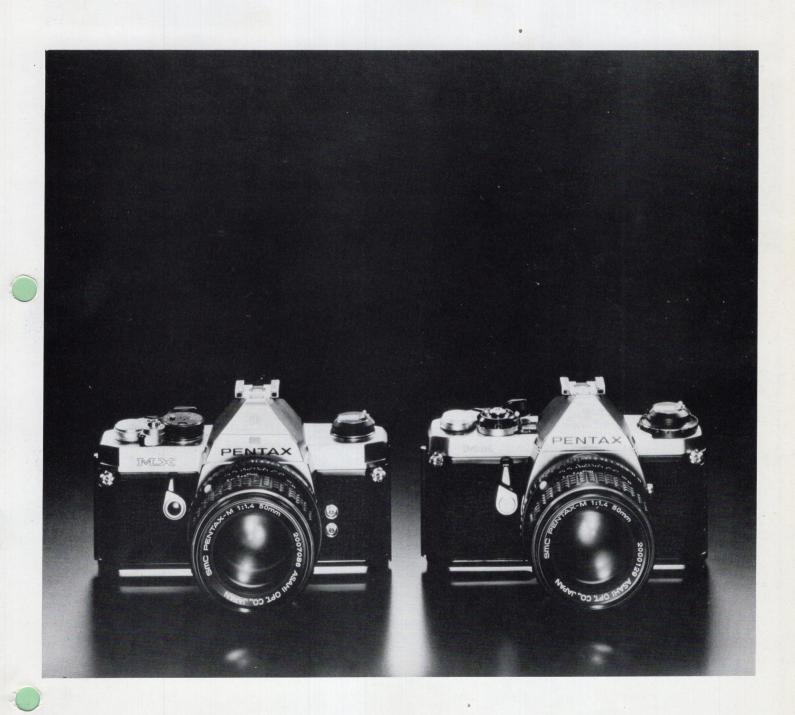
Honeywell

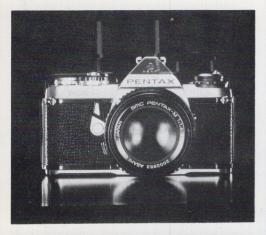
HOT LINE NEWSLETTER

ME and **MX**

the world's smallest, lightest, most compact / easy-to-use, full-featured 35mm SLR cameras!

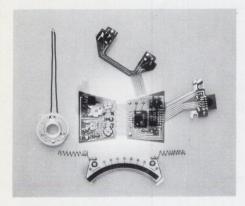


Rugged dependability, innovative technology, ease of use and featured for the professional. All packed into the smallest, lightest SLR cameras in the world!



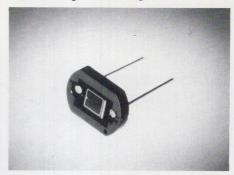


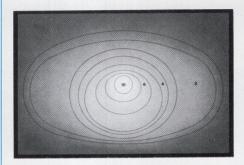
Advanced Electronic Technology



Solid-state, accurate and reliable electronics are superbly blended with famous Pentax optical quality. IC circuitry and a mini-computer (in the ME) have been integrated in an all new, amazingly compact, camera body.

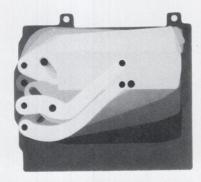
New Metering Breakthrough



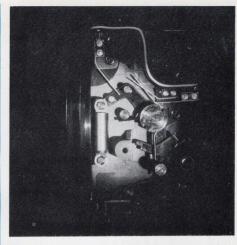


Newly developed GPD's (Gallium Arsenide Phosphorous Diodes) provide exposure accuracy and speed never before attainable. They are 1,000 times faster than conventional CdS cells, and respond instantly to any light change without any 'memory lag'. And, unlike silicon cells, GPD's are insensitive to temperature extremes and infrared.

New Shutter Advances



The fully automatic ME utilizes an improved, smaller version of the Seiko stepless, electronic shutter. The 11 blade, all metal, focal plane shutter is extremely quiet and vibration free.



The new, compact focal plane shutter in the MX has been matched to a new mirror dampening system that virtually eliminates all vibration during an exposure. This new system enables sharp, pictures even in critical close-up photography.

Brilliant Viewfinders

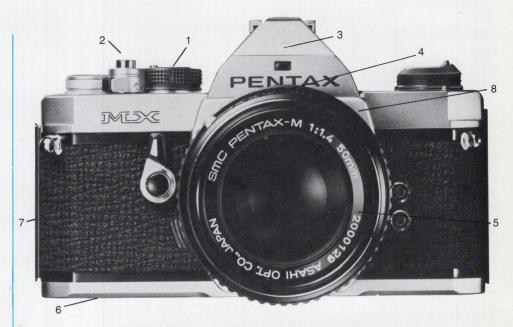
Both the ME and MX have new silvered viewfinders that offer a large, extremely bright image that's easy to focus accurately on. Exposure indications are through LED's which have a new stabilizer and hold circuit that eliminates the common flicker and jumping between the neighboring LED's. The combination split-image and microprism focusing system enables easy, fast pinpoint focusing under any light condition.

A System to Grow With



Auto winders are offered at an easily affordable price for both the ME and the MX. In addition, a motor drive unit is available for the MX. These will greatly enhance your picture taking capabilities and let both the amateur and the professional concentrate on their picture taking rather than on the operation of the camera. Both the winders and the motor drive unit attach directly to the cameras and are so compact that together with the camera they are equal to most standard cameras in size. Additionally, there is a whole new line of ultra-compact lenses and an extensive range of accessories to fulfill every photographer's needs ... and some to even create some new endeavors.

MX Camera

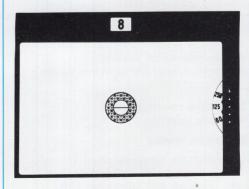


- 1. Focal plane shutter with mirror dampening system. (1 to /1000 sec)
- 2. 160° film advance (smooth fast)
- 3. Large, bright viewfinder with LED metering, shutter speed & aperture readings.
- 4. GPD (Gallium Arsenide Phospherous Diode) metering (fast accurate)
- 5. New 'M' compact lenses (bayonet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

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

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

- GPD metering for instant accurate response
- Full information viewfinder



• Tri Color LED exposure read out

- Interchangeable focusing screens
- MX Winder (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.

Ca	+	N	0
υa	١.	1.4	v

05000Pentax MX Chrome Camera Body05010Pentax MX Black Camera Body37381Pentax MX Auto Winder2016740mm SMC Pentax-M f/2.8 lens2094750mm SMC Pentax-M f/1.2 lens2086750mm SMC Pentax-M f/1.4 lens2087750mm SMC Pentax-M f/1.7 lens32700MX Soft Case30831Focusing Screen SA-130833Focusing Screen SA-330834Focusing Screen SB-130835Focusing Screen SC-130836Focusing Screen SD-130837Focusing Screen SE30838Focusing Screen SG

30836 Focusing Screen SI





MX Camera

Specifications

Type

35mm full-frame SLR camera with openaperture center-weighted Through-The-Lens meter.

Lens mount

Pentax K bayonet.

Standard lenses

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

Shutter

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

Flash synchronization

FP and X-sync terminals, plus 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 (8 interchangeable screens); 95% of picture-taking area visible and 0.95x magnification with 50mm lens at infinity); —0.5 diopter eyepiece.

Information viewfinder shows f/stop, shutter speed and tri-colored LED readout dots. Correction lens adaptor M, Magnifier M and Refconverter 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

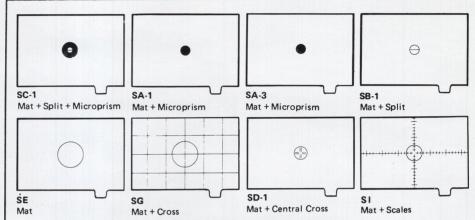
Rachet-type rapid wind lever, plastictipped for winding comfort. 162° throw with a stand-off angle of 20°. Rewind crank for speedy film rewind.

