Manual Extension Tube Set

The Manual Extension Tube Set provides manual diaphragm operation and stop-down metering. The three tubes provide individual extensions of 9.5mm, 19mm and 28.5mm.

Cat. No.
30525 Manual Extension Tube Set (B) w/Case
30520 Manual Extension Tube Set (S) w/Case

Helicoid Extension Tube

The "Adjustable Extension Tube", the internal helicoid provides an infinitely stepless adjustment range from 26.5mm to 46.5mm. Lifesize magnifications are obtained with the SMC Pentax-M Macro 50mm f/4.0 and near lifesize (0.995) with the SMC Pentax-M Macro 100mm f/4.0. Magnifications with a SMC Pentax-M 50mm lens range from 0.52 — 1.06. Manual diaphragm and stop-down metering operations are required with all lenses. When the Helicoid Extension Tube is used with any automatic camera (ME, K2, K2DMD) full exposure automation is retained. May be combined with either Auto or Manual Extension Tubes for greater magnification. May be used with either screw-mount bodies or lenses with the use of Adapter (B).

Cat. No.
30542 Helicoid Extension Tube (B) w/Case

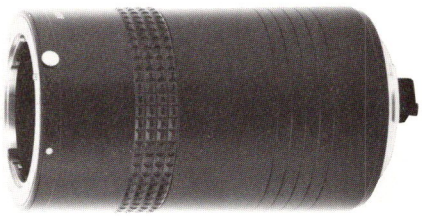
Note:
Any extension tube may be used simply to decrease the minimum focusing distance of a lens. When using any extension tubes you must keep in mind that the distance and depth-of-field scales on the lens cannot be used. For magnifications greater than life-size (1:1) reversal of the lens is recommended. (Use Reverse Adapter B or S).

(B) —Pentax Bayonet Mount
(S) —Pentax Screw Mount

Life-Size Auto Extension Tube (B) 50mm

When used in conjunction with the SMCP-M Macro 50mm f/4.0 lens, this auto extension tube enables magnifications from 1:1X(Life-Size) to 1:1.5X, and will provide up to life-size magnification when used with the SMCP-M Macro 100mm f/4.0 lens. For its range, it proves to be an ecomomical alternative to purchasing the entire Auto Extension Tube Set. With 120mm to 135mm lenses, close-ups in excess of 0.4X can be obtained; with 200mm lenses, close-ups in the vicinity of 0.25X are obtainable. It also affords the convenience of automatic diaphragm operation and open-aperture metering. When used with any Pentax automatic camera (ME, K2, K2DMD) full exposure automation is retained.

Cat. No.
30551 Life-Size Auto Extension Tube (B) 50mm w/Case



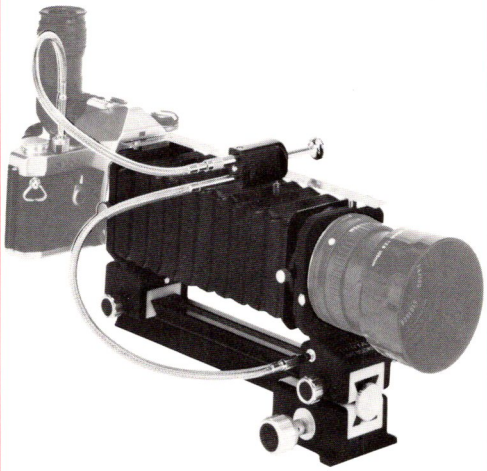
Life-Size Auto Extension Tube (B) 100mm

Life-Size (1:1) magnification is obtained when using this extension tube with the SMCP-M Macro 100mm f/4.0 lens. While the Life-Size Auto Extension Tube (B) 50mm will provide **up to** life-size magnification with the SMCP-M Macro 100mm lens, this tube will enable magnifications **from** life-size (1:1X) **up to** 1.5X. When used with the SMCP-M Macro 100mm f/4.0 lens, the magnification range is from 1:2X to 1:2.5X. With other 100mm lenses magnifications in the vicinity of 1X are obtainable; 0.8X with 120mm to 135mm lenses; 0.5X with 200mm lenses, and 0.35X with 300mm lenses. Both the 50mm and 100mm Life-Size Auto Extension Tubes greatly shorten the minimum focusing distances of telephoto lenses enabling striking capabilities. When used with any Pentax automatic camera (ME, K2, ME Super, LX, K2DMD) full exposure automation is retained. Both the 50mm and 100mm Life-Size Auto Extension Tubes may be used with Pentax screw-mount lenses with the use of Adapter (B).

Cat. No.
30556 Life-Size Auto Extension Tube (B) 100mm w/Case

Auto Bellows

The Pentax Auto Bellows inserted in between a Pentax Bayonet camera and any of the SMCP, SMCP-M lenses is all you need to be ready for a wide range of different types of photography from close-up work to macrophotography. And with the addition of the manual or automatic extension tubes, you have the complete range from the closest of close-up work to macrophotography. The lenses can also be attached to the front bellows plate in reverse, so there is no need for a reverse adapter. It is also equipped with a double cable release which retains the automatic diaphragm feature of the lens (except when the lens is reversed on the lens mount). Although stop-down exposure metering must be employed, when the Auto Bellows is used with any of the Pentax Automatic Cameras (ME, ME Super, LX, K2, K2DMD) full exposure automation is retained. Together with the Slide Copier, you can also reproduce slides and film strips.



Auto Bellows M-Set

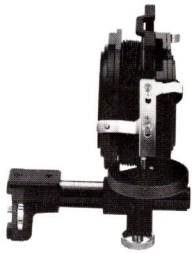
Auto Bellows can be extended from 38mm to 170mm in the normal position. This unit provides a lens-reversing feature on the front plate, a double cable release for operating the automatic diaphragm and a measuring scale that indicates how far the bellows has been drawn out both with the lens in a normal and reversed position. The movable tripod receptacle is mounted on a single rack-and-pinion track. The Auto Bellows has a minimum extension of 38mm; the minimum magnification is 0.73 with a 50 mm lens.

30022 Auto Bellows M-Set
Supplied with removable 49mm adapter for most SMCP-M (49mm filter size) Pentax Bayonet-Mount lenses. With adapter removed, 52mm filter size Pentax Bayonet-Mount lenses will fit in reversed lens position.

Bellows Unit III

Bellows Unit III is similar to Auto Bellows M-Set but with less extension and no double cable release. This unit does not permit automatic diaphragm setting, nor is it used with Slide Copier (B). Lens can be reversed on front plate by using Reverse Adapter (B). The tripod mount is movable. With a 50mm lens this unit provides a minimum magnification of 0.62X. Pentax screw-mount lenses (and universal thread) may be used with Mount Adapter (B). When Bellows Unit (B) is used with any Pentax Automatic Camera (ME, ME Super, LX, K2, K2DMD) full exposure automation is retained.

30038 Bellows Unit III



Slide Copier (B) for Auto Bellows Units

The Slide Copier attaches to the front of the Auto-Bellows M-Set. With a standard lens, not reversed, one-to-one copies are attainable. With the lens reversed, magnifications up to about 1.5 are attainable which will crop the original slide. The slide can move in the carrier to change image composition. Slide Copier unit accepts mounted or unmounted 35mm film (24x36mm) or filmstrips. Supplied with bellows and frosted glass for even illumination. When Slide Copier is used with any Pentax Automatic Camera full exposure automation is retained.

Cat. No.
30029 Slide Copier (B) for Auto Bellows M-Set
Supplied with 49mm removable adapter.
Pentax screw-mount lenses may be used with Auto Bellows M-Set.

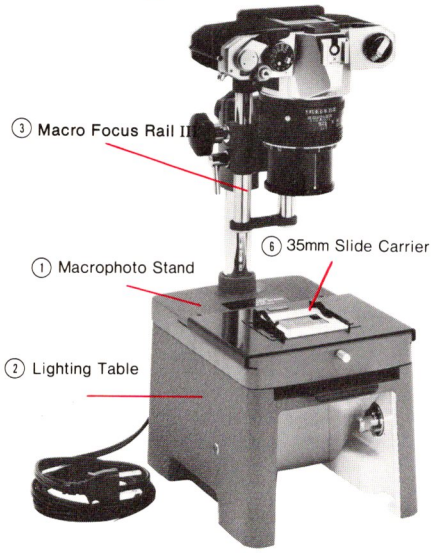
49mm and 52mm filter size screw-mount lenses will reverse.

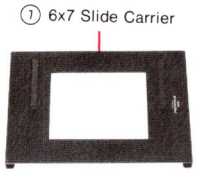
Slide copier (B) will fit Auto Bellows (S).

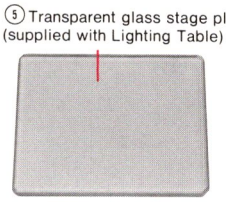
PENTAX

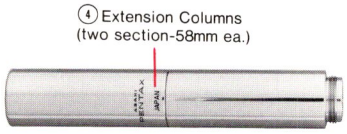
Accessories

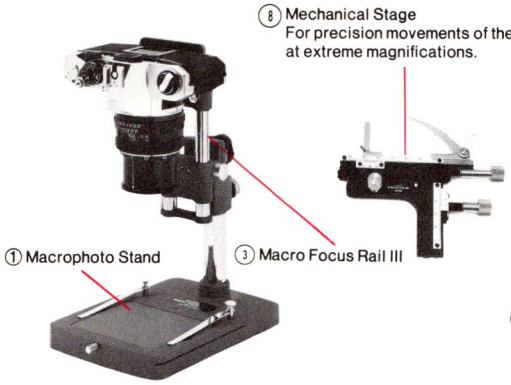
• Close-Up Accessories











Macrophoto Stand/Lighting Table

The Macrophoto Stand①is an extremely compact unit convenient for ultra close-ups and macrophotography. Magnifications are continuously variable from 1/2X to 1.9X when the stand is employed with Macro Focus Rail III③, the Macro 50mm f/4 lens, Auto Extension Tube Set (B) and Reverse Adapter (B). When employed with Auto Bellows M-Set, magnifications from 0.7X-3.1X are obtainable. Also, includes a reversible gray/black stage plate; the gray side has an 18% reflectivity, making it ideal for taking test exposure readings. A "trans-illuminating" Lighting Table②is also available as a Macrophoto Stand accessory. By replacing the gray/black stage plate of the Macrophoto Stand with a transparent glass stage plate⑤, permeable lighting is provided from beneath the stage via a built-in tungsten lamp. For brighter lighting, a built-in mirror may be angled to reflect light from Pentax electronic flash units; reflector lamps; a 35mm slide projector and other commercially available lighting sources. The Macrophoto Stand/Lighting Table combination also comes in handy for slide copying when the accessory 35mm format and 6x7 format⑦slide carriers are employed. Each item ordered separately:

Cat No.
30078 Macrophoto Stand
30079 Lighting Table
30072 Extension Columns
30073 35mm Slide Carrier
37993 6x7 Slide Carrier
30080 Mechanical Stage
30076 Macro Focus Rail III (required)

Reverse Adapter

Permits 49mm or 52mm lenses to be mounted on a Pentax camera body or extension tubes in reverse position for better image quality at magnifications greater than 1.0 (1:1), and for high magnifications with less extension. Lens aperture is adjusted manually, using the aperture ring on the lens, and the focus control on the lens has no effect. When used with a Pentax Automatic Camera full exposure automation is retained within the measurable range. Both screw-mount and bayonet mount lenses may be used with either type of body by use of the appropriate reverse adapter.

Cat. No.
30332 Reverse Adapter (B) 49mm For most SMCP-M Pentax Bayonet Mount Lenses.
37955 Reverse Adapter (B) 52mm For Pentax Bayonet Mount Lenses with 52mm filter threads.
30331 Reverse Adapter (S) 49mm For Pentax Screw Mount Lenses with 49mm filter threads. 52mm filter size Pentax Screw mount lenses may be used with this adapter with 49→52mm Step-Up Adapter Ring.

Macro Focus Rail III

When close-ups are to be made with a large magnification (5X or more), focusing can easily be accomplished by using the Macro Focus Rail III for precisely setting the position of the lens, or extension tube. This device is also useful for making close-ups with a predetermined magnification. (If the lens alone is moved for focusing, it causes a change in magnification.) Required for use with the Macrophoto Stand/Lighting Table. Provided with a tripod receptacle.

Cat. No.
30076 Macro Focus Rail III

Slide Holder 1x (B)

Slide Holder 1x (B) serves the same purpose as Slide Copier (B) for Auto Bellows (B). When used with an Auto Extension Tube (B) or Extension Tube (B), this unit allows the standard lens or Pentax SMCP-Macro 50mm f/4.0 lens to make slide duplications with 1:1 magnification. Lens must be reversed, and Reverse Adapter is required.

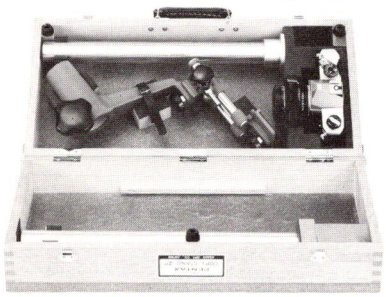
Cat. No.
37948 Slide Holder 1x (B)

Close-Up Lenses
An SMC Close-Up Lens can be threaded into the front lens frame of an SMC Pentax lens for crisp macrophotography. The entire range gives you the convenience of automatic diaphragm setting and open-aperture metering. These attachment lenses are available in the following types:

Type	• SMC Pentax Lens	• Lens-to-subject distance range	• Magnification		• Cat. No.
S40	50mm f/1.7, 50mm f/1.4, 50mm f/2.0 55mm f/1.8, 40mm f/2.8	48.0~27.0cm (with 50mm f/1.7 lens)	1/7.6~1/3.5 (with 50mm f/1.7 lens)	49mm 52mm	**30451** **30221**
S25	50mmf/1.7, 50mm f/1.4, 50mm f/2.0 55mm f/1.8, 40mm f/2.8	32.6~22.0cm (with 50mm f/1.7 lens)	1/4.8~1/2.7 (with 50mm f/1.7 lens)	49mm 52mm	**30450** **30220**
T80	85mm~150mm	91.6~50.5cm (with 85mm f/2.0 lens)	1/9.4~1/4.2 (with 85mm f/2.0 lens)	49mm 52mm	**30452** **30222**
T160	100mm~150mm	175.0~89.5cm (with 135mm f/3.5 lens)	1/11.9~1/4.9 (with 135mm f/3.5 lens)	49mm 52mm	**30454** **30223**
T95	135mm f/2.5,200mm f/4	114.0~84.0cm	1/4.8~1/2.6	58mm	**30224**
T183	135mm f/2.5,200mm f/4	202.0~113.0cm	1/9.1~1/3.8	58mm	**30225**

Copy Stand III

Copy Stand III-P



Copy Stand III & III-P

The Copy Stand aligns the camera quickly and accurately for copy work. Both are equipped with a critical focusing knob for fine adjustment. Each model has an 18% standard gray reflector panel which facilitates exposure measurement. Both accept all Pentax 35mm Bayonet and Screw-Mount Cameras, and extension tubes and/or bellows units are easily employed.

Copy Stand III is a fixed copying stand of sturdy construction, it is 73cm (28.5 in) in height when assembled and weighs 5.5 kgs (12.1 lbs) without camera/lens. Copy Stand III accepts Table Clamp as accessory.

Copy Stand III-P is a portable copying stand which can be disassembled and fitted into a wooden carrying case, which also serves as the baseboard. In addition the carrying case has enough space for a Pentax camera and a set of extension tubes, and can easily be carried on location. As the support column has two long sections. Copy Stand III-P can take photographs of larger subjects than can Copy Stand III. Copy Stand III-P is 78 cm (30.4 in) in height when assembled and weighs 5.1 kg (11.3 lbs).

Cat. No.
30075 Copy Stand III
30069 Copy Stand III-P (Portable)

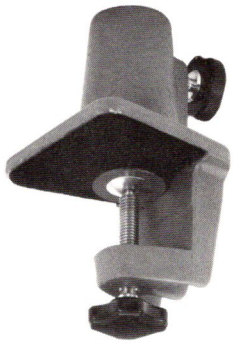


Table Clamp for Copy Stand III

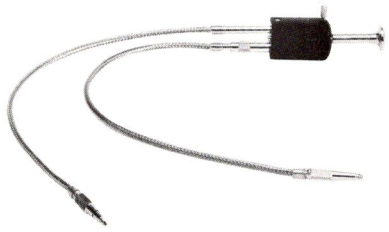
The table clamp can be attached to any desk or table top less than 6 cm (2.3 in) thick, thus enabling fast and easy assembly of the stand where the baseboard is impractical or undesired. The table clamp weighs 620 gr (21.9 oz).

Cat. No.
30054 Table Clamp for Copy Stand III

Cable Releases

A cable release is a "must" for preventing camera movement, especially when the camera is being used on a tripod, copy stand or copipod. This unit has a locking collar to allow time exposures. Available in the following types:

30098 Cable Release 30 (30 cm Long)
30099 Cable Release 50 (50 cm Long)



Double Cable Release for Auto Bellows M-Set, (S)

Permits use of the fully automatic diaphragm of Pentax lenses in the normal position. (Supplied with all auto bellows units).

Cat. No.
30039 Double Cable Release II

PENTAX
Accessories

• For Critical Focusing

Right-Angle Finders

Pentax Right-Angle Finders, also referred to as refconverters, serve as an invaluable aid when copying. Working from a low angle, or whenever it is difficult to view directly through the viewfinder.

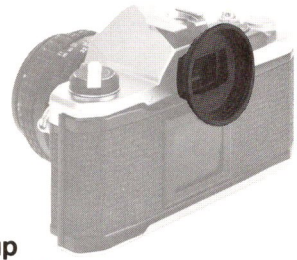
Right-Angle Finder-M
Right-Angle Finder-II

These Right-Angle Finders are extremely easy to use as the image appears exactly as it does when viewing directly through the viewfinder of the camera (non-reversed and laterally correct image). These Right-Angle Finders have provision for diopter adjustment and are supplied with rubber eyecups. 360° rotation. Right-Angle Finder-M has a built-in 2X magnifier which is brought into action by simply moving a switch.

Cat. No.

30157 Right-Angle Finder-M w/Case (For the Pentax M-series cameras and LX)

30153 Right-Angle Finder II w/Case (For Pentax KX, K2, K2DMD and most screw mount cameras)



Eyecup
Eyecup-M

A useful aid for non-eyeglass wearers as it eliminates reflections for clear viewing, and also prevents extraneous light from entering the eyepiece and influencing the meter.

Cat. No.

30086 Rubber Eyecup-M (For the Pentax M-series cameras)

30082 Rubber Eyecup (For all other Pentax Bayonet Mount and most Pentax screw-mount cameras)

Right-Angle Finder I

The image in Right-Angle Finder I appears laterally reversed (backwards). Therefore if it were to be used with the Pentax KX, K2 or K2DMD, the figures in the shutter speed scale and/or aperture read-out in the viewfinder would appear backwards, making it inconvenient to use. For this reason, this Right-Angle Finder is only recommended for use with the Pentax K1000 or KM. Right-Angle Finder I does not fit the Pentax M-series cameras.

Cat. No.

30061 Right-Angle Finder I

Earlier Pentax screw-mount cameras accept either Right-Angle Finder I or II

Magnifier
Magnifier-M

Easily clips on to the grooves of the eyepiece to magnify the central portion of the focusing screen 2X for critical focusing. The hinged magnifier can be raised to view the entire focusing screen, and is designed to accept Diopter Correction SMC Lenses as well.

Cat. No.

30920 Magnifier-M w/Case (For Pentax M-series cameras

30151 Magnifier w/Case (For all other Pentax Bayonet Mount and most Pentax screw-mount cameras)

Diopter Correction Lens w/Adapter
Diopter Correction Lens w/Adapter-M

A clip-on prescription eyepiece designed for eyeglass wearer. SMC Correction Lenses are available in −5, −4, −3, −2, +1, +2, and +3 (Diopter). Since the eyepiece lens of −1.0 D, a farsighted person normally requiring +2 D, should utilize a +3 D (+2 D - [−1.0 D] = +3 D) SMC Correction Lens. Similarly, a nearsighted person normally requiring −2 D should utilize a −1 D (−2 D - [−1.0 D] = −1 D) SMC Correction Lens. SMC Diopter Correction lenses are supplied with adapters designed to fit specific Pentax Cameras as indicated below. Adapters are available separately either as replacements, or for those wishing to obtain diopter correction lenses from their optometrist.

Cat. No.

For Pentax M-series Cameras:

30731 Diopter Correction SMC Lens w/Adapter-M[−5]

30732 Diopter Correction SMC Lens w/Adapter-M[−4]

30733 Diopter Correction SMC Lens w/Adapter-M[−3]

30734 Diopter Correction SMC Lens w/Adapter-M [−2]

30735 Diopter Correction SMC Lens w/Adapter-M [−1]

30736 Diopter Correction SMC Lens w/Adapter-M [+1]

30737 Diopter Correction SMC Lens w/Adapter-M [+2]

30738 Diopter Correction SMC Lens w/Adapter-M[+3]

30283 Diopter Correction Lens Adapter-M Only, with rubber eyecup. Accepts 6x7 Diopter Correction Lenses

For all other Pentax Bayonet & Screw Mount Cameras:

30721 Diopter Correction SMC Lens w/Adapter[−5]

30722 Diopter Correction SMC Lens w/Adapter[−4]

30723 Diopter Correction SMC Lens w/Adapter [−3]

30724 Diopter Correction SMC Lens w/Adapter [−2]

30725 Diopter Correction SMC Lens w/Adapter [−1]

30726 Diopter Correction SMC Lens w/Adapter [+1]

30727 Diopter Correction SMC Lens w/Adapter [+2]

30703 Diopter Correction SMC Lens w/Adapter[+3]

30282 Diopter Correction Lens Adapter-(K) (S) Only

• For Photomicrography

Microscope Adapter

This adapter is designed to fit the camera body directly onto a microscope. It can be used with any microscope having a 25mm outside diameter tube. Consists of Adapter Main Tube, Fastener Tube and Light Sealing Tube. Pentax Bellows Unit may be added for even greater magnification. When used on any Pentax Automatic camera full exposure automation is retained.

Cat. No.
30043 Microscope Adapter (S)
30044 Microscope Adapter (B)

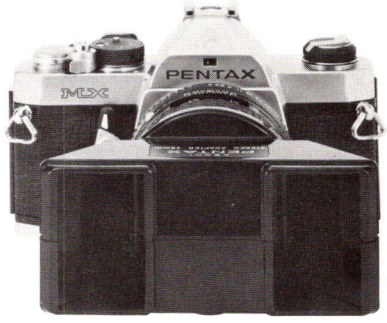
Microscope Lens Adapter (B)

Microscope Lens Adapter (B) is used to adapt special-purpose objective lenses (Olympus M plan 1.3X, 2.5X, 5X, 10X, 20X) or special-purpose macro lenses (Zuiko Macro 20mm f/3.5, Zuiko Macro 38mm f/3.5) to the Pentax Bayonet Mount. The special lenses are merely screwed into one side of the adapter and the other fits directly to the Pentax bayonet camera mount. When fitted to the Auto Bellows M-Set or Bellows Unit III this adapter permits varied macro magnifications from 2X to 10X. When used with any Pentax Automatic Camera full exposure automation is retained.

Cat. No.
30045 Microscope Lens Adapter (B)

(B) — Pentax Bayonet Mount
(S) — Pentax Screw Mount

• For Special Applications



49mm and 52mm Stereo Adapter Stereo Viewer II

Stunning, single-frame, 3-D slides are extremely simple to make. Merely attach the Stereo Adapter to your standard 50 or 55mm lens and shoot at f/5.6 or f/8. After receiving the slides back from your photo-finisher, view them in the Stereo Viewer II. The most dramatic effects are obtained when the subject is photographed from a distance of four meters (13 feet) or less.

Cat. No.
30348 Stereo Adapter 49mm Set for 49mm filter size.
30344 Stereo Adapter 52mm Set for 52mm filter size.
Above Set(s) include Stereo Viewer II
30347 Stereo Viewer II.

Tripod 1000

Specifically designed for the SMCP 1000mm f/8.0 lens, this sturdy, wood and metal construction tripod will ensure vibration-free photography when utilizing this ultra-telephoto lens. Fully adjustable, Tripod 1000 features adjustable height from 36 in. to 53 inches. It is supplied with a sturdy case, and measures 45″ in height when collapsed.

Cat. No.
99040 Tripod 1000

PENTAX

Accessories

• Lens Adapters

Mount Adapter (B)

The Mount Adapter B fits the new Pentax bayonet mount cameras and permits screw-mount Takumar lenses to be used on them. When used with this adapter, a screw-mount (Universal Thread) lens will focus to infinity, however it cannot be used for automatic diaphragm or open aperture metering. When used on any Pentax automatic camera full camera automation is retained when using screw-mount lenses and accessories.

Cat. No.
30120 Mount Adapter (B)

Adapters are not available to allow Pentax screw-mount cameras to accept Pentax bayonet mount lenses.

6x7 Lens Adapter

This adapter fits either Pentax Bayonet or Screw Mount cameras and permits the use of 6×7 SMCT, SMCP Lenses with them. With this adapter, the lens will focus to infinity, however, it cannot be used with automatic diaphragm or open aperture metering. When used on any Pentax automatic camera full exposure automation is retained within the measurable range. When used with 6x7 SMCT, SMCP lenses with a built-in tripod socket, this adapter allows the camera to change its position vertically or horizontally while the lens remains on the tripod.

Cat. No.
37954 6x7 Lens Adapter (B)
For Pentax Bayonet Mount Cameras
37953 6x7 Lens Adapter (S)
For Pentax Screw Mount Cameras [May be used on Bayonet Mount cameras with Mount Adapter (B)]

52mm → 49mm Adapter Step-Down Ring

This adapter permits the use of 49mm diameter SMC Pentax filters and lens accessories on a lens with a 52mm filter size. Care should be taken to ensure that the smaller size lens accessory does not create image fall-off (vignetting). Note that this adapter cannot be used with the SMC Pentax 85mm f/1.8 lens.

Cat. No.
30142 52mm → 49mm Adapter Step-Down Ring

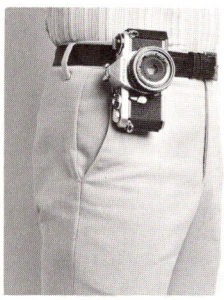
49mm → 52mm Adapter Step-Up Ring

This adapter permits the use of 52mm diameter SMC Pentax filters and lens accessories on a lens with a 49mm filter size.

Cat. No.
30141 49mm → 52mm Adapter Step-Up Ring

Camera Cases & Gadget Bags

Camera cases, lens cases and gadget bags protect your equipment and make it more portable.
A case molded to the shape of the camera provides protection against bumps and jars while you carry it, as well as protecting the camera from adverse weather conditions.
Lens cases protect fragile glass optics and keep lenses from knocking into one another when they are carried loose in a gadget bag or in luggage.
Gadget bags not only protect equipment, but allow you to both carry and organize the components of your camera system such as accessory lenses, winders, motor drives, film, filters, flash and back-up equipment.



Belt Clip for ME

As an extra added convenience for ME owners only, Pentax has designed a new unique belt clip which makes it easier than ever to carry your compact ME with you whenever and wherever you wish — without neckstrap, without carrying case. It takes just seconds to attach the sturdy black finished, metal clip to the tripod socket at the base of the camera and position on your belt, or you may clip it to the inside of an attache case or handbag. The ME Belt Clip, especially when the trim 40mm standard lens is mounted, is perfect for business-persons, travelers, and backpackers.

Cat. No.
82740 Belt Clip for ME/MV/ME SUPER, MV-1, MG

Soft Eveready cases

The several types of eveready cases are perfectly contoured to fit snugly around the camera body and provide protection for the various working controls. These cases accomodate a specific camera body with standard (normal) lens. The two-part construction features an outer section that folds around the front and top which can be dropped down while still attached to the inner section for occasional picture-taking, or removed entirely to permit greater freedom of operation.

Soft Case K1000/K1000 "SE"

Rich black, soft case. Also for Pentax Model KX and KM. Attaches to tripod socket. (This case will also accept most screwmount cameras)
Cat. No.
32630 Soft Case for K1000/K1000 "SE"

Soft Case K2/K2DMD

Accomodating either the Pentax K2 or K2DMD Camera, this smart black eveready case attaches to the camera with a tripod-socket screw.

Cat. No.
32600 Soft Case for K2/K2DMD

Soft Cases for ME and MX

Snug and compact as the cameras themselves, these soft, black, eveready cases are also available with specially designed front and back covers to accomodate a wide range of ME/MX accessories without a sacrifice in protection or ease of operation.

Cat. No.
32700 Soft Case for MX
32730 Soft Case for ME, ME Super, MV, MV-1, MG

Front/Back for Soft Cases ME and MX

When selecting a specially designed front case for your Pentax camera, the standard back case should be ordered individually. The standard front case is also available separately.

Cat. No.
32720 Back for Soft Case MX
32750 Back for Soft Case ME
32710 Front for Soft Case MX
32740 Front for Soft Case ME

Front Case for SMCP-M 40mm f/2.8 ME/MX

This custom front case allows the compact combination of the SMCP-M 40mm lens with the M-Series Camera while providing maximum protection and portability.

Cat. No.
32712 Front for Soft Case MX and SMCP-M 40mm f/2.8 lens
32742 Front for Soft Case ME and SMCP-M 40mm f/2.8 lens

PENTAX

Accessories

• Cases, Bags and Straps

Front Case for SMCP 50mm f/1.2 ME/MX

Expressly designed to protect this larger optic. Order with Back for Soft Case ME or MX.

Cat. No.
32711 Front for SMCP 50mm f/1.2 for Soft Case MX
32741 Front for SMCP 50mm f/1.2 for Soft Case ME

Front Covers for Soft Case ME/MX

These Front Covers are designed to accept lenses which are larger than standard/normal lens into a Eveready Style Case. These are especially useful to the photographer who favors leaving one lens on the camers (like a zoom) the majority of the time but still wants Eveready Case convenience and protection. Front Cover T-1, T-2, T-3, will accept the lenses listed below and any other lenses having similar dimensions.

T-1
SMCP 18/3.5, SMCP 28/2, SMCP 50/1.2, SMCP-M 120/2.8, SMCP-M 135/3.5, SMCP-M Zoom 24-35/3.5, SMCP-M Zoom 28-50/4.5

T-2
SMCP-M 150/3.5, SMCP-M Zoom 35-70, SMCP-M Zoom 40-80, SMCP-M Macro 100/4

T-3
SMCP 135/2.5, SMCP-M 200/4, SMCP-M Zoom 75-150

Short Soft Case for ME/MX

This unique case fits around the lens rather than over the lens allowing full camera operation without removal of the case. Because the camera body is fully surrounded by the case the operating noise is reduced making this very useful for photographing on-stage performances, or when used remotely to photograph wildlife. It also protects the camera against the elements. As all camera functions may be used with the camera in the case, it is invaluable for quick-action photography or "shooting from the hip". Focusing, film advance and lens changing are readily performed, and a special release button built into the case cover enables fast shutter release.

Cat. No.
32801 Quiet/Action Case for MX
32802 Quiet/Action Case for ME, ME Super, MV-1, MV, ME

Soft Cases for Dial Data Back ME/MX

Similar to Soft Cases ME and MX in construction, these custom soft cases feature a back case to accommodate the ME or MX Camera with the respective Dial Data Back attached, and allow the three dials of the data back to be changed while in the case. Supplied complete with front case.

Cat. No.
32704 Soft Case for MX w/Dial Data Back
32734 Soft Case for ME w/Dial Data Back

Case for M-Series Camera with Autowinder

This soft flexible "pouch" style case will hold the M-Series Camera with standard lens and winder. For added versatility the case will also accommodate either camera with lens and winder and the Dial Data Back. In addition this case may be used for the MX Camera with Motor Drive MX, NiCad Battery Pack M, standard lens and Dial Data Back MX.

Cat. No.
32703 Case for M-Series Camera w/Winder

• Lens Cases

Hard Lens Cases

These quality hard leather cases offer optimum protection for Pentax lenses. They are individually designed for each lens, and are supplied with a strap.

Cat. No.
33040 Lens Case for SMCP-M 40mm f/2.8
33030 Lens Case for SMCP-M 50mm f/1.7/2.0
33012 Lens Case for SMCP-M 50mm f/1.4
33000 Lens Case for SMCP 50mm f/1.2

33112 Lens Case for SMCP Fish-Eye 17mm f/4
33101 Lens Case for SMCP 15mm f/3.5
33120 Lens Case for SMCP 18mm f/3.5
33202 Lens Case for SMCP-M 20mm f/4
33252 Lens Case for SMCP 24mm f/2.8
33217 Lens Case for SMCP-M 28/2
33215 Lens Case for SMCP-M 28mm f/2.8
33216 Lens Case for SMCP-M 28mm f/3.5
33214 Lens Case for SMCP 28/3.5 Shift
33260 Lens Case for SMCP 30mm f/2.8
33223 Lens Case for SMCP-M 35mm f/2.0
33270 Lens Case for SMCP-M 35mm f/2.8

33322 Lens Case for SMCP-M 85mm f/2.0
33325 Lens Case for SMCP-M 100mm f/2.8
33342 Lens Case for SMCP-M 120mm f/2.8
33361 Lens Case for SMCP 135mm f/2.5
33352 Lens Case for SMCP-M 135mm f/3.5
33372 Lens Case for SMCP-M 150mm f/3.5
33472 Lens Case for SMCP 200mm f/2.5
33482 Lens Case for SMCP-M 200mm f/4

33432 Lens Case for SMCP 300/4
33433 Lens Case for SMCP-M* 300/4
33493 Lens Case for SMCP Reflex 2000/13.5
33731 Lens Case for SMCP 35-70mm/2.8 Zoom Auto Focus Lens
33701 Lens Case for SMCP-M 40~80mm Zoom
33770 Lens Case for SMCP-M 24~35mm Zoom
33771 Lens Case for SMCP-M 24~50mm Zoom
33700 Lens Case for SMCP-M Zoom 28~50mm
33730 Lens Case for SMCP-M Zoom 35~70mm
33721 Lens case for SMCP Zoom 45~125mm f/4
33710 Lens Case for SMCP-M 75~150 Zoom
33740 Lens Case for SMCP-M Zoom 80~200mm f/4

33832 Lens Case for SMCP-M Macro 50mm f/4
33862 Lens Case for SMCP-M Macro 100mm f/4
33821 Lens Case for SMCP Bellows 100mm f/4

• Gadget Bags

Deluxe Gadget Bag

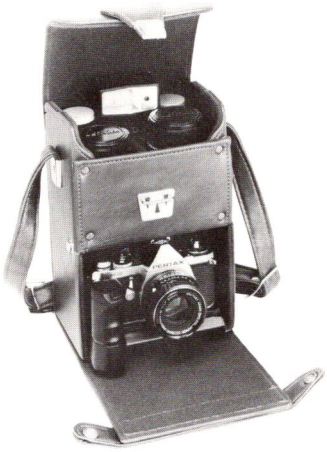
Featuring maximum protection with immediate accessability in a compact size, this water-resistant, chestnut brown Durahyde bag with heavy duty clasp and sturdy adjustable strap is especially designed for the compact camera with accessories.
The bottom compartment will hold one of the following combinations:

- PENTAX ME with lens and winder
- PENTAX MX with lens and winder or motordrive
- PENTAX K1000 with lens
- PENTAX K2/K2DMD with lens and motordrive

The top compartment holds all of the following:

- Two accessory "M" series lenses (up to 200mm f/4)
- AF-16 Electronic Flash (or most shoe mounts)
- Film
- Filters
- Miscellaneous Accessories

Or, the top compartment can hold an extra camera, lens and winder or motordrive.



