

PENTAX

DEALER CATALOG



Dealer Catalog

National Corporate Service and Distribution Headquarters

Denver

35 Inverness Drive East
Post Office Box 6509
Englewood, Colorado 80155-6509
(303) 799-8000

Regional Sales Offices

Chicago

3500 Western Avenue
Highland Park, Illinois 60035-1263
(847) 266-1280

Los Angeles

8363 Reseda Boulevard
Northridge, California 91324
(818) 701-9578

New York

1101 Stewart Avenue
Garden City, New York 11530
(516) 222-0831

<http://www.pentax.com>

This catalog is for the express use of Pentax Corporation retailers.
All specifications and product availability contained herein are subject
to change without notice. Refer to General Information section for details
on policies and procedures.

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PENTAX is a registered trademark.

Note: All UPC Codes can be found in Price Guide.

GENERAL INFORMATION, TERMS AND CONDITIONS OF SALE FOR PENTAX PHOTOGRAPHIC PRODUCTS

NOTICE

The possession of the Pentax Promotion and Price Guide and/or Dealer Catalog does not necessarily entitle the possessor to the prices, nor is it necessarily an offer to sell. All prices subject to change without notice. Price protection will be made in accordance with the current Pentax Inventory Protection Policy. Only authorized dealers may purchase products directly from Pentax Corporation and participate in company programs.

OPENING ORDER REQUIREMENTS

The required opening order to become a Pentax dealer is \$1,500 which may be comprised of any assortment of Pentax products. The opening order is subject to the approval of a credit application.

YEARLY PURCHASE REQUIREMENT

A Pentax dealer is required to purchase a minimum of \$2,000 per fiscal year from Pentax Corporation, beginning on April 1st and ending the following March 31st. Any dealer receiving shipments of Pentax products totaling less than \$2,000 may be removed from the Pentax Dealer List and in such case will no longer be considered a Pentax dealer. The above is not to be considered as in any way limiting Pentax's right at any time to determine the customers with whom will transact business.

CONDITIONS OF SALE

Orders are subject to the acceptance of Pentax Corporation. Pentax reserves the right to change all prices, quantity discounts, terms of sale and cancel back orders without prior notice. Merchandise shipped will be billed at dealer net prices and discounts prevailing at time of shipment. The basis for these prices and all discounts is set forth in the Pentax Promotions and Price Guide.

MINIMUM ORDER REQUIREMENT

The minimum order that will be accepted from an authorized Pentax dealer by Pentax Corporation is \$50. Orders for less than \$50 may be rejected by Pentax and return to the ordering dealer with a letter of explanation. There is a \$10 minimum order requirement on orders for spare parts. There is no minimum order on repairs or back orders.

TERMS

The terms listed in the Pentax Promotion and Price Guide are available to Pentax dealers. A cash discount will be allowed if remittance is received by Pentax within the terms specified in the current Pentax Promotion and Price Guide. **Credit terms may be changed by Pentax for special promotions.** If a dealer fails to pay within the terms of sale, Pentax reserves the right to demand payment on entire account balance without discount.

SHIPPING POLICY

All merchandise is sold F.O.B. shipping point. Transportation will be prepaid on all orders for Pentax products that (a) total \$500.00 or more at net billing and are shipped to a single location or multiple location if placed under a master purchase order or (b) are back orders of an order originally qualifying for free transportation. Pentax will select the transportation method and carrier. If a dealer requires special handling or transportation methods, any additional freight charges will be charged to the dealer.

TRANSIT CLAIMS

All merchandise delivered to the carrier has been checked for condition, proper packaging and accuracy of count. All shipments are F.O.B. shipping point. Our responsibility for damage, pilferage, or carton shortage ends with delivery of the goods to the carrier. Please file claims for in-transit damage, carton shortage or pilferage with the carrier.

Pentax will assist the dealer in presenting the claim if notified within 3 days of receipt of merchandise and if proper exception has been taken on the delivery receipt. For claims assistance contact: Traffic Department, Pentax Corporation, 35 Inverness Drive East, P.O. Box 6509, Englewood, Colorado 80112-6509.

CREDITS

Dealers entitled to credits will receive memoranda as quickly as possible. Please do not deduct credit claims from your remittance before receiving our credit memoranda.

RE-CLASSIFIED MERCHANDISE

From time to time Pentax may offer re-classified merchandise to dealers based on availability of such products. Re-Classed merchandise that has been sold or delivered to a dealer, ultimate consumer, or used for sales demonstration by Pentax salesforce and dealers is subjected to a rigorous inspection by Pentax and meets all functional/performance criteria applicable to identical new category merchandise. The packaging and product registration for such products will indicate **Re-Classed**. Since Re-Classed merchandise sold by Pentax accrues a co-op allowance and may be advertised, Pentax recommends that any Re-Classed advertising should contain a disclaimer to advise the consumer that the advertised merchandise is Re-Classed. The Pentax Re-Classed advertising disclaimer is available upon request from your Pentax representative.

Pentax reserves the right to revise these policies upon 30 days written notice. **Nothing** herein contained shall be construed as granting the dealer a franchise or license to use any trademark, service mark, copyrighted materials, logotype or related characteristic of Pentax Corporation.

Notice: The terms and statements published here are subject to the following conditions:

- All orders are subject to Credit Department approval.
- All promotions are subject to change or cancellation by Pentax Corporation.
- All promotion orders not completely shipped by December 31, 1997, will automatically be cancelled.
- All back orders will be invoiced at the price prevailing at the time of shipment.
- All prices are subject to change without prior notice.

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Pentax Corporation
35 Inverness Drive East
P.O. Box 6509
Englewood, Colorado 80155-6509
(303) 799-8000

CO-OP PROGRAM

Earn 3% of your net monthly purchases on selected Pentax products as a co-operative allowance. The complete revised program has been sent to each Pentax dealer with the dealer catalogue. Additional copies are available from Pentax.

* Contact your local sales representative for complete details.

* § MAP (Minimum Advertised Price) To insure full co-op redemption, contact your Pentax representative for pricing information.

WHERE TO SEND CLAIMS

All claims for cooperative advertising reimbursement

must be submitted to:

Pentax Corporation
c/o ADVERTISING CHECKING BUREAU
P.O. Box 52118
Phoenix, AZ 85072

RETURN GOODS POLICY

Defective Goods

Defective goods can be either a consumer return or dealer inventory stock. Defective merchandise must be shipped freight prepaid via a certified carrier to the attention of the Pentax Service Department. (see address below) **Defective goods returns do not require a Return Goods Authorization (RGA).**

Customer Owned Product

- Defective merchandise must be returned with consumer's proof of purchase and an explanation of the problem. USA warranty card may be requested if there is a question as to the origin of the merchandise.
- Problems with product covered under warranty will be repaired and the merchandise returned to the dealer at no charge.
- Problems not covered under warranty will be referred to the dealer for authorization to repair and the dealer will be invoiced in accordance with Pentax Dealer Repair Price Schedule.
- **Replacement of a customer unit by the dealer will be at the dealer's option with the understanding that Pentax will repair and return the original unit. Pentax will not issue a credit for defective merchandise.**

Dealer Inventory Stock (Initial Defect)

- Dealer inventory stock is defined as merchandise sold to the dealer
- Unsold dealer stock that is defective must be returned freight prepaid.
It must be returned in the original carton with complete packaging, including all accessories, components and USA Warranty Card along with an explanation of the problem. The stock must not be shop worn.
- Defective product covered under warranty and deemed as new will be replaced at no charge. **Any product deemed as not new (missing components, manuals, registration cards, shop worn, etc.) or which requires repackaging, will be repaired and returned to the dealer.**
- Defective merchandise problems not covered under warranty will be referred to the dealer for authorization to repair the product and the dealer will be invoiced in accordance with the Pentax Dealer Repair Price Schedule.
- **Credit will not be issued for defective units.**
- Any product found not to be defective will be returned to the dealer.
- All defective returns must be shipped to:

Pentax Corporation
Attention: Service Department
35 Inverness Drive East
Englewood, CO 80112

Returns for Credit

All Pentax Photographic and Sport Optics products are sold without return privileges. Any dealer requesting a return authorization must first contact their local sales representative. Should Pentax agree to accept returned goods, a Return Goods Authorization (RGA) is mandatory.

- No merchandise will be accepted or credit issued without an authorized RGA
- Any merchandise received without authorization will be returned to the dealer freight collect
- All authorizations for return must be accompanied with an order 1-1/2 times the value of the returned merchandise
- Pre-addressed shipping labels must be affixed on the outside of shipping carton (for your security it is recommended that you mark on the outside of boxes the total number of boxes in return)
- All returns must be shipped to:

Pentax Corporation
35 Inverness Drive East
Englewood, CO 80112
Attn: Return Goods Department

- Merchandise returned for credit must be in new condition. Merchandise deemed not new will be returned to dealer at their expense. It must be returned with original carton, packaging, accessories and USA warranty.
- All merchandise will be inspected by Pentax. Dealer will be charged 5% for any missing components (strap, instruction manual, warranty and registration cards) or necessary repackaging materials (torn boxes and/or removal of store affixed labels).
- If product was purchased as a kit, all components of this kit must be included for credit. Cost of any missing kit components will be deducted. (Price will be figured at dealer net).
- **No merchandise that has been discontinued for more than 60 days will be accepted for return.**
- **Re-classified merchandise (Class II) will not be accepted for credit.**
- A credit will be issued to the dealers account. The credit will reflect cash discount, price protection, coop credits or any other promotions that reduced the price as originally invoiced to the dealer.
- **No credit can be deducted until approved credit memo is received from Pentax.**
- Merchandise must be returned within 15 days of issue of an RGA and should be shipped freight prepaid via a certified carrier.

PENTAX SERVICE INFORMATION

(Pentax Photographic and Sport Optics Products Only)

Normal repair time is ten working days after receipt of a product covered by warranty, or after receipt of approval on a chargeable product repair. Of course, this may vary due to volume.

REPAIR OF PRODUCTS UNDER WARRANTY

Products sent to Pentax for repair which are covered under a warranty must be accompanied by a copy of the owner's dated proof of purchase (sales receipt, cancelled check, or charge slip).

REPAIR OF PRODUCTS OUT OF WARRANTY

Out of warranty products sent to Pentax for repair are examined by our service technicians. The cost of repairs (parts and labor) to bring the equipment back to factory specifications is estimated. This estimate/quotation is sent to the individual/dealer requesting authorization to proceed. No work will be done until authorization is returned. We also require that full payment for the repairs accompany the authorization. The only exception is for those having an open account with Pentax. In this case, after receipt of authorization, repair charges will appear on the next statement from Pentax.

REPAIR WARRANTY

All Pentax photographic equipment repair work is covered by a warranty on material and workmanship for one year from the date of repair. Should the equipment malfunction during this one year period, please return it to the service center that originally repaired the equipment, along with a copy of the Pentax Repair Order. This type of situation is handled on a priority basis. The reverse side of the Pentax Repair Order explains the terms of the repair warranty.

PENTAX CORPORATION SERVICE CENTER

35 Inverness Drive East
P.O. Box 6509
Englewood, CO 80112-6509
(303) 799-8000
1-(800) 877-0155 (Service, Parts, and Product Information only)

PENTAX PRODUCT INFORMATION

If you or your customers have any technical questions regarding Pentax photographic or sport optics products, our Information Center will be happy to assist you. Please call (303) 799-8000 or 1-(800) 877-0155

PENTAX

IQZoom 160



1. Main switch mode dial
2. Red-eye Reduction Button
3. LCD Panel
4. AF Mode Button
5. Shutter Release Button
6. Zooming Lever
7. Drive Button
8. Slide-out Flash
9. Zoom Lens
10. Focus Aid Illuminator Window
11. Remote Control Receiver
12. Autofocus Window
13. Viewfinder Window
14. Light Sensor Window
15. Self-timer Lamp
16. Strap Lugs
17. Battery Chamber Cover (underneath)
18. Back Cover Release Lever
19. Film Information Window
20. Tripod Socket (underneath)
21. Date Back (optional)
22. Mid-roll Rewind Button (underneath)
23. Diopter Adjustment Dial
24. Viewfinder Eyepiece
25. Panorama Lever
26. Back Cover

World's first 38mm-160mm built-in power zoom lens in a compact camera.

- 35mm compact zoom camera
- 38mm-160mm SMC power zoom lens
- Aspherical lenses
- 6-segment multi-pattern metering
- Automatic LCD parallax correction viewfinder
- Large LCD instruction panel
- Functional dial control
- 5-point passive autofocus system
- Automatic backlight compensation
- "Slide-out" flash with red-eye reduction
- Switchable panorama*
- Full-range macro
- Dial-control diopter adjustment
- Remote control capability

Ordering Information:

10124 IQZoom 160

10114 IQZoom 160 White Gold Date

UPC Codes:

027075039551

027075041516

* The expression "Panorama" indicates a format equal in width to a conventional 35mm film frame, but narrower across the top and bottom.

PENTAX

IQZoom 160

Specifications

Type

35mm fully automatic lens-shutter camera with built-in zoom lens, autofocus, auto exposure and auto flash.

Film

35mm DX-coded film with 24mm x 36mm format.

Lens

SMC Pentax power zoom 38mm-160mm f/4.5- f/12 lens; 11 elements (2 aspherical elements) in 7 groups.

Focusing System

Phase-matching passive five-point autofocus system.

Autofocusing Range

.8m (2.6 ft.) to infinity.

Exposure Control

Programmed auto exposure control.

Metering Range

(1) Auto mode:

EV 10.0~17.0 (38mm at ISO400).
EV 14.5~19.5 (160mm at ISO400).

(2) Slow shutter speed:

EV 5.0~17.0 (38mm at ISO400).
EV 6.0 ~19.5 (160mm at ISO400).

Shutter

Programmed AE electronic lens shutter. Shutter speeds: approx. 1/400 sec. to 2 sec.; 1/2 sec. to 5 min. in bulb mode.

Viewfinder

Standard/panorama switchable. Actual-image zoom viewfinder with LCD indication. Dial-control diopter adjustment (-3~+1).

Viewfinder Area

83% (at 3m). Focus and flash-ready status, infinity-landscape mark, panoramic format picture area, close distance compensation mark, 5-point AF frame and spot AF frame.

External LCD Indication

Frame numbers, battery exhaustion warning mark, infinity-landscape mode, spot AF mode, red-eye reduction mode, film rewind mode, flash-on, flash-off, slow shutter, bulb, self-timer, multiple exposure, and remote control mark. Automatic LCD illumination.

Film Loading

Automatic film loading with first-frame positioning.

Film Winding

Automatic film winding (single frame).

Film Rewinding

Automatic film rewinding at end of roll. Automatic stop upon rewind completion. Mid-roll rewinding possible.

Film-Speed Setting

Auto film-speed setting with DX-coded film from ISO25-3200.

Self-Timer

10-second delay electronic self-timer.

Flash

Built-in auto zoom flash. Automatic discharge under low lighting and backlighting conditions in auto mode. Flash-on and flash-off modes. Dual discharge in red-eye reduction mode. Recycling time: approx. 5 sec. with fresh lithium battery.

Remote Control

Infrared wireless remote control. 3-second delay release provided.

Power Source

One 3V lithium battery (CR-123A or the equivalent).

Dimensions and Weight

127.5 x 73.0 x 68.0mm
(5.0" x 2.9" x 2.7").
320g (11.3 oz.) without battery.

ESPIO 160 Date Only

Data Imprinting

Five-mode switchable: "Year-Month-Day," "Month-Day-Year," "Day-Month-Year," "Day-Hour-Minute" and blank.

Dimensions and Weight:

127.5 x 73.0 x 71.0mm
(5.0" x 2.9" x 2.8")
330g (11.7 oz.) without battery.

PENTAX

IQZoom 140



1. Shutter Release Button
2. Zooming Lever
3. Drive Button
4. Mode Button
5. Redeye Reduction Button
6. LCD Panel
7. Spot AF/Infinity Focus Button
8. Remote Control* Receiver
9. Self Timer Light
10. Light Sensor Window
11. Autofocus Spotbeam
12. Viewfinder Window
13. Autofocus Window
14. Zoom Flash
15. Zoom Lens
16. Tripod Socket
17. Battery Compartment
18. Adjustable Diopter
19. Viewfinder Eyepiece
20. Panorama *Switch
21. On/Off Button
22. Back Cover Release Lever
23. Film Information Window
24. Date Back (optional)

Remote control is an optional accessory

Sleek compact design 38mm-140mm zoom camera with multi function performance.

- Built-in 38-140mm SMC power zoom lens.
- Passive five-point autofocus keeps pictures in focus, even with off-center subjects or two subjects separated from each other. Spotbeam autofocusing also available.
- Six-segment multi-pattern metering system reads light values from six separate areas with great accuracy in mixed conditions of light and shade.
- Automatic LCD parallax correction viewfinder.
- A special preflash emission helps to reduce "red-eye" effect.
- Framing flexibility with mid-roll panorama switching.
- Full-range macro allows shooting as close as 2.4 ft. without switching modes.
- Large, auto illuminated LCD instruction panel displays clear guidance to simplify operation.

Ordering Information:
10044 IQZoom 140
10049 IQZoom 140 Date

UPC Codes:
027075037960
027075038004

*The expression "Panorama" indicates a format equal in width to a conventional 35mm film frame, but narrower across the top and bottom.

PENTAX

IQZoom 140

Specifications

Type

35mm fully automatic lens-shutter camera with built-in zoom lens, autofocus, auto-exposure and auto flash.

Film

35mm DX-coded film; 24mm x 36mm format.

Lens

SMC Pentax power zoom 38mm-140mm f/4.1-f/10.2; 9 elements in 7 groups.

Focusing System

Phase-matching passive five-point autofocus system, with AF Spotbeam assist.

Autofocusing Range

0.73m (2.4 ft.) at 38mm wide setting and 1m (3.3 ft.) at 140mm tele setting to infinity.

Exposure Control

Programmed auto exposure control.

Six segment multi-pattern metering.

With metering range of:

1. Shooting in auto:

EV 9.6-17
(wide lens setting, at ISO 100)
EV 12.4-17
(tele lens setting, at ISO 100)

2. Slow shutter:

EV 3-17
(Wide lens setting, at ISO 100)
EV 5.5-17
(tele lens setting, at ISO 100).

Shutter

Programmed AE electronic lens shutter with shutter speed approx. 1/400 sec. to 2 sec., 1/2 sec. to 5 min. in bulb mode.

Viewfinder

Standard/panorama switchable. Actual-image zoom viewfinder with LCD indication. Dial-control diopter adjustment (-3 to +1). Viewfinder area: 83% (at 3m). Focus and flash ready status, infinity-landscape mark, panoramic format picture area, close distance compensation mark, 5-point AF frame and spot AF frame.

External LCD Indication

Frame numbers, battery exhaustion warning mark, infinity-landscape mode, spot AF mode, red-eye reduction mode, film rewind mode. Flash-on, flash-off, slow-shutter and bulb. Self-timer, multiple shooting. Remote control marks. (LCD is automatically illuminated.)

Film Loading

Automatic film loading with first-frame positioning.

Film Winding

Automatic film winding (single-frame).

Film Rewinding

Automatic film rewinding at end of roll. Automatic stop upon rewind completion. (Mid-roll rewinding possible.)

Film-Speed Setting

Auto film-speed setting with DX-coded film from ISO 25 to ISO 3200.

Self-Timer

10-second delay electronic self-timer.

Flash

Built-in auto zoom flash. Automatic discharge under low lighting or backlighting conditions in auto mode. Flash-on and flash-off modes. Recycling time: approx. 5 sec. with fresh lithium battery. Dual discharge in red-eye reduction mode.

Remote Control Capability

Optional infrared wireless remote control. 3-second delay release provided.

Power Source

One 3V lithium battery, CR-123A or the equivalent. Auto power shutoff.

Dimensions and Weight

132(W) x 74.5(H) x 61.5(D)mm (5.2" x 2.9" x 2.2"). 315g (11.3 oz.) without battery.

IQ Zoom 140 Date Only

Data Imprinting

Five-mode switchable; "Year-Month-Day", "Day-Hour-Minute", "Month-Day-Year", "Day-Month-Year", and blank.

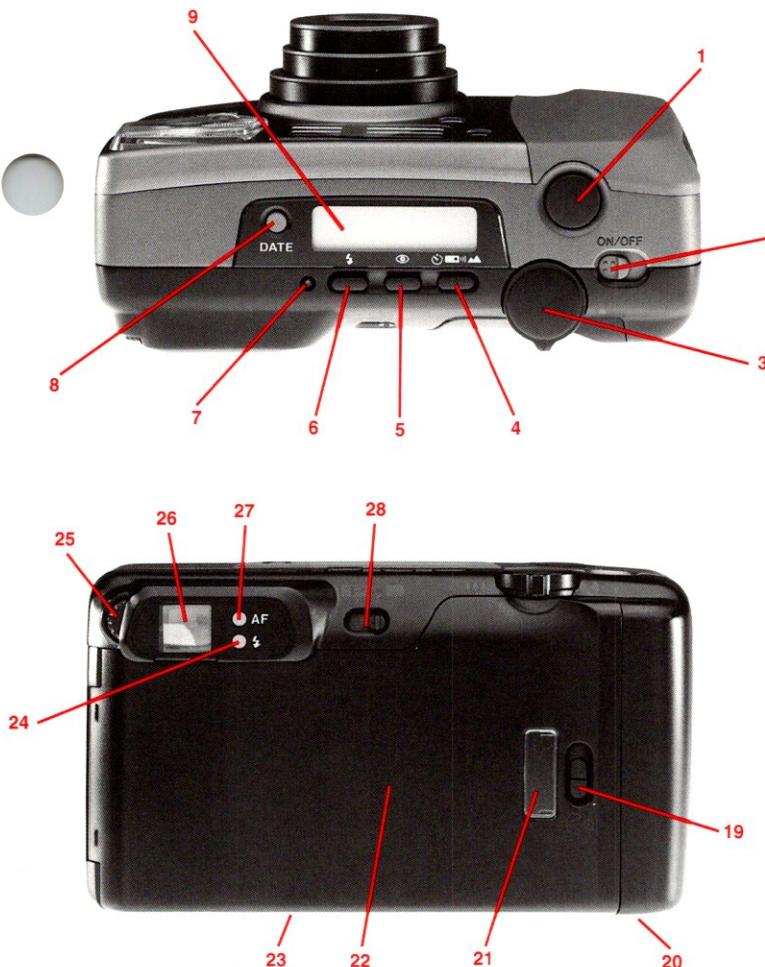
Power supplied by camera battery.

Dimensions and Weight

132(W) x 74.5(H) x 64.5(D)mm (5.2" x 2.9" x 2.5"). 325g (11.6 oz.) without battery.

PENTAX

IQZoom 115M



1. Shutter Release Button
2. Main Switch
3. Zooming Lever
4. Drive Button
5. Red-eye Reduction Lamp Button
6. Mode Button
7. Mid-roll Rewind Button
8. Date Button
9. LCD Panel
10. Built-in Flash
11. Remote Control Receiver
12. Self-timer Lamp
13. Lens
14. Strap Lug
15. Spotbeam Window
16. Light Sensor Window
17. Autofocus Window
18. Viewfinder Window
19. Back Cover Release Lever
20. Battery Compartment
21. Film Information Window
22. Back Cover
23. Tripod Socket (underneath)
24. Flash Ready Light
25. Adjustable Diopter
26. Viewfinder Eyepiece
27. Autofocus Light
28. Panorama Switch



A super-small camera with a built-in 38mm-115mm power zoom lens and multiple functions.

- 35mm ultra compact full-flat body design
- Powerful 38mm-115mm zoom lens
- Passive 5-point autofocus system
- Auto backlight compensation
- Auto flash with red-eye reduction
- Large easy-to-read LCD panel
- Remote control capability
- Mid-roll panorama switching
- Actual image zoom viewfinder
- Electronic self-timer
- Aspherical lens

Ordering Information:
10134 IQZoom 115M
10144 IQZoom 115M Gold Date

UPC Codes:
027075039728
027075041097

* The expression "Panorama" indicates a format equal in width to a conventional 35mm film frame, but narrower across the top and bottom.

PENTAX

IQZoom 115M

Specifications

Type

35mm fully automatic lens-shutter camera with built-in zoom lens, autofocus, auto exposure and auto flash.

Film

35mm DX-coded film with 24mm x 36mm format.

Lens

Pentax power zoom 38mm-115mm f/3.9- f/10.5 lens: 7 elements in 6 groups with 1 aspherical element.

Focusing System

Phase-matching passive five-point autofocus system.

Autofocusing Range

0.65m (2.1 ft.) to infinity.

Exposure Control

Programmed auto exposure control, with multi-metering.

Metering Range

(1) Auto Mode: EV9.0-17.0
(38mm at ISO400).
EV 12.8-20.0
(115mm at ISO400).
(2) Slow Shutter Speed: EV4.0-17.0
(38mm at ISO400)
EV6.0-20.0
(115m at ISO400)

Shutter

Programmed AE electronic lens shutter. Shutter speeds: approx. 1/300 sec. to 2 sec.; 1/2 sec. to 5 min. in bulb mode.

Viewfinder

Standard/panorama switchable. Actual-image zoom viewfinder with dial-control diopter adjustment (approx. -3 – +1).

Viewfinder Area

83% (at 3m). Indication: Focus and flash status, Panorama-format picture area, close distance compensation frame and AF frame.

External LCD Indication

Exposure counter, battery exhaustion warning, infinity-landscape, red-eye reduction, flash-on, flash-off, slow shutter, bulb, self-timer, remote control and zoom lever.

Film Loading

Automatic film loading with first-frame positioning.

Film Winding

Automatic film winding.

Film Rewinding

Automatic film rewinding at end of roll. Automatic stop upon rewind completion. Mid-roll rewinding possible.

Film-Speed Setting

Auto film-speed setting with DX-coded film from ISO25-3200.

Self-Timer

10-second delay electronic self-timer.

Flash

Built-in auto zoom flash. Automatic discharge under low lighting and backlighting conditions in auto mode. Flash-on and flash-off modes. Recycling time: approx. 5 sec. with fresh lithium battery. "Red-eye" reduction lamp when "red-eye" reduction feature is in use.

Remote Control

Infrared wireless remote control. 3-second delay release provided.

Power Source

One 3V lithium battery (CR2 type).

Dimensions and Weight

111.0 x 61.0 x 40.5
(4.4" x 2.4" x 1.6").
215g (7.6 oz.) without battery.

ESPIO 115M Date Only**Data Imprinting**

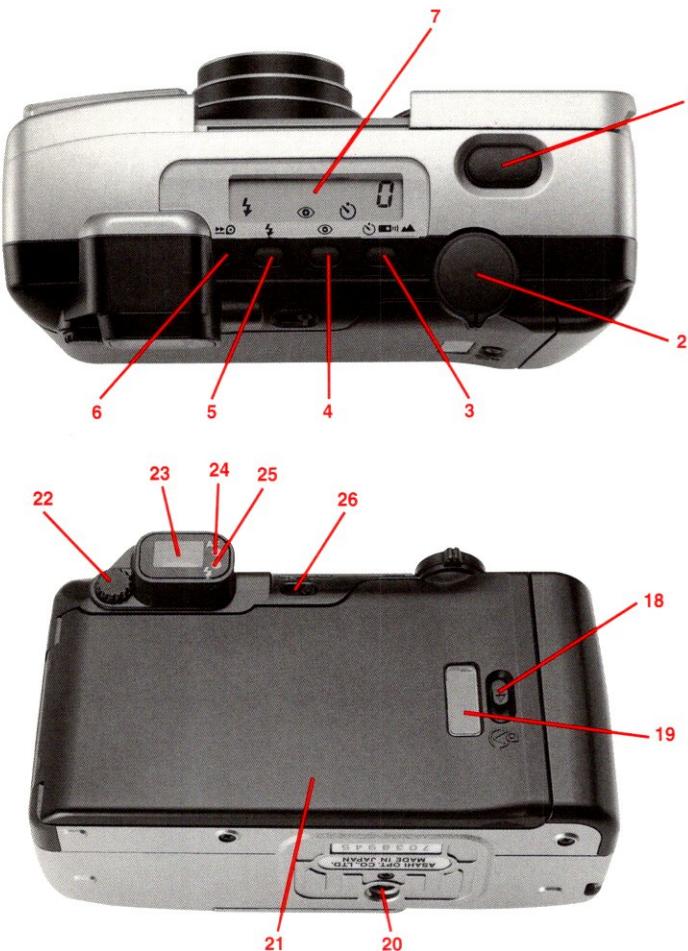
Five-mode switchable: "Year-Month-Day," "Month-Day-Year," "Day-Month-Year," "Day-Hour-Minute" and blank.

Dimensions and Weight:

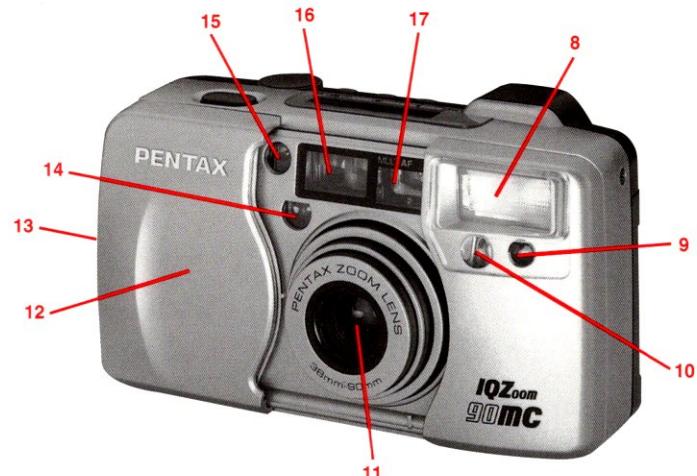
111.0 x 61.0 x 40.5mm
(4.4" x 2.4" x 1.6").
215g (7.6 oz.) without battery.

PENTAX

IQZoom 90MC



- 1. Shutter Release Button
- 2. Zooming Lever
- 3. Drive Button
- 4. Red-eye Reduction Button
- 5. Mode Button
- 6. Mid-roll Rewind Button
- 7. LCD Panel
- 8. Built-in Flash
- 9. Remote Control Receiver
- 10. Self-timer Lamp
- 11. Lens
- 12. Lens Cover/Main Switch
- 13. Battery Compartment (side)
- 14. Spotbeam Window
- 15. Light Sensor Window
- 16. Autofocus Window
- 17. Viewfinder Window
- 18. Back Cover Release Lever
- 19. Film Information Window
- 20. Tripod Socket
- 21. Back Cover
- 22. Adjustable Diopter
- 23. Viewfinder Eyepiece
- 24. Autofocus Light
- 25. Flash Ready Light
- 26. Panorama Switch



Stylish, palm-sized 38mm-90mm compact zoom camera.

- Small, pocket-sized 35mm zoom, compact with unique protective lens cover.
- High performance 38mm-90mm zoom lens with optimum zooming and focusing performance.
- Features advanced multi-pattern metering system for beautiful exposures under many different lighting conditions.
- Passive five-point autofocus system ensures accurate focusing even when subject is off-center.
- Innovative computer-controlled integrated lens activating system (ILAS) for fast, accurate focusing over the entire focal-length range.
- Multi-function auto flash for low light or backlit situations.
- Red-eye reduction.
- Actual-image zoom viewfinder which automatically adjusts the size of the image area in proportion to the selected focal length.
- Built-in diopter adjustment mechanism is provided to adjust the viewfinder image to match the user's eyesight.
- Viewfinder indicators provide photographer with information on focusing and flash status.
- *Panorama mode allows for dramatic landscapes as well as group shots, and can be switched mid-roll.
- Multi-information LCD panel provides data on camera operation with a quick glance.
- Built-in self-timer.
- When the camera is left unused for three minutes with the power on, the IQZoom 90MC automatically retracts the lens to the wide-angle position to protect from damage.
- Optional remote control is available.
- Date model available.

Ordering Information:
10154 IQZoom 90MC
10159 IQZoom 90MC Date

UPC Codes:
027075040236
027075040274

* The expression "Panorama" indicates a format equal in width to a conventional 35mm film frame, but narrower across the top and bottom.

PENTAX

IQZoom 90MC

Specifications

Type

35mm fully automatic lens-shutter camera with built-in zoom lens, autofocus, auto exposure and auto flash.

Film

35mm DX-coded film with 24mm x 36mm format.

Lens

Pentax power zoom 38mm-90mm f/4.5- f/9.5 lens; 5 elements (2 aspherical elements) in 5 groups.

Focusing System

Phase-matching passive five-point autofocus system.

Autofocusing Range

0.65m (2.1 ft.) to infinity.

Exposure Control

Programmed auto exposure control.

Metering Range

(1) Auto mode:

EV 9.0~17.0 (38mm at ISO400).
EV 13.0~19.0 (115mm at ISO400).

(2) Slow shutter speed:

EV 4.0~17.0 (38mm at ISO400).
EV 5.0 ~19.0 (115mm at ISO400).

Shutter

Programmed AE electronic lens shutter. Shutter speeds: approx. 1/300 sec. to 2 sec.; 1/2 sec. to 5 min. in bulb mode.

Viewfinder

Standard/panorama switchable. Actual-image zoom viewfinder with dial-control diopter adjustment (-3~+1).

Viewfinder Area

83% (at 3m). Indication: Focus and flash status, panorama-format picture area, close distance compensation frame and AF frame.

External LCD Indication

Exposure counter, battery exhaustion warning, infinity-landscape, red-eye reduction, flash-on, flash-off, slow shutter, bulb, self-timer, remote control.

Film Loading

Automatic film loading with first-frame positioning.

Film Winding

Automatic film winding.

Film Rewinding

Automatic film rewinding at end of roll. Automatic stop upon rewind completion. Mid-roll rewinding possible.

Film-Speed Setting

Auto film-speed setting with DX-coded film from ISO 25-3200.

Self-Timer

10-second delay electronic self-timer.

Flash

Built-in auto flash. Automatic discharge under low lighting and backlighting conditions in auto mode. Flash-on and flash-off modes. Recycling time: approx. 5 sec. with fresh lithium battery. "Red-eye" reduction lamp when "red-eye" reduction feature is in use.

Remote Control (optional)

Infrared wireless remote control. 3-second delay release provided.

Power Source

One 3V lithium battery (CR2 type).

Dimensions and Weight

111.5 (W) x 61.5 (H) x 42.0 (D)mm
(4.4" x 2.4" x 1.7").
220g (7.8 oz.) without battery.

IQZoom 90MC Date Only

Data Imprinting

Five-mode switchable: "Year-Month-Day," "Month-Day-Year," "Day-Month-Year," "Day-Hour-Minute" and blank.

Dimensions and Weight

111.5 x 61.5 x 42.0mm
(4.4" x 2.4" x 1.7")
220g (7.8 oz.) without battery.

* Design and specifications are subject to change without notice.

* Use of film with ISO 400 or faster is recommended with this camera.

* It is strongly recommended that you read the entire operation manual before operating this camera.

* The expression "Panorama" used in this brochure indicates a format equal in width to a conventional 35mm film frame but narrower across the top and bottom.

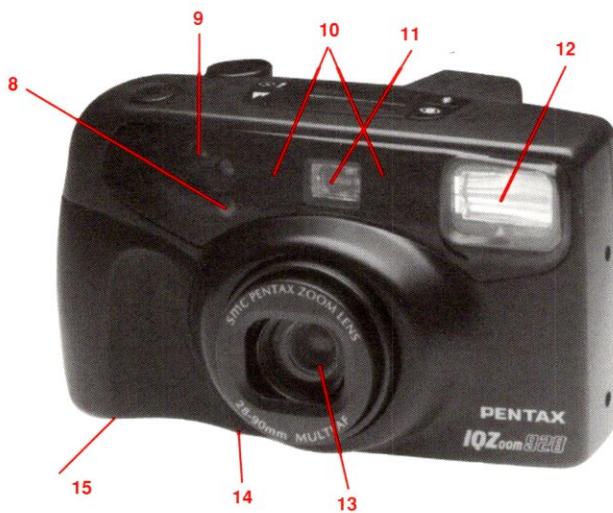
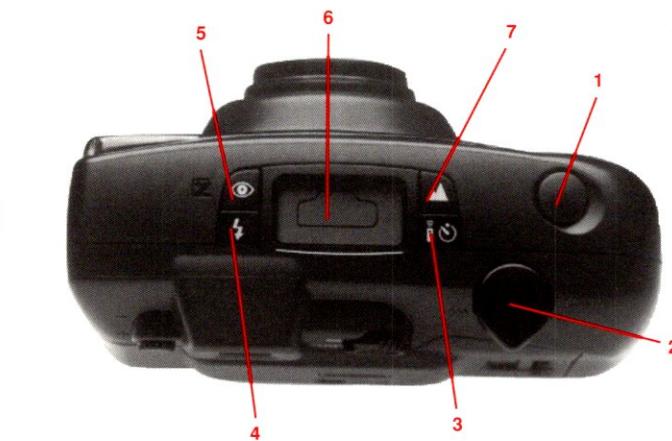
* Pentax and IQZoom are registered trademarks of Asahi Optical Co., LTD.

* This brochure is printed on recycled paper.

PENTAX

IQZoom 928

DATE CAMERA



1. Shutter Release Button
2. Zooming Lever
3. Drive/Remote Button
4. Mode Button
5. Redeye Reduction/Exposure Compensation Button
6. LCD Panel
7. Infinity Focus Button
8. Self-Timer Light
9. Light Sensor Windows
10. Autofocus Windows
11. Viewfinder Window
12. Zoom Flash
13. Zoom Lens
14. Tripod Socket
15. Battery Compartment
16. Back Cover Release Lever
17. Film Information Window
18. Date Back (optional)
19. Adjustable Diopter
20. Viewfinder Eyepiece
21. Panorama Switch
22. On/Off Button

High-performance wide-angle 28mm-90mm telephoto zoom compact camera.

- Ultra-Compact Ergonomic Design
- Wide Angle 28-90mm (3.2X) Power Zoom Lens
- Multi-Beam (3-Point) Auto Focus System
- SMC (Super Multi Coated) Pentax Zoom Lens
- Synchronized Actual-Image Zoom Finder and Flash
- Panorama Switching Mode
- Auto and Manual Exposure Compensation
- Remote Control Capability
- Easy Pic. Mode (Fail-Proof Function)
- Red Eye Reduction Flash
- Large-Size Graphic Guide LCD Panel
- Full Range Macro
- Auto Films Speed Setting (DX)

Ordering Information:
08969 IQZoom 928 Date

*The expression "Panorama" indicates a format equal in width to a conventional 35mm film frame, but narrower across the top and bottom.

PENTAX

IQZoom 928

Specifications

Type

35mm fully automatic leaf-shutter camera with built-in zoom lens, autofocus, auto-exposure and auto flash.

Film

35mm DX-coded film; 24mm x 36mm format.

Lens

SMC Pentax zoom 28mm-90mm f/3.5-f/9; 9 elements in 7 groups.

Focusing System

Pentax infrared active automatic focusing system (454 steps) with switchable multi-beam/ spot focusing; focus lock is possible. Focusing range from 0.58m (1.9 ft.) to infinity.

Exposure Control

Programmed auto exposure control with multi-metering system. Exposure compensation provided (± 3 EV) in 0.5 EV increments.

Metering range:

1. Shooting in auto:

EV 8.6-17
(wide lens setting, at ISO 100)
EV 11.6-17
(tele lens setting, at ISO 100)

2. Slow shutter:

EV 6.0 -17
(Wide lens setting, at ISO 100)
EV 8.4-17
(tele lens setting, at ISO 100).

Shutter

Programmed AE electronic lens shutter with shutter speed approx. 1/400 sec. to 1/5 sec; 1/2 sec. to 10 min. in bulb mode.

Viewfinder

Standard/panorama switchable actual-image zoom viewfinder. Focus and flash ready status, panoramic format area.

External LCD indication

Frame number, battery exhaustion warning mark, infinity-landscape mode, red-eye reduction mode, film rewind mode. Flash-on, flash-off, slow-shutter and bulb. Self-timer and multiple shooting.

Film Loading

Automatic film loading with first-frame positioning.

Film Winding

Automatic film winding (single-frame and consecutive).

Film Rewinding

Automatic film rewinding at end of roll. Automatic stop upon rewind completion. (Mid-roll rewinding possible.)

Film Speed Setting

Auto film-speed setting with DX-coded film from ISO 25 to ISO 3200.

Self-Timer

10-second delay electronic self-timer.

Flash

Built-in auto zoom flash. Automatic discharge under low lighting condition in auto mode. Flash-on and flash-off modes. Recycling time: approx. 5 sec. with fresh lithium battery. Dual discharge in red-eye reduction mode.