Film loading

New magic-needle quick/sure loading.

Automatic winder

MX camera body accepts MX Winder for up to 2 frames-per-second (single-frame and consecutive exposure operation possible)



FOCUSING SCREEN TYPES

SC-1 This is the standard screen of the MX which is equipped with a central range-finder circle 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 range-finder distracting and desires a plain screen with the emphasis on a large ground glass area. The versatility of the screen nearly equals that of the SC-1, and can be used with an equal number of lenses.

SA-3 Similar to SA-1, but the angle formed by the prisms in the micro-prism grid is greater to simplify 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 nearly as versatile as SC-1 and can be used with an equal number of lenses.

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 as well as an aid for the alignment of images when creating double exposures.

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

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.

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); LED's double as battery check lamp.

Back cover

Standard back with memo holder, interchangeable with Magazine Back MX, Dial Data MX for data recording on film.

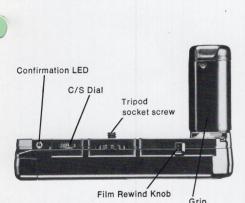
Body size

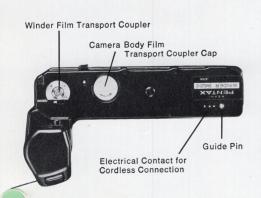
135.8mm x 82.5mm x 49.3mm, 5.35" x 3.25" x 1.94"

Body weight

495g., 17.5 oz.

Winder MX







Winder MX is designed specifically for the Pentax 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

Auto winder designed for exclusive use with the Pentax 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, but B (Bulb).

Power Source

4 penlight batteries.

Shutter Release

Shutter is released with the built-in Trigger Release Button of the Winder MX Grip.

Confirmation of Proper Functioning

An LED found to the right of the C/S Dial flashes 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 Tripod Socket allows Winder MX to be attached to a tripod.

Dimensions

144mm 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 Pentax Auto Winder MX

Motor Drive MX



Motor Drive MX



Ni-Cd battery pack M



The new MX Motor Drive system offers the ultimate in versatility and compactness in a Motor Drive. The MD unit along with the Ni-cad battery pack is extraordinarily compact. When mounted on the MX, it is no larger than most standard size cameras alone.

Choice of Power Sources:

For compactness, the 15V rechargeable Ni-Cd Battery Pack-M is ideal. For convenience, there is also an 18V Battery Grip-M which utilizes easily replaceable penlight batteries. In a studio situation, the Power Pack-M, which runs on standard AC current is invaluable.

Rapid-Fire consecutive exposures:
Regardless of the power source, the motor drive MX system allows single-frame exposures, with automatic advance, or consecutive exposures at a steplessly variable speed of between 1 to 5 fps. Remote power cords are also available regardless of power source or mode of operation.



SPECIFICATIONS:

Motor Drive MX

Designed for exclusive use with the Asahi Pentax MX.

Choice of single-frame exposure (automatic transport, one frame at a time) or consecutive exposures in a steplessly variable range of 1-5

Usable Shutter Speeds:

All shutter speeds, but B (Bulb).

Power Source:

15V DC Ni-Cd Battery Pack M, 18V DC Battery Grip M (12 penlight batteries), AC Power Pack M.

Bulk Film Magazine:

Magazine Back MX quickly interchanges with Back Cover of MX for cordless connection, providing up to 250 exposures with bulk film.

Remote Control:

3m and 10m long Power Cables available for remote control, single-frame or consecutive exposures possible in conjunction with the Remote Trigger Connector.

Exposure Counter:

Subtractive type with Automatic Stop when counter reaches zero.

Shutter Release:

By the Trigger Release Button built into the Grip of Motor Drive MX, or by the remote control release button.

Dimensions:

5.6"w x 2.8"H x 2.5"D (143mm W x 71mm H x 64mm D)

Weight:

8 oz. (225.5g.)

Additional:

LED flashes for confirmation of proper functioning, built in receptor for storage of Camera Body Film Transport Coupler Cap.

Ni-Cd Battery Pack M

Type:

Designed for exclusive use with Motor Drive MX (for Pentax MX) or Motor Drive MD (for Pentax K2 DMD).

C/S Dial:

Settings for OFF, single-frame exposure and consecutive exposures, dial used in conjunction with C/S Dial of Motor Drive MX for MD

Remote Control:

3m or 10m long Power Cable M is attached between Motor Drive MX and Ni-Cd Battery Pack M, Release Button of Battery Pack M is used to release the shutter.

Attachment Method:

Attaches to Tripod Socket of Motor Drive MX.

37380

Provided with built-on Tripod Socket to attach Battery Pack to tripod.

Power Source:

Rechargeable 15V Ni-Cd battery which can be recharged in approximately 6 hours with the accessory Charger Pack M.

Motor Drive Trigger Cord M

Cat. No.	
37114	Motor Drive MX
30606	Standard Back Cover for MX
37123	Motor Drive Battery Grip M
37231	Motor Drive Ni-Cd Battery Pack M
37141	Motor Drive Charge Pack M
37201	Motor Drive Power Pack M
37215	Motor Drive Power Cord M 3m
37216	Motor Drive Power Cord M 10m

Dial Data MX Data MX

Instant Conversion to a Data Camera

By simply removing the original camera back, one can easily convert the MX to a data camera. The Data Backs are mounted on the camera and desired information will be imprinted on the corner of the film during each

The Dial Data MX can be set to record the date, shooting aperture, an alphabetical code, or whatever code the user wants to employ.

The Data MX is easily attached to the MX with a slight modification to the camera, and affords the opportunity of imprinting a small clock in the corner of the frame with the date, hour, minute and second. A memo plate can also be substituted for the clock if desired.

The Data accessory backs prove to be an invaluable tool for commercial and scientific applications, as well as a great convenience for the serious amateur photographer.



Specifications:

DIAL DATA MX

Type:

Designed for exclusive use with the Asahi Pentax MX.

Attachment:

Instantly interchangeable with standard Back Cover of Pentax MX.

Available Data:

Data selected from three dials of which the left dial is used to imprint the year (76-86) or aperture, the central dial for the month (0-12), shutter speed, or letters of the alphabet (A-M), and the right dial for the day of the month or frame number (0-36).

ASA Range:

Two settings available for black and white or color film, ASA 25-50 and ASA 64-400.

Confirmation:

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

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

Power Source:

Three 1.5V silver oxide batteries.

Additional:

Imprinting of data when using Winder MX or Motor Drive MX is possible.



DATA MX

Type:

Designed for exclusive use with Asahi Pentax MX Data (slight modification of Pentax MX).

Attachment:

Instantly interchangeable with Back Cover of Pentax MX Data.

Available Data:

Built-in clock indicates day of the month, hour, minute, second, and the central portion of the clock has a ground glass surface for pencilling in additional data. Clock is interchangeable with Memo Plate which can be used to indicate any type of data desired.

ASA Range:

Three settings provided for black and white film (ASA 100, 200, 400) and one setting for color film (ASA 64-160).

Confirmation:

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

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

Power Source:

One 6V silver oxide battery.

Dial Data MX 37134 Data MX



Introducing The New K1000

As the K Series model entailing the smallest investment, the K 1000 represents the ideal way of getting acquainted with Pentax photography. Proudly bearing the Pentax name, it retains all the essential features of a quality camera.

System camera

Sharing the same mount as the other members of the K family, the K 1000 can use any one of the superb SMC Pentax lenses and accessories available. It comes with a fast f/2 55mm lens which makes it possible to shoot brightly-lit interiors and city streets at night without flash. And for those occasions when desiring to use an electronic flash unit, there is a "hot shoe" for cordless operation as well as an X-sync PC terminal for use with cords.