Cat. No.
84580 Deluxe Gadget Bag

• Other Gadget Bags

Cat. No.
30159 PENTAX Brown Speed Bag M
30179 PENTAX Black Speed Bag M
30164 PENTAX Gadget Bag Deluxe
30623 PENTAX Gadget Bag II
30624 PENTAX Joy Bag (Small)
30625 PENTAX Joy Bag (Large)
30627 PENTAX Travel Bag II
84583 SLR Shoulder Bag

• Straps

Camera Neck Strap

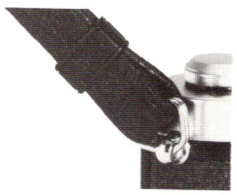
A robust, adjustable strap to safely carry your Pentax camera around your neck. Attaches to "D" rings of camera body. A strap is furnished with every Pentax camera body. Order shoulder pad separately.

Cat. No.
32950 Camera Neck Strap
Shoulder Pad

Camera Hand Strap

This sturdy hand or wrist strap offers security and added portability for hand-holding cameras. Attaches directly to "D" rings of camera body.

Cat. No.
32770 Camera Hand Strap



D Ring

Metal replacement rings for attaching camera straps to the camera lugs.

Cat. No.
30417 D-Ring (one per package)

PENTAX

Accessories

- **Miscellaneous**

Lens Caps

Whenever the lens is not being used it should be protected from dirt, dust and foreign matter. Most Pentax SMCP-M lenses accept 49mm lens caps. Refer to the lens specification chart for the correct size (filter size) if not otherwise indicated below. 49mm, 52mm and 58mm lens caps are spring-loaded and are easily attached and removed from the lens. All other size lens caps are slip-on. A lens cap is supplied with every Pentax Lens.

Cat. No.

31490 49mm Lens Cap
For most SMCP-M lenses.
31511 52mm Lens Cap
31571 58mm Lens Cap
31651 67mm Lens Cap
31701 77mm Lens Cap
31850 85mm Lens Cap (400/5.6)
31601 Lens Cap for 17mm f/4 Fish Eye
31750 Lens Cap for 15mm f/3.5

Rear Lens Cap (B), (S)

Whenever the lens is not attached to the camera body, a rear lens cap should be fitted onto it so that dust, dirt or other foreign matter will not get in. A rear lens cap is furnished with each SMC Pentax lens.

Cat. No.

31006 Rear Lens Cap (B),
For Pentax Bayonet Mount Lenses
31001 Rear Lens Cap (S)
For Pentax Screw Mount Lenses

Body Cap (B), (S)

A body cap should be fitted onto the camera body whenever the lens has been removed so that dust, dirt and other foreign matter cannot get in. A body cap is furnished with each Pentax camera body.

Cat. No.

31007 Body Cap (B)
For Pentax Bayonet Mount Cameras
31002 Body Cap (S)
For Pentax Screw Mount Cameras

PENTAX
Accessories

Right-Angle Finders

Pentax Right-Angle Finders, also referred to as refconverters, serve as an invaluable aid when copying. Working from a low angle, or whenever it is difficult to view directly through the viewfinder.

Right-Angle Finder-A
Right-Angle Finder II

These Right-Angle Finders are extremely easy to use as the image appears exactly as it does when viewing directly through the viewfinder of the camera (non-reversed and laterally correct image). These Right-Angle Finders have provision for diopter adjustment and are supplied with rubber eyecups. 360° rotation. Right-Angle Finder-A has a built-in 2X magnifier which is brought into action by simply moving a switch.

Cat. No.

30148 Right-Angle Finder-A w/Case
(For the Pentax SF cameras, M-series cameras, Super Program, Program Plus and LX)

30153 Right-Angle Finder II w/Case
(For Pentax K1000, KX, K2, K2DMD and most screw mount cameras)

Eyecups

Rubber eyecups fit over camera's eyepiece for more comfortable viewing.

Cat No.

30116 Eyecup F (SF1 and SF1n)
30117 Eyecup FB (SF10)
30115 Eyecup P (P3n, P3, P5, A3000)
30086 Eyecup M (LX, Super Program, Program Plus, M-series)

Eyecup Blind M

Eyepiece Blind M slides over camera eyepiece to prevent light from entering and affecting exposure during time exposures or when camera is used on a tripod.

Cat. No.

31011 Eyepiece Blind M (SF1n, SF10, SF1, P3n, P3, P5, A3000, Super Program, Program Plus, M-series)

Right-Angle Finder I

The image in Right-Angle Finder I appears laterally reversed (backwards). Therefore if it were to be used with the Pentax KX, K2 or K2DMD, the figures in the shutter speed scale and/or aperture read-out in the viewfinder would appear backwards, making it inconvenient to use. For this reason, this Right-Angle Finder is only recommended for use with the Pentax K1000 or KM.

Cat. No.

30061 Right-Angle Finder-A w/Case
(For Pentax K1000 and KM only)

Earlier Pentax screw-mount cameras accept either Right-Angle Finder I or II.

Magnifiers

Easily clips on to the grooves of the eyepiece to magnify the central portion of the focusing screen 2X for critical focusing. The hinged magnifier can be raised to view the entire focusing screen, and it has a built-in eyepiece correction lens with an adjustable diopter range.

Cat No.

30990 Magnifier FB
(For Pentax SF cameras)

30920 Magnifier-M w/Case
(For LX & Pentax M-series cameras)

30151 Magnifier w/Case (K, S)
(For all other Pentax Bayonet Mount and most Pentax screw-mount cameras)

Diopter Correction SMC Lenses

A clip-on prescription eyepiece designed for eyeglass wearer. SMC Correction Lenses are available in −5, −4, −3, −2, +1, +2, and +3 (Diopter). Since the eyepiece lens of −1.0 D, a farsighted person normally requiring +2 D, should utilize a +3 D (+2 D − [−1.0 D] = +3 D) SMC Correction Lens. Similarly, a nearsighted person normally requiring −2 D should utilize a −1 D (−2 D −[−1.0 D]= −1 D) SMC Correction Lens. SMC Diopter Correction lenses are supplied with adapters designed to fit specific Pentax Cameras as indicated below. Adapters are available separately either as replacements, or for those wishing to obtain diopter correction lenses from their optometrist.

Cat No.

For Pentax SF and M-series Cameras:

30731 Diopter Correction SMC Lens w/Adapter-M[−5]
30732 Diopter Correction SMC Lens w/Adapter-M[−4]
30733 Diopter Correction SMC Lens w/Adapter-M[−3]
30734 Diopter Correction SMC Lens w/Adapter-M[−2]
30735 Diopter Correction SMC Lens w/Adapter-M[−1]
30736 Diopter Correction SMC Lens w/Adapter-M[+1]
30737 Diopter Correction SMC Lens w/Adapter-M[+2]
30738 Diopter Correction SMC Lens w/Adapter-M[+3]
30283 Diopter Correction Lens Adapter-M Only, with rubber eyecup. Accepts 6x7 Diopter Correction Lenses

For all other Pentax Bayonet & Screw Mount Cameras:

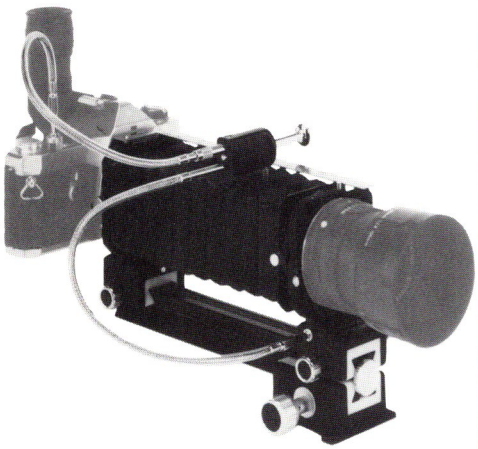
30722 Diopter Correction SMC Lens w/Adapter (K,S) [−4]
30723 Diopter Correction SMC Lens w/Adapter (K,S) [−3]
30724 Diopter Correction SMC Lens w/Adapter (K,S) [−2]
30725 Diopter Correction SMC Lens w/Adapter (K,S) [−1]
30726 Diopter Correction SMC Lens w/Adapter (K,S) [+1]
30727 Diopter Correction SMC Lens w/Adapter (K,S) [+2]
30728 Diopter Correction SMC Lens w/Adapter (K,S) [+3]

PENTAX

Close-Up Accessories

Auto Bellows

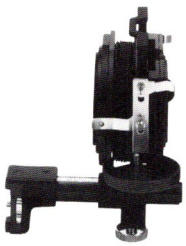
The Pentax Auto Bellows inserted in between a Pentax Bayonet camera and any of the Pentax Bayonet lenses is all you need to be ready for a wide range of different types of photography from close-up work to macro-photography. And with the addition of the manual or automatic extension tubes, you have the complete range from the closest of close-up work to macrophotography. The lenses can also be attached to the front bellows plate in reverse, so there is no need for a reverse adapter. It is also equipped with a double cable release which retains the automatic diaphragm feature of the lens (except when the lens is reversed on the lens mount). Although stop-down exposure metering must be employed, when the Auto Bellows is used with any of the Pentax Automatic Cameras aperture priority exposure automation is retained. Together with the Slide Copier, you can also reproduce slides and film strips.



Auto Bellows A-Set

Auto Bellows can be extended from 38mm to 170mm in the normal position. This unit provides a lens-reversing feature on the front plate, a double cable release for operating the automatic diaphragm and a measuring scale that indicates how far the bellows has been drawn out both with the lens in a normal and reversed position. The movable tripod receptacle is mounted on a single rack-and-pinion track. The Auto Bellows has a minimum extension of 38mm; the minimum magnification is 0.73 with a 50mm lens.

Cat. No.
30273 Auto Bellows A-Set
Supplied with removable 49mm adapter for most SMCP (49mm filter size) Pentax Bayonet-Mount lenses. With adapter removed, 52mm filter size Pentax Bayonet-Mount lenses will fit in reversed lens position.



Slide Copier (A) for Auto Bellows A

The Slide Copier attaches to the front of the Auto-Bellows A-Set. With a standard lens, not reversed, one-to-one copies are attainable. With the lens reversed, magnifications up to about 1.5 are attainable which will crop the original slide. The slide can move in the carrier to change image composition. Slide Copier unit accepts mounted or unmounted 35mm film (24×36mm) or filmstrips. Supplied with bellows and frosted glass for even illumination.

Cat. No.
30211 Slide Copier (A) for Auto Bellows A-Set
Supplied with 49mm removable adapter.
Pentax screw-mount lenses may be used with Auto Bellows A-Set.

49mm and 52mm filter size screw-mount lenses will reverse.

Microscope Lens Adapter (B)

Microscope Lens Adapter (B) is used to adapt special-purpose objective lenses (Olympus M plan 1.3X, 2.5X, 5X, 10X, 20X) or special-purpose macro lenses (Zuiko Macro 20mm f/3.5, Zuiko Macro 38mm f/3.5) to the Pentax Bayonet Mount. The special lenses are merely screwed into one side of the adapter and the other fits directly to the Pentax bayonet camera mount. When fitted to the Auto Bellows A-Set or Bellows Unit III this adapter permits varied macro magnifications from 2X to 10X. When used with any Pentax Automatic Camera aperture priority exposure automation is retained.

Cat. No.
30045 Microscope Lens Adapter (B)

- **For Photomicrography**

Microscope Adapter

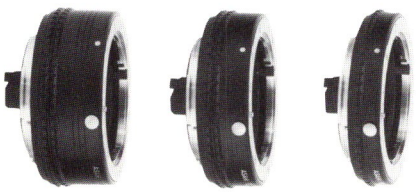
This adapter is designed to fit the camera body directly onto a microscope. It can be used with any microscope having a 25mm outside diameter tube. Consists of Adapter Main Tube, Fastener Tube and Light Sealing Tube. Pentax Bellows Unit may be added for even greater magnification. When used on any Pentax Automatic camera aperture priority exposure automation is retained.

Cat. No.
30044 Microscope Adapter (B)

(B) — Pentax Bayonet Mount

PENTAX

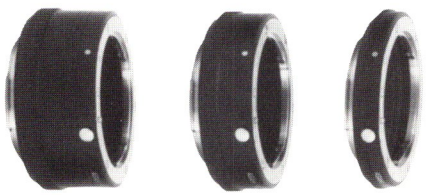
Close-Up Accessories



Auto Extension Tube Set

The Auto Extension Tube Set consists of three different tubes (12mm, 19mm, 26mm), which can be used either individually or in combination. This set allows you the convenience of automatic diaphragm operation and open-aperture metering.

Cat. No.
30535 Auto Extension Tube Set (B) w/Case



Manual Extension Tube Set

The Manual Extension Tube Set provides manual diaphragm operation and stop-down metering. The three tubes provide individual extensions of 9.5mm, 19mm and 28.5mm.

Cat. No.
30525 Manual Extension Tube Set (B) w/Case
30520 Manual Extension Tube Set (S) w/Case

Helicoid Extension Tube

The "Adjustable Extension Tube," the internal helicoid provides an infinitely stepless adjustment range from 26.5mm to 46.5mm. Manual diaphragm and stop-down metering operations are required with all lenses. When the Helicoid Extension Tube is used with any automatic camera full exposure automation is retained. May be combined with either Auto or Manual Extension Tubes for greater magnification.

Cat. No.
30542 Helicoid Extension Tube (B) w/Case

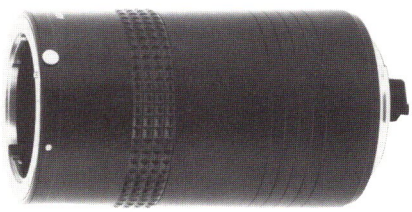
Note:
Any extension tube may be used simply to decrease the minimum focusing distance of a lens. When using any extension tubes you must keep in mind that the distance and depth-of-field scales on the lens cannot be used. For magnifications greater than life-size (1:1) reversal of the lens is recommended. (Use Reverse Adapter B or S).

(B) — Pentax Bayonet Mount
(S) — Pentax Screw Mount

Life-Size Auto Extension Tube (B) 50mm

When used in conjunction with the 50mm macro lens, this auto extension tube will give 2.02X magnification, and will provide 1.7X when used with the 100mm macro lens.

Cat. No.
30551 Life-Size Auto Extension Tube (B) 50mm w/Case



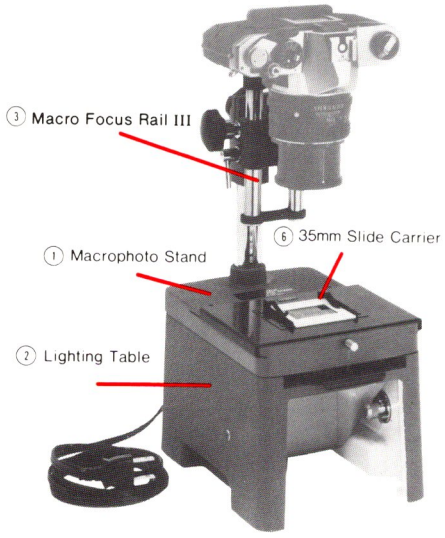
Life-Size Auto Extension Tube (B) 100mm

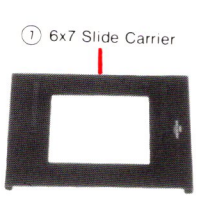
2.4X magnification is obtained when using this extension tube with the 100mm macro lens, and will provide 3.07X when used with the 50mm macro lens.

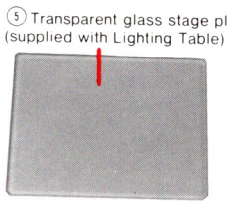
Cat. No.
30556 Life-Size Auto Extension Tube (B) 100mm w/Case

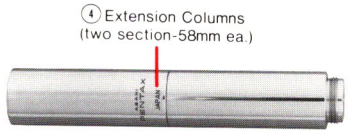
PENTAX

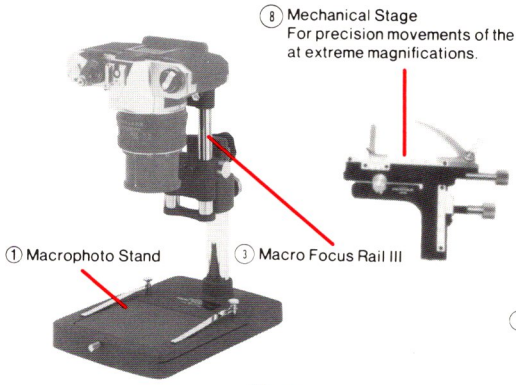
Close-Up Accessories











Macrophoto Stand/Lighting Table

The Macrophoto Stand ① is an extremely compact unit convenient for ultra close-ups and macro-photography. Includes a reversible gray/black stage plate; the gray slide has an 18% reflectivity, making it ideal for taking test exposure readings. A "trans-illuminating" Lighting Table ② is also available as a Macrophoto Stand accessory. By replacing the gray/black stage plate of the Macrophoto Stand with a transparent glass stage plate ⑤, permeable lighting is provided from beneath the stage via a built-in tungsten lamp. For brighter lighting, a built-in mirror may be angled to reflect light from Pentax electronic flash units; reflector lamps; a 35mm slide projector and other commercially available lighting sources. The Macrophoto Stand/Lighting Table combination also comes in handy for slide copying when the accessory 35mm format and 6×7 format ⑦ slide carriers are employed. Each item ordered separately:

Cat. No.
30078 Macrophoto Stand
30112 Lighting Table
30072 Extension Columns
30073 35mm Slide Carrier
37993 6x7 Slide Carrier
30080 Mechanical Stage
30076 Macro Focus Rail III (required)

Reverse Adapter

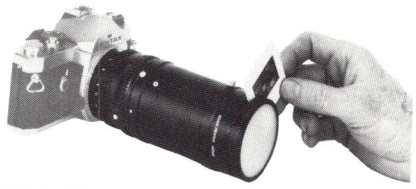
Permits 49mm or 52mm lenses to be mounted on a Pentax camera body or extension tubes in reverse position for better image quality at magnifications greater than 1.0 (1:1), and for high magnifications with less extension. Lens aperture is adjusted manually, using the aperture ring on the lens, and the focus control on the lens has no effect. When used with a Pentax Automatic Camera aperture priority exposure automation is retained within the measurable range. Both screw-mount and bayonet mount lenses may be used with either type of body by use of the appropriate reverse adapter.

Cat. No.
30332 Reverse Adapter (B) 49mm For Pentax Bayonet Mount Lenses
37955 Reverse Adapter (B) 52mm For Pentax Bayonet Mount Lenses with 52mm filter threads
30331 Reverse Adapter (S) 49mm For Pentax Screw Mount Lenses with 49mm filter threads. 52mm filter size Pentax Screw mount lenses may be used with this adapter with 49→52mm Step-Up Adapter Ring

Macro Focus Rail III

When close-ups are to be made with a large magnification (5X or more), focusing can easily be accomplished by using the Macro Focus Rail III for precisely setting the position of the lens, or extension tube. This device is also useful for making close-ups with a predetermined magnification. (If the lens alone is moved for focusing, it causes a change in magnification.) Required for use with the Macrophoto Stand/Lighting Table. Provided with a tripod receptacle.

Cat. No.
30076 Macro Focus Rail III



Slide Holder 1X (B)

Slide Holder 1X (B) serves the same purpose as Slide Copier (A) for Auto Bellows (A). When used with an Auto Extension Tube (B) or Extension Tube (B), this unit allows the standard lens or the 50mm macro lenses to make slide duplications with 1:1 magnification. Lens must be reversed, and Reverse Adapter is required.

Cat. No.
37948 Slide Holder 1X (B)

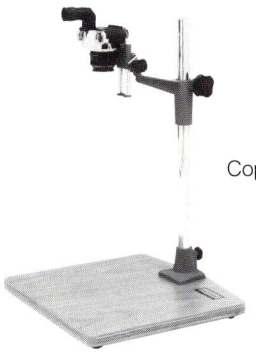
Close-Up Lenses

An SMC Close-Up Lens can be threaded into the front lens frame of an SMC Pentax lens for crisp macrophotography. The entire range gives you the convenience of automatic diaphragm setting and open-aperture metering. These attachment lenses are available in the following types:

Type	SMC Pentax Lens	Lens-to-subject distance range	Magnification		Cat. No.
S40	50mm f/1.7, 50mm f/1.4, 50mm f/2.0	48.0 ~ 27.0cm	1/7.6 ~ 1/3.5	49mm	**30451**
S25	50mm f/1.7, 50mm f/1.4, 50mm f/2.0	32.6 ~ 22.0cm	1/4.8 ~ 1/2.7	49mm	**30450**
T80	85mm ~ 150mm	91.6 ~ 50.5cm	1/9.4 ~ 1/4.2	49mm	**30452**

PENTAX

Copying Accessories



Copy Stand III

Copy Stand III

The Copy Stand aligns the camera quickly and accurately for copy work. It is equipped with a critical focusing knob for fine adjustment, and an 18% standard gray reflector panel which facilitates exposure measurement. It will accept all Pentax 35mm Bayonet and Screw-Mount Cameras. Extension tubes and/or bellows units are easily employed.

Copy Stand III is a fixed copying stand of sturdy construction, it is 73cm (28.5″) in height when assembled and weighs 5.5 kgs (12.1 lbs) without camera/lens. Copy Stand III accepts Table Clamp as accessory.

Cat. No.
30075 Copy Stand III

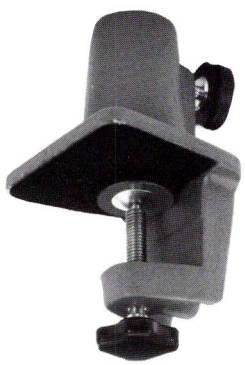


Table Clamp for Copy Stand III

The table clamp can be attached to any desk or table top less than 6 cm (2.3″) thick, thus enabling fast and easy assembly of the stand where the baseboard is impractical or undesired. The table clamp weights 620 gr (21.9 oz).

Cat. No.
30054 Table Clamp for Copy Stand III

Electronic Cable Releases

These cable releases trip the shutter electrically, without transferring mechanical movement to the camera. Pressing the cable release switch partway will activate the camera's metering and/or autofocusing, and a locking switch is provided for long time exposures. Each cable is 3½ ft. long.

Cat. No.
37241 Cable Switch A (645, P3n, P3, P5, A3000, Super Program, Program Plus)
37242 Cable Switch F (SF1n, SF10, SF1, IQZoom 900, IQZoom 105 Super)

Cable Releases

A cable release is a "must" for preventing camera movement, especially when the camera is being used on a tripod, copy stand or copipod. This unit has a locking collar to allow time exposures. Available in the following types:

Cat. No.
30098 Cable Release 30 (30 cm Long) 12″
30099 Cable Release 50 (50 cm Long) 20″

Double Cable Release for Auto Bellows A-Set

Permits use of the fully automatic diaphragm of Pentax lenses in the normal position. (Supplied with all auto bellows units.)

Cat. No.
30040 Double Cable Release A

PENTAX

Other Accessories

Battery Accessories

Cat. No.

37357 Battery Cord A. . . holds camera batteries in pocket for cold weather shooting. 4 ft. power cord attaches to camera's battery compartment. For Super Program, Program Plus, ME Super, MG.

37009 Lithium Battery Grip FB. . . replacement lithium battery grip for SF1, SF1n. Holds short or long style 6 volt lithium battery.

39919 6 Volt Lithium Battery 2CR5 for SF1, SF1n

37007 AA Battery Grip FB. . . replacement battery grip for SF1, SF1n. Holds 4 AA alkaline batteries (Nicads not recommended.) Slightly larger than Lithium Battery Grip FB: will not fit into Back Case FB.

37358 Remote Battery Pack F Set. . . two piece set for cold weather shooting with SF1, SF1n. Remote Battery Pack F holds 4 AA alkaline batteries (Nicads not recommended) warm in pocket and connects with power cord to Terminal Grip F mounted on camera.

37359 Remote Battery Pack F. . . available separately.

37128 Terminal Grip F. . . available separately.

Tripod Accessories

Cat. No.

37383 Tripod Spacer M. . . a plastic spacer for European-style tripods with longer mounting screws. Prevents screw from bottoming-out in camera's tripod socket.

30419 Adapter for Tripod. . . spacer with extra depth for use with SMCP 400-600mm and SMCP AF Zoom 35-70 (for ME-F) lenses.

38465 Quick Shoe Set 35mm. . . a two-part quick release system for mounting/dismounting cameras onto a tripod. The Quick Shoe attaches to the camera's tripod socket and slides into the Quick Shoe Adapter mounted on the tripod. The set includes **#38456** Quick Shoe and **#38459** Quick Shoe Adapter.

38456 Quick Shoe. . . additional shoes can be mounted on separate cameras.

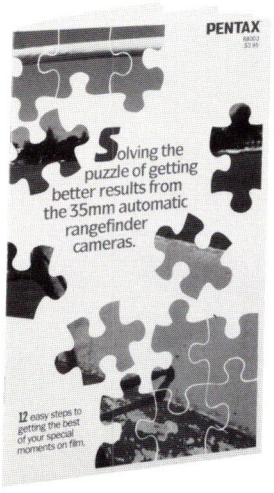
38459 Quick Shoe Adapter. . . for mounting on additional tripod(s).

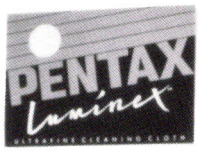
Camera Grips

Cat. No.

37127 Grip for Super Program, Program Plus. . . replacement finger grip mounts onto front of camera.

37008 Hand Grip for SF1, SF10, SF1n. . . Hand Grip with adjustable strap mounts onto strap logs of SF cameras so camera can hang from right hand.





Miscellaneous Accessories

Cat. No.

88020 Lens Cleaning Cloth. . . 9″×9″ microporous polyester fabric cleans off dust, oil without leaving any residue. Can be washed for reuse.

88003 "How To" Booklet for 35mm Lens Shutter Cameras. . . 18 pages of shooting tips and suggestions for rangefinder/zoom cameras.

88002 "How To" Booklet for 35mm SLR Cameras. . . 34 pages of shooting tips and suggestions for SF autofocus cameras.

88100 "Shoot Like A Pro" VHS SLR Training Tape. . . covers the basics of equipment selection, exposure, composition, etc. for 35mm SLR owners.

PENTAX
Other Accessories

• Lens Adapters

Mount Adapter (B)

The Mount Adapter B fits the Pentax bayonet mount cameras and permits screw-mount Takumar lenses to be used on them. When used with this adapter, a screw-mount (Universal Thread) lens will focus to infinity, however it cannot be used for automatic diaphragm or open aperture metering. When used on any Pentax automatic camera aperture priority camera automation is retained when using screw-mount lenses and accessories.

Cat. No.
30120 Mount Adapter (B)

Adapters are not available to allow Pentax screw-mount cameras to accept Pentax bayonet mount lenses.

6x7 Lens Adapter

This adapter fits Pentax Bayonet cameras and permits the use of 6×7 SMCT, SMCP Lenses with them. With this adapter, the lens will focus to infinity, however, it cannot be used with automatic diaphragm or open aperture metering. When used on any Pentax automatic camera full exposure automation is retained within the measurable range. When used with 6×7 SMCT, SMCP lenses with a built-in tripod socket, this adapter allows the camera to change its position vertically or horizontally while the lens remains on the tripod.

Cat. No.
37954 6x7 Lens Adapter (B)
For Pentax Bayonet Mount Cameras

Step-Up Ring

Step Up Rings increase the lens' existing filter size to attach larger filters and accessories.

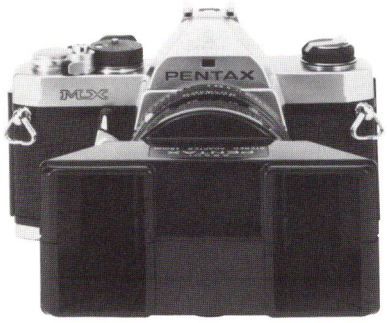
Cat. No.
30141 49→52mm Step Up Ring
30145 49→58mm Step Up Ring
30143 58→77mm Step Up Ring

Step-Down Ring

Step Down Rings reduce the lens' existing filter size to attach smaller filters and accessories (beware of possible vignetting when using smaller sizes than recommended for a lens).

Cat. No.
30142 52→49mm Step Down Ring
30146 58→49mm Step Down

• Special Applications



49mm and 52mm Stereo Adapter Stereo Viewer II

Stunning, single-frame, 3-D slides are extremely simple to make. Merely attach the Stereo Adapter to your standard 50 or 55mm lens and shoot at f/5.6 or f/8. After receiving the slides back from your photo-finisher, view them in the Stereo Viewer II. The most dramatic effects are obtained when the subject is photographed from a distance of four meters (13 feet) or less.

Cat. No.
30348 Stereo Adapter 49mm Set for 49mm filter size
30344 Stereo Adapter 52mm Set for 52mm filter size
Above Set(s) include Stereo Viewer II
30347 Stereo Viewer II

Mirror Adapter II

Mirror Adapter II takes pictures at right angles to the lens axis. It can be used with lenses from 135mm to 200mm wih 49mm, 52mm, and 58mm filter sizes.

Cat. No.
30355 Mirror Adapter II

PENTAX
Lens Accessories

•Lens Cases

Hard Lens Cases

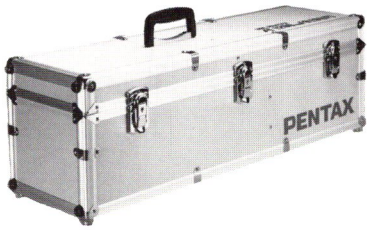
Hard leather cases offer optimum protection for Pentax lenses. They are individually designed for each lens, and are supplied with a strap.

Soft Lens Cases

Soft, padded, nylon cases with velcro closures are available for SMCP-F lenses.

Lens Hoods

The main purpose of a lens hood is to shield the lens from the light outside the picture area, which might otherwise cause unwanted reflections inside the lens.



Trunk Case

Exclusive metal trunk case supplied with some of the larger telephoto and zoom lenses.

F-Lens Accessory Chart

Lens Product Code	Description	Lens Hood	Product Code	Lens Soft Case	Product Code
22517	F 28/2.8	49mm	34117	S70-70	33923
20837	F 50/1.7	49mm Round Rubber	34260	S70-70	33923
20828	F 50/1.4	49mm Round Rubber	34260	S70-70	33923
23417	F 135/2.8	Built-in		S80-160	33925
24320	F*300/4.5	Built-in		SS10-22	33435
24880	F*600/4	Built-in		Trunk Case	33473
27007	F 24-50Z	RH-B60	34792	S80-120	33924
27187	F 28-80Z	RH-B60	34792	S80-120	33924
27177	F 35-70Z	RH-RA49	34773	S70-70	33923
27477	F 35-105Z	RH-B58	38702	S80-120	33924
27197	F 35-135Z	RH-A60	34762	S80-160	33925
27357	F 70-210Z	RH-RB49	34774	S80-160	33925
27900	F 250-600Z	Built-in		N/A	
28180	F 50/2.8 Macro	Not Needed		S80-120	33924
28990	F 100/2.8 Macro	Not Needed		S80-160	33925

(1) Classification by Quality:

RH — Rubber Hood
MH — Metal Hood
PH — Plastic Hood

(2) Classification by Shape:

R — Round shape
S — Square shape

(3) Classification by Depth of Hood:
According to the depth of hood, hoods classified by A-/B-/C-type.

(4) Classification by Diameter:

58 — Hood diameter is 58mm
60 — Hood diameter is 60mm
67 — Hood diameter is 67mm
etc.

Please refer to charts for lens/hood compatibility.

PENTAX
Lens Accessories

A-Lens Accessory Chart

Lens Product Code	Description	Lens Hood	Product Code	Lens Case	Product Code
Standard					
20697	50/2.0	49mm 49mm 49mm	34020 34021 34260	HA-90B	33881
20897	50/1.7	49mm 49mm 49mm	34020 34021 34260	HA-90B	33881
20887	50/1.4	49mm 49mm 49mm	34020 34021 34260	HA-90B	33881
20987	50/1.2	52mm	34000	HB-90	33878
Wide Angle					
22010	15/3.5	N/A		HE-120	33875
21300	16/2.8 (Fisheye)	N/A		HD-100	33891
22870	20/2.8	MH-RE67	34130	HD-100	33891
22690	24/2.8	52mm	34061	HA-90	33880
22950	28/2.0	49mm	34110	HA-90B	33881
22997	28/2.8	49mm	34110	HA-90B	33881
22770	35/2.0	49mm	34110	HA-90B	33881
22790	35/2.8	49mm	34110	HA-90B	33881
Telephoto					
23070	A*85/1.4	MH-RA67	34325	HG-115E	33874
23690	100/2.8	Built-in		HA-98	33882
23530	A*135/1.8	RH-A77	38721	HE-169B	33876
23497	135/2.8	Built-in		HB-120	33883
24130	A*200/2.8ED	Built-in		HF-185	33877
24297	200/4.0	Built-in		HB-152	33885
24380	A*300/2.8ED(IF)	Built-in		Trunk Case	33434
24390	A*300/4.0	Built-in		HE-189	33887
24590	A*400/2.8ED(IF)	Built-in		Trunk Case	33453
24570	400/5.6	Built-in		HE-300	33873
24740	500/4.5	Built-in		N/A	
24890	A*600/5.6ED(IF)	Built-in		Trunk Case	33871
24940	1000/8.0	Built-in		Trunk Case	33491
24960	1000/11.0 Reflex	Built-in		Hard Case	33492
24970	A*1200/8.0ED(IF)	Built-in		Trunk Case	33494
24980	2000/13.5 Reflex	Built-in		Trunk Case	33493
Macro					
28190	50/2.8	Not Required		HA-90	33880
28970	100/2.8	Not Required		HG-140	33872
28980	100/4.0	Not Required		HB-120	33883
28800	A*200/4.0ED	Built-in		HF-185B	33895
Special Purpose					
22561	28/3.5 Shift	N/A		Hard Case	33214
23160	85/2.2 Soft Focus	49mm	34391	N/A	
28240	100/4.0 Bellows	52mm	34000	Hard Case	33821
Zoom					
27037	24-50/4.0	RH-B60	34792	HB-120	33883
27017	28-80/3.5-4.5	RH-B-60	34792	HB-120	33883
27087	28-135/4.0	RH-A80	34763	HE-169	33886
27227	35-70/4.0	58mm	34770	HB-105	33889
27137	35-70/3.5-4.5	RH-RA49	34773	HA-90	33880
27097	35-105/3.5	RH-B70	38711	HD-143	33884
27167	35-135/3.5-4.5	RH-A60	34762	HB-152B	33893
27337	35-210/3.5-4.5	RH-B70	38711	HD-190C	33894
27297	70-210/4.0	Built-in		HD-190	33888
27640	135-600/6.7	Built-in		Trunk Case	33761
27940	400-600/8.0-12.0 Reflex	Exclusive-with Lens		Hard Case	33790

PENTAX
Filters

Pentax filters are manufactured with the same high performance optical standards that have made Pentax lenses the basis of comparison throughout the world. A full range is offered to suit every application.

SMC

Super-Multi-Coated Pentax Filters are designed specifically for Super-Multi-Coated lenses, but can be used with any lens. SMC Filters minimize reflections and glare that might be introduced by a filter.

Filter Applications

U.V., Ultra Violet
Absorbs ultra-violet light rays. Helps to prevent haze in distant scenes. Can be used at all times without exposure factor, thus giving good protection to the lens. Primary use—B&W Film. Exposure Factor 1.

Ghostless U.V.
A "ghost" image is the image light reflected back to the filter surface, re-transmitted through the lens, forming a duplicate image on the film plane. Use this filter to eliminate ghost images. This filter also provides the same protection as the above UV filter. Primary use—B&W Film. Exposure Factor 1.

Y-1 (Y44), Light Yellow (6)
Gives a slight emphasis on total separation between sky and clouds. Good choice for those who desire a subtle change in blue absorption. Primary use—B&W Film. Exposure Factor 1.5.