Remote Control

Optional infrared wireless remote control. Step zooming at tele (90mm), 50mm, wide (28mm). 3-second delay release provided.

Power Source

One 3V lithium battery, CR-123A or DL-123A.

Dimensions and Weight

126(W) x 73(H) x 54.5(D)mm
(5.0" x 2.9" x 2.1"). 305g (10.8 oz.) without battery.

IQ Zoom 928 Date Only

Data Imprinting

Five-mode switchable; "Year-Month-Day", "Day-Hour-Minute", "Month-Day-Year", "Day-Month-Year", and blank.

Power source: camera main unit source.

Dimensions and Weight

126.5(W) x 73(H) x 57.5(D)mm
(5.0" x 2.9" x 2.3"). 315g (11.1 oz.) without battery.

PENTAX

IQZoom 90-WR



Weather-Resistant, fully featured 35mm AF camera with 38-90mm zoom range. Completely automatic features include: Multi-beam Infrared Autofocus, Red Eye Reduction Zoom Flash with Auto backlight fill flash and many more creative exposure features. Also, the IQZoom 90-WR is equipped with a detachable Infrared Remote Control which zooms and fires the camera from the back or front



1. Shutter Release Button
2. Zoom Buttons
3. Macro Button
4. LCD Panel
5. Exposure Mode Button
6. Focus Selection Button
7. Main Power Button
8. Back Remote Infrared Receiver
9. Film Information Window
10. Remote Control Release Button
11. Back Cover Release
12. Viewfinder Eyepiece
13. Autofocus LED
14. Flash Ready LED
15. Front Remote Infrared Receiver
16. Self-Timer/Remote Warning LED
17. Autofocus/Viewfinder Area
18. Light Sensors
19. Zoom Flash
20. Infinity Landscape Button
21. Tripod Socket
22. Mid-roll FilmRewind
23. Drive Mode Selection Button
24. Red-Eye Reduction Button
25. Infrared Remote Controller
 - a. Shutter Release Button
 - b. Zooming Switch

- The world's first fully Weatherized Zoom Camera which gives the photographer photo opportunities regardless of the weather or environmental conditions.
- 38-90mm Power Zoom Range gives precise creative control along with full range close up and macro shooting at any focal length setting.
- Detachable Infrared Remote Controller operates the IQZoom 90-WR from the front or back within 15 feet with instant or three-second delay shutter release and step zooming capabilities.
- A choice of Multi-beam Infrared or Spot Auto Focusing which will cover off-center subjects or precision spot focusing. The IQZoom 90-WR also offers an Infinity Landscape Mode when fixed infinity focusing is required.
- Actual Image Zoom Viewfinder so what you see is what you get.
- Fully automatic built-in zoom flash with manual overrides and red-eye reduction mode.
- Automatic Backlight Compensation incorporates two light sensors for highly precise light metering. It also uses auto-flash fill when subject is within flash range and lighting situations require it.
- Five drive shooting modes for single frame exposure, continuous shooting, multiple exposures, interval exposures and single or dual self timer.
- Bulb Exposure Modes provide timed exposures from 1 second to 10 minutes which can also be used with flash for exceptional night time photography.
- Full information graphic LCD panel guides the photographer through all of the various shooting and drive modes. It also shows the zoom focal length selected.
- Built-in winder loads, advances and rewinds film automatically, with mid-roll rewind capability.
- The IQZoom 90-WR automatically sets film speed from 25 to 3200 when DX film is loaded.

Ordering Information

07630 IQZoom 90-WR
07640 IQZoom 90-WR Date

PENTAX

IQZoom 90-WR

Specifications

Type

35mm fully automatic leaf-shutter camera with zoom lens, built-in auto flash and weather resistant design.

Film

35mm perforated cartridge, DX-coded film, 24mm x 36mm format.

Lens

Pentax power zoom 38mm-90mm f/3.5-7.5; 8 elements in 7 groups.

Focusing System

Pentax infrared active automatic focusing system. Two focusing modes: three beam and spot.

Auto Focusing Range

0.8m (2.6 ft.) to infinity in normal range; 0.5m (1.6 ft.) to 0.8m (2.6 ft.) in macro range.

Exposure Control

Programmed auto exposure control. Metering range: (1) Auto and Flash-On mode: EV9 to EV16.5 in wide setting and EV11.5 to EV16.5 in tele and macro settings (at ISO 100) and (2) Flash-Off or Auto mode in interval setting; EV6 to EV16.5 in wide setting and EV8 to EV16.5 in tele and macro settings (at ISO 100). Auto Exposure Compensation provided. Auto Flash-On provided.

Shutter

Programmed AE electronic shutter with shutter speeds from approx. 1/400 sec to 1/5 sec, 1/2 sec to 10 min in Bulb mode, and 1 sec to 10 min in Bulb-Timer mode.

Viewfinder

Actual-Image Zoom Viewfinder. Viewfinder area: 82% (at 3m). LED Indication (next to viewfinder): Focus and Flash ready status.

External LCD Indication

Frame numbers, lens focal length, shutter release button mark, zooming button mark, patron mark, film marks, low battery warning mark, Macro mode mark, Spot auto focus mark and remote control mark.
Exposure mode marks — Auto-Flash, Flash-On, Flash-Off, Red-Eye Reduction, Slow Shutter Speed, Bulb, Bulb-Sync.
Drive mode marks — Self-Timer, Double Self-Timer, Consecutive Shooting, Multi-Exposure, Interval-Shooting.

Film Loading

Automatic film loading with first-frame positioning.

Film Winding

Automatic film winding (single-frame and consecutive).

Film Rewinding

Automatic film rewinding at end of roll. Automatic stop upon rewind completion. (Mid-roll rewinding possible).

Film-Speed Setting

Automatic film-speed setting with DX-coded film from ISO 25 to ISO 3200.

Self-Timer

Approx. 10-second-delay electronic self-timer with LED indication. Double self-timer mode provided.

Flash

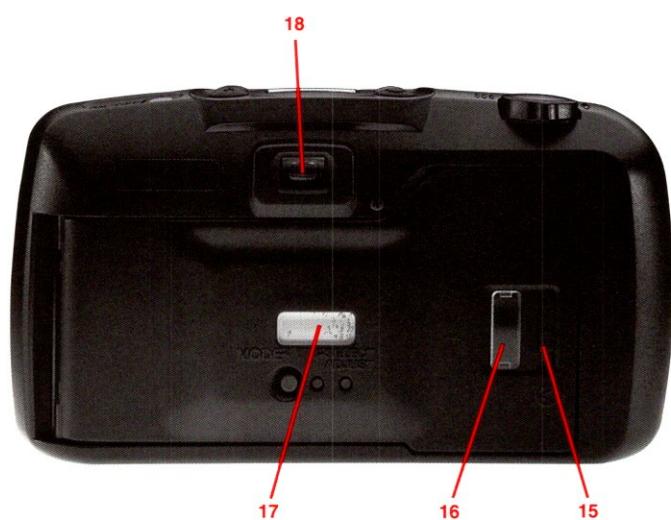
Built-in auto zoom flash. Automatic discharge under low lighting and back lighting in Auto mode. Recycling time approx. 3 sec. with fresh lithium batteries. Dual discharge in Red-eye Reduction Mode.

Remote Controller

Infrared wireless remote controller. Step zooming at 90mm, 60mm and 38mm, 3-second-delay release in Self-Timer mode and instant release provided. Effective range: 5m (16.4 ft.) from the front when projected from the camera's front and 0.7m (2.3 ft.) from the back when projected from the rear.

PENTAX

IQZoom 80E



1. On/Off Button
2. Red-eye Reduction Button
3. Rewind Button
4. Shutter Release Button
5. Zooming Lever
6. Self-timer Button
7. LCD Panel
8. Flash Mode Button
9. Electronic Flash
10. Zoom Lens
11. Light Sensor Window
12. Viewfinder Window
13. Autofocus Sensors
14. Self-timer LED
15. Back Cover Release Lever
16. Film Information Window
17. Data Back (optional)
18. Viewfinder Eyepiece

A 38mm-80mm power zoom lens housed in a multi-featured sophisticated camera.

- Ultra-slim compact design
- 38mm-80mm autofocus power zoom lens
- Aspherical lenses
- Backlight compensation
- Graphic guide LCD panel
- Bulb and bulb sync modes
- Auto flash with red-eye reduction
- Auto film loading, advance, rewind
- Programmed auto exposure
- Electronic self-timer

Ordering Information:
10094 IQZoom 80E
10099 IQZoom 80E Date

UPC Codes:
027075038929
027075038950

PENTAX

IQZoom 80E

Specifications

Type

35mm fully automatic lens-shutter camera with built-in zoom lens, autofocus, auto exposure and auto flash.

Film

35mm DX-coded film with 24mm x 36mm format.

Lens

Pentax power zoom 38mm-80mm f/4.8- f/9.5: 5 elements in 5 groups with 2 aspherical lens elements.

Focusing System

Pentax infrared active autofocus system.

Autofocusing Range

0.6m (2.0 ft.) to infinity.

Exposure Control

Programmed auto exposure control.

Metering Range

EV 10-17
(wide -angle setting at ISO100).
EV 11.5-17
(telephoto setting at ISO100).

Shutter

Programmed AE electronic lens shutter with speeds approx. 1/320 sec. to 1/3 sec.; 1/2 sec. to infinity in bulb mode.

Viewfinder

Albada zoom viewfinder.

Viewfinder Area

83% (at 3m). Focus/flash-ready status. Close-distance compensation frame.

External LCD Indication

Frame numbers, battery exhaustion warning mark, "red-eye" reduction mode, flash-on, flash-off, slow-shutter, bulb, backlight compensation and self-timer.

Film Handling

Automatic loading with first-frame positioning, automatic winding and automatic rewinding at end of roll. Automatic stop upon rewind completion. Mid-roll rewinding possible.

Film Speed Setting

Automatic setting with DX-coded film from ISO25~1600.

Self-Timer

10-second delay electronic self-timer.

Flash

Built-in auto flash. Automatic discharge under low lighting conditions in auto mode. Flash-on and flash-off modes. "Red-eye" reduction lamp in "red-eye" reduction mode. Recycling time: Approx. 5 sec. with fresh lithium battery.

Power Source

One 3V lithium battery, CR-123A or DL-123A.

Dimensions and Weight

134(W) x 74(H) x 51.5(D)mm
(5.3" x 2.9" x 2.0").
245g (8.6 oz.) without battery.

ESPIO 80E Date Only

Data Imprinting

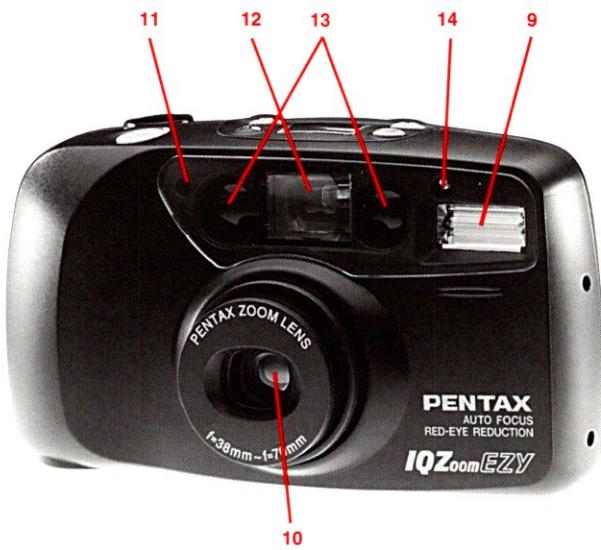
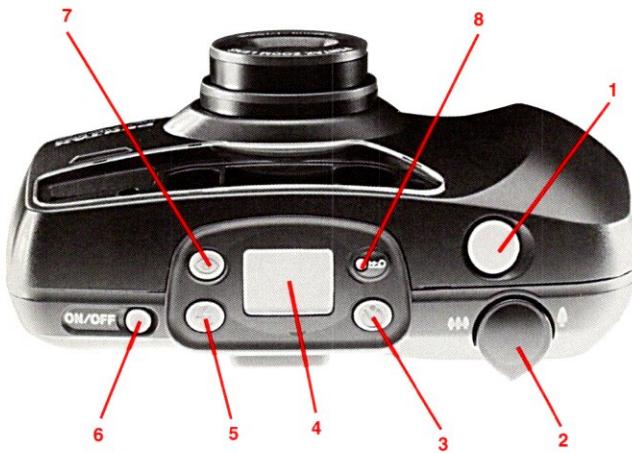
Five-mode switchable: "Year-Month-Day," "Month-Day-Year," "Day-Month-Year," "Day-Hour-Minute" and blank.

Dimensions and Weight:

134(W) x 74(H) x 55(D)mm
(5.3" x 2.9" x 2.2")
250g (8.8 oz.) without battery.

PENTAX

IQZoom EZY



1. Shutter Release Button
2. Zooming Lever
3. Self Timer Button
4. LCD Panel
5. Flash Mode Button
6. On/Off Button
7. Redeye Reduction Button
8. Rewind Button
9. Electronic Flash
10. Zoom Lens
11. Light Sensor Window
12. Viewfinder Window
13. Autofocus Sensors
14. Self Timer LED
15. Back Cover Release Lever
16. Film Information Window
17. Viewfinder Eyepiece

38mm-70mm Power Zoom Compact. A user-friendly/camera with automatic features to make picture taking fun.

- 38mm-70mm zoom offers a wide variety of subject sizes and framing from portrait to landscape.
- Ergonomic, compact design with large control buttons and zoom lever for ease of operation.
- Autofocus and auto exposure ensure sharp, clear images.
- Large LCD panel clearly indicates all vital information for smooth operation.
- Flash functions include: Auto flash for insufficient lighting situations; Flash-on Mode when fill-in flash is required; Flash-off Mode where flash use is restricted; Slow Shutter Sync Mode captures subjects in evening light; and Red-Eye Reduction Mode, which reduces the red-eye effect common to flash pictures.
- Backlight Compensation provides proper exposure of subject against a bright background.
- Auto Film Handling (loading, winding and rewinding) simplifies operation.
- Self-Timer enables the user to take a self-portrait or join a group shot.
- Bulb Mode allows the shutter release button, when pressed, to stay open longer for nighttime shots.

Ordering Information:

10074 IQZoom EZY Camera
10079 IQZoom EZY Date Camera

PENTAX

IQZoom EZY

Specifications

Type

35mm fully automatic lens-shutter camera with built-in zoom lens, autofocus, auto exposure control and auto flash.

Film

35mm DX-coded film with 24mm x 36mm format.

Lens

Pentax power zoom 38mm-70mm f/4.8- 8.5; 5 elements in 5 groups.

Focusing System

Pentax infrared active autofocus system. Autofocusing Range: 0.6m (2.0 ft.) to infinity.

Exposure Control

Programmed auto exposure control. (Backlight compensation of +1.5EV is available.)

Metering Range

(1) Shooting in auto:

EV 10-17
(wide lens setting at ISO 100)
EV 11.5-17
(tele lens setting at ISO 100)

(2) Slow shutter, Backlight compensation:

EV 6-17
(wide lens setting at ISO 100)
EV 7.5-17
(tele lens setting at ISO 100)

Shutter

Programmed AE electronic lens shutter with speeds approx. 1/320 sec. to 1/3 sec.; 1/2 sec. to infinity in bulb mode.

Viewfinder

Albada zoom viewfinder. Viewfinder area: 83% (at 3m). Focus/flash ready status. Close distance compensation frame.

External LCD Indication

Frame numbers, battery exhaustion warning mark, red-eye reduction mode. Flash-on, flash-off, slow shutter, bulb, backlight compensation and self-timer.

Film Loading

Automatic film loading with first-frame positioning.

Film Winding

Automatic film winding. (single frame)

Film Rewinding

Automatic film rewinding at end of roll. Automatic stop upon rewind completion. (Mid-roll rewinding possible.)

Film-Speed Setting

Automatic setting with DX-coded film from ISO 25 to 1600.

Self-Timer

10-second delay electronic self-timer.

Flash

Built-in auto flash. Automatic discharge under low lighting conditions in auto mode. Flash-on and flash-off modes. Recycling time: approx. 5 sec. with fresh lithium battery. Red-eye reduction lamp in red-eye reduction mode.

Power Source

One 3V lithium battery, CR-123A or DL-123A.

Dimensions and Weight

134(W) x 74(H) x 47.5(D)mm
(5.3" x 2.9" x 1.9").
240g (8.5 oz.) without battery.

IQZoom EZY Date Model Only

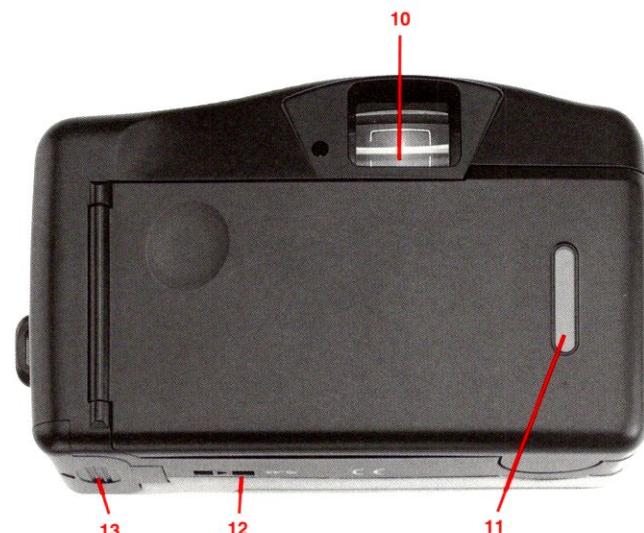
Data Imprinting

Five-mode switchable: "Year-Month-Day," "Month-Day-Year," "Day-Month-Year," "Day-Hour-Minute" and blank.

Power source supplied by camera's main unit source.

Dimensions and Weight:

134(W) x 74(H) x 50(D)mm
(5.3" x 2.9" x 2.0")
250g (8.8 oz.) without battery.



1. Shutter Release Button
2. Auto Focus Sensor Window
3. Film Counter
4. Viewfinder Window
5. Electronic Flash
6. Auto Focus Sensor Window
7. 30mm Lens
8. Sliding Lens Cover (on/off)
9. Light Sensor
10. Viewfinder Eyepiece
11. Film Information Window
12. Mid-roll Rewind Lever
13. Battery Compartment

35mm fully automatic autofocus lens-shutter camera with lots of extras.

- Compact and stylish
- 35mm autofocus camera
- Oversized, easy viewing viewfinder
- Programmed automatic exposure
- Focus lock
- Auto film load, advance, and rewind
- Built-in auto flash, with red-eye reduction
- Built-in lens protector
- Auto power shut off
- Auto DX coding (ISO 100/200, 400)

PENTAX

PC-55

Specifications

Type

35mm fully automatic lens-shutter camera with autofocus, auto exposure control, auto flash, automatic film wind/rewind.

Film

35mm DX-coded film with 24mm x 36mm format.

Lens

Pentax 30mm f/4.5 lens; 3 element 3 groups.

Focusing System

Pentax infrared active auto-focusing system, focusing range from 4.3 feet to infinity. (2 steps) Focus lock is available.

Exposure Control

Auto exposure control.

Shutter

Behind-the-lens mechanical shutter speed of 1/125 sec.

Viewfinder

Albada bright-frame with oversized high-eye-point viewfinder. Approx. 82% viewing area (at 3m), autofocus indication.

Film Loading

Automatic film loading with one push of release button.

Film Winding/Rewinding

Automatic film winding, and automatic film rewinding. Automatic stop upon rewind completion. (Mid-roll rewinding possible.)

Film-Speed Setting

Automatic setting with DX-coded film cartridge at ISO 100/200, 400.

Flash

Built-in auto flash. Automatic discharge under low lighting conditions. Approx. 7-sec., recycling time with fresh battery. Automatic red-eye reduction mode illuminates under low lighting conditions.

Power Source

Two 1.5 V alkaline AA size batteries.

Dimensions and Weight

126 (W) x 73 (H) x 49 (D) mm (4.8" x 2.9" x 1.7"). (5.9 oz.) without battery.

PC-55 Date Only

Date Imprinting

Five-mode switching; "Year-Month-Day", "Month-Day-Year", "Day-Month-Year", "Day-Hour-Minute" and blank.

Power Source

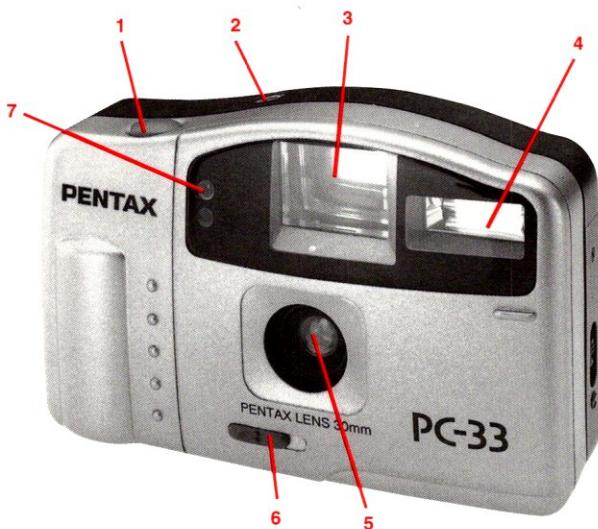
One lithium battery, CR 2025.

Dimensions and Weight

126 (W) x 73 (H) x 53 (D) mm (4.8" x 2.9" x 1.7"). (5.8 oz.) without battery.

PENTAX

PC-33



1. Shutter Release Button
2. Film Counter
3. Viewfinder Window
4. Electronic Flash
5. 30mm Lens
6. Sliding Lens Cover (on/off)
7. Light Sensor
8. Viewfinder Eyepiece
9. Film Information Window
10. Film Rewind Lever
11. Battery Compartment

Best value 35mm focus-free lens shutter camera.

- Compact and stylish 35mm focus-free camera
- Oversized, easy viewing viewfinder
- Programmed automatic exposure
- Auto film load and advance
- Built-in flash, with red-eye reduction
- Built-in lens protector
- Auto power shut off
- Auto DX coding (ISO 100, 400)

PENTAX

PC-33

Specifications

Type

35mm focus-free lens-shutter camera, auto exposure control, auto flash, automatic film load and advance.

Film

35mm DX-coded film with 24mm x 36mm format.

Lens

Pentax 30mm f/6.3 lens; 3 elements in 3 groups.

Focusing System

Fixed focus with sharp-focus range from 5 feet to infinity.

Exposure Control

Auto exposure control.

Shutter

Behind-the-lens mechanical shutter speed of 1/125 sec.

Viewfinder

Albada bright-frame with oversized high-eye-point viewfinder. Approx. 82% viewing area (at 3m).

Film Loading

Automatic film loading with one push of release button.

Film Winding/Rewinding

Automatic film winding, semi-automatic film rewinding with rewinding switch activation, automatic stop upon rewind completion. (Mid-roll rewinding possible.)

Film-Speed Setting

Automatic setting with DX-coded film cartridge at ISO 100 and 400.

Flash

Built-in auto flash. Automatic discharge under low lighting conditions. Approx. 7-sec., recycling time with fresh battery. Automatic red-eye reduction mode illuminates under low lighting conditions.

Power Source

Two 1.5 V alkaline AA size batteries.

Dimensions and Weight

122 (W) x 73.8 (H) x 43 (D) mm (4.8" x 2.9" x 1.7"). (5.9 oz.) without battery.

SLR Cameras

PENTAX

PZ-1P



A high performance, multi-featured 35mm autofocus SLR for the advanced amateur and professional photographer. Designed for maximum interaction with the photographer's creative vision, the PZ-1P incorporates Hyper Program and Hyper Manual exposure modes, fast "SAFOX II" autofocusing, multi-mode metering, and Intelligent Power Zoom lens operation. Improved TTL auto flash functions, a programmable "User Position", and a panorama* mode give additional versatility.

- Intelligent Power Zoom Lens System with 'Zoom Effect', 'Image Size Tracking, and Zoom Clip Modes'.
- A truly 'Interactive' SLR which allows the photographer to step into the camera's automated operation at any time with minimal action. All controls are located within one finger's reach for quick and easy response to any photographic situation.
- Panorama* image format mode can be used in mid-roll for eye-catching horizontal and vertical compositions.
- Fifteen Pentax Function settings allow the photographer to customize factory settings to his or her preferences.
- Six comprehensive exposure modes which include Shutter Priority, Aperture Priority, Multi-Programmed AE, TTL Program Flash Mode and two innovative interactive modes, Hyper Program and Hyper Manual.
- The PZ-1P features a choice of an eight segment metering system, spot metering or center weighted metering on demand.
- SAFOX II Auto Focusing System which tracks fast moving objects with predictive auto focusing, low EV sensitivity, and a coreless AF motor for faster AF speed in single and servo focusing modes.
- Two advanced operating modes, including "User Position" in which the photographer can instantly recall a set of preselected camera settings.
- A high speed motor drive which advances at four frames per second, and the option to choose from eight different drive modes: Single or continuous shooting, 3 self-timer options, intervalometer, multiple exposure and auto bracketing.
- Built-in TTL RTF flash with red-eye reduction, auto flash bracketing, variable flash output control, daylight sync, trailing shutter curtain sync, slow speed sync and contrast control when used with Pentax dedicated autofocus flashes.
- The PZ-1P also has an exterior LCD information panel, a viewfinder LCD display with bargraph, brighter interchangeable focusing screens, built-in viewfinder diopter of -2.5 +1.5, and manual depth of field preview. A new, scratch-resistant "UV" coating helps preserve the appearance of the camera body.

Ordering Information:

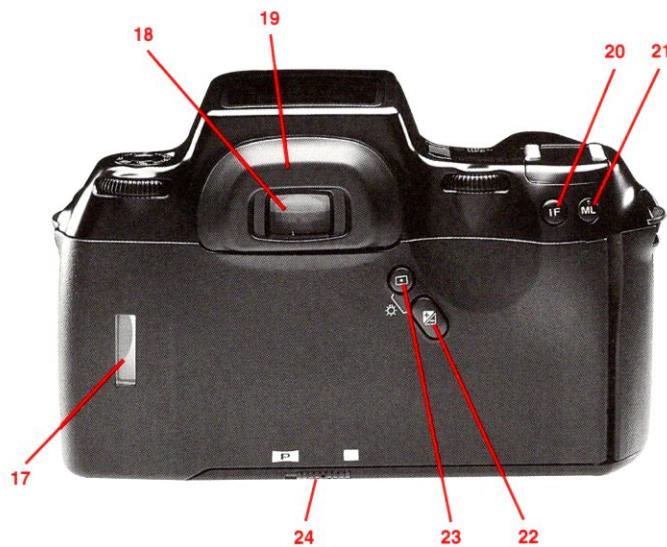
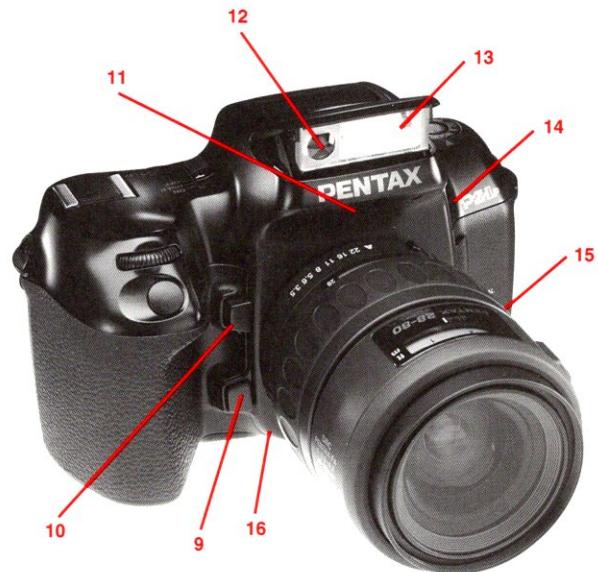
06725 PZ-1P
27537 FA 28-80 Zoom Lens

UPC Codes:

027075035256
027075030626

PENTAX

PZ-1P



- 1. Shutter Release Button
- 2. TV Dial
- 3. Hot Shoe
- 4. AV Dial
- 5. Main Switch
- 6. LCD Panel
- 7. Mode Dial
- 8. Mode Set Button
- 9. Lens Lock Button
- 10. Depth of Field Preview Button
- 11. Self Timer Light
- 12. Autofocus Spotbeam
- 13. Built-in RTF Flash
- 14. Cable Release Socket
- 15. Focus Mode Switch
- 16. Tripod Socket
- 17. Film Information Window
- 18. Viewfinder Eyepiece
- 19. Adjustable Diopter
- 20. IF Button
- 21. Memory Lock Button
- 22. Exposure Compensation Button
- 23. Metering Mode Button
- 24. Panorama* Switch

Specifications

Type

TTL autofocus, auto-exposure multi-mode 35mm SLR with built-in Retractable TTL Auto Flash (RTF).

Film

35mm perforated cartridge film.

Image Size

24mm x 36mm. (13mm x 36mm in panorama mode.)

Lens Mount

Pentax KAF2 bayonet mount. Compatible with KAF, KA and K mounts.

Usable Lenses

(1) Pentax KAF2- and KAF-mount lenses for autofocus operation; (2) Pentax KA- and K-mount lenses for manual focus operation.

Power Zoom System (with Pentax FA zoom lenses)

- Type: Power-assisted zooming by motor built in lens.
- Zoom speeds: 3 speeds, adjustable by zoom ring. (Maximum speed: approx. 0.8 sec. from wide angle to telephoto with FA Zoom 28mm-80mm lens.)
- Modes: (1) power zoom; (2) manual zoom; (3) auto zoom (Image-Size Tracking, Zoom Clip, Zoom Effect); (4) Auto lens retraction.

Focusing System

- Type: TTL phase-matching system (with SAFOX II in AF sensor unit).
- Usable illumination range: EV1~EV18 (at ISO100/m with 50mm f/1.4 lens).
- Modes: (1) AF-Single (with focus-lock function); (2) AF-Servo (with Predictive AF mode); (3) manual focus (selectable with switch on camera body).
- AF spotbeam (with RTF in pop-up position): automatic emission under low light and with low contrast subjects (1m-6m range).

Exposure Control:

- Metering system: (1) TTL open-aperture eight-segment multi-pattern metering w/SPD cell (coupled with lens and AF information); (2) spot metering; (3) center-weighted metering.
- Metering range: EV0~EV20 (at ISO100/m with 50mm f/1.4 lens).
- Modes: (1) Hyper Program; (2) Programmed AE; (3) Aperture-Priority AE; (4) Shutter-Priority AE; (5) Hyper Manual; (6) Manual Bulb; (7) TTL Program Auto Flash. Automatic exposure compensation provided with multi-pattern metering.
- Exposure compensation: ± 4 EV. (1/3EV or 1/2EV increment selectable with Pentax Function.)
- Memory lock: 5-second memory with ML button. (Memory extendible.)

- Auto-bracketing: 3 frames in order of proper/under/ over exposures within range of ± 4 EV (1/3EV or 1/2EV increment selectable). Combination use with exposure compensation and flash possible.
- Multiple exposure: 2~9 frames adjustable.

Shutter

- Type: Electronically controlled vertical-run focal-plane shutter.
- Speeds: (1) auto: 1/8000 sec.~30 sec. stepless; (2) manual: 1/8000 sec.~30 sec. plus bulb; (3) flash sync: 1/250 sec. (slow-shutter-speed sync: 250 sec.~30 sec. plus bulb).
- Shutter lock: by turning main switch off.

Diaphragm Control

Aperture-coupled mechanism (with FA, F and A lenses).

Viewfinder

- Type: Pentaprism.
- Focusing screen: Interchangeable Natural-Bright-Matte focusing screen (panorama-spot-matte type as standard).
- Field of view: 92% vertically/vertically.
- Magnification: 0.8X (with 50mm f/1.4 lens at infinity).
- Adjustable diopter, -2.5 to +1.5.

Viewfinder Display

- Type: multi-data LCD LED type with illuminator.
- Data: (1) in-focus; (2) shutter speed; (3) aperture; (4) accessory flash emission; (5) RTF emission; (6) flash emission compensation; (7) low-illumination warning; (8) non-applicable lens warning; (9) exposure compensation scale; (10) exposure compensation; (11) memory lock; (12) metering system (multi-pattern, spot, center-weighted); (13) panorama mode.

External Information Panel

- Type: multi-data LCD type with EL (Electro-Luminescence) illuminator.
- Data: (1) exposure mode (Hyper Program, Programmed AE, Aperture-Priority AE, Shutter-Priority AE, Hyper Manual and Manual Bulb); (2) film loading, film advance/rewind and loading error warning; (3) Image-Size Tracking; (4) Zoom Clip; (5) Zoom Effect; (6) shutter speed; (7) aperture; (8) ISO film speed; (9) exposure compensation; (10) exposure compensation value; (11) exposure frame number; (12) low-battery warning; (13) RTF recharge; (14) low illumination warning; (15) non-applicable lens warning; (16) metering mode (multi-segment, spot, center weighted); (17) Pentax Functions; (18) self-timer; (19) multiple exposure; (20) trailing-shutter-curtain sync; (21) pre-flash emission (red-eye reduction); (22) flash emission compensation; (23) auto-bracketing; (24) TV direct dial; (25) AV direct dial; (26) motor drive mode.

Film Handling

- Loading: quick loading mechanism with automatic film advance to first frame.
- Advance/rewind: automatic. (Mid-roll rewind possible.)
- Advance modes: single-frame and consecutive (approx. 4 frames/sec.).
- Panorama mode (switchable in mid-roll).

Film Speed Setting

Automatic with DX-coded film (ISO25~ISO1000). Manual setting available (ISO6~ISO6400 in 1/3EV steps).

Built-in Flash

- Type: Retractable TTL auto flash (RTF).
- Guide number: 14 (at ISO100/m).
- Angle of coverage: 28mm wide-angle lens maximum.
- Others: (1) Emission adjustable in daylight sync and slow-shutter-speed sync; (2) flash bracketing; (3) flash emission compensation; (4) trailing-shutter-curtain sync; (5) pre-flash emission (red-eye reduction); (6) AF spotbeam projector (1m-6m range) built in.

Flash Synchronization

- Synchronization: with RTF via hotshoe.
- Sync speeds: 1/250 sec. set automatically with RTF or dedicated flash unit upon recharge completion.

Self-timer

- Type: electronically controlled multi-mode self-timer.
- Modes: (1) normal (12-sec. delay); (2) 2-sec. delay; (3) triple-frame. Mid-operation cancellation possible.

Interval-Timer

- Starting time (1 sec.-24 hours)
- Exposure interval (1 sec.-24 hours)
- No. of exposures (1-36 frames)

Pentax Functions

15 custom-programmable functions.

Main Switch

- (1) OFF; (2) "User" Position;
- (3) ON (full-speak position).

Power Source

One 6V lithium battery (2CR5 type).

Dimensions

152.0mm (W) x 95.5mm (H) x 74.0mm (D). (6.0" x 3.8" x 2.9")

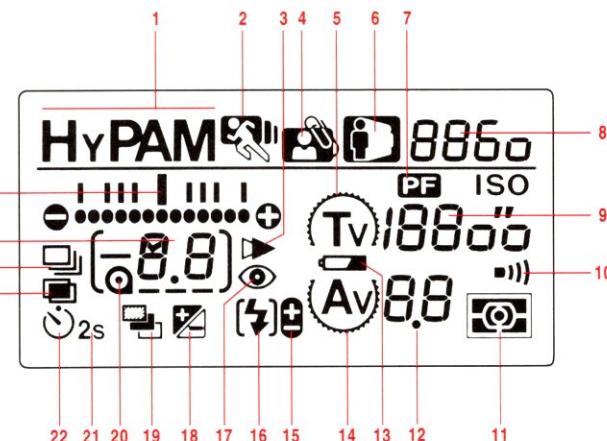
Weight

650g (22.9 oz.) without lens and battery.

A Large LCD Guide Panel

The PZ-1P incorporates a large, easy-to-follow LCD guide panel, which is ideally positioned on top of the pentaprism. Using a combination of symbols and digits, this multi-information panel provides a full range of operational data at a quick glance. In addition, its EL (Electro-Luminescence) illuminator can be turned on with a simple pushbutton operation to help you avoid making mistakes in the dark.

1. Exposure Mode	12. Av Value (Aperture)
2. Image-Size Tracking	13. Battery Exhaustion Warning
3. Trailing-shutter-curtain Sync Flash	14. Av Direct Dial
4. Zoom Clip	15. Exposure Compensation with Flash
5. Tv Direct Dial	16. Built-in RTF Flash Information
6. Zoom Effect	17. Red-eye Reduction Flash
7. Pentax Functions	18. Exposure Compensation
8. ISO Film Speed	19. Auto Bracketing
9. Tv Value (Shutter Speed)	20. Film Status
10. PCV Audible Signal	21. Self-Timer with 2-Second Delay
11. Multi-segment Metering	22. Self-Timer with 12-Second Delay

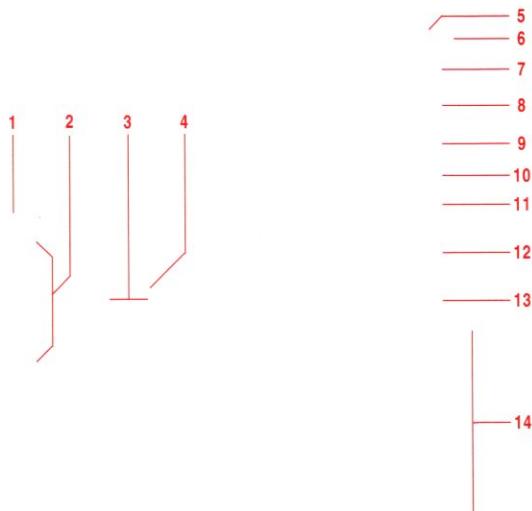


23. Multi-exposure
24. Motor Drive Mode
25. Film Counter/Multi-exposure Counter/Exposure Compensation/Exposure Compensation With Flash/Auto-Bracketing Compensation Value Range
26. Exposure Compensation Scale/Bar Graph

A Bright LCD Viewfinder Display

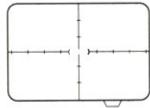
Located in the viewfinder, this informative LCD display lets you check the camera's vital settings without taking your eye off the subject. It integrates as easy-to-read bar scale which indicates critical exposure compensation value. It also comes equipped with a backlight illuminator, which is automatically activated during shooting.

1. Panorama* Mode	10. Memory Lock
2. Panorama* Frame	11. In-Focus
3. Autofocus Frame	12. Tv Value (Shutter Speed)
4. Spot Metering Frame	13. Av Value (Aperture)
5. Accessory Flash Information	14. Exposure Compensation Scale/Bar Graph
6. Exposure Compensation with Flash	
7. Built-in RTF Flash Information	
8. Metering Mode	
9. Exposure Compensation	



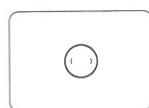
AF Frame Matte [FF-60]

A plain screen with an autofocus frame in the center.
Product code: 30785
UPC Code: 02707537403



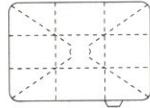
Scale Matte [FI-60]

A screen with vertical and horizontal scales.
Product code: 30790
UPC Code: 027075037458



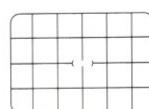
Center Spot Matte [FS-60]

A plain screen with autofocus and spot metering frames.
Product code: 30787
UPC Code: 027075037427



Golden Section Matte [FK-60]

A screen with lines indicating the golden section.
Product code: 30791
UPC Code: 027075037465



Cross Hair Matte [FG-60]

A screen with 6mm squares for precise alignment.
Product code: 30789
UPC Code: 027075037441

* The expression "Panorama" indicates a format equal in width to a conventional 35mm film frame, but narrower across the top and bottom.



**A super-compact 35mm autofocus SLR featuring the user-friendly
"Smart Picture Mode."**

- One of the most compact and lightweight 35mm autofocus SLR cameras on the market.
- The Smart Picture Mode automatically selects the most appropriate auto-exposure mode to ensure the best results by detecting the subject's distance, lens focal length, and whether the subject is in motion.
- The ZX-10 offers five user-selectable Picture Modes, two conventional auto-exposure modes (Aperture-Priority AE and Shutter-Priority AE), Metered Manual and Bulb.
- The six-segment multi-pattern metering system assures optimum results even under difficult lighting conditions.
- The high-precision, high-speed phase-matching autofocus (SAFOX IV), the ZX-10 assures sharp, crisp focus even under poor lighting conditions. The three-point wide focus frame enables pinpoint focus even in difficult situations. The predictive autofocus function automatically activates when the camera detects the subject's motion and predicts the subject's position at the moment of shutter release for accurate focusing. This function makes it possible to shoot a few frames even after the subject moves out of the AF frame.
- The built-in retractable auto flash covers up to a 28mm angle of view and gives a warning when the camera detects low-light and backlight situations. When set in the Smart Picture Mode or one of the

Picture Modes and the flash is in the pop-up position, the Smart Flash automatically discharges to provide supplementary illumination to the subject. Thanks to the TTL flash control system, complicated flash techniques (such as daylight sync, slow-shutter sync and bulb sync) are made simple and effortless. Its pre-flash emission function effectively reduces the "red-eye" effect.