Correct exposures assured

Simply removing the lens cap automatically turns on the highly accurate metering system which can be instantly adjusted for correct exposure by merely aligning the indicator needle between the two brackets visible in the viewfinder. Focusing, composing, and viewing are simplified by the large, bright focusing screen of the K 1000.

And since all exposure adjustments are made at full aperture, the viewfinder never grows dark.

Renowned Pentax shutter

The K 1000 employs a rubberized silk focal plane shutter developed by Pentax for optimum durability and accuracy. A complete shutter speed range is provided, from a brief 1/1000 sec. to "freeze action" to a long 1 sec. for dimly-lit scenes.

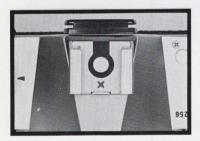
Handling ease

Both the elimination of mirror vibration by the shock absorbers incorporated into the camera body and the texturized body surface of the K 1000 assist the photographer in holding the camera rocksteady. A large, upraised alignment dot appears on each SMC Pentax lens for instant matching of body and lens, and a slight twist securely locks the lens into place; attaching lenses was never easier.

Features galore

Whether you are using a slow reversal film or "pushing" fast film to its limit, the K 1000 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 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 55mm f/2 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.

Viewfinder

Pentaprism finder with cross-microprism. Magnification of life-size with 55mm standard lens focused at infinity. 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. 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 aperture, shutter and film speed settings. Film speed from 20 to 3200 ASA. EV 3-18 with ASA 100 film. Powered with one 1.5V silver oxide battery. (S76 type). Built-in photoswitch.

Dimensions

With 55mm f/2 lens: width 143mm (5.6") x height 91.4mm (3.6") x depth 91mm (3.6").

Weight

837g (29.3 ozs.) with 55mm f/2 lens. 610g (21.4 ozs.) without lens.

Merely centering the needle assures correct exposure.

Cat. No.

04505	Pentax K1000 chrome body with microprism focusing screen, 50mm SMC Pentax f/2.0 lens
84505	As above with case.
04525	Pentax K1000 chrome body with split-image focusing screen, 50mm

split-image focusing screen, 50mm SMC Pentax f/2.0 lens

84525 As above with case.

32630 Soft camera case for the Pentax K1000.



The K2 is the finest, fully-automatic electronic exposure SLR camera in the world. 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.



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.



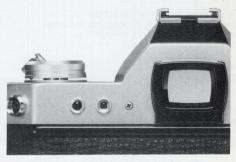
Fast response silicon photo diode adjusts quickly to abrupt light changes.

Mirror lock-up switch to minimize vibrations.

4x to 1/4 x exposure factor dial to compensate for difficult lighting situations.

Human engineered for surer, easier and faster handling.

Over 30 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 50mm SMC Pentax f/1.4 lens.
The body only is a light 24.2 ozs., with the 50mm f/1.4 lens 33.7 ozs.

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.

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

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.

Salf-timer

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

Viewfinder

Silver coated pentaprism finder with microprism or split-image focusing screen. 0.88x magnification with 50mm lenses (life-size with 55mm lens). 95% field of view. Dioptry —0.8. "Incorrect exposure range" indicator.

Focusing

Microprism or split-image screens standard plus custom 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 lever. 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, 1/2x, 1/4x for exposure compensation control.

Power Source

Two 1.5V silver oxide batteries (Eveready S76E or Mallory MS76H).

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: width 144mm (5.7") x height 92mm (3.6") x depth 94mm (3.7").

Weight

946g (33.7 ozs.) with 50mm f/1.4 lens. 680g (24.2 ozs.) without lens.





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.

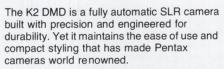
03000 Pentax K2 chrome body with body cap and microprism focusing screen, strap and batteries.

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

32600 Soft leather camera case for Pentax K2.

PENTAX K2 DMD





Like the K2, the K2 DMD 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 to 1/1000 second, plus B, electronic flash synch 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 motor drive capabilities, the K2 DMD incorporates several other features, unique in the line to the K2 DMD:

- A full information viewfinder that shows whether the camera is being used on auto 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 repositioning 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.
- An Eyepiece Blind.
- Interchangeable backs.

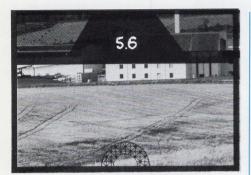
Cat. No

03310

Pentax K2 DMD black body with body cap, strap and batteries.



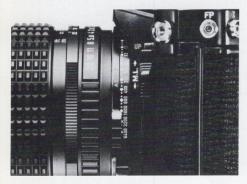
K2 DMD



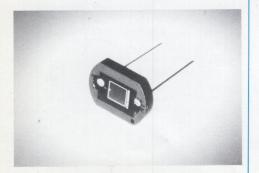
As a warning and reminder, the aperture read-out changes from white to orange whenever exposure compensation is utilized.



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



The Mirror Lock-Up and Photo Memory Lock Lever.



Camera Type

Aperture-Priority AE 35mm SLR with manual override and provision for motor drive.

Shutter

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

Auto:

Stepless range of 1/1000 - 8 seconds. 1/1000 - 8 seconds & b. B, 1/125 sec. (no

Manual: 1/1000 - 8 second Mechanical Shutter: B, 1/125 sec. (no

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 brilliant viewing, Split-Micro focusing aid, magnification of .88x with 50mm lens at infinity. 95% of picture taking area visible, eyepiece of .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.

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 K Bayonet Mount.

Power Source

Two 1.5V silver oxide batteries 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

144mm(L) x 92mm(H) x 90.4mm(D) (with 50mm f/1.4 lens).

Weight

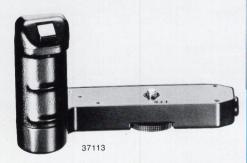
953g (with 50mm f/1.4 lens), 688g (without lens and batteries).

Additional Features

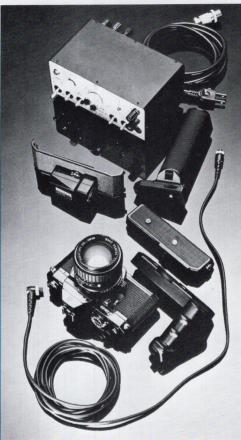
Built-on Tripod Socket, Depth of Field Preview Button, lenses provided with upraised dots for instant matching and mounting to camera body, reinforced neck strap lugs, all back body, texturized body surface for sure grip.

Motor Drive MD









Motor Drive MD

With only a small addition in weight and size, one can easily convert the full-featured K2 DMD 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 1/2 to 2 frames-per-second. A single touch switches the operation from single frame to continuous mode. The Motor Drive MD is easily attached to the K2 DMD camera and is designed to be a perfect mate to the camera. The K2 DMD and Motor Drive MD combination will be sure to perform for both the professional and the amateur, in the same dependable manner that has made Pentax famous.

Battery Grip M

In addition to serving as a solid support and secure grip for the combination of K2 DMD and Motor Drive MD, Battery Grip M also houses the 12 penlight batteries which serve as the power source. As the batteries are stored in a cassette-type battery holder, the battery grip can be instantly loaded, or used batteries can be immediately replaced with fresh ones which have been preloaded in an additional holder. For added versatility, the grip has its own trigger release.

Power Cable M

This 3 meter power cable is available as a standard accessory and, for remote control operation from extended distances, a 10 meter power cable is available as an optional accessory.

Specifications:

Designed for exclusive use with Asahi Pentax K2 DMD.

High performance 15V DC micro motor.

Power Source

12 1.5V penlight batteries housed in battery grip provide up to 1,400 exposures.

Film Transport Rate

Steplessly variable within a range of ½ - 2 fps for consecutive exposures during which time the Quick Return Mirror functions as usual.