Y-2 (Y48), Medium Yellow (8)
Most popular of all filters for B&W Photography. Gives most accurate total rendition for panchromatic film. Primary use—B&W Film. Exposure Factor 2.

O-2 (O56), Medium Orange (23A)
Absorbs ultra-violet and blue light, thus making blue tones appear darker. Excellent for marine scenes, aerial photography and copying. Primary use—B&W Film. Exposure Factor 3.

Y-G, Yellow Green
Ideal outdoor filter to render more pleasing flesh tones in portraits against the sky than you can obtain with a yellow filter. Also renders beautiful black and white pictures of landscapes, flowers, blossoms and natural sky appearance. Primary use—B&W Film. Exposure Factor 2.

R-2 (R60), Medium Red (25)
Use with panchromatic or infra-red films to achieve maximum contrast. This filter will create dramatic sky effects, simulating moonlight scenes in mid-day by slight under-exposure. Cuts through fog, haze and mist by absorbing excessive blue and ultra-violet light rays. Excellent copying filter for blueprints. Primary use—B&W Film. Exposure Factor 6.

Skylight (1A)
Recommended for use outdoors at all times to reduce excess blue and to add warmth to your subjects. Also use in open shade to reduce blue. Gives truer flesh tones when an excess of blue is prevalent. Primary use—Daylight Color Reversal Film. Exposure Factor 1.

Cloudy (81A)
Slight warming filter. Cuts through haze, and prevents excessive bluish results, thereby giving warm tones in open shade and cloudy days. More effective haze-cutting than the Skylight filter. Primary use—Daylight Color Reversal Film. Exposure Factor 1.5.

Morning & Evening (82A)
Slight cooling filter. Using this filter early in the morning and late in the afternoon to prevent excessive warm rendition, shade and cloudy days. More effective haze-cutting than the Skylight filter. Primary use—Daylight Color Reversal Film. Exposure Factor 1.5.

Flash (80C)
Use with clear wire-filled flash bulbs. . . not with blue flash bulbs. More effective than the Morning & Evening filter in preventing excessive warmth. Primary use—Daylight Color Reversal Film. Exposure Factor 2.

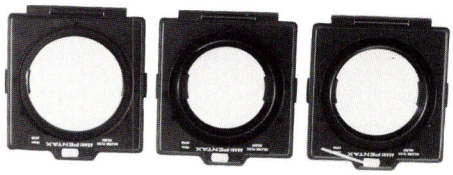
Flood (80B)
Photo flood tends to render excessive warm effect on your color film. Use this filter to "cool" it down to get correct color rendition. Primary use—Daylight Color Reversal Film. Exposure Factor 3.

Polarizer
Polarizers eliminate unwanted surface reflections and glare, darken blue skies, penetrate atmospheric haze, and add richness to colors. Primary use—B&W and Color Film. Exposure Factor 2½-3.

Circular Polarizer
For LX and SF-series auto focus SLRs.

PF Filters

The PF filter, like an ordinary filter, screws in the front frame of a telephoto or ultra-telephoto lens to protect its front element from being damaged. Made of a Super-Multi-Coated optical glass, it does not affect the spectrum performance of the master lens.



Gelatin Filter Holder

The Pentax Gelatin Filter Holder accepts three-inch square Kodak or other gelatin filters. The accessory filter frame is used in conjunction with the holder, while the Kodak gelatin filter frame can also be used. Once the filter is inserted into its frame it is simply sandwiched in the holder—a feature which makes filter changes extremely easy.

The holder mounts conveniently to the front of the lens in the same manner as a spring-mounted lens hood. Five sizes are available: 49mm, 52mm, 58mm, 67mm, and 77mm.

PENTAX
Filters

Regular Coating

Type	Size and Catalog No.				
	49mm	52mm	58mm	67mm	77mm
Ultra Violet (UV)	35001				
Skylight	35111				
Light Yellow (Y-1)	35014				
Medium Yellow (Y-2)	35012				
Yellow-Green (Y-G)	35015				
Medium Red (R-2)	35016				
Medium Orange (O-2)	35013				
Morning & Evening (82A)	35113				
Flash (80C)	35114				
Flood (80B)	35115				
Polarizer	35019				
Circular Polarizer	35094	35266	38601	38611	35182
Cloudy (81A)	35112				

SMC

Type	Size and Catalog No.				
	49mm	52mm	58mm	67mm	77mm
Ultra Violet (UV)	35601	35401	35431	35451	35481
Medium Yellow (Y-2)	35602	35402	35432	35452	35482
Medium Orange (O-2)	35603	35403	35433	35453	35483
Medium Red (R-2)	35604	35406	35436	35434	35484
Skylight	35605	35501	35531	35551	35581
Cloudy (81A)	35606	35502	35532	35552	35582

SMC Protective Front (PF)

Size	Catalog No.	Compatible Lenses
77mm	35620	A* 135/1.8, A* 200/2.8 ED, A* 300/4, A 400/5.6, A* 645 300/4 ED (IF)
112mm	35621	A* 300/2.8 ED (IF), A* 600/5.6 ED (IF), F* 250-600/5.6 ED, 67 400/4 ED (IF)
128mm	35622	M* 67 800/6.7 ED (IF)
145mm	35623	A* 400/2.8 ED (IF)
150mm	35624	A* 1200/8 ED (IF), F* 600/4 ED (IF)

Gelatin Filter Holders

Size	Catalog No.	Description
49mm	35241	Gelatin Filter Holder w/Frame
52mm	35242	Gelatin Filter Holder w/Frame
58mm	35243	Gelatin Filter Holder w/Frame
67mm	35240	Gelatin Filter Holder w/Frame
77mm	35244	Gelatin Filter Holder w/Frame
	35246	Frame for Gelatin Filter Holder

PENTAX

Lens Caps

Lens Caps

Whenever the lens is not being used it should be protected from dirt, dust and foreign matter. Most Pentax SMCP-M lenses accept 49mm lens caps. Refer to the lens specification chart for the correct size (filter size) if not otherwise indicated below. 49mm, 52mm and 58mm lens caps are spring-loaded and are easily attached and removed from the lens. All other size lens caps are slip-on. A lens cap is supplied with every Pentax lens.

Cat. No.

31491 Lens Cap F 49mm
31515 Lens Cap F 52mm
31573 Lens Cap F 58mm
31653 Lens Cap F 67mm
31572 58mm Lens Cap A
31652 67mm Lens Cap A
31702 77mm Lens Cap A
31601 Lens Cap for 17mm f/4 Fish Eye
31750 Lens Cap for 15mm f/3.5
31190 127mm Lens Cap (500/4.5)
31440 143mm Lens Cap (1000/8.0)

Rear Lens Cap (B), (S)

Whenever the lens is not attached to the camera body, a rear lens cap should be fitted onto it so that dust, dirt or other foreign matter will not get in. A rear lens cap is furnished with each SMC Pentax lens.

Cat. No.

31006 Rear Lens Cap (B),
For Pentax Bayonet Mount Lenses
31001 Rear Lens Cap (S),
For Pentax Screw Mount Lenses

Body Cap (B), (S)

A body cap should be fitted onto the camera body whenever the lens has been removed so that dust, dirt and other foreign matter cannot get in. A body cap is furnished with each Pentax camera body.

Cat. No.

31007 Body Cap (B)
For Pentax Bayonet Mount Cameras
31002 Body Cap (S)
For Pentax Screw Mount Cameras

PENTAX

Cases, Bags & Straps

Camera Cases

Auto Focus SLRs (SF models)

FB eveready style case is black vinyl with a leather-like finish and a soft nap interior. The Back Case attaches to the camera's tripod socket, and the Front Case snaps onto the Back Case. A film window is provided in the Back Case. These cases will fit any SF body with the standard lithium battery grip.

Cat. No.

32320 Soft Case FB. . .includes Back Case FB and Front Case FB (S)
32322 Front Case FB (S). . .fits F-50 standards, 28, 35-70
32323 Front Case FB (M). . .fits F-50 Macro, 135, 24-50, 28-80, 35-105
32324 Front Case FB (L). . .fits F-100 Macro, 35-135, 70-210
32325 Back Case FB. . .fits SF body (without Data Back)
32326 Back Case FB, Quartz Date. . .fits SF body with Data Back (FB)

P3n

PN eveready style two-piece case is black vinyl with leather finish and soft nap interior. Back Case snaps onto camera strap lugs and Front Case snaps onto Back Case. These will also fit the Pentax P3 camera.

Cat. No.

32330 Soft Case PN (S). . .fits F-50 standards, 28, 35-70
32340 Soft Case PN (L2). . .fits F50 & 100 Macros, 135, 24-50, 28-80, 35-105, 35-135, 70-210
32331 Back Case PN. . .fits P3n/P3 body only
32572 Front Cover P (S). . .fits F-50 standards, 28, 35-70
32573 Front Cover P (L2). . .fits F-50 & 100 Macros, 135, 24-50, 28-80, 35-105, 35-135, 70-210

K1000

Soft Case for K1000 is two-piece eveready style made of soft black vinyl. Attaches to tripod socket. Will also fit KX and KM cameras and most screw mount cameras.

Cat. No.

32630 Soft Case for K1000/K1000SE

Front Case T-1 Front Case T-2 Front Case T-3

Front Covers for M-Series, Super Program/Program Plus Soft Cases

Telephoto front cases provide eveready case protection to cameras with larger than "normal" lenses attached. These front covers have a flap which covers the top of the camera and meets another flap from the bottom of the front cover; these two flaps attach together with a Velcro closure (no snaps). See the chart below for T-Front Cover and lens matching.

Front Cover: T-1, T-2, T-3, will accept the lenses listed below and any other lenses having similar dimensions.

Lens	T-1	T-2	T-3	Standard Eveready Front
SMCP 18/3.5	X			
SMCP-M 20/4				X
SMCP-A 24/2.8	X			
SMCP 24/2.8	X			
SMCP-A 28/2	X			
SMCP-M 28/2	X			
SMCP-A 28/2.8				X
SMCP-M 28/2.8				X
SMCP 30/2.8				X
SMCP-A 35/2	X			
SMCP-M 35/2	X			
SMCP-A 35/2.8				X
SMCP-M 35/2.8				X
SMCP-M 40/2.8				X
SMCP 50/1.2	X			
SMCP-A 50/1.4				X
SMCP-M 50/1.4				X
SMCP-A 50/1.7				X
SMCP-M 50/1.7				X
SMCP-M 50/2				X
SMCP-M 85/2	X			
SMCP-M 100/2.8	X			
SMCP-M 120/2.8	X			
SMCP 135/2.5			X	
SMCP-A 135/2.8		X		
SMCP-M 135/3.5	X			
SMCP-M 150/3.5		X		
SMCP-A 200/4			X	
SMCP-M 200/4			X	
SMCP-M 24 35/3.5	X			
SMCP-A 24 50/4		X		
SMCP-M 24 50/4		X		
SMCP-M 28 50/4.5	X			
SMCP-A 28 135/4			X	
SMCP-M 35 70/3.5 & A		X		
SMCP-A 35 105/3.5			X	
SMCP-M 40 80/2.8		X		
SMCP-M 75 150/4			X	
SMCP-A 50/2.8 Macro	X			
SMCP-M 50/4 Macro	X			
SMCP-M 100/4 Macro		X		

Cat No

32861 Front Cover T-1
32862 Front Cover T-2
32863 Front Cover T-3
32811 Front Cover T-2 for Soft Case LX } Same as 32861, 32862, and
32812 Front Cover T-3 for Soft Case LX } 32863 but designed for larger size of LX.

PENTAX

Cases, Bags & Straps

Soft Case Z-1 Soft Case Z-2 Soft Case Z-3

Z-Soft Cases for M-Series, Super Program/Program Plus

One piece eveready type case, made of extremely flexible synthetic leather which can be crumbled up and stored in your pocket when not in use. Case is designed for M-Series and Super Program cameras with longer than "normal" lenses attached. See the chart below for application information.

Lens	Soft Case Z-1	Soft Case Z-2	Soft Case Z-3
SMCP-A 200/4.0		X	
SMCP-A Zoom 24-50/4.0	X		
SMCP-A Zoom 35-105/3.5		X	
SMCP-A Zoom 28-135/4.0		X	
SMCP-A Zoom 70-210/4.0			X
SMCP 18/3.5	X		
SMCP-M 100/2.8	X		
SMCP-M 120/2.8	X		
SMCP-M 135/3.5	X		
SMCP-M 150/3.5	X		
SMCP-M 200/4.0		X	
SMCP-M Zoom 24-35/3.5	X		
SMCP-M Zoom 24-50/4.0	X		
SMCP-M Zoom 28-50/3.5-4.5	X		
SMCP-M Zoom 45-125/4.0			X
SMCP-M Zoom 75-150/4.0		X	
SMCP-M Zoom 80-200/4.5			X

Cat. No.
32681 Soft Case Z-1
32682 Soft Case Z-2
32683 Soft Case Z-3

Gadget Bags

PTX-16 Gadget Bag

Black durable nylon exterior, padded interior with film loops, movable velcro dividers. Flap with velcro closure, nylon webbing non-slip shoulder strap. Size: 10¾" W × 7" H × 4" D

Cat. No.
84591 PTX-16 Gadget Bag**

SLR System Bag

9½" x8" x5½". Black nylon exterior with red and gray trim. Interior and exterior pockets, moveable interior dividers, plastic feet. Padded shoulder strap and carrying handle.

Cat. No.
84689 SLR System Bag

Compact Gadget Bag

6¾" × 6½" × 4½"
Black nylon with red and gray trim, inside zipper pocket, adjustable shoulder strap.

Cat. No.
84684 Compact Gadget Bag

PTX-22 All Purpose Zoom Bag

PVC lambskin. Holds SLR with zoom lens.
Size: 6½" × 7" × 3⅝"

Cat. No.
84584 PTX-22 All Purpose Zoom Bag**

SLR Holster Bag

6½" x7" x3¼". Black nylon with red and gray trim. Exterior zipper pocket with adjustable shoulder strap.
Fits PZ-10 with 28-80 lens.

Cat. No.
84683 SLR Holster Bag

Camera Straps

Cat. No.
32969 Camera Strap F. . .standard strap for SF cameras. Grey with black trim and red Pentax logo.
32948 SF1 Neck Strap. . .wide banjo strap with terrycloth surface, non-slip shoulder pad, leather reinforcements, and gold SF1 logo.
32962 Neck Strap Super Program, Program Plus. . .black and red webbed nylon strap with Pentax logo.
32951 Standard Neck Strap. . .narrow black webbed nylon strap.
80083 Pentax Fashion Strap. . .wide banjo strap, red and black with white Pentax logo, leather reinforced.
30417 D Ring (one piece). . .split metal ring attaches to camera strap lug for easier strap installation.

** Limited quantities

PENTAX

SF Data Backs

- For SF1, SF10, SF1n
- For Auto Focus SLRs

Interval Data Back F

The Pentax Interval Data Back F attaches to SF cameras and replaces the camera's back cover. It records on the film selected information such as date and time, and also controls the shutter release according to predesigned times and intervals. A simple pushbutton control makes data adjustment fast and easy. All pertinent information is clearly indicated in the external LCD window. The selected data is imprinted on the film by a seven-segment, six-digit LCD and an exposure lamp. The lamp's output is automatically adjusted according to the ISO film speed (ISO 25 to 1600) set on the camera.

Data recording modes

(1) Date (year/month/day, month/day/year or day/month/year)
(2) Time (day/hour/minute or AM-PM/hour/minute)
(3) Six-digit number ("0" to "9" and blank)
(4) One alphabet letter and two-digit count-up number
(5) Blank (no data imprinted)

Interval shooting modes

(1) Shooting start time (within a one-month period)
(2) Interval length (from one second to 99 hours, 59 minutes and 59 seconds)
(3) Frame number (from 1 to 99)
(4) Long-time exposure (from one second to 99 hours)
(5) Precharge signal

Power Source

Two 1.5V lithium or silver-oxide batteries with low battery level warning signaled by a flashing LCD display.

Specifications

Type

LCD date-recording system with interval timer function.

Connection to camera

Replaces the back cover without cord.

Usable camera

Pentax SF1

Recording data

(1) Year/month/day.
(2) Month/day/year.
(3) Day/month/year.
(4) Day (AM/PM)/hour/minute).
(5) Six-digit random number ("0" to "9", "--" and blank).
(6) One alphabet letter and two-digit count-up number.
(7) One alphabet letter and two-digit count-down number.
(8) OFF (no data imprinted).

Recording system

Printed on the back of film by seven-segment, six-digit LED and exposure lamp.

Recording exposure control

Automatic adjustment by ISO film speed (ISO 25 to 1600) set on camera.

Recording confirmation

By flashing "PRINT" indication in external LCD panel.

Interval timer function

(1) Exposure start time (within a one-month period).
(2) Interval length (from one second to 99 hours, 59 minutes and 59 seconds).
(3) Number of exposures (from 1 to 99).
(4) Length of long-time extended exposure (from one second to 99 hours, 59 minutes and 59 seconds).
(5) Precharge signal (to start the charging of an external flash unit attached to the SFX's hotshoe).

External indication

(1) Year/month/day.
(2) Month/day/year.
(3) Day/month/year.
(4) Day (AM/PM)/hour/minute.
(5) Six-digit random number.
(6) Two-digit count-up/-down number.
(7) Exposure start time.
(8) Interval length.
(9) Number of exposures.
(10) Length of long-time exposure.
(11) Recording confirmation (PRINT).

Battery warning

By flashing the entire indicator.

Auto calendar function

Automatic adjustment of months and leap years from 1987 to 2085.

Clock accuracy

±20 sec./month (at 25°C temperature).

Power source

Two 1.5V alkaline or silver-oxide batteries.

Dimensions

144(W) x 57.5(H) x 25.5(D) mm (5.6" x 2.2" 1.0")

Weight

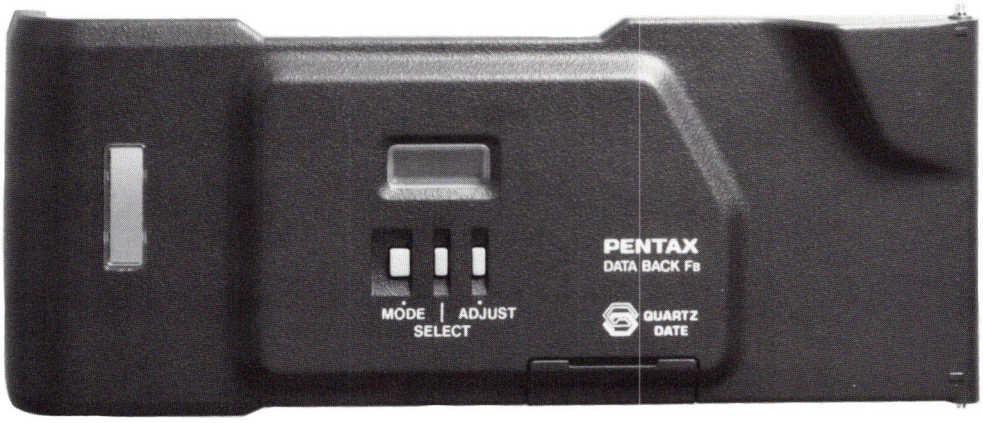
82g (without batteries). (2.9 oz.)

Cat. No.
37152 SF1 Interval Data Back F

PENTAX

SF Data Backs

- **For SF1, SF10, SF1n**



Data Back FB
Date or time prints automatically on each picture with the Data Back FB. It easily replaces the SF1n, SF10, and SF1 standard back cover. Date and time modes are set with buttons and viewed on the digital LCD display. An OFF mode prevents imprinting when desired.

Recording Modes:
(1) Year/month/day.
(2) Month/day/year.
(3) Day/month/year.
(4) Day (AM/PM)/hour/minute.
(5) OFF (no data imprinted).

Recording Exposure Control
Automatic adjustment by ISO film speed (ISO 25-1600) set on camera.

Automatic Calendar Update
Adjustment of months, years, and leap years through 2019.

Clock Accuracy
±90 seconds/month.

Battery
One 3 volt #CR 2025 lithium battery.

Dimensions (W×H×D)
144×58×26mm/5.6″×2.2″×1.0″.

Weight
68.5 gr./2.4 oz.

Cat. No.
37153 Data Back FB

PENTAX

Digital Data M

For automatic data-recording on your photos, the Digital Data M is an invaluable tool. Designed to interchange rapidly with the normal back of the Super Program, Program Plus, ME-F, and MG (direct cordless synchronization) and the ME Super, ME, MV and MV-1 (with the cord supplied) the Digital Data M lets you select any of three modes. The first prints year, month and day at the bottom right corner of your photo, out of the way of the main picture area, with a calendar programmed up to the year 2019. The second mode prints hour and minute on the frame, while the third prints no information, exactly like a standard back.

The Digital Data M can be used in all the Super Program's many modes, and with a full range of accessories, including the Motor Drive A.

YEAR-MONTH-DAY

HOUR-MINUTE

Specifications

Type
Digital data recording camera back to be mounted on the following Pentax 35mm SLRs: Super Program, Program Plus, ME-F, MG (direct cordless synchronization); ME Super, ME, MV, and MV-1 (via cord supplied).

Data recording system
An internal recording lamp projects and records information onto the reverse side of film during exposure by utilizing 6-digit liquid crystal characters.

Data imprinting modes
Soft touch push buttons used to set the unit to any of three modes: Yr/Mo/Dy (year-month-day). Hr/Mi (hour, minute), or no imprint. Year, leap year and month (odd or even number of days) automatically adjusted by the data unit. Year, month, day mode: 80 to 19, for the years 1980 to 2019; 1 to 12, for the month; 1 to 31 for the day. Hour/minute mode: 00 to 23 for the hour, 00 to 59 for the minute. Character size: 0.7mm high by 0.4mm wide.

Data setting
Advanced by one digit for each press of a button. For faster advancing, maintain pressure on the button; in less than a second, rapid advance will occur.

Liquid Crystal Display
Data settings displayed in a 7-segment, 6-digit Liquid Crystal Display on the data back.

ASA/ISO film speed scale
Three steps provided: 6-80, 100-125, and 160-400.

Power source
Two LR-44 or SR-44 silver oxide batteries.

Battery check
BC button provided; failure of the red LED indicator to come on indicates worn out batteries.

Number of recordings
With fresh batteries (LR-44), approximately 5,000 recordings or about one year of normal operation.

Recording confirmation
The LED indicator will go on as the shutter is tripped to confirm that the data has been recorded.

Simultaneous flash operation
Possible when flash is connected to camera hot shoe. (Note: when checking normal flash operation with the test button, set the Digital Data M to the "no imprint" mode.)

Synchronization with Autowinder or Motor Drive
Continuous shooting possible at speeds up to 2 frames per second.

Dimensions
135 W x 53 H x 26mm D (5.3 x 2.1 x 1 inch)

Weight
73 grams (2.6 ounces) without batteries

Cat. No.
37149 Digital Data M w/cord

PENTAX

AF500 FTZ Flash

• For Auto Focus SLRs only

The AF500FTZ Power Zoom Flash zooms automatically to match the focal length of F and FA-series zoom lenses used on the PZ autofocus cameras. With manual zoom lenses on the SF cameras, the flash zoom position is set with a button.

This shoe-mount flash has full TTL exposure control with the PZ and SF cameras, and its internal zoom head automatically adjusts to the F or FA zoom lens setting when the PZ camera's shutter button is pressed. The 24-85mm zoom range can also be set manually with the press of a button.

The AF500FTZ has a guide number of 50 (at ISO 100/m), and can be used in TTL Auto or adjustable Manual modes. There is also a Multiple Flash mode for stroboscopic flash effects. For easy bounce flash, the flash head tilts vertically 90° and swivels horizontally 270°.

The AF500FTZ has an AF Spotbeam Projector for low light autofocusing with PZ and SF cameras. The AF Spotbeam can also be used as a focusing aid with the flash turned off.

To combine existing light and flash, Leading Shutter Curtain Sync and Trailing Shutter Curtain Sync modes are available. The Contrast Control Sync mode gives a 1:2 lighting ratio when the AF500FTZ is used with the PZ's RTF flash.

For cable-free, off-camera flash operation, a built-in slave trigger is fired by the camera's RTF or shoe mount flash. A dedicated socket can accept the optional Extension Cord F and Hotshoe Adapter F.

A full information, illuminated LCD panel displays all flash modes. To conserve battery power, the flash turns off automatically and an optional external power supply can be attached.

PENTAX

AF500 FTZ Flash

Specifications

Type
Clip-on type, series-control, TTL auto zoom electronic flash.

Guide Numbers
Switchable ranging M 1/1 to 1/32 (6-step).

	Focal length (zooming position)					
	85mm	70mm	50mm	35mm	28mm	24mm
([M 1/1] = FULL)						
[M 1/1]	50	47	42	36	32	30
[M 1/2]	36	33	30	25	22	21
[M 1/4]	25	23	21	18	16	15
[M 1/8]	18	16.5	15	12.5	11	10.5
[M 1/16]	12.5	11.5	10.5	9	8	7.5
[M 1/32]	9	8	7.5	6	5.5	5

with ISO100 film

Flash Duration (1/2 peak)
Approx. 1/2000 sec. in [M 1/1]
Approx. 1/30000 sec. at minimum-distance discharge in [TTL]

Flash Frequency & Recycling Time:

Power	Recycling Time	Frequency
Alkaline battery (LR6)	About 9 sec.	About 100
Ni-Cd battery (KR-AA)	About 6 sec.	About 40
TR Power Pack-2 (LR14)	About 4 sec.	About 550 (in [M 1/1])

Consecutive Discharge
Approx. 20 flashes in [M 1/16] mode at about 2 frames per second with fully-charged Ni-Cd batteries.

Flash Coverage Angle (6-Step Zoom)

	Zooming position					
	85mm	70mm	50mm	35mm	28mm	24mm
Vertical	23°	26°	34°	45°	53°	60°
Horizontal	31°	36°	46°	60°	70°	78°

Color Temperature
Daylight color (ideally suited for daylight type color film).

Auto Coupling Range
Approx. 0.7-7.5m (GN42, ISO100. f/5.6).

AF Spotbeam
Red light will be projected onto the subject in low-contrast or in dim light. Measurable distance range: Approx. 1-8m (under the Pentax testing conditions).

Film Speed
ISO25-1600

Flash Discharge Mode
TTL Auto, Manual, Multiple burst

Dedicated Functions with the Camera
Flash ready lamp. Viewfinder auto check. Auto shutter speed change. . Slow-speed-sync. Trailing-shutter-curtain sync. Contrast-control sync. AF spotbeam.

Multiple Burst
Number of flash discharge: 2-9 times (1-step) [-] (consecutive). Recycling times: 1-20Hz (1-step).
Flash light intensity: 1/8, 1/16, 1/32 (3-step).

Slave Flash
Flash sync mode: Manual & Multiple burst flash mode.
Operating distance of slave flash: approx. 10m (under the Pentax testing conditions).

Bounce Flash Angle
Up: 0°, 45°, 60°, 75°, 90°
To right: 0°, 30°, 60°, 90°, 120°, 150°, 180°
To left: 0°, 30°, 60°, 90°

Auto Power Off
Automatic power off after 3 minutes of non-operation (except when using slave flash).

Auto Power Quick On
Automatic power-on by depressing the shutter release button halfway after auto power-off.

LCD Panel
Illuminated for about 10 sec. by depressing the illumination lamp switch. Goes off if depressed again.

Power Source
Four "AA" size alkaline (LR6) or Ni-Cd battery (KR-AA).
Optional external power source: TR Power Pack-2 (PW-222).

Dimensions
77(W) x 124(H) x 122(D)
3.0″*(W)* x 4.9″(H) x 4.8″(D) (without batteries)

Weight
Approx. 385g (13.6 oz)

Cat No.
30367 AF500 FTZ Flash

PENTAX

AF240FT TTL Flash

•For Auto Focus SLRs only

The AF240FT TTL Flash is a compact TTL (through-the-lens) Auto Flash for use with Pentax SF Auto Focus cameras, exclusively.

Specifically designed for use with the Pentax SF series auto focus cameras, the AF240FT is an excellent clip-on type flash unit with a guide number of 24 (ISO 100/m).

It enables the user to perform daylight sync flash photography easily in TTL Auto Flash mode and Trailing-curtain-sync photography. Flash-coverage angle of view is 35mm. By attaching optional accessories - Wide Adapter FWB and Tele Adapter FT, 28mm wide-angle lenses and 85mm-200mm telephoto lenses can also be used. The infrared spotbeam projector assists autofocusing in dim-light situations up to a distance of 6m.

Specifications

Type
Clip-on type TTL auto flash

Control system
1) TTL automatic-discharge direct control
2) Manual control

Discharge angle
About 45º (vertical) and 60º (horizontal); equivalent to angle of view of 35mm-format 35mm wide-angle lens

Guide number (ISO 100/m)
Manual High/Low selectable
1) Manual High: 24 (full)
2) Manual Low: 6 (1/4)

Effective range
0.7 - 4.3m (G.N. 24, ISO 100, f/5.6)

Exposure mode
1) TTL Auto Flash
2) Manual Flash

Recharge time/No. of discharges
(Full discharge in Manual Flash mode)
1) Alkaline-manganese batteries: approx. 8 sec./100 discharges
2) Ni-Cd batteries: approx. 3 sec./120 discharges

AF spotbeam projector
TAP-system with striped projection pattern. Effective range: approx. 1-6m

Functions
1) Flash-ready indication
2) Finder auto check
3) Auto shutter speed change
4) Slow shutter speed sync flash/trailing curtain sync flash signals
5) AF spotbeam signal

Power source
Four AA-size batteries
(alkaline, manganese or Ni-Cd)

Dimensions
72 W x 114 H x 74 D mm
(2.8'' x 4.5'' x 2.9'')

Weight
210g (without batteries)
(7.4 oz.)

Cat No.
30315 AF-240FT Flash
30318 Wide Angle Adapter for AF-240FT
30319 Tele Adapter for AF-240FT
30317 Case for AF-240FT

PENTAX

AF330FTZ TTL Power Zoom Flash

The AF-330FTZ Power Zoom Flash zooms automatically to match the lens focal length when used on the PZ Auto Focus cameras. When used on the SF Auto Focus cameras, the power zoom can be activated by pressing a button.

This fully featured compact Automatic TTL flash unit was designed to operate in the Automatic Power Zoom mode when used in conjunction with the Pentax PZ FA or F series of lenses. By pressing the shutter button halfway down the flash head zooms automatically when using the FA or F zoom lenses. The flash zoom range is from 28 to 85mm. The flash head can also be zoomed manually by pressing a button.

This clip-on type unit makes flash photography easy and automatic. It has a guide number of 33 (at ISO 100/m) and can be used in either the TTL Auto Flash Mode, which is controlled by the PZ/SF advanced TTL flash control system, or in manual mode. In addition, the unit offers a high and low Manual mode.

The AF-330FTZ has an AF Spotbeam Projector to assist the PZ/SF cameras auto focus in the dark. The flash head can also be turned off and the AF spotbeam used strictly as a focusing aide.

The AF-330FTZ also offers the highly sophisticated features of leading-shutter-curtain or trailing-shutter-curtain sync Slow Speed Sync Modes. A Contrast Control Sync Flash mode is a new feature which allows twin flash photography when the AF-330FTZ is used in combination with the RTF built-in flash unit on the PZ Cameras.

The AF-330 FTZ Flash also includes a full-information LCD control panel which displays the flash unit's current operational status, including flash mode, zoom lens setting and flash exposure compensation.

PENTAX

AF330FTZ TTL Power Zoom Flash

Specifications

Type
Clip-on type, serial-controlled TTL auto zoom electronic flash.

Guide Numbers
[MH] and [ML] ranges switchable
[MH] (Manual High = FULL)
[ML] (Manual Low = 1/16)

	Focal length (zoom position)				
	85mm	70mm	50mm	35mm	28mm
[MH]	33	31	28	24	20
[ML]	8.3	7.8	7	6	5

Flash Duration (1/2 peak)
Approx. 1/2000 sec. in [MH]
Approx. 1/20000 sec. in [ML]
Approx. 1/30000 sec. at minimum-distance discharge in [TTL]

Flash Frequency & Recycling Time:

Power	Recycling Time	Frequency
Alkaline battery	About 4 sec.	About 300
Manganese battery	About 6 sec.	About 80
Ni-Cd battery	About 3 sec.	About 120

Consecutive Discharge
Approx. 40 flashes in [ML] mode at about 2 frames per second with fully-charged Ni-Cd batteries.

Flash Coverage Angle (5-Step Zoom)

	Zoom position				
	85mm	70mm	50mm	35mm	28mm
Tilt	23°	26°	34°	45°	53°
Panning	31°	36°	46°	60°	70°

Color Temperature
Daylight color (ideally suited for daylight type color film).

Auto Coupling Range
About 0.6-5m (GN28, ISO 100. f/5.6).

AF Spotbeam
Projected onto the subject in low-contrast or in dim light. Measurable distance range: About 1-6m (according to Pentax testing conditions).

Film Speed
ISO25-1600

Dedicated Functions with the Camera
Flash ready lamp. Viewfinder auto check. Auto shutter speed. Slow-speed-sync. Trailing curtain sync. Contrast control sync. AF spotbeam.

Auto Power Off
Automatic power off after 3 minutes of switch-on.

Auto Power Quick On
Automatic power on by pressing the shutter release button halfway after auto power off.

LCD Panel
Illuminated for about 10 sec. by pressing the illumination button. Turned off if depressed again.

Power Source
Four "AA" size alkaline, manganese or Ni-Cd battery.

Dimensions
70(W) x 87(H) x 102(D) mm
2.8″(W) x 3.4″(H) x 4.0″(D)

Weight
210g (7.4 oz)

Accessories
Soft case

Cat. No.
30312 AF-330 FTZ

PENTAX

AF400FTZ TTL Zoom Flash

- **For Auto Focus SLRs only**

AF400FTZ TTL Zoom Flash
A compact TTL (through-the-lens) Auto Flash for use with the Pentax SF Auto Focus Cameras Exculsively

Designed to operate in conjunction with the Pentax SF series auto focus cameras. This clip-on type unit makes flash photography easy and automatic. It has a guide number of 40 (at ISO 100/m) and can be used in either the TTL Auto Flash mode, which is controlled by the SF camera's advanced TTL flash control system, or in manual mode. In addition, the unit offers a high and low Manual mode.

The AF400FTZ has an AF Spotbeam Projector, which is more powerful than that of the SF camera to assist the camera's auto-focusing system in the dark. It automatically discharges under poor lighting conditions.

Another innovative feature of the AF400FTZ is the choice it offers of either the leading-shutter-curtain or trailing-shutter-curtain sync mode.

The Pentax AF400FTZ provides bounce flash covering a range of 90° vertically and 180° horizontally.

The unit also includes a full-information control panel which displays the flash's current operational status, including flash mode, zoom setting and flash exposure confirmation.

PENTAX

AF400FTZ TTL Zoom Flash

Specifications

Type
Clip-on type TTL auto zoom flash

Control System
1) TTL automatic-discharge direct control
2) Manual control

Discharge angle
Four manually adjustable settings (105mm, 50mm, 35mm, 28mm), plus 24mm setting using Wide Adapter FWA.

Guide Number
(ISO 100/m)
Manual High/Low selectable:
1) Manual high: 44 (105mm), 40 (50mm), 34 (35mm), 29 (28mm), 20 (24mm)
2) Manual low: 11 (105mm), 10 (50mm), 8.5 (35mm), 7.2 (28mm), 5 (24mm)

Effective Range
0.7m to 5.4m in TTL Auto Flash mode (G.N. 34, ISO 100, f/5.6)

Exposure Mode
1) TTL Auto Flash
2) Manual Flash

Recharge time/No. of discharges
Full discharge in Manual Flash mode.
1) Alkaline-manganese batteries: 9 sec./100 discharges
2) Ni-Cad batteries: 6 sec./70 discharges

AF Spotbeam Projector
TAP-system with striped projection pattern.
Effective range: Approx. 1m to 6m (3.3 ft. to 19.7 ft.)