- The ZX-10's multi-data LCD panel with large icons and numbers efficiently supplements the camera's simple operation system; the viewfinder display offers a full range of information including the Picture Modes and exposure compensation.
- The easy-setting compensation button on the back and the up/down lever allows the photographer to easily set the desired compensation value... (except when the camera is set in the Smart Picture Mode or the Metered Manual Mode.)
- The ZX-10 can be used with Pentax FA, F or A lenses. It can also accommodate Pentax power zoom lenses for power-assisted assisted high speed framing.
- While many existing Pentax accessories can be used with the ZX-10 (for instance the AF500FTZ and AF330FTZ flash units), the line-up is further expanded with the addition of new accessories exclusively designed for the ZX series of cameras.
- The ZX-10 panorama/date model offers a panorama mode with mid-roll switching and date or day and time recording ability.

PENTAX

ZX-10



- 1. Flash Pop-up Button
- 2. Multi Function Dial
- 3. Drive Mode Switch
- 4. Main Switch
- 5. Select Dial
- 6. Shutter Release Button
- 7. LCD Panel
- 8. Hot Shoe
- 9. Strap Lug
- 10. Release Socket
- 11. Back Cover Release Lever
- 12. Multi Function Button
- 13. Lens Lock Button
- 14. Built-in TTL Flash
- 15. Strap Lug
- 16. Back Cover
- 17. Battery Chamber
- 18. Date Back (optional)
- 19. Tripod Socket
- 20. Film Information Window
- 21. Viewfinder Eyepiece
- 22. Eye Cup FH
- 23. Panorama Switch (Quartz Date Model Only)
- 24. Exposure Compensation Button

Ordering Information:

06789 Pentax ZX-10QD
27179 SMCP-FA 28-70mm F/4.0 AL
01319 Pentax ZX-10QD Silver

UPC Codes:

027075040168
027075038998
027075041288

Specifications

Type

TTL autofocus, auto-exposure multi-mode 35mm SLR with built-in retractable TTL auto flash (RTF).

Film

35mm perforated cartridge film.

Image Size

24mm X 36mm (normal). Approx.

Lens Mount

Pentax KAF₂ bayonet mount compatible with KAF, KA and K mounts.

Usable Lenses

Pentax KAF₂-, KAF-, KA- and K-mount lenses (autofocus possible using AF adapter).

Power Zoom System

(with Pentax FA power zoom lenses):

- Type: Motor-driven zoom with motor built-in lens.
- Zooming: 3 speeds, adjustable by zoom ring.
- Mode: (1) Power Zoom, (2) Manual Zoom.
- Auto lens retraction.

Focusing System

- Type: TTL phase-matching 3-point autofocus system.
- Usable illumination range: EV-1~EV18 (at ISO 100/m with 50mm f/1.4 lens).
- Mode: (1) AF (focus lock and predictive AF available). (2) Manual.

Exposure Control

- Metering system: TTL open-aperture 6-segment metering. (coupled with lens and AF information).
- Metering range: EV0~EV21 (at ISO100/m with 50mm f/1.4 lens).
- Mode: (1) Smart Picture mode, (2) Picture mode, (3) Aperture-Priority AE, (4) Shutter-priority AE, (5) Metered manual, (6) Bulb
- TTL Programmed auto flash.
- Automatic exposure compensation by multi-segment metering.
- Exposure compensation: ±3EV (1/2EV steps).

Shutter

- Type: Electronically controlled vertical-run focal plane shutter.
- Speed: (1)Auto: 1/2000 ~ 30 sec. (stepless), (2) Manual: 1/2000~30 sec. and bulb.
- (3) Flash sync: 1/100~30 sec. and bulb.
- Shutter lock: Main switch at "OFF" position.

Diaphragm Control

Aperture-coupled mechanism (with FA, F and A lenses).

Viewfinder

- Type: Fixed molded penta-mirror type.
- Focusing screen: Natural-Bright-Matte focusing screen.
- Field of view: 92% vertically/horizontally.
- Magnification: 0.77X (with 50mm f/1.4 lens at infinity).
- Panorama frame: Mechanical black-out type. (Panorama date version)

Viewfinder LCD indication

(1) In-focus, (2) RTF discharge (flash-use indication, recharge completion and non-applicable lens warning), (3) External flash status, (4) Shutter speed, aperture, exposure compensation and out-of-exposure coupling-range warning, (5) Green Operation, Portrait Program, Landscape Program, Close-up Program and Action Program, (6) Exposure compensation factor, (7) Bar-graph, (8) Over- or underexposure indication in Metered Manual.

External LCD Indication

(1) Green Operation, Portrait Program, Landscape Program, Close-up Program and Action Program, (2) Film loading, film advance/rewind, loading error, (3) Exposure frame number, (4) Shutter speed or aperture value, (5) Manual-set film speed, (6) Audible PCV signals, (7) Flash use recommendation and recharge incompleteness/completion, (8) Red-eye reduction flash, (9) Non-applicable lens warning, (10) Battery exhaustion warning, (11) Automatic flash function.

Film Handling

- Loading: Quick auto loading (automatic film advance to first frame).
- Advance/rewind: Automatic (Mid-roll rewind possible).
- Advance mode: (1) Single, (2) Consecutive (approx. 2 frames/sec.).

Film Speed Setting

(1) Automatic with DX-coded film (ISO25~5000), (2) Manual (ISO6 ~ 6400).

Built-In Flash

- Type: Series-control retractable TTL auto flash (RTF).
- Guide number: 11 (ISO100/m).
- Angle-of-view coverage: 28mm wide-angle lens.
- Daylight sync/slow-shutter sync: Discharge level automatically adjusted.

Flash Synchronization

with RTF and via hot shoe.

- Sync speed: 1/100 sec. set automatically with RTF or Pentax dedicated flash unit at recharge completion.

Self-Timer

Electronically controlled type with 12-second delay (Cancellation possible).

Drive mode switch

(1) Single advance, (2) Consecutive advance, (3) Self-timer. Data imprinting: Available with the optional Pentax Data Back FG.

Power Source

Two 3V lithium batteries (CR2 type).

Dimensions

135.0 (W) X 90.5 (H) X 62.5 (D)mm (5.3" X 3.6" X 2.5").

Weight

350g (12.3 oz.) without batteries.

ZX-10 Date Model Only

Data Imprinting

Five-mode switchable: "Year-Month-Day," "Day-Hour-Minute" "Month-Day-Year," "Day-Month-Year," and blank.

Panorama Switching

Mid-roll panorama switching possible. Viewfinder: Mechanical black-out panorama frame.

Dimensions and Weight

135.0 (W) x 90.5 (H) x 62.5mm (D) (5.3" x 3.6" x 2.5")
365g (12.9 oz.) without battery.

PENTAX

ZX-5



A new 35mm autofocus SLR camera featuring compact dimensions and simple dial controls for easy operation and enhanced maneuverability.

With its ultra-compact dimensions and functional design, the ZX-5 is one of the smallest 35mm SLRs. It measures 5.3" wide, 3.5" high and 2.4" deep.

Two control dials on the camera's top panel handle most of the operational adjustments... from the setting of the metering mode and the selection of the shutter speed to the adjustment of the exposure compensation.

The ZX-5 offers five exposure modes (Programmed AE, Aperture-Priority AE, Shutter-Priority AE, Metered Manual and Bulb). The three auto-exposure modes are designed to simplify operation, while the Metered Manual mode gives unlimited control over the exposure control.

An advanced six-segment multi-pattern metering system assures optimum results under difficult lighting conditions. The spot metering allows the photographer to pinpoint the metering at a single small area of the frame. Center-weighted metering is also provided for those who are use to conventional metering systems.

The ZX-5 incorporates a high-precision, high-speed phase matching autofocus system (SAFOX IV), which is extremely reliable even under poor lighting conditions. The predictive autofocus function automatically activates when the camera detects the subject's motion. Then, it "predicts" the subject's position at the moment of shutter release and adjusts the focus accordingly.

The built-in "Smart Flash," which covers up to a 28mm angle of view, gives a warning when the camera detects low-light and backlight situations. When set in the Programmed AE mode and with the flash in the pop-up position, the Smart Flash automatically provides supplementary illumination of the subject for perfect exposure. The advanced TTL flash control system makes complicated flash techniques simple and effortless. There is also a preflash emmision function to reduce "red-eye."

To complement the dial control system, the ZX-5 is equipped with a multi-data viewfinder display and LCD panel, with an illuminator that automatically adjusts the illumination level to the brightness of the subject.

The ZX-5 features a panorama mode, which makes it possible to switch to this mode at any frame with a simple twist of a lever.

While many existing Pentax accessories can be used with the ZX-5 (for instance the AF500 FTZ and AF330 FTZ flash units), the line-up is further expanded with the addition of new accessories exclusively designed for this camera. These new accessories include:

AA-Battery Pack FG: Uses four AA-size batteries and can power the ZX-5 for 200 rolls of 24-exposure film (without use of the flash).

Data Back FG: Replacing the camera's back cover, this data back records the date or time of shooting on each picture. In the panorama mode, it automatically adjusts the position of data imprinting.

Extension Cord F5P, Hot Shoe Adapter FG, Off-Camera Adapter F: These connection accessories are designed for a remote flash setup using a Pentax dedicated accessory flash unit and multi-flash set up combination with the ZX-5's RTF with a dedicated accessory flash unit.

Other accessories include: Extension Cord F5P and Hot Shoe Adapter FG for the AF500FTZ. Extension Cord F5P, Hot Shoe Adapter FG and Off- Camera Adapter F for the AF330FTZ.

PENTAX

ZX-5



1. Shutter Dial Lock Button
2. Shutter Dial
3. Drive Mode Switch
4. Shutter Release Button
5. LCD Panel
6. Hot Shoe
7. Exposure Compensation Release Button
8. Metering Mode Switch
9. Exposure Compensation Dial
10. Strap Lug
11. Back Cover Release Lever
12. Mid-roll Rewind Button
13. Release Socket
14. Focus Mode Switch
15. Multi-function Button
16. Lens Lock Button
17. Built-in RTF Flash
18. Flash Pop-up Button
19. Spot AF Button
20. Battery Chamber (underneath)
21. Tripod Socket (underneath)
22. Back Cover
23. Film Information Window
24. Viewfinder Eyepiece
25. Eye Cup FG
26. Diopter Adjustment Lever (under eyecup)
27. Panorama Mode Switch

Ordering Information:

06769 Pentax ZX-5 Silver Body
27531 SMCP-FA 28-70 f/4.0 AL

UPC Codes:

027075039117
027075038998

Specifications

Type

TTL autofocus, auto-exposure multi-mode 35mm SLR with built-in retractable TTL auto flash (RTF).

Film

35mm perforated cartridge film.

Image Size

24mm X 36mm (normal).

Approx. 13mm X 36mm (panorama).

Lens Mount

Pentax KAF2 bayonet mount compatible with KAF, K and K mounts.

Usable Lenses

Pentax KAF2-, KAF-, KA- and K-mount lenses (autofocus possible using AF adapter).

Power Zoom System

(with Pentax FA power zoom lenses):

- Type: Motor-driven zoom with motor built in lens.
- Zooming: 3 speeds, adjustable by zoom ring.
- Mode: (1) Power Zoom, (2) Manual Zoom.
- Auto lens retraction with main switch at "L (lock)" position.

Focusing System:

- Type: TTL phase-matching autofocus system. 3-point AF/Spot AF switchable.
- Usable illumination range: EV-1~EV18 (at ISO100/m with 50mm f/1.4 lens).
- Mode: (1) AF (focus lock and predictive AF available), (2) Manual.

Exposure Control:

- Metering system: TTL open-aperture 6-segment metering by SPD cell (coupled with lens and AF information). Spot metering and center-weighted metering selectable.
- Metering range: EV0~EV21 (at ISO100/m with 50mm f/1.4 lens).
- Mode: (1) Programmed AE, (2) Aperture-Priority AE, (3) Shutter-Priority AE, (4) Metered Manual, (5) Bulb.
- TTL Programmed Auto Flash.
- Automatic exposure compensation by six-segment metering.
- Exposure compensation: ± 3 EV (1/2EV steps).

Shutter

- Type: Electronically controlled vertical-run focal-plane metal shutter.
- Speed: (1) Auto: 1/2000~30 sec. (stepless), (2) Manual: 1/2000~2 sec. and bulb, (3) Flash sync: 1/100~30 sec. and bulb.
- Shutter lock: Main switch at "L (lock)" position.

Diaphragm Control

Aperture-coupled mechanism (with FA, F and A lenses).

Viewfinder

- Type: Pentaprism finder
- Focusing screen: Natural-Bright-Matte focusing screen.
- Field of view: 92% vertically/horizontally.
- Magnification: 0.8X (with 50mm f/1.4 lens at infinity).
- Diopter: -2.5~+1.5 (adjustable).
- Panorama frame: Mechanical black-out type.

Viewfinder LCD Indication

- (1) In-focus, (2) RTF discharge (flash-use indication, recharge completion and non-applicable lens warning), (3) External flash status, (4) Shutter speed, aperture, exposure compensation and out-of-exposure-coupling-range warning, (5) Exposure compensation factor, (6) Bargraph, (7) Over- or under-exposure indication in Metered Manual.

External LCD Indication

- (1) Film loading, film advance/rewind, loading error, (2) Exposure frame number, (3) Programmed AE, Aperture-Priority AE, Shutter-Priority AE, Metered Manual and Bulb, (4) Shutter speed or aperture value, (5) Manual-set film speed, (6) Audible PCV signals, (7) Flash use recommendation and recharge incompleteness/completion, (8) Red-eye reduction flash, (9) Nonapplicable lens warning, (10) Battery exhaustion warning, (11) Automatic flash function.

Film Handling

- Loading: Quick auto loading (automatic film advance to first frame).
- Advance/rewind: Automatic (Mid-roll rewind possible).
- Advance mode: (1) Single, (2) Consecutive (approx. 2 frames/sec.).

Film Speed Setting

- (1) Automatic with DX-coded film (ISO25~5000), (2) Manual (ISO6~6400).

Built-in Flash

- Type: Series-control retractable TTL auto flash (RTF).
- Guide number: 11 (ISO 100/m).
- Angle-of-view coverage: 28mm wide-angle lens.
- Daylight sync/slow-shutter sync: Discharge level automatically adjusted.

Flash Synchronization

With RTF and via hot shoe.

- Sync speed: 1/100 sec. set automatically with RTF or Pentax dedicated flash unit at recharge completion.

Self-Timer

Electronically controlled type with 12-second delay (Cancellation possible).

Drive Mode Switch

- (1) L ("lock" and power off),
- (2) Single advance,
- (3) Consecutive advance,
- (4) Self-timer.

Data Imprinting

Available with the optional Pentax Data Back FG.

Power Source

Two 3V lithium batteries (CR2 type).

Dimensions

135.0 (W) X 90.0 (H) X 61.5 (D)mm (5.3" X 3.5" X 2.4").

Weight

400g (14.1 oz.) without batteries.

PENTAX

ZX-50



Super-compact, ultra-lightweight autofocus with built-in flash and five user-friendly picture modes.

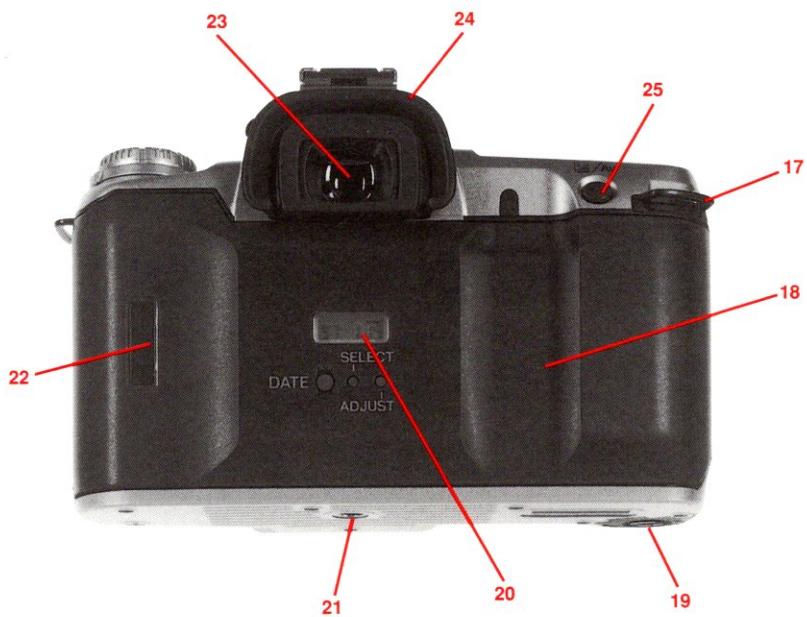
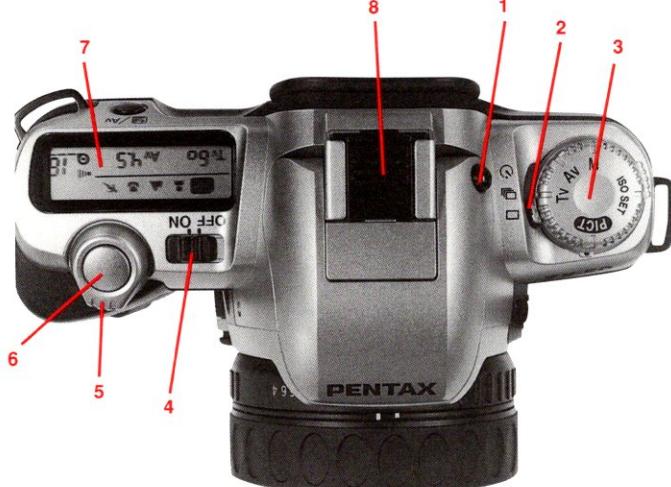
- One of the smallest, lightest autofocus SLR cameras on the market.
- Five user-selectable Picture Modes, including Green Mode (for point-and-shoot simplicity), Portrait Mode, Landscape Mode, Action Mode and Close-up Mode, for maximum flexibility without sacrificing ease of use.
- Conventional aperture-preferred and shutter preferred auto modes for creative control, and metered manual and Bulb modes for total creative freedom.
- Multi-segment metering system assures optimum results even under difficult lighting conditions, such as backlighting or high-contrast conditions.
- High-speed, high-precision SAFOX V phase-matching autofocus system assures precise, fast focus even under poor lighting conditions.
- Predictive autofocus function automatically detects the subject's motion and anticipates the subject's position at the time of shutter release, resulting in perfectly focused photos even when the subject is moving toward or away from the camera.
- Built-in retractable auto flash covers the angle of view of lenses as wide as 28mm. When the flash is set to the

pop-up position and the camera is in one of the selectable Picture Modes, the camera's metering system will detect low light or backlit situations and the flash will automatically fire whenever lighting conditions require it.

- The flash can also be used for daylight fill, slow-shutter sync, and bulb sync with absolute simplicity, because of the TTL flash metering system built into the camera. Just pop up the flash and set the camera to shutter-preferred auto, aperture-preferred auto, metered manual or bulb, and the camera automatically gives the correct flash exposure, regardless of the conditions.
- Large, easy-to-see external LCD control panel gives camera status at a glance, including shutter and aperture settings, exposure counter, picture mode setting, exposure compensation setting and low-battery warning.
- Bright, uncluttered viewfinder has an LCD display with shutter and aperture settings, manual metering scale, and indicators for focus, flash and exposure compensation.
- Exposure-compensation button allows deliberate over or underexposure, giving the photographer creative control without giving up ease of use.

PENTAX

ZX-50



- 1. Flash Pop-up Button
- 2. Drive Mode Switch
- 3. Multi Function Dial
- 4. Main Switch
- 5. Select Dial
- 6. Shutter Release Button
- 7. LCD Panel
- 8. Hot Shoe
- 9. Strap Lug
- 10. Cable Release Socket
- 11. Back Cover Release
- 12. Mid-roll Rewind Button
- 13. Multi Function Button
- 14. Autofocus / Manual Focus Switch
- 15. Lens Lock Button
- 16. Built-in TTL Flash
- 17. Strap Lug
- 18. Back Cover
- 19. Battery Chamber
- 20. Optional Date Back Display & Control Buttons
- 21. Tripod Socket
- 22. Film Information Window
- 23. Viewfinder Eyepiece
- 24. Eye Cup FH
- 25. Exposure Compensation Button

Ordering Information:

01324 ZX-50 Body
01329 ZX-50QD Body
27179 SMCP-F Zoom 35-80mm Lens

UPC Codes:

027075041318
027075041349
027075034655

Specifications

Type

TTL autofocus, auto-exposure multi-mode 35mm SLR with built-in retractable TTL auto flash (RTF).

Film

35mm perforated cartridge film.

Image Size

24mm x 36mm.

Lens Mount

Pentax KAF bayonet mount.

Usable Lenses

FA, F, A, M and K lenses

* When the aperture ring is set at other than the A position, aperture-priority at open-aperture or unmetered manual are available.

Focusing System

- Type: TTL phase-matching autofocus system (SAFOX V).
- Usable illumination range: EV 0-EV18 (at ISO 100 with 50mm f/1.4 lens).
- Mode: (1) AF (focus lock and predictive AF available), (2) Manual.

Exposure Control

- Metering system: TTL open-aperture multi metering (coupled with lens and AF information).
- Metering range: EV 1-EV21 (at ISO 100 with 50mm f/1.4 lens).
- Mode: (1) Picture Mode, (2) Aperture-priority AE, (3) Shutter-priority AE, (4) Metered Manual, (5) Bulb.
- TTL Programmed auto flash.
- Automatic exposure compensation by multi-segment metering.
- Exposure compensation: $\pm 3EV$ (1/2EV steps).
- * When the aperture ring is set at other than the A position, aperture-priority at open-aperture or unmetered manual are available.

Shutter

- Type: Electronically controlled vertical-run focal plane shutter.
- Speed: (1) Auto: 1/2000 ~ 30 sec. (stepless), (2) Manual: 1/2000~30 sec. and bulb, (3) Flash sync: 1/100~30 sec. and bulb.
- Shutter lock: Main switch at "OFF" position.

Viewfinder

- Type: Fixed molded penta-mirror type.
- Focusing screen: Natural-bright-matte focusing screen.
- Field of view: 92% vertically/vertically.
- Magnification: 0.77X (with 50mm f/1.4 lens at infinity).

Viewfinder LCD indication

(1) In-focus, (2) RTF discharge (flash-use indication, recharge completion and non-applicable lens warning), (3) External flash status, (4) Shutter speed, aperture, exposure compensation and out-of-exposure coupling-range warning, (5) Exposure compensation factor, (6) Bar-graph, (7) Over-or underexposure indication in Metered Manual.

External LCD Indication

(1) Green Operation, Portrait Program, Landscape Program, Close-up Program and Action Program, (2) Manual, (3) Film loading, film advance/rewind, loading error, (4) Exposure frame number, (5) Shutter speed or aperture value, (6) Manual-set film speed, (7) Audible PCV signals, (8) Flash use recommendation and recharge incompleteness/completion, (9) Red-eye reduction flash, (10) Non-applicable lens warning, (11) Battery exhaustion warning, (12) Automatic flash function.

Film Handling

- Loading: Quick auto loading (automatic film advance to first frame).
- Advance/rewind: Automatic (Mid-roll rewind possible).
- Advance mode: (1) Single, (2) Consecutive (approx. 2 frames/sec.).

Film Speed Setting

(1) Automatic with DX-coded film (ISO 25~5000), (2) Manual (ISO 6 ~ 6400).

Built-In Flash

- Type: Series-control retractable TTL auto flash (RTF).
- Guide number: 11 (ISO 100, in meters).
- Angle-of-view coverage: 28mm wide-angle lens.
- Smart Flash: Automatic flash function, discharge level automatically adjusted.

Flash Synchronization

With RTF and via hot shoe.

- Sync speed: 1/100 sec. set automatically with RTF or Pentax dedicated flash unit at recharge completion.

Self-Timer

Electronically controlled type with 12-second delay (Cancellation possible).

Drive mode switch

- Single advance, (2) Consecutive advance, (3) Self-timer.

Data imprinting

Available with the optional Pentax Data Back FG.

Power Source

Two 3V lithium batteries (CR2 type).

Dimensions

135.0 (W) x 90.5 (H) x 62.5 (D)mm (5.3" x 3.6" x 2.5").

Weight

345g (12.2 oz.) without batteries.

ZX-50 Date Model Only

Five-mode switchable: "Year-Month-Day," "Day-Hour-Minute" "Month-Day-Year," "Day-Month-Year," and blank.

Dimensions and Weight

135.0 (W) x 90.5 (H) x 62.5mm (D)mm (5.3" x 3.6" x 2.5").

Weight: 360g (12.7 oz.) without batteries.

PENTAX

ZX-5N



A new 35mm autofocus SLR camera featuring autobracketing, electronic preview and exposure memory lock for more creative photography.

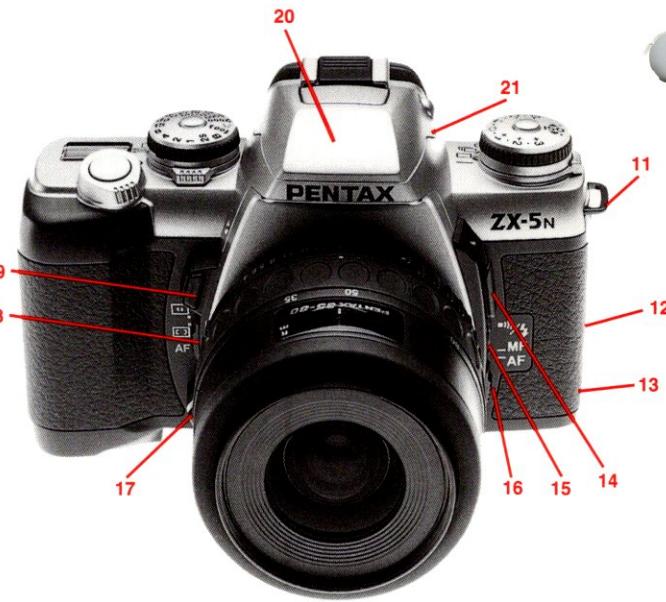
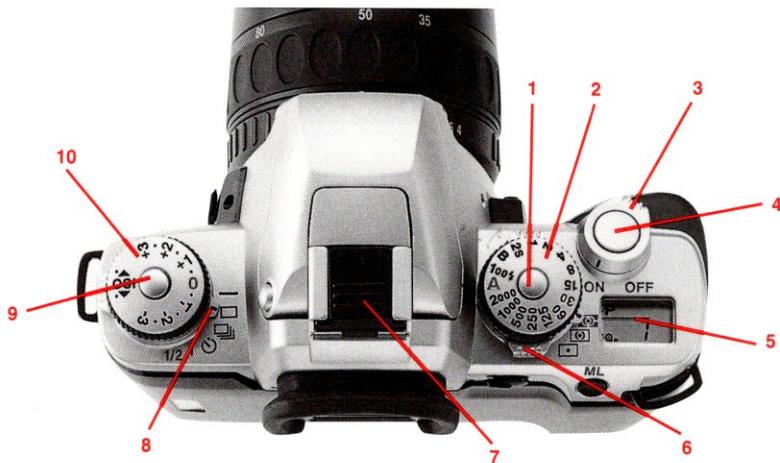
- The exposure memory lock button allows you to quickly and accurately expose for those areas that are most important to the scene.
- The electronic depth of field preview button allows you to see precisely those areas that are in focus before taking the exposure.
- An easy to use auto bracketing switch allows you to take 3 exposures at 1/2 or 1 stop increments.
- With its ultra-compact dimensions and functional design, the ZX-5N is one of the smallest 35mm SLRs. It measures 5.3" wide, 3.5" high and 2.4" deep.
- Two control dials on the camera's top panel handle most of the operational adjustments... from the setting of the metering mode and the selection of the shutter speed to the adjustment of the exposure compensation.
- The ZX-5N offers five exposure modes (Programmed AE, Aperture-Priority AE, Shutter-Priority AE, Metered Manual and Bulb). The three auto-exposure modes are designed to simplify operation, while the Metered Manual mode gives unlimited control over the exposure control.
- An advanced six-segment multi-pattern metering system assures optimum results under difficult lighting conditions. The spot metering allows the photographer to pinpoint the metering at a single small area of the frame. Center-weighted metering is also provided for those who are use to conventional metering systems.
- The ZX-5N incorporates a high-precision, high-speed phase matching autofocus system (SAFOX IV), which is extremely reliable even under poor lighting conditions. The predictive autofocus function automatically activates when the camera detects the subject's motion. Then, it "predicts" the subject's position at the moment of shutter release and adjusts the focus accordingly.
- The built-in "Smart Flash," which covers up to a 28mm angle of view, gives a warning when the camera detects low-light and backlight situations. When set in the

Programmed AE mode and with the flash in the pop-up position, the Smart Flash automatically provides supplementary illumination of the subject for perfect exposure. The advanced TTL flash control system makes complicated flash techniques simple and effortless. There is also a preflash emission function to reduce "red-eye."

- To complement the dial control system, the ZX-5N is equipped with a multi-data viewfinder display and LCD panel, with an illuminator that automatically adjusts the illumination level to the brightness of the subject.
- The ZX-5N features a panorama mode, which makes it possible to switch to this mode at any frame with a simple twist of a lever.
- While many existing Pentax accessories can be used with the ZX-5N (for instance the AF500 FTZ and AF330 FTZ flash units), the line-up is further expanded with the addition of new accessories exclusively designed for this camera. These new accessories include:
 - AA-Battery Pack FG: Uses four AA-size batteries and can power the ZX-5N for 200 rolls of 24-exposure film (without use of the flash).
 - Data Back FG: Replacing the camera's back cover, this data back records the date or time of shooting on each picture. In the panorama mode, it automatically adjusts the position of data imprinting.
 - Extension Cord F5P, Hot Shoe Adapter FG, Off-Camera Adapter F: These connection accessories are designed for a remote flash setup using a Pentax dedicated accessory flash unit and multi-flash set up combination with the ZX-5N's RTF with a dedicated accessory flash unit.
 - Other accessories include: Extension Cord F5P and Hot Shoe Adapter FG for the AF500FTZ, Extension Cord F5P, Hot Shoe Adapter FG and Off- Camera Adapter F for the AF330FTZ.

PENTAX

ZX-5N



- 1. Shutter Dial Lock Button
- 2. Shutter Dial
- 3. On/off Switch
- 4. Shutter Release Button
- 5. LCD Panel
- 6. Metering Mode Switch
- 7. Hot Shoe
- 8. Drive Mode /Selftimer/Autobracket Switch
- 9. Exposure Compensation Release Button
- 10. Exposure Compensation Dial
- 11. Strap Lug
- 12. Back Cover Release Lever
- 13. Mid-roll Rewind Button
- 14. Release Socket
- 15. Multi-function Button
- 16. Focus Mode Switch
- 17. Lens Lock Button
- 18. Spot/3pt. Autofocus Switch
- 19. Electronic Preview Button
- 20. Built-in RTF Flash
- 21. Flash Pop-up Button
- 22. Exposure Memory Lock
- 23. Battery Chamber (underneath)
- 24. Tripod Socket (underneath)
- 25. Back Cover
- 26. Film Information Window
- 27. Viewfinder Eyepiece
- 28. Eye Cup FG
- 29. Diopter Adjustment Lever (under eyecup)
- 30. Panorama Mode Switch

Ordering Information:

01354 Pentax ZX-5N Body
27531 SMCP-FA 28-70 f/4.0 AL

UPC Codes:

027075042032
027075038998

Specifications

Type

TTL autofocus, auto-exposure multi-mode 35mm SLR with built-in retractable TTL auto flash (smart flash).

Film

35mm perforated cartridge film.

Image Size

24mm X 36mm (normal).
Approx. 13mm X 36mm (panorama).

Lens Mount

Pentax KAF2 bayonet mount compatible with KAF, K and K mounts.

Usable Lenses

Pentax KAF2-, KAF-, KA- and K-mount lenses (autofocus possible with KA- and K- mount lenses using AF adapter).

Power Zoom System

(with Pentax FA power zoom lenses):

- Type: Motor-driven zoom with motor built in lens.
- Zooming: 3 speeds, adjustable by zoom ring.
- Mode: (1) Power Zoom, (2) Manual Zoom.
- Auto lens retraction with main switch at "Off" position.

Focusing System:

- Type: TTL phase-matching autofocus system. 3-point AF/Spot AF switchable.
- Usable illumination range: EV-1~EV18 (at ISO100/m with 50mm f/1.4 lens).
- Mode: (1) AF (focus lock and predictive AF available), (2) Manual.

Exposure Control:

- Metering system: TTL open-aperture 6-segment metering by SPD cell (coupled with lens and AF information). Spot metering and center-weighted metering selectable.
- Metering range: EV0~EV21 (at ISO100/m with 50mm f/1.4 lens).
- Mode: (1) Programmed AE, (2) Aperture-Priority AE, (3) Shutter-Priority AE, (4) Metered Manual, (5) Bulb.
- TTL Programmed Auto Flash.
- Automatic exposure compensation in auto exposure mode with multi-pattern metering.
- Exposure compensation: ±3EV (1/2EV steps).
- Exposure memory lock
- Auto bracketing mode (up to +/- 1 EV 3 frames).

Shutter

- Type: Electronically controlled vertical-run focal-plane metal shutter.
- Speed: (1) Auto: 1/2000~30 sec. (stepless), (2) Manual: 1/2000~2 sec. and bulb, (3) Flash sync: 1/100~30 sec. and bulb.

- Shutter lock: Main switch at "L (lock)" position.

Diaphragm Control

Aperture-coupled mechanism (with FA, F and A lenses).

Viewfinder

- Type: Pentaprism finder
- Focusing screen: Natural-Bright-Matte focusing screen.
- Field of view: 92% vertically/vertically.
- Magnification: 0.8X (with 50mm f/1.4 lens at infinity).
- Diopter: -2.5~+1.5 (adjustable).
- Panorama frame: Mechanical black-out type.
- Preview: electronic type. Possible in all exposure modes using preview button.

Viewfinder LCD Indication

- (1) In-focus, (2) RTF discharge (flash-use indication, recharge completion and non-applicable lens warning), (3) External flash status, (4) Shutter speed, aperture, exposure compensation and out-of-exposure-coupling-range warning, (5) Exposure compensation factor, (6) Bargraph, (7) Over- or under-exposure indication in Metered Manual, (8) Memory lock, (9) Auto bracketing bar graph.

External LCD Indication

- (1) Film loading, film advance/rewind, loading error, (2) Exposure frame number, (3) Programmed AE, Aperture-Priority AE, Shutter-Priority AE, Metered Manual and Bulb, (4) Manual-set film speed, (5) Audible PCV signals, (6) Flash use recommendation and recharge incompleteness/completion, (7) Red-eye reduction flash, (8) Nonapplicable lens warning, (9) Battery exhaustion warning, (10) Automatic flash function.

Film Handling

- Loading: Quick auto loading (automatic film advance to first frame).
- Advance/rewind: Automatic (Mid-roll rewind possible).
- Advance mode: (1) Single, (2) Consecutive (approx. 2 frames/sec.).

Film Speed Setting

- (1) Automatic with DX-coded film (ISO25~5000), (2) Manual (ISO6~6400).

Built-in Flash

- Type: Series-control retractable TTL auto flash (RTF).
- Guide number: 11 (ISO 100/m).
- Angle-of-view coverage: 28mm wide-angle lens.
- Daylight sync/slow-shutter sync: Discharge level automatically adjusted.

Flash Synchronization

With RTF and via hot shoe.

- Sync speed: 1/100 sec. set automatically with RTF or Pentax dedicated flash unit at recharge completion.

Self-Timer

Electronically controlled type with 12-second delay (Cancellation possible).

Drive Mode Switch

- (1) Single advance,
- (2) Consecutive advance,
- (3) Self-timer,
- (4) Autobracketing 1/2 EV.
- (5) Autobracketing 1 EV.

Data Imprinting

Available with the optional Pentax Data Back FG.

Power Source

Two 3V lithium batteries (CR2 type).

Dimensions

135.0 (W) X 90.0 (H) X 61.5 (D)mm (5.3" X 3.5" X 2.4").

Weight

410g (14.5 oz.) without batteries.

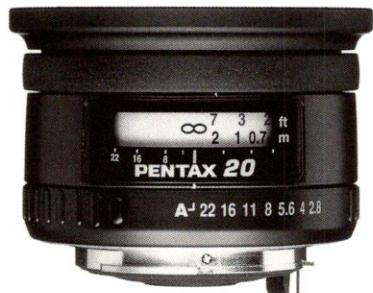
35mm Lenses

PENTAX

FA-Series Auto Focus Lenses

SMCP-FA 20mm f/2.8

Mount: 22
Lens Construction: 9 groups 10 elements
Angle of View: 94°
Diaphragm: Fully Automatic
Minimum Focusing Distance: .8 ft.
Macro Magnification: 0.12x
Filter Size: 67mm
Lens Hood: 34130 MH-RB67
Lens Case: 33923 S70-70
Maximum Diameter & Length:
70mm x 44mm
Front Case Size: Small
Weight: 9 oz.
Catalog No.: 22880 SMCP-FA 20mm
f/2.8 w/case
UPC Code: 027075038806



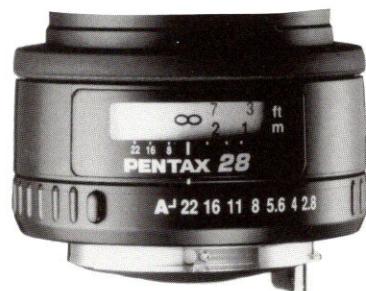
SMCP-FA 24mm f/2 AL (IF)

Minimum Aperture: 22
Lens Construction: 9 groups 11 elements
Angle of View: 84°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.3m (1.0 ft.)
Filter Size: 67mm
Lens Hood: Exclusive- supplied w/lens
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
72.5mm x 65.5mm (2.9" x 2.6")
Weight: 405g (14.3 oz.)
Catalog No.: 22630 SMCP-FA 24mm f/2 AL
(IF) w/case and hood
UPC Code: 027075031555



SMCP-FA 28mm f/2.8 AL

Minimum Aperture: 22
Lens Construction: 5 groups 5 elements
Angle of View: 75°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.3m (1.0 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm
Accessories Section
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
65mm x 40.5mm (2.5" x 1.6")
Weight: 185g (6.5 oz.)
Catalog No.: 22527 SMCP-FA
28mm f/2.8 AL w/o case
UPC Code: 027075030565



PENTAX

FA-Series Auto Focus Lenses

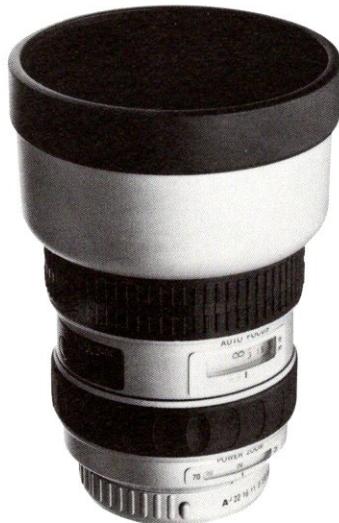
SMCP-FA Zoom 28mm f/2.8 Soft

Minimum Aperture: 22
Lens Construction: 5 groups 5 elements
Angle of View: 75°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.25m (9.8 in.)
Macro Magnification: 0.18x
Filter Size: 49mm
Lens Hood: 34110
Lens Case: 33923 S70-70
Maximum Diameter & Length:
65.6mm x 40.3mm (2.6" x 1.6")
Front Case Size: Small
Weight: 191g (6.7 oz.)
Catalog No.: 22530 28mm f/2.8
Soft Focus Lens
UPC Code: 027075041653



SMCP-FA* Zoom 28mm-70mm f/2.8 AL

Minimum Aperture: 22
Lens Construction: 11 groups 14 elements
Angle of View: 75°-34.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.43m (1.4 ft.)
Macro Magnification: 0.25x
Filter Size: 67mm
Lens Hood: PH-RBC77 (Supplied w/lens)
Lens Case: S120-150 (Supplied w/lens)
Maximum Diameter & Length:
84.7mm x 104.2mm (104.5 x 149.5 w/hood)
3.3" x 4.1" (4.1" x 5.9" w/hood)
Weight: 800g (28.2 oz.) w/hood
Tripod Mount: no
Front Case Size: PZ-1 L
PZ-20/10 N/A
P-30T N/A
K-1000 N/A
Catalog No.: 27660 SMCP-FA* Zoom
28-70mm f/2.8 AL w/case
UPC Code: 027075036765



SMCP-FA Zoom 28mm-70mm f/4 AL

Minimum Aperture: 22
Lens Construction: 7 groups 9 elements
Angle of View: 75°-34.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.4m (1.3 ft.)
Maximum Magnification: 0.23x
Filter Size: 52mm
Lens Hood: RH-RB52
Maximum Diameter & Length:
65.5mm x 66mm (2.55" x 2.6")
Weight: 240g (8.4 oz.)
Catalog No.: 27531 SMCP-FA Zoom
28-70mm f/4 AL
UPC Code: 027075038998

Power zoom function is not available.