Usable Shutter Speeds

Single-Frame Exposures: A stepless range of 1/1,000 - 8 sec. for AUTO and a range of 1/1,000 - 8 sec. B for MANUAL operation. Consecutive Exposures: 1/1000 - 1/60 sec. (AUTO or MANUAL) at 2 fps, 1/1,000 - ½ sec. (AUTO or MANUAL) at 1 fps. 1/1,000 - 1 sec. (AUTO or MANUAL) at ½ fps, all AUTO and MANUAL speeds (except B) at longer intervals.

Exposure Rate

Maximum number of 36 exposures possible. Exposure Counter is of subtractive type with automatic stop at zero.

Dimensions

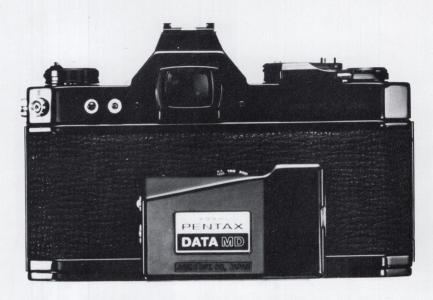
148.5mm(L) x 253mm(H) x 90.4mm(D) with K2 DMD body, 50mm f/1.4 lens, and Battery Grip M attached.

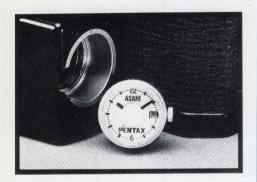
1,501g with K2 DMD body, 50mm f/1.4 lens, and Battery Grip M (without batteries) attached.

Cat No.

37113 Pentax Motor Drive MD 37123 Motor Drive Battery Grip M 37201 Motor Drive Power Pack M 37215 Motor Drive Power Cord M 3m 37216 Motor Drive Power Cord M 10m 37231 Motor Drive NiCad Battery Pack M 37141 Motor Drive Charge Pack M

Data MD for K2 DMD







Merely replacing the standard back cover of the K2 DMD with the data back, Data MD, instantly converts it into a data camera. Upon attaching Data MD to the K2 DMD, direct and immediate electrical contact is automatically made for safe and foolproof operation. The built-in watch of the data back is automatically photographed and appears in the upper left-hand corner of the frame, indicating the date, hour, minute, and second. The central portion of the watch can be used to show the year, month, and time of day (A.M. or P.M.)

Even with the data back attached, the imprinting of data upon the film can be terminated at any time by setting the Data Switch on the bottom of the camera to OFF.

Specifications

Designed for exclusive use with Asahi Pentax K2 DMD.

ASA Range

Three positions for 100, 200 and 400 ASA black and white film upon which the data is imprinted in black and white, and one position for 64 - 100 ASA color film upon which the data is imprinted in black and orange.

Coupling

Cordless attachment to K2 DMD body and coupling to Motor Drive MD.

Day of month, hour, minute, second, and provision for addition of year, month, and time of day (A.M. or P.M.), all of which appear on face of watch. Accessory Memo Plate also provided to indicate any other form of data.

Data Position

Upper left-hand corner of film frame.

Data Size

A circle of 3.8mm diameter on the film surface.

Battery Check

Provision to check battery condition and ascertain that data is being imprinted.

Dimensions

144mm(L) x 92.2mm(H) x 123mm(D) when attached to K2 DMD body with 50mm f/1.4

1,054g (without batteries) when attached to K2 DMD with 50mm f/1.4 lens.

37131 Data Back MD

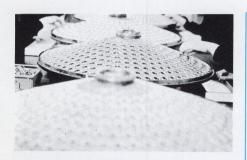
SMC lenses (Super-Multi-Coated)

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

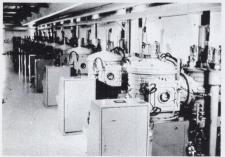


SMC lenses (Super-Multi-Coated)

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



Lenses undergoing Super-Multi-Coating process



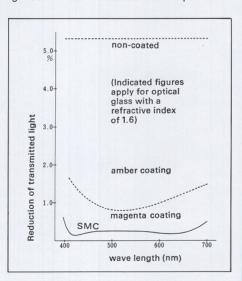
An array of SMC vacuum evaporators installed in response to improved SMC technology.

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.

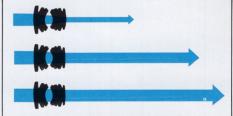


However, because of the complex optical designs of photographic lenses, there is still a 10-20% loss of transmitted light in conventionally coated lenses. Moreover, in addition to the loss of light, conventionally coated lenses suffer from flare and ghost images, the result of which is loss of contrast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

Asahi 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 in 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, in the new SMC Pentax standard focal length lenses, SMC 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.



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 shiftcontrol photography. And all fit the Pentax MX and ME as well as the Pentax "K" cameras.

Type	. Wafte of Lens	·W	ninum Angle of	View de c	Orstructor Oupsitier Oupsitier	·M.	.4.	ocus distributed bia	· 04.	.013	Filter
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	ВІ
Ultra-wide-	SMC Pentax 15mm f/3.5	22	111	12-13	FA	0.3	1.0	80 x 81.5	550	19.25	ВІ
angle	SMC Pentax 18mm f/3.5	22	100	11-12	FA	0.25	0.79	63 x 61.5	328	11.48	ВІ
	SMC Pentax 20mm f/4	22	94	10-12	FA	0.25	0.8	63 x 57	300	10.5	58
	SMC Pentax 24mm f/2.8	22	84	8-9	FA	0.25	0.79	63 x 41.5	194	6.79	52
Wide-angle	SMC Pentax 28mm f/2	22	75	8-9	FA	0.30	1.0	62.5 x 69	423	14.8	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	150	5.3	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	205	7.18	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	5-4	FA	0.60	2.0	63 x 18	110	3.88	49
	SMC Pentax 50mm f/1.2	22	46	6-7	FA	0.45	1.5	65 x 48.5	385	13.48	52
	SMC Pentax-M 50mm f / 1.4	22	46	7-6	FA	0.45	1.5	63 x 37	238	8.4	49
	SMC Pentax-M 50mm f/1.7	22	46	6-5	FA	0.45	1.5	63 x 31	185	6.53	49
Telephoto	SMC Pentax 85mm f / 1.8	22	29	6-6	FA	0.85	2.75	64 x 56	331	11.59	52
	SMC Pentax-M 100mm f/2.8	22	24.5	5-5	FA	1.0	3.3	62.5 x 55.7	225	7.88	49
	SMC Pentax 120mm f/2.8	32	21	4-5	FA	1.2	4	62.5 x 74.5	355	12.43	52
	SMC Pentax 135mm f/2.5	32	18	6-6	FA	1.5	5	67.5 x 85.9	470	16.45	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 96	338	11.83	49
	SMC Pentax-M 200mm f/4	32	12	5-6	FA	2	6.5	63.5 x 111	405	14.18	52
Ultra-telephot	SMC Pentax 300mm f/4	32	8.5	5-7	FA	4	13	85 x 188	942	32.97	77
	SMC Pentax 400mm f/5.6	45	6	5-5	М	8	27	85 x 277	1.24	43.4	77
	SMC Pentax 500mm f / 4.5	45	5	4-4	М	10	35	126.5 x 440	3.33	116.6	52
	SMC Pentax 1000mm f/8	45	2.5	5-5	М	30	100	143 x 738	5.25	1.83.8	52
	SMC Pentax Reflex 1000mm f/11	-	2.5	5-8	ND	8	26.24	119 x 248	2.3	80.5	BI/52
Zoom	SMC Pentax Zoom 45~125mm f/4	22	50.5-20	11-14	FA	1.5	5	69 x 127	612	21.42	67
	SMC Pentax Zoom 85~210mm f/3.5	32	29-11	11-12	FA	1.9	6.23	76.5 x 207.5	1.05	36.75	67
	SMC Pentax Zoom 135~600mm f/6.7	45	18-4	12-15	М	6	20	105 x 582	4.07	142.5	52
Macro	SMC Pentax-M Macro 50mm f/4	32	46	4-3	FA	0.234	0.77	63 x 42.5	160	5.6	49
	SMC Pentax-M Macro 100mm f/4	32	24.5	3-5	FA	0.45	1.48	64.6 x 77.5	355	12.43	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	22	75	11-12	М	0.3	1.0	80 x 92.5	611	21.39	BI

SMC lenses

(Super-Multi-Coated)

Change in Angle of View SMC Pentax Lenses



SMC Pentax-M

(Standard Bayonet Lenses)

The new high-performance SMC Pentax-M miniaturized lenses are 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 new Pentax ME and MX cameras, the smallest and lightest 35mm SLRs vet made. But they fit all Pentax "K" cameras

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 and ghost images. And exemplifying their total-convenience design, all SMC Pentax-M lenses accept the same 49mm-diameter filters.