Functions
1) Trailing-shutter-curtain flash sync (automatic setting of TTL Auto Flash mode)
2) Automatic setting of TTL Auto Flash mode (when camera is in automatic exposure mode)
3) Automatic power on (when camera's light metering switch goes on)
4) Auto power off (five minutes after power switch is turned on or camera's light metering switch is turned off)

Bounce Angle
1) 90° vertically (0°, 45°, 60°, 75°, 90°)
2) 180° clockwise (0°, 30°, 60°, 90°, 120°, 150°, 180°) and 90° counterclockwise (0°, 30°, 60°, 90°) horizontally

Back Panel Indications
1) Flash ready
2) Effective range scale
3) Zoom setting
4) Out-of-discharge-angle warning
5) Flash exposure confirmation
6) TTL Auto Flash
7) Trailing-shutter-curtain flash sync mode
8) Power on

Power Source
1) Four AA alkaline-manganese batteries
2) Four AA Ni-Cad batteries

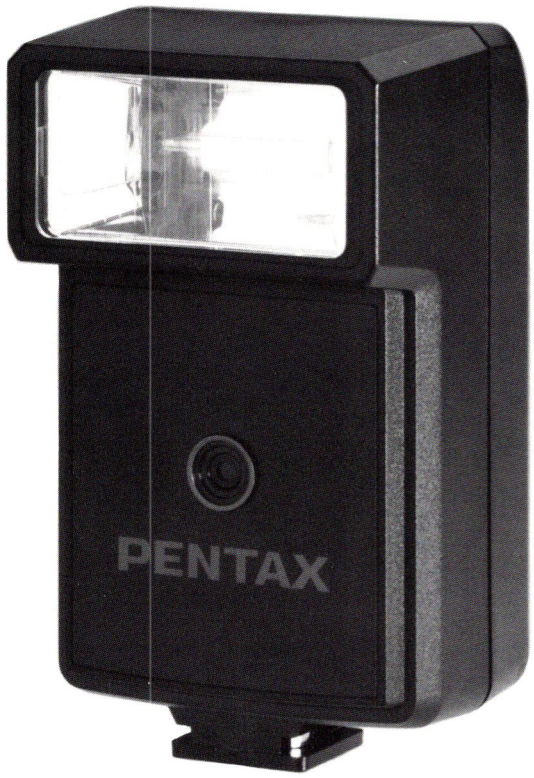
Dimensions
76 W x 137 H x 103 D mm (3.0" x 5.3" x 4.0")

Weight
385g (without batteries) (13.5 ozs.)

Cat No.
30386 AF 400FTZ Flash
30384 Wide Angle Adapter for AF400FTZ
30387 Case for AF400FTZ

PENTAX

AF-160SA Flash



The AF-160 SA is a compact clip-on type flash unit designed for Pentax programmed cameras. It has a guide number of 16 with ISO 100 film. In combination with Pentax programmed cameras, the shutter speed and f-stop are automatically set and the flash output for correct exposures is automatically controlled within a range of 1.6 ft.—13 ft. (ISO 100) by just setting the power switch at Program.

This flash unit can also be used on non-programmed cameras by setting the power switch at manual and following the Manual Exposure Table.

Specifications

Type
Clip-on type, thyristor electronic flash with Programmed AE and Manual control.

Guide number
16 with ISO 100, in meters.

Flash duration
1/30,000 - 1/2,000 sec.

Number of flashes and Recycling time

Power source	Recycling time	Number of flashes
Alkaline batteries	Approx. 5 sec.	Approx. 300

Flash coverage angle
45º x 60º (covers 35mm lens).

Color temperature
Equivalent to daylight.

Auto flash range
0.5 - 4m (1.6 - 13 ft.)

Film speed range
ISO 25-400

Aperture auto set function:

Film speed (ISO)	Program	Flash range
25	f/2	0.5 - 4 m (1.6 - 13 ft.)
100	f/4	
400	f/8	

*Functions when used with programmed camera with its A-lens set to A.

Power source
Two AA-size batteries (1.5V x 2): Maganese or Alkaline.

Dimensions
45 W x 90 H x 52 D mm (1.8" x 3.5" x 2.0")

Weight
100g (3.5 oz.)

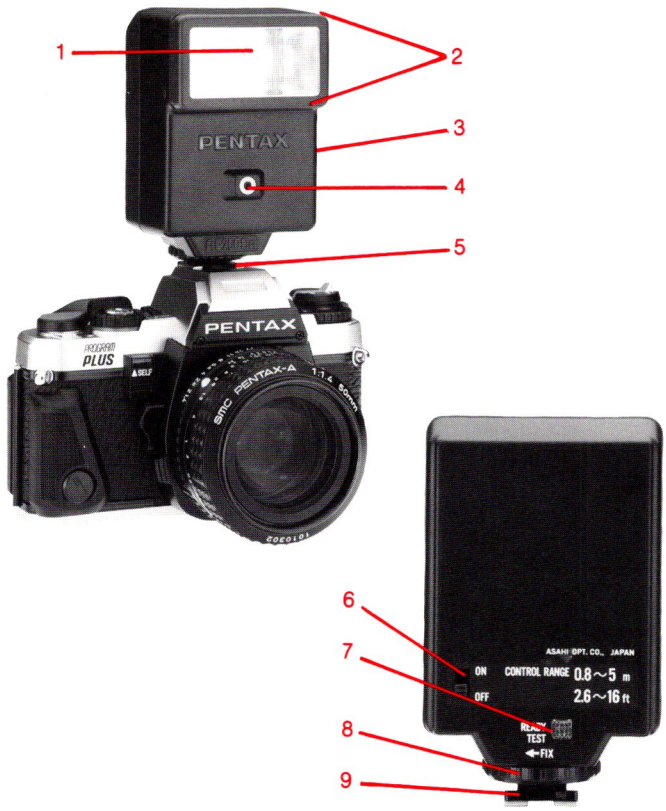
Recommended aperture settings for manual flash

	Distance to subject (ft.)						
ISO	3	6	9	12	18	24	36
25	8	4	2.8	2	1.4		
50	11	5.6	4	2.8	2	1.4	
100	16	8	5.6	4	2.8	2	1.4
200	22	11	8	5.6	4	2.8	2
400	32	16	11	8	5.6	4	2.8

Cat No.
30376 AF-160SA Flash

PENTAX

AF-200SA Flash



1. Flash head
2. Adapter slots for wide-angle, telephoto adapters (AFW-1, AFT-1 optional)
3. Battery cover
4. Auto flash sensor
5. Hot-shoe contacts
6. Power switch
7. Flash-ready lamp/test button
8. Thumbscrew
9. Hot-shoe bracket

The Pentax AF-200SA is a light, compact electronic flash that was designed specifically for Pentax programmed cameras.

When used with a Pentax programmed camera in the programmed mode, flash photography is completely automatic. Simply turning the flash on, the shutter speed is automatically set to the "X" sync speed and the lens aperture is set to the correct f-stop. Any type of film can be used from ISO 25 through 1600, with an auto flash range from 2.6 to 16.4 ft.

In the aperture priority AE mode, the AF-200SA will still set the shutter speed to the flash sync speed, but the lens must be manually set to the proper f-stop. With ISO 25 film, the aperture should be set to f/2, with ISO 100 the aperture is f/4, and with ISO 200 film, the correct aperture is f/5.6. The flash range remains effective from 2.6 to 16.4 ft. no matter which film speed is used.

The AF-200SA can also be used with non-programmed Pentax cameras which have a hot-shoe. It can be used as described for the aperture priority AE mode. With Pentax cameras that do not have dedicated capabilities, the shutter should be manually set to the proper flash sync speed.

Specifications

Type
Clip-on type, automatic thyristor electronic flash, specifically designed for use with Pentax programmed cameras.

Guide number
20 with ISO 100, in meters.

Flash duration
Auto, full flash output. 1/2500 sec. (1/2 peak); auto, shortest: 1/15000 sec. (1/2 peak).

Number of flashes and Recycling time

Power source	Recycling time	Number of flashes
Manganese batteries	Approx. 10 sec.	Approx. 60
Alkaline batteries	Approx. 8 sec.	Approx. 200
NiCad batteries	Approx. 4 sec.	Approx. 90

Flash coverage angle
65° horizontally; 50° vertically (covers 28mm lens).

Auto sensor angle
Approx. 20°

Color temperature
Equivalent to daylight.

Auto flash range
0.8-5m (2.6-16.4 ft.)

Compatible film speed
ISO 25-1600

Cat. No.
30365 AF-200SA Flash
30018 Wide Angle Adapter
30019 Telephoto Adapter

Aperture auto set function

Film Speed (ISO)	Aperture (f)	Flash Range
25	2	0.8 - 5m (2.6 - 16.4 ft.)
50	2.8	
100	4	
200	5.6	
400	8	
800	11	
1600	16	

(Functions when used with programmed camera with its A-lens set to A.)

Sync and dedicated flash features
Flash-ready indication, automatic shutter-speed setting, slow shutter-speed sync, automatic aperture setting.

Power source
Four AA-size batteries (1.5V x 4): Manganese, Alkaline or NiCad.

Dimensions and weight
62 W x 97 H x 58 D mm; 180 g.

Accessories
Case, AFW-1 adapter (option), AFT-1 adapter (option).

• Number of flashes is the average number of flashes fired every 30 sec. with the flash-ready lamp lighted within 30 sec. Test made at 20°C. The number also differs from one brand to another.

PENTAX

AF-260SA Flash

Flash For The Programmed SLR

The AF260SA is a compact clip-on type flash unit developed for the Pentax programmed cameras. In combination with the P30N/P3N and other programmed SLR cameras, the shutter speed and f-stop are automatically controlled.

As the AF260SA has a large guide number, 26, the flash shooting from 1m up to 6.5m is possible. It covers the view angle of a 35mm wide-angle lens and a 28mm wide-angle lens can be also used by attaching its standard accessory, Wide-Angle Adapter. The new affordable AF260SA flash unit will make a good kit to help promote Pentax cameras in your market.

Specifications

Type
Clip-on type, automatic thyristor electronic flash. Specially designed for use with Pentax programmed AE cameras.

Guide Number
26 (ISO 100, M)

Flash Coverage Angle
55° horizontally; 38° vertically
(covers picture area of 35mm lens)
with Wide-Angle Adapter
66° horizontally; 46° vertically
(covers picture area of 28mm lens)

Color Temperature
Equivalent to daylight

Auto Sensor Angle
Approx. 18°

Flash Duration
1/1000 sec. (Auto, full output, ½ peak)
1/15000 sec. (Auto, Shortest, ½ peak)

Recycling Time
Approx. 8 sec. with Alkaline batteries

Number Of Flashes
Approx. 200 with Alkaline batteries

Aperture Auto Set Function
With any Pentax programmed AE camera with its lens set to "A"

Auto Flash Range
1m-6.25m (3.3 ft - 21 ft)

Compatible Cameras
P30N/P3N, LX and Kaf amount cameras

Compatible Film Speed
ISO 25-800

Flash-ready Indicator
Orange lamp / Lights up

Power Source
Four AA-size batteries (1.5V X 4); Manganese, Alkaline or Ni-Cd

Dimensions
70mm (W) x 114mm (H) x 55mm (d)
(2.8″ x 4.5″ x 2.2″)

Weight Accessory
Wide angle adapter

Cat. No.
30256 AF260SA Electronic Flash w/Wide-Angle Adapter

PENTAX

AF-200T Flash

The AF-200T offers the convenience and accuracy of dedicated TTL flash in an affordable, compact unit. With a guide number of 66 (in feet, at ASA/ISO 100), the AF-200T has enough power for most general flash requirements, while the angle of coverage is sufficient for a 28mm lens. Optional telephoto and wide-angle reflectors are available when additional range or coverage is needed.

In the TTL mode, when used with the SF cameras, the Super Program, LX, or 645, flash exposure is read directly through the lens and controlled by the camera. Because the aperture is set manually, the photographer has total control of depth of field.

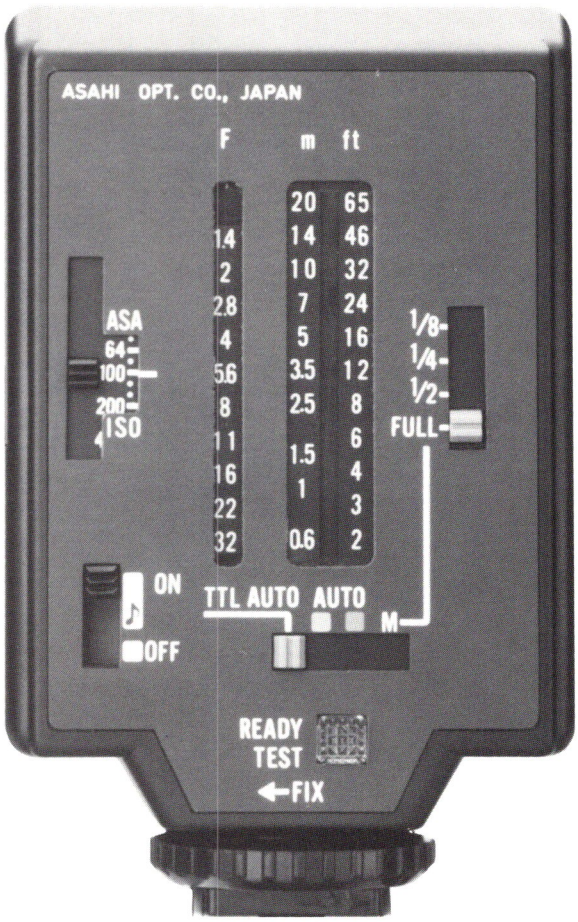
In addition to the TTL mode, the AF-200T has two automatic ranges. The red range gives automatic exposure to 23 feet, with an aperture of f/2.8 (at ASA/ISO 100); the green range is automatic to 11-½ feet, with an aperture of f/5.6. When the AF-200T is used with the super programmed flash mode, the camera sets the proper synchronization speed (1/125 second) and the correct aperture, based on the range selected.

An audible signal (which can be switched off) confirms proper exposure in the two automatic or TTL modes.

In the manual mode, the AF-200T has full, 1/2, 1/4 and 1/8 power settings for easy fill-flash.

PENTAX

AF-200T Flash



Specifications

Type
Multi-mode, shoe-mount dedicated thyristor electronic flash. TTL auto, two-range programmed auto, four-level manual flash when used with SF cameras, Super Program, LX, and 645. TTL auto, two-range auto, four-level manual flash with Pentax LX. Two-range auto, four-level manual flash with all other Pentax bayonet mount cameras.

Mounting
Direct to camera hot-shoe.

Guide number
At ASA/ISO 100: Auto: 65 - 13 ft., (20 - 4 meters), stepless. Manual: Full power — 65 (ft) 1/2 power — 45 (ft), 1/4 power — 32 (ft), 1/8 power — 22 (ft).

Flash duration
1/1500 sec. - 1/30,000 sec.

Number of flashes and recycle times

Power Source	Recycle time	No. of flashes
Manganese batteries	10 sec.	60
Alkaline batteries	8 sec.	200
NiCad batteries	4 sec.	90

NOTE: Recycle times and number of flashes based on full output in manual mode with fresh batteries. Faster recycle times possible in auto mode, depending on flash distance and f/number used.

Beam coverage angle
50° vertically, 65° horizontally (adequate coverage for a 28mm wide angle lens).

Color temperature
Equivalent to noon daylight.

Auto flash ranges
At ASA/ISO 100: Auto (red) 4.5 ft. - 22.9 ft., Auto (green) 1.96 ft. - 11.4 ft., TTL auto 1.96 ft - 54.7 ft. (f/22 to f/1.2).

Film speed range
ASA/ISO 25 - 800.

Aperture settings in auto

Mode	ASA/ISO 100	ASA/ISO 400
Auto (red)	f/2.8	f/5.6
Auto (green)	f/5.6	f/11

Automatic aperture setting system
When used with the Pentax Super Program camera, the lens aperture is set automatically in programmed AE and shutter preferred AE modes.

Auto sensor angle of flash unit
Approx. 20° vertically and horizontally.

Auto exposure confirmation
After the exposure has been taken, correct flash exposure is confirmed by PCV beeper (1.5 sec.). Audible signal can be switched off.

Synchronization/dedicated flash features
Flash ready indication in finder and on flash unit, auto exposure check in finder, correct shutter speed for flash synch is set automatically, TTL auto operation, override flash system (camera's auto exposure system overrides flash when indicated shutter speed is faster than the speed required for flash synchronization. Angle of coverage: 65° H x 45° V covers a 28mm lens.

Power source
Four AA size 1.5V manganese, alkaline or rechargeable NiCad batteries.

Size
62mm W x 97mm H x 58mm D
(2.4" x 3.8" x 2.28").

Weight
175 grams (6.2 oz.) without batteries.

Accessories
Case.

Optional accessories
AFW-1 wide-angle adapter (to cover up to 24mm lens), AFT-1 telephoto adapter (for 85mm lens or longer).

Cat. No.	
30360	AF-200T Flash
30018	Wide-angle Adapter for AF-200T
30019	Telephoto Adapter for AF-200T

PENTAX

AF-280T Flash

The AF-280T features a fully rotating bounce flash head for complete lighting control and flexibility.

Pentax AF-280T
TTL Coupled Thyristor
Automatic Electronic Flash

This new thyristor shoe-mount automatic electronic flash from the innovators at Pentax features a powerful ASA 100 guide number of 92 yet is extremely compact, lightweight and well-balanced. When used with the Pentax SF cameras, LX, Super Program, and 645, the AF-280T provides full TTL integration including through the lens automatic exposure control, automatic shutter speed synchronization at "X", viewfinder ready light and auto exposure viewfinder confirmation. With cameras such as the Program Plus, A-3000, ME Super, or MG, full "dedicated" features are retained for maximum flash versatility and, of course, the AF-280T is fully compatible with all other Pentax 35mm SLR cameras.

With the SF cameras, Super Program, LX, and 645, the AF-280T will deliver an automatic exposure range with through the lens accuracy of from 0.8 feet to 65.6 feet with an f/1.4 lens and ASA 100 film. In standard automatic it allows the photographer to select from two auto f/stop ranges for depth of field control and provides a maximum automatic operating distance of 24 feet.

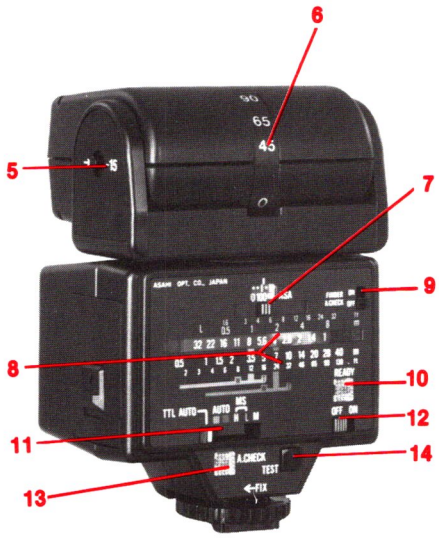
This functional unit also delivers dual manual control with ASA guide numbers of 92 in "High" and 25 in "Low." Both these manual positions provide for "dedicated" flash operation but an override allows for total manual control and synchronization at speeds other than "X."

Enhancing the unit's versatility even further is the fully rotating, bounce flash head which provides for −15° to 90° angles in the vertical position and a full 270° in the horizontal.

For complete specifications and ordering information, see reverse side.

PENTAX

AF-280T Flash



1. Rotating Bounce Flash Head
2. Auto Sensor
3. Battery Compartment
4. Hot-Shoe with Lock
5. Flash Head Lock Lever
6. Flash Head Angle Scale
7. ASA Selector and Scale
8. Aperture/Distance Scales
9. Viewfinder Auto Check Switch
10. Ready Light
11. Flash Mode Selector
12. On/Off Switch
13. Auto Exposure Check Lamp
14. Open Flash Button

Specifications

Type
Compact, cordless, TTL coupled "dedicated" electronic flash unit featuring through the lens auto exposure control with the SF cameras, LX, Super Program, and 645, two standard auto operating ranges, dual level synchronized manual and full manual override. Provides automatic shutter speed setting and viewfinder ready light with compatible Pentax cameras; also provides viewfinder auto exposure confirmation with SF cameras, LX, Super Program, and 645.

Apertures on AUTO

	ASA 100	ASA 400
TTL	All	All
Red	f/4	f/8
Green	f/8	f/16

Guide Numbers (ft.)

Manual Position	ASA 100	ASA 400
High	92	184
Low	25	50

TTL Auto Operating Range
0.8 to 65.6 feet with 50mm f/1.4 standard lens (ASA 100)

Non-TTL Auto Operating Ranges
3.5 to 24 feet (Red)
1.6 to 11.5 feet (Green)

Auto Sensor Angle
20 Degrees

Color Temperature
Equivalent to daylight

Recycle Times
10 seconds with Alkaline batteries
8 seconds with NiCad batteries
(Approximate times for full power flash recycle with fresh batteries)

Flash Duration
1/1500 to 1/30,000 second

Number of Flashes
Up to 150 with Alkaline batteries
Up to 120 with NiCad batteries
(Based on full power flashes with fresh or fully charged batteries)

Power Source
Four 1.5V AA-size Alkaline or NiCad batteries

Angles of Illumination
Covers 28mm camera lens
65° H x 50° V

Bounce Capability
Head rotates a full 270° with detents at each 45° position, horizontal rotation of 180° to the right (with click stops at 45°, 90° and 180°); rotates 90° to the left (with click stops at 45° and 90°); vertical adjustment from −15° to 90° with click stops at 0°, 45° and 65°. Lock release allows head to be set for −15° close-up position.

Other Features
Auto Exposure Check Lamp (LX viewfinder confirmation with On/Off Switch)
Ready Light indicates full charge
Open Flash Button
Hot-Shoe Locking Mechanism

Size
80mm W x 116mm H x 68mm D
(3.1" x 4.6" x 2.7")

Weight
300 grams (10.6 ounces) without batteries

Optional Accessories
AFW-1 Wide Angle Adapter
AFT-1 Telephoto Adapter

Cat. No.

30381	AF-280T Electronic Flash with Case
30382	Case for AF-280T (replacement)
30018	AFW-1 Wide Angle Adapter for AF-280T
30019	AFT-1 Telephoto Adapter for AF-280T

PENTAX

AF-400T Flash

The AFT-400T is the perfect complement to the extensive Pentax LX Professional 35mm SLR System.

Power supply options for the AF-400T include the Grip Battery Pack, the TR Power Pack, both 510V and 240/270V Power Packs and an AC Adapter.

Pentax AF-400T
TTL Coupled Thyristor
Automatic Electronic Flash

The new AF-400T has been designed for the photographer who requires maximum light output with total automatic and manual exposure control plus a wide variety of internal and external power source options. This handsomely-styled handle-mount unit delivers with an ASA 100 guide number of 130, fully integrated TTL automatic exposure control with the Pentax SF cameras, Super Program, LX and 645, a choice of three standard automatic operating ranges, and four manual power settings for creative lighting flexibility in both the "dedicated manual" and standard manual operating modes.

When used with the LX, the AF-400T delivers film plane measured automatic operation from 0.8 to an amazing 108.2 feet with the 50mm f/1.2 standard lens and ASA 100 film. Three auto exposure ranges for non-TTL control are provided with a maximum auto operating distance of 33 feet. In manual, the photographer can select full power, 1/4 power, 1/16 power or 1/25 power electing to use either the "dedicated" features of manual sync or the total exposure control of full manual override.

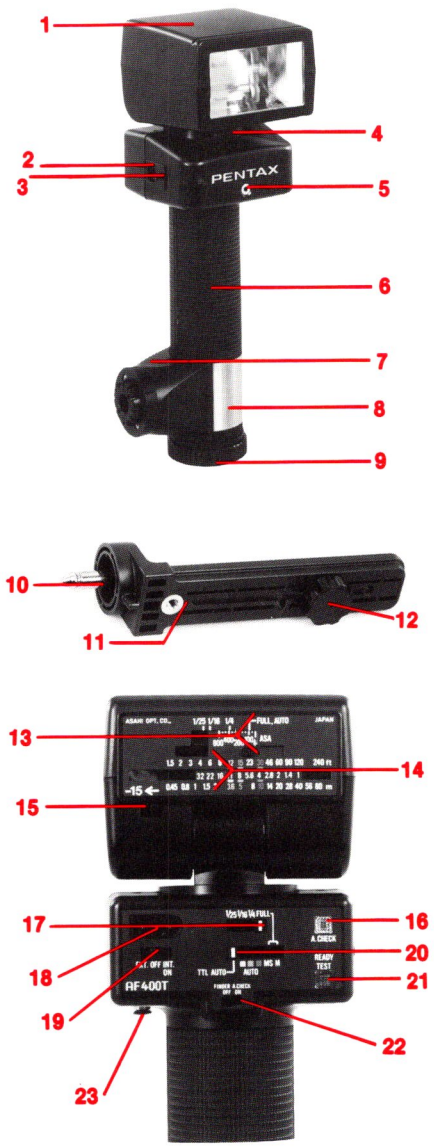
The functional design of the AF-400T is enhanced by its quick release bracket, handle-mount styling and by the availability of a wide choice in power supply options. The Grip Battery Pack combines the portability and convenience of AA Alkaline or NiCad cells with the handling ease of direct to handle mounting. The TR Power Pack converts the power of six "C" size Alkaline cells to the voltage required for the flash unit while the Power Pack 510V and Power Pack 240/270V provide the fast recycling and high number of flashes available only with laminated dry batteries.

For additional supplemental lighting flexibility, the head of the AF-400T rotates a full 180° and provides bounce angles from −15° to 90°.

For complete specifications and ordering information, see reverse side.

PENTAX

AF-400T Flash



1. Rotating Bounce Flash Head
2. 4P Sync Cord Socket
3. Sync Cord Lock Release
4. Flash Head Angle Scale
5. Auto Sensor
6. Grip
7. Bracket Lock (rear)
8. Bracket Clamp
9. Bottom Cover
10. Bracket Pin
11. Tripod Socket
12. Tripod Screw
13. ASA Selector and Scale
14. Aperture/Distance Scales
15. Flash Head Lock Lever
16. Auto Exposure Check Lamp
17. Manual Power Selector
18. External Power Socket
19. Power Switch
20. Flash Mode Selector
21. Ready Light
22. Viewfinder Auto Check Switch
23. Standard PC Sync Socket

Specifications

Type
Grip style TTL coupled "dedicated" electronic flash unit featuring through the lens auto exposure control with SF cameras, LX, Super Program, and 645, three standard auto operating ranges, and four level manual operation with manual sync or full manual override. Optional 4P Sync Cord A provides full TTL/Dedicated coupling with Pentax LX; full dedicated operation with P3n, P3, Program Plus, A3000, ME Super, MV, MV-1, and similar cameras is available with 4P Sync Cord B; full TTL/dedicated coupling available on SF cameras, 645, Super Program (and LX with FA-1 or FA-1W finder) while using 4P Sync Cord B. Compatible with other cameras with readily available optional PC Sync Cord.

Apertures on AUTO

	ASA 100	ASA 400
TTL	All	All
Red	f/4	f/8
Green	f/8	f/16
Yellow	f/11	f/22

Guide Numbers (ft.)

Manual Position	ASA 100	ASA 400
Full	130	260
1/4	66	132
1/16	33	66
1/25	26	52

TTL Auto Operating Range
0.8 to 108.2 feet with 50mm f/1.2 standard lens (ASA 100)

Non-TTL Auto Operating Ranges
4.1 to 32.8 feet (Red)
2.1 to 16.4 feet (Green)
1.5 to 11.8 feet (Yellow)

Auto Sensor Angle
20 Degrees

Color Temperature
Equivalent to daylight

Recycle Times
0.2 to 12 seconds depending upon subject distance, condition of batteries and type of cells used.

Flash Duration
1/1500 to 1/30,000 second

Number of Flashes
Up to 800 + depending upon subject distance, condition of batteries and type of cells used.

Power Sources
Grip Battery Pack — 6 1.5V AA Alkaline or NiCad Batteries
TR Power Pack — 6 "C" Cell Alkaline or NiCad Batteries
Power Pack 510V — 510 volt laminated dry battery
AC Adapter — 120V Adapters available individually

Angles of Illumination
45° vertical, 60° horizontal
(covers a 28mm lens)

Bounce Capability
The head of the AF-400T rotates 270° horizontally (90° to the right, 180° to the left), and 90° vertically (plus a −15° setting for close-ups). The vertical angle can be further adjusted by changing the attachment angles of the bracket and clamp.

Other Features
Auto Exposure Check Lamp (LX, Super Program and 645 viewfinder confirmation with On/off Switch)
Ready Light indicates full charge
Open Flash Button

Size
86mm W x 260mm H x 92mm D
3.4" x 10.2" x 3.6"

Weight
770 grams (27.2 ounces) less battery grip and mounting bracket

Cat. No.	
30390	AF-400T w/Clamp (w/o Bracket or Battery Holder)
30388	AF-400T kit (consists of AF-400T, 4P Sync Cord B, Bracket, Grip Battery Pack)
30398	Wide-Angle Adapter II for AF-400T
30399	Telephoto Adapter II for AF-400T
37341	4P Sync Cord A for AF-400T or Hot-Shoe Grip (for PC Terminal of LX Camera)
37342	4P Sync Cord B for AF-400T or Hot-Shoe Grip (for Hot-Shoe Contact)
37343	4P Sync Cord C for AF-400T or Hot-Shoe Grip (for PC Terminal/Non-TTL)
37344	4P Sync Cord A-5m (16.4 ft.) for AF-400T or Hot-Shoe Grip (for PC Terminal of LX Camera)
37346	4P Sync Cord B-5m (16.4 ft.) for AF-400T or Hot-Shoe Grip (for Hot-Shoe Contact)
30392	Quick Release Bracket for AF-400T or Hot-Shoe Grip
30389	Clamp for AF-400T or Hot-Shoe Grip
37973	AF-400T 6x7 Bracket or Hot-Shoe Grip
38462	AF-400T Bracket for 645 or Hot-Shoe Grip
30394	Grip Battery Pack (AA Batteries) for AF-400T
37205	Power Pack 510V for AF-400T or AF-080C
90101	Power Cord for Power Pack 510V (Replacement)
37208	Transistor Power Pack for AF-400T or AF-080C
30395	AC Adapter II 120V for AF-400T or AF-080C

PENTAX

AF-140C Macro Flash for PZ and SF Cameras

Pentax AF-140C Macro Flash Ring Light Set

A TTL auto flash with a guide number of 14 (ISO 100/m) for shadowless macro flash photography. It has a 360° circular flash head that clips-on to the camera lens to provide even illumination for a wide variety of subjects. This macro flash unit has four separate flash tubes. Depending on lighting conditions, the tubes can be manually selected to fire either as one or two pairs, for perfect exposures and three-dimensional flash effects.

- Built-in modeling light to check lighting conditions.
- Short flash discharge time to freeze action of a moving subject for sharply focused images.
- Manual flash capability, in addition to the TTL auto flash mode.
- Aperture can be manually selected in the TTL auto flash mode. When the camera's aperture is set at auto, the AF-140C selects f/5.6 or f/22 automatically for proper exposure.
- Macro photography with excellent illumination and focal distance, thanks to the small aperture made possible by the unit's large guide number.

The Ring Light operates jointly with the AF Ring Light Control Unit, which attaches directly to the camera hot-shoe. It houses the control switches and thyristorized flash circuitry to provide economocal recycling. It also houses the four AA cells used as the internal power source.

PENTAX

AF-140C Macro Flash for PZ and SF Cameras

AF-140C Macro Flash Ring Light Control Unit Specifications

Type
Clip-on type TTL and auto macro flash.

Control System
(1) TTL auto flash.
(2) Manual flash.

Usable Focal Lengths
Macro (50mm, 100mm and 200mm) and bellows 100mm.

Guide Number
Full discharge: GN 14 (ISO 100/m) (46 ft).

Zooming Mode
Fixed.

Angle of Discharge
Horizontal: 60°
Vertical: 60°

Flash Illumination Range (TTL Auto)
0.05m–1m (ISO 100) (0.16 ft–3.3 ft).

Flash Discharge Time
Auto min: 1/50,000 second.
Manual: 1/3,000 second.

Discharge Interval/Number (Full discharge)
Approx. 8 second/140 times (Alkaline batteries).
Approx. 6 second/50 times (Ni-Cd batteries).

Film Sensitivity
ISO 25–3200.

Color
Daylight.

Flash Control Modes
(1) TTL auto flash f/5.6 mode.
(2) TTL auto flash f/22 mode.
(3) Manual flash mode.
[f/5.6 and f/22 modes available when lens is set at auto.]

Shooting Modes
(1) 4-tube discharge mode.
(2) Left-side 2-tube discharge mode.
(3) Right-side 2-tube discharge mode.

LED Indication
(1) Recharge completion.
(2) Discharge confirmation.
Camera viewfinder: varied by camera type.

Others
- Modeling light.
  (1) ON by switch.
  (2) OFF by switch.
  (3) Auto-off before discharge and 20 seconds after ON.
- Auto power-off after 10 min. without operation.
- Auto power-on coupled with camera.

Power Source
(1) 4 AA-size alkaline batteries.
(2) 4 AA-size Ni-Cd batteries.

Dimensions
Control Unit: 74(W) x 71(H) x 101(D) mm (2.9″ x 2.8″ x 4.0″)
Flash Unit: 100(W) x 100(H) x 26(D) mm (3.9″ x 3.9″ x 1″)

Weight
Control Unit: 180g (6.3 oz) (without battery)
Flash Unit: 105g (3.7 oz)

Accessories
- Soft case.
- 49mm, 52mm and 58mm attachment adapters.

Cat. No.
30302 AF-140C Macro Flash Ring Light and Control Unit

PENTAX

AF-080C Flash

Pentax AF-080C Ring Light Set

A Compact Flash that Makes Close-ups Easy

The compact and easy to use Pentax AF-080C is the ideal flash unit for close-ups and macrophotography. It has a 360° circular flash head that screws directly to the camera lens, and provides shadowless, even illumination for a wide variety of subjects. Use it to photograph insects and small animals, or documenting medical and dental close-ups. It works with a range of close-up accessories and operates easily handheld. The Ring Light also stops the subject in motion to eliminate picture blur.

Portable Control Pack/Thyristorized Circuitry/Optional DC/AC Power Sources

The Ring Light operates jointly with the AF Ring Light Control Pack, which attaches directly to the camera hot-shoe. It houses the control switches and thyristorized flash circuitry to provide economical recycling. It also houses the four AA cells used as the internal power source. When additional power is needed, the Ring Light can be operated with three optional power sources, including a transistor power pack, high voltage power pack, and an AC adaptor.

TTL Auto Flash Control

The Ring Light features two-way standard manual flash operation with a FULL setting providing GN 8 (ASA 100 in meters) and a ¼th low intensity setting at GN 4 for faster recycling. In addition, when used with the Pentax SF cameras, LX, Super Program and 645, it offers convenient through-the-lens auto flash control. With the TTL system, flash output is measured by the metering cell inside the camera for unprecedented exposure accuracy. TTL flash control eliminates errors resulting from miscalculation and permits free selection of f-numbers within the flash operating range, for the ultimate convenience in close-up and macrophoto work.