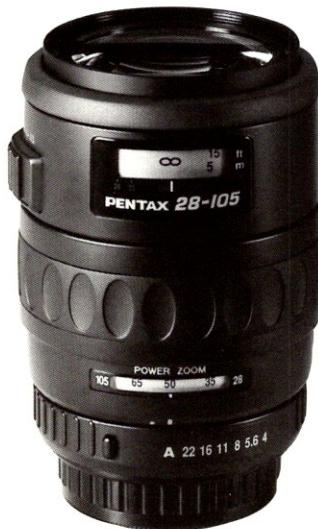


PENTAX

FA-Series Auto Focus Lenses

SMCP-FA Zoom 28mm-105mm f/4-f/5.6

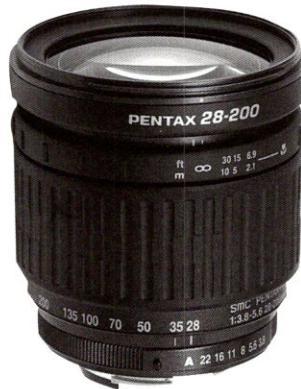
Minimum Aperture: 22-32
Lens Construction: 11 groups 13 elements
Angle of View: 75°-23.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: .43m (1.4 ft.)
Macro Magnification: 33x
Filter Size: 58mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 72.5mm x 95.5mm (2.8" x 3.7")
Weight: 445g (15.7 oz.)
Catalog No.: 27667 SMCP-FA Zoom 28-105mm f/4-f/5.6 w/o case
UPC Code: 027075032026



SMCP-FA Zoom 28mm-200mm f/3.8-f/5.6 AL (IF)

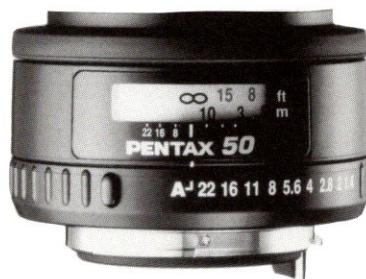
Minimum Aperture: 32
Lens Construction: 14 groups 16 elements
Angle of View: 75°-12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: .52m (1.7 ft.) at 135mm
Macro Magnification: 0.21x at 135mm
Filter Size: 72mm
Lens Hood: Included
Lens Case: 33925 S80-160
Maximum Diameter & Length: 78mm x 83mm
Front Case Size: None Available
Weight: 16.4 oz.
Catalog No.: 27021 SMCP-FA Zoom 28-200mm f/3.8-f/5.6 AL IF
UPC Code: 027075040816

Power zoom function is not available.



SMCP-FA 50mm f/1.4

Minimum Aperture: 22
Lens Construction: 6 groups 7 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 65mm x 37mm (2.5" x 1.5")
Weight: 220g (7.8 oz.)
Catalog No.: 20817 SMCP-FA 50mm f/1.4 w/o case
UPC Code: 027075030534



PENTAX

FA-Series Auto Focus Lenses

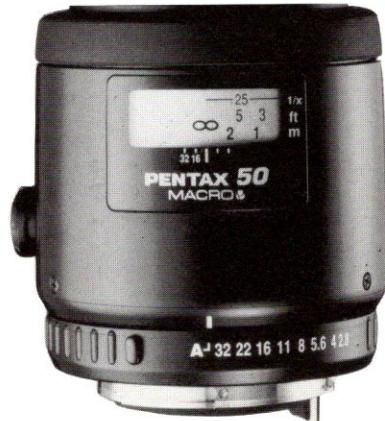
SMCP-FA 50mm f/1.7

Minimum Aperture: 22
Lens Construction: 5 groups 6 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 65mm x 37mm (2.5" x 1.5")
Weight: 170g (6.0 oz.)
Catalog No.: 20907 SMCP-FA 50mm f/1.7 w/o case
UPC Code: 027075030541



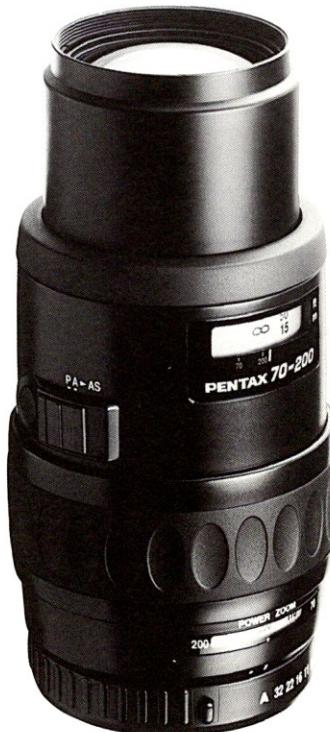
SMCP-FA Macro 50mm f/2.8

Minimum Aperture: 32
Lens Construction: 7 groups 8 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.195m (0.6 ft.)
Macro Magnification: 1.0x
Filter Size: 52mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 68mm x 70mm (2.7" x 2.8")
Weight: 385g (13.6 oz.)
Catalog No.: 28170 SMCP-FA Macro 50mm f/2.8 w/case
UPC Code: 027075031340



SMCP-FA Zoom 70mm-200mm f/4-5.6

Minimum Aperture: 32-45
Lens Construction: 8 groups 10 elements
Angle of View: 34.5°-12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.1m (3.6 ft.)
Macro Magnification: 0.25x
Filter Size: 49mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 73mm x 116.5mm (2.9" x 4.6")
Weight: 465g (16.4 oz.)
Catalog No.: 27427 SMCP-FA Zoom 70-200mm f/4-5.6 w/o case
UPC Code: 027075030633

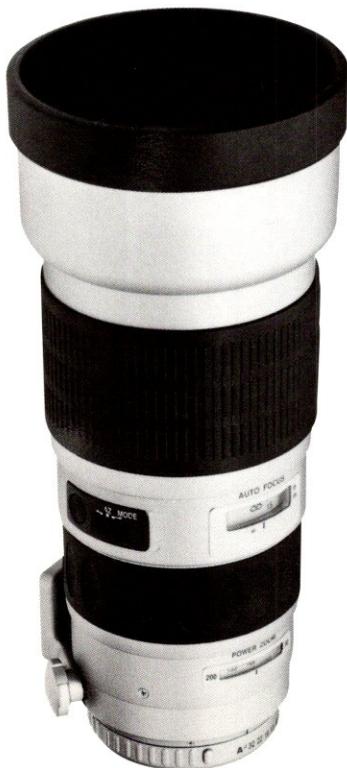


PENTAX

FA-Series Auto Focus Lenses

SMCP-FA* Zoom 80mm-200mm f/2.8 ED(IF)

Minimum Aperture: 32
Lens Construction: 13 groups 16 elements
Angle of View: 30.5°-12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.4m (4.6 ft.)
Macro Magnification: 0.19x
Filter Size: 77mm
Lens Hood: PH-RBC77 (Supplied w/lens)
Lens Case: S120-230 (Supplied w/lens)
Maximum Diameter & Length:
87.3mm x 191.5mm (104.5" x 237.5" w/hood)
3.4" x 7.5" (4.1" x 9.4" w/hood)
Weight: 1,507g (52.7 oz.) w/hood,
1,591g (55.7 oz.) w/tripod mount
Tripod Mount: yes
Front Case Size: None Available
Catalog No.: 27590 SMCP-FA* Zoom
80-200mm f/2.8 ED(IF) w/case
UPC Code: 027075036734



SMCP-FA Zoom 80-320mm f/4.5-5.6

Minimum Aperture: 32
Lens Construction: 10 groups 13 elements
Angle of View: 30.5°- 7.7°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.5m (4.9 ft.)
Maximum Magnification (Macro Range):
0.28x
Filter Size: 58mm
Lens Hood: RH-A58
Lens Case: S80-160
Photometric Method: TTL open-aperture
metering
Maximum Diameter & Length:
73.5mm x 129mm (2.9" x 5.1")
Weight: 550g (19.4 oz.)
Catalog No.: 27607 SMCP-FA Zoom
80-320mm f/4.5-5.6
UPC Code: 027075042261



SMCP-FA* 85mm f/1.4 (IF)

Minimum Aperture: 22
Lens Construction: 7 groups 8 elements
Angle of View: 28.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.85m (2.8 ft.)
Maximum Magnification (Macro Range):
0.10
Filter Size: 67mm
Lens Hood: Exclusive- supplied w/lens
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
78.9mm x 70mm (3.1" x 2.8")
Weight: 549.5g (17.7 oz.) w/o hood
678.5g (21.8 oz.) w/hood
Catalog No.: 23080 SMCPA-FA 85mm
f/1.4 (IF) with case
UPC Code: 027075033443



PENTAX

FA-Series Auto Focus Lenses

SMCP-FA Soft 85mm f/2.8

Minimum Aperture: 32
Lens Construction: 4 groups 5 elements
Angle of View: 28.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.5m (1.6 ft.)
Macro Magnification: 0.25x
Filter Size: 52mm
Lens Hood: MH-RB52
Lens Case: S80-120
Maximum Diameter & Length:
66mm x 60mm
Weight: 305g
Catalog No.: 23190 SMCP-FA
85mm Soft f/2.8
UPC Code: 027075038974



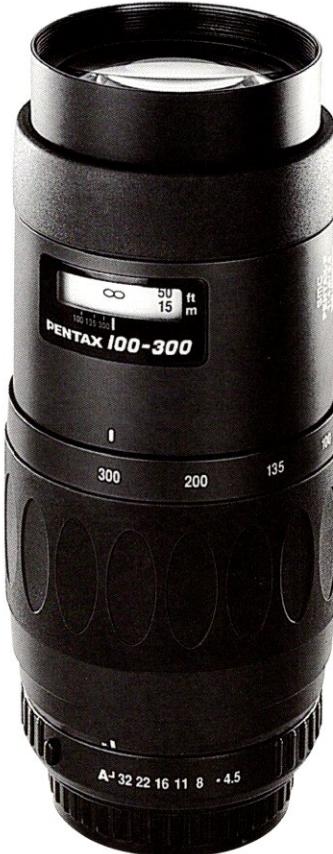
SMCP-FA Macro 100mm f/2.8

Minimum Aperture: 32
Lens Construction: 8 groups 9 elements
Angle of View: 24.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.306m (1.0 ft.)
Macro Magnification: 1.0x
Filter Size: 58mm
Lens Hood: See Chart in 35mm
Accessories Section
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
74mm x 103.5mm (2.9" x 4.0")
Weight: 600g (21.2 oz.)
Catalog No.: 28930 SMCP-FA Macro 100mm
f/2.8 w/case
UPC Code: 027075031350



SMCP-FA Zoom 100mm-300mm f/4.5-f/5.6

Minimum Aperture: 32-38
Lens Construction: 8 groups 12 elements
Angle of View: 24.5°-8.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.5m (4.9 ft.)
Macro Magnification: 0.25x
Filter Size: 58mm
Lens Hood: See Chart in 35mm
Accessories Section
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
73mm x 145.5mm (2.9" x 5.7")
Weight: 605g (21.3 oz.)
Catalog No.: 27927 SMCP-FA Zoom
100-300mm f/4.5-f/5.6 w/o case
UPC Code: 027075032019

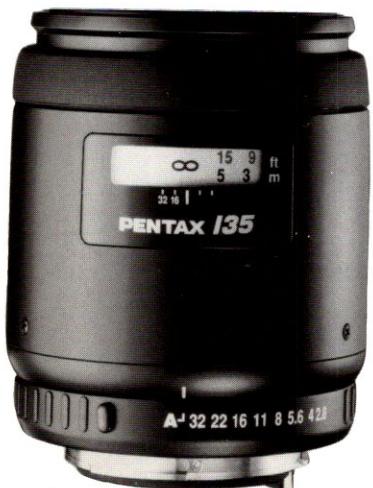


PENTAX

FA-Series Auto Focus Lenses

SMCP-FA 135mm f/2.8 (IF)

Minimum Aperture: 22
Lens Construction: 7 groups 8 elements
Angle of View: 18°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.7m (2.3 ft.)
Filter Size: 52mm
Lens Hood: Built-in
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
65mm x 80mm (2.5" x 3.1")
Weight: 375g (13.2 oz.)
Catalog No.: 23427 SMCP-FA 135mm
f/2.8 (IF) w/o case
UPC Code: 027075030572



SMCP-FA* 200mm f/2.8 ED (IF)

Minimum Aperture: 32
Lens Construction: 8 groups 9 elements
Angle of View: 12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.2m (4.7 ft.)
Maximum Magnification (Macro Range):
0.14
Filter Size: 77mm
Lens Hood: Exclusive- supplied w/lens
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
82.5mm x 134mm (3.2" x 5.3")
Weight: 783g (25.2 oz.) w/o hood
900g (28.9 oz.) w/hood
Catalog No.: 24140 SMCPA-FA 200mm
f/2.8 ED (IF) with case
UPC Code: 027075033481



SMCP-FA Zoom 250mm-600mm f/5.6 ED (IF)

Minimum Aperture: 32
Lens Construction: 16 groups 18 elements
Angle of View: 9.9°-4.1°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 3.5m (11.5 ft.)
Macro Magnification: 0.2x
Filter Size: 43mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive
Maximum Diameter & Length:
134mm x 442mm (5.3" x 17.4")
Weight: 5050g (178.1 oz.)
Catalog No.: 27910 SMCP-FA Zoom
250-600mm f/5.6 ED (IF) w/case and
tripod mount
UPC Code: 027075031524



PENTAX

FA-Series Auto Focus Lenses

SMCP-FA* 300mm f/2.8 2.8 ED(IF)

Minimum Aperture: 32
Lens Construction: 7 groups 10 elements
Angle of View: 8.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 2m (6.6 ft.)
Macro Magnification: 0.17x
Filter Size: Front-112 Inner-43 (Exclusive)
Lens Hood: Built-in
Lens Case: Exclusive (Supplied w/lens)
Maximum Diameter & Length:
123mm x 256mm (135 x 340 w/hood)
4.8" x 10" (5.3" x 13.4" w/hood)
Weight: 2,680g (93.8 oz.) w/hood,
2,980g (104.3 oz.) w/tripod mount
Tripod Mount: yes
Front Case Size: None Available
Catalog No.: 24370 SMCP-FA*
300mm f/2.8 ED(IF) w/case
UPC Code: 027075036703



SMCP-FA 300mm f/4.5 ED (IF)

Minimum Aperture: 22
Lens Construction: 7 groups 9 elements
Angle of View: 8.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 2.0m (6.6 ft.)
Filter Size: 67mm
Lens Hood: Exclusive- supplied w/lens
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
72.5mm x 160mm (2.9" x 6.3")
Weight: 935g (33 oz.)
Catalog No.: 24400 SMCP-FA 300mm
f/4.5 ED (IF) w/case and hood
UPC Code: 027075031548



SMCP-FA* 400mm f/5.6 ED (IF)

Minimum Aperture: 45
Lens Construction: 8 groups 9 elements
Angle of View: 6.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 2.0m (6.5 ft.)
Macro Magnification: 0.16x
Filter Size: 77mm
Lens Hood: Exclusive- supplied w/lens
Lens Case: 33928 S110-230
Maximum Diameter & Length: 3.8" x 10.4"
w/hood
Front Case Size: None
Weight: 40.2 oz.
Catalog No.: 24580 SMCP-FA
400mm f/5.6 ED (IF) w/case
UPC Code: 027075041134



PENTAX

FA-Series
Auto Focus Lenses

**SMCP-FA
600mm f/4
ED (IF)**

Minimum Aperture: 32
Lens Construction: 7 groups 9 elements
Angle of View: 4.1°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 5.0m (16.4 ft.)
Filter Size: 43mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive
Maximum Diameter & Length:
176mm x 456.5mm (6.9" x 18")
Weight: 6450g (227.5 oz.)
Catalog No.: 24870 SMCP-FA 600m f/4 ED
(IF) w/case and tripod mount
UPC Code: 027075031531



PENTAX

F-Series Auto Focus Lenses

SMC Pentax-F Fish-Eye Zoom 17mm-28mm f/3.5-4.5

Mount: Pentax KAF Mount
Lens Construction: 7 groups 9 elements
Angle of View: 180°- 90°
Diaphragm: Fully Automatic
Minimum Aperture: 22
Minimum Focusing Distance: 0.45m (1.48 ft.)
Maximum Magnification: 0.07x
Maximum Diameter & Length:
65mm x 61mm (2.54" x 2.38")
Weight: 255g (8.93 oz.)
Catalog No.: 27000
UPC Code: 027075038561



SMCP-F Zoom 24mm-50mm f/4

Minimum Aperture: 22
Lens Construction: 10 groups 11 elements
Angle of View: 84°-47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.4m (1.3 ft.)
Filter Size: 58mm
Lens Hood: See Chart in 35mm
Accessories Section
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
69.5mm x 67mm (2.7" x 2.6")
Weight: 380g (13.4 oz.)
Catalog No.: 27007 SMCP-F Zoom
24-50mm f/4 w/o case
UPC Code: 027075023260



SMCP-F Zoom 35mm-80mm f/4-5.6

Minimum Aperture: 22
Lens Construction: 6 groups 7 elements
Angle of View: 63°-30.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.4m (1.3 ft.)
Filter Size: 49mm
Lens Hood: RH-RA49mm (optional)
Lens Case: S80-80 (optional)
Maximum Diameter & Length:
65mm x 58.2mm (2.5" x 2.3")
Weight: 185g (6.5 oz.)
Tripod Mount: no
Front Case Size: PZ-1 M
PZ-20/10 S
P-30T P-S
K-1000 Standard
Case
Catalog No.: 27179 SMCP-F Zoom
35-80mm f/4-5.6 w/o case
UPC Code: 027075034655



PENTAX

F-Series Auto Focus Lenses

SMCP-F Zoom 80mm-200mm f/4.7-5.6

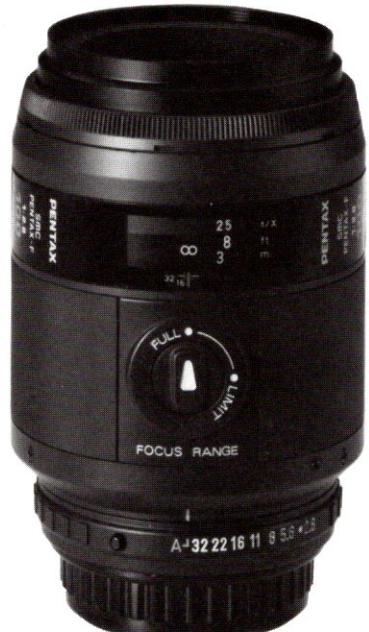
Minimum Aperture: 32
Lens Construction: 7 groups 11 elements
Angle of View: 30.5°-12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.1m (3.6 ft.)
Maximum Magnification: 0.25x
Filter Size: 49mm
Lens Hood: RH-RB49mm (optional)
Lens Case: S80-120 (optional)
Maximum Diameter & Length:
65mm x 99.4mm (2.5" x 3.9")
Weight: 295g (10.4 oz.)
Tripod Mount: no
Front Case Size: PZ-1 L
PZ-20/10 L
P-30T L2
K-1000 N/A

Catalog No.: 27567 SMCP-F Zoom
80-200mm f/4.7-5.6 w/o case
UPC Code: 027075036246



SMCP-F Macro 100mm f/2.8

Minimum Aperture: 32
Lens Construction: 8 groups 9 elements
Angle of View: 24.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.306m (1.0 ft.)
Maximum Magnification: 1.0x
Filter Size: 58mm
Lens Hood: Not Needed
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
74mm x 103.5mm (2.9" x 4.0")
Weight: 590g (20.8 oz.)
Catalog No.: 28990 SMCP-F Macro 100mm
f/2.8 w/case
UPC Code: 027075023253



SMCP-F Zoom 100mm-300mm f/4.5-5.6

Minimum Aperture: 32
Lens Construction: 8 groups 12 elements
Angle of View: 24.5°-8.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.5m (4.9 ft.)
Maximum Magnification: 0.25x
Filter Size: 58mm
Lens Case: S80-160
Maximum Diameter & Length:
71.5mm x 154.5mm (2.8" x 6")
Weight: 605g (21.18 oz.)
Catalog No.: 27931
SMCP-F Zoom 100-300mm
UPC Code: 027075039032



PENTAX

F-Series **Auto Focus Lenses**

SMCP-F* Zoom 250mm-600mm f/5.6 ED(IF)

Minimum Aperture: 32
Lens Construction: 15 groups 17 elements
Angle of View: 9.9°-4.1°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 3.5m (11.5 ft.)
Filter Size: 43mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
149mm x 439mm (5.9" x 17.3")
Weight: 5,400g (190 oz.)
Catalog No.: 27900 SMCP-F* Zoom
250-600mm f/5.6 ED(IF) w/case
UPC Code: 027075025714



PENTAX

A-Series Manual Focus Lenses

SMCP-A 15mm f/3.5

Minimum Aperture: 22
Lens Construction: 12 groups 13 elements
Angle of View: 111°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.3m (1.0 ft.)
Filter Size: Built-in; UV, Y2, O2, Skylight
Lens Hood: N/A
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
80mm x 81.5mm (3.1" x 3.2")
Weight: 595g (20.9 oz.)
Catalog No.: 22010 SMCP-A 15mm f/3.5
w/case
UPC Code: 027075001589



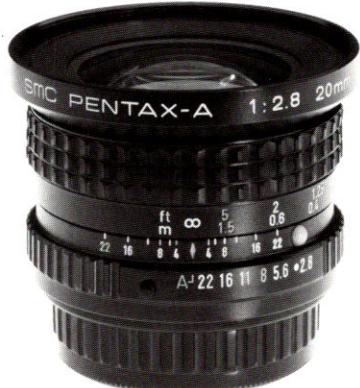
SMCP-A Fish-Eye 16mm f/2.8

Minimum Aperture: 22
Lens Construction: 7 groups 9 elements
Angle of View: 180°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.2m (0.7 ft.)
Filter Size: Built-in; Skylight, Y2, O2 w/gelatin
filter clip at rear
Lens Hood: N/A
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
65mm x 56mm (2.6" x 2.2")
Weight: 320g (11.3 oz.)
Catalog No.: 21300 SMCP-A Fish-Eye 16mm
f/2.8 w/case
UPC Code: 027075001565



SMCP-A 20mm f/2.8

Minimum Aperture: 22
Lens Construction: 9 groups 10 elements
Angle of View: 94°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.25m (0.8 ft.)
Filter Size: 67mm
Lens Hood: See Chart in 35mm
Accessories Section
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
70mm x 43.5mm (2.8" x 1.7")
Weight: 245g (8.6 oz.)
Catalog No.: 22875 SMCP-A 20mm f/2.8
w/case
UPC Code: 027075033344

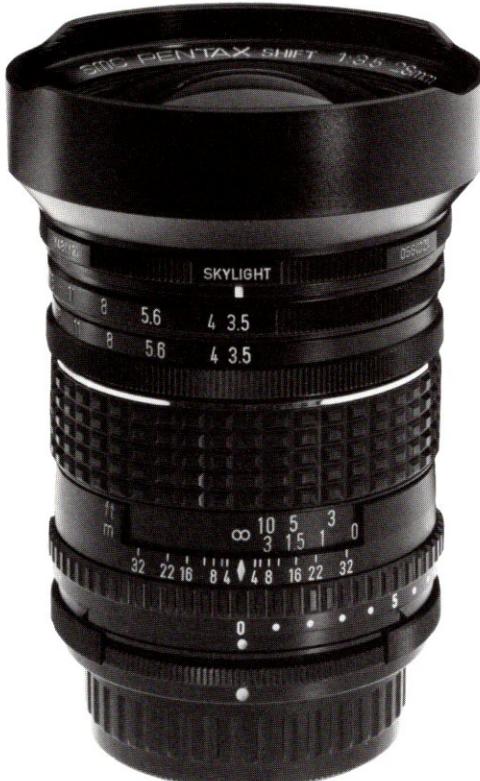


PENTAX

A-Series Manual Focus Lenses

SMCP Shift 28mm f/3.5

Minimum Aperture: 32
Lens Construction: 11 groups 12 elements
Angle of View: 75°
Diaphragm: Manual
Minimum Focusing Distance: 0.3m (1.0 ft.)
Maximum Shift: 11mm; Click-Stops at one millimeter intervals
Lens Rotation: 360°; Click-Stops at 30° intervals
Filter Size: Built-in, Y2, O2, Skylight w/gelatin filter clip at rear
Lens Hood: N/A
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 80mm x 92.5mm (3.1" x 3.6")
Weight: 610g (21.5 oz.)
Catalog No.: 22561 SMCP Shift 28mm f/3.5 w/case
UPC Code: 027075001640



SMCP-A Zoom 35mm-80mm f/4-5.6

Minimum Aperture: 22
Lens Construction: 6 groups 7 elements
Angle of View: 63-30.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.4m (1.3 ft.)
Macro Magnification: 0.25x
Filter Size: 49mm
Lens Hood: RH-RA49mm (optional)
Lens Case: S80-120 (optional)
Maximum Diameter & Length: 65mm x 58.2 mm (2.5" x 2.3")
Weight: 185g (6.5 oz.)
Tripod Mount: no
Front Case Size: PZ-1 M
PZ-20/10 S
P-30T P-S
K-1000 Standard
Case
Catalog No.: 27174 SMCP-A Zoom 35mm-80mm f/4-5.6 w/o case
UPC Code: 027075036468



SMCP-A 50mm f/1.2

Minimum Aperture: 22
Lens Construction: 6 groups 7 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 52mm
Lens Hood: See Chart in 35mm Accessories Section
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length: 64.5mm x 47.5mm (2.5" x 1.9")
Weight: 345g (12.1 oz.)
Catalog No.: 20987 SMCP-A 50mm f/1.2 w/o case
UPC Code: 027075001503



PENTAX

A-Series Manual Focus Lenses

SMCP-A 50mm f/2

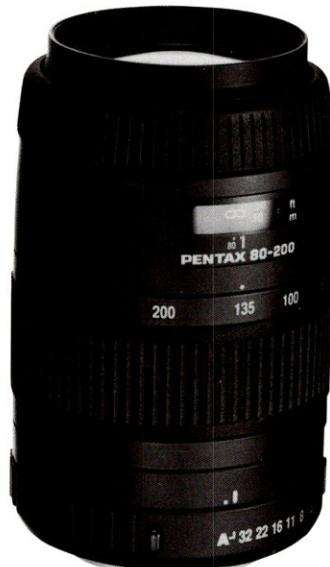
Minimum Aperture: 22
Lens Construction: 5 groups 5 elements
Angle of View: 47°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 49mm
Lens Hood: See Chart in 35mm
Accessories Section
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
63mm x 31mm (2.5" x 1.2")
Weight: 145g (5.1 oz.)
Catalog No.: 20697 SMCP-A 50mm f/2
w/o case
UPC Code: 027075206977



SMCP-F Zoom 80mm-200mm f/4.7-5.6

Minimum Aperture: 32
Lens Construction: 7 groups 11 elements
Angle of View: 30.5-12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.1m (3.6 ft.)
Macro Magnification: 0.25x
Filter Size: 49mm
Lens Hood: RH-RB49mm (optional)
Lens Case: S80-120 (optional)
Maximum Diameter & Length:
65mm x 99.4mm (2.5" x 3.9")
Weight: 295g (10.4 oz.)
Tripod Mount: no
Front Case Size: PZ-1 L
PZ-20/10 L
P-30T L2
K-1000 N/A

Catalog No.: 27567 SMCP-F Zoom
80mm-200mm f/4.7-5.6 w/o case
UPC Code: 027075036246



SMCP-A* 200mm f/2.8 ED

Minimum Aperture: 32
Lens Construction: 6 groups 6 elements
Angle of View: 12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.8m (5.9 ft.)
Filter Size: 77mm
Lens Hood: Built-in
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
91mm x 137.5mm (3.6" x 5.4")
Weight: 850g (29.9 oz.)
Catalog No.: 24135 SMCP-A* 200mm f/2.8
ED w/case
UPC Code: 027075033351



PENTAX

A-Series Manual Focus Lenses

SMCP-A Macro 200mm f/4.0 ED

Minimum Aperture: 32
Lens Construction: 9 groups 10 elements
Angle of View: 12.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.8 ft.
Macro Magnification: 1.0x
Filter Size: 58mm
Lens Hood: Built-in
Lens Case: 33895
Maximum Diameter & Length:
70.5mm x 145mm
Front Case Size: None Available
Weight: 31.6 oz.
Catalog No.: 28805 SMCP-A* Macro 200mm
f/4.0 ED w/case
UPC Code: 027075033368



SMCP-A* 300mm f/2.8 ED(IF)

Minimum Aperture: 32
Lens Construction: 8 groups 8 elements
Angle of View: 8.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 3.0m (9.8 ft.)
Filter Size: 49mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
133mm x 236mm (5.2" x 9.3")
Weight: 2,970g (104.8 oz.)
Catalog No.: 24380 SMCP-A* 300mm f/2.8
ED(IF) w/case
UPC Code: 027075002050



SMCP-A* 400mm f/2.8 ED(IF)

Minimum Aperture: 32
Lens Construction: 8 groups 8 elements
Angle of View: 6.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 4.0m (13.1 ft.)
Filter Size: 49mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
164mm x 325mm (6.5" x 12.8")
Weight: 6,000g (211.6 oz.)
Catalog No.: 24590 SMCP-A* 400mm f/2.8
ED(IF) w/case
UPC Code: 027075002111

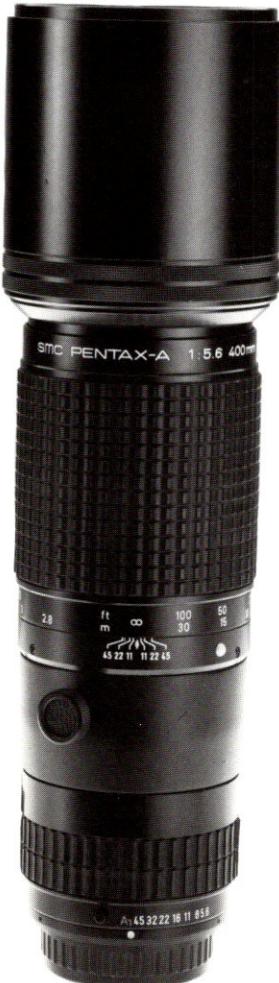


PENTAX

A-Series Manual Focus Lenses

SMCP-A 400mm f/5.6

Minimum Aperture: 45
Lens Construction: 6 groups 7 elements
Angle of View: 6.2°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 2.8m (9.2 ft.)
Filter Size: 77mm
Lens Hood: Built-in
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
85mm x 277mm (3.3" x 10.9")
Weight: 1,240g (43.7 oz.)
Catalog No.: 24570 SMCP-A 400mm f/5.6
w/case
UPC Code: 027075002098



SMCP **Reflex** Zoom 400mm f/8-600mm f/12

Minimum Aperture: -
Lens Construction: 7 groups 12 elements
Angle of View: 6.2°- 4.1°
Diaphragm: ND (controlled by neutral density filters)
Minimum Focusing Distance: 3m (9.8 ft.)
Filter Size: 67mm front-Exclusive 40.5mm rear mount filters; (normal, sky, Y8, R60, ND 2x, 2.8x, 4x)
Lens Hood: Exclusive-supplied with Lens
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
82mm x 108mm (3.2" x 4.3")
Weight: 730g (25.7 oz.)
Catalog No.: 27940 SMCP Reflex Zoom 400mm f/8-600mm f/12 w/hood, seven 40.5mm filters, & case
UPC Code: 027075002883



SMCP 500mm f/4.5

Minimum Aperture: 45
Lens Construction: 4 groups 4 elements
Angle of View: 5°
Diaphragm: Manual
Minimum Focusing Distance: 10m (32.8 ft.)
Filter Size: 52mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm
Accessories Section
Maximum Diameter & Length:
126.5mm x 440mm (4.9" x 17.3")
Weight: 3,370g (118.9 oz.)
Catalog No.: 24740 SMCP 500mm f/4.5
w/case
UPC Code: 027075002135



PENTAX

A-Series Manual Focus Lenses

SMCP-A 600mm f/5.6 ED (IF)

Minimum Aperture: 45
Lens Construction: 6 groups 8 elements
Angle of View: 4.1°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 18 ft.
Macro Magnification: .12x
Filter Size: 49mm (rear)
Lens Hood: Built-in
Lens Case: 33871 Trunk Case
Maximum Diameter & Length:
133mm x 386mm
Front Case Size: None
Weight: 115.7 oz.
Catalog No.: 24890 SMCP-A* 600mm
f/5.6 ED (IF)
UPC Code: 027075002159



SMCP Reflex 1000mm f/11

Minimum Aperture: -
Lens Construction: 6 groups 8 elements
Angle of View: 2.5°
Diaphragm: ND (controlled by neutral density filters)
Minimum Focusing Distance: 8m (26.2 ft.)
Filter Size: 52mm (rear) & Built-in; ND x1, x2.8, x2, x4 & Skylight, Y2, R2
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length:
119mm x 248mm (4.7" x 9.8")
Weight: 2,300g (81.1 oz.)
Catalog No.: 24960 SMCP Reflex 1000mm
f/11 w/case
UPC Code: 027075002197



SMCP-A* 1200mm f/8 ED(IF)

Minimum Aperture: 45
Lens Construction: 8 groups 9 elements
Angle of View: 2.1°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 8m (26.2 ft.)
Filter Size: 49mm (rear)
Lens Hood: Built-in
Lens Case: See Chart in 35mm Accessories Section
Maximum Diameter & Length:
170mm x 684mm (6.7" x 26.9")
Weight: 8,580g (302.6 oz.)
Catalog No.: 24970 SMCP-A* 1200mm f/8
ED(IF) w/case
UPC Code: 027075002210



PENTAX

A-Series

Manual Focus Lenses

SMCP Reflex

2000mm f/13.5

Minimum Aperture: -

Lens Construction: 6 groups 8 elements

Angle of View: 1.2°

Diaphragm: ND (controlled by neutral density filters)

Minimum Focusing Distance: 20m (65.6 ft.)

Filter Size: 52mm (rear) & Built-in; ND x1, x2.8, x2, x4 & Skylight, Y2, R2

Lens Hood: Built-in

Lens Case: See Chart in 35mm Accessories Section

Maximum Diameter & Length:

180mm x 530mm (7.0" x 20.8")

Weight: 8,000g (282.2 oz.)

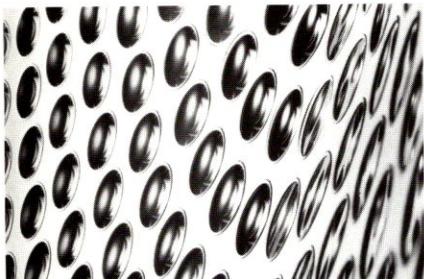
Catalog No.: 24980 SMCP Reflex 2000mm f/13.5 w/case

UPC Code: 027075002234

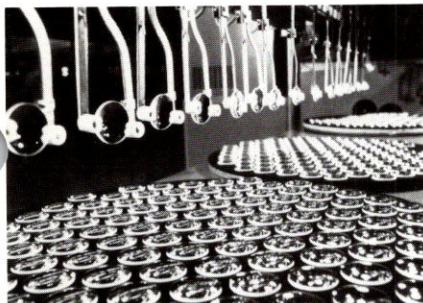


SMC Lenses (Super-Multi-Coated)

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



Lenses undergoing Super-Multi-Coating process.

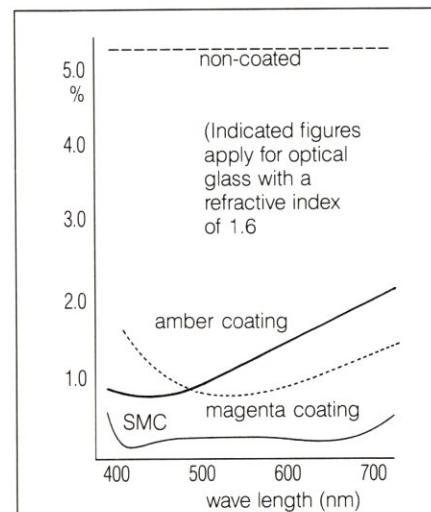


A Guide to Super-Multi-Coating

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

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

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



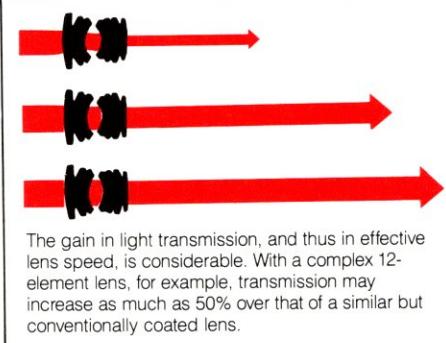
Reduction of transmitted light

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

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

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

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



The gain in light transmission, and thus in effective lens speed, is considerable. With a complex 12-element lens, for example, transmission may increase as much as 50% over that of a similar but conventionally coated lens.

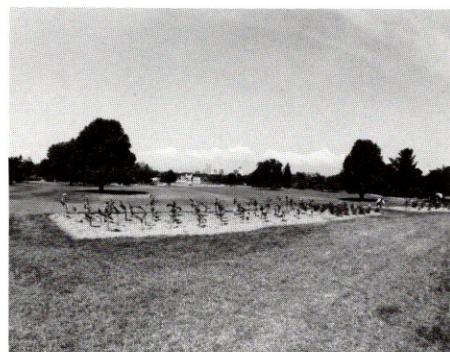
The full 7 layers of super multi-coating has been applied to most glass surfaces within the lens. SMC has also been applied even to those glass surfaces which are thereafter cemented together.

With the Pentax SMC lenses, even slight reflections are minimized. Pictures are sharper; color rendition is excellent; more detail is retained; and the reproduction of black tones—often a problem—is strikingly successful.