SMC Pentax-M 40mm f/2.8

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 3/4 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.





SMC Pentax-M 50mm f/1.4

Measures only 11/2 Inches from Mounting Plane to Front Rim. This high-speed, high-resolution standard lens weighs less than 81/2 ounces. It has 7 elements in 6 groups, focuses down to 18 inches and covers a 46° field of view.



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°.



SMC Pentax-M

(Wide Angle Bayonet Lenses)

SMC Pentax-M 28mm f/2.8

The "Classic" Wide-Angle Lens. Weighs only 51/2 ounces and is less than 11/4 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 **22960**



SMC Pentax-M 28mm f/3.5

Lightweight, compact and economical, this superb lens enables the user to obtain dramatic wide angle effects and expand the field of view while being able to limit his investment and overall camera bulk. Has 6 elements in 6 group construction and utilizes 49mm filters.

Cat. No **22570**



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.

22760





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**



SMC Pentax-M

(Telephoto Bayonet Lenses)



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.

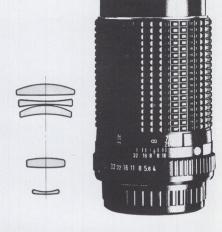




SMC Pentax-M 135mm f/3.5

Well Balanced and Lightweight, Medium Telephoto. Featuring a built-in collapsible 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 23460



SMC Pentax 150mm f/3.5

A unique lens from Asahi Pentax, specially designed to offer maximum magnification (3X) for a compact and lightweight telephoto. Not only is it extremely portable, but like its 85, 105, 120, and 135mm counterparts, a 1/125 sec. shutter is sufficient to produce sharp photographs when handholding the combination of camera and telephoto lens. Of course, if the camera cannot be held steady for any reason, such as on a very windy day, a higher shutter speed (e.g. 1/250 or 1/500 sec.) would be recommended. Uses 49mm filter size.

Cat. No. 23760



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 foct, its 6 elements are arranged in 5 groups. feet. Its 6 elements are arranged in 5 groups.

Cat No.

24260

SMC Pentax-M

(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 50mm macro lens can be used in place of the standard lens.
Similarly, the SMC Pentax 100mm macro lens can be used in place if the 105mm telephoto lens for general purpose photography in addition to macrophotography.

Both the SMC Pentax 50 and 100mm macro lense focus all the way to 1/2 lifesize. When combined with the K Series auto extension tubes, it is possible to photograph at a 1:1 (lifesize) reproduction ratio. For maximum convenience, the K Series auto extension tubes 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 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 the above coupled to SMC multi-coating makes it almost impossible for photographs to be marred by flare when using the SMC Pentax 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.

All Super-multi-coated Pentax lens include a front and rear lens cap.

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 9½ inches, and when used with a Reverse Adaptor can make larger-than-life-size images. Construction is 4 elements in 3 groups, and the angle of view is 46°.

Cat. No. 28160

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. Lens construction is 5 elements in 3 groups, closest working distance is less than 1½ feet and the field of view is 24.5°.



Standard Bayonet Lenses

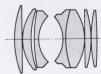


• G. N. Wootto

Standard Lenses

The standard lens is the 50 or 55mm lens and the wide range of applications for which it is suited explain why it is referred to as the "standard" lens. The large maximum aperture and close focusing ability (45cm) offer extreme versatility.





SMC Pentax 50mm f/1.2

After years of research, Pentax has 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**

Wide Angle Bayonet Lenses





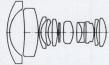
SMC Pentax 15mm f/3.5

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



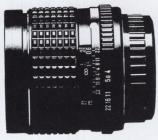


SMC Pentax 18mm f/3.5

This SMC Pentax 18mm f/3.5 rectilinear lens has an angle of view of 100°, 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.) Its lens hood is the same as 20mm f/4 and 24mm f/3.5 SMCP lenses.

Cat. No

22160



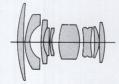


SMC Pentax 20mm f/4

This is a relatively compact lens, considering its extreme 94° diagonal angle of view. Also to its advantage is the fact that it does not require large filters, but uses standard 58mm filters. Its extensive depth of field, dynamic perspective, and extremely wide angle-of-view make it a popular lens with those who have already mastered the 24mm focal length. Uses 58mm size filter.

Cat. No 22841

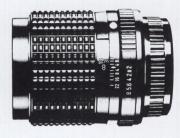




SMC Pentax 24mm f/2.8

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 simplified focusing because of the shallower 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



SMC Pentax 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 no more difficult than that of 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 28mm f/2 high speed wide-angle lens is getting to know the thrilling world of creative photography. Uses 52mm filter size.

Cat. No. 22941





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 Ienses. 52mm filter size.

Cat. No. 22440

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 change. 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 emboided 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 lenses: 50, 55, 85, 105, 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 \sim 125mm zoom lens weighs 612 grams, the total weight of the 50mm f/1.4, 55mm f/1.8. 85mm, 105mm, and 120mm lenses is 1.466 grams, which is more than twice the weight of the 45 \sim 125mm zoom lens.
- Although most zoom lenses have separate control rings for focusing and zooming, all three 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. 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 $45 \sim 125 \text{mm}$ is $2.8 (125 \div 45 = 2.8)$. 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 $2 \sim 3X$ is best.



SMC Pentax Zoom 45mm-125mm f/4

A compact, easy-to-handle zoom lens which covers a slightly wide-angle to telephoto zoom range. It weighs nearly the same and is 7mm shorter in length than the SMC Pentax 200mm f/4. Most important, however, optical performance is on a par with SMC Pentax fixed focal length lenses. Of course, the SMC Pentax Zoom 45 ~ 125mm f/4 has automatic diaphragm operation and full-aperture meter coupling. Moreover, SMC multi-coating guarantees beautiful color rendition. Uses 67mm filter size.

Cat. No.



SMC Pentax Zoom 85-210mm f/3.5

Special features of this lens include its relatively large aperture of f/3.5 (approximately one stop faster than its f/4.5 counterpart), extended focusing to 1.9m, and a new optical formula to assure exceptional quality at all distances and focal lengths.

Cat. No. 27580



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 ratio of 4.4X and an ultra telephoto focal 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 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. Comes with case and lenshood. Uses 52mm filter size. (Rear mount)

Cat. No.

27640

All Super-multi-coated Pentax lens include a front and rear lens cap.

Fish-Eye Lens



• T. Tanaka

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 wideangle are the 24mm, 20mm, and 15mm; we can also include the 17mm Fish-Eye. Lenses representing ultra telephoto are the 300mm, 400mm, 500mm, and 1000mm focal lengths.

Thus, the beginner will select the 28 or 35mm at 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/3.5. 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

Eighteen of the SMC Pentax lenses are so compact and lightweight that they do not require the use of a tripod. For handholdable lenses, you can choose from the 17mm Fish Eye to the 200mm telephoto. Also included is the 45 \sim 125mm zoom lens.