"Dedicated" Flash Operation

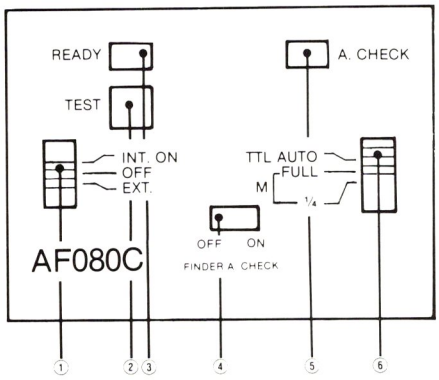
The AF-080C has another remarkable feature. With the LX and other late model Pentax cameras it features "dedicated" flash, synchronizing automatically for flash and providing viewfinder flash ready indication.

PENTAX

AF-080C Flash

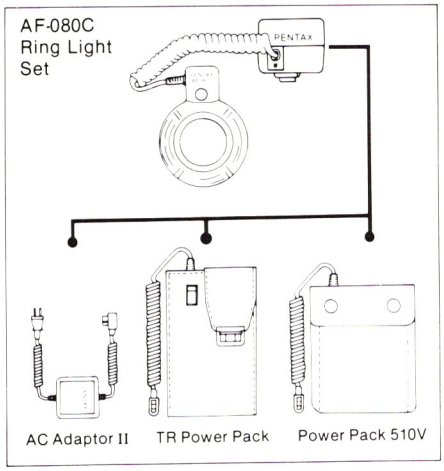
AF-080C Ring Light Set

A truly convenient new flash unit from Pentax, offering TTL metering from inside the camera with the Pentax LX, plus two-way standard and dedicated manual flash operation with other cameras.



1. power switch
2. test button
3. ready lamp
4. viewfinder auto check on/off switch
5. auto check lamp
6. mode switch

Power Source System



High Resolution Close-ups with a Variety of Lenses and Accessories

The Pentax AF-080C Ring Light provides direct shadowless lighting to bring to life the hidden world beneath us.

The AF-080C mounts to all Pentax standard lenses, the 50mm and 100mm macro lenses and 100mm bellows lens. The Ring Light also operates with a variety of close-up accessories from auto bellows to extension tubes, permitting virtually unlimited creativity.

"Dedicated" Flash Guards Against Exposure Errors

In addition to providing TTL auto operation and auto check, the AF-080C also offers dedicated flash operation.

AF-080C Ring Light and Control Pack Specifications

Type
Clip-on type electronic ring flash featuring TTL Auto operation plus two-level manual.

Guide Numbers
8 at Full output; 4 at ¼th output (ASA 100 in meters)

TTL Auto Aperture Range
f/3.5 — f/13.5 lens at 50cm, f/5.6 — f/22 at 25cm; f/8 — f/32 at 10cm; f/11 — f/32 at 5cm; f/8 — f/32
at 4cm.

Number of Flashes Recycling Times

• Manganese batteries	50 at 12 sec.
• NiCad batteries	90 at 5 sec.
• Power Pack 510V	800 at 1 sec.
• Alkaline batteries	200 at 8 sec.
• TR Power Pack	600 at 3 sec.
• AC Adaptor II	3 sec.

Flash Duration
1/15,000 sec. (min.) on auto; 1/1000 sec. at full manual

Flash Angle
80° (balanced for daylight)

ASA Range
ASA 6—800 (on TTL Auto)

Power Source
Four 1.5V AA-size batteries

Optional Power Source
TR Power Pack, Power Pack 510V, AC Adaptor II

Size and Weight
Control Pack: 70mm W x 70mm H x 82mm D; 235 grams, without batteries.
Ring Flash: 93mm W x 122mm H x 22mm D; 135 grams.

Optional Accessories

Cat. No.	
30418	Reverse Ring Light Holder K
30142	52-49mm Adapter Step-down Ring (for F-100mm macro)
30400	AF-080C Ring Light Flash Set Includes: Control Pack, Ring Flash, Case
30418	Reverse Ring Light Holder K
30122	Hot Shoe Adapter F (raises control pack so SF shutter button is accessible)

PENTAX
Flash Accessories

4P Sync Cord A (for AF-400T or Hot Shoe Grip)

For PC Terminal of LX camera — Retains TTL & dedicated flash functions (3 feet long).

Cat. No.
37341

4P Sync Cord B (for AF-400T or Hot Shoe Grip)

For Hot Shoe contact — Can be used on all camera bodies; retains TTL & dedicated flash functions where applicable. (3 feet long).

Cat. No.
37342

4P Sync Cord C (for AF-400T or Hot Shoe Grip)

For standard PC Terminal/Non-TTL. (3 feet long).

Cat. No.
37343

4P Sync Cord A 5m (for AF-400T or Hot Shoe Grip)

For PC Terminal of LX camera; 5m (16 feet) long.

Cat. No.
37344

4P Sync Cord B 5m (for AF-400T or Hot Shoe Grip)

For Hot Shoe contact 5m (16 feet) long.

Cat. No.
37346

Hot Shoe Grip

For using Hot Shoe type flash units off camera. Must be used with 4P sync cord A, B, or C. Retains all TTL & dedicated functions where applicable. Has tripod socket on bottom cover.

Cat. No.
37126

Quick Release Bracket (for AF-400T or Hot Shoe Grip)

Attaches to tripod socket of 35mm cameras, for mounting the flash unit at the side of the camera.

Cat. No.
30392

AC Adapter II 120V for AF-400T or AF-080C

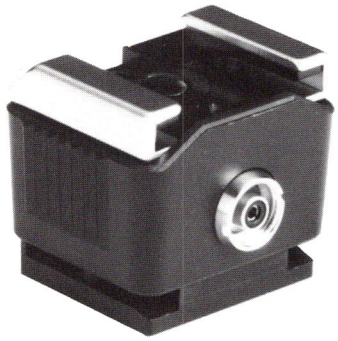
Power source for operating AF-400T or AF-080C with household current. Recycle time 7 seconds.

Cat. No.
30395

Hot Shoe Cover

Plastic cover for hot shoe contacts.

Cat. No.
31014



Hot Shoe Adapter 2P (for cameras w/o PC Terminals)

Attaches to camera's hot shoe; has a standard PC terminal.

Cat. No.
31014

Reverse Ring Light Holder K

For use with AF-080C Ring Light with lens reversed.

Cat. No.
30418

Wide Angle Adapter for AF-200S, AF-200SA, AF-200T, AF-280T

Extends flash coverage for use with wide angle lenses down to 24mm.

Cat. No.
30018

PENTAX
Flash Accessories

Wide Angle Adapter For AF-400T

Extends flash coverage for use with wide angle lenses down to 24mm.

Cat. No.
30398

Telephoto Adapter For AF-200S, AF-200SA, AF-200T, AF-280T

Gives greater concentration of the flash beam with telephoto lenses in the 85mm-200mm range.

Cat. No.
30019

Telephoto Adapter II for AF-400T

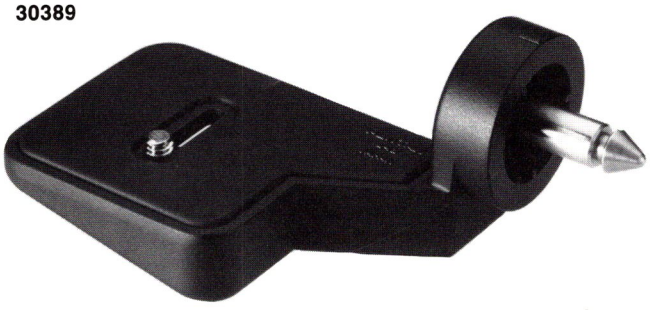
Gives greater concentration of the flash beam with telephoto lenses in the 85mm-200mm range.

Cat. No.
30399

Clamp (for AF-400T or Hot Shoe Grip)

This band clamp fits the AF-400T or Hot Shoe Grip, and has a quick release pin for rapid attachment to the quick release bracket.

Cat. No.
30389



AF-400T Bracket for 645

Attaches to 645 tripod socket, for side mounting AF-400T w/clamp or hot shoe grip w/clamp.

Cat. No.
38462

AF-400T 67 Bracket

Attaches to 67 strap lugs, for side mounting AF-400T w/clamp or hot shoe grip w/clamp.

Cat. No.
37973

Distributor for Multistrobe Lighting

Allows the use of up to three flash units for fully synchronized multi-flash photography. Attaches to camera via a 4P Sync Cord A, B, or C. Retains all automatic functions of both camera and flash when used with 4P sync cord A or B. Connects to AF-400T or Hot Shoe Grip with 4P Multi Sync Cord 5m.

Cat. No.
37330

4P Multi-Sync Cord 5m (16 ft.)

This cord is used to connect the three terminals of the distributor to AF-400T flashes or Hot Shoe Grips for multi-flash photography.

Cat. No.
37331

PENTAX

Flash Accessories

Grip Battery Pack for AF-400T

Attaches to handle mount of AF-400T. Uses 6 "AA" batteries. Approx. 70 flashes at full power with alkaline batteries. 45 flashes with NiCd batteries. Recycle time - 11 seconds with fresh alkaline or 9 seconds with fully charged NiCd batteries.

Cat. No.
30394

Transistor Power Pack for AF-400T or AF-080C

Power stored in unit's transistor circuitry for fast recycle time. Uses 6 "C" cell batteries. Carry with either the supplied shoulder strap or belt loop. Approx. 210 flashes available with 17 - seconds intervals at full power with alkaline batteries, 150 flashes with NiCd batteries. Recycle time 7 seconds with fresh alkaline or 6 seconds with fully charged NiCad batteries at full power.

Cat. No.
37208

Power Pack 510V for AF-400T or AF-080C

Uses a 510V high-voltage laminated battery. Has greatest number of flashes and faster recycling time than other portable power sources. Carry with either the supplied shoulder strap or belt loop. Approx. 300 flashes available with 30-second intervals at full power. Recycle time - 2 seconds at full power with fresh batteries.

Cat. No.
37205

Power Cord for Power Pack 510V

Replacement cord for power pack 510V.

Cat. No.
90101

Pouch style cases are available for the AF-200 series flash units and the AF-280T.

Cat No. **30017** — Case for AF-200 series
Cat No. **30382** — Case for AF-280T

Auto Focus Flash Accessories

Hot Shoe Cover FB

Plastic cover for hot shoe contacts.

Cat. No.
31023

Hot Shoe Adapter F Extension Cord F5P

Used together these two accessories permit off camera flash operation with the AF-240FT and AF-400FTZ. The Hot Shoe Adapter F can also be used to raise the control pack for the AF-080C ring light, making it easier to operate the SF camera's shutter button and select switches.

Cat. No.
31022 Hot Shoe Adapter F
37347 Extension Cord F5P

Wide Angle Adapter for AF-240FT

Extends flash coverage for use with wide angle lenses down to 28mm.

Cat. No.
30318

Telephoto Adapter for AF-240 FT

Gives greater concentration of the flash beam with telephoto lenses in the 85mm-200mm range.

Cat. No.
30319

Wide Angle Adapter FWA for AF-400FTZ

Extends flash coverage for use with wide angle lenses down to 24mm.

Cat. No.
30384

Pouch style cases are available for the AF-240FT and AF-400FTZ flash units.

Cat. No.
30317 Case for AF-240FT
30387 Case for AF-400FTZ

PENTAX
Electronic Flash

1. Automatic Sensor
2. Auto/Manual Selector
3. Built-in Hot Shoe

Pentax AF-160:
A Compact "Dedicated" Automatic Flash Unit

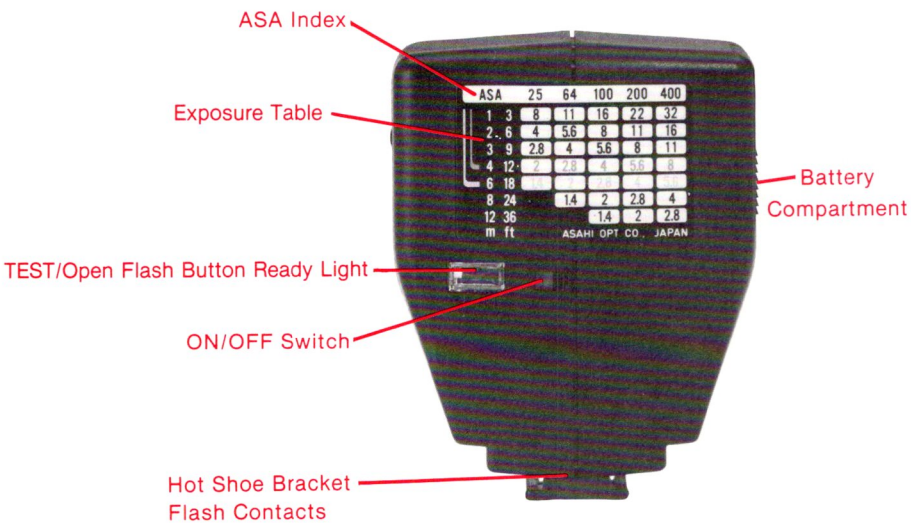
Designed to make flash photography as compact, easy and automatic as today's new generation of 35mm SLR cameras, the Pentax AF-160 measures the light reflected and automatically shuts itself off when just the right amount of light has been delivered for a proper exposure. When used with Pentax SLR cameras featuring "dedicated" flash operation, camera and AF-160 work together to automatically set the shutter speed and activate a viewfinder ready light for worry-free flash pictures.

The AF-160 is a compact, lightweight flash with two automatic f/stop settings for maximum depth of field control plus full manual capability. Delivering up to 200 flashes from two fresh 1.5 volt AA alkaline cells with recycling as fast as every 8 seconds, the AF-160 features a versatile automatic exposure control range from 1.6 to 13 feet in the Green mode and 3.3 to 19.7 feet in the Orange mode. Visually designed to complement the full line of compact Pentax cameras, the AF-160 measures just 2.6″ wide by 3.2″ high by 1.6″deep.

For complete specifications see reverse side.

PENTAX

Electronic Flash



Specifications

Type
Compact, cordless, "dedicated" electronic flash unit with two-range automatic operation plus manual setings, for all cameras with hot shoe ("X") contact. Provides automatic shutter speed setting and viewfinder ready light indicator with Pentax cameras with "dedicated flash" capability.

Flash Control
Two automatic ranges—Orange and Green settings. Manual setting for special requirements.

Apertures on AUTO:

	ASA 100	ASA 400
Orange	f/2.8	f/5.6
Green	f/4.0	f/8.0

Guide Numbers
For manual setting (in feet) 48 (ASA 100)
96 (ASA 400)

Flash Range
AUTO: 3.3—19.7 feet [Orange] (ASA 100 f/2.8)
1.6—13 feet [Green] (ASA 100 f/4.0)
MANUAL: 3—36 feet [M] (ASA 100 f/1.4)

Sensor Reception Angle
18 Degrees

Color Temperature
Equivalent to daylight

Recycling Time
Approximate time with fresh batteries
8 seconds with alkaline batteries
10 seconds with manganese batteries

Flash Duration
1/1500 to 1/30,000 second

Number of Flashes
Up to 200 (with fresh alkaline batteries)
Up to 40 (with fresh manganese batteries)

Power Source
Two 1.5v AA-size batteries (E91 or equivalent) (batteries not included)
(Does not accept rechargeable NiCad batteries)

Other Features
Ready light indicates when unit is charged.
Test Button (Open Flash)
Color-coded exposure table

Size
66mm W x 81mm H x 41mm D
2.6″ W x 3.2″ H x 1.6″ D

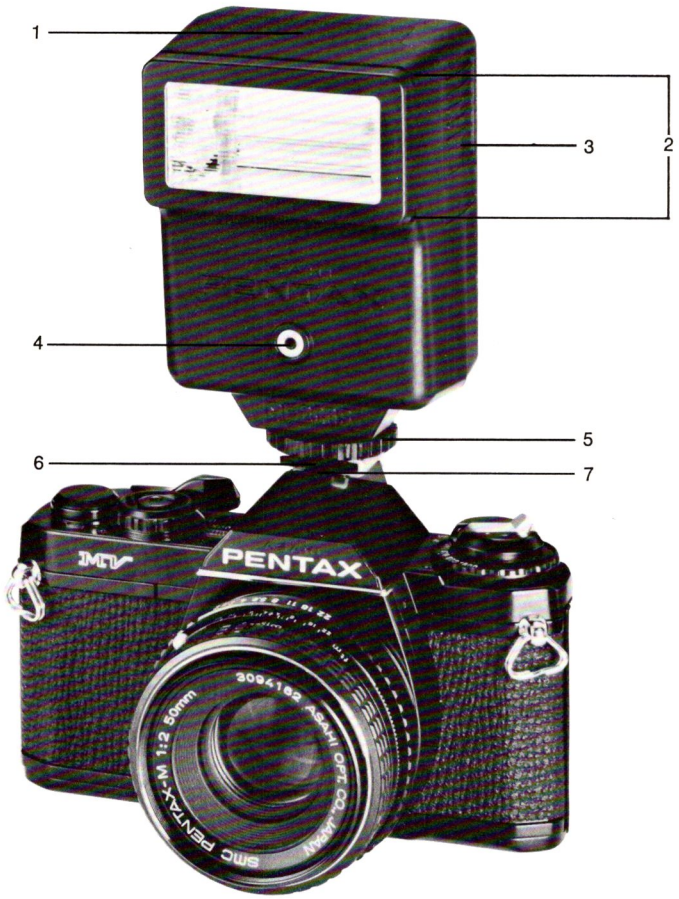
Weight
102 grams (3.6 ounces) without batteries

Accessories
Case (optional)

Cat. No.
30237 AF-160 Electronic Flash
30238 Case for AF-160 Flash

PENTAX

AF 200S Electronic Flash



1. Flash Head
2. Adapter Slots for wide-angle, telephoto adapters
3. Battery Compartment Cover
4. Flash Sensor
5. Thumbscrew
6. Hot Shoe Bracket
7. Hot Shoe Contacts

The Pentax AF 200S incorporates the latest "state of the art" thyristor circuitry in a trim, light, compact electronic flash unit, designed to Pentax standards of performance and reliability. Offers high light output, two automatic exposure ranges plus manual settings.

With Pentax dedicated cameras, the AF 200S provides complete flash automation, simply by sliding the unit into the camera hot shoe. This automatically sets the correct shutter speed and activates the "X" LED signal in the viewfinder which indicates when flash unit is fully charged.

For greater versatility, the AF 200S has two automatic operating modes plus manual setting. On "Auto" the red setting provides apertures of f/2.8 (ASA 100) and f/5.6 (ASA 400) while the green apertures are f/5.6 and f/11, respectively. Thus, there is full control over depth of field.

Working distances with the Green setting range from 2 feet to 11 feet, while the Red setting provides distances from approximately 4½ feet to 23 feet. The built-in light sensor "reads" the light and automatically adjusts flash duration to provide correct exposure for the working apertures and the subject-to-flash distance.

For flash photography at other apertures or at greater flash-to-subject distances than 23 feet, the manual setting is used with foot guide numbers of 66 (for ASA 100 film) or 130 (with ASA 400 film).

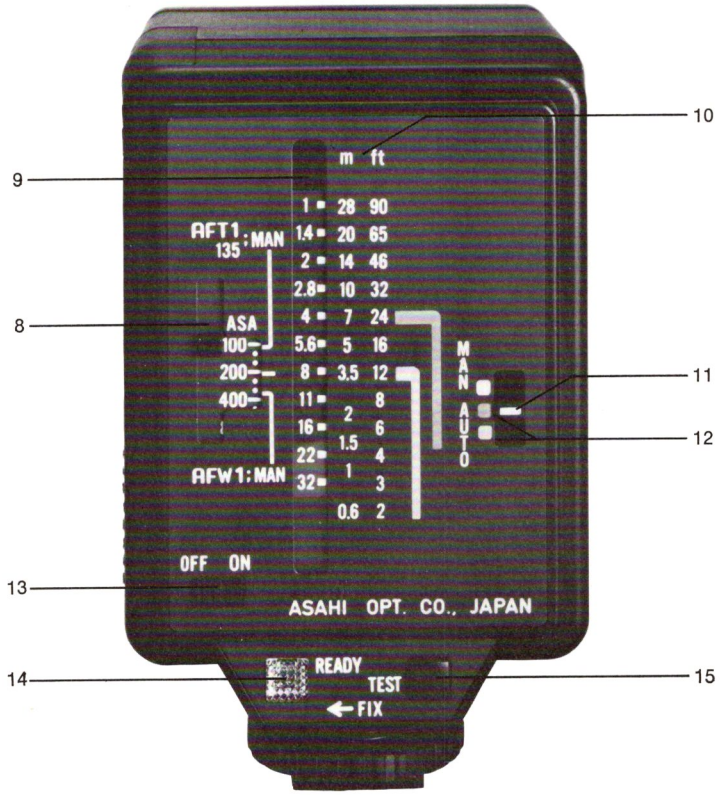
The thyristor circuitry serves as an energy saver, cutting off the power when the proper flash duration is over, thus providing up to 250 flashes from a set of four alkaline AA cells. Recycling times are conveniently short, ranging from virtually instantaneous at close subject-to-flash distances to 4 to 6 seconds at longer distances.

The light distribution of the unit is broad enough for even illumination when using wide-angle lenses of 35mm focal length. The Pentax AF 200S is ideally suited for today's photography, eliminating worrisome details and giving the photographer the freedom to concentrate on the picture while the Pentax camera and flash do the work. It is easy to carry, fits perfectly on modern, compact cameras, and extends aim-and-shoot convenience to the area of flash photography.

Technical specifications on next page

PENTAX

AF 200S Electronic Flash



8. ASA Film Speed Index.
9. Aperture Scale
10. Distance Scale
11. Operating Mode Selector: Auto/Manual
12. Auto Mode Indexes (Red, Green)
13. Power Switch
14. Ready Light
15. Test Lamp

Specifications

Type:
Thyristor electronic flash unit, compact, cordless, with two-range automatic operation plus manual settings, for all cameras with hot shoe contact. Provides automatic synchronization with Pentax dedicated cameras.

Flash Control:
Two automatic ranges — Red and Green settings. Manual setting for special requirements.

Apertures on AUTO:

	ASA 100	ASA 400
Red	f/2.8	f/5.6
Green	f/5.6	f/11

Guide Numbers:

For manual setting (in feet)	66 (ASA 100)
	130 (ASA 400)

Flash Range:
4.6 to 23 feet (Red)
2 to 11.5 feet (Green)

Sensor Reception Angle:
18 degrees

Color Temperature:
Equivalent to daylight

Recycling Times:
Varies continuously based on operating mode and subject distance from virtually instantaneous at low outputs (close subject distance) to 4-5 seconds at high output (farthest range) with fresh batteries.

Flash Duration:
1/1500 to 1/30,000 second

Number of Flashes:
Up to 250 (with fresh alkaline batteries)

Power Source:
Four 1.5V AA batteries (E 91 or equivalent) or rechargeable nicad

Other Features:
Ready light indicates when unit is charged.
Test button.

Size:
105mm H x 67mm W x 60mm D (4.1" x 2.6" x 2.4").

Weight:
285 grams (10 ounces) without batteries

Accessories:
Case

Cat. No.
30015 AF 200S with case
30017 Case for AF 200S

PENTAX

Electronic Flash

Pentax AF-280T
TTL Coupled Thyristor Automatic Electronic Flash

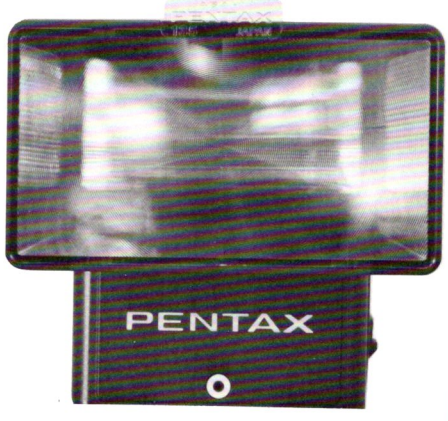
This new thyristor shoe-mount automatic electronic flash from the innovators at Pentax features a powerful ASA 100 guide number of 92 yet is extremely compact, lightweight and well-balanced. When used with the Pentax LX, the AF-280T provides full TTL integration including film plane measured automatic exposure control, automatic shutter speed synchronization at "X," viewfinder ready light and auto exposure viewfinder confirmation. With cameras such as the ME Super, MV or MV-1, full "dedicated" features are retained for maximum flash versatility and, of course, the AF-280T is fully compatible with all other Pentax 35mm SLR cameras.

The AF-280T and Pentax LX work together to deliver an automatic exposure range with film plane measured accuracy of from 0.8 feet to 65.6 feet with an f/1.4 lens and ASA 100 film. In standard automatic it allows the photographer to select from two auto f/stop ranges for depth of field control and provides a maximum automatic operating distance of 24 feet.

This functional unit also delivers dual manual control with ASA guide numbers of 92 in "High" and 25 in "Low." Both these manual positions provide for "dedicated" flash operation but an override allows for total manual control and synchronization at speeds other than "X."

Enhancing the unit's versatility even further is the fully rotating, bounce flash head which provides for −15° to 90° angles in the vertical position and a full 180° in the horizontal.

The AF-280T features a fully rotating bounce flash head for complete lighting control and flexibility.

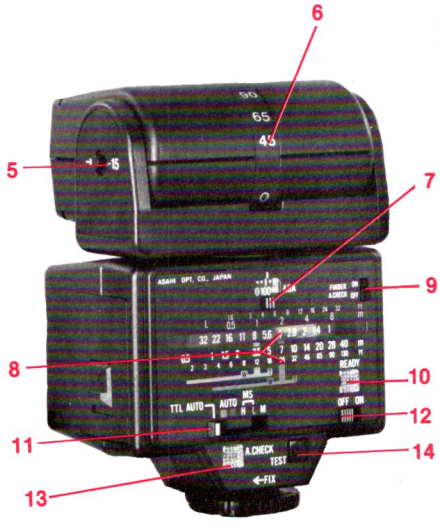


Optional accessories include the AFW-1 Wide Angle Adapter and the AFT-1 Tele Adapter.

For complete specifications and ordering information, see reverse side.

PENTAX

Electronic Flash



1. Rotating Bounce Flash Head
2. Auto Sensor
3. Battery Compartment
4. Hot Shoe with Lock
5. Flash Head Lock Lever
6. Flash Head Angle Scale
7. ASA Selector and Scale
8. Aperture/Distance Scales
9. Viewfinder Auto Check Switch
10. Ready Light
11. Flash Mode Selector
12. On/Off Switch
13. Auto Exposure Check Lamp
14. Open Flash Button

Specifications

Type
Compact, cordless, TTL coupled "dedicated" electronic flash unit featuring film plane measured auto exposure control with the LX, two standard auto operating ranges, dual level synchronized manual and full manual override. Provides automatic shutter speed setting and viewfinder ready light with compatible Pentax cameras; also provides viewfinder auto exposure confirmation with LX.

Apertures on AUTO

	ASA 100	ASA 400
TTL	All	All
Red	f/4	f/8
Green	f/8	f/16

Guide Numbers (ft.)

Manual Position	ASA 100	ASA 400
High	92	184
Low	25	50

TTL Auto Operating Range
0.8 to 65.6 feet with 50mm f/1.4 standard lens (ASA 100)

Non-TTL Auto Operating Ranges
3.5 to 24 feet (Red)
1.6 to 11.5 feet (Green)

Auto Sensor Angle
20 Degrees

Color Temperature
Equivalent to daylight

Recycle Times
10 seconds with Alkaline batteries
8 seconds with NiCad batteries
(Approximate times for full power flash recycle with fresh batteries)

Flash Duration
1/1500 to 1/30,000 second

Number of Flashes
Up to 150 with Alkaline batteries
Up to 120 with NiCad batteries
(Based on full power flashes with fresh or fully charged batteries)

Power Source
Four 1.5v AA-size Alkaline or NiCad batteries

Angles of Illumination
Covers 28mm camera lens

Bounce Capability
Head rotates a full 180° with detents at each 45° position; vertical adjustment from −15° to 90° with click stops at 0°, 45° and 65°. Lock release allows head to be set for −15° close-up position.

Other Features
Auto Exposure Check Lamp (LX viewfinder confirmation with On/Off Switch)
Ready Light indicates full charge
Open Flash Button
Hot Shoe Locking Mechanism

Size
80mm W × 116mm H × 68mm D
3.1″ W × 4.6″ H × 2.7″ D

Weight
300 grams (10.6 ounces) without batteries

Optional Accessories
AFW-1 Wide Angle Adapter
AFT-1 Telephoto Adapter

ORDERING INFORMATION

Cat. No.	
30381	AF-280T Electronic Flash with Case
30382	Case for AF-280T (replacement)
30018	AFW-1 Wide Angle Adapter for AF-200S and AF-280T
30019	AFT-1 Telephoto Adapter for AF-200S and AF-280T

PENTAX

Electronic Flash

The AFT-400T is the perfect complement to the extensive Pentax LX Professional 35mm SLR System.

Power supply options for the AF-400T include the Grip Battery Pack, the TR Power Pack, both 510V and 240/270V Power Packs and an AC Adapter.

Pentax AF-400T
TTL Coupled Thyristor Automatic Electronic Flash

The new AF-400T has been designed for the photographer who requires maximum light output with total automatic and manual exposure control plus a wide variety of internal and external power source options. This handsomely-styled handle-mount unit delivers with an ASA 100 guide number of 130, fully integrated TTL automatic exposure control with the Pentax LX for film plane measurement accuracy, a choice of three standard automatic operating ranges, and four manual power settings for creative lighting flexibility in both the "dedicated manual" and standard manual operating modes.

When used with the LX, the AF-400T delivers film plane measured automatic operation from 0.8 to an amazing 108.2 feet with the 50mm f/1.2 standard lens and ASA 100 film. Three auto exposure ranges for non-TTL control are provided with a maximum auto operating distance of 33 feet. In manual, the photographer can select full power, 1/4 power, 1/16 power or 1/25 power electing to use either the "dedicated" features of manual synch or the total exposure control of full manual override.

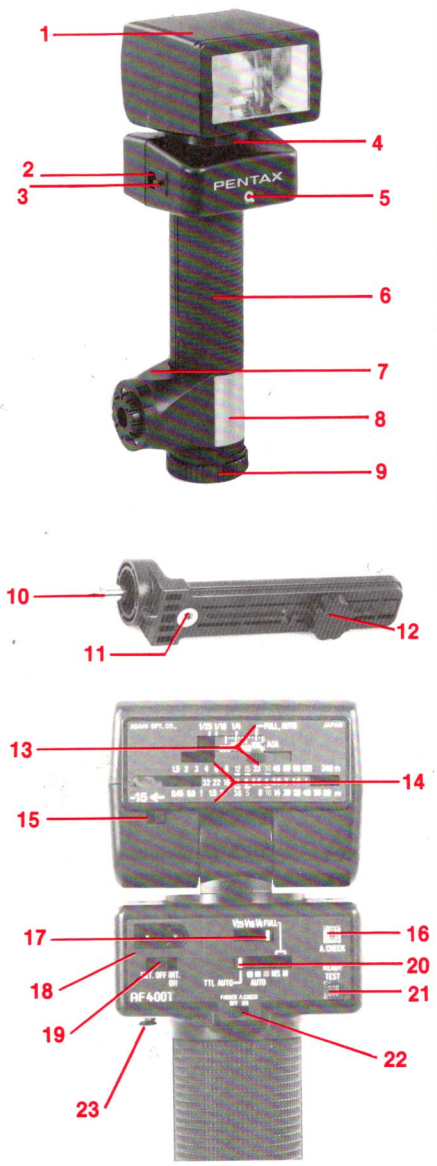
The functional design of the AF-400T is enhanced by its quick release bracket, handle-mount styling and by the availability of a wide choice in power supply options. The Grip Battery Pack combines the portability and convenience of AA Alkaline or NiCad cells with the handling ease of direct to handle mounting. The TR Power Pack converts the power of six "C" size Alkaline cells to the voltage required for the flash unit while the Power Pack 510V and Power Pack 240/270V provide the fast recycling and high number of flashes available only with laminated dry batteries.

For additional supplemental lighting flexibility, the head of the AF-400T rotates a full 180° and provides bounce angles from −15° to 90°.

For complete specifications and ordering information, see reverse side.

PENTAX

Electronic Flash



1. Rotating Bounce Flash Head
2. 4-Pin Sync Cord Socket
3. Sync Cord Lock Release
4. Flash Head Angle Scale
5. Auto Sensor
6. Grip
7. Bracket Lock (rear)
8. Bracket Clamp
9. Bottom Cover
10. Bracket Pin
11. Tripod Socket
12. Tripod Screw
13. ASA Selector and Scale
14. Aperture/Distance Scales
15. Flash Head Lock Lever
16. Auto Exposure Check Lamp
17. Manual Power Selector
18. External Power Socket
19. Power Switch
20. Flash Mode Selector
21. Ready Light
22. Viewfinder Auto Check Switch
23. Standard PC Sync Socket

Specifications

Type
Grip style TTL coupled "dedicated" electronic flash unit featuring film plane measured auto exposure control with the LX, three standard auto operating ranges, and four level manual operation with manual sync or full manual override. 4-Pin Sync Cord A provides full TTL/Dedicated coupling with Pentax LX; full dedicated operation with ME Super, MV, MV-1 and similar cameras is available with optional 4-Pin Sync Cord B; compatible with other cameras with readily available optional PC Sync Cord.

Apertures on AUTO

	ASA 100	ASA 400
TTL	All	All
Red	f/4	f/8
Green	f/8	f/16
Yellow	f/11	f/22

Guide Numbers (ft.)

Manual Position	ASA 100	ASA 400
Full	130	260
1/4	66	132
1/16	33	66
1/25	26	52

TTL Auto Operating Range
0.8 to 108.2 feet with 50mm f/1.2 standard lens (ASA 100)

Non-TTL Auto Operating Ranges
4.1 to 32.8 feet (Red)
2.1 to 16.4 feet (Green)
1.5 to 11.8 feet (Yellow)

Auto Sensor Angle
20 Degrees

Color Temperature
Equivalent to daylight

Recycle Times
0.2 to 12 seconds depending upon subject distance, condition of batteries and type of cells used.

Flash Duration
1/1500 to 1/30,000 second

Number of Flashes
Up to 800+ depending upon subect distance, condition of batteries and type of cells used.

Power Sources
Grip Battery Pack—6 1.5V AA Alkaline or NiCad Batteries
TR Power Pack—6 "C" Cell Alkaline or NiCad Batteries
Power Pack 510V—510 volt laminated dry battery
Power Pack 240/270V—Either 240V or 270V laminated dry battery
AC Adapter—100V or 120V Adapters available individually

Angles of Illumination
45° vertical, 60° horizontal

Bounce Capability
Head rotates a full 180° with detents at each 45° position; vertical adjustment from −15° to 90° with click stops at 0°, 45° and 65°. Lock release allows head to be set for −15° close-up position.