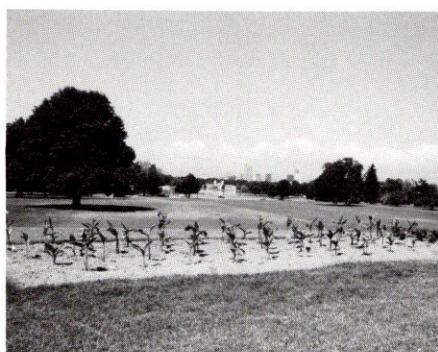
PENTAX

SMC Lenses (Super-Multi-Coated)

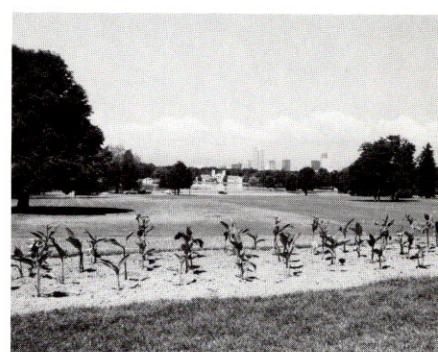
Change in Angle of View of SMC Pentax Lenses



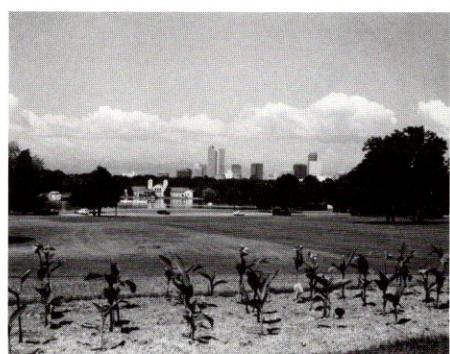
16mm



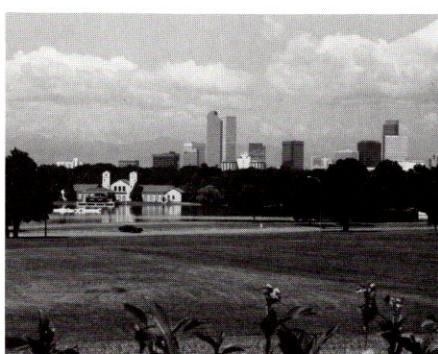
24mm



35mm



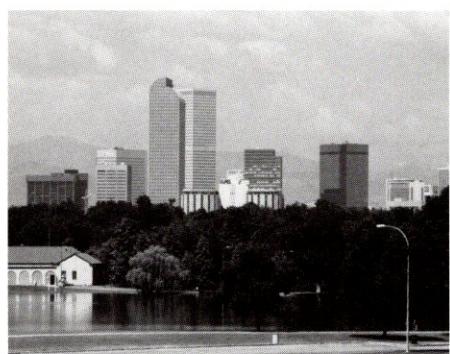
50mm



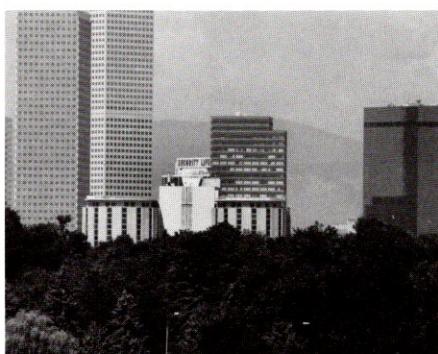
85mm



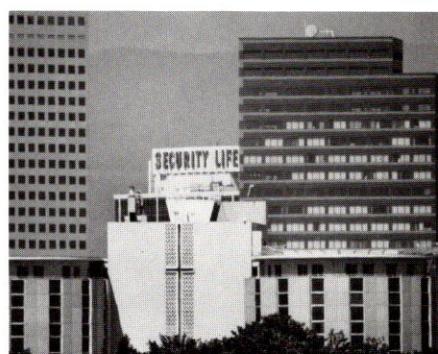
135mm



200mm



400mm



1000mm

PENTAX

Bellows

Bayonet Lens

SMCP Bellows 100mm f/4

Minimum Aperture: 32

Lens Construction: 3 groups 5 elements

Angle of View: 24.5°

Diaphragm: Fully Automatic/Manual

Minimum Focusing Distance: —

Filter Size: 52mm

Lens Hood: See Chart in 35mm

Accessories Section

Lens Case: See Chart in 35mm

Accessories Section

Maximum Diameter & Length: 60mm x 40mm (2.4" x 1.6")

Weight: 185g (6.5 oz)

Catalog No.: 28240 SMCP Bellows 100mm f/4 w/hood & case

SMC Pentax Bellows 100mm f/4

The ideal macro lens

You will find the 100mm focal length ideal for macrophotography. There is no fear of casting a shadow on the subject or frightening insects away because of the close proximity of the lens. Moreover, the increased distance between the camera and subject simplify the setting up of lights. You will also enjoy the pleasing perspective obtained from a 100mm lens. Finally, to ensure that you have ample depth of field in your close-ups, the SMC Pentax Bellows lens is provided with a minimum aperture of f/32. Uses 52mm filters.

Instant adjustments possible

As the SMC Pentax Bellows lens is focused, the bellows-extension is automatically indicated on the Pentax bellows scale. It is therefore possible, by referring to the table shown below, to instantly set the bellows and lens to the proper position to fill the frame with the subject, such as a stamp. The subject-to-film distance and exposure factor for the same subject are also indicated. The bellows and lens can also be preset for any magnification desired.



A bellows unit such as this Pentax Auto Bellows (A) shown above is required to focus this SMC Pentax Bellows Lens.

Magnification	Bellows Extension	Area Covered	Subject-to-film Distance	Exposure Factor
0.02	40mm	1797.1x1198.1mm	518.7cm	x1.0
0.12	50	299.5x 199.7	104.4	x1.3
0.22	60	163.4x 108.9	67.6	x1.6
0.32	70	112.3x 74.9	54.5	x1.9
0.42	80	85.6x 57.1	48.1	x2.2
0.52	90	69.1x 46.1	44.5	x2.6
0.62	100	58.0x 38.6	42.4	x2.9
0.72	110	49.9x 33.3	41.2	x3.4
0.82	120	43.8x 29.2	40.5	x3.8
0.92	130	39.1x 26.0	40.2	x4.3
1.02	140	35.2x 23.5	40.1	x4.8
1.12	150	32.1x 21.4	40.2	x5.3
1.22	160	29.5x 19.6	40.5	x5.8
1.32	170	27.2x 18.2	40.9	x6.4
1.42	180	25.3x 16.9	41.4	x7.0
1.52	190	23.6x 15.8	41.9	x7.6
1.62	200	22.2x 14.8	42.5	x8.3

PENTAX

SMC-A Rear Converters



SMC-A Rear Converter 1.4XL

Lens Construction: 5 groups 5 elements
Diameter & Length: 65.5mm x 28.5mm (2.6" x 1.1")
Weight: 175g (6.2 oz)
Case: HB-90
Usable Lenses: See Chart
Catalog No: 30943 SMC-A Rear Converter 1.4XL

SMC-A Rear Converter 2.0XL

Lens Construction: 5 groups 6 elements
Diameter & Length: 65.5mm x 63mm (2.6" x 2.5")
Weight: 255g (9 oz)
Case: HB-120
Usable Lenses: See Chart
Catalog No: 30945 SMC-A Rear Converter 2.0XL w/case

SMC-A Rear Converter 1.4XS

Lens Construction: 4 groups 5 elements
Diameter & Length: 64.5mm x 21.5mm (2.5" x 0.8")
Weight: 145g (5.1 oz)
Case: HB-90
Usable Lenses: See Chart
Catalog No: 30942 SMC-A Rear Converter 1.4XS w/case

SMC-A Rear Converter 2.0XS

Lens Construction: 6 groups 7 elements
Diameter & Length: 64.5mm x 39mm (2.5" x 1.5")
Weight: 210g (7.4 oz)
Case: HB-90
Usable Lenses: See Chart
Catalog No: 30944 SMC-A Rear Converter 2.0XS w/case

Usable Lenses with Rear Converter-A

	1.4XS	2.0XS	1.4XL	2.0XL	1.4XS	2.0XS	1.4XL	2.0XL	
A-15/3.5	X	X	X	X	A*-600/5.6	X	O	O*	O*
A-16/2.8 FE	O	O	X	X	P-1000/8	X	O	O	O
A-20/2.8	O	O	X	X	P-1000/11	X	O	X	X
A-24/2.8	O	O	X	X	A*-1200/8	X	X	O	O
FA*-24/2	O	O	X	X	P-2000/13.5	X	O	X	X
A-28/2	O	O	X	X	A-24-50/4	O	O	X	X
A-28/2.8	O	O	X	X	F-24-50/4	O	O	X	X
F-28/2.8	O	O	X	X	A-28-80/3.5-4.5	O	O	X	X
FA-28/2.8	O	O	X	X	F-28-80/3.5-4.5	O	O	X	X
A-35/2	O	O	X	X	F-28-80/3.5-4.7	O	O	X	X
A-35/2.8	O	O	X	X	A-28-135/4	O	O	X	X
A-50/1.2	O	O	X	X	FA-28-105/4-5.6	O	O	X	X
A-50/1.4	O	O	X	X	A-35-70/4	O	O	X	X
F-50/1.4	O	O	X	X	A-35-70/3.5-4.5	O	O	X	X
FA-50/1.4	O	O	X	X	F-35-70/3.5-4.5	O	O	X	X
A-50/1.7	O	O	X	X	A-35-105/3.5	O	O	X	X
F-50/1.7	O	O	X	X	F-35-105/4-5.6	O	O	X	X
FA-50/1.7	O	O	X	X	A-35-135/3.5-4.5	O	O	X	X
A-50/2	O	O	X	X	F-35-135/3.5-4.5	O	O	X	X
A*-85/1.4	O	O	X	X	A-35-210/3.5-4.5	O	O	X	X
FA*-85/1.4	O	O	X	X	A-70-210/4	O	O	X	X
A-100/2.8	O	O	X	X	F-70-210/4-5.6	O	O	X	X
A*-135/1.8	O	O	X	X	FA-70-200/4-5.6	O	O	X	X
A-135/2.8	O	O	X	X	F-135-600/6.7	X	O	X	O
F-135/2.8	O	O	X	X	FA-100-300/4.5-5.6	O	O	X	X
FA-135/2.8	O	O	X	X	F*-250-600/5.6	X	X	O	O
A*-200/2.8	O	O	X	X	FA*-250-600/5.6	X	X	O	O
FA*-200/2.8	O	O	X	X	P-400-600/8-12	X	O	O	X
A-200/4	O	O	X	X	A-Macro 50/2.8	O	O	X	X
A*-300/2.8	O	O	O*	O*	F-Macro 50/2.8	O	O	X	X
A*-300/4	O	O	X	X	FA-Macro 50/2.8	O	O	X	X
F*-300/4.5	O	O	X	X	A-Macro 100/2.8	O	O	X	X
FA*-300/4.5	X	O	X	X	F-Macro 100/2.8	O	O	X	X
A*-400/2.8	X	O	O*	O*	FA-Macro 100/2.8	O	O	X	X
A-400/5.6	X	O	X	O	A-Macro 100/4	O	O	X	X
A-500/4.5	X	O	O	O	A-Macro 200/4	X	O	O	O
F*-600/4	X	O	O*	O*	A-Shift 28/3.5	O	O	X	X
FA*-600/4	X	X	O	O	A-Soft 85/2.2	O	O	O	O
					A-Bellows 100/4	O	O	X	X

O * - Better performance can be achieved

O - Usable

X - Not usable

Discontinued FA-Series Lenses

Type	Name of Lens	Minimum Aperture	Angle of View (Degrees)	Lens Construction (Groups-Elements)	Minimum Focusing Distance		Maximum Diameter & Minimum Length (mm/inches)	Weight		Filter Size (mm)
					m.	ft.		gr.	oz.	
ZOOM	SMC Pentax-FA Zoom 28-80mm f/3.5-4.7	32	75-30.5	8-8	0.4	1.3	71 x 83.5/2.8x3.3	380	13.3	58
	SMC Pentax-FA Zoom 100-300mm f/4.5-5.6	32-38	24.5-8.2	8-12	1.5	4.9	73 x 154.5/2.9x6	605	21.4	58

PENTAX

Discontinued F-Series Lenses

Type	Name of Lens	Minimum Aperture	Angle of View (Degrees)	Lens Construction (Groups-Elements)	Minimum Focusing Distance		Maximum Diameter & Minimum Length (mm/inches)	Weight		Filter Size (mm)
					m.	ft.		gr.	oz.	
STANDARD	SMC Pentax-F 50mm f/1.7	22	47	5-6	0.45	1.5	65 x 37 / 2.5 x 1.5	200	7	49
	SMC Pentax-F 50mm f/1.4	22	47	6-7	0.45	1.5	65 x 37 / 2.5 x 1.5	230	8.1	49
WIDE-ANGLE	SMC Pentax-F 28mm f/2.8	22	75	7-7	0.30	1.0	64 x 37 / 2.5 x 1.5	180	6.3	49
TELEPHOTO	SMC Pentax-F 135mm f/2.8	32	18	7-8	0.70	2.3	68 x 80 / 2.7 x 3.2	400	14	52
	SMC Pentax-F 300mm f/4.5 ED(IF)	32	8.2	7-9	2.00	6.6	84 x 160 / 3.3 x 6.3	880	31	67
	SMC Pentax-F 600mm f/4 ED(IF)	32	4.1	7-9	5.0	16.4	181 x 457 / 7.13 x 17.1	6830	239	43
SOFT	SMC Pentax-F 85mm f/2.8 Soft	32	28.5	4-5	0.5	1.7	66 x 60 / 2.6 x 2.3	300	10.6	52
MACRO	SMC Pentax-F Macro 50mm f/2.8	32	47	7-8	0.20	0.6	68 x 70 / 2.7 x 2.8	385	135	52
ZOOM	SMC Pentax-F Zoom 35-70mm f/3.5-4.5	22-32	63-34.5	8-8	0.32	1.0	67 x 50 / 2.6 x 1.1	235	8.2	49
	SMC Pentax-F Zoom 35-105mm f/4-5.6	22	63-23.4	12-14	0.42	1.4	72 x 71 / 2.8 x 2.7	345	12.1	58

PENTAX

Discontinued A-Series Lenses

Type	Name of Lens	Minimum Aperture	Angle of View (Degrees)	Lens Construction (Groups-Elements)	Minimum Focusing Distance		Maximum Diameter & Minimum Length (mm/inches)	Weight		Filter Size (mm)
					m.	ft.		gr.	oz.	
STANDARD	SMC Pentax-A 50mm f/1.7	22	47	5-6	0.45	1.5	63 x 31 / 2.5 x 1.2	165	5.8	49
	SMC Pentax-A 50mm f/1.4	22	47	6-7	0.45	1.5	63 x 37 / 2.5 x 1.5	235	8.3	49
WIDE-ANGLE	SMC Pentax-A 24mm f/2.8	22	84	8-9	0.25	0.8	63 x 41.5 / 2.5 x 1.6	205	7.2	52
	SMC Pentax-A 28mm f/2	22	75	7-8	0.30	1	63 x 41.5 / 2.5 x 1.6	215	7.5	49
	SMC Pentax-A 28mm f/2.8	22	75	7-7	0.30	1	63 x 36.5 / 2.5 x 1.4	170	6	49
	SMC Pentax-A 35mm f/2	22	63	7-7	0.30	1	63 x 41.5 / 2.5 x 1.6	205	7.2	49
	SMC Pentax-A 35mm f/2.8	22	63	6-6	0.30	1	63 x 36.5 / 2.5 x 1.4	170	6	49
TELEPHOTO	SMC Pentax-A* 85mm f/1.4	22	28.5	6-7	0.85	2.8	74 x 66 / 2.9 x 2.6	555	19.5	67
	SMC Pentax-A 100mm f/2.8	22	24.5	5-5	1	3.3	63 x 56 / 2.5 x 2.2	260	9.1	49
	SMC Pentax-A* 135mm f/1.8	22	18	6-7	1.2	3.9	80 x 97.5 / 3.1 x 3.8	865	30.5	77
	SMC Pentax-A 135mm f/2.8	32	18	4-4	1.2	3.9	65 x 76.5 / 2.6 x 3.0	340	11.9	52
	SMC Pentax-A 200mm f/4	32	12.5	6-6	1.9	6.2	63.5 x 111 / 2.5 x 4.4	410	14.5	52
	SMC Pentax-A* 300mm f/4	32	8.3	7-8	4	13.1	84.5 x 132 / 3.3 x 5.2	850	29.9	77
	SMC Pentax-A* 600mm f/5.6 ED(IF)	45	4.1	6-8	5.5	18	133 x 386 / 5.2 x 15.2	3,280	115.7	49R
MACRO	SMC Pentax-A Macro 50mm f/2.8	22	47	4-6	0.24	0.8	63 x 50 / 2.5 x 2	220	7.8	49
	SMC Pentax-A Macro 100mm f/2.8	22	24.5	7-7	0.31	1	74 x 93 / 2.9 x 3.7	505	17.8	49
	SMC Pentax-A Macro 100mm f/4	32	24.5	3-5	0.45	1.5	64.5 x 78 / 2.5 x 3.0	340	12	49
	SMC Pentax-A Macro 200mm f/4 ED	32	12.5	9-10	0.55	1.8	70.5 x 145 / 2.8 x 5.7	895	31.5	58
ZOOM	SMC Pentax-A 24-50mm f/4	22	84-47	10-11	0.40	1.3	64 x 67.5 / 2.5 x 2.7	375	13.2	58
	SMC Pentax-A 28-80mm f/3.5-4.5	22	75-30.5	9-12	0.40	1.3	63 x 75 / 2.5 x 3.0	355	12.5	58
	SMC Pentax-A 28-135mm f/4	22	75-18	15-17	1.7	5.6	80 x 112 / 3.1 x 4.4	820	28.9	77
	SMC Pentax-A 35-70mm f/4	22	63-34.5	7-7	0.25	0.8	65 x 62 / 2.6 x 2.4	330	11.6	58
	SMC Pentax-A 35-70mm f/3.5-4.5	22	63-34.5	8-8	0.70	2.3	66 x 55 / 2.6 x 2.2	265	9.3	49
	SMC Pentax-A 35-105mm f/3.5	22	63-23.5	13-15	1.5	4.9	70 x 97.5 / 2.8 x 3.8	615	21.7	67
	SMC Pentax-A 35-135mm f/3.5-4.5	22	63-18	12-16	1.6	5.2	63 x 91.5 / 2.5 x 3.6	450	15.9	58
	SMC Pentax-A 35-210mm f/3.5-4.5	22	63-11.8	14-17	1.6	5.2	70.4 x 125.7 / 2.8 x 4.9	775	27.3	67
	SMC Pentax-A 70-210mm f/3.5-4.5	32	34.5-12	10-13	1.2	3.9	72 x 149 / 2.8 x 5.9	680	24	58
SPECIAL	SMC Pentax soft 85mm f/2.2	5.6	28.5	1-2	0.57	1.9	72 x 51.5 / 2.8 x 2	235	8.3	49

PENTAX

Discontinued M-Series Bayonet Mount Lenses

Type	Name of Lens	Minimum Aperture	Angle of View (Degrees)	Lens Construction (Groups-Elements)	Diaphragm	Minimum Focusing Distance		Maximum Diameter & Minimum Length (mm/inches)	Weight		Filter Size (mm)
						m.	ft.		gr.	oz.	
FISH-EYE	SMC Pentax Fish Eye 17mm f/4	22	180	7-11	FA	0.2	0.66	64.5 x 34	234	8.19	BI
ULTRA-WIDE ANGLE	SMC Pentax 15mm f/3.5	22	111	12-13	FA	0.3	1	80 x 81.5	550	19.25	BI
	SMC Pentax 18mm f/3.5	22	100	11-12	FA	0.25	0.79	63 x 61.5	328	11.48	BI
	SMC Pentax-M 20mm f/4	22	94	8-8	FA	0.25	0.90	63 x 29.5	150	5.29	49
	SMC Pentax 24mm f/2.8	22	84	8-9	FA	0.25	0.79	63 x 41.5	195	6.88	52
WIDE-ANGLE	SMC Pentax-M 28mm f/2	22	75	7-8	FA	0.30	1	63 x 41.5	215	7.58	49
	SMC Pentax-M 28mm f/2.8	22	75	7-7	FA	0.30	1	63 x 31	156	5.50	49
	SMC Pentax 30mm f/2.8	22	72	7-7	FA	0.30	1	63 x 39.5	215	7.52	52
	SMC Pentax-M 35mm f/2	22	62	7-7	FA	0.30	1	63 x 42	206	7.27	49
	SMC Pentax-M 35mm f/2.8	22	62	6-6	FA	0.30	1	63 x 35.5	174	6.14	49
STANDARD	SMC Pentax-M 40mm f/2.8	22	56	4-5	FA	0.60	2	63 x 18	111	3.91	49
	SMC Pentax 50mm f/1.2	22	46	6-7	FA	0.45	1.5	65 x 48.5	391	13.79	52
	SMC Pentax-M 50mm f/1.4	22	46	6-7	FA	0.45	1.5	63 x 37	238	8.4	49
	SMC Pentax-M 50mm f/1.7	22	46	5-6	FA	0.45	1.5	63 x 31	185	6.53	49
TELEPHOTO	SMC Pentax-M 85mm f/2	22	29	4-5	FA	0.85	2.8	62.5 x 46	250	8.82	49
	SMC Pentax-M 100mm f/2.8	22	24.5	5-5	FA	1	3.3	62.5 x 55.7	224	7.90	49
	SMC Pentax-M 120mm f/2.8	32	21	5-5	FA	1.2	4	62.5 x 63	275	9.52	49
	SMC Pentax 135mm f/2.5	32	18	6-6	FA	1.5	5	67.5 x 85.9	483	17.04	58
	SMC Pentax-M 135mm f/3.5	32	18	5-5	FA	1.5	5	62.5 x 65.7	276	9.74	49
	SMC Pentax-M 150mm f/3.5	32	17	5-5	FA	1.8	6	62.5 x 75	290	10.23	49
	SMC Pentax 200mm f/2.5	32	12	6-6	FA	2	6.5	89 x 145	950	33.51	77
	SMC Pentax-M 200mm f/4	32	12	5-6	FA	2	6.5	63.5 x 111	400	14.11	52
ULTRA TELEPHOTO	SMC Pentax-M* 300mm f/4	32	8.3	7-8	FA	4	13	84 x 132	825	29.1	77
	SMC Pentax 300mm f/4	32	8	5-7	FA	4	13	85 x 188	1,020	35.98	77
	SMC Pentax-M 400mm f/5.6	45	6	5-5	FA	5	17	85 x 276.5	1,220	43.0	77
	SMC Pentax 1000mm f/8	45	2.5	5-5	MAN	30	98.4	143 x 738	5290	186.6	52R
ZOOM	SMC Pentax-M Zoom 24mm-35mm f/3.5	22	82.5-64.5	9-9	FA	0.5	2	64 x 48	290	10.23	58
	SMC Pentax-M Zoom 28mm f/3.5-50mm f/4.5	22	75-46	10-10	FA	0.6	2.1	65 x 52	315	11.11	52
	SMC Pentax-AF Zoom 35mm-70mm f/2.8	22	63-34.5	7-7	FA	1.2	4	73 x 76.5	580	20.46	67
	SMC Pentax-M Zoom 35mm f/2.8-70mm f/3.5	22	62-34.5	7-7	FA	1	3.5	67 x 76	470	16.58	67*
	SMC Pentax-M Zoom 40mm f/2.8-80mm f/4	22	57.2-30.9	7-7	FA	1.2	4	65.5 x 76	395	13.93	49
	SMC Pentax Zoom 45mm-125mm f/4	22	50.5-20	11-14	FA	1.5	5	69 x 127	612	21.42	67*
	SMC Pentax-M Zoom 75mm-150mm f/4	32	32.1-16.5	9-12	FA	1.2	4	63.5 x 111	465	16.40	49
	SMC Pentax-M Zoom 80mm-200mm f/4.5	32	30-12	12-15	FA	1.6	5.5	65 x 141.5	555	19.57	52
	SMC Pentax Zoom 135mm-600mm f/6.7	45	18-4.1	12-15	MAN	6	19.7	105 x 589	4070	143.6	52R
MACRO	SMC Pentax-M Macro 50mm f/4	32	46	3-4	FA	0.234	0.77	63 x 42.5	167	5.89	49
	SMC Pentax-M Macro 100mm f/4	32	24.5	3-5	FA	0.45	1.48	64.6 x 77.5	357	12.59	49

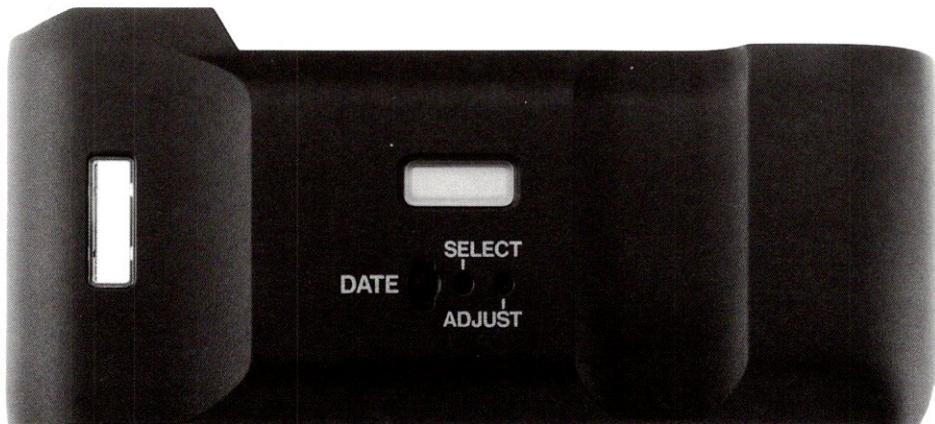
BI – Filters built-in FA – Fully Automatic M – Manual ND – ND Filters built-in

Note: Lens length does not include mount portion.

*Filter size with lens hood, 58mm without hood

PENTAX

ZX-50 Data Back FI



ZX-50 Data Back FI

The Pentax Data Back FI attaches to the ZX-50 camera and replaces the camera's back cover. It has five modes which allow the user to print selected data clearly on the film. The modes include year/month/day, day/month/year, month/day/year, day/hour/minute, and blank.

Specifications

Data Printout

7-segment, 6-digit liquid crystal display (LCD)

Printout Confirmation

" " indication blinks for a few seconds in LCD panel

Printout Position

On the lower right corner of the picture positioned horizontally

Character Size

Approx. 0.75(H) x 0.45(W) mm

Printing Modes

Year/month/day, day/month/year, month/day/year, day/hour/minute, and " _ _ " (blank).

Year (87~19) = 1987~2019

Month (1~12) = Jan.~Dec.

Day = 1~31

Hour = 0~23

Minute = 00~59

Film Speed

ISO 25-1600

Power Source

CR 2025 (lithium battery)

Number of Prints

Approx. 5,000

Size

139.5(W) x 58(H) x 21(W)mm
(5.5"(W) x 2.3"(H) x 0.8"(W))

Weight

63.0g (2.2oz.) without battery

Cat. No.

33928 ZX-50 Data Back FI

PENTAX

ZX-5, ZX-10, ZX-50, PZ-70 Data Back FG



ZX-5, ZX-10, ZX-50, PZ-70 Data Back FG

The Pentax Data Back FG attaches to the ZX-5, ZX-10, ZX-50 and PZ-70 camera and replaces the camera's back cover. It has five modes which allow the user to print selected data clearly on the film. The modes include year/month/day, day/month/year, month/day/year, day/hour/minute, and blank.

Specifications

Data Printout

7-segment, 6-digit liquid crystal display (LCD)

Printout Confirmation

"—" indication blinks for a few seconds in LCD panel

Printout Position

On the lower right corner of the picture positioned horizontally

Character Size

Approx. 0.75(H) x 0.45(W) mm

Printing Modes

Year/month/day, day/month/year, month/day/year, day/hour/minute, and "——" (blank).

Year (87~19) = 1987~2019

Month (1~12) = Jan.~Dec.

Day = 1~31

Hour = 0~23

Minute = 00~59

Film Speed

ISO 25-1600

Power Source

CR 2025 (lithium battery)

Number of Prints

Approx. 5,000

Size

139.5(W) x 58(H) x 21(W)mm
(5.5"(W) x 2.3"(H) x 0.8"(W))

Weight

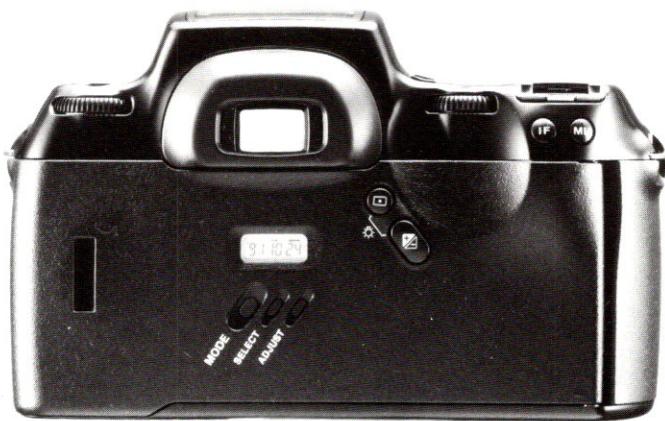
63.0g (2.2oz.) without battery

Cat. No.

37182 ZX-5, ZX-10, ZX-50, PZ-70 Data Back FG

PENTAX

PZ-1 Data Back FD



PZ-1 Data Back FD

The Pentax Data Back FD attaches to the PZ-1 camera and replaces the camera's back cover. It has five modes, which allow the user to print selected data clearly on the film. The modes include year/month/day, day/month/year, month/day/year, day/hour/minute and blank.

Specifications

Data Printout

7-segment, 6-digit liquid crystal display (LCD)

Printout Confirmation

"—" indication blinks for a few seconds in LCD panel

Printout Position

On the lower right corner of the picture positioned horizontally

Character Size

Approximately 0.75(H) x 0.45(W) mm

Printing Modes

Year/month/day, day/month/year,
month/day/year, day/hour/minute,
"— — —" (blank)

Year (87—19) = 1987—2019

Month (1—12) = Jan.—Dec.

Day = 1—31

Hour = 0—23

Minute = 00—59

Film Speed

ISO 25-1600

Power Source

CR 2025 (lithium battery)

Number of Prints

Approximately 5,000

Size

138(W) x 58.8(H) x 20(W)mm
5.4"(W) x 2.3"(H) x 0.8"(W)

Weight

58.3g (2.1 oz.) without battery

Cat. No.

37156 PZ-1 Data Back FD

PENTAX

PZ-10 Data Back FC

(discontinued item-for reference only)



PZ-10 Data Back FC

The PZ-10 Data Back FC is a special camera back which allows the user to record data on his/her photographs. Replacing the standard camera back, this data back has five modes: year/month/day, day/month/year, month/day/year, day/hour/minute and blank.

Specifications

Data Printout

7-segment, 6-digit liquid crystal display (LCD)

Printout Confirmation

"—" indication blinks for a few seconds in LCD panel

Printout Position

On the lower right corner of the picture positioned horizontally

Character Size

Approximately 0.75(H) x 0.45(W) mm

Printing Modes

Year/month/day, day/month/year,

month/day/year, day/hour/minute,

"— — —" (blank)

Year (87—19) = 1987—2019

Month (1—12) = Jan.—Dec.

Day = 1—31

Hour = 0—23

Minute = 00—59

Film Speed

ISO 25-1600

Power Source

CR 2025 (lithium battery)

Number of Prints

Approximately 5,000

Size

139.5(W) x 58(H) x 21(W)mm

5.5"(W) x 2.3"(H) x 0.8"(W)

Weight

63.0g (2.2 oz.) without battery

Cat. No.

37155 PZ-10 Data Back FC

PENTAX

PZ-10, PZ-20 Data Back FE



PZ-10, PZ-20 Data Back FE

The Pentax Data Back FE attaches to the PZ-10 and PZ-20 camera and replaces the camera's back cover. It has five modes which allow the user to print selected data clearly on the film. The modes include year/month/day, day/month/year, month/day/year, day/hour/minute, and blank.

Specifications

Data Printout

7-segment, 6-digit liquid crystal display (LCD)

Printout Confirmation

"—" indication blinks for a few seconds in LCD panel

Printout Position

On the lower right corner of the picture positioned horizontally

Character Size

Approx. 0.75(H) x 0.45(W) mm

Printing Modes

Year/month/day, day/month/year, month/day/year, day/hour/minute, and "—" (blank).

Year (87~19) = 1987~2019

Month (1~12) = Jan.~Dec.

Day = 1~31

Hour = 0~23

Minute = 00~59

Film Speed

ISO 25-1600

Power Source

CR 2025 (lithium battery)

Number of Prints

Approx. 5,000

Size

139.5(W) x 58(H) x 21(W)mm
(5.5"(W) x 2.3"(H) x 0.8"(W))

Weight

63.0g (2.2oz.) without battery

Cat. No.

37181 PZ-10, PZ-20 Data Back FE

PENTAX

SF Data Backs

• For SF1, SF10, SF1n

Interval Data Back F

The Pentax Interval Data Back F attaches to SF cameras and replaces the camera's back cover. It records on the film selected information such as date and time, and also controls the shutter release according to predesigned times and intervals. A simple pushbutton control makes data adjustment fast and easy. All pertinent information is clearly indicated in the external LCD window. The selected data is imprinted on the film by a seven-segment, six-digit LCD and an exposure lamp. The lamp's output is automatically adjusted according to the ISO film speed (ISO 25 to 1600) set on the camera.

Data recording modes

- (1) Date (year/month/day, month/day/year or day/month/year)
- (2) Time (day/hour/minute or AM-PM/hour/minute)
- (3) Six-digit number ("0" to "9" and blank)
- (4) One alphabet letter and two-digit count-up number
- (5) Blank (no data imprinted)

Interval shooting modes

- (1) Shooting start time (within a one-month period)
- (2) Interval length (from one second to 99 hours, 59 minutes and 59 seconds)
- (3) Frame number (from 1 to 99)
- (4) Long-time exposure (from one second to 99 hours)
- (5) Precharge signal

Power Source

Two 1.5V lithium or silver-oxide batteries with low battery level warning signaled by a flashing LCD display.

Specifications

Type

LCD date-recording system with interval timer function.

Connection to camera

Replaces the back cover without cord.

Usable camera

Pentax SF1

Recording data

- (1) Year/month/day.
- (2) Month/day/year.
- (3) Day/month/year.
- (4) Day (AM/PM)/hour/minute.
- (5) Six-digit random number ("0" to "9", "--" and blank).
- (6) One alphabet letter and two-digit count-up number.
- (7) One alphabet letter and two-digit count-down number.
- (8) OFF (no data imprinted).



Recording system

Printed on the back of film by seven-segment, six-digit LED and exposure lamp.

Recording exposure control

Automatic adjustment by ISO film speed (ISO 25 to 1600) set on camera.

Recording confirmation

By flashing "PRINT" indication in external LCD panel.

Interval timer function

- (1) Exposure start time (within a one-month period).
- (2) Interval length (from one second to 99 hours, 59 minutes and 59 seconds).
- (3) Number of exposures (from 1 to 99).
- (4) Length of long-time extended exposure (from one second to 99 hours, 59 minutes and 59 seconds).
- (5) Precharge signal (to start the charging of an external flash unit attached to the SF's hotshoe).

External indication

- (1) Year/month/day.
- (2) Month/day/year.
- (3) Day/month/year.
- (4) Day (AM/PM)/hour/minute.
- (5) Six-digit random number.
- (6) Two-digit count-up/-down number.
- (7) Exposure start time.
- (8) Interval length.
- (9) Number of exposures.
- (10) Length of long-time exposure.
- (11) Recording confirmation (PRINT).

Battery warning

By flashing the entire indicator.

Auto calendar function

Automatic adjustment of months and leap years from 1987 to 2085.

Clock accuracy

±20 sec./month (at 25°C temperature).

Power source

Two 1.5V alkaline or silver-oxide batteries.

Dimensions

144(W) x 57.5(H) x 25.5(D) mm (5.6" x 2.2" 1.0")

Weight

82g (without batteries). (2.9 oz.)

Cat. No.

37152 SF1 Interval Data Back F

PENTAX

SF Data Backs

• For SF1, SF10, SF1n



Data Back FB

Date or time prints automatically on each picture with the Data Back FB. It easily replaces the SF1n, SF10, and SF1 standard back cover. Date and time modes are set with buttons and viewed on the digital LCD display. An OFF mode prevents imprinting when desired.

Recording Modes:

- (1) Year/month/day.
- (2) Month/day/year.
- (3) Day/month/year.
- (4) Day (AM/PM)/hour/minute.
- (5) OFF (no data imprinted).

Recording Exposure Control

Automatic adjustment by ISO film speed (ISO 25-1600) set on camera.

Automatic Calendar Update

Adjustment of months, years, and leap years through 2019.

Clock Accuracy

±90 seconds/month.

Battery

One 3 volt #CR 2025 lithium battery.

Dimensions (W×H×D)

144×58×26mm/5.6"×2.2"×1.0".

Weight

68.5 gr./2.4 oz.

Cat. No

37153 Data Back FB

Viewfinder Accessories

Right-Angle Finders

Pentax Right-Angle Finders, also referred to as refconverters, serve as an invaluable aid when copying. Working from a low angle, or whenever it is difficult to view directly through the viewfinder.



Right-Angle Finder-A Right-Angle Finder II

These Right-Angle Finders are extremely easy to use as the image appears exactly as it does when viewing directly through the viewfinder of the camera (non-reversed and laterally correct image). These Right-Angle Finders have provision for diopter adjustment and are supplied with rubber eyecups. 360° rotation. Right-Angle Finder-A has a built-in 2X magnifier which is brought into action by simply moving a switch.

Cat. No.

30148 Right-Angle Finder-A w/Case (For the Pentax ZX, PZ, and SF cameras, Program series, M-series cameras, and LX)
30153 Right-Angle Finder II w/Case (For Pentax K1000, KX, K2, K2DMD and most screw mount cameras)



Eyecups

Rubber eyecups fit over camera's eyepiece for more comfortable viewing.

Cat. No.

30086 Eyecup M (LX, Super Program, Program Plus, M-series)
30115 Eyecup P (P30T, P3n, P3, P5, A3000)
30117 Eyecup FB (SF-10)
30118 Eyecup FC (for PZ-10)
30119 Eyecup FD (for PZ-1)
30136 Eyecup FE (for PZ-20)
30138 Eyecup FG (for ZX-5, ZX-5N)
30139 Eyecup FH (for ZX-10, ZX-50)



Eyepiece Blind M

Eyepiece Blind M slides over camera eyepiece to prevent light from entering and affecting exposure during time exposures or when camera is used on a tripod.

Cat. No.

31011 Eyepiece Blind M (PZ1, PZ10, PZ20, SF1n, SF10, SF1, P30T, P3n, P3, P5, A3000, Super Program, Program Plus, M-series)



Right-Angle Finder I

The image in Right-Angle Finder I appears laterally reversed (backwards). Therefore if it were to be used with the Pentax KX, K2 or K2DMD, the figures in the shutter speed scale and/or aperture read-out in the viewfinder would appear backwards, making it inconvenient to use. For this reason, this Right-Angle Finder is only recommended for use with the Pentax K1000 or KM.

Cat. No.

30061 Right-Angle Finder I w/Case (For Pentax K1000 and KM only)

Earlier Pentax screw-mount cameras accept either Right-Angle Finder I or II.



Magnifiers

Easily clips on to the grooves of the eyepiece to magnify the central portion of the focusing screen 2X for critical focusing. The hinged magnifier can be raised to view the entire focusing screen, and it has a built-in eyepiece correction lens with an adjustable diopter range.

Cat. No.

30920 Magnifier-M w/Case (For LX, Program, & M-series cameras)
30990 Magnifier FB (For Pentax ZX, SF & PZ cameras)
30151 Magnifier w/Case (K,S) (For all other Pentax Bayonet Mount and most Pentax screw-mount cameras)



Diopter Correction SMC Lenses

A clip-on prescription eyepiece designed for eyeglass wearer. SMC Correction Lenses are available in -5, -4, -3, -2, +1, +2, and +3 (Diopter). Since the eyepiece lens of -1.0 D, a farsighted person normally requiring +2 D, should utilize a +3 D (+2D - [-1.0 D] = +3 D) SMC Correction Lens. Similarly, a nearsighted person normally requiring -2 D should utilize a -1 D (-2 D - [-1.0 D] = -1 D) SMC Correction Lens. SMC Diopter Correction lenses are supplied with adapters designed to fit specific Pentax Cameras as indicated below. Adapters are available separately either as replacements, or for those wishing to obtain diopter correction lenses from their optometrist.

Cat. No.

For Pentax ZX, PZ, SF, Program, and M-series Cameras:

30731 Diopter Correction SMC Lens w/Adapter-M[-5]
30732 Diopter Correction SMC Lens w/Adapter-M[-4]
30733 Diopter Correction SMC Lens w/Adapter-M[-3]
30734 Diopter Correction SMC Lens w/Adapter-M[-2]
30735 Diopter Correction SMC Lens w/Adapter-M[-1]
30736 Diopter Correction SMC Lens w/Adapter-M[+1]
30737 Diopter Correction SMC Lens w/Adapter-M[+2]
30738 Diopter Correction SMC Lens w/Adapter-M[+3]

For all other Pentax Bayonet & Screw Mount Cameras:

30722 Diopter Correction SMC Lens w/Adapter (K,S) [-4]
30725 Diopter Correction SMC Lens w/Adapter (K,S) [-1]

PZ, SF Focusing Screens

User interchangeable Focusing Screens for PZ1 and SF1, SF1n autofocus cameras.

Cat. No.

30819 Focusing Screens FG-50 (grid-for PZ-1)
30818 Focusing Screens FS-50 (spot metering-for PZ-1)
30820 Focusing Screens FI-50 (crosshair-for PZ-1)
30872 Focusing Screens FG-40 (grid-for SF1, SF1n)
30880 Focusing Screens FI-40 (crosshair-for SF1, SF1n)

PENTAX

Close-Up Accessories

• For all PZ, SF, Program, M, and K series cameras

Auto Bellows

The Pentax Auto Bellows inserted in between a Pentax Bayonet camera and any of the Pentax Bayonet lenses is all you need to be ready for a wide range of different types of photography from close-up work to macro-photography. And with the addition of the manual or automatic extension tubes, you have the complete range from the closest of close-up work to macrophotography. The lenses can also be attached to the front bellows plate in reverse, so there is no need for a reverse adapter. It is also equipped with a double cable release which retains the automatic diaphragm feature of the lens (except when the lens is reversed on the lens mount). Although stop-down exposure metering must be employed, when the Auto Bellows is used with any of the Pentax Automatic Cameras aperture priority exposure automation is retained. Together with the Slide Copier, you can also reproduce slides and film strips.