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





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. Gelatine filters can also be slipped into the built-on gelatine filter holder at the rear of the lens.

21240

All Super-multi-coated Pentax lens include a front and rear lens cap.

Shift Lens





Uncorrected (photo on the left) and "corrected" (photo on the right) results taken with the SMC Pentax Shift lens.

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 transmissions 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/22 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. Comes with lens case, front and rear lens caps.

Cat. No. **2256I**

Bellows Bayonet Lens



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 camera and the 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 filter size.

Instant adjustments possible.

As the SMC Pentax Bellows lens is focused, the bellows-extension is automatically indicated on the Pentax K 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-camera distance and exposure factor for the same subject are also indicated. The bellows and lens can also be preset for any magnification desired.

All Super-Multi-Coated Pentax lenses include a front and rear lens cap.

Cat. No. 28240



A Pentax K Bellows as shown above is required to focus this lens.

Magnification	Bellows Extension	Area Covered	Subject-to-camera 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

Screw Mount Lenses

Each screw mount lens is packed in a handsome, rugged, custom-padded, black eather carrying case, unless otherwise noted. Each lens is also supplied with both front and rear lens caps.

Lenshoods are included where indicated.



Cat. No.

22550 28mm Super-Multi-Coated Takumar, f/3.5; Fully automatic; 7 elements; 75° angle of view; Min. aperture f/16; Min. focus 15¾ inches; Weight 7.3 oz. Uses 49mm filter. Lenshood is supplied.



Cat. No.

22351 35mm Super-Multi-Coated Takumar, f/3.5; Fully automatic; 5 elements; 63° angle of view; Min. aperture f/16; Min. focus 18 inches; Weight 5.3 oz. Uses 49mm filter. No. 830 lenshood required.



Cat. No.

22750 35mm Super-Multi-Coated Takumar, f/2.0; Fully automatic; 8 elements; 63° angle of view; Min. aperture f/16; Min. focus 15 inches; Weight 8.5 oz. Uses 49mm filter. Lenshood is supplied.



Cat. No.

23850 135mm Super-Multi-Coated
Takumar, f/2.5; Fully automatic;
5 elements; 18° angle of view; Min.
aperture f/22; Min. focus 5 ft.;
Weight 15.8 oz. Uses 58mm filter.
Lenshood is supplied.

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.

Lenshood are included where indicated.



Cat. No.

23450 135mm Super-Multi-Coated
Takumar, f/3.5; Fully automatic;
4 elements; 18° angle of view; Min.
aperture f/22; Min. focus 5 ft.; Weight 12.4 oz. Uses 49mm filter. Lenshood is supplied.



Cat. No.

24050 200mm Super-Multi-Coated Takumar, f/4.0; Fully automatic; 5 elements; 12.5° angle of view; Min. aperture f/22; Min. focus 8 ft.; Weight 19.7 oz. Uses 58mm filter. Lenshood is supplied.



Cat. No.

28950 100mm Super-Multi-Coated Macro Takumar, f/4.0; fully-automatic; 5 elements; 24.5° angle of view; Min. aperture f/22; Min. focus 18 inches (.5x magnification); weight. 13 oz. Uses 49mm filter. "Sure-grip" focusing ring. Lenshood is supplied.



Cat. No.

28151 50mm Super-Multi-Coated Macro-Takumar, f/4.0; Fully automatic; 4 elements; 46° angle of view; Min. aperture f/22; Min. focus 9.5 inches (.5x magnification); Weight 8.2 oz. Uses 49mm filter. Lenshood not required as lens is recessed into mount.



SMC Takumar Lenses

Pentax Screw-Mount Lens Specifications

			Lens		Min.		nimum al Dist.	Angle of	We	ight	Filter Diameter for Threaded	Lens- hood Size	Le	ength	Dia	meter
Cat. No.	Lens	Diaphragm	Ele- ments	Lens Type	Aper- ture	Feet	Meters	View	Ozs.	Gm.	Filters	(In mm)	In.	mm	In.	mm
22550	28mm SMCT f/3.5	Fully-Auto.	7	Wide Angle Retrofocus	f/16	1.3	0.40	75°	7.3	207	49	51 S.O.	1.7	42.8	2.2	57.1
22750	35mm SMCT f/2.0	Fully-Auto.	8	Wide Angle Retrofocus	f/16	1.3	0.40	63°	8.5	240	49	49 T	2.1	53.6	2.2	56.0
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 #830	1.3	34	2.2	56.5
28151	50mm SMCT Macro f/4.0	Fully-Auto.	4	Macro	f/22	0.77	0.23	46°	8.2	235	49	Not Re- quired	2.1	54.5	2.3	59.4
28950	100mm SMCT Macro f/4.0	Fully-Auto.	5	Macro	f/22	1.5	.5	24.5°	13	372	49	*	3.7	95	2.6	65
23850	135mm SMCT f/2.5	Fully-Auto.	5	Tele- photo	f/22	5	1.5	18°	15.8	448	58	58 T	3.2	80	2.5	65.5
23450	135mm SMCT f/3.5	Fully-Auto.	4	Tele- photo	f/22	5	1.5	18°	12.4	343	49	49 T	3.5	87.7	2.2	57.6
24050	200mm SMCT f/4.0	Fully-Auto.	5	Tele- photo	f/22	8	2.5	12°	19.7	558	58	*	5.4	137	2.5	64.2

^{*}Lenshood Supplied w/Lens

T Threaded

S.O. Slip-On

**When used w/Auto Bellows

⁺ Stop-down metering with ES and Spotmatic F

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, Light Yellow.

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, Medium Yellow.

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. Medium Orange.

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, Medium Red.

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.

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 hazecutting 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.

Type A.

Converts Tungsten Type A color film for outdoor use. Primary use—Tungsten Type A Color Reversal Film. Exposure Factor 2.

Polarizer.

Eliminates unwanted surface reflections and glare. Primary use—B&W and Color Film. Exposure Factor 3.

Filters

Туре	Size and Catalog Number												
	SMC 49mm	49mm	52mm	SMC 52mm	58mm	SMC 58mm	67mm	SMC 67mm	77mm	SMC 77mm			
Ultra Violet (UV)	35601	35011	35251	35401	35031	35431	35051	35451	35081	35481			
Ghostless UV		35018											
Light Yellow (Y-1)		35014	35254										
Medium Yellow (Y-2)	35602	35012	35252	35402	35032	35432	35052	35452	35082	35482			
Yellow-Green (YG)		35015	35255										
Medium Red (R-2)	35604	35016	35256	35406		35436		35454		35484			
Medium Orange (O-2)	35603	35013	35253	35403	35033	35432	35053	35453	35083	35483			
Polarizer		35019	35259		35039								
Skylight	35605	35111	35261	35501	35131	35531	35151	35551	35181	35581			
Ghostless Skylight		35116											
Cloudy (81A)	35606	35112	35262	35502		35532		35552		35582			
Morning & Evening (82A)		35113	35263										
Flash (80C)		35114	35264										
Flood (80B)		35115	35265										
Type A		35119											

Note: basic filter size for Pentax cameras are:

M: 49 K: 52 Screw MT: 49

LENS HOODS

CAT. NO.

34260	49mm Rubber Lens Hood
	(for SMCP-M 40/2.8)

LENS & BODY CAPS

CAT. NO.

31490	49mm Lens Cap (MX, ME)
31511	52mm Lens Cap K

31311	Janin Lens Cap IX
31571	58mm Lens Cap K

31007	Body Mount Cap K (Bayonet)
31006	Lens Mount Cap K (Bayonet)

31001	Body Mount Cap S (Screw)
31002	Lens Mount Cap S (Screw)

LENS CASES

CAT. NO.