Other Features
Auto Exposure Check Lamp (LX viewfinder confirmation with On/off Switch)
Ready Light indicates full charge
Open Flash Button

Size
86mm W × 260mm H × 92mm D
3.4″ W × 10.2″ H × 3.6″ D

Weight
770 grams (27.2 ounces) less battery grip and mounting bracket

Optional Accessories
4-Pin Sync Cord B for Hot Shoe cameras
AFW-2 Wide Angle Adapter
AFT-2 Telephoto Adapter
AC Adapter 100V
AC Adapter 120V
Power Pack 510V
Power Pack 240/270V
TR Power Pack
Grip Battery Pack
Bracket
4-Pin Sync Cord A (for LX)

ORDERING INFORMATION

Cat. No.	
30391	AF-400T Kit consisting of: AF-400T, 4P Sync Cord A, Bracket and Grip Battery Pack
30390	AF-400T with Clamp
37341	4P Sync Cord A for AF-400T (For PC Terminal)
37342	4P Sync Cord B for AF-400T (For Hot-Shoe Contact)
37343	4P Sync Cord C for AF-400T (For PC Terminal/non TTL)
37344	4P Sync Cord A-5m (16 ft.) for AF-400T (For PC Terminal)
30398	Wide Angle Adapter II for AF-400T
30399	Telephoto Adapter II for AF-400T
30392	Bracket for AF-400T (for 35mm cameras)
30395	AC Adapter II 120V for AF-400T
37205	Power Pack 510V for AF-400T
37206	Power Pack 240/270V for AF-400T
37208	TR Power Pack for AF-400T
37394	Grip Battery Pack for AF-400T
37973	6x7 Bracket for AF-400T

PENTAX 645

Multi-Mode Medium-Format SLR Camera with Built-In Motor Drive

- Programmed Auto
- Aperture Priority
- Shutter Priority
- Metered Manual
- TTL Flash
- Programmed Flash
- Leaf Shutter

All too often, the professional photographer must wait years for some new innovation to make its way from mass-market 35mm SLRs to medium-format cameras. The Pentax 645 is a welcome exception. It is a fully programmed multi-mode camera with more sophisticated electronics than any other medium-format SLR now on the market. The Pentax 645's seven exposure-control modes put the photographer in charge, whether the situation demands the instant response of programmed automation, the full creative freedom of metered manual, or anything in between, including aperture or shutter priority automation and automatic TTL flash synchronization. The Pentax combination of total control through electronics and superb picture quality with the 6 x 4.5 format opens up exciting new possibilities for professional-quality photography.

As versatile as the popular 35mm format is, the serious photographer often needs more. Only a larger format can produce sharp, professional-quality enlargements for display or transparencies for reproduction.

The Pentax 645 offers the superior photographic quality of the 6 x 4.5 format without sacrificing versatility and handling ease. The 6 x 4.5 negative provides 2,324 sq. mm of usable area — over two and a half times the area of a 35mm negative. That means finer resolution and better color fidelity in enlargements and easier viewing of stock photos. Using 120, 220, or 70mm film, the 6 x 4.5 rectangular negative format is also highly efficient, with none of the wasted space of 6 x 6 square negatives, which must usually be cropped into rectangular shape. And there's one more advantage to the 6 x 4.5 medium format: it gives the photographer access to a full range of professional-quality medium-format lenses — not only our new 645 lenses, but also, with an adapter, most Pentax 67-system lenses.

Compact prism
A highly compact pentaprism of a type never before used in a medium-format camera contributes significantly to the light weight and low-profile design of the camera. Thanks to this new prism, the 645 stands just a little taller than popular 35mm SLRs.

Smooth, quiet film winder
Most auto-wind cameras use a system of noisy speed-reduction gears to transmit motion from the motor to the film spools. For the Pentax 645, we've created a quiet belt-drive system that is both reliable and durable. "Teeth" on the belt help prevent slippage during high-speed winding.

Shock-reducing mirror brake
Regulating the motion of the mirror as it tilts is a motorized flywheel that acts as a governor, braking the mirror as it approaches its full-up position. Mirror shock is thus minimal, an important consideration at slow shutter speeds. Most other cameras use a jerky spring-action mirror mechanism.

Functional control panel layout
All electronic controls on the Pentax 645 are functionally arranged on the top panel of the body for easy access while shooting. The lefthand panel contains buttons for MODE, ISO setting and exposure compensation (±EF). These controls are activated by selecting buttons located between the righthand panel and the shutter release button. All control settings can be made in seconds without moving the hands from the shooting position. The lefthand panel also contains on/off switches for display panel illumination and viewfinder LED display. On the righthand panel, in addition to the selecting buttons, are large LCD readouts for all vital information concerning mode, aperture, shutter speed, flash status, ISO setting, exposure compensation and exposure count. Located between the selecting buttons and the shutter release is the main power switch. Switching off power to the camera does not erase previous control settings.

Multiple exposure ring and shutter cocked indicator
To capture two or more images in a single frame, turn the multiple exposure ring on the side of the camera before pressing the shutter release. This prevents the film from advancing. The shutter cocked indicator, located below the multiple exposure ring, shows red when the camera is ready for the next exposure.

PENTAX
645

Specifications

Type
6 x 4.5 format SLR with multi-mode automatic exposure controls and built-in motor drive.

Exposure Modes
Programmed AE, Aperture-Priority AE, Shutter-Priority AE, Metered Manual, TTL Auto Flash, Programmed Auto Flash, and Leaf-Shutter Lens modes.

Exposure Control Mode Selection
Via mode setting buttons and aperture ring of 645 lens.

Film
120 film (15 exposures), 220 film (30 exposures) and 70 mm film (approx. 90 exposures).

Picture Size
56mm x 41.5mm

Lens Mount
Pentax 645 bayonet mount (with electronic contacts).

Shutter
Electronically-controlled vertical-run cloth focal-plane shutter, from 15 to 1/1000 sec., 1/60 sec., and B. Electro-magnetic shutter release.

Exposure Information in Viewfinder
LED indication for lens aperture, shutter speeds and exposure factor warning, out-of-meter coupling and shutter/aperture coupling range warning, flash-ready signal, flash exposure confirmation signal, Flash sync at 1/60 sec. [60], Bulb [B], and Leaf-Shutter Lens [LS, F--].

External Indication
Liquid crystal displays (LCD) indicate Programmed AE [Auto, P], Aperture-Priority AE [Auto, f-numer], Shutter-Priority AE [Auto, shutter speed], Aperture-Priority AE (lens aperture set manually) [Auto, F--], Metered Manual [M, shutter speed], Flash sync at 1/60 sec. [60], Bulb [B], Leaf-Shutter Lens [LS, F--], exposure factor, ISO film speed, exposure count, and flash-ready signal.

Flash Synchronization
Via hot-shoe (X-sync contact, dedicated flash contacts) and X-sync socket. X-sync speed at 1/60 sec. Slow shutter speed synchronization possible in Metered Manual mode.

Viewfinder
Keplerian telescopic viewfinder with split-image/microprism Clear-Bright-Matte screen. (Interchangeable focusing screens available.); Viewing area 92% vertical and 93% horizontal, 0.75X magnification with 75mm lens at infinity and -1 diopter. Diopter adjustment possible from −5 to +2 diopters.

Mirror
Instant return mirror.

Film Loading
120 and 220 films semi-automatically loaded with start mark; 70mm film automatically loaded.

Film Winding
Automatic film winding by motor drive with single/consecutive shooting modes. (Single: 1 fps. Consecutive: approx. 1.5 fps.) Film winding automatically stops at end of film trailer.

Exposure Counter
LED indication. Additive type. Automatic resetting by LCD. Automatically sets shutter speed at 1/1000 sec. up to first frame. Exposure count not advanced in multiple-exposure mode.

Multiple Exposure
Via multi-exposure ring.
Cancellation possible.

Exposure Metering:
Open-aperture, center-weighted TTL metering by GPD cells. Off-the-film metering for dedicated TTL automatic electronic flashes.

Exposure Range
From EV 3 (f/2.8 at 1 sec.) to EV 19 (f/22 at 1/1000 sec.) with 75mm f/2.8 lens with ISO 100 film.

Exposure Compensation
Via exposure factor button. Settings at +3, +2, +1, 0, −1, −2, and −3.

Depth-of-Field Preview
Via preview lever when aperture set manually.

Power Source and Battery Life
Six 1.5V "AA" batteries (Manganese, Alkaline or NiCd) for exposure control/display circuits and motor drive. Power automatically turned off 30 seconds after the return of shutter release button.

	Power Source		
	Manganese Battery:	Alkaline Battery:	Ni-Cd Battery:
120 Film	Approx. 100 rolls	Approx. 250 rolls	Approx. 100 rolls
220 Film	Approx. 70 rolls	Approx. 170 rolls	Approx. 70 rolls
70mm Film	Approx. 20 rolls	Approx. 50 rolls	Approx. 20 rolls

Memory Power Source
One built-in lithium battery for exposure data memory circuits. Minimum battery life 5 years. (Replaced at Pentax service center.)

Size
147 mm (W) x 109mm (H) x 117mm (D)
(5.7″ x 4.3″ x 4.6″) with Film Holder and Grip 645.

Weight
1,320g (46.2 oz.) with lithium battery, Film Holder and Grip 645.

PENTAX

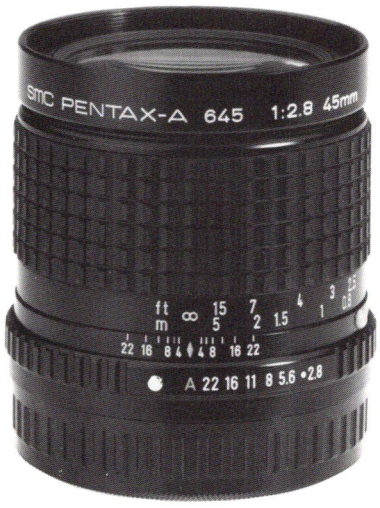
645 Lenses

SMCP-A 645 35mm f/3.5

Minimum Aperture: 22
Lens Construction: 8 groups 9 elements
Angle of View: 90°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.3m (1.0 ft.)
Filter Size: 77mm
Lens Hood: RH-RB 77
Lens Case: HG-115/S80-120
Maximum Diameter & Length: 80mm x 67mm (3.1″ x 2.6″)
Weight: 470g (16.6 oz)
Catalog No.: 26325 SMCP-A 645 35mm f/3.5 w/case

SMCP-A 645 45mm f/2.8

Minimum Aperture: 22
Lens Construction: 8 groups 9 elements
Angle of View: 76°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 67mm
Lens Hood: RH-B70
Lens Case: HG-115B/S80-120
Maximum Diameter & Length: 74mm x 66.5mm (2.9″ x 2.6″)
Weight: 400g (14.1 oz)
Catalog No.: 26305 SMCP-A 645 45mm f/2.8 w/case



SMCP-A 645 55mm f/2.8

Minimum Aperture: 22
Lens Construction: 7 groups 8 elements
Angle of View: 65°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 58mm
Lens Hood: RH-B58
Lens Case: HG-115C/S80-80
Maximum Diameter & Length: 74mm x 60.5mm (2.9″ x 2.4″)
Weight: 410g (14.5 oz)
Catalog No.: 26315 SMCP-A 645 55mm f/2.8 w/case

PENTAX

645 Lenses

SMCP-A 645 75mm f/2.8

Minimum Aperture: 22
Lens Construction: 5 groups 6 elements
Angle of View: 50°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.6m (2.0 ft.)
Filter Size: 58mm
Lens Hood: RH-A58
Lens Case: HG-90/S80-80
Maximum Diameter & Length: 74mm x 37.5mm (2.9″ x 1.5″)
Weight: 240g (8.5 oz)
Catalog No.: 26101 SMCP-A 645 75mm f/2.8 w/case

SMCP 645 75mm f/2.8 Leaf Shutter

Minimum Aperture: 22
Lens Construction: 5 groups 6 elements
Angle of View: 50°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.75m (2.5 ft.)
Flash Sync Shutter Speeds: 1/60 to 1/500
Filter Size: 58mm
Lens Hood: RH-A58
Lens Case: HG-100/S80-80
Maximum Diameter & Length: 76mm x 49.5mm (3.0″ x 1.9″)
Weight: 365g (12.9 oz)
Catalog No.: 26110 * SMCP 645 LS 75mm f/2.8 w/case

*Catalog Number changes to 26115 10/90

SMCP-A 645 Macro 120mm f/4

Minimum Aperture: 32
Lens Construction: 7 groups 9 elements
Angle of View: 32.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.39m (1.3 ft.)
Maximum Magnification: 1.0X
Filter Size: 67mm
Lens Hood: MH-RA67
Lens Case: HG-170/S80-160
Maximum Diameter & Length: 78.5mm x 110mm (3.0″ x 4.3″)
Weight: 695g (24.5 oz)
Catalog No.: 26905 SMCP-A 645 Macro 120mm f/4 w/case

PENTAX
645 Lenses

SMCP 645 135mm f/4 Leaf Shutter

Minimum Aperture: 32
Lens Construction: 5 groups 5 elements
Angle of View: 29°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 2.0m (6.6 ft.)
Flash Sync Shutter Speeds: 1/60 to 1/500
Filter Size: 58mm
Lens Hood: RH-A58
Lens Case: HG-115/S80-120
Maximum Diameter & Length: 76mm x 69mm (3.0″ x 2.7″)
Weight: 570g (20.1 oz)
Catalog No.: 26410 * SMCP 645 LS 135mm f/4 w/case

SMCP-A 645 150mm f/3.5

Minimum Aperture: 32
Lens Construction: 4 groups 4 elements
Angle of View: 26°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.4m (4.6 ft.)
Filter Size: 58mm
Lens Hood: Built-in
Lens Case: HG-115/S80-120
Maximum Diameter & Length: 74mm x 71.5mm (2.9″ x 2.8″)
Weight: 435g (15.3 oz)
Catalog No.: 26405 SMCP-A 645 150mm f/3.5 w/case

SMCP-A 645 200mm f/4

Minimum Aperture: 32
Lens Construction: 4 groups 4 elements
Angle of View: 20°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 2.0m (6.6 ft.)
Filter Size: 58mm
Lens Hood: Built-in
Lens Case: HD-190B/S80-160
Maximum Diameter & Length: 74mm x 127.5mm (2.9″ x 5.0″)
Weight: 570g (20.1 oz)
Catalog No.: 26435 SMCP-A 645 200mm f/4 w/case

***Catalog Number changes to 26415 3/91**

PENTAX

645 Lenses

SMCP-A* 645 300mm f/4 ED(IF)

Minimum Aperture: 32
Lens Construction: 8 groups 8 elements
Angle of View: 13.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 3.0m (9.8 ft.)
Filter Size: 77mm
Lens Hood: Built-in
Lens Case: HF-270/S110-230
Maximum Diameter & Length: 93mm x 208mm (3.7″ x 8.2″)
Weight: 1,360g (48 oz)
Catalog No.: 26425 SMCP-A* 645 300mm f/4 ED(IF) w/case

SMCP-A* 645 600mm f/5.6 ED(IF)

Minimum Aperture: 45
Lens Construction: 11 groups 12 elements
Angle of View: 6.6°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 5.0m (16.4 ft.)
Filter Size: 49 (rear)
Lens Hood: Built-in
Lens Case: Exclusive Trunk Case
Maximum Diameter & Length: 156mm x 353mm (6.1″ x 13.9″)
Weight: 5,000g (176.4 oz)
Catalog No.: 26600 SMCP-A* 645 600mm f/5.6 ED(IF) w/Trunk Case

SMCP-A 645 Zoom 80mm-160mm f/4.5

Minimum Aperture: 32
Lens Construction: 11 groups 11 elements
Angle of View: 47°24.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.0m (3.3 ft.)
Filter Size: 77mm
Lens Hood: RH-A77
Lens Case: HE-189B/S90-160
Maximum Diameter & Length: 82.5mm x 131mm (3.2″ x 5.2″)
Weight: 1,010g (35.6 oz)
Catalog No.: 26705 SMCP-A 645 Zoom 80mm-160mm f/4.5 w/case

PENTAX

645 Lenses

645 1.4X Rear Converter A

Lens Construction: 4 groups 5 elements
Maximum Diameter & Length: 77mm x 31mm (3.0″ x 1.2″)
Weight: 265g (9.3 oz)
Lens Case: HG-90/S80-80
Usable Lenses: 120/4, 200/4, 300/4, 600/5.6
Catalog No.: 38400 * 645 1.4X Rear Converter A w/case

*Catalog Number changes to 38405 10/90

645 2X Rear Converter A

Lens Construction: 4 groups 6 elements
Maximum Diameter & Length: 77mm x 60mm (3.0″ x 2.4″)
Weight: 350g (12.3 oz)
Lens Case: HG-115B/S80-120
Usable Lenses: All; 35mm to 600mm, 80mm-160mm Zoom
Catalog No.: 38402 * 645 2X Rear Converter A w/case

*Catalog Number changes to 38406 10/90

PENTAX

645 Lens Hoods and Cases

Lens Product Code	Lens Description	Filter Size	Hood	Hood Product Code	Case	Case Product Code
26320	35mm/3.5	77	RH-RB 77	38722	HG-115 S80-120	38863 33924
26300	45mm/2.8	67	RH-B 70	38711	HG-115B S80-120	38861 33924
26310	55mm/2.8	58	RH-B 58	38702	HG-115C S80-80	38862 33927
26101	75mm/2.8	58	RH-A 58	38701	HG-90 S80-80	38866 33927
26110	75mm/2.8 L.S.	58	RH-A 58	38701	HG-100 S80-80	38860 33927
26900	120mm/4 Macro	67	MH-RA 67	34325	HG-170 S80-160	38868 33925
26410	135mm/4 L.S.	58	RH-A 58	38701	HG-115 S80-120	38863 33924
26400	150mm/3.5	58	Built-in	—	HG-115 S80-120	38863 33924
26430	200mm/4	58	Built-in	—	HD-190B S80-160	38892 33925
26420	300mm/4 ED(IF)	77	Built-in	—	HF-270 S110-230	38864 33928
26600	600mm/5.6 ED(IF)	49R	Built-in	—	Exclusive Trunk Case supplied w/lens	
26700	80-160mm/4.5	77	RH-A 77	38721	HE-189B S90-160	38865 33929
38400	1.4X Converter	—	—	—	HG-90 S80-80	38866 33927
38402	2X Converter	—	—	—	HG-115 S80-120	38863 33924
			RH—Rubber Hood MH—Metal Hood		H—Hard Case S—Soft Case	

Lens Hood

PENTAX

645 Accessories

Power Cord 645

The Power Cord 645 is an accessory to be used in remote control photography. Connect the grip connector plug (that has been removed from the 645 body) to the body connector socket. In this way the shutter can be manipulated from the grip positioned slightly away from the camera or kept warm in pocket.

Cat. No.
38451 Power Cord 645 (3M)

Adapter 645 for 67 Lens

This adapter enables you to use the Pentax 67 lens with the Pentax 645 body. When 67 lenses are used with this adapter, open aperture metering is maintained and three of the 645's exposure modes can be used — aperture priority, TTL flash, and metered manual.

Compatible 67 Lenses — SMC Fish-Eye 67 35mm f/4.5, SMCP 67 45mm f/4, SMCP 67 55mm f/4, SMC 67 75mm f/4.5, SMCP 67 90mm f/2.8, SMC 67 105mm f/2.4, SMC Macro 67 135mm f/4, SMCP 67 165mm f/2.8, SMC 67 200mm f/4, SMC 67 300mm f/4, SMC 67 400mm f/4, SMC 67 600mm f/4, SMCP-M* 67 800mm f/6.7 ED(1F)

Cat. No.
38454 645 Adapter for 67 System Lenses

Adapter K for 645 Lens

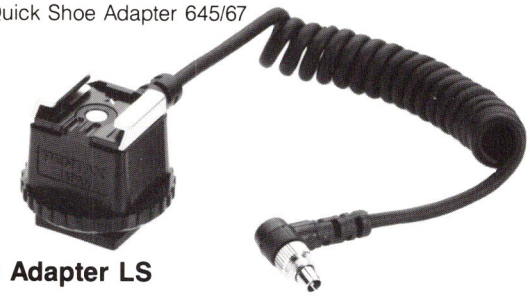
The Adapter K for 645 Lens is an adapter ring to mount 645 lenses to Pentax K (KA, Kf) mount 35mm SLRs. It permits photography of the subject up to infinity (∞) as an ordinary lens. When you go out for a photo trip with your 645 camera and its lenses, and are carrying a 35mm SLR as a back-up, you can use your 645 lens for that camera as well. When the subject doesn't require this 6x4.5cm larger format, by using this space-saving and easy-to-carry adapter, you can use the 35mm SLR combining your 645 lens. You don't need to carry extra 35mm format lenses.

Cat. No.
38455 Adapter K for 645 Lenses

Quick Shoe 645/67

This accessory enables you to attach the camera to the tripod or detach the camera from the tripon in seconds. The unit consists of the tripod shoe that attaches to the tripod head and the adapter that attaches to the camera. The adapter 645/67 is used for the Pentax 645 or 67 camera.

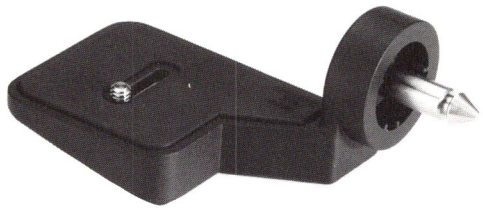
Cat. No.
38464 Quick Shoe 645/67 set (38456 and 38458)
38456 Quick Shoe
38458 Quick Shoe Adapter 645/67



Hot-Shoe Adapter LS

This adapter is needed when the 645's or 67's leaf-shutter lens and the clip-on type electronic flash are used in combination. It is first attached to the 645 camera body or the 67 Grip, onto which the flash unit is mounted. The sync cord is connected to the X-sync socket on the lens. This combination, however, does not permit TTL Auto Flash photography.

Cat. No.
38460 Hot-Shoe Adapter LS (30cm, 11.8 in)



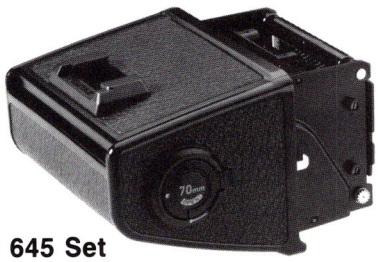
AF-400T Bracket for 645

When used with the clamp for AF-400T or hot shoe grip (supplied w/AF-400T) this bracket securely attaches the AF-400T or hot-shoe grip to the 645.

Cat. No.
38462 AF-400T Bracket for 645

PENTAX

645 Accessories



70mm Film Holder 645 Set

Holds Type II 70mm film in 15 foot cartridges for approximately 85 6 x 4.5cm exposures. Comes with eyepiece extension, one empty film cartridge, #38806 Back Cover, and carrying case.

Dimensions, W x H x D: 96 x 72.5 x 114mm (3.8 x 2.9 x 4.5 in.)
Weight (without cartridge): 394 gr. (13.9 oz.)

Cat. No.
38800 70mm Film Holder 645 set w/eyepiece, case, and back cover
38807 Eyepiece for 70mm Film Holder 645
38808 Soft Case for 70mm Film Holder 645
38806 Back Cover for 70mm Film Holder 645 (also fits 120 and 220 645 Film Holders)

120 Film Holder 645

Holds 120 roll film for 15 exposures. Has film memo holder and comes with storage case.

Cat. No.
38801 120 Film Holder 645

220 Film Holder 645

Holds 220 roll film for 30 exposures. Has film memo holder and comes with storage case.

Cat. No.
38802 220 Film Holder 645

Metal Camera Case 645

A Pentax-exclusive case convenient for carrying the 645 system for outdoor photography. Made of lightweight and intensified aluminum, the case is extremely lightweight and durable. It is partitioned to contain a 645 camera and a set of lenses and accessories described on the back as an example. The partitions are adjustable. It also has a side bag on one side of the case to contain some photography material and small items. The side bag is removable.
Dimensions (W×H×D): 18″×13″×6″

Cat. No.
38855 Metal Camera Case 645 w/Side Case

645 Soft Case

Made of soft suede, this can contain a 645 body with any one of the interchangeable lenses from 45mm to 150mm. Can also contain the 645 body even with the Large Eyecup on.

Cat. No.
38850 645 Soft Case

Auto Bellows 645 Set

Auto Bellows for closeups and macrophotography. Gives over 2x life-size magnification with 75mm f/2.8 lens. Rack & pinion adjustment for rail, front & rear standards. Requires stop-down metering; Program operation not possible.

Usable Lenses: Pentax 645 lenses from 55-200mm (excluding 80-160mm zoom)

Bellows Extension: 54mm minimum — 180mm maximum

Auto Diaphragm Operation: Possible with Infrared Remote Release Cord and Cable Release 30 (both included).

Reversing Lens: Possible with optional 645 Reverse Adapter Set

Tripod Socket: 1/4'' and 3/8''

Dimensions, W x H x D: 100 x 197 x 213mm (3.9 x 7.8 x 8.4 in.)

Weight: 1.6 kg (3.6 lb.)

Cat. No.
38421 Auto Bellows 645 Set

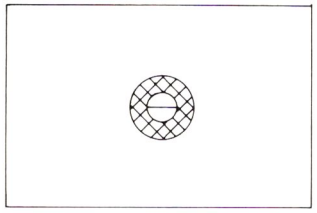
PENTAX

645 Accessories

645 Magnifier

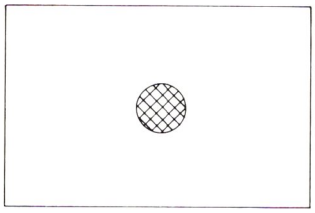
Cat. No.
38435 645 Magnifier w/Case
38437 Case for 645 Magnifier

645 Focusing Screens



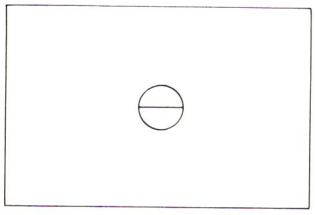
UC-21

Matte field and split-image spot with microprism collar



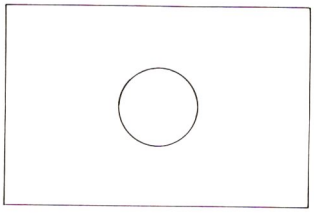
UA-21

Matte field and microprism spot



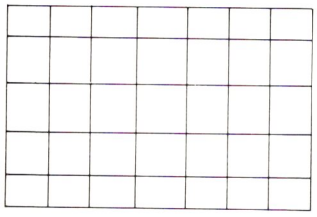
UB-21

Matte field and split-image spot



UE-20

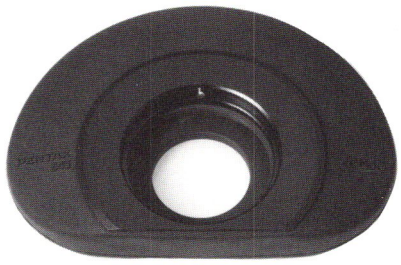
Matte field only



UG-20

Matte field and cross hairs

Cat. No.
38531 Interchangeable Focusing Screen 645 UA-21
38532 Interchangeable Focusing Screen 645 UE-20
38533 Interchangeable Focusing Screen 645 UB-21
38534 Interchangeable Focusing Screen 645 UG-20
38535 Interchangeable Focusing Screen 645 UC-21



645 Eyecup

Cat. No.
38461 645 Eyecup
38463 645 Large Eyecup

645 Grip

Replacement grip for 645.

Cat. No.
38471 645 Grip

Camera Strap B for 645

Replacement camera strap for 645 camera body.

Cat. No.
38472 Camera Strap B

Remote Battery Pack 645

The remote battery pack is an accessory to keep batteries warm, to be used when photographing in extremely cold places. Connect the Grip 645's external power socket and the Remote Battery Pack's cord plug. Replace the battery case in the grip with that in the battery pack, and use the pack, keeping it warm in a pocket some place where your body heat will aid in heat storage.

Cat. No.
38443 Remote Battery Pack 645 (1.2M)

PENTAX

645 Accessories

Auto Extension Tube-A 645 Set

No. 1 No. 2 No. 3

The Auto Extension Tube-A 645 is a set of close-up and copying accessories, which are designed to be coupled with the 645 camera body and any of the 645 lenses. Provision of lens information contacts allows using the A (Auto) setting of the A645 lens. Tubes No. 1, No. 2 and No. 3 are usable in any combination or individually, permitting open aperture metering. These tubes have a combined extension of 79.8mm (13.3, 26.6 and 39.9mm).

Cat. No.
38504 Auto Extension Tube-A Set w/Case
38869 Case HG-115D for Auto Extension Tube-A Set
38501 Auto Extension Tube-A 645 No. 1
38502 Auto Extension Tube-A 645 No. 2
38503 Auto Extension Tube-A 645 No. 3

Helicoid Extension Tube 645

The Helicoid Extension Tube is a close-up and copy work accessory furnished with a helicoidal thread to enable free change of photographic magnification with a single unit. In actual use, it is inserted between the camera body and the lens. As the helicoid is extended (43.7-67.4mm), the subject at a near distance may be photographed in a much larger image. This tube can be used with all 645 lenses except the SMCP-A 645 300mm f/4 ED(IF). It is compatible with 67 lenses by using the adapter 645 for 67 lenses.

Cat. No.
38511 Helicoid Extension Tube 645 w/Case

Reverse Attachment 645

This is another accessory ring for attaching to the "reversed" 645 lens mount, designed to enable the activating of the stop-down metering of the reversed lens. A filter or hood can be attached to the 58mm thread on the attachment.

Cat. No.
38453 Reverse Attachment 645
38450 645 Reverse Adapter Set (includes 38452, 38453)

SMC 645 Close-Up Lenses

645 lens	**S33**	1/4.3 - 1/2.4
A75mm f/2.8	**S56**	1/7.1 - 1/3.2
645 lens	**S33**	1/4.3 - 1/2.7
LS 75mm f/2.8	**S56**	1/7.1 - 1/3.7

Cat. No.
38411 SMC Close-up Lens S33 58mm
38412 SMC Close-up Lens S56 58mm

Refconverter 645

Screwed in the camera's viewfinder eyepiece with the eyecup removed, the Refconverter is an invaluable aid when you are using the camera on a tripod, and are shooting down on your subject. It is useful in any situation where it is difficult to see your subject with normal eye-level viewing. Provides exactly the same image you normally see in the camera's viewfinder. Swivels for vertical and horizontal shooting.

Cat. No.
38440 Refconverter 645 w/Case
38442 Case for Refconverter 645

58mm Reverse Adapter 645

When working at magnifications larger than life-size, it is recommended that the lens be reversed, improving focusing capability and thus, resulting in better pictures. The 58mm Reverse Adapter 645 is an accessory ring to have the Pentax 645 lens (filter thread 58mm 0) mount in the reversed position, on the 645 camera body, or on the Auto Extension Tube-A 645 mount itself.

When used in combination with the Helicoid Extension Tube 645 or Auto Extension Tube-A 645, it allows photographic close-ups or copies, at magnifications exceeding 1:1.

Cat. No.
38452 58mm Reverse Adapter 645
38450 645 Reverse Adapter Set (includes 38452, 38453)

PENTAX
67 System

The Super SLR!

A stampeding stallion...An athlete making a flying tackle...A hummingbird darting from blossom to blossom...A glamorous model posing atop a sand dune...

Regardless of the subject, photography with the Pentax 67 combines unmatched image quality with maximum handling ease. That's why we call it the "Super SLR." For it is a perfect balance of two picture-taking personalities. It's the large format camera guaranteeing the high-quality results and non-waste enlargements inherent in its 67 "ideal" negative format; and from its very inception it was designed to incorporate all of the outstanding features of a 35mm SLR — including well-positioned controls, precise eye-level operation, superb balance, smooth and steady shutter release, an electronic focal plane shutter, well-dampened mirror action and a host of other outstanding features. And, enhancing its versatility even more is a wide array of interchangeable lenses from ultra-wide to ultra-telephoto, fish-eye-to macro, and also a full range of close-up accessories. Optional viewfinders permit the camera to be used at waist and ground levels, on vertical copy stands or on low-height tripods. A highly accurate TTL metering pentaprism finder is also available which provides full-aperture readings with automatic diaphragm lenses. In addition, there's an assortment of focusing screens with varied alignment patterns for a wide variety of studio, architectural and other applications.

But, these are not the only reasons we call the Pentax 67 the "Super SLR." It would be hard to overlook its rugged body and durable construction. Photographers really appreciate its capability to take the day-in, day-out battering of studio work and yet render unwavering performance on location in a scorching desert one moment or on a freezing mountain top the next.

There's yet one more superlative which can be applied to the "Super SLR" — the quality of its SMC 67 lenses, acclaimed the world over for their brilliance and clarity. Like the camera, these also have been designed along 35mm SLR lines, featuring a bayonet mount for quick changes, and automatic diaphragm action on all models through 300mm and including the 500mm and 800mm ED(IF) telephoto. Moreover, as the only medium format lenses treated with Super-Multi-Coating, SMC lenses retain their crisp sharpness and dramatic contrast even in the harshest lighting conditions.

It all adds up to "The Super SLR." The Super Camera... The Super Lenses...The Super System!

PENTAX
67 System

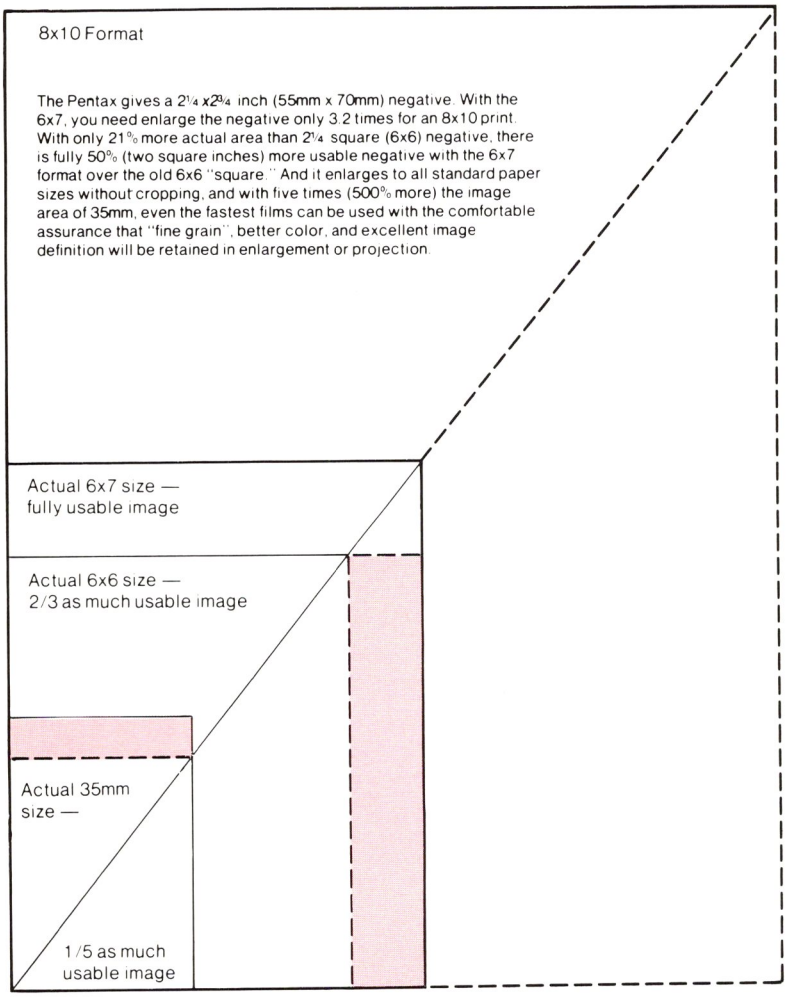
Not a format designed to match the camera, but a camera designed to match the format.

With the advent of roll film, box-shaped cameras were designed to accommodate it. But, whether inexpensive plastic box cameras or deluxe twin lens and single lens reflexes, they were too awkward to be held both horizontally and vertically; consequently, the film format was designed as a square. This way, no mater how the camera was held, the result was the same. Later, when attempts were made to extend the format size of roll film to 67, the box was enlarged, but not redesigned to permit holding the camera sideways; it was decided to rotate the film instead.

Both of the above examples may be considered as designing the format to match the camera. Or reworded, placing the cart before the horse.

But, the solutions created more problems than they solved. Although the original square format design eliminated the need to hold the camera sideways, it created a large waste, as negatives required cropping to create a rectangular picture. The roating back design eliminated the problem of negative waste, but added significant bulk and weight, hereby restricting the use of the camera.

Smaller "ideal" format cameras were then designed to eliminate the rotating back, however, the awkward square box was retained, and the resulting small 6x4.5 format, as the cropped 6x6 square, results in more grain and less sharpness in enlargements.