Auto Bellows A-Set

Auto Bellows can be extended from 38mm to 170mm in the normal position. This unit provides a lens-reversing feature on the front plate, a double cable release for operating the automatic diaphragm and a measuring scale that indicates how far the bellows has been drawn out both with the lens in a normal and reversed position. The movable tripod receptacle is mounted on a single rack-and-pinion track. Magnification range with a 50mm lens is .8x to 3.0x.

Cat. No.

30273 Auto Bellows A-Set

Supplied with removable 49mm adapter for most SMCP (49mm filter size) Pentax Bayonet-Mount lenses. With adapter removed, 52mm filter size Pentax Bayonet-Mount lenses will fit in reversed lens position.



Slide Copier A for Auto Bellows A

The Slide Copier attaches to the front of the Auto-Bellows A-Set. With a standard lens, not reversed, one-to-one copies are attainable. With the lens reversed, magnification up to about 1.5 are attainable which will crop the original slide. The slide can move in the carrier to change image composition. Slide Copier unit accepts mounted or unmounted 35mm film (24x36mm) or filmstrips. Supplied with bellows and frosted glass for even illumination.

Cat. No.

30211

Slide Copier (A) for Auto Bellows A-Set

Supplied with 49mm removable adapter.

Pentax screw-mount lenses may be used with Auto Bellows A-Set.

49mm and 52mm filter size screw-mount lenses will reverse.



Microscope Adapter B

This adapter is designed to fit the camera body directly onto a microscope. It can be used with any microscope having a 25mm outside diameter tube. Consists of Adapter Main Tube, Fastener Tube and Light Sealing Tune. Pentax Bellows Unit may be added for even greater magnification. When used on any Pentax Automatic camera aperture priority exposure automation is retained.

Cat. No.

30044

Microscope Adapter B



Microscope Lens Adapter B

Microscope Lens Adapter (B) is used to adapt special-purpose objective lenses (Olympus M plan 1.3X, 2.5X, 5X, 10X, 20X) or special-purpose macro lenses (Zuiko Macro 20mm f/3.5, Zuiko Macro 38mm f/3.5) to the Pentax Bayonet Mount. The special lenses are merely screwed into one side of the adapter and the other fits directly to the Pentax bayonet camera mount. When fitted to the Auto Bellows A-Set or Bellows Unit III this adapter permits varied macro magnification from 2X to 10X. When used with any Pentax Automatic Camera aperture priority exposure automation is retained.

Cat. No.

30045

Microscope Lens Adapter B



(B) – Pentax Bayonet Mount

PENTAX

Close-Up Accessories

• For all PZ, SF, Program, M, and K series cameras



Auto Extension Tube Set B

The Auto Extension Tube Set consists of three different tubes (12mm, 19mm, 26mm), which can be used either individually or in combination. This set allows you the convenience of automatic diaphragm operation and open-aperture metering. Magnification range with a 50mm lens is .38x to 1.0x.

Cat. No.
30535 Auto Extension Tube Set B w/Case



Manual Extension Tube Set B

The Manual Extension Tube Set provides manual diaphragm operation and stop-down metering. The three tubes provide individual extensions of 9.5mm, 19mm and 28.5mm. Magnification range with a 50mm lens is .33x to 1.0x.

Cat. No.
30525 Manual Extension Tube Set B w/Case



Helicoid Extension Tube B

The "Adjustable Extension Tube," the internal helicoid provides an infinitely stepless adjustment range from 26.5mm to 46.5mm. Manual diaphragm and stop-down metering operations are required with all lenses. Magnification range with a 50mm lens is .50x-1.00x. May be combined with either Auto or Manual Extension Tubes for greater magnification.

Cat. No.
30542 Helicoid Extension Tube B w/Case

Note:

Any extension tube may be used simply to decrease the minimum focusing distance of a lens. When using any extension tubes you must keep in mind that the distance and depth-of-field scales on the lens cannot be used. For magnifications greater than life-size (1:1) reversal of the lens is recommended. (Use Reversal Adapter B).

(B) – Pentax Bayonet Mount



Auto Extension Tube 50mm

Recommended for use with lenses longer than 50mm, or with reversed 50mm lenses (using a Reverse Adapter). Magnification with a 135mm lens is .50x, and 1.4x with a reversed 50mm lens.

Cat. No.
30551 Life-Size Auto Extension Tube B 50mm w/Case



Auto Extension Tube B 100mm

Recommended for use with lenses longer than 50mm, or with reversed 50mm lenses (using a Reverse Adapter). Magnification with a 135mm lens is .80x, and 2.5x with a reversed 50mm lens.

Cat. No.
30556 Life-Size Auto Extension Tube B 100mm w/Case
When used with a 50mm

PENTAX

Close-Up Accessories

• For all PZ, SF, Program, M, and K series cameras



Reverse Adapter

Permits 49mm or 52mm lenses to be mounted on a Pentax camera body or extension tubes in reverse position for better image quality at magnifications greater than 1.0 (1:1), and for high magnifications with less extension. Lens aperture is adjusted manually, using the aperture ring on the lens, and the focus control on the lens has no effect. When used with a Pentax Automatic Camera aperture priority exposure automation is retained within the measurable range. Magnification of reversed 50mm lens is approximately .60x.

Cat. No.

30332 Reverse Adapter (B) 49mm For Pentax Bayonet Mount Lenses
37955 Reverse Adapter (B) 52mm For Pentax Bayonet Mount Lenses with 52mm filter threads



① Macro Focus Rail III

Macro Focus Rail III

When close-ups are to be made with a large magnification (5X or more), focusing can easily be accomplished by using the Macro Focus Rail III for precisely setting the position of the lens, or extension tube. This device is also useful for making close-ups with a predetermined magnification. (If the lens alone is moved for focusing, it causes a change in magnification.) Maximum travel 2.25". Provided with tripod socket.

Cat. No.

30076 Macro Focus Rail III



Slide Holder 1X (B)

Slide Holder 1X (B) serves the same purpose as Slide Copier (A) for Auto Bellows (A). When used with an Auto Extension Tube (B) or Extension Tube (B), this unit allows the standard lens or the 50mm macro lenses to make slide duplications with 1:1 magnification (lens must be reversed). Requires 50mm lens, Reverse Adapter, and Extension Tube Set.

Cat. No.

37948 Slide Holder 1X (B)

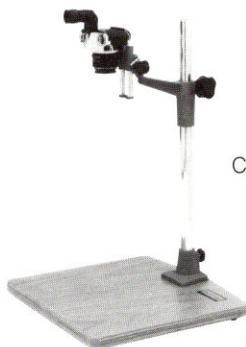
Close-Up Lenses

These single element SMC Close-Up Lenses can be threaded into the front lens frame of an SMC Pentax lens for crisp macrophotography. The entire range gives you the convenience of automatic diaphragm setting and open-aperture metering. These attachment lenses are available in the following types:

Type	SMC Pentax Lens	Lens-to-subject distance range	Magnification		Cat. No.
S25	50mm f/1.7, 50mm f/1.4, 50mm f/2.0	32.6~22.0cm	1/4.8~1/2.7	49mm	30450
T80	85mm~150mm	91.6~50.5cm	1/9.4~1/4.2	49mm	30452

PENTAX

Copying Accessories



Copy Stand III

Copy Stand III

The Copy Stand aligns the camera quickly and accurately for copy work. It is equipped with a critical focusing knob for fine adjustment, and an 18% standard gray reflector panel which facilitates exposure measurement. It will accept all Pentax 35mm Bayonet and Screw-Mount Cameras. Extension tubes and/or bellows units are easily employed.

Copy Stand III is a fixed copying stand of sturdy construction, it is 73cm (28.5") in height when assembled and weighs 5.5 kgs (12.1 lbs) without camera/lens. Copy Stand III accepts Table Clamp as accessory.

Cat. No.

30075 Copy Stand III



Table Clamp for Copy Stand III

The table clamp can be attached to any desk or table top less than 6 cm (2.3") thick, thus enabling fast and easy assembly of the stand where the baseboard is impractical or undesired. The table clamp weights 620 gr (21.9 oz).

Cat. No.

30054 Table Clamp for Copy Stand III

Electronic Cable Releases

These cable releases trip the shutter electrically, without transferring mechanical movement to the camera. Pressing the cable release switch partway will activate the camera's metering and/or autofocusing, and a locking switch is provided for long time exposures. Each cable is 3 1/2 ft. long.

Cat. No.

37241 Cable Switch A (645, P3n, P3, P5, A3000, Super Program, Program Plus)
37242 Cable Switch F (PZs ZX-5N, ZX-5, ZX-10, ZX-50, SFs IQZoom 900, IQZoom 105 Super, 105R)

Cable Releases

A cable release is a "must" for preventing camera movement, especially when the camera is being used on a tripod, copy stand or copipod. This unit has a locking collar to allow time exposures. Available in the following types:



Cat. No.

30098 Cable Release 30 (30 cm Long) 12"
30099 Cable Release 50 (50 cm Long) 20"



Double Cable Release for Auto Bellows A-Set

Permits use of the fully automatic diaphragm of Pentax lenses in the normal position. (Supplied with all auto bellows units.)

Cat. No.

30040 Double Cable Release A

Release Socket Caps

Covers 3 pin remote release socket on PZ and SF cameras.

Cat. No.

31028 Release Socket Cap FD (PZ-1)
31021 Release Socket Cap F (PZ-10, ZX-5N, ZX-5, ZX-10, ZX-50, SFs)
31029 Release Socket Cap FE (PZ-20)

Other Accessories



Battery Accessories

Cat. No.

37357 Battery Cord A... holds camera batteries in pocket for cold weather shooting. 4ft. power cord attaches to camera's battery compartment. For Super Program, Program Plus, ME Super, MG.

37009 Lithium Battery Grip FB... replacement lithium battery grip for SF1, SF1n. Holds short or long style 6 volt lithium battery.

39919 6 Volt Lithium Battery 2CR5 for SF1, SF1n, PZ-10, PZ-1.

37358 Remote Battery Pack F Set... two piece set for cold weather shooting with SF1, SF1n. Remote Battery Pack F holds 4 AA alkaline batteries (NiCds not recommended) warm in pocket and connects with power cord to Terminal Grip F mounted on camera.

37359 Remote Battery Pack F... available separately as part of #37358 set.

37128 Terminal Grip F... available separately as part of #37358 set.

Tripod Accessories

Cat. No.

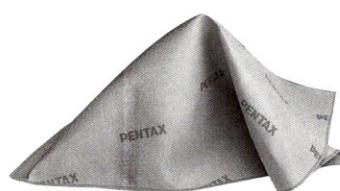
37383 Tripod Spacer M... a plastic spacer for European-style tripods with longer mounting screws. Prevents screw from bottoming-out in camera's tripod socket.

30419 Adapter for Tripod... spacer with extra depth for use with SMCP 400-600mm and SMCP AF Zoom 35-70 (for ME-F) lenses.

38465 Quick Shoe Set 35mm... a two-part quick release system for mounting/dismounting cameras onto a tripod. The Quick Shoe attaches to the camera's tripod socket and slides into the Quick Shoe Adapter mounted on the tripod. The set includes #38456 Quick Shoe and #38459 Quick Shoe Adapter.

38456 Quick Shoe... additional shoes can be mounted on separate cameras.

38459 Quick Shoe Adapter... for mounting on additional tripod(s).



Lens Cleaning Cloth

Cat. No.

88025 (Pack of 20) Lens Cleaning Cloth... 9" x 9" microporous polyester fabric cleans off dust, oil without leaving any residue. Can't be washed for reuse.



Camera Grips

Cat. No.

37127 Grip for Super Program, Program Plus... replacement finger grip mounts onto front of camera.

37008 Hand Grip for SF1, SF10, SF1n... Hand Grip with adjustable strap mounts onto strap lugs of SF cameras so camera can hang from right hand.



37000 AA- Battery Pack FG... Battery pack for the ZX line of SLR cameras. Takes 4 AA batteries.

Books & Videotapes

Cat. No.

88003 "How to" Booklet for 35mm Lens Shutter Cameras... 18 pages of shooting tips and suggestions for rangefinder/zoom cameras.

88002 "How to" Booklet for 35mm SLR Cameras... 34 pages of shooting tips and suggestions for SF autofocus cameras.

88100 "Shoot Like A Pro" VHS SLR Training Tape... covers the basics of equipment selection, exposure, composition, etc. for 35mm SLR owners.

88104 PZ-1 Video Guide... covers basic operations of PZ-1 autofocus camera.

88105 PZ-20 Video Guide... covers basic operations of PZ-20 autofocus camera.

PENTAX

Other Accessories

• Lens Adapter



Mount Adapter B

The Mount Adapter B fits Pentax bayonet mount cameras and permits screw-mount lenses to be used on them*. When used with this adapter, a screw-mount (Universal Thread) lens will focus to infinity, however it cannot be used for automatic diaphragm or open aperture metering. When used on any Pentax automatic camera aperture priority camera automation is retained when using screw-mount lenses and accessories.

Cat. No.
30120 Mount Adapter (B)

* Adapters are not available to allow Pentax screw-mount cameras to accept Pentax bayonet mount lenses.



Lens Adapter B 67

This adapter fits Pentax Bayonet cameras and permits the use of 6x7 SMCT, SMCP lenses with them. With this adapter, the lens will focus to infinity, however, it cannot be used with automatic diaphragm or open aperture metering. When used on any Pentax automatic camera aperture priority exposure automation is retained within the measurable range. When used with 6x7 SMCT, SMCP lenses with a built-in tripod socket, this adapter allows the camera to change its position vertically or horizontally while the lens remains on the tripod.

Cat. No.
37954 Lens Adapter B 67
For Pentax Bayonet
Mount Cameras



Step-Up Ring

Step Up Rings increase the lens' existing filter size to attach larger filters and accessories.

Cat. No.
30141 49→52mm Step Up Ring
30143 58→77mm Step Up Ring
30145 49→58mm Step Up Ring

Step-Down Ring

Step Down Rings reduce the lens' existing filter size to attach smaller filters and accessories (beware of possible vignetting when using smaller sizes than recommended for a lens).

Cat. No.
30142 52→49mm Step Down Ring
30146 58→49mm Step Down Ring

• Special Applications



49mm and 52mm Stereo Adapter and Stereo Viewer II

Stunning, single-frame, 3-D slides are extremely simple to make. Merely attach the Stereo Adapter to your standard 50 or 55mm lens and shoot at f/5.6 or f/8. After receiving the slides back from your photo-finisher, view them in the Stereo Viewer II. The most dramatic effects are obtained when the subject is photographed from a distance of four meters (13 feet) or less. The Stereo Adapter Sets include the lens Adapter and Slide Viewer.

Cat. No.
30344 Stereo Adapter 52mm Set for 52mm filter size
30347 Stereo Viewer II
30348 Stereo Adapter 49mm Set for 49mm filter size

Lens Accessories

Lens Cases

(1) Classification by Quality:
RH – Rubber Hood
MH – Metal Hood
PH – Plastic Hood

(2) Classification by Shape:
R – Round shape
S – Square shape

(3) Classification by Depth of Hood:
According to the depth of hood,
hoods classified by A/B/C-type.

(4) Classification by Diameter:
58 – Hood diameter is 58mm
60 – Hood diameter is 60mm

Please refer to charts for lens/hood compatibility

FA- Lens Accessory Chart

CODE#	FA-LENS	FILTER SIZE	CODE#	LENS HOOD	CODE#	LENS SOFT CASE	FRONT CASE
22880	FA 20/2.8	67mm	34130	MH-RB67	33923	S70-70	S
22630	FA*24/2.0	67mm	34765	PH-RBA 67	37725	S90-100	none
22527	FA 28/2.8	49mm	34110	49mm	33923	S70-70	S
22530	FA 28/2.8 Soft	49mm	34110	49mm	33923	S70-70	S
27661	FA*28-70/2.8	67mm	34794	PH-RBC77	37727	S120-150	none
27531	FA 2.8-70/4	52mm	34795	RH-RB52	33924	S80-120	M
24537**	FA 28-80Z	58mm	34792	RH-B60	33924	S80-120	M
27667	FA 28-105Z	58mm	34792	RH-B60	33924	S80-120	L
27021	FA 28-200Z	72mm	Included		33925	S80-160	none
20817	FA 50/1.4	49mm	34020	34021	49mm	33923	S70-70
20907	FA 50/1.7	49mm	34260	49mm	33923	S70-70	S
28170	FA 50/2.8 Macro	52mm	34784	RH-RA52	33924	S80-120	M
27427	FA 70-200Z	49mm	34774	RH-RB49	33925	S80-160	L
27590	FA*80-200/2.8	77mm	34794	PH-RBC77	33922	S120-230	none
27607	FA 80-320/4.5-5.6	58mm	38701	RH-A58	33925	S80-160	none
23080	FA*85/1.4	67mm	34768	MH-RBB67	37727	S120-150	none
23190	FA 85/2.8 Soft	52mm	37638	MH-RB52	33924	S80-120	none
28930	FA 100/2.8 Macro	58mm	Not required		33925	S80-160	L
27927**	FA 100-300Z	58mm	38701	RH-A58	33925	S80-160	none
23427	FA 135/2.8	52mm	Built-in		33924	S80-120	M
24140	FA*200/2.8	77mm	34767	MH-RBA77	37729	S110-160	none
27910	FA 250-600Z	43mm(R)	Built-in		Supplied w/lens		none
24370	FA*300/2.8	43mm(R)	34769	MH-RA112	33436	Soft Case	none
24400	FA*300/4.5	67mm	34766	MH-RBA67	33929	S90-160	none
24580	FA 400/5.6	77mm	Supplied w/lens		33928	S110-230	none
24870	FA*600/4	43mm(R)	Built-in		Supplied w/lens		none

F- Lens Accessory Chart

CODE#	F-LENS	FILTER SIZE	CODE#	LENS HOOD	CODE#	LENS SOFT CASE	FRONT CASE
30925	AF 1.7x Adapter	none	Not required		33923	S70-70	none
27000	F 17-28 Fisheye	N/A	N/A		33927	S80-80	S
27007	F 24-50Z	58mm	34792	RH-B60	33924	S80-120	M
22517**	F 28/2.8	49mm	34110	49mm	33923	S70-70	S
27187	F 28/80Z	58mm	34792	RH-B60	33924	S80-120	M
27177**	F 35/70Z	49mm	34773	RH-RA49	33923	S70-70	S
27179	F 35-80	49mm	34773	RH-RA49	33927	S80-80	M
27477**	F 35-105Z	58mm	38702	RH-B58	33924	S80-120	M
27197	F 35-135Z	58mm	34762	RH-A60	33925	S80-160	L
20827**	F 50/1.4	49mm	34260	49mm	33923	S70-70	S
20837**	F 50/1.7	49mm	34020	34021	49mm	33923	S70-70
28180**	F 50/2.8 Macro	52mm	34784	RH-RA52	33924	S80-120	M
27357**	F 70/210Z	49mm	34774	RH-RB49	33925	S80-160	L
27567	F 80-200	49mm	34774	RH-RB49	33924	S80-120	L
23180	F Soft 85/2.8	52mm	Supplied w/lens		33924	S80-120	M
28990	F 100/2.8 Macro	58mm	Not required		33925	S80-160	L
27931	F 100-300Z	58mm	–	–	33925	S80-160	none
23417**	F 135/2.8	52mm	Built-in		33925	S80-160	M
27900	F 250-600Z	43mm(rear)	Built-in		none		
24320	F*300/4.5	67mm	Built-in		33435	SS10-22	none
24880**	F*600/4	4mm(rear)	Built-in		33473	Trunk Case	none
AKUMAR-F							
27457	F 28-80Z	58mm	34792	RH-B60	33924	S80-120	L
27417**	F 70-200Z	49mm	34774	RH-RB49	33925	S80-160	L

** Discontinued product



Lens Hoods

The main purpose of a lens hood is to shield the lens from the light outside the picture area, which might otherwise cause unwanted reflections inside the lens.



Hard Lens Cases

Hard leather cases offer optimum protection for Pentax lenses. They are individually designed for each lens, and are supplied with a strap.



Soft Lens Cases

Soft, padded, nylon cases with velcro closures are available for SMCP-F Lenses.



Trunk Case

Exclusive metal trunk case supplied with some of the larger telephoto and zoom lenses.

PENTAX

Lens Accessories

A- Lens Accessory Chart

CODE#	LENS	FILTER SIZE	CODE#	LENS HOOD	CODE#	LENS CASE
STANDARD						
20697**	A 50/2.0	49	34020 34021 34260	49mm 49mm 49mm	33881	HA-90B
20897**	A 50/1.7	49	34020 34021 34260	49mm 49mm 49mm	33881	HA-90B
20887**	A 50/1.4	49	34020 34021 34260	49mm 49mm 49mm	33881	HA-90B
20987	A 50/1.2	52	34000	52mm	33923	S70-70
WIDE ANGLE						
22010	A 15/3.5	built-in	not available		33875	HE-120
21300	A 16/2.8 (Fisheye)	built-in	not available		33891	HD-100
22875	A 20/2.8	67	34130	MH-RE67	33891	HD-100
22690**	A 24/2.8	52	34061	52mm	33880	HA-90
22950**	A 28/2.0	49	34110	49mm	33881	HA-90B
22997**	A 28/2.8	49	34110	49mm	33881	HA-90B
22770**	A 35/2.0	49	34110	49mm	33881	HA-90B
22790**	A 35/2.8	49	34110	49mm	33881	HA-90B
TELEPHOTO						
23070**	A *85/1.4	67	34325	MH-RA67	33874	HG-115E
23690**	A 100/2.8	49	built-in		33882	HA-98
23530**	A*135/1.8	77	38721	RH-A77	33876	HE-169B
23497**	A 135/2.8	52	built-in		33883	HB-120
24135	A*200/2.8 ED	77	built-in		33877	HF-185
24297**	A 200/4.0	52	built-in		33885	HB-152
24380	A*300/2.8 ED(IF)	49R	built-in		33434	Trunk Case
24390**	A*300/4.0	77	built-in		33877	HF-185
24590	A*400/2.8 ED(IF)	49R	built-in		33453	Trunk Case
24570	A 400/5.6	77	built-in		33873	HE-300
24740	500/4.5	52R	built-in		not available	
24890	A*600/5.6 ED(IF)	49R	built-in		33871	Trunk Case
24940**	1000/8.0	built-in/52	built-in		33491	Trunk Case
24960	1000/11.0 Reflex	built-in/52	built-in		33492	Hard Case
24970	A*1200/8.0 ED(IF)	49R	built-in		33494	Trunk Case
24980	2000/1.35 Reflex	built-in/52	built-in		33493	Trunk Case
MACRO						
28190**	A 50/2.8	49	not required		33880	HA-90
28970**	A 100/2.8	58	not required		33872	HG-140
28980**	A 100/4.0	49	not required		33883	HB-120
28800**	A*200/4.0 ED	58	built-in		33895	HF-185B
SPECIAL PURPOSE						
22561	28/3.5 Shift	built-in	not available		33214	Hard Case
23160**	85/2.2 Soft Focus	49	34391	49mm	not available	
28245	100/4.0 Bellows	52	34000	52mm	33821	Hard Case
ZOOM						
27037**	A 24-50/4.0	58	34792	RH-B60	33883	HB-120
27017**	A 28-80/3.5-4.5	58	34792	RH-B60	33883	HB-120
27087**	A 28-135/4.0	77	34763	RH-A80	33886	HE-169
27227**	A 35-70/4.0	58	34770	58mm	33889	HB-105
27137**	A 35-70/3.5-4.5	49	34773	RH-RA49	33880	HA-90
27174	A 35-80	49	34773	RH-RA49	33927	S80-80
27097**	A 35-105/3.5	67	38711	RH-B70	33884	HD-143
27167**	A 35-135/3.5-4.5	58	34762	RH-A60	33893	HB-152B
27337**	A 35-210/3.5-4.5	67	38711	RH-B70	33894	HD-190C
27297**	A 70-210/4.0	58	built-in		33925	S80-160
27577	A 80-200/4.7-5.6	49	34774	RH-RB49	33924	S80-120
27640**	135-600/6.7	52R	built-in		33761	Trunk Case
27940	400-600/8.0-12.0	67	not available		33790	Hard Case
TAKUMAR-A						
27027**	A 28-80/3.5-4.5	58	34792	RH-B60	33883	HB-120
27317**	A 70-200/4.0	58	34770	58mm	33925	S80-160

** Discontinued product

Cases, Bags & Straps

Camera Cases

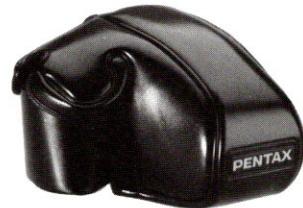


PZ-1

FD eveready style case is black vinyl with a leather-like finish and soft nap interior. The Black Case screws onto the cameras tripod socket, and the Front Case snaps onto the Back Case. The Back Case has a film window, and will fit the PZ-1 body with a Date Back attached.

Cat. No.

32357 Soft Case FD (M) includes Back Case FD and Front Case FD (M)
32358 Front Case FD (S) fits FS 50s, 28
32359 Front Case FD (M) fits FA 50 macro, 28-80, 35-105, 85, 135
32360 Front Case FD (L) fits FA 28-105, 70-200, 100 macro
32361 Back Case FD fits PZ-1 body (with Date Back also)



SF1, SF1n, SF10

FD eveready style case is black vinyl with a leather-like finish and a soft nap interior. The Back Case attaches to the camera's tripod socket, and the Front Case snaps onto the Back Case. A film window is provided in the Back Case. These cases will fit any SF body with the standard lithium battery grip.

Cat. No.

32320 Soft Case FB includes Back Case FB and Front Case FB (S)
32322 Front Case FB (S) fits F-50 standards, 28, 35-70
32324 Front Case FB (L) fits F-100 Macro, 35-135, 70-210
32325 Back Case FB fits SF body (without Data Back)
32326 Back Case FB Quartz Date fits SF body with Data Back (FB)

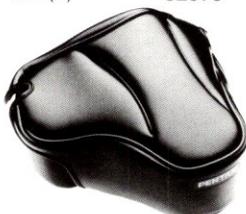


ZX-5N, ZX-5, ZX-10, ZX-50

FC eveready style case is black vinyl with a leather-like finish and soft nap interior. The Back Case screws onto the cameras tripod socket, and the Front Case snaps onto the Back Case. The Back Case has a film window, and will fit the ZX-5, ZX-5N, ZX-10 or ZX-50 body with a Date Back attached.

Cat. No.

32367 Soft Case FG (S) **32370** Front Cover FG (S)
32368 Soft Case FG (M) **32371** Front Cover FG (M)
32369 Front Case FG (L) **32372** Front Cover FG (L)
32373 Back Cover FG (S)

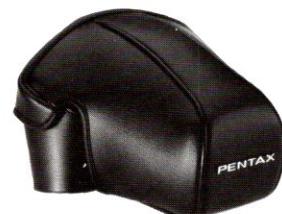


PZ-10, PZ-20

FC eveready style case is black vinyl with a leather-like finish and soft nap interior. The Back Case screws onto the cameras tripod socket, and the Front Case snaps onto the Back Case. The Back Case has a film window, and will fit the PZ-10 or PZ-20 body with a Date Back attached.

Cat. No.

32350 Soft Case FC (S) includes Back Case FC and Front Case FC (S)
32351 Soft Case FC (M) includes Back Case FC and Front Case FC (M)
32352 Front Case FC (S) fits FA 50s, 28
32353 Front Case FC (M) fits FA 50 macro, 28-80, 35-105, 85, 135
32354 Front Case FC (L) fits FA 28-105, 70-200, 100 macro
32355 Back Case FC fits PZ-10, PZ-20 body (with Date Back also)



P30T, P3n

PN eveready style two-piece case is black vinyl with leather-like finish and soft nap interior. Back Case snaps onto camera strap lugs and Front Case snaps onto Back Case. These will also fit the Pentax P3 camera.

Cat. No.

32330 Soft Case PN (S) fits F-50 standards, 28, 35-70, F&A 35-80
32340 Soft Case PN (L2) fits F50 & 100 Macros, 135, 24-50, 28-80, 35-105, 35-135, 70-210, F&A 80-200
32331 Back Case PN fits P3n/P3 body only
32572 Front Cover P (S) fits F-50 standards, 28, 35-70
32573 Front Cover P (L2) fits F-50 & 100 Macros, 135, 24-50, 28-80, 35-105, 35-135, 70-210



K1000

Soft Case for K1000 is two-piece eveready style made of soft black vinyl. Attaches to tripod socket. Will also fit KX and KM cameras and most screw mount cameras with a 50mm lens attached.

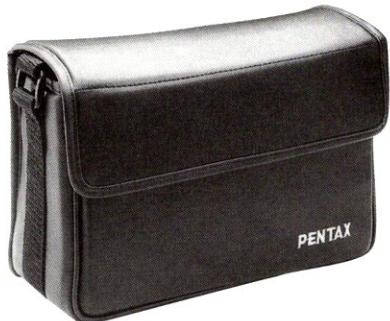
Cat. No.

32630 Soft Case for K1000/K1000SE

PENTAX

Cases, Bags & Straps

Gadget Bags



PTX-16 Gadget Bag

10 $\frac{1}{4}$ " x 7" x 4"

Black Vinyl with film loops, 2 velcro dividers.

Cat. No.
84591



SLR Holster Bag

6 $\frac{1}{2}$ " x 7" x 3 $\frac{1}{4}$ "

Black nylon. Fits PZ body with 28-80 FA lens.

Cat. No.
84683

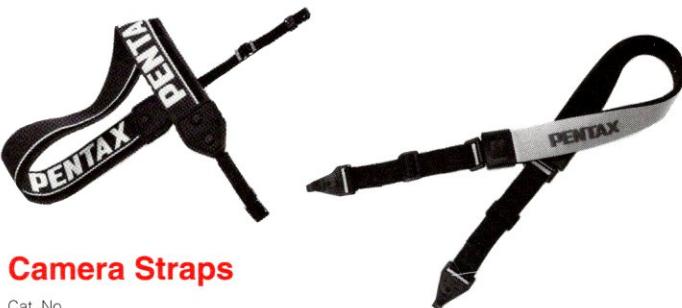


SLR Gadget Bag

9 $\frac{1}{2}$ " x 8" x 5 $\frac{1}{2}$ "

Black nylon. Fits SLR body with two lenses, collapsible inserts and outside zipper pocket.

Cat. No.
84685



Camera Straps

Cat. No.

30417 D Ring (one piece)... split metal ring attaches to camera strap lug for easier strap installation.

32948 SF1 Neck Strap... wide banjo strap with terrycloth surface, non-slip shoulder pad, leather reinforcements, and gold SF1 logo.

32951 Standard Neck Strap... narrow black webbed nylon strap.
32962 Neck Strap Super Program, Program Plus... black and red webbed nylon strap with Pentax logo.

32969 Camera Strap F... standard strap for SF cameras. Grey with black trim and red Pentax logo.

32998 Camera Strap FC... replacement strap for PZ-1, PZ-10, PZ-20. Black with gray Pentax logo.

80083 Pentax Fashion Strap... wide banjo strap, red and black with white Pentax logo, leather reinforced.

**Limited quantities



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.

Y-1 (Y44), Light Yellow (6)

Gives a slight emphasis on total separation between sky and clouds. Good choice for those who desire a subtle change in blue absorption. Primary use—B&W Film. Exposure Factor 1.5.

Y-2 (Y48), Medium Yellow (8)

Most popular of all filters for B&W Photography. Gives most accurate total rendition for panchromatic film. Primary use—B&W Film. Exposure Factor 2.

O-2 (O56), Medium Orange (23A)

Absorbs ultra-violet and blue light, thus making blue tones appear darker. Excellent for marine scenes, aerial photography and copying. Primary use—B&W Film. Exposure Factor 3.

Y-G, Yellow Green

Ideal outdoor filter to render more pleasing flesh tones in portraits against the sky than you can obtain with a yellow filter. Also renders beautiful black and white pictures of landscapes, flowers, blossoms and natural sky appearance. Primary use—B&W Film. Exposure Factor 2.

R-2 (R60), Medium Red (25)

Use with panchromatic or infra-red films to achieve maximum contrast. This filter will create dramatic sky effects, simulating moonlight scenes in mid-day by slight under-exposure. Cuts through fog, haze and mist by absorbing excessive blue and ultra-violet light rays. Excellent copying filter for blueprints. Primary use—B&W Film. Exposure Factor 6.

Skylight (1A)

Recommended for use outdoors at all times to reduce excess blue and to add warmth to your subjects. Also use in open shade to reduce blue. Gives truer flesh tones when an excess of blue is prevalent. Primary use—Daylight Color Reversal Film. Exposure Factor 1.

Cloudy (81A)

Slight warming filter. Cuts through haze, and prevents excessive bluish results, thereby giving warm tones in open shade and cloudy days. More effective haze-cutting than the Skylight filter. Primary use—Daylight Color Reversal Film. Exposure Factor 1.5.

Morning & Evening (82A)

Slight cooling filter. Using this filter early in the morning and late in the afternoon to prevent excessive warm rendition, shade and cloudy days. More effective haze-cutting than the Skylight filter. Primary use—Daylight Color Reversal Film. Exposure Factor 1.5.

Flash (80C)

Use with clear wire-filled flash bulbs... not with blue flash bulbs. More effective than the Morning & Evening filter in preventing excessive warmth. Primary use—Daylight Color Reversal Film. Exposure Factor 2.

Flood (80B)

Photo flood tends to render excessive warm effect on your color film. Use this filter to "cool" it down to get correct color rendition. Primary use—Daylight Color Reversal Film. Exposure Factor 3.

Polarizer

Polarizers eliminate unwanted surface reflections and glare, darken blue skies, penetrate atmospheric haze, and add richness to colors. Primary use—B&W and Color Film. Exposure Factor 2½-3.

Circular Polarizer

For LX, SF, and PZ-series auto focus SLRs.

PF Filters

The PF filter, like an ordinary filter, screws in the front frame of a telephoto or ultra-telephoto lens to protect its front element from being damaged. Made of a Super-Multi-Coated optical glass, it does not affect the spectrum performance of the master lens.



Gelatin Filter Holder

The Pentax Gelatin Filter Holder accepts 75mm (3") square Kodak or other gelatin (acetate) filters. The accessory filter frame is used with the holder, while the Kodak gelatin filter frame can also be used. Once the filter is inserted into its frame it is simply sandwiched in the holder—a feature which makes filter changes extremely easy.

The holder clips onto the front of the lens in the same manner as a springmounted lens hood. Five sizes are available: 49mm, 52mm, 58mm, 67mm, and 77mm.

PENTAX

Filters

Regular Coating

Type	Size and Catalog No.				
	49mm	52mm	58mm	67mm	77mm
Skylight	35111				
Light Yellow (Y-1)	35014				
Medium Yellow (Y-2)	35012				
Yellow-Green (Y-G)	35015				
Medium Red (R-2)	35016				
Medium Orange (O-2)	35013				
Morning & Evening (82A)	35113				
Cloudy (81A)	35112				
Flash (80C)	35114				
Flood (80B)	35115				
Polarizer	35019				
Circular Polarizer	35094	35266	38601	38611	35182

SMC

Type	Size and Catalog No.				
	49mm	52mm	58mm	67mm	77mm
Ultra Violet (UV)	35601	35401	35431	35451	35481
Medium Yellow (Y-2)	35602			35452	35482
Medium Orange (O-2)	35603		35433	35453	35483
Medium Red (R-2)	35604		35436	35454	35484
Skylight	35605	35501	35531	35551	35581
Cloudy (81A)	35606	35502	35532	35552	35582

SMC Protective Front (PF)

Size	Catalog No.	Compatible Lenses
77mm	35620	A*135/1.8, A* 200/2.8 ED, A* 300/4, A 400/5.6, FA* 200/2.8, A* 645 300/4 ED (IF)
112mm	35621	A* 300/2.8 ED (IF), A* 600/5.6 ED (IF), FA & F 250-600/5.6 ED, 67 400/4 ED (IF), FA* 300/2.8 ED (IF)
128mm	35622	M* 67 800/6.7 ED (IF), 645-600/5.6 ED (IF)
145mm	35623	A* 400/2.8 ED (IF)
150mm	35624	A* 1200/8 ED (IF), FA & F 600/4 ED (IF)

Gelatin Filter Holders

Size	Catalog No.	Description
49mm	35241	Gelatin Filter Holder w/Frame
52mm	35242	Gelatin Filter Holder w/Frame
58mm	35243	Gelatin Filter Holder w/Frame
67mm	35240	Gelatin Filter Holder w/Frame
77mm	35244	Gelatin Filter Holder w/Frame
	35246	Frame for Gelatin Filter Holder

PENTAX

Lens Cap



Lens Caps

Whenever the lens is not being used it should be protected from dirt, dust and foreign matter. Most Pentax SMCP-M lenses accept 49mm lens caps. Refer to the lens specification chart for the correct size (filter size) if not otherwise indicated below. 49mm, 52mm and 58mm lens caps are spring-loaded and are easily attached and removed from the lens. All other size lens caps are slip-on. A lens cap is supplied with every Pentax lens.

Cat. No.

- 31491** Lens Cap F 49mm
- 31515** Lens Cap F 52mm
- 31573** Lens Cap F 58mm
- 31653** Lens Cap F 67mm
- 31702** 77mm Lens Cap A
- 31601** Lens Cap for 17mm f/4 Fish Eye
- 31750** Lens Cap for 15mm f/3.5, 28mm Shift
- 31440** 143mm Lens Cap (1000/8.0)



Body Cap B, S

A body cap should be fitted onto the camera body whenever the lens has been removed so that dust, dirt and other foreign matter cannot get in. A body cap is furnished with each Pentax camera body.

Cat. No.

- 31007** Body Cap (B)
For Pentax Bayonet Mount Cameras
- 31002** Body Cap (S)
For Pentax Screw Mount Cameras



Rear Lens Cap B, S

Whenever the lens is not attached to the camera body, a rear lens cap should be fitted onto it so that dust, dirt or other foreign matter will not get in. A rear lens cap is furnished with each SMC Pentax lens.

Cat. No.

- 31006** Rear Lens Cap (B),
For Pentax Bayonet Mount Lenses
- 31001** Rear Lens Cap (S),
For Pentax Screw Mount Lenses

Flashes

PENTAX

AF500 FTZ TTL Power Zoom Flash

• For Auto Focus SLRs only

The AF500FTZ Power Zoom Flash zooms automatically to match the lens focal length of F and FA-series zoom lenses used on the PZ and SF autofocus cameras. With manual zoom lenses, the flash zoom position is set with a button.

This shoe-mount flash has full TTL exposure control with the PZ and SF cameras, and its internal zoom head automatically adjusts to the F or FA zoom lens setting when the camera's shutter button is pressed. The 24-85mm zoom range can also be set manually with the press of a button.

The AF500FTZ has a guide number of 50 (at ISO 100/m), and can be used in TTL Auto or adjustable Manual modes. There is also a Multiple Flash mode for stroboscopic flash effects. For easy bounce flash, the flash head tilts vertically 90° and swivels horizontally 270°.

The AF500FTZ has an AF Spotbeam Projector for low light autofocusing with PZ and SF cameras. The AF Spotbeam can also be used as a focusing aid with the flash turned off.

To combine existing light and flash, Leading Shutter Curtain Sync and Trailing Shutter Curtain Sync modes are available. The Contrast Control Sync mode gives a 1:2 lighting ratio when the AF500FTZ is used with the PZ's RTF flash.

For cable-free, off-camera manual flash operation, a built-in slave trigger is fired by the camera's RTF or shoe mount flash. A dedicated socket can accept the optional Extension Cord F and Hotshoe Adapter F.

A full information, illuminated LCD panel displays all flash modes. To conserve battery power, the flash turns off automatically and an optional external power supply can be attached.



PENTAX

AF500 FTZ TTL Power Zoom Flash

Type

Clip-on type, series-control, TTL auto zoom electronic flash.

Guide Numbers

Switchable ranging M 1/1 to 1/32 (6-step).

	Focal length (zooming position)					
	85mm	70mm	50mm	35mm	28mm	24mm
<i>[(M 1/1) = FULL]</i>						
[M 1/1]	50	47	42	36	32	30
[M 1/2]	36	33	30	25	22	21
[M 1/4]	25	23	21	18	16	15
[M 1/8]	18	16.5	15	12.5	11	10.5
[M 1/16]	12.5	11.5	10.5	9	8	7.5
[M 1/32]	9	8	7.5	6	5.5	5

with ISO100 film

Flash Duration (1/2 peak)

Approx. 1/2000 sec. in [M 1/1]

Approx. 1/30000 sec. at minimum-distance discharge in [TTL]

Flash Frequency & Recycling Time:

Power	Recycling Time	Frequency
Alkaline battery (LR6)	About 9 sec.	About 100
Ni-Cd battery (KR-AA)	About 6 sec.	About 40
TR Power Pack-2 (LR14)	About 4 sec.	About 550 (in [M 1/1])

Consecutive Discharge

Approx. 20 flashes in [M 1/16] mode at about 2 frames per second with fully-charged Ni-Cd batteries.