33920	Lens Soft Case, Small
33921	Lens Soft Case, Large
33215	Case for SMCP-M 28mm f/2.8
33216	Case for SMCP-M 28mm f/3.5
33223	Case for SMCP-M 35mm f/2.0
33270	Case for SMCP-M 35mm f/2.8
33325	Case for SMCP-M 100mm f/2.8
33352	Case for SMCP-M 135mm f/3.5
33372	Case for SMCP-M 150mm f/3.5
33482	Case for SMCP-M 200mm f/4.0

33472	Case for SMCP 200mm 1/2.5
33832	Case for SMCP-M Macro 50mm f/4.0

33862	Case	for	SMCP-	M	Macro	100mm	f/4.0

33000	Case	for	SMCP	50mm	f/1.2

33011	Case for SMCP 55mm f/1.8
33021	Case for SMCP 55mm f/1 8

33861	Case for SMCP Macro 100mm f/4.0
33821	Case for SMCP Bellows 100mm f/4.0

33752 Case for SMCP 85-210mm f/3.5 Zoom

Camera Accessories

Pentax Stereo Adapter

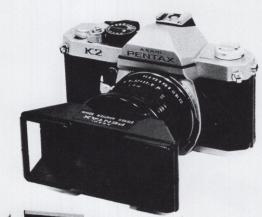
The stereo adapter fits on the front of a normal f/1.4, f/1.8, f/2 lens to split the 24x36mm into a stereo pair of single frame images. The kit consists of the adapter to fit the normal lens and a stereo ambient light viewer. The stereo adapter slips on the front of the lens and is tightened by a screw. The viewer has an adjustable ocular.

Cat. No.

30348 Stereo Adapter and Viewer for SMC lenses, 49mm filter

30344 Stereo Adapter and Viewer for SMC Pentax lenses, 52mm filter size 'K'.

30347 Stereo Viewer II for ME/MX.













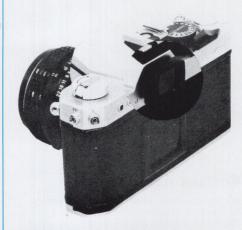
Auto Extension Tube Set

Fully-automatic extension tubes for Honeywell Pentax cameras. This set consists of three rings: No. 1, No. 2, and No. 3 for a total extension of 57mm. They may be used singularly or in combination as desired. When all three are used simultaneously with the 55mm lens, the subject is enlarged on film to a magnification of 1.17x.

Cat. No.

30530 Auto Extension Tube Set 'S'

30535 Auto Extension Tube Set 'K' with full aperture metering.



Pentax Correction Lenses

Lenses are inserted into an eyepiece for eyeglass wearers. Eyepiece included.

Cat. No. 'M' Cameras	K & Screw Mount Cameras	Correction Lens
30735	30705	→ 1.0
30734	30704	-2.0
30733	30703	-3.0
30736	30706	+ 1.0
30737	30707	+2.0



30141 49-52 Adapter, permits 52mm filters to be used on lenses with 49mm filter size.



30142 52-49 Adapter, permits 49mm filters to be used on lenses with a 52mm filter size.



Pentax Copipod

Lightweight, yet rigid and sturdy. This portable copying stand fits all models of the 35mm Pentax and can be used anywhere for copying documents, artwork, stamps, etc. Complete with lens board, and four calibrated telescoping legs. Sets up easily in seconds and is quickly disassembled. Fits neatly into small black pouch for storage or carrying convenience.

30130 Copipod 'S' (49mm filter size)

30135 Copipod 'K' (52mm filter size)

'S' screw mount

'K' bayonet mount

Camera Accessories

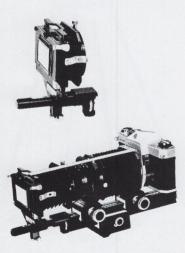


Helicoid Extension Tube

Provides variable extension from 16.8mm to 30.6mm. When used with a standard 55mm lens, it will permit magnifications from .3x to .71x.

Cat No

30540 Focusing Extension Tube 'S' 30542 Focusing Extension Tube 'K'



Slide Copier

Precision, finely made Slide Copier attaches to the front of the Auto Bellows for quick, accurate slide duplication and partial slide magnification. Slide copier must be used with Auto Bellows.

Cat. No.

30036 Slide Copier 'S' 30028 Slide Copier 'K' 30029 Slide Copier 'K' for ME/MX

'S' screw mount
'K' bayonet mount



Auto Bellows

Consists of one bellows on a single, rack and pinion track. Tripod base can be shifted to balance the equipment. Front lens board can be turned around to mount lens in a reverse position. Double cable release triggers the camera shutter and diaphragm of lens simultaneously.

Cat. No.

30031 Auto Bellows 'S' 30026 Auto Bellows 'K'

30023 Auto Bellows 'K' with 49mm Adapter for ME/MX.



Reverse Adapter

Allows standard 50mm or 55mm lenses to be used on extension tubes in reverse position for better macro results.

Cat. No.

30332 Reverse Adapter 'M' (49mm) 30331 Reverse Adapter 'S' (49mm) 37955 Reverse Adapter 'K' (52mm)



Bellows Unit II

Extremely flexible for ultra-close-up photography. It has a special calibrated shaft for continuous magnification from 0.56x to 2.29x with the 55mm lens.

Cat. No.

30272 Bellows Unit 'S' 30025 Bellows Unit 'K'



Manual Extension Tube Set 'K'

The Manual Extension Tube Set is for the Pentax 'K' series cameras and lenses. Consists of three rings that may be used singularly or together. The three give a total extension of 57mm for a 1.17x magnification with a 55mm lens. Close-down metering is used and lens must be preset to shooting aperture.

Cat. No.

30525 Manual Extension Tube Set 'K'

Macro/Micro Copy Equipment



Close-Up Lenses

The Pentax close-up lenses screw into any Pentax lens with the same filter diameter. They soften the effective focal length of the lens, increasing magnification without affecting exposure. The 'S' means the lens is for the normal 50 and 55mm lens while the 'T' indicates that the lens is for use with telephoto lenses. The SMC Close-Up lenses have Super-Multi-Coating and the numbers after the letters are the focal length of the close-up lens.

Cat No

30450	49mm	SMC	Close-Up	Lens	S25
30451	49mm	SMC	Close-Up	Lens	S40
30452	49mm	SMC	Close-Up	Lens	T30
30454	49mm	SMC	Close-Up	Lens	T160
30220	52mm	SMC	Close-Up	Lens	S25
30221	52mm	SMC	Close-Up	Lens	S40
30222	52mm	SMC	Close-Up	Lens	T80
30223	52mm	SMC	Close-Up	Lens	T160
30224	58mm	SMC	Close-Up	Lens	T95
30225	58mm	SMC	Close-Up	Lens	T183



Microscope Adapter

Fitting between the Pentax camera body and the microscope tube, the adapter permits utilization of the microscope's optics in place of the camera's lens. It may be used with any microscope which has a tube of 25mm diameter. Complete set consists of adapter main tube, light sealing tube.

Cat. No.

30043 Microscope Adapter 'S' 30044 Microscope Adapter 'K'



Deluxe Copy Stand

Quickly and accurately aligns any 35mm Pentax camera for copying documents, specimens, artwork, other items.

Cat. No.

30075 Deluxe Copy Stand III

30069 Deluxe Copy Stand III P (portable)30054 Table Clamp for Copy Stand



Clip-On Magnifier

For added convenience in critical focusing for close-ups, copying, macro photography, etc. Easily attached to the slotted frame of the viewfinder and enlarges viewfinder image 2x.

Cat. No.

30157 For ME/MX

30061 For 'K' and 'S' cameras



Right Angle Finder

Attaches quickly and easily to the viewfinder of all models of Pentax cameras. Designed for added convenience in low angle and close-up photography, photo-micrography, etc. Rotates 360°.

Cat. No.