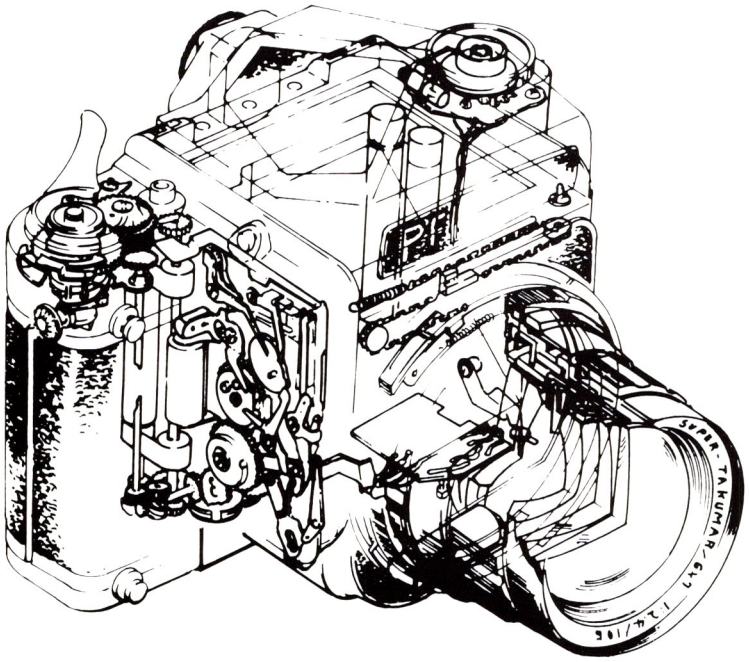


The Pentax Answer

When the engineers at Asahi Optical Company set out to design the Pentax 67, they started from the right premise: they chose the 6x7 format because it is only slightly larger than the 6x6 square format, but offers a full 50% more usable area. And it enlarges to all standard paper sizes without cropping. That's why it is referred to as the ideal format — "It eliminates the problem of negative waste."

Furthermore, as the 6x7 negative is merely 21% larger than the square format, the engineers were able to make it almost as small as cameras using the smaller negative, but designed it exactly like a 35mm SLR. Thus, it offered superb balance and far excelled the box-shaped cameras in handling ease. And while the box cameras were designed principally for waist-level viewing or use with a tripod and later adapted for eye-level use, the Pentax 67 was designed for both hand-holding and eye-level viewing from the very beginning. Its easy handling and rapid response to action facilitates concentration on the image, eliminating the cumbersome operation associated with box-shaped cameras. It's also sealed off from dirt and can be used anywhere — on the ground, vertically on a copy stand, on low-height tripods, in the air, or beneath the sea...The Pentax engineers had the answer. From the very beginning they designed the "ideal camera to match the ideal format."

PENTAX
67 System



Specifications

Type
67 ideal-format single-lens reflex

Film
120 roll-film (10 exposures)/220 roll-film (20 exposures)

Image size
55mm x 70mm (2¼" x 2¾")

Standard lens
SMC Pentax/67 105mm f/2.4, or SMC Pentax/67 90mm f/2.8. Both have 67 mm filter size

Minimum focusing distance
1 meter (3.3 ft.) with standard lens

Shutter
Electronically-timed, double-curtain focal plane shutter; X, B, 1-1/1000 sec.

Power source
6V silver oxide battery (Eveready #544 or Mallory PX28)

Battery check
Push button with indicator lamp

Viewfinders
Interchangeable Pentaprism Finder; TTL (Exposure Meter) Prism Finder; Folding Focusing Hood; Rigid Magnifying Hood. Matte field with central microprism spot focusing screen supplied as standard. Life size image with standard lens.

Reflex mirror
Swing-up-and-back instant return mirror with lock-up provision

Film transport
Rapid-wind lever (180°) angle); Shutter is cocked when film is advanced.

Exposure counter
Automatic reset exposure counter

Lens mount
Dual bayonet mounts, inner bayonet: 35mm-300mm and 500mm lenses/outer bayonet: 600-1000mm lenses

Flash synchronization
FP and X terminals/electronic flash at 1/30-1 sec., B

Exposure meter
Accessory pentaprism with through-the-lens meter couples with shutter speed and aperture

Dimensions
184mm W x 149mm H x 156mm D (7.2" x 5.8" x 6.1")

Weight
Body: (1,280 grams) 45.9 ozs.
Standard lens: (628 grams) 22.1 ozs.
Pentaprism housing: (460 grams) 16.2 ozs.

Cat. No.
15411 67 Body w/body cap, strap and battery

Standard 67 Set:

Cat. No.
15411 67 Body w/body cap, strap and battery.
37966 TTL Meter Pentaprism Finder
29014 SMCT 67 105mm f/24

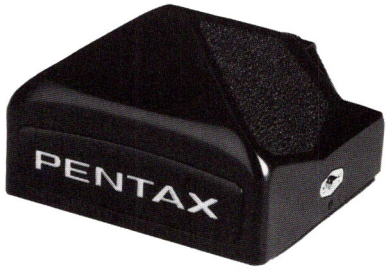
PENTAX
67 Viewfinders

TTL Meter Pentaprism Finder

Through-the-lens metering finder couples to lens apertures and shutter speeds for open aperture or stopped-down manual metering. Meter needle visible through viewfinder eyepiece, GPD cells take average reading off camera's focusing screen. Includes shutter Dial Adapter.

EV Range: EV 2.5-19 (w/ISO 100 & 105/2.4 lens)
Manual ISO Settinngs: ISO 12-3200
Aperture/Speed Range: f/2-22 / 15-1/1000 (w/ISO 100)
Power Source: 6 volt battery in camera (Eveready #544)
% of Image Area Visible: 90%
Dimensions, WxHxD: 123 x 58 x 89mm (4.8 x 2.3 x 3.5 in.)
Weight: 520 gr. (1 lb., 2 oz.)

Cat. No.
37966 67 TTL Meter Pentaprism Finder w/o case w/Shutter Dial Adapter



Pentaprism Finder

Standard eye-level pentaprism finder (w/o metering capability)

% of Image Area Visible: 90%
Dimensions, WxHxD: 81 x 58 x 91mm (3.2 x 2.3 x 3.6 in.)
Weight: 460 gr. (1 lb.)

Cat. No.
37401 67 Pentaprism Finder w/o case

Rigid Magnifying Hood

Waist-level type hood w/eyecup encloses focusing screen for bright viewing. Eyepiece magnifies image by 3X and has adjustable -1 ~ -4 diopter. Image is reversed left-to-right.

% of Image Area Visable: 100%
Dimensions, WxHxD: 81 x 82 x 87mm (3.2 x 3.2 x 3.4 in.)
Weight: 251 gr. (8.8 oz.)

Cat. No.
37406 67 Rigid Magnifying Hood w/case

Folding Focusing Hood

Waist-level finder with flip-up 3.8X magnifier folds down for easier storage. Image is reversed left-to-right.

% of Image Area Visible: 100%
Dimensions, WxHxD: 81 x 26 x 87mm (3.2 x 1 x 3.4 in.)
Weight: 134 gr. (4.7 oz.)

Cat. No.
37403 67 Folding Focusing Hood w/case

PENTAX
67 Lenses

SMCP 67 Fish-Eye 35mm f/4.5

Minimum Aperture: 22
Lens Construction: 7 groups 11 elements
Angle of View: 180°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: Built-in; UV, Y2, O2, R2 - w/gelatin filter clip at rear
Lens Hood: N/A
Lens Case: Hard Case #37701, Soft Case S120-150
Maximum Diameter & Length: 102mm x 73mm (4.0" x 2.9")
Weight: 920g (32.5 oz)
Catalog No.: 29120 SMCP 67 Fish-Eye 35mm f/4.5 w/case

SMCP 67 45mm f/4

Minimum Aperture: 22
Lens Construction: 8 groups 9 elements
Angle of View: 88°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 0.37m (1.2 ft.)
Filter Size: 82mm (Threaded & Bayonet)
Lens Hood: Clip-on #37650
Lens Case: Hard Case #37706, Soft Case S90-100
Maximum Diameter & Length: 91.5mm x 57.5mm (3.6" x 2.3")
Weight: 485g (17.1 oz)
Catalog No.: 29250 SMCP 67 45mm f/4 w/case

SMCP 67 55mm f/4

Minimum Aperture: 22
Lens Construction: 7 groups 8 elements
Angle of View: 78°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 0.35m (1.1 ft.)
Filter Size: 77mm (Threaded)
Lens Hood: Clip-on #37626
Lens Case: Hard Case #37718, Soft Case S90-140
Maximum Diameter & Length: 92.5mm x 78.5mm (3.6" x 3.1")
Weight: 725g (25.6 oz)
Catalog No.: 29210 SMCP 67 55mm f/4 w/case

PENTAX
67 Lenses

SMCP 67 75mm f/4.5

Minimum Aperture: 22
Lens Construction: 4 groups 5 elements
Angle of View: 61°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 0.7m (2.3 ft.)
Filter Size: 82mm (Threaded & Bayonet)
Lens Hood: Clip-on #37628
Lens Case: Hard Case #37703, Soft Case S90-140
Maximum Diameter & Length: 91.5mm x 81mm (3.6" x 3.2")
Weight: 600g (21.2 oz)
Catalog No.: 29274 SMCP 67 75mm f/4.5 w/case

SMCP 67 Shift 75mm f/4.5

Minimum Aperture: 32
Lens Construction: 8 groups 9 elements
Angle of View: 61°
Diaphragm: Manual (inner Bayonet Mount)
Minimum Focusing Distance: 0.7m (2.3 ft.)
Maximum Shift: 20mm; Click-Stops at one-millimeter intervals
Lens Rotation: 360°; Click-Stops at 30° intervals
Filter Size: 82mm (Threaded & Bayonet) w/gelatin filter clip at rear
Lens Hood: N/A
Lens Case: Hard Case #37705, Soft Case S120-150
Maximum Diameter & Length: 97mm x 106.5mm (3.8" x 4.2")
Weight: 950g (33.5 oz)
Catalog No.: 29220 SMCP 67 Shift 75mm f/4.5 w/case

SMCP 67 90mm f/2.8

Minimum Aperture: 22
Lens Construction: 5 groups 7 elements
Angle of View: 52°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 0.65m (2.1 ft.)
Filter Size: 67mm (Threaded & Bayonet)
Lens Hood: Screw-on #37600
Lens Case: Hard Case #37708, Soft Case S90-100
Maximum Diameter & Length: 91.5mm x 49mm (3.6" x 1.9")
Weight: 485g (17.1 oz)
Catalog No.: 29248 SMCP 67 90mm f/2.8 w/case

PENTAX
67 Lenses

SMCP 67 105mm f/2.4

Minimum Aperture: 22
Lens Construction: 5 groups 6 elements
Angle of View: 46°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 1.0m (3.3 ft.)
Filter Size: 67mm (Threaded & Bayonet)
Lens Hood: Screw-on #37600
Lens Case: Hard Case #37700, Soft Case S90-100
Maximum Diameter & Length: 91.5mm x 60mm (3.6" x 2.4")
Weight: 590g (20.8 oz)
Catalog No.: 29029 SMCP 67 105mm f/2.4 w/case

SMCP 67 Soft 120mm f/3.5

Minimum Aperture: 22
Lens Construction: 3 groups 4 elements
Angle of View: 40.5°
Diaphragm: Manual (inner Bayonet Mount)
Minimum Focusing Distance: 0.75m (2.5 ft.)
Filter Size: 77mm (Threaded)
Lens Hood: Screw-on #37639
Lens Case: Soft Case #37724
Maximum Diameter & Length: 89mm x 63.5mm (3.5" x 2.5")
Weight: 520g (18.3 oz)
Catalog No.: 29294 SMCP 67 Soft 120mm f/3.5 w/case

SMCP 67 Macro 135mm f/4

Minimum Aperture: 32
Lens Construction: 3 groups 5 elements
Angle of View: 36.5°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 0.75m (2.5 ft.)
Maximum Magnification: 0.31X
Filter Size: 67mm (Threaded & Bayonet)
Lens Hood: Screw-on #34325
Lens Case: Hard Case #37720, Soft Case S90-140
Maximum Diameter & Length: 91.5mm x 95mm (3.6" x 3.7")
Weight: 645g (22.8 oz)
Catalog No.: 29824 SMCP 67 Macro 135mm f/4 w/case

PENTAX
67 Lenses

SMCP 67 165mm f/2.8

Minimum Aperture: 22
Lens Construction: 5 groups 6 elements
Angle of View: 30º
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 1.6m (5.2 ft.)
Filter Size: 67mm (Threaded & Bayonet)
Lens Hood: Built-in
Lens Case: Hard Case #37709, Soft Case, S90-140
Maximum Diameter & Length: 91.5mm x 98.5mm (3.6" x 3.9")
Weight: 835g (29.5 oz)
Catalog No.: 29300 SMCP 67 165mm f/2.8 w/case

SMCP 67 165mm f/4 Leaf Shutter

Minimum Aperture: 32
Lens Construction: 4 groups 5 elements
Angle of View: 30º
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 1.6m (5.2 ft.)
Flash Sync Shutter Speeds: 1/60 to 1/500
Filter Size: 77mm (Threaded)
Lens Hood: Screw-on #37639
Lens Case: Hard Case #37779, Soft Case S90-140
Maximum Diameter & Length: 92.5mm x 77mm (3.6" x 3.0")
Weight: 780g (27.5 oz)
Catalog No.: 29301 SMCP 67 L.S. 165mm f/4 w/case

SMCP 67 200mm f/4

Minimum Aperture: 32
Lens Construction: 4 groups 5 elements
Angle of View: 25º
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 1.5m (4.9 ft.)
Filter Size: 77mm (Threaded)
Lens Hood: Screw-on #37637
Lens Case: Hard Case #37719, Soft Case S110-160
Maximum Diameter & Length: 92.5mm x 135mm (3.6" x 5.3")
Weight: 795g (28 oz)
Catalog No.: 29340 SMCP 67 200mm f/4 w/case

PENTAX
67 Lenses

SMCP 67 300mm f/4

Minimum Aperture: 45
Lens Construction: 5 groups 5 elements
Angle of View: 17º
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 5.0m (16.4 ft.)
Filter Size: 82mm (Threaded & Bayonet)
Lens Hood: Built-in
Lens Case: Hard Case #37712, Soft Case S110-210
Maximum Diameter & Length: 92.5mm x 186mm (3.6" x 7.3")
Weight: 1,420g (50 oz)
Catalog No.: 29330 SMCP 67 300mm f/4 w/case

SMCP-M* 67 400mm f/4 ED(IF)

Minimum Aperture: 45
Lens Construction: 9 groups 9 elements
Angle of View: 12º
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 2.8m (9.2 ft.)
Filter Size: 67mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive Trunk Case
Maximum Diameter & Length: 132.5mm x 305mm (5.2" x 12.0")
Weight: 3,700g (130.5 oz)
Catalog No.: 29415 SMCP-M* 67 400mm f/4 ED(IF) w/Trunk Case

SMCP 67 500mm f/5.6

Minimum Aperture: 45
Lens Construction: 4 groups 4 elements
Angle of View: 10º
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 8.0m (26.2 ft.)
Filter Size: 95mm (Threaded)
Lens Hood: Built-in
Lens Case: Exclusive Hard Case
Maximum Diameter & Length: 106.5mm x 398mm (4.2" x 15.7")
Weight: 3,200g (112.9 oz)
Catalog No.: 29404 SMCP 67 500mm f/5.6 w/case

PENTAX
67 Lenses

SMC Takumar 67 600mm f/4

Minimum Aperture: 45
Lens Construction: 5 groups 6 elements
Angle of View: 8°
Diaphragm: Manual (outer Bayonet Mount)
Minimum Focusing Distance: 12.0m (39.4 ft.)
Filter Size: 77mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive Trunk Case
Maximum Diameter & Length: 170mm x 370mm (6.7" x 14.6")
Weight: 6,000g (211.6 oz)
Catalog No.: 29424 SMCT 67 600mm f/4 w/Trunk Case

SMC Takumar 67 800mm f/4

Minimum Aperture: 45
Lens Construction: 6 groups 6 elements
Angle of View: 6°
Diaphragm: Manual (outer Bayonet Mount)
Minimum Focusing Distance: 20.0m (65.6 ft.)
Filter Size: 77mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive Trunk Case
Maximum Diameter & Length: 236mm x 611mm (9.3" x 24.0")
Weight: 17,700g (624.3 oz)
Catalog No.: 29434 SMCT 67 800mm f/4 w/Trunk Case

SMCP-M* 67 800mm f/6.7 ED(IF)

Minimum Aperture: 45
Lens Construction: 8 groups 9 elements
Angle of View: 6°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 8.0m (26.2 ft.)
Filter Size: 67mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive Trunk Case
Maximum Diameter & Length: 150mm x 570mm (5.9" x 22.4")
Weight: 6,000g (211.6 oz)
Catalog No.: 29436 SMCP-M* 67 800mm f/6.7 ED(IF) w/Trunk Case & Exclusive 1.4x Rear Converter

PENTAX
67 Lenses

SMC Takumar Reflex 67 1000mm f/8

Minimum Aperture: —
Lens Construction: 4 groups 6 elements
Angle of View: 5º
Diaphragm: ND (Controlled by neutral density filters)
Minimum Focusing Distance: 35.0m (114.8 ft.)
Filter Size: Built-in; ND x1, x2, x4, x8; Skylight, Y2, R2
Lens Hood: Built-in
Lens Case: Exclusive Trunk Case
Maximum Diameter & Length: 180mm x 352mm (7.0" x 13.9")
Weight: 6,660g (234.9 oz)
Catalog No.: 29454 SMCT Reflex 67 1000mm f/8 w/Trunk Case

SMCP 67 Rear Converter 1.4x

Lens Construction: 3 groups 5 elements
Maximum Diameter & Length: 91mm x 39.5mm (3.6" x 1.6")
Weight: 520g (18.3 oz)
Case: HE-90 #37778
Usable Lenses: 165mm to 400*mm
Catalog No.: 37931 SMCP 67 Rear Converter 1.4x w/case

SMCP 67 Rear Converter 2x

Lens Construction: 4 groups 6 elements
Maximum Diameter & Length: 91mm x 71.5mm (3.6" x 2.8")
Weight: 560g (19.8 oz)
Case: HI-140B #37779
Usable Lenses: 35mm to 400*mm (Except Shift 75mm f/4.5)
Catalog No.: 37934 SMCP 67 Rear Converter 2x w/case

PENTAX

67 Lens Hoods

Lens Product Code	Lens Description	Filter Size	Hood	Hood Product Code
29120	35mm/4.5	BI	not recommended	—
29250	45mm/4	82	45/4	37650
29210	55mm/4	77	PH-SA 77	37626
29274	75mm/4.5	82	PH-SA 82	37628
29220	75mm/4.5 shift	82	not recommended	—
29248	90mm/2.8	67	105/90	37600
29029	105mm/2.4	67	105/90	37600
29294	120mm/3.5 Soft	77	RH-RC 77	37639
29824	135mm/4 Macro	67		34325
29300	165mm/2.8	67	built-in	—
29301	165mm/4 L.S.	77	RH-RC 77	37639
29340	200mm/4	77	MH-RA 77	37637
29330	300mm/4	82	built-in	—
29415	400mm/4 ED(IF)	67R	built-in	—
29404	500mm/5.6	95	built-in	—
29424	600mm/4	77R	built-in	—
29434	800mm/4	77R	built-in	—
29436	800mm/6.7 ED(IF)	67R	built-in	—
29454	R 1000mm/8	67R	built-in	—

MH — Metal Hood
PH — Plastic Hood
RH — Rubber Hood

PENTAX

67 Lens Cases

Lens Product Code	Lens Description	Hard Case	Hard Case Product Code	Soft Case	Soft Case Product Code
29120	35mm/4.5	67/35	37701	S120-150	37727
29250	45mm/4	—	37706	S90-100	37725
29210	55mm/4	HI-140	37718	S90-140	37726
29274	75mm/4.5	67/75	37703	S90-140	37726
29220	75mm/4.5 Shift	67/S75	37705	S120-150	37727
29248	90mm/2.8	—	37708	S90-100	37725
29029	105mm/2.4	—	37700	S90-100	37725
29294	120mm/3.5 Soft	—	—	67/120S	37724
29824	135mm/4 Macro	67/135	37720	S90-140	37726
29300	165mm/2.8	—	37709	S90-140	37726
29301	165mm/4 L.S.	—	37779	S90-140	37726
29340	200mm/4	HI-185	37719	S110-160	37729
29330	300mm/4	—	37712	S110-210	37728
29415	400mm/4 ED(IF)	*	—	—	—
29404	500m/5.6		Exclusive Hard Case	—	—
29424	600mm/4	*	—	—	—
29434	800mm/4	*	—	—	—
29436	800mm/6.7 ED(IF)	*	—	—	—
29454	R 1000mm/8	*	—	—	—
37931	1.4X Converter	HE-90	37778	S90-100	37725
37934	2X Converter	HI-140B	37779	S90-140	37726

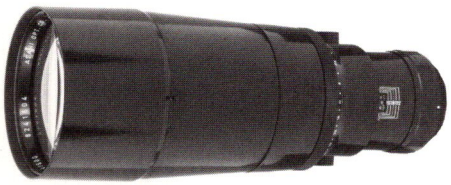
*supplied with exclusive trunk case

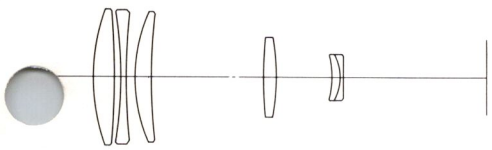
Hard Case

Soft Case

6x7 Lenses

600mm SMCT 6x7 f/4





Minimum aperture:
45

Diaphragm:
Manual (Outer Bayonet Mount)

Nearest focus distance:
12.0m (39.4 ft)

Image magnification at nearest distance:
0.059x

Ratio of image size at infinity to image of 105mm lens:
5.7:1

Angles of view
Diagonal: 8°15′
Horizontal: 6°30′
Vertical: 5°15′

Filter size (inside screw diameter):
77mm (rear-mount)

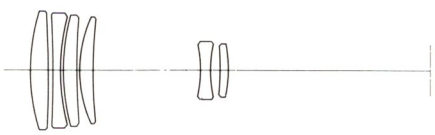
Lens hood size:
Built-in

Overall size:
170mm (diameter); 370mm (length)

Weight:
6000 g (211.6 oz)

Cat. No.
29424 SMCT 6x7 600mm f/4 w/Metal Case

800mm SMCT 6x7 f/4



Minimum aperture:
45

Diaphragm:
Manual (Outer Bayonet Mount)

Nearest focus distance:
20.0m (65.6 ft)

Image magnification at nearest distance:
0.044x

Ratio of image size at infinity to image of 105mm lens:
7.6:1

Angles of view
Diagonal: 6°15′
Horizontal: 5°
Vertical: 4°

Filter size (inside screw diameter):
77mm (rear-mount)

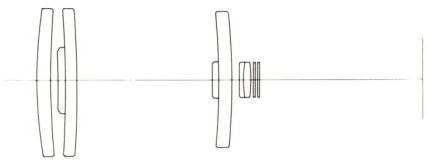
Lens hood size:
Built-in

Overall size:
236mm (diameter); 611mm (length)

Weight:
17,700 g (624.3 oz.)

Cat. No.
29434 SMCT 6x7 800mm f/4 w/Metal Case

1000mm SMCT Reflex 6x7 f/8



Minimum aperture:

Diaphragm:
None, single aperture; built-in ND filters adjust light intake. (Outer Bayonet Mount)

Nearest focus distance:
35.0m (114.8 ft); rack-and-pinion focusing

Image magnification at nearest distance:
0.037x

Ratio of image size at infinity to image of 105mm lens:
9.5:1

Angles of view
Diagonal: 5°
Horizontal 4°
Vertical: 3°

Filters:
Built-in Y2, R2 & ND (67mm rear-mount)

Lens hood size:
Built-in

Overall size:
180mm (diameter) x 352mm (length)

Weight:
6,400 g (225.9 oz)

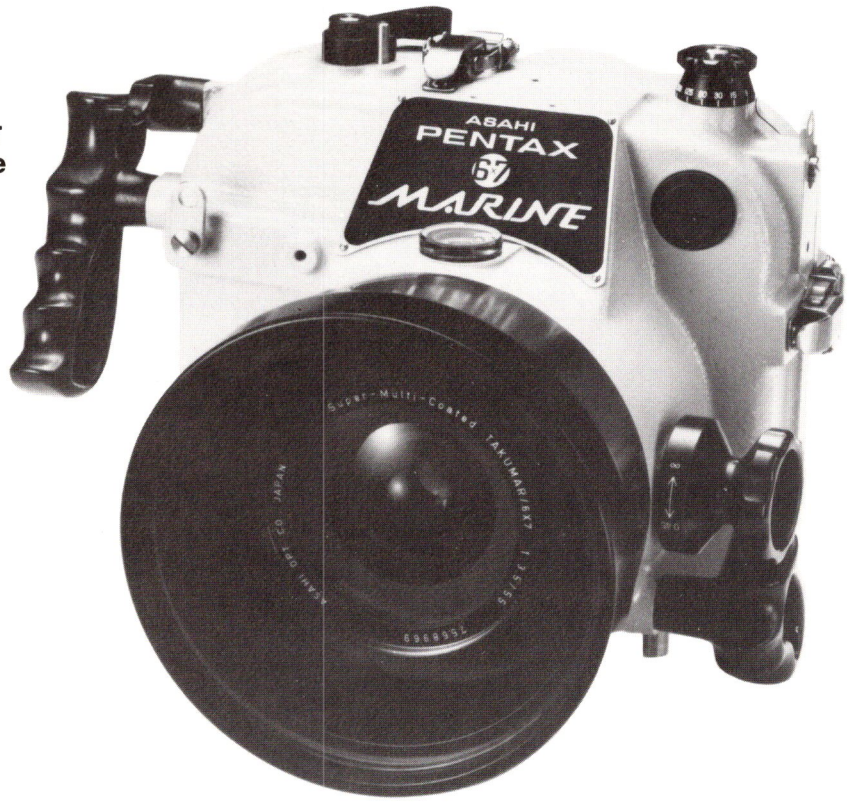
Cat. No.
29454 SMCT Mirror Reflex 6x7 1000mm f/8 w/Metal Case.

All SMCT 6x7 Pentax lenses include a front and rear lens cap and are supplied with a case.

PENTAX

6x7 Marine Underwater Housing

Pentax introduces the all new Pentax 6x7 Marine — The first underwater housing ever made for an ideal format SLR. It lets you see the fantastic "world below" with clarity, ease and results never before possible.



Now, for the first time in history, you can shoot the big picture of the underwater universe — with the world's first housing made exclusively for an ideal format 6x7 SLR: the Pentax 6x7 Marine.

The fish, the plants, even the vibrating currents of the water itself are yours, thanks to the superb Super-Multi-Coated Takumar lenses.

And because the camera you're using is the Pentax 6x7 SLR, your underwater photography will combine greater ease of handling with more successful results than you've ever before considered possible.

The three interchangeable lens housings (ports) of the Pentax 6x7 Marine accomodate any of seven different SMC Takumar/6x7 lenses, transforming the Pentax 6x7 into the world's most versatile underwater camera. Whether fish-eye, wide-angle, standard, telephoto or macro, any of these lenses can accompany you on your journey 164 feet below the surface of the sea.

Maneuverability is assured, for the underwater housing, camera and 55mm wide-angle lens total only 2.2 pounds when used underwater — less than the weight of just the 6x7 camera body on land!

Additional features include oversize controls on the housing for ease of handling, special viewfinders, flash connections for all popular flash units, and a special coating applied to all three front lens housings.

The Super SLR and The Ultimate Underwater Housing. The Combination for the best results beneath the surface of the sea.

Specifications
Camera:
Pentax 6x7 (up to 20 2¼ x 2¾" exposures per roll)

Interchangeable Lens Housings (Ports):
Standard Lens Housing
Fish-Eye Lens Housing
Macro/Tele Lens Housing
Depth Capability:
Up to 164 feet (50 meters);
(6 atmospheres)
Flash Connection:
X and FP Sync; Supplied with Nikonos III waterproof connecter and Rollei-type terminals. Adapts to E/O, Nikonos II, etc.
Construction:
Non-corrosive aluminum alloy, salt water resistant paint, O-Rings for each joining part, external shutter-speed dial, diaphragm ring dial and focusing knob with distance scale window, all dials are sure-grip.
Size:
12" W x 9.7" H (308mm x 246mm) Depth dimension varies by Lens Housing.

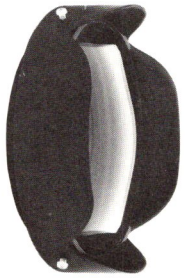
Weight:
Body Housing Only: 14.6 lbs (6.6kg) Out-Of-Water; Underwater with Body Housing plus Standard Lens Housing plus 55mm lens: 2.2 lbs (1kg)
Viewfinder:
Field of vision identical to 6x7 Camera. Supplied with Underwater Viewfinder with .6x magnification.
Other:
Supplied with Spare O-Ring and O-Ring Grease. Order Lens Housings (Ports), Gear Ring Sets and Accessories separately.

Cat. No.
95300 6x7 Marine Body Housing

Standard Set:
Cat. No.
95300 6x7 Marine Body Housing
95302 6x7 Standard Lens Housing
95307 6x7 Marine Gear Ring Set/SMCT 55/3.5
95304 6x7 Marine Compensation Lens SMCT 55/3.5

6x7 Marine Underwater Housing

6x7 Marine Housing — Standard Lens Housing



Fish-Eye Port — Macro/Tele Lens Housing

The Standard Lens Housing (Port) accomodates three 6x7 SMCT lenses: SMCT/6x7 55mm f/3.5; SMCT/6x7 75mm f/4.5; and the standard SMCT/6x7 105mm f/2.4, allowing you wide-angle to "normal" focal lengths with the use of only one port. With this lens housing, the total housing measures 12"W x 9.7"H x 9.6"D (308mm x 246mm x 245mm). Order respective gear-ring sets separately.

Cat. No.
95302 6x7 Marine Standard Lens Housing

Gear Ring Sets

Each set contains one ring to fit around the focusing mount of the lens, and another fits around the diaphragm ring of the lens. These precision gears connect with the gear controls of the body housing and insure easy and precise operation. A separate gear-ring set must be ordered for each different focal-length lens.

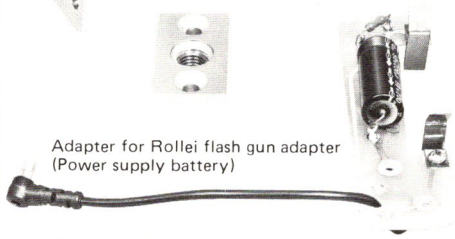
Cat. No.
95306 6x7 Marine Gear Ring Set/SMCT 35mm/4.5
95307 6x7 Marine Gear Ring Set/SMCT 55mm/3.5
95308 6x7 Marine Gear Ring Set/SMCT 75mm/4.5
95309 6x7 Marine Gear Ring Set/SMCT 105mm/2.4
95310 6x7 Marine Gear Ring Set/SMCT 135mm/4.0
95311 6x7 Marine Gear Ring Set/SMCT 150mm/2.8
95312 6x7 Marine Gear Ring Set/SMCT 200mm/4.0

Compensation Lens for SMCT/6x7 55mm f/3.5

When using wide-angle lenses with a flat front port, distortion will be evident in the corners and edges of the film. The use of this lens will correct for this distortion and will also correct chromatic abberation. It is only required for the SMCT/6x7 55mm lens (100mm filter size) and weighs 15.5oz (440g).

Cat. No.
95304 6x7 Marine Compensation Lens 55mm/3.5

Nikonos Bracket Adapter



Adapter for Rollei flash gun adapter (Power supply battery)

Marine Flash Bracket Adapters

These adapters attach to the Marine Body Housing and permit popular flash units with brackets to be easily attached. The Nikonos Bracket Adapter is used for Nikonos flash units, Sunpack Marine, Toshiba and other similar units. The Rollei Bracket Adapter is for Rollei type flash units which do not have their own power source. A Battery Holder is supplied with this adapter which fits inside the 6x7 Marine Body Housing and is powered by a 22.5v battery (M215 or equiv.).

The 6x7 Marine Housing is furnished with a Nikonos III type waterproof connector with both X and FP terminals available on the camera, in addition to exposed Rollei-type flash terminals on the housing. Adapters are readily available to adapt the Nikonos III type to E/O, Nikonos II, etc. If you are unable to obtain the required adapter, contact Pentax Corporation for a list of sources.

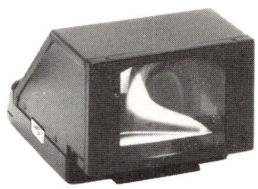
Cat. No.
95313 6x7 Marine Nikonos Bracket Adapter
95314 6x7 Marine Rollei Bracket Adapter (Includes battery holder)

For replacement O-Rings, and other supplied accessory items refer to Special Products Section.

The Fish-Eye Lens Housing port is for the exclusive use of the SMCT/6x7 35mm f/4.5 Fish-Eye lens, and it is mounted with a rugged flange to protect the protruding front element of the port. Spectacular effects are obtained with the use of this lens and housing, and the overall dimensions including the body housing are 12"Wx9.7"Hx8.3"D (308mm x 246mm x 210mm). Requires gear-ring set. Order Front Housing Protector flange separately.

The Macro/Tele Lens Housing Port has been designed to accomodate the SMCT/6x7 135mm f/4.0 Macro lens enabling you to obtain undistorted, factual, close-up underwater photographs. This lens housing will also accept the SMCT/6x7 150mm f/2.8 and SMCT/6x7 200mm f/4.0 lenses, and measures 12"W x 9.7"H x 11.4"D (308mm x 246mm x 290mm) when attached to the body housing. Order respective gear-ring sets separately.

Cat. No.
95301 6x7 Marine Fish-Eye Lens Housing *(requires 95305)*
95305 6x7 Marine Fish-Eye Housing Protector
95303 6x7 Marine Macro/Tele Lens Housing



Marine Mirror Finder Underwater Viewfinder

The Mirror Finder shows 100% of the negative area with 1.8x magnification (with normal lens). The image is laterally reversed (backwards and upside down) and is very useful when a large viewfinder image is required.

The Underwater Viewfinder is supplied with the Marine Body Housing and provides .6x magnification. It fits the eyepiece socket of the standard 6x7 Pentaprism Finder and enables unobstructed viewing of the subject.
Note: The 6x7 TTL Pentaprism Finder is not designed for the 6x7 Marine Housing, and the Shutter-Speed Dial Ring will not connect to it.

Cat. No.
95315 6x7 Marine Mirror Finder

PENTAX

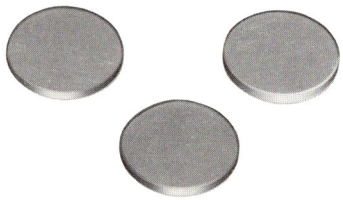
6x7 Accessories

• VIEWFINDER ACCESSORIES

Right-Angle Finder

Attaches to the eyepiece of the standard and TTL Meter Pentaprism Finders for low-angle photography. The image is both laterally correct and unreversed. The entire focusing screen, as well as the exposure meter indicator needle of the TTL Meter Pentaprism Finder, is visible. The eyepiece adjusts from +3 to −5 diopter and accepts the accessory eyecup.

Cat. No.
37420 6x7 Right Angle Finder w/Case



6x7 Correction Lenses

They attach to the eyepiece of the pentaprism finders to correct for near and farsightedness. Available in seven strengths: +2, +1, −1, −2, −3, −4, −5.