Flash Coverage Angle (6-Step Zoom)

Zooming position						
	85mm	70mm	50mm	35mm	28mm	24mm
Vertical	23°	26°	34°	45°	53°	60°
Horizontal	31°	36°	46°	60°	70°	78°

Color Temperature

Daylight color (ideally suited for daylight type color film).

Auto Coupling Range

Approx. 0.7-7.5m (GN42, ISO100, f/5.6).

AF Spotbeam

Red light will be projected onto the subject in low-contrast or in dim light. Measurable distance range: Approx. 1-8m (under the Pentax testing conditions).

Film Speed

ISO25-1600

Flash Discharge Mode

TTL Auto, Manual, Multiple burst

Dedicated Functions with the Camera

Flash ready lamp. Viewfinder auto check. Auto shutter speed change. Slow-speed-sync. Trailing-shutter-curtain sync. Contrast-control sync. AF spotbeam.

Multiple Burst

Number of flash discharge: 2-9 times (1-step) [-] (consecutive). Recycling times: 1-20Hz (1-step). Flash light intensity: 1/8, 1/16, 1/32 (3-step).

Slave Flash

Flash sync mode: Manual & Multiple burst flash mode. Operating distance of slave flash: approx. 10m (under the Pentax testing conditions).

Bounce Flash Angle

Up: 0°, 45°, 60°, 75°, 90°
To right: 0°, 30°, 60°, 90°, 120°, 150°, 180°
To left: 0°, 30°, 60°, 90°

Auto Power Off

Automatic power off after 3 minutes of non-operation (except when using slave flash).

Auto Power Quick On

Automatic power-on by depressing the shutter release button halfway after auto power-off.

LCD Panel

Illuminated for about 10 sec. by depressing the illumination lamp switch. Goes off if depressed again.

Power Source

Four "AA" size alkaline (LR6) or Ni-Cd battery (KR-AA). Optional external power source: TR Power Pack-2 (PW-222).

Dimensions

77(W) x 124(H) x 122(D)
3.0"(W) x 4.9"(H) x 4.8"(D) (without batteries)

Weight

Approx. 385g (13.6 oz)

Cat No.

30367 AF500 FTZ Flash

PENTAX

AF330FTZ

TTL Power Zoom Flash

• For Auto Focus SLRs only

The AF-330FTZ Power Zoom Flash zooms automatically to match the lens focal length of F and FA series zoom lenses used on the PZ and SF auto focus cameras. With manual zoom lenses, the flash zoom position is set with a button.

This fully featured compact Automatic TTL flash unit was designed to operate in the Automatic Power Zoom mode when used in conjunction with the Pentax FA or F series of lenses. By pressing the shutter button halfway down the flash head zooms automatically when using the FA or F zoom lenses. The flash zoom range is from 28 to 85mm. The flash head can also be zoomed manually by pressing a button.

This clip-on type unit makes flash photography easy and automatic. It has a guide number of 33 (at ISO 100/m) and can be used in either the TTL Auto Flash Mode, which is controlled by the PZ/SF advanced TTL flash control system, or in manual mode. In addition, the unit offers a high and low Manual mode.

The AF-330FTZ has an AF Spotbeam Projector to assist the PZ/SF cameras auto focus in the dark. The flash head can also be turned off and the AF spotbeam used strictly as a focusing aide.

The AF-330FTZ also offers the highly sophisticated features of leading-shutter-curtain or trailing-shutter-curtain sync Slow Speed Sync Modes. A Contrast Control Sync Flash mode is a new feature which allows twin flash photography when the AF-330FTZ is used in combination with the RTF built-in flash unit on the PZ Cameras.

The AF-330 FTZ Flash also includes a full-information LCD control panel which displays the flash unit's current operational status, including flash mode, zoom lens setting and flash exposure compensation.



PENTAX

AF330FTZ TTL Power Zoom Flash

Specifications

Type

Clip-on type, serial-controlled TTL auto zoom electronic flash.

Guide Numbers

[MH] and [ML] ranges switchable

[MH] (Manual High = FULL)

[ML] (Manual Low = 1/16)

Focal length (zoom position)

	85mm	70mm	50mm	35mm	28mm
[MH]	33	31	28	24	20
[ML]	8.3	7.8	7	6	5

Flash Duration (1/2 peak)

Approx. 1/2000 sec. in [MH]

Approx. 1/20000 sec. in [ML]

Approx. 1/30000 sec. at minimum-distance discharge in [TTL]

Flash Frequency & Recycling Time:

Power	Recycling Time	Frequency
Alkaline battery	About 4 sec.	About 300
Manganese battery	About 6 sec.	About 80
Ni-Cd battery	About 3 sec.	About 120

Consecutive Discharge

Approx. 40 flashes in [ML] mode at about 2 frames per second with fully-charged Ni-Cd batteries.

Flash Coverage Angle (5-Step Zoom)

Zoom position

	85mm	70mm	50mm	35mm	28mm
Tilt	23°	26°	34°	45°	53°
Panning	31°	36°	46°	60°	70°

Color Temperature

Daylight color (ideally suited for daylight type color film).

Auto Coupling Range

About 0.6-5m (GN28, ISO 100, f/5.6).

AF Spotbeam

Projected onto the subject in low-contrast or in dim light. Measurable distance range: About 1-6m (according to Pentax testing conditions).

Film Speed

ISO25-1600

Dedicated Functions with the Camera

Flash ready lamp. Viewfinder auto check. Auto shutter speed. Slow-speed-sync. Trailing curtain sync. Contrast control sync. AF spotbeam.

Auto Power Off

Automatic power off after 3 minutes of switch-on.

Auto Power Quick On

Automatic power on by pressing the shutter release button halfway after auto power off.

LCD Panel

Illuminated for about 10 sec. by pressing the illumination button. Turned off if depressed again.

Power Source

Four "AA" size alkaline, manganese or Ni-Cd battery.

Dimensions

70(W) x 87(H) x 102(D) mm
2.8"(W) x 3.4"(H) x 4.0"(D)

Weight

210g (7.4 oz)

Accessories

Soft case

Cat. No.
30312 AF-330 FTZ

PENTAX

AF-400T Flash



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

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

Pentax AF-400T TTL Coupled Thyristor Automatic Electronic Flash

The new AF-400T has been designed for the photographer who requires maximum light output with total automatic and manual exposure control plus a wide variety of internal and external power source options. This handsomely-styled handle-mount unit delivers with an ASA 100 guide number of 130, fully integrated TTL automatic exposure control with the Pentax PZ, SF cameras, Super Program, LX and 645, a choice of three standard automatic operating ranges, and four manual power settings for creative lighting flexibility in both the "dedicated manual" and standard manual operating modes.

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

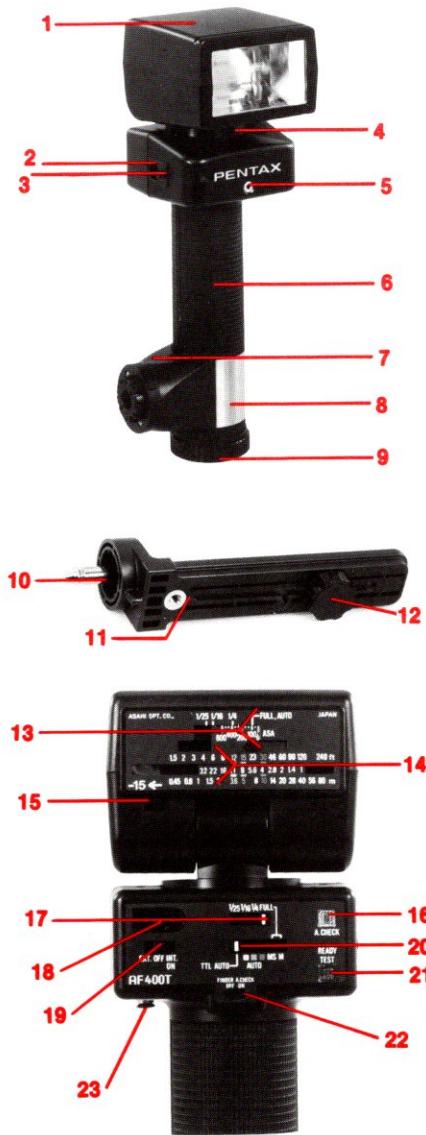
The functional design of the AF-400T is enhanced by its quick release bracket, handmount styling and by the availability of a wide choice in power supply options. The Grip Battery Pack combines the portability and convenience of AA Alkaline or NiCad cells with the handling ease of direct to handle mounting.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

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

For complete specifications and ordering information, see reverse side.

PENTAX

AF-400T Flash



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

Specifications

Type

Grip style TTL coupled "dedicated" electronic flash unit featuring through the lens auto exposure control with SF cameras, LX, Super Program, and 645, three standard auto operating ranges, and four level manual operation with manual sync or full manual override. Optional 4P Sync Cord A provides full TTL/Dedicated coupling with Pentax LX; full dedicated operation with P3n, P3, Program Plus, A3000, ME Super, MV, MV-1, and similar cameras is available with 4P Sync Cord B; full TTL/dedicated coupling available on SF cameras, 645, Super Program (and LX with FA-1 or FA-1W finder) while using 4P Sync Cord B. Compatible with other cameras with readily available optional PC Sync Cord.

Apertures on AUTO

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

Guide Numbers (ft.)

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

TTL Auto Operating Range

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

Non-TTL Auto Operating Ranges

- 4.1 to 32.8 feet (Red)
- 2.1 to 16.4 feet (Green)
- 1.5 to 11.8 feet (Yellow)

Auto Sensor Angle

20 Degrees

Color Temperature

Equivalent to daylight

Recycle Times

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

Flash Duration

1/1500 to 1/30,000 second

Number of Flashes

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

Power Sources

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

Angles of Illumination

45° vertical, 60° horizontal (covers a 28mm lens)

Bounce Capability

The head of the AF-400T rotates 270° horizontally (90° to the right, 180° to the left), and 90° vertically (plus a -15° setting for close-ups). The vertical angle can be further adjusted by changing the attachment angles of the bracket and clamp.

Other Features

Auto Exposure Check Lamp (LX, Super Program and 645 viewfinder confirmation with On/off Switch)

Ready Light indicates full charge
Open Flash Button

Size

86mm W x 260mm H x 92mm D
3.4" x 10.2" x 3.6"

Weight

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

Cat. No.

- 30390** AF-400T w/Clamp (w/o Bracket or Battery Holder)
- 30388** AF-400T kit (consists of AF-400T, 4P Sync Cord B, Bracket, Grip Battery Pack)
- 30398** Wide-Angle Adapter II for AF-400T
- 30399** Telephoto Adapter II for AF-400T
- 37341** 4P Sync Cord A for AF-400T or Hot-Shoe Grip (for PC Terminal of LX Camera)
- 37342** 4P Sync Cord B for AF-400T or Hot-Shoe Grip (for Hot-Shoe Contact)
- 37343** 4P Sync Cord C for AF-400T or Hot-Shoe Grip (for PC Terminal/Non-TTL)
- 37344** 4P Sync Cord A-5m (16.4 ft.) for AF-400T or Hot-Shoe Grip (for PC Terminal of LX Camera)
- 37346** 4P Sync Cord B-5m (16.4 ft.) for AF-400T or Hot-Shoe Grip (for Hot-Shoe Contact)
- 30392** Quick Release Bracket for AF-400T or Hot-Shoe Grip
- 30389** Clamp for AF-400T or Hot-Shoe Grip
- 37973** AF-400T 6x7 Bracket or Hot-Shoe Grip
- 38462** AF-400T Bracket for 645 or Hot-Shoe Grip
- 30394** Grip Battery Pack (AA Batteries) for AF-400T
- 37205** Power Pack 510V for AF-400T or AF-080C (battery not included)
- 90101** Power Cord for Power Pack 510V (Replacement)
- 37208** Transistor Power Pack for AF-400T or AF-080C
- 30395** AC Adapter II 120V for AF-400T or AF-080C

PENTAX

AF-280T Flash



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

Pentax AF-280T TTL Coupled Thyristor Automatic Electronic Flash

This new thyristor shoe-mount automatic electronic flash from the innovators at Pentax features a powerful ASA 100 guide number of 92 yet is extremely compact, lightweight and well-balanced. When used with the Pentax PZ, SF cameras, LX, Super Program, and 645, the AF-280T provides full TTL integration including through the lens automatic exposure control, automatic shutter speed synchronization at "X", viewfinder ready light and auto exposure viewfinder confirmation. With cameras such as the Program Plus, A-3000, ME Super, or MG, full "dedicated" features are retained for maximum flash versatility and, of course, the AF-280T is fully compatible with all other Pentax 35mm SLR cameras.

With the PZ, SF cameras, LX, Super Program, and 645, the AF-280T will deliver an automatic exposure range with through the lens accuracy of from 0.8 feet to 65.6 feet with an f/1.4 lens and ASA 100 film. In standard automatic it allows the photographer to select from two auto f/stop ranges for depth of field control and provides a maximum automatic operating distance of 24 feet.

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

Enhancing the unit's versatility even further is the fully rotating, bounce flash head which provides for - 15° to 90° angles in the vertical position and a full 270° in the horizontal.

PENTAX

AF-280T Flash



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

Specifications

Type

Compact, cordless, TTL coupled "dedicated" electronic flash unit featuring through the lens auto exposure control with the SF cameras, LX, Super Program, and 645, two standard auto operating ranges, dual level synchronized manual and full manual override. Provides automatic shutter speed setting and viewfinder ready light with compatible Pentax cameras; also provides viewfinder auto exposure confirmation with SF cameras, LX, Super Program, and 645.

Apertures on AUTO

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

Guide Numbers (ft.)

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

TTL Auto Operating Range

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

Non-TTL Auto Operating Ranges

3.5 to 24 feet (Red)
1.6 to 11.5 feet (Green)

Auto Sensor Angle

20 Degrees

Color Temperature

Equivalent to daylight

Recycle Times

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

Flash Duration

1/1500 to 1/30,000 second

Number of Flashes

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

Power Source

Four 1.5V AA-size Alkaline or NiCad batteries

Angles of Illumination

Covers 28mm camera lens
65° H x 50° V

Bounce Capability

Head rotates a full 270° with detents at each 45° position, horizontal rotation of 180° to the right (with click stops at 45°, 90° and 180°); rotates 90° to the left (with click stops at 45° and 90°); vertical adjustment from -15° to 90° with click stops at 0°, 45° and 65°. Lock release allows head to be set for -15° close-up position.

Other Features

Auto Exposure Check Lamp (LX viewfinder confirmation with On/Off Switch)

Ready Light indicates full charge

Open Flash Button

Hot-Shoe Locking Mechanism

Size

80mm W x 116mm H x 68mm D
(3.1" x 4.6" x 2.7")

Weight

300 grams (10.6 ounces) without batteries

Optional Accessories

AFW-1 Wide Angle Adapter

AFT-1 Telephoto Adapter

PENTAX

AF220T TTL Flash

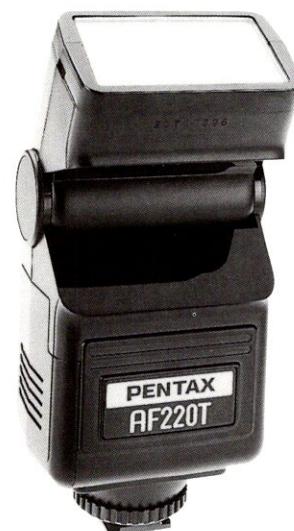
AF220T Flash a compact clip-on-type TTL auto dedicated flash unit. It features a compact lightweight design, the advanced TTL auto flash system and a vertically adjustable flash head with a guide number of 22 (ISO 100/m) and an illumination range of from 0.7 to 5.5 meters (2.3 to 18 feet; ISO 100, f/4). Powered by four AA-size batteries, it can be easily attached to most Pentax 35mm SLR cameras currently on the market.

TTL auto flash: The flash discharge level is automatically adjusted when the AF220T is used in combination with the Pentax PZ- and ZX-series autofocus cameras, the Pentax Super A and the Pentax 645. (It provides full discharge when used with other Pentax SLR cameras.) Automatic X-sync speed setting: When the AF220T's main switch is turned on, the camera's X-sync speed is automatically selected and the flash-ready mark in the camera's viewfinder lights up.

Automatic aperture setting: When the AF220T is set to the TTL Auto Flash mode and used in combination with a specific Pentax camera (Pentax PZ- or ZX- series model, Super A or 645), an A-, F- or FA-series lens, and with the lens aperture ring set to the "A" (auto) position, the aperture is automatically set at f/4 as soon as the flash is fully recharged.

When the camera is set to the Programmed Auto Flash mode, the aperture corresponding to the film speed is automatically selected.

Vertically adjustable flash head: In addition to the conventional horizontal position, the flash head can be set at a 60- or 90- degree angle to the subject for bounce flash photography.



The AF-220T features a bounce flash head for lighting control and flexibility

PENTAX

AF220T TTL Flash



Specifications

Type

Clip-on type, Series control TTL auto flash; specially designed for use with the camera incorporated TTL flash control device.

Guide Number

22 (ISO 100/m)

Flash Coverage Angle

Covers picture area of 35mm lens.

Color Temperature

Equivalent to daylight

TTL Flash Range

0.7m - 5.5m (2.3 - 18ft.)

Aperture Auto Set Function

With any Pentax, programmed AE with its lens set to "A".

Usable Film Speed

ISO 25 - 1600

Power Source

Four AA-size batteries (1.5v x 4); Alkaline, Manganese, or Ni-Cd.

Dimensions

62 (W) x 104.5 (H) x 69.5 (D)mm
2.4" (W) x 4.1" (H) x 2.7" (D)

Weight

165g (5.8 oz).

TTL Auto Flash Range (ISO 100)

f/stop	Flash Range
1.2	2.8 - 18.3m (9.2 - 60 ft.)
1.4	2 - 15.7m (6.6 - 51.5 ft.)
2	1.4 - 11m (4.6 - 36.1 ft.)
2.8	1 - 7.8m (3.3 - 25.6 ft.)
4	0.7 - 5.5m (2.3 - 18 ft.)
5.6	0.7 - 3.9m (2.3 - 12.8 ft.)
8	0.7 - 2.7m (2.3 - 8.9 ft.)
11	0.7 - 2m (2.3 - 6.56 ft.)
16	0.7 - 1.3m (2.3 - 4.3 ft.)
22	0.7 - 1m (2.3 - 3.3 ft.)

At ISO 400, the distances are doubled, while at ISO 25, the distances are halved.

Compatible Cameras and Exposure Modes

This flash is designed to work with a Pentax camera that incorporates a TTL Flash function.

Exposure mode	KAF/KAF2 mount cameras, 645
Programmed AE	O*
Aperture-Priority AE	O**

* Upon completion of charging, the flash-sync speed and Programmed f-stop will be set automatically.

**Upon completion of charging, the flash-sync speed will be set automatically. However; the aperture should be set manually.

ISO Film Speed, Aperture, and Flash Range

In the programmed AE mode, the aperture is automatically set to the f-stop as shown. The flash range (flash to subject distance) is fixed from 0.7m to 5.5m (2.3 - 18 ft.). In the Aperture Priority AE and Manual Exposure control modes, a proper f-stop must be manually selected. Otherwise, a proper exposure will not be obtained.

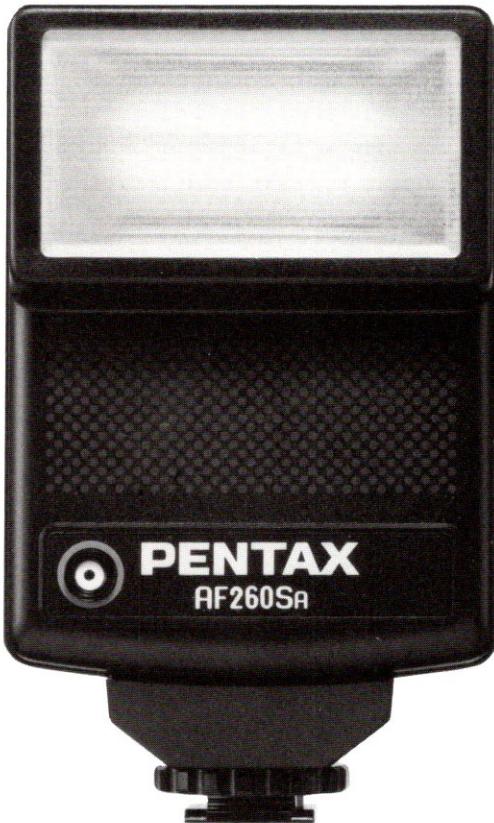
ISO	f/stop	ISO	f/stop
25	2	400	8
50	2.8	800	11
100	4	1600	16
200	5.6		

Ordering Information:
30307 AF220T TTL Flash

UPC Codes:
027075041554

PENTAX

AF-260SA Flash



Flash For The Programmed SLR

The AF260SA is a compact clip-on type flash unit developed for the Pentax programmed cameras. In combination with the P30N/P3N and other programmed SLR cameras, the shutter speed and f-stop are automatically controlled.

As the AF260SA has a large guide number, 26, the flash shooting from 1m up to 6.5m is possible. It covers the view angle of a 35mm wide-angle lens and a 28mm wide-angle lens can be also used by attaching its standard accessory, Wide-Angle Adapter. The new affordable AF260SA flash unit will make a good kit to help promote Pentax cameras in your market.

Specifications

Type

Clip-on type, automatic thyristor electronic flash. Specially designed for use with Pentax programmed AE cameras.

Guide Number

26 (ISO 100, M)

Flash Coverage Angle

55° horizontally; 38° vertically
(covers picture area of 35mm lens)

with Wide-Angle Adapter

66° horizontally; 46° vertically
(covers picture area of 28mm lens)

Color Temperature

Equivalent to daylight

Auto Sensor Angle

Approx. 18°

Flash Duration

1/1000 sec. (Auto, full output, 1/2 peak)
1/15000 sec. (Auto, Shortest, 1/2 peak)

Recycling Time

Approx. 8 sec. with Alkaline batteries

Number Of Flashes

Approx. 200 with Alkaline batteries

Aperture Auto Set Function

With any Pentax programmed AE camera with its lens set to "A"

Auto Flash Range

1m-6.25m (3.3 ft - 21 ft)

Compatible Cameras

P30N/P3N, LX and Kaf mount cameras

Compatible Film Speed

ISO 25-800

Flash-ready Indicator

Orange lamp / Lights up

Power Source

Four AA-size batteries (1.5V X 4); Manganese, Alkaline or Ni-Cd

Dimensions

70mm (W) x 114mm (H) x 55mm (d)
(2.8" x 4.5" x 2.2")

Weight Accessory

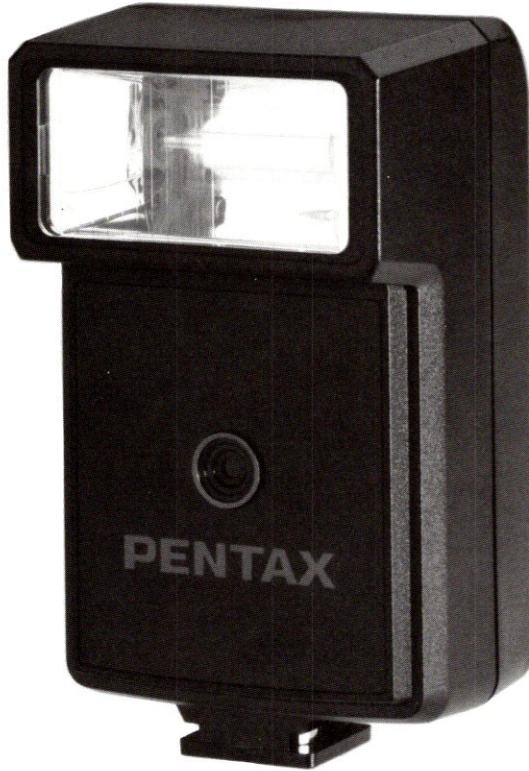
Wide angle adapter

Cat. No.

30256 AF260SA Electronic Flash w/Wide-Angle Adapter

PENTAX

AF-160SA Flash



Specifications

Type

Clip-on type, thyristor electronic flash with Programmed AE and Manual control.

Guide number

16 with ISO 100, in meters.

Flash duration

1/30,000 - 1/2,000 sec.

Number of flashes and Recycling time

Power source	Recycling time	Number of flashes
Alkaline batteries	Approx. 5 sec.	Approx. 300

Flash coverage angle

45° x 60° (covers 35mm lens).

Color temperature

Equivalent to daylight.

Auto flash range

0.5 - 4m (1.6 - 13 ft.)

Film speed range

ISO 25-400

Aperture auto set function:

Film speed (ISO)	Program	Flash range
25	f/2	0.5 - 4 m
100	f/4	(1.6 - 13 ft.)
400	f/8	

*Functions when used with programmed camera with its A-lens set to A.

The AF-160 SA is a compact clip-on type flash unit designed for Pentax programmed cameras. It has a guide number of 16 with ISO 100 film. In combination with Pentax programmed cameras, the shutter speed and f-stop are automatically set and the flash output for correct exposures is automatically controlled within a range of 1.6 ft.—13 ft. (ISO 100) by just setting the power switch at Program.

This flash unit can also be used on non-programmed cameras by setting the power switch at manual and following the Manual Exposure Table.

Power source

Two AA-size batteries (1.5V x 2): Maganese or Alkaline.

Dimensions

45 W x 90 H x 52 D mm (1.8" x 3.5" x 2.0")

Weight

100g (3.5 oz.)

Recommended aperture settings for manual flash

ISO	Distance to subject (ft.)						
	3	6	9	12	18	24	36
25	8	4	2.8	2	1.4		
50	11	5.6	4	2.8	2	1.4	
100	16	8	5.6	4	2.8	2	1.4
200	22	11	8	5.6	4	2.8	2
400	32	16	11	8	5.6	4	2.8

Cat No.

30376 AF-160SA Flash

PENTAX

AF-200SA Flash

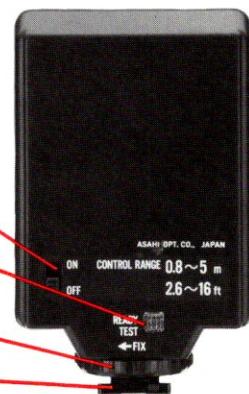
The Pentax AF-200SA is a light, compact electronic flash that was designed specifically for Pentax programmed cameras.

When used with a Pentax programmed camera in the programmed mode, flash photography is completely automatic. Simply turning the flash on, the shutter speed is automatically set to the "X" sync speed and the lens aperture is set to the correct f-stop. Any type of film can be used from ISO 25 through 1600, with an auto flash range from 2.6 to 16.4 ft.

In the aperture priority AE mode, the AF-200SA will still set the shutter speed to the flash sync speed, but the lens must be manually set to the proper f-stop. With ISO 25 film, the aperture should be set to f/2, with ISO 100 the aperture is f/4, and with ISO 200 film, the correct aperture is f/5.6. The flash range remains effective from 2.6 to 16.4 ft. no matter which film speed is used.

The AF-200SA can also be used with non-programmed Pentax cameras which have a hot-shoe. It can be used as described for the aperture priority AE mode. With Pentax cameras that do not have dedicated capabilities the shutter should be manually set to the proper flash sync speed.

1. Flash head	5. Hot Shoe
2. Adapter slots for wide-angle, telephoto adapters (AFW-1, AFT-1 optional)	6. Power switch
3. Battery cover	7. Flash-ready lamp/test button
4. Auto flash sensor	8. Thumbscrew
	9. Hot-shoe bracket



Specifications

Type

Clip-on type, automatic thyristor electronic flash, specifically designed for use with Pentax programmed cameras.

Guide number

20 with ISO 100, in meters.

Flash duration

Auto, full flash output. 1/2500 sec. (1/2 peak); auto, shortest: 1/15000 sec. (1/2 peak).

Number of flashes and recycling time

Power source	Recycling time	Number of flashes
Manganese batteries	Approx. 10 sec.	Approx. 60
Alkaline batteries	Approx. 8 sec.	Approx. 200
NiCad batteries	Approx. 4 sec.	Approx. 90

Flash coverage angle

65° horizontally; 50° vertically (covers 28mm lens).

Auto sensor angle

Approx. 20°

Color temperature

Equivalent to daylight.

Auto flash range

0.8-5m (2.6-16.4 ft.)

Compatible film speed

ISO 25-1600

Cat. No.

30365 AF-200SA Flash
30018 Wide Angle Adapter
30019 Telephoto Adapter

Aperture auto set function

Film Speed (ISO)	Aperture (f)	Flash Range
25	2	0.8 - 5m (2.6 - 16.4 ft.)
50	2.8	
100	4	
200	5.6	
400	8	
800	11	
1600	16	

(Function when used with programmed camera with its A-lens set to A.)

Sync and dedicated flash features

Flash-ready indication, automatic shutter-speed setting, slow shutter speed sync, automatic aperture setting.

Power Source

Four AA-size batteries (1.5V x 4): Manganese, Alkaline or NiCad.

Dimension Weight

62 W x 97 H x 58 D mm; 180 g.

Accessories

Case, AFW-1 adapter (option), AFT-1 adapter (option).

- Number of flashes is the average number of flashes fired every 30 sec. with the flash-ready lamp lighted within 30 sec. Test made at 20°C. The number also differs from one brand to another.

PENTAX

AF-140C Macro Flash

• For PZ, SF, LX, Super Program, 645



Pentax AF-140C Macro Flash Ring Light Set

A TTL auto flash with a guide number of 14 (ISO 100/m) for shadowless macro flash photography. It has a 360° circular flash head that clips-on to the camera lens to provide even illumination for a wide variety of subjects. This macro flash unit has four separate flash tubes. Depending on lighting conditions, the tubes can be manually selected to fire either as one or two pairs, for perfect exposures and three-dimensional flash effects.

- Built-in modeling light to check lighting conditions.
- Short flash discharge time to freeze action of a moving subject for sharply focused images.
- Manual flash capability, in addition to the TTL auto flash mode.
- Aperture can be manually selected in the TTL auto flash mode. When the camera's aperture is set at auto, the AF-140C selects f/5.6 or f/22 automatically for proper exposure.
- Macro photography with excellent illumination and focal distance, thanks to the small aperture made possible by the unit's large guide number.

The Ring Light operates jointly with the AF Ring Light Control Unit, which attaches directly to the camera hot-shoe. It houses the control switches and thyristorized flash circuitry to provide economical recycling. It also houses the four AA cells used as the internal power source.

PENTAX

AF-140C Macro Flash

The AF-140C Macro Flash offers two levels of TTL flash control and one manual flash mode. It can be used with all Pentax 35mm standard lenses, 50mm and 100mm macro lenses, and the 100mm bellows lens. It can also be used with the 645 and 75mm standard lens. It will not work with the 120mm Macro lens for the 645, or with any 67 lens, including the 135mm Macro.

AF-140C Macro Flash Ring Light Control Unit Specifications

Type

Clip-on type TTL and auto macro flash.

Control System

(1) TTL auto flash.
(2) Manual flash.

Usable Focal Lengths

Macro (50mm, 100mm and 200mm) and bellows 100mm.

Guide Number

Full discharge: GN 14 (ISO 100/m) (46 ft.).

Zooming Mode

Fixed.

Angle of Discharge

Horizontal: 60°
Vertical: 60°

Flash Illumination Range (TTL Auto)

0.05m-1m (ISO 100) (0.16 ft.-3.3 ft.).

Flash Discharge Time

Auto min: 1/50,000 second.
Manual: 1/3,000 second.

Discharge Interval/Number

(Full discharge)

Approx. 8 second/140 times (Alkaline batteries).
Approx. 6 second/50 times (Ni-Cd batteries).

Film Sensitivity

ISO 25-3200.

Color

Daylight.

Flash Control Modes

(1) TTL auto flash f/5.6 mode.
(2) TTL auto flash f/22 mode.
(3) Manual flash mode.
[f/5.6 and f/22 modes available when lens is set at auto.]

Shooting Modes

(1) 4-tube discharge mode.
(2) Left-side 2-tube discharge mode.
(3) Right-side 2-tube discharge mode.

LED Indication

(1) Recharge completion.
(2) Discharge confirmation.
Camera viewfinder: varied by camera type.

Others

- Modeling light.
 - (1) ON by switch.
 - (2) OFF by switch.
 - (3) Auto-off before discharge and 20 seconds after ON.
- Auto power-off after 10 min. without operation.
- Auto power-on coupled with camera.

Power Source

(1) 4 AA-size alkaline batteries.
(2) 4 AA-size Ni-Cd batteries.

Dimensions

Control Unit: 74(W) x 71(H) x 101(D) mm
(2.9" x 2.8" x 4.0")
Flash Unit: 100(W) x 100(H) x 26(D) mm
(3.9" x 3.9" x 1")

Weight

Control Unit: 180g (6.3 oz.) (without battery)
Flash Unit: 105g (3.7 oz.)

Accessories

- Soft case.
- 49mm, 52mm and 58mm attachment adapters.

Cat. No.
30302

AF-140C Macro Flash Ring Light
and Control Unit

PENTAX

Flash Accessories



4P Sync Cord A (for AF-400T or Hot Shoe Grip)

For PC Terminal of LX camera – Retains TTL & dedicated flash functions (3 feet long).

Cat. No.
37341



4P Sync Cord B (for AF-400T or Hot Shoe Grip)

For Hot Shoe contact – Can be used on all camera bodies; retains TTL & dedicated flash functions where applicable. (3 feet long).

Cat. No.
37342



4P Sync Cord C (for AF-400T or Hot Shoe Grip)

For standard PC Terminal/Non-TTL. (3 feet long).

Cat. No.
37343



4P Sync Cord A 5m (for AF-400T or Hot Shoe Grip)

For PC Terminal of LX camera; 5m (16 feet) long.

Cat. No.
37344



4P Sync Cord B 5m (for AF-400T or Hot Shoe Grip)

For Hot Shoe contact 5m (16 feet) long.

Cat. No.
37346



Hot Shoe Grip

For using Hot Shoe type flash units off camera. Must be used with 4P sync cord A, B, or C. Retains all TTL & dedicated functions where applicable. Has tripod socket on bottom cover.

Cat. No.
37126

Quick Release Bracket (for AF-400T or Hot Shoe Grip)

Attaches to tripod socket of 35mm cameras, for mounting the flash unit at the side of the camera.

Cat. No.
30392

AC Adapter II 120V for AF-400T or AF-080C

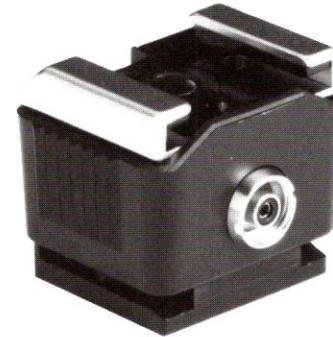
Power source for operating AF-400T or AF-080C with household current. Recycle time 7 seconds.

Cat. No.
30395

Hot Shoe Cover

Plastic cover for hot shoe contacts.

Cat. No.
31014



Hot Shoe Adapter 2P (for cameras w/o PC Terminals)

Attaches to camera's hot shoe; has a standard PC terminal. Use with PZ, SF, P30T and flash units that require a PC cord connection.

Cat. No.
31014

Reverse Ring Light Holder K

For use with AF-080C Ring Light with lens reversed.

Cat. No.
30418



Wide Angle Adapter for AF-200S, AF-200SA, AF-200T, AF-280T

Extends flash coverage for use with wide angle lenses down 24mm.

Cat. No.
30018

PENTAX

Flash Accessories

Wide Angle Adapter For AF-400T

Extends flash coverage for use with wide angle lenses down to 24mm.

Cat. No.
30398



Telephoto Adapter For AF-200S, AF-200SA, AF-200T, AF-280T

Gives greater concentration of the flash beam with telephoto lenses in the 85mm-200mm range.

Cat. No.
30019

Telephoto Adapter II for AF-400T

Gives greater concentration of the flash beam with telephoto lenses in the 85mm-200mm range.

Cat. No.
30399

Clamp (for AF-400T or Hot Shoe Grip)

This band clamp fits the AF-400T or Hot Shoe Grip, and has a quick release pin for rapid attachment to the quick release bracket.

Cat. No.
30389



AF-400T Bracket for 645

Attaches to 645 tripod socket, for side mounting AF-400T w/clamp or hot shoe grip w/clamp.

Cat. No.
38462



AF-400T 67 Bracket

Attaches to 67 strap lugs, for side mounting AF-400T w/clamp or hot shoe grip w/clamp.

Cat. No.
37973



Distributor for Multistrobe Lighting

Allows the use of up to three flash units for fully synchronized multi-flash photography. Attaches to camera via a 4P Sync Cord A, B, or C. Retains all automatic functions of both camera and flash when used with 4P sync cord A or B. Connects to AF-400T or Hot Shoe Grip with 4P Multi Sync Cord 5m.

Cat. No.
37330

4P Multi-Sync Cord 5m (16 ft.)

This cord is used to connect the three terminals of the distributor to AF-400T flashes or Hot Shoe Grips for multi-flash photography.

Cat. No.
37331

PENTAX

Flash Accessories

Grip Battery Pack for AF-400T

Attaches to handle mount of AF-400T. Uses 6 "AA" batteries. Approx. 70 flashes at full power with alkaline batteries. 45 flashes with NiCd batteries. Recycle time - 11 seconds with fresh alkaline or 9 seconds with fully charged NiCd batteries.

Cat. No.
30394



Transistor Power Pack for AF-400T or AF-080C

Power stored in units transistor circuitry for fast recycle time. Uses 6 "C" cell batteries. Carry with either the supplied shoulder strap or belt loop. Approx. 210 flashes available with 17 - second intervals at full power with alkaline batteries, 150 flashes with NiCd batteries. Recycle time 7 seconds with fresh alkaline or 6 seconds with fully charged NiCd batteries at full power.

Cat. No.
37208

Power Pack 510V for AF-400T or AF-080C

Uses a 510V high-voltage laminated battery. Has greatest number of flashes and faster recycling time than other portable power sources. Carry with either the supplied shoulder strap or belt loop. Approx. 300 flashes available with 30-second intervals at full power. Recycle time-2 seconds at full power with fresh batteries.

Cat. No.
37205

Power Cord for Power Pack 510V

Replacement cord for power pack 510V.

Cat. No.
90101

Pouch style cases are available for the AF-200 series flash units and the AF-280T.

Cat. No. **30017** Case for AF-200 series
Cat. No. **30382** Case for AF-280T

Hot Shoe Adapter FG Off Camera Shoe Adapter F

Used together, these two accessories permit off camera flash operation with the ZX line of SLR cameras and the AF-220T, AF240FT, AF330FTZ, AF400FTZ, and AF500FTZ flashes. The Extension Cord F5P (37347) connects the two units together.

Cat. No.
31045 Hot Shoe Adapter FG
31046 Off Camera Shoe Adapter F
37347 Extension Cord F5P



Hot Shoe Adapter F Extension Cord F5P

Used together these two accessories permit off camera flash operation with the AF-240FT, AF-330FTZ*, AF-400FTZ, and AF-500FTZ. The Hot Shoe Adapter F can also be used to raise the control pack for the AF-080C ring light, making it easier to operate the SF camera's shutter button and select switches.

*Off camera use requires 2 each Hot Shoe Adapter Fs.

Cat. No.
31022 Hot Shoe Adapter F
37347 Extension Cord F5P
37349 Extension Cord F5P (9.5 ft.)



Autofocus Flash Accessories

Hot Shoe Cover

Plastic cover for hot shoe contracts.

31019 Hot Shoe Cover SF1n, SF1
31023 Hot Shoe Cover FB (SF1n, SF1, SF10)
31024 Hot Shoe Cover FC (PZ10)
31025 Hot Shoe Cover FD (PZ1)
31026 Hot Shoe Cover FE (PZ20)

Cat. No.
31023

Wide Angle Adapter for AF-240FT

Extends flash coverage for use with wide angle lenses down to 28mm.

Cat. No.
30318

PENTAX

Flash Accessories



Telephoto Adapter for AF-240FT

Gives greater concentration of the flash beam with telephoto lenses in the 85mm-200mm range.

Cat. No.
30319



Wide Angle Adapter FWA for AF-400FTZ

Extends flash coverage for use with wide angle lenses down to 24mm.