30920 For ME/MX

30151 For 'K' and 'S' cameras



Right Angle Finder II

Attaches easily to the viewfinder of 35mm Pentax cameras. It is designed for added convenience in low angle and close-up photography. Rotates 360° with click stops at each 90°. Eyepiece adjusts from +3 to -5 dioptre. Correct image viewing. Fits both 'S' and 'K' series cameras.

Cat. No.

30153

Camera Accessories



Belt Clip ME

82740 A convenient accessory that easily attaches to the tripod socket at the base of the camera and enables you to clip the camera to a belt. The Belt Clip is made of sturdy chrome plated metal and will not appear to add any bulk to the camera body. Available for the ME camera only.



31002 Cap for Camera Body, for protection of Pentax screw mount camera body when lens is removed.

32904 10 "D"-Rings for attaching camera straps to camera lugs.

32941 Neck Strap for "K" Cameras

32909 Shoulder Pad (10 in a box)



30092 Deluxe Cable Release, 12" with rotating thread mount and spring-loaded locking collar.

30090 Cable Release. 10" with rotating thread mount and locking screw for time exposure.



30194 Deluxe Accessory Clip, locks into grooved slot of viewfinder for sturdy support of shoe-mounted accessories. For screw mt. cameras without hot-shoes.

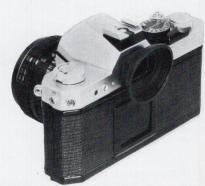
30350 Right-Angle Mirror Adapter, for taking candid pictures of subjects at right angles from lens axis. Fits telephoto lenses having 58mm filter diameters.



Bayonet Mount Adapter, for mounting Takumar screw mount lenses on a "K" series camera body. The lens will focus to infinity, but close-down metering must be used and the automatic diaphragm will not operate.

37953 "P" Mount Adapter (permits use of 6x7 lenses on Pentax screw mount 35mm cameras).

37954 Bayonet Mount Adapter to use 6x7 lenses on Pentax 35mm Bayonet Mount cameras.



30082 Rubber Eye Cup (K,S) 30086 Rubber Eye Cup (M)

Camera Cases



Cat. No. **32630** Soft case for K1000.



32600 Soft leather case for K2.



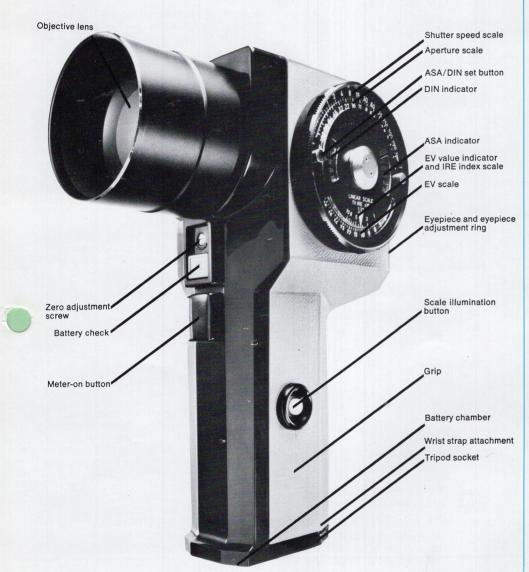
Cat. No.

32610 Soft leather case for KX and KM.



'M' Cases 32700 Soft case for MX 32730 Soft case for ME

Spotmeter V



The Pentax Spotmeter V for Precision Exposure Metering

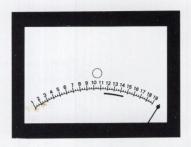
For highly accurate exposure metering, use the Asahi Pentax Spotmeter V.

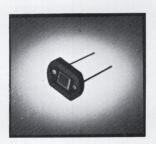
One of the keys to good photography is accurate exposure metering. This is especially true in professional circles where reversal color film requiring an exposure accuracy of 1/3rd of an f/stop is often employed, and in TV and movie film making where subject illumination has to be measured by spot metering methods. The metering angle in ordinary cameras is about 50°, and only one exposure reading is produced. Spot meters 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 brighest and the darkest areas, the needle deflections will be greater for the stronger contrasts, and smaller for the weaker contrasts.

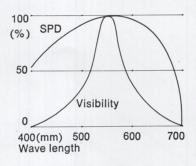
The IRE scale is used to ensure that the amount of needle deflection (indicating degree of subject contrast) does not exceed the maximum reproducible contrast ratio of the film being used (1:32 for reversal film, or 5 EV steps).

The Asahi Pentax Spotmeter V incorporates a single lens reflex optical system, constituting the ideal in precision exposure metering. The subject 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 G-13 (Eveready S76) mercury 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 Pentay Spotmeter, it has consistently Pentax Spotmeter, 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.

Spotmeter V







Top: The EV scale as seen through the viewfinder.

Center: The high-performance SPD

photosensitive cell (silidon photo diode) installed in the Spotmeter V.

Bottom: The Spotmeter V SPD spectroscopic sensitivity.

Specifications

Measuring ranges:

EV1-19, ASA 6-6400 or DIN 9-39, aperture f1-f128, shutter speeds 1/4000 sec. - 4 mins., scales marked 1/3rd f-stop increments.

Measuring angle:

The field enclosed by the small circle in the center of the viewfinder; this representing 1°.

Measuring distances:

From about 1.5m to infinity — fixed focal length. (Focusing down to about 1m possible by screwing the eyepiece out as far as it will go).

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 G-13 mercury batteries (1.5V) Eveready S76

Battery check:

Battery check indicated in viewfinder.

Viewfinder:

Single lens reflex pentaprism type, giving erect projected image. Fresnel lens, field of vision 17° horiz. and 12° vert. (same as 35mm half frame camera). Magnification 1.5x. Eyepiece correction 0 —1Dptr. Scale illumination.

Weight and size:

62mmW x 163mmH x 127mmL. Width of grip 34mm. Weight 450g (with batteries).

Accessories:

Mercury batteries, wrist strap and case.

Cat. No.

36130 Spotmeter V with case

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 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 3-2/3 oz., its bright fixed focus, through-the-lens viewfinder presents a slightly enlarged (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.

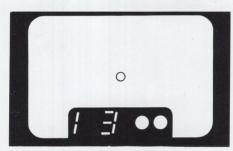
All components of the Spotmeter's exposure measuring system are without moving parts. Therefore, the unit is extremely rugged and not prone to damage or jamming.

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 comes in 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



Digital Spotmeter viewfinder shows 1° area of meter coverage and LED panel.

Specifications

Measuring Range:

(100 ASA) EV 1 - 20 (EV 20 displayed as "O"). ASA, 6-6400; Shutter Speed, 1/4000 sec. - 4 min.; Aperture, f/1 - 128; EV Number, 1 -19-2/3; IRE, 1 - 10.

Measuring Angle:

1.

Measuring Distances:

From about 1.5m to infinity — fixed focal length. (Focusing down to about 1m possible by screwing the eyepiece out as far as it will go).

Exposure Read-Out:

LED digital display of EV Numbers (100 ASA), and up to two dots (each of which equals \pm 1/3 EV).

Photosensitive Cell:

Silicon Photo Diode.

Power Source:

One 6V silver oxide battery (No. 544 or equivalent) or No. 537 alkaline battery.

Battery Check:

Failure of LED digital display to illuminate indicates battery needs replacing.

Viewfinder:

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 appears at the bottom. Viewfinder coverage similar in shape to that of a 35mm SLR, and with a diagonal field of view of 26°, horizontal field of 22°, and vertical field of 14°, adjustable eyepiece of -2 to +1 diopter.

Filter Size:

40.5mm.

Dimensions:

1.7"D x 5.7"H x 3.4"W (44mm x 144mm x 83mm).

Weight:

9.3 oz. (258g) (with battery).

Additional:

Equipped with Tripod Socket, supplied with case, Wrist Strap, battery, and Lens Cap.

Cat. No.

36141