Cat. No.
37411 −5 Diopter Correction Lens 6x7
37412 −4 Diopter Correction Lens 6x7
37413 −3 Diopter Correction Lens 6x7
37414 −2 Diopter Correction Lens 6x7
37415 −1 Diopter Correction Lens 6x7
37416 +1 Diopter Correction Lens 6x7
37417 +2 Diopter Correction Lens 6x7

Magnifier

Magnifies the central area of the focusing screen by 2X for critical focusing. The eyepiece of the magnifier has a built-in diopter adjustment for optimum viewing comfort. It is hinged at the top, allowing it to be raised out of the way for a final check of the overall composition. Supplied with case.

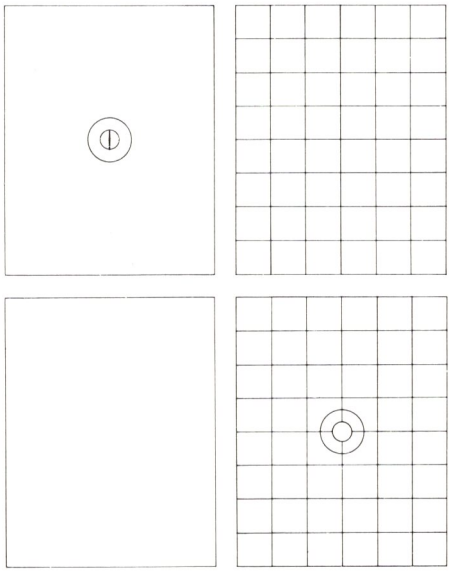
Cat. No.
37421 6x7 Magnifier 2X w/Case

Eyecup

The rubber Eyecup attaches to the eyepiece of the pentaprism and right-angle finders to prevent extraneous light from obstructing the view or adversely affecting the TTL exposure meter.

Cat. No.
37410 6x7 Eye Cup

For replacement of supplied accessory items, refer to Special Products Section.



FOCUSING SCREENS

The 6x7 focusing screens are varied in design for a wide range of specialized applications requiring accurate alignment of image patterns such as in architectural photography, advertising and copy work. In addition to the standard focusing screen, others are available and can be installed at your nearest Pentax Service Center. Each of the focusing screens is equipped with a unique double Fresnel lens for exceptionally bright viewing and even illumination across the entire field. The standard screen features a matte field with central microprism spot, while the others are: matte with central split-image spot, all-matte, matte with crosslines, matte with crosslines and central microprism spot.

Cat No.
37443 Matte with cross lines and microprism spot.
37444 Matte with central split-image spot.
37448 All Matte.
37449 Matte with crosslines.

For ordering information, refer to Special Products Section.

PENTAX
67 Accessories

Carrying Case 67

A compact case which will hold camera with standard lens and some accessories such as filters, cable releases, and film. Designed to offer adequate protection for the camera, which easily slides in and out of the case.

Cat. No.
37770 67 Carrying Case
37760 Case for 67 Pentaprism Finder
37764 Case for 67 TTL Finder

67 Metal Trunk Case Pro II

A professional compartment type case designed exclusively for the Pentax 67. This strong aluminum case will hold two camera bodies, 3 to 4 lenses, and accessories. Dimensions (W×H×D):
17¾″×11¼″×10¼″

Cat. No.
37776 67 Metal Trunk Case Pro II

67 Hand Grip

The grip can easily be attached or removed with a single hand and has an accessory shoe to accept flash units. Once attached to the camera, this accessory offers a secure grip for the left hand.

Cat. No.
37970 67 Hand Grip

67 Adapter for Pentax 35mm Bayonet Mount Cameras

This adapter fits Pentax Bayonet Mount cameras and permit the use of 67 lenses with them. With this adapter, the lens will focus to infinity, however, it cannot be used with automatic diaphragm or open aperture metering. When used on any Pentax automatic camera, aperture priority exposure automation is retained within the measurable range. When used with the 67 lenses with a built-in tripod socket, this adapter allows the camera to change its position vertically or horizontally while the lens remains on the tripod.

Cat. No.
37954 67 Lens Adapter (B) for Pentax Bayonet Mount Cameras

Quick Focusing Rings 67

With the Quick Focusing Ring in place it is possible to focus the lens with the fingers of the left hand at the same time they grasp the camera Grip. Quick Focusing rings are available in two types: A-type (for use with 105mm, 135mm, 150mm, 200mm lenses) and B-type (for 35mm, 75mm, 90mm lenses).

Cat. No.
37980 67 Quick Focus Ring (A)
37982 67 Quick Focus Ring (B)

37430 67 Camera Strap

67 Remote Battery Cord

When batteries are used at below-freezing temperatures, their voltage may drop, causing malfunction of the electronic shutter. The Remote Battery Cord is designed to eliminate the possibility of this problem occurring with the Pentax 67. One end of the cord contains the battery chamber and fits in a warm pocket, while the opposite end of the cord is plugged into the camera.

Cat. No.
37990 67 Remote Battery Cord (1.5M) w/battery chamber protector

PENTAX
67 Accessories

67 TTL Shutter Dial Adapter Ring

The TTL Shutter Dial Adapter Ring is used when the 67 TTL Meter Pentaprism Finder is installed. The Adapter Ring increases the diameter of the 67's normal shutter dial for easier shutter speed adjustment.

Cat. No.
37992 67 TTL Shutter Dial Adapter Ring

Hot-Shoe Adapter LS

This adapter is needed when the 645's or 67's leaf-shutter lens and the clip-on type electronic flash are used in combination. It is first attached to the 645 camera body or the 67 Grip, onto which the flash unit is mounted. The sync cord is connected to the X-sync socket on the lens. This combination, however, does not permit TTL Auto Flash photography.

Cat. No.
38460 Hot-Shoe Adapter LS (30cm, 11.8 in.)

Quick Shoe 645/67

This accessory enables you to attach the camera to the tripod or detach the camera from the tripod in seconds. The unit consists of the tripod shoe that attaches to the tripod head and the adapter that attaches to the camera. The adapter 645/67 is used for the Pentax 645 or 67 camera.

Cat. No.
38464 Quick Shoe 645/67 set (38456 and 38458)
38456 Quick Shoe
38458 Quick Shoe Adapter 645/67

Flash Bracket
AF-400T bracket for 67

The AF-400T is a totally professional auto flash unit with advanced capabilities which will surely appeal to 67 users. Pentax provides a special bracket which allows you to attach the AF-400T to the 67 for greater handling convenience.

Cat. No.
37973 AF-400T 67 Bracket

Adapter 645 for 67 Lens

This adapter enables you to use the Pentax 67 lens with the Pentax 645 body.

When 67 lenses are used with this adapter, open aperture metering is maintained and three of the 645's exposure modes can be used — aperture priority, TTL flash, and metered manual.

Cat. No.
38454 645 Adapter for 67 System Lenses

67 Viewfinder Cases

Hard leather cases with padded interiors and snap lids.

Cat. No.
37760 Case for 67 TTL Pentaprism Finder
37764 Case for 67 Pentaprism Finder

67 Caps

Cat. No.
37432 67 Body Cap (covers bayonet mount on 67 body)
37433 67 Prism Cover (covers bottom of viewfinders)
37434 67 Finder Cap (covers 67 focusing screen)
37800 67 Rear Lens Cap, Inner Bayonet (for all inner bayonet mount lenses)
37801 67 Rear Lens Cap, Outer Bayonet (for all outer bayonet mount lenses)
37810 67 67mm Lens Cap (front/bayonet mount)
37812 67 82mm Lens Cap (front/bayonet mount)
37814 67 100mm Lens Cap (slip-on)
37815 67 103mm Lens Cap (slip-on for SMCP 67 55mm/f3.5)

PENTAX
67 Accessories

Auto Extension Tube Set 67

A set of three extension (14, 28 and 56mm), tubes can be used singularly or in combination on the inner bayonet mount of the Pentax 67 with all lenses from 55mm wide-angle to 300mm telephoto. Fully automatic diaphragm action is retained and magnifications greater than life-size can be produced.

Cat. No.
37910 67 Auto Extension Tube Set w/Case

Extension Tube Set 67

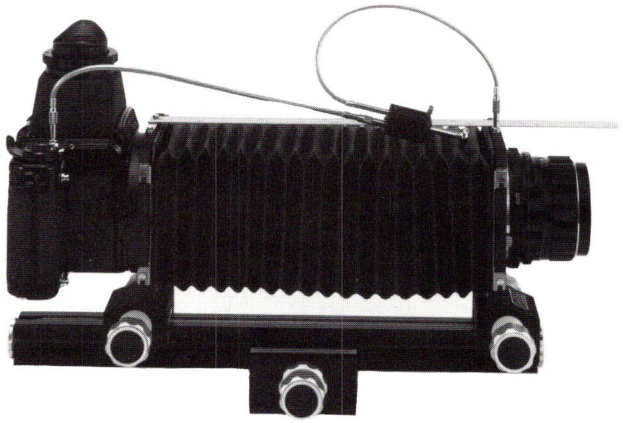
A two piece extension tube set (23 and 46mm), used on the outer bayonet mount of the Pentax 67 to extend the minimum focusing distance of all ultra telephoto lenses (600mm and longer). The tubes can be used in combination with each other or with the Pentax Rear Converter.

Cat. No.
37900 67 Extension Tube Set w/Case

Helicoid Extension Tube 67

This single extension tube, (28-56mm), which is used on the inner bayonet mount of the Pentax 67, offers continuously variable extension for precise control of the image size. It is equal to the No. 2 Auto Extension Tube at minimum extension, and to the No. 3 Auto Extension Tube at maximum extension. When used in combination with the standard lens, magnification is 0.3X-0.6X, making it possible to fill the frame with a king-size pack of cigarettes.

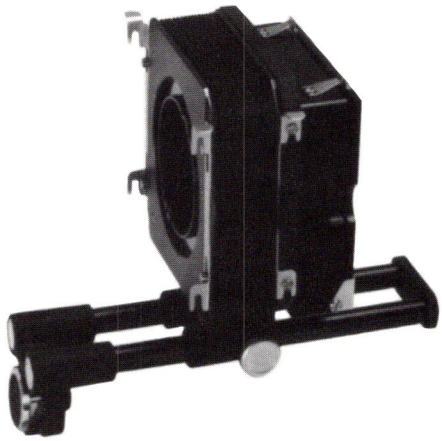
Cat. No.
37919 67 Helicoid Extension Tube w/Case



Auto Bellows

Magnification of 0.5X to 3.3X is possible with the combination of Auto Bellows and standard lens. Diaphragm automation is retained with the aid of a double cable release, even when the lens is mounted in reverse. All lenses from 90mm to 300mm can be used with the Auto Bellows. Supplied with double cable release and magnification scale.

Cat. No.
37930 67 Auto Bellows Set



Slide Copier

The Slide Copier is used in conjunction with the Auto Bellows unit to make copies of mounted or unmounted transparencies, whether of the 35mm or 67 format. Life-size or partially cropped duplicates can be made from originals.

Cat. No.
37945 67 Slide Copier

PENTAX
67 Accessories

49mm Reverse Adapter 67

This adapter makes it possible to use 49mm filter size lenses mounted in reverse on the Helicoid Extension Tube for macrophotography.

Cat. No.
37943 67 49mm Reverse Adapter

67mm Reverse Adapter

The 67mm Reverse Adapter makes it possible to use the 90, 105, and 135mm lenses mounted in reverse on the Helicoid Extension Tube, Auto Extension Tubes, or Auto Bellows for superior optical performance when working at greater-than-life-size magnification.

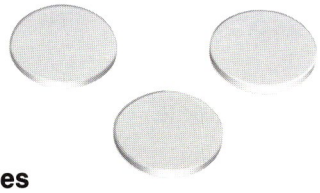
Cat. No.
37941 67 67mm Reverse Adapter

SMC 67 Close-Up Lenses

For the ultimate in close-up convenience, SMC 67 Close-Up Lenses thread quickly and easily into the filter thread of most standard and medium telephoto 67 lenses. Super-Multi-Coated to deliver exceptional image quality even at higher magnifications.

Lens	Close-Up Lens	Magnification
SMCT 90mm f/2.8	S82	.11X~.24X
SMCT 105mm f/2.4	S82	.13X~.27X
SMCT 150mm f/2.8	T132	.11X~.24X
SMCT 200mm f/4.0	T132	.15X~.26X
	T226	.09X~.19X

Cat. No.
37830 67 Close-Up Lens 67mm, S82 w/Plastic Case
37831 67 Close-Up Lens 67mm, T132 w/Plastic Case
37832 67 Close-Up Lens 67mm, T226 w/Plastic Case



67 Correction Lenses

These lenses fit into the eyepiece of the pentaprism finders to correct for near and farsightedness. Available in seven strengths: +2, +1, −1, −2, −3, −4, −5.

Cat. No.
37411 -5 Diopter Correction Lens 67
37412 -4 Diopter Correction Lens 67
37413 -3 Diopter Correction Lens 67
37414 -2 Diopter Correction Lens 67
37415 -1 Diopter Correction Lens 67
37416 +1 Diopter Correction Lens 67
37417 +2 Diopter Correction Lens 67

67 Right-Angle Finder

Attaches to the eyepiece of the standard and TTL Meter Pentaprism Finders for low-angle photography. The image is both laterally correct and unreversed. The entire focusing screen, as well as the exposure meter indicator needle of the TTL Meter Pentaprism Finder, is visible. The eyepiece adjusts from +3 to -5 diopter and accepts the accessory eyecup.

Cat. No.
37420 67 Right-Angle Finder w/Case

Magnifier 67

Magnifies the central area of the focusing screen by 2X for critical focusing. The eye-piece of the magnifier has a built-in diopter adjustment for optimum viewing comfort. It is hinged at the top, allowing it to be raised out of the way for a final check of the overall composition. Supplied with case.

Cat. No.
37421 67 Magnifier 2X w/Case

Eyecup

The rubber Eyecup attaches to the eyepiece of the pentaprism and right-angle finders to prevent extraneous light from obstructing the view or adversely affecting the TTL exposure meter.

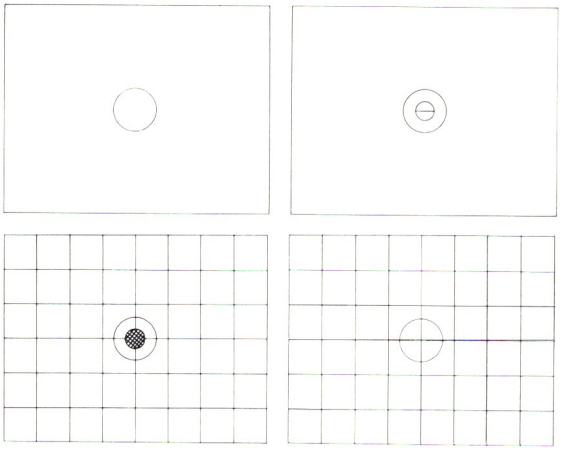
Cat. No.
37410 67 Eyecup

PENTAX
67 Accessories

Focusing Screens

The focusing screens are varied in design for a wide range of specialized applications requiring accurate alignment of image patterns such as in architectural photography, advertising and copy work. In addition to the standard focusing screen, others are available and can be installed at your nearest Pentax Service Center. Each of the focusing screens is equipped with a unique double Fresnel lens for exceptionally bright viewing and even illumination across the entire field.

Available Focusing Screens For 67



Cat. No.

37443	Matte with crosslines and microprism spot.
37444	Matte with central split-image spot.
37448	All Matte.
37449	Matte with crosslines.

Please Note:
Focusing screens for the 67 are not user interchangeable.

Gelatin Filter Frames

Available in three sizes for the 67 (67mm, 82mm, 100mm) all of which accept standard 75mm gelatin filter squares. The filter frames allow the use of two gelatin filters at a time.

Cat. No.

37591	67mm Gelatin Filter Frame 67
37592	82mm Gelatin Filter Frame 67
37593	100mm Gelatin Filter Frame 67

Pentax 67 Filters

For 67 lenses only, these filters bayonet mount onto the lens. They are threaded on the front end to accept additional threaded (or bayonet) filters. SMC filters have the same 7 layer coatings as 67 lenses.

		Cat. No. 67 SMC Filters	Regular Filters
Size	**Type**		
67mm	UV	**37506**	
	Y2 (8)	**37507**	
	O2 (23A)	**37508**	
	R2 (25)	**37509**	
	Skylight (1A)	**37516**	
	Polarizing		**37513**
	Morning & Evening (82A)		**37512**
77mm	UV	**37526**	
	Y2 (8)	**37527**	
	O2 (23A)	**37528**	
	R2 (25)	**37529**	
	Skylight (1A)	**37536**	
	Cloudy (81A)	**37537**	
	Morning & Evening (82A)		**37532**
82mm	UV	**37546**	
	Y2 (8)	**37547**	
	O2 (23A)	**37548**	
	R2 (25)	**37549**	
	Skylight (1A)	**37556**	
	Cloudy (81A)	**37557**	
	Morning & Evening (82A)		**37552**
95mm	UV	**37580***	
	Y2 (8)	**37581***	
	O2 (23A)	**37582***	
	R2 (25)	**37583***	
	Skylight (1A)	**37586***	
	Cloudy (81A)	**37587***	
100mm	UV	**37566***	
	Y2 (8)	**37567***	
	O2 (23A)	**37568***	
	R2 (25)	**37569***	
	Skylight (1A)	**37576***	
	Cloudy (81A)	**37577***	
	Morning & Evening (82A)		**37572**

***Discontinued, Limited Stock**

PENTAX

Lens Focal Lengths

Format Comparison of Lens Focal Lengths

Approximate Angle of View*	35mm Format	645 Format	67 Format
180°	16mm		35mm
90°	20mm	35mm	45mm
75°	28mm	45mm	55mm
63°	35mm	55mm	75mm
50°		75mm	90mm
45°	50mm		105mm
40°			120mm
34°		120mm (mac.)	135mm
30°	85mm	135mm	165mm
25°	100mm	150mm	200mm
20°	135mm	200mm	
16°			300mm
13°	200mm	300mm	400mm
10°			500mm
8°	300mm		600mm
7°		600mm	
6°	400mm		800mm
5°	500mm		1000mm

*See lens specifications for exact angle of view.

PENTAX

Spotmeter V

The Pentax Spotmeter V for Precision Exposure Metering

For highly accurate exposure metering, use the Pentax Spotmeter V.

One of the keys to good photography is accurate exposure metering. This is especially true in professional circles where reversal color film requiring an exposure accuracy of 1/3rd of an f/stop is often employed, and in TV and movie film making where subject illumination has to be measured by spot metering methods. The metering angle in ordinary cameras is about 50°, and only one exposure reading is produced. Pentax Spotmeters have a very small metering angle of only 1°. Consequently, they can measure many different parts of the field to be photographed. They can also give a rapid indication of the amount of contrast. When the spot is moved quickly back and forth between the brightest and the darkest areas, the needle deflections will be greater for the stronger contrasts, and smaller for the weaker contrasts.

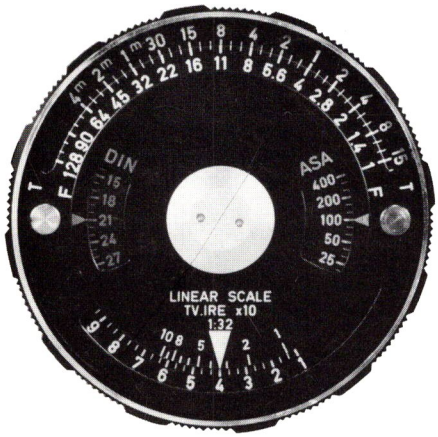
The IRE scale is used to ensure that the amount of needle deflection (indicating degree of subject contrast) does not exceed the maximum reproducible contrast ratio of the film being used (1:32 for reversal film, or 5 EV steps).

The Pentax Spotmeter V incorporates a single lens reflex optical system, constituting the ideal in precision exposure metering. The subejct area covered by the very small metering angle of 1° (equivalent to the angle used by an ultra-telephoto 2000mm lens) is indicated by a small circle in the pentaprism viewfinder. The brightness of even minute detail in the subject field can be measured easily and quickly (no need to approach the subject). The photosensitive element used in the Spotmeter V is a silicon photo diode (SPD) with exceptional performance, even in low levels of light, this being one of the reasons why the measuring range has been expanded to EV1-19. Three 1.5v (Eveready S76) silver batteries in the power supply provide very stable voltage, a prerequisite for highly accurate measuring capability. The single linear meter scale in the viewfinder makes needle deflections very easy to read, and an IRE index scale can be read off directly from EV values on the side dial. The push button meter switch ensures that the batteries are not consumed unnecessarily. With the vast technical know-how of the makers of the Pentax Spotmeter V, it has consistently advanced, adding one improvement upon another. Whether it be commercial filming, night scenes, the stage, or the TV studio, no other exposure meter comes anywhere near the Spotmeter V.

Specifications on next page.

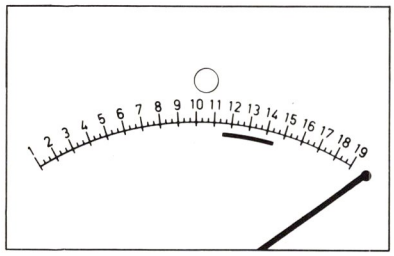
Cat. No.
36130 Spotmeter V w/Case

PENTAX
Spotmeter V

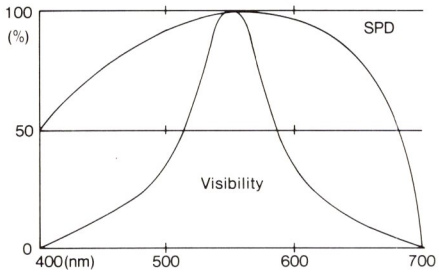


When the EV reading has been set, the proper exposure combination will be indicated on the two scales at the top of the calculator dial. The "T" scale indicates shutter speeds, the "F" scale indicates lens aperture (f-stop).

For additional information on the Spotmeter IRE Scale, refer to page SP-4.



The EV scale as seen through the viewfinder.



The Spotmeter V SPD spectroscopic sensitivity.

Specifications

Measuring Ranges:
EV1-19, ASA 6-6400 (DIN 9-39), aperture f1-f128, shutter speeds 1/4000 sec.-4 mins., scales marked 1/3rd EV increments from 1-19.

Measuring Angle:
Circle of 1° of arc in center of finder.

Measuring Distances:
From about 1.5m to infinity — fixed focal length. (Focusing down to about 3 ft. (1 meter) possible by turning the eyepiece).

Measuring Method:
Spot measuring of reflected light. (Meter switches on when button pressed). EV direct reading. IRE scale.

Photosensitive Cell:
Silicon photo diode (SPD)

Power Supply:
Three 1.5v silver batteries (Eveready S76 or equivilent).

Battery check:
Battery check indicated in viewfinder.

Viewfinder:
Single lens reflex pentaprism type, giving erect projected image. Fresnel lens, field of view 17′ horizontal and 12′ vertical, 21′ diagonal. Magnification 1.5X. Eyepiece correction 0~ −1 diopter. Scale illumination button provided.

Filter Accessory Size:
46mm

Calibration:
Zero adjustment screw

Weight:
15.9 oz. (450g) with batteries.

Dimensions:
62mm W x 163mm H x 127mm L.
2.5″x6.4″x5″
Width of grip 34mm (1.3″).

Accessories:
Accepts 46mm filter, tripod socket, batteries, wrist strap, lens cap and case.

NEW

PENTAX

Spotmeter V-FL

1° Spot Exposure readings directly in foot lamberts.

The easiest and most accurate method to evaluate scene brightness is with the new Spotmeter V-FL from Pentax. With the amazing ability to read a 1° area, TV and film metering will never be the same.

Both the viewfinder scale and the calculator dial are calibrated directly in foot lamberts (ft/L), eliminating the time required, and the chance for error, for converting EV values into foot lamberts.

As luminance values are determined by metering both the brightest and the darkest areas in a given area, the calculator dial features two scales for easy calculation of luminance ratio variations. And with the 1° spot readings, you have the assurance that both bright and dark readings will be highly precise, with the accuracy you have come to expect of the Pentax Silicon Photo Diode (SPD) cells.

The inner scale of the calculator dial features a foot lambert scale ranging from 0.125 to 16000 ft/L; while the outer scale indicates corresponding luminance ratios from 1:1 to 1:128,000. By simply matching the foot lambert reading of the darkest area metered to the 1:1 index mark, the luminance ratio is instantly calculated.

The new Spotmeter V-FL incorporates all of the technology and dependability of the famous Pentax Spotmeter V — acclaimed by professionals around the world for accuracy and dependability.

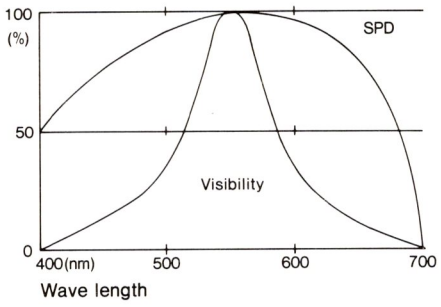
Now, whether its matching live TV studio conditions with film materials, establishing TV or motion picture light for new productions, setting up home video cameras, measuring industrial or office lighting conditions for safety regulations, or performing numerous laboratory and technical operations, the new Spotmeter V-FL from Pentax is your assurance of fast, easy, precise and accurate foot lambert measurement.

Cat. No.
36127 Spotmeter V-FL w/Case

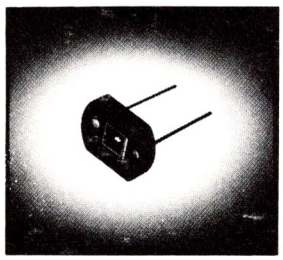
Specifications on next page.

PENTAX

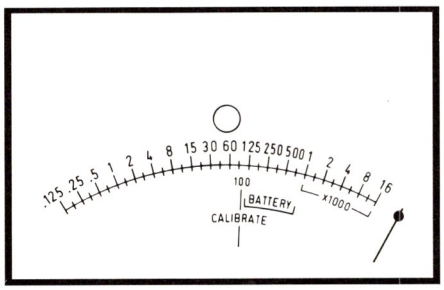
Spotmeter V-FL



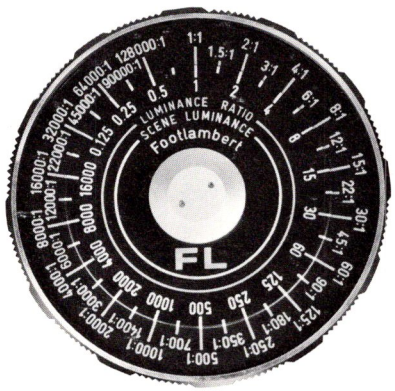
The Spotmeter V-FL SPD spectroscopic sensitivity.



The high performance SPD photosensitive cell (silicon photo diode) installed in the Spotmeter V-FL.



The viewfinder of the Spotmeter V-FL



With the etched 1° circle on the subject area a direct reading in foot lamberts (ft/L) is made.
Luminance ratios are determined by reading both the brightest and the darkest spots in a given area. If the brightest spot reads 1000 ft/L, for instance, and the darkest spot reads 2 ft/L, align the 2 ft/L index on the inner scale to the 1:1 luminance ratio index mark on the outer scale. A glance at the 1000 ft/L position (which was the brightest spot measured) on the inner scale immediately informs you that the luminance ratio is 500:1.

Specifications

Measuring ranges:
0.125 to 16000 ft/L.
Scene luminance 1.5:1
Luminance ratio 1:1 to 128000:1
Measuring Angle:
Circle of 1° of arc in center of finder.
Measuring Distances:
From about 5 ft. (1.5m) to infinity — fixed focal length. (Focusing down to about 3 ft. (1 meter) possible by turning the eyepiece.
Measuring Method:
Spot measuring of reflected light. (Meter switches on when button is pressed).
Photosensitive Cell:
Silicon photo diode (SPD)
Power Supply:
Three 1.5v silver batteries. (Eveready S76 or equivalent)
Battery Check:
Battery check indicated in viewfinder.
Viewfinder:
Single lens reflex pentaprism type with unreversed, laterally correct image. Even illumination achieved with finely grooved fresnel lens. 1° spot indicated in center of viewfinder. Field of view 21° diagonal, 17° horizontal and 12° vertical. Magnification 1.5X. Adjustable eyepiece correction 0 to -1 diopter.
Filter Accessory Size:
46mm
Calibration:
Adjustment screw with calibration indicated in viewfinder.
Weight:
15.9 oz (450g) with batteries.
Dimensions:
2.5" W x 6.4" H x 5" L
(62mm x 163mm x 127mm)
Width of grip: 1.3" (34mm)
Additional:
Scale illumination for low ft/L levels. Equipped with tripod socket, accepts 46mm filters, supplied with Case, Wrist Strap, batteries and Lens Cap.

Cat. No.
36127 Spotmeter V-FL w/Case

For replacement of supplied accessories, refer to Special Products Section.

PENTAX

Digital Spotmeter

1° Precision exposure meter with rugged solid state digital readout.

A major breakthrough in exposure metering technology, the Pentax Digital Spotmeter selectively pinpoints with extreme accuracy the correct exposures in the deepest shadows and the brightest highlights. It can also measure contrast ratios and serve as a brightness meter in T.V. or motion picture studios. The Pentax Digital Spotmeter has a 1° pinpoint metering angle which is comparable to the field of view of a 2,000mm lens for a 35mm camera, and has a measuring range of EV 1-20. It can be used to measure exposures by four different methods: general measuring, averaging, highlight reading and shadow reading. It is therefore ideally suited to the most exacting needs of any photographer, professional or amateur.

Weighing only 9.1 oz., its bright fixed focus, through-the-lens viewfinder presents a slightly englarged (1.15x life size) image. The silver-coated pentaprism, seven-layer multicoating of its lens and eyepiece and fine-grooved fresnel lens all combine to create an extraordinarily brilliant viewfinder, effective even in the dimmest light. A 1° circle engraved in the center of the viewfinder outlines the image-area being measured. When the trigger-like metering button in the pistol-grip handle is squeezed, the appropriate EV number lights up in the LED panel.

Measurements are given in 1/3 EV increments indicated by a single or double dot next to the digital number readout. The EV numbers can be converted quickly into shutter speed/aperture combinations on the easy-to-read scale around the lens barrel. The LED numbers are highly visible, even in bright light. A special Stabilizer Circuit prevents flickering or simultaneous flashing of adjacent LEDs, adding still further to the meter's accuracy.

The Pentax Digital Spotmeter's Silicon Photo Diode light sensor responds 1,000 times faster than CDS cells, and has no bright light memory. This allows the Spotmeter to be swept quickly back and forth between bright and shadow areas for instantaneous and accurate measurement of both areas.

All components of the Spotmeter's exposure measuring system are without moving parts. Therefore, the unit is extremely rugged and not prone to damage or jamming.

The Pentax Digital Spotmeter also has a IRE (Institute of Radio Engineers) scale for determining which highlights at any given exposure would be washed out and which shadows would be underexposed. The meter also has a Cine Index for motion picture use.

The Pentax Digital Spotmeter has a black finish and is powered by one 6V silver oxide battery, has a tripod socket and is supplied with case, wrist strap and lens cap.

Cat. No.
36141 Digital Spotmeter w/Case

Specifications on next page.

PENTAX

Digital Spotmeter

IRE Scale

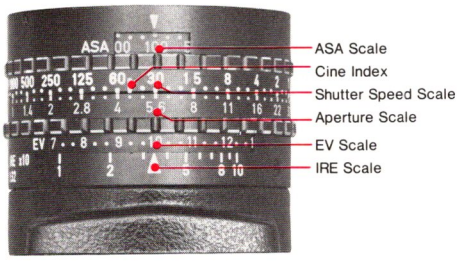
Named for the Institute of Radio Engineers, IRE units provide a means for the percentage-wise comparison of energy. The IRE scales from 1-10 cover 5 EV and "f/stop" levels, representing the maximum and minimum light levels which will reproduce on reversal-type films. This "5 stop" range also represents a contrast range of 1:32 making the spotmeter invaluable for television use and motion picture production. For general photographic applications it enables highlight and shadow readings quickly and easily. Exceptional exposures under difficult lighting conditions are instantly determined:

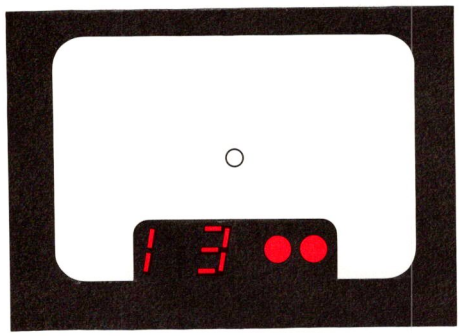
- **Highlight Reading Method**

In this method priority is given to the reproduction of the bright highlights. If the contrast ratio is particularly strong, the shadows will tend to be blackened out. For example, when aiming at the people under a spotlight on a stage with a black background or when trying to capture the color of neon lights at night, this method will prove very successful. Measure the brightest highlight, and align the exposure value with the IRE Scale at position 10 (not the central standard index mark) on the far right hand side. Then choose any aperture/shutter speed combination. With reversible color film, shadow detail with an EV reading no lower than that corresponding to an IRE index of 1 (when the highlight EV has been set to an IRE index of 10) will be reproduced. All darker areas will be pitch black.

- **Shadow Reading Method**

This method is just the opposite of the highlight reading method, priority being given to the reproduction of detail in the dark shadows. If the contrast is very strong, the brighter parts of the highlights will appear just plain white. Measure the shadow area, align the exposure value with the IRE Scale at position 1, and then select suitable exposure combinations. Details of highlight areas which give an EV reading no higher than the EV value corresponding to the IRE index scale position 10 (when measuring the shadows) will still be reproduced. Anything brighter than that will come out all white. The readings given by ordinary exposure meters when measuring fields with extensive shadow areas such as a night scene, usually result in overexposure. But the accuracy of the Digital Spotmeter ensures just the right exposure setting for realistic results.





Viewfinder of Digital Spotmeter shows 1° area of meter coverage and LED panel. Each illuminated dot beside the EV number represents 1/3 EV, thus the reading shown above is 13 2/3 EV. When the exposure value exceeds 19 (19 2/3 EV) or falls below 1, zero [0] is displayed.

Specifications

Measuring Ranges:
EV 1-20 [at ASA 100] (EV 20 displayed as "0") ASA 6-6400; Shutter Speeds 1/4000 sec-4 minutes; Apertures f/1-f/128; Scales marked 1/3rd EV increments from 1-19 2/3, IRE 1-10.

Measuring Angle:
Circle of 1° of arc in center of finder.

Measuring Distances:
From about 5 ft. (1.5m) to infinity — fixed focal length. (Focusing down to about 3 ft. (1 meter) possible by turning the eyepiece)

Measuring Method:
Spot measuring of reflected light. (Meter switches on when button pressed).

Exposure Read-Out:
LED digital display of EV numbers. Also displays one or two dots — each dot represents +1/3 EV.

Photosensitive Cell:
Silicon Photo Diode (SPD)

Power Supply:
One 6v silver battery (Mallory PX28 or equivalent).

Viewfinder:
Single lens reflex pentaprism type with unreversed, laterally correct image. Objective and eyepiece lenses Super-Multi-Coated and pentaprism specially silvered for brilliant viewfinder image. Even illumination achieved with finely grooved fresnel lens. 1° spot indicated in center of viewfinder, and large LED panel at bottom. Total viewfinder coverage similar in shape to that of a 35mm SLR viewfinder with a diagonal field of view of 26°, horizontal field of 22° and vertical field of 14°. Adjustable eyepiece correction from -2 to +1 diopter.

Filter Size:
40.5mm

Weight:
9.1oz (258g) with battery.

Dimensions:
1.7"D x 5.7"H x 3.3"W
(44mm x 144mm x 83mm)

Additional:
Equipped with Tripod Socket, accepts 40.5mm filters, supplied with Case, Wrist Strap, battery and Lens Cap.

Cat. No.
36141 Digital Spotmeter w/Case