Cat. No.
30384

Pouch style cases are available for the AF-240FT and AF-400 FTZ flash units.

Cat. No.
30314 Case for AF-330FTZ
30317 Case for AF-240FT
30369 Case for AF-500FTZ
30387 Case for AF-400FTZ

TR Power Pack II for AF-500FTZ Flash

Uses 6 "C" cell batteries. Gives approximately 400 flashes with 4 sec. recycle time with fresh alkaline batteries (NiCd batteries not recommended). Comes with case, power cord, and strap.

Cat. No.
37209

Multi-Mode Medium-Format SLR Camera with Built-In Motor Drive



- Programmed Auto
- Aperture Priority
- Shutter Priority
- Metered Manual
- TTL Flash
- Programmed Flash
- Leaf Shutter

All too often, the professional photographer must wait years for some new innovation to make its way from mass-market 35mm SLRs to medium-format cameras. The Pentax 645 is a welcome exception. It is a fully programmed multi-mode camera with more sophisticated electronics than any other medium-format SLR now on the market. The Pentax 645's seven exposure-control modes put the photographer in charge, whether the situation demands the instant response of programmed automation, the full creative freedom of metered manual, or anything in between, including aperture or shutter priority automation and automatic TTL flash synchronization. The Pentax combination of total control through electronics and superb picture quality with the 6 x 4.5 format opens up exciting new possibilities for professional-quality photography.

As versatile as the popular 35mm format is, the serious photographer often needs more. Only a larger format can produce sharp, professional-quality enlargements for display or transparencies for reproduction.

The Pentax 645 offers the superior photographic quality of the 6 x 4.5 format without sacrificing versatility and handling ease. The 6 x 4.5 negative provides 2,324 sq. mm of usable area — over two and a half times the area of a 35mm negative. That means finer resolution and better color fidelity in enlargements and easier viewing of stock photos. Using 120, 220, or 70mm film, the 6 x 4.5 rectangular negative format is also highly efficient, with none of the wasted space of 6 x 6 square negatives, which must usually be cropped into rectangular shape. And there's one more advantage to the 6 x 4.5 medium format: it gives the photographer access to a full range of professional-quality medium-format lenses — not only our new 645 lenses, but also, with an adapter, most Pentax 67-system lenses.



Compact prism

A highly compact pentaprism of a type never before used in a medium-format camera contributes significantly to the light weight and low-profile design of the camera. Thanks to this new prism, the 645 stands just a little taller than popular 35mm SLRs.

Smooth, quiet film winder

Most auto-wind cameras use a system of noisy speed-reduction gears to transmit motion from the motor to the film spools. For the Pentax 645, we've created a quiet belt-drive system that is both reliable and durable. "Teeth" on the belt help prevent slippage during high-speed winding.

Shock-reducing mirror brake

Regulating the motion of the mirror as it tilts is a motorized flywheel that acts as a governor, braking the mirror as it approaches its full-up position. Mirror shock is thus minimal, an important consideration at slow shutter speeds. Most other cameras use a jerky spring-action mirror mechanism.

Functional control panel layout

All electronic controls on the Pentax 645 are functionally arranged on the top panel of the body for easy access while shooting. The lefthand panel contains buttons for MODE, ISO setting and exposure compensation ($\pm EF$). These controls are activated by selecting buttons located between the righthand panel and the shutter release button. All control settings can be made in seconds without moving the hands from the shooting position. The lefthand panel also contains on/off switches for display panel illumination and viewfinder LED display. On the righthand panel, in addition to the selecting buttons, are large LCD readouts for all vital information concerning mode, aperture, shutter speed, flash status, ISO setting, exposure compensation and exposure count. Located between the selecting buttons and the shutter release is the main power switch. Switching off power to the camera does not erase previous control settings.

Multiple exposure ring and shutter cocked indicator

To capture two or more images in a single frame, turn the multiple exposure ring on the side of the camera before pressing the shutter release. This prevents the film from advancing. The shutter cocked indicator, located below the multiple exposure ring, shows red when the camera is ready for the next exposure.

PENTAX

645

Specifications

Type

6 x 4.5 format SLR with multi-mode automatic exposure controls and built-in motor drive.

Exposure Modes

Programmed AE, Aperture-Priority AE, Shutter-Priority AE, Metered Manual, TTL Auto Flash, Programmed Auto Flash, and Leaf-Shutter Lens modes.

Exposure Control Mode Selection

Via mode setting buttons and aperture ring of 645 lens.

Film

120 film (15 exposures), 220 film (30 exposures) and 70 mm film (approx. 90 exposures).

Picture Size

56mm x 41.5mm

Lens Mount

Pentax 645 bayonet mount (with electronic contacts).

Shutter

Electronically-controlled vertical-run cloth focal-plane shutter, from 15 to 1/1000 sec., 1/60 sec., and B. Electro-magnetic shutter release.

Exposure Information in Viewfinder

LED indication for lens aperture, shutter speeds and exposure factor warning, out-of-meter coupling and shutter/aperture coupling range warning, flash-ready signal, flash exposure confirmation signal, Flash sync at 1/60 sec. [60], Bulb [B], and Leaf-Shutter Lens [LS, F-].

External Indication

Liquid crystal displays (LCD) indicate Programmed AE [Auto, P], Aperture-Priority AE [Auto, f-numer], Shutter-Priority AE [Auto, shutter speed], Aperture-Priority AE (lens aperture set manually) [Auto, F-], Metered Manual [M, shutter speed], Flash sync at 1/60 sec. [60], Bulb [B], Leaf-Shutter Lens [LS, F-], exposure factor, ISO film speed, exposure count, and flash-ready signal.

Flash Synchronization

Via hot-shoe (X-sync contact, dedicated flash contacts) and X-sync socket. X-sync speed at 1/60 sec. Slow shutter speed synchronization possible in Metered Manual mode.

Viewfinder

Keplerian telescopic viewfinder with split-image/microprism Clear-Bright-Matte screen. (Interchangeable focusing screens available.); Viewing area 92% vertical and 93% horizontal, 0.75X magnification with 75mm lens at infinity and -1 diopter. Diopter adjustment possible from -5 to +2 diopters.

Mirror

Instant return mirror.

Film Loading

120 and 220 films semi-automatically loaded with start mark; 70mm film automatically loaded.

Film Winding

Automatic film winding by motor drive with single/consecutive shooting modes. (Single: 1 fps. Consecutive: approx. 1.5 fps.) Film winding automatically stops at end of film trailer.

Exposure Counter

LED indication. Additive type. Automatic resetting by LCD. Automatically sets shutter speed at 1/1000 sec. up to first frame. Exposure count not advanced in multiple-exposure mode.

Multiple Exposure

Via multi-exposure ring. Cancellation possible.

Exposure Metering:

Open-aperture, center-weighted TTL metering by GPD cells. Off-the-film metering for dedicated TTL automatic electronic flashes.

Exposure Range

From EV 3 (f/2.8 at 1 sec.) to EV 19 (f/22 at 1/1000 sec.) with 75mm f/2.8 lens with ISO 100 film.

Exposure Compensation

Via exposure factor button. Settings at +3, +2, +1, 0, -1, -2, and -3.

Depth-of-Field Preview

Via preview lever when aperture set manually.

Power Source and Battery Life

Six 1.5V "AA" batteries (Manganese, Alkaline or NiCd) for exposure control/display circuits and motor drive. Power automatically turned off 30 seconds after the return of shutter release button.

	Power Source		
	Manganese Battery:	Alkaline Battery:	Ni-Cd Battery:
120 Film	Approx. 100 rolls	Approx. 250 rolls	Approx. 100 rolls
220 Film	Approx. 70 rolls	Approx. 170 rolls	Approx. 70 rolls
70mm Film	Approx. 20 rolls	Approx. 50 rolls	Approx. 20 rolls

Memory Power Source

One built-in lithium battery for exposure data memory circuits. Minimum battery life 5 years. (Replaced at Pentax service center.)

Size

147 mm (W) x 109mm (H) x 117mm (D)
(5.7" x 4.3" x 4.6") with Film Holder and Grip 645.

Weight

1,320g (46.2 oz.) with lithium battery, Film Holder and Grip 645.

Catalog. No.

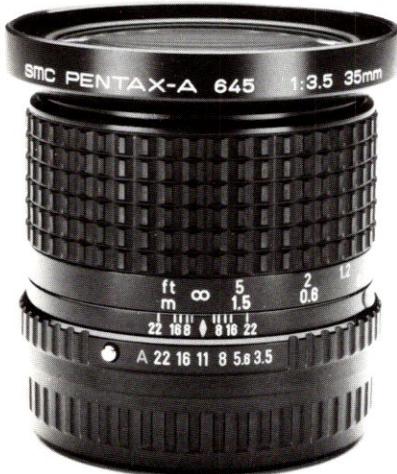
15712 Pentax 645 Body with battery grip, small eyecup, large eyecup, body caps, strap, and split-image/microprism focusing screen.

PENTAX

645 Lenses

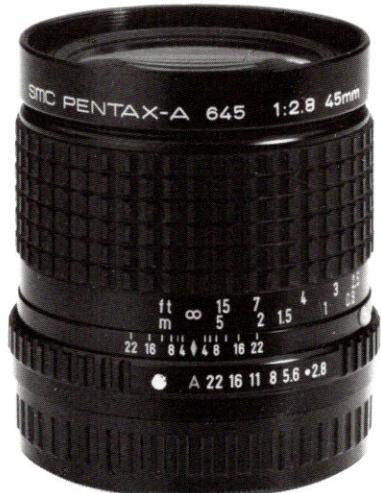
SMCP-A 645 35mm f/3.5

Minimum Aperture: 22
Lens Construction: 8 groups 9 elements
Angle of View: 90°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.3m (1.0 ft.)
Filter Size: 77mm
Lens Hood: RH-RB 77
Lens Case: HG-115/S80-120
Maximum Diameter & Length:
80mm x 67mm (3.1" x 2.6")
Weight: 470g (16.6 oz.)
Catalog No.: 26325 SMCP-A 645
35mm f/3.5 w/case
UPC Code: 027075028874



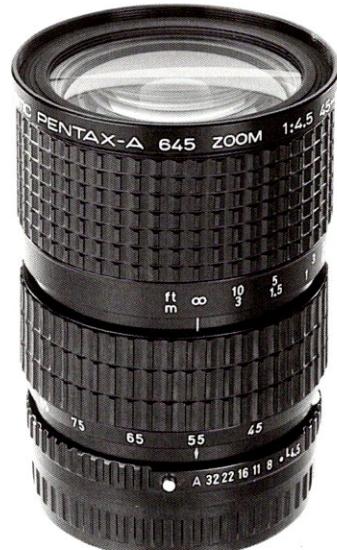
SMCP-A 645 45mm f/2.8

Minimum Aperture: 22
Lens Construction: 8 groups 9 elements
Angle of View: 76°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 67mm
Lens Hood: RH-B70
Lens Case: HG-115B/S80-120
Maximum Diameter & Length:
74mm x 66.5mm (2.9" x 2.6")
Weight: 400g (14.1 oz.)
Catalog No.: 26305 SMCP-A 645
45mm f/2.8 w/case
UPC Code: 027075028791



645 Zoom 45mm-85mm f/4.5

Minimum Aperture: 32
Lens Construction: 9 groups 11 elements
Angle of View: 76°-44.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.5m (1.6 ft.)
Macro Magnification: 0.22x
Filter Size: 77mm
Lens Hood: RH-RD 77
Lens Case: S80-160
Maximum Diameter & Length:
80mm x 99.5mm (3.1" x 3.9")
Weight: 805g (28.2 oz.)
Catalog No.: 26715 SMCP-A 645 Zoom
45-85mm f/4.5 w/case
UPC Code: 027075039049

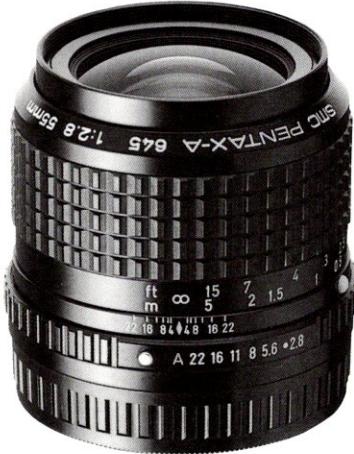


PENTAX

645 Lenses

SMCP-A 645 55mm f/2.8

Minimum Aperture: 22
Lens Construction: 7 groups 8 elements
Angle of View: 65°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: 58mm
Lens Hood: RH-B58
Lens Case: HG-115C/S80-80
Maximum Diameter & Length:
74mm x 60.5mm (2.9" x 2.4")
Weight: 410g (14.5 oz.)
Catalog No.: 26315 SMCP-A 645
55mm f/2.8 w/case
UPC Code: 027075028807



SMCP-A 645 75mm f/2.8

Minimum Aperture: 22
Lens Construction: 5 groups 6 elements
Angle of View: 50°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.6m (2.0 ft.)
Filter Size: 58mm
Lens Hood: RH-A58
Lens Case: HG-90/S80-80
Maximum Diameter & Length:
74mm x 37.5mm (2.9" x 1.5")
Weight: 240g (8.5 oz.)
Catalog No.: 26101 SMCP-A 645
75mm f/2.8 w/case
UPC Code: 027075002319



SMCP 645 75mm f/2.8 Leaf Shutter

Minimum Aperture: 22
Lens Construction: 5 groups 6 elements
Angle of View: 50°
Diaphragm: Fully Automatic (non-Program)
Minimum Focusing Distance: 0.75m (2.5 ft.)
Flash Sync Shutter Speeds: 1/60 to 1/500
Filter Size: 58mm
Lens Hood: RH-A58
Lens Case: HG-100/S80-80
Maximum Diameter & Length:
76mm x 49.5mm (3.0" x 1.9")
Weight: 365g (12.9 oz.)
Catalog No.: 26115 SMCP 645 LS
75mm f/2.8 w/case
UPC Code: 027075028784

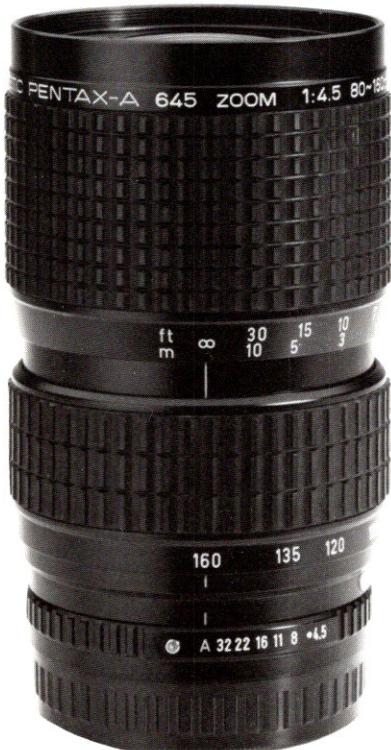


PENTAX

645 Lenses

SMCP-A 645 Zoom 80mm-160mm f/4.5

Minimum Aperture: 32
Lens Construction: 11 groups 11 elements
Angle of View: 47° - 24.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.0m (3.3 ft.)
Filter Size: 77mm
Lens Hood: RH-A77
Lens Case: HE-189B/S90-160
Maximum Diameter & Length:
82.5mm x 131mm (3.2" x 5.2")
Weight: 1,010g (35.6 oz.)
Catalog No.: 26705 SMCP-A 645 Zoom
80mm-160mm f/4.5 w/case
UPC Code: 027075028861



SMCP-A 645 Macro 120mm f/4

Minimum Aperture: 32
Lens Construction: 7 groups 9 elements
Angle of View: 32.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 0.39m (1.3 ft.)
Maximum Magnification: 1.0x
Filter Size: 67mm
Lens Hood: MH-RA67
Lens Case: HG-170/S80-160
Maximum Diameter & Length:
78.5mm x 110mm (3.0" x 4.3")
Weight: 695g (24.5 oz.)
Catalog No.: 26905 SMCP-A 645 Macro
120mm f/4 w/case
UPC Code: 027075028876



SMCP 645 135mm f/4 Leaf Shutter

Minimum Aperture: 32
Lens Construction: 5 groups 5 elements
Angle of View: 29°
Diaphragm: Fully Automatic (non-program)
Minimum Focusing Distance: 2.0m (6.6 ft.)
Flash Sync Shutter Speed: 1/60 to 1/500
Filter Size: 58mm
Lens Hood: RH-A58
Lens Case: HG-115/S80-120
Maximum Diameter & Length:
76mm x 69mm (3.0" x 2.7")
Weight: 570g (20.1 oz.)
Catalog No.: 26415 SMCP 645 LS
135mm f/4 w/case
UPC Code: 027075028838

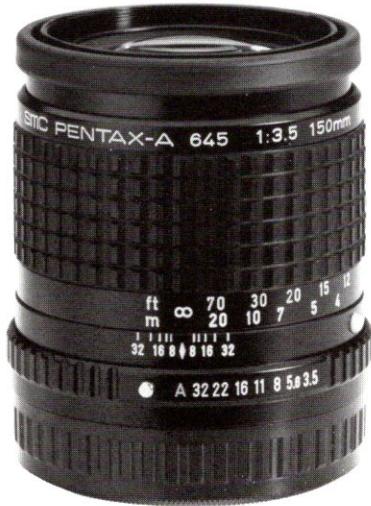


PENTAX

645 Lenses

SMCP-A 645 150mm f/3.5

Minimum Aperture: 32
Lens Construction: 4 groups 4 elements
Angle of View: 26°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 1.4m (4.6 ft.)
Filter Size: 58mm
Lens Hood: Built-in
Lens Case: HG-115/S80-120
Maximum Diameter & Length:
74mm x 71.5mm (2.9" x 2.8")
Weight: 435g (15.3 oz.)
Catalog No.: 26405 SMCP-A 645
150mm f/3.5 w/case
UPC Code: 027075028821



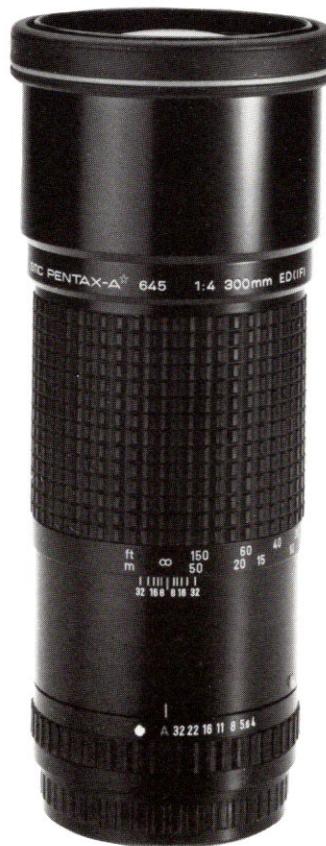
SMCP-A 645 200mm f/4

Minimum Aperture: 32
Lens Construction: 4 groups 4 elements
Angle of View: 20°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 2.0m (6.6 ft.)
Filter Size: 58mm
Lens Hood: Built-in
Lens Case: S80-160
Maximum Diameter & Length:
74mm x 127.5mm (2.9" x 5.0")
Weight: 570g (20.1 oz.)
Catalog No.: 26435 SMCP-A 645
200mm f/4 w/case
UPC Code: 027075028845



SMCP-A* 645 300mm f/4 ED(IF)

Minimum Aperture: 32
Lens Construction: 8 groups 8 elements
Angle of View: 13.5°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 3.0m (9.8 ft.)
Filter Size: 77mm
Lens Hood: Built-in
Lens Case: HF-270
Maximum Diameter & Length:
93mm x 208mm (3.7" x 8.2")
Weight: 1,360g (48 oz.)
Catalog No.: 26425 SMCP-A* 645
300mm f/4 ED(IF) w/case
UPC Code: 027075028852



PENTAX

645 Lenses

SMCP-A* 645 600mm f/5.6 ED(IF)

Minimum Aperture: 45
Lens Construction: 11 groups 12 elements
Angle of View: 6.6°
Diaphragm: Fully Automatic
Minimum Focusing Distance: 5.0m (16.4 ft.)
Filter Size: 49mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive Trunk Case
Maximum Diameter & Length:
156mm x 353mm (6.1" x 13.9")
Weight: 5,000g (176.4 oz.)
Catalog No.: 26600 SMCP-A* 645
600mm f/5.6 ED(IF) w/Trunk Case
UPC Code: 027075021464



645 1.4X Rear Converter A

Lens Construction: 4 groups 5 elements
Maximum Diameter & Length:
77mm x 31mm (3.0" x 1.2")
Weight: 265g (9.3 oz.)
Lens Case: HG-90/S80-80
Usable Lenses: 120/4, 200/4, 300/4, 600/5.6
Catalog No.: 38405 645 1.4X Rear
Converter A w/case
UPC Code: 027075028890



645 2X Rear Converter A

Lens Construction: 4 groups 6 elements
Maximum Diameter & Length:
77mm x 60mm (3.0" x 2.4")
Weight: 350g (12.3 oz.)
Lens Case: HG-115B/S80-120
Usable Lenses: All 35mm to 600mm,
80mm-160mm Zoom
Catalog No.: 38406 645 2X Rear
Converter A w/case
UPC Code: 027075028906



PENTAX

645 Lens Hoods and Cases

CODE#	645 LENS	FILTER SIZE	CODE#	LENS HOOD	CODE#	CASE
26325	35mm/3.5	77mm	38722	RH-RB 77	38863 33924	HG-115 S80-120
26305	45mm/2.8	67mm	38711	RH-B 70	38861 33924	HG-115B S80-120
26715	45-85mm f/4.5	77mm	38723	RH-RB 77	33925	S80-160
26315	55mm/2.8	58mm	38702	RH-B 58	38862 33927	HG-115C S80-80
26101	75mm/2.8	58mm	38701	RH-A 58	38866 33927	HG-90 S80-80
26115	75mm/2.8 L.S.	58mm	38701	RH-A 58	38860 33927	HG-100 S80-80
26705	80-160mm/4.5	77mm	38721	RH-A 77	38865 33929	HE-189B S90-160
26905	120mm/4.0 Macro	67mm	34325	MH-RA 67	38868 33925	HG-170 S80-160
26415	135mm/4.0 L.S.	58mm	38701	RH-A 58	38863 33924	HG-115 S80-120
26405	150mm/3.5	58mm	–	Built-in	38863 33924	HG-115 S80-120
26435	200m/4.0	58mm	–	Built-in	33925	S80-160
26425	300mm/4.0 ED(IF)	77mm	–	Built-in	38864	HF-270
26600	600mm/5.6 ED(IF)	49mm (R)	–	Built-in	Exclusive Trunk Case supplied w/lens	
38405	1.4X Converter	–	–	none	38866 33927	HG-90 S80-80
38406	2X Converter	–	–	none	38863 33924	HG-115 S80-120
			RH- Rubber Hood MH- Metal Hood			H- Hard Case S- Soft Case



LENS HOOD

PENTAX

645 Accessories



Power Cord 645

The Power Cord 645 is an accessory to be used in remote control photography. Connect the grip connector plug (that has been removed from the 645 body) to the body connector socket. In this way the shutter can be manipulated from the grip positioned slightly away from the camera or kept warm in pocket.

Cat. No.

38451 Power Cord 645 (3M)



Adapter 645 for 67 Lens

This adapter enables you to use the Pentax 67 lens with the Pentax 645 body. When 67 lenses are used with this adapter, open aperture metering is maintained and three of the 645's exposure modes can be used – aperture priority, TTL flash, and metered manual.

Compatible 67 Lenses – SMC Fish-Eye 67 35mm f/4.5, SMC 67 45mm f/4, SMC 67 55mm f/4, SMC 67 75mm f/4.5, SMC 67 90mm f/2.8, SMC 67 105mm f/2.4, SMC Macro 67 135mm f/4, SMC 67 165mm f/2.8, SMC 67 200mm f/4, SMC 67 300mm f/4, SMC 67 400mm f/4, SMC 67 600mm f/4, SMC-M* 67 800mm f/6.7 ED(1F)

Cat. No.

38454 645 Adapter for 67 System Lenses



Adapter K for 645 Lens

The Adapter K for 645 Lens is an adapter ring to mount 645 lenses to Pentax K (KA, Kf) mount 35mm SLRs. It permits photography of the subject up to infinity (x) as an ordinary lens. When you go out for a photo trip with your 645 camera and its lenses, and are carrying a 35mm SLR as a back-up, you can use your 645 lens for that camera as well. When the subject doesn't require this 6x4.5cm larger format, by using this space-saving and easy-to-carry adapter, you can use the 35mm SLR combining your 645 lens. Stop-down metering is required.

Cat. No.

38455 Adapter K for 645 Lenses



Quick Shoe 645/67

This accessory enables you to attach the camera to the tripod or detach the camera from the tripod in seconds. The unit consists of the tripod shoe that attaches to the tripod head and the adapter that attaches to the camera. The adapter 645/67 is used for the Pentax 645 or 67 camera.

Cat. No.

38464 Quick Shoe 645/67 set (38456 and 38458)

38456 Quick Shoe (mounts on tripod)

38458 Quick Shoe Adapter 645/67 (mounts on camera)



Hot-Shoe Adapter LS

This adapter is needed when the 645's or 67's leaf-shutter lens and the clip-on type electronic flash are used in combination. It is first attached to the 645 camera body or the 67 Grip, onto which the flash unit is mounted. The sync cord is connected to the X-sync socket on the lens. This combination, however, does not permit TTL Auto Flash photography.

Cat. No.

38460 Hot-Shoe Adapter LS (30cm, 11.8 in)



AF-400T Bracket for 645

When used with the clamp for AF-400T or hot shoe grip (supplied w/AF-400T) this bracket securely attaches the AF-400T or hot-shoe grip to the 645.

Cat. No.

38462 AF-400T Bracket for 645

645 Accessories



70mm Film Holder 645 Set

Holds Type II 70mm film in 15 foot cartridges for approximately 85 6 x 4.5cm exposures. Comes with eyepiece extension, one empty film cartridge, #38806 Back Cover, and carrying case.

Dimensions, W x H x D: 96 x 72.5 x 114mm (3.8 x 2.9 x 4.5 in.)
Weight (without cartridge): 394 gr. (13.9 oz.)

Cat. No.

38800 70mm Film Holder 645 set w/eyepiece, case, and back cover
38807 Eyepiece for 70mm Film Holder 645
38808 Soft Case for 70mm Film Holder 645
38806 Back Cover for 70mm Film Holder 645 (also fits 120 and 220 645 Film Holders)



120 Film Holder 645

Holds 120 roll film for 15 exposures. Has film memo holder and comes with storage case.

Cat. No.

38801 120 Film Holder 645



220 Film Holder 645

Holds 220 roll film for 30 exposures. Has film memo holder and comes with storage case.

Cat. No.

38802 220 Film Holder 645



Metal Camera Case 645

A Pentax-exclusive case convenient for carrying the 645 system for outdoor photography. Made of lightweight and intensified aluminum, the case is extremely lightweight and durable. It is partitioned to contain a 645 camera, lenses, and accessories. The partitions are adjustable. It also has a removable bag on one side of the case to contain small items. Dimensions (WxHxD): 18"x13"x6"

Cat. No.

38855 Metal Camera Case 645 w/Side Case



645 Soft Case

Made of soft suede, this can contain a 645 body with any one of the interchangeable lenses from 45mm to 150mm. Can also contain the 645 body even with the Large Eyecup on.

Cat. No.

38850 645 Soft Case



Auto Bellows 645 Set

Auto Bellows for closeups and macrophotography. Gives over 2x life-size magnification with 75mm f/2.8 lens. Rack & pinion adjustment for rail, front & rear standards. Requires stop-down metering; Program operation not possible.

Usable Lenses: Pentax 645 lenses from 55-200mm (excluding 80-160mm zoom)

Bellows Extension: 54mm minimum — 180mm maximum

Auto Diaphragm Operation: Possible with Infrared Remote Release Cord and Cable Release 30 (both included).

Reversing Lens: Possible with optional 645 Reverse Adapter Set

Tripod Socket: 1/4" and 3/8"

Dimensions, W x H x D: 100 x 197 x 213mm (3.9 x 7.8 x 8.4 in.)

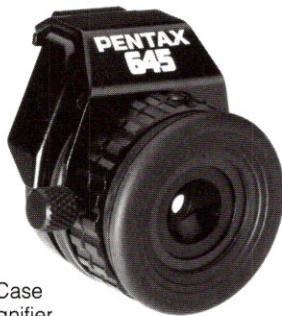
Weight: 1.6 kg (3.6 lb.)

Cat. No.

38421 Auto Bellows 645 Set

PENTAX

645 Accessories

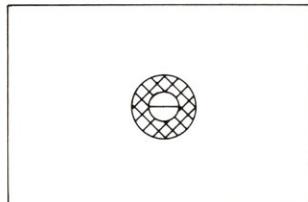


645 Magnifier

Cat. No.

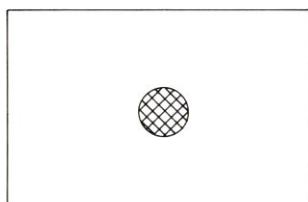
38435 645 Magnifier w/Case
38437 Case for 645 Magnifier

645 Focusing Screens



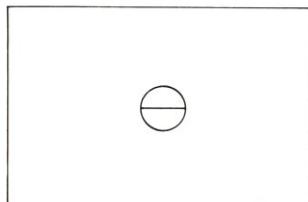
UC-21

Matte field and split-image spot with microprism collar



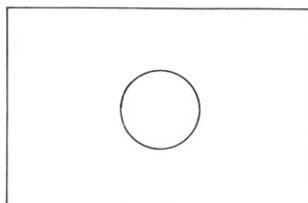
UA-21

Matte field and microprism spot



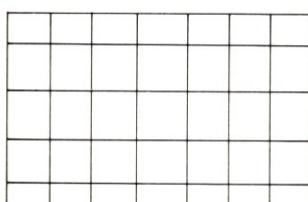
UB-21

Matte field and split-image spot



UE-20

Matte field only



UG-20

Matte field and cross hairs

Cat. No.

38531 Interchangeable Focusing Screen 645 UA-21
38532 Interchangeable Focusing Screen 645 UE-20
38533 Interchangeable Focusing Screen 645 UB-21
38534 Interchangeable Focusing Screen 645 UG-20
38535 Interchangeable Focusing Screen 645 UC-21



645 Eyecup

Cat. No.

38461 645 Eyecup (replacement)
38463 645 Large Eyecup



645 Grip

Replacement grip for 645, with holder for 6-AA batteries.

Cat. No.

38471 645 Grip

Camera Strap B for 645

Replacement camera strap for 645 camera body.

Cat. No.

38472 Camera Strap B (with connectors)

PENTAX

645 Accessories

Auto Extension Tube-A 645 Set



No. 1

No. 2

No. 3

The Auto Extension Tube-A 645 is a set of close-up and copying accessories, which are designed to be coupled with the 645 camera body and any of the 645 lenses. Provision of lens information contacts allows using the A (Auto) setting of the A645 lens. Tubes No. 1, No. 2 and No. 3 are usable in any combination or individually, permitting open aperture metering. These tubes have a combined extension of 79.8mm (13.3, 26.6 and 39.9mm).

Cat. No.

38501 Auto Extension Tube-A 645 No. 1
38502 Auto Extension Tube-A 645 No. 2
38503 Auto Extension Tube-A 645 No. 3
38504 Auto Extension Tube-A Set w/Case (Tubes No. 1,2,3)
38867 Case HG-115D for Auto Extension Tube-A Set



Helicoid Extension Tube 645

The Helicoid Extension Tube is a close-up and copy work accessory furnished with a helicoidal thread to enable free change of photographic magnification with a single unit. In actual use, it is inserted between the camera body and the lens. As the helicoid is extended (43.7-67.4mm), the subject at a near distance may be photographed in a much larger image. This tube can be used with all 645 lenses except the SMCP-A 645 300mm f/4 ED(IF). It is compatible with 67 lenses by using the adapter 645 for 67 lenses.

Cat. No.

38512 Helicoid Extension Tube 645 w/Case

58mm Reverse Adapter 645

When working at magnifications larger than life-size, it is recommended that the lens be reversed, improving focusing capability and thus, resulting in better pictures. The 58mm Reverse Adapter 645 is an accessory ring to have the Pentax 645 lens (filter thread 58mm 0) mount in the reversed position, on the 645 camera body, or on the Auto Extension Tube-A 645 mount itself.

When used in combination with the Helicoid Extension Tube 645 or Auto Extension Tube-A 645, it allows photographic close-ups or copies, at magnifications exceeding 1:1.

Reverse Attachment 645

This is another accessory ring for attaching to the "reversed" 645 lens mount, designed to enable the activating of the stop-down metering of the reversed lens. A filter or hood can be attached to the 58mm thread on the attachment.

38450 645 Reverse Adapter Set (includes 38452, 38453)
38452 58mm Reverse Adapter 645 (reverses lens onto body)
38453 Reverse Attachment 645 (stops down reversed lens)

SMC 645 Close-Up Lenses

Super Multi coated, two element construction.

645 lens	S33	1/4.3~1/2.4
A75mm f/2.8	S56	1/7.1~1/3.2
645 lens	S33	1/4.3~1/2.7
LS 75mm f/2.8	S56	1/7.1~1/3.7

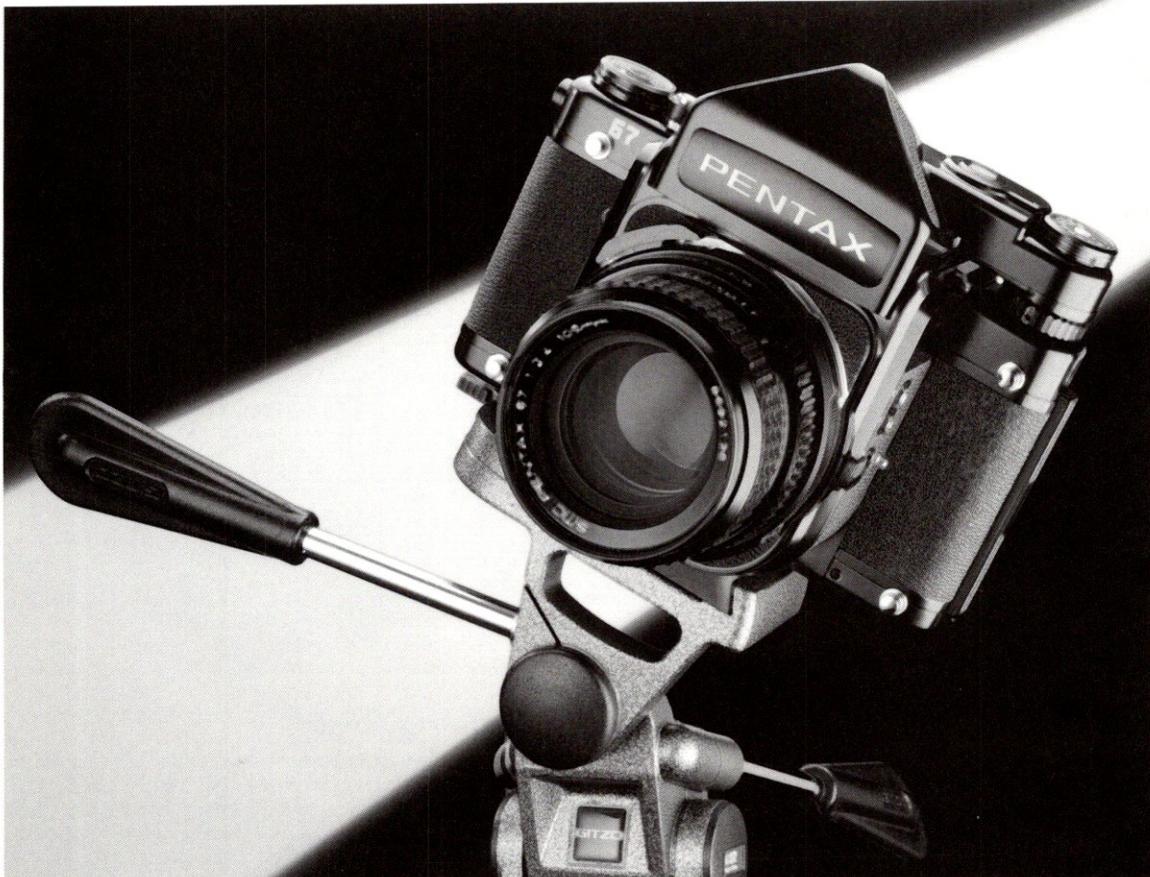
38411 SMC Close-up Lens S33 58mm
38412 SMC Close-up Lens S56 58mm



Refconverter 645

Screwed in the camera's viewfinder eyepiece with the eyecup removed, the Refconverter is an invaluable aid when you are using the camera on a tripod, and are shooting down on your subject. It is useful in any situation where it is difficult to see your subject with normal eye-level viewing. Provides exactly the same image you normally see in the camera's viewfinder. Swivels for vertical and horizontal shooting.

38440 Refconverter 645 w/Case
38442 Case for Refconverter 645



The Super SLR!

A stampeding stallion...An athlete making a flying tackle...A hummingbird darting from blossom to blossom...A glamorous model posing atop a sand dune...

Regardless of the subject, photography with the Pentax 67 combines unmatched image quality with maximum handling ease. That's why we call it the "Super SLR." For it is a perfect balance of two picture-taking personalities. It's the large format camera guaranteeing the high-quality results and non-waste enlargements inherent in its 67 "ideal" negative format; and from its very inception it was designed to incorporate all of the outstanding features of a 35mm SLR — including well-positioned controls, precise eye-level operation, superb balance, smooth and steady shutter release, an electronic focal plane shutter, well-dampened mirror action and a host of other outstanding features. And, enhancing its ver-

satility even more is a wide array of interchangeable lenses from ultra-wide to ultra-telephoto, fish-eye-to macro, and also a full range of close-up accessories. Optional viewfinders permit the camera to be used at waist and ground levels, on vertical copy stands or on low-height tripods. A highly accurate TTL metering pentaprism finder is also available which provides full-aperture readings with automatic diaphragm lenses. In addition, there's an assortment of focusing screens with varied alignment patterns for a wide variety of studio, architectural and other applications.

But, these are not the only reasons we call the Pentax 67 the "Super SLR." It would be hard to overlook its rugged body and durable construction. Photographers really appreciate its capability to take the day-in, day-out battering of studio work and yet render unwavering performance on location in a scorching desert one moment or on a freezing mountain top the next.

There's yet one more superlative which can be applied to the "Super SLR" — the quality of its SMC 67 lenses, acclaimed the world over for their brilliance and clarity. Like the camera, these also have been designed along 35mm SLR lines, featuring a bayonet mount for quick changes, and automatic diaphragm action on all models through 300mm and including the 500mm and 800mm ED(IF) telephoto. Moreover, as the only medium format lenses treated with Super-Multi-Coating, SMC lenses retain their crisp sharpness and dramatic contrast even in the harshest lighting conditions.

It all adds up to "The Super SLR." The Super Camera... The Super Lenses... The Super System!

PENTAX

67 System

Not a format designed to match the camera, but a camera designed to match the format.

With the advent of roll film, box-shaped cameras were designed to accommodate it. But, whether inexpensive plastic box cameras or deluxe twin lens and single lens reflexes, they were too awkward to be held both horizontally and vertically; consequently, the film format was designed as a square. This way, no matter how the camera was held, the result was the same. Later, when attempts were made to extend the format size of roll film to 67, the box was enlarged, but not redesigned to permit holding the camera sideways; it was decided to rotate the film instead.

Both of the above examples may be considered as designing the format to match the camera. Or reworded, placing the cart before the horse.

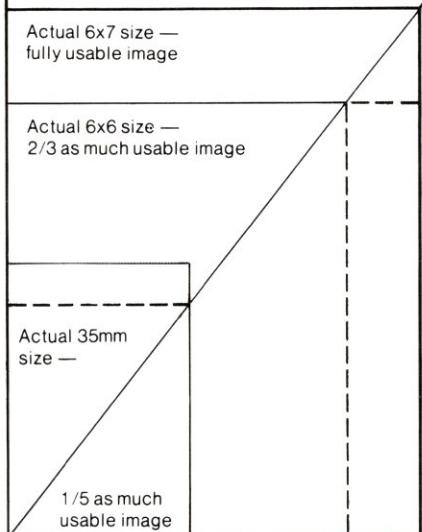
But, the solutions created more problems than they solved. Although the original square format design eliminated the need to hold the camera sideways, it created a large waste, as negatives required cropping to create a rectangular picture. The rotating back design eliminated the problem of negative waste, but added significant bulk and weight, hereby restricting the use of the camera.

Smaller "ideal" format cameras were then designed to eliminate the rotating back, however, the awkward square box was retained, and the resulting small 6x4.5 format, as the cropped 6x6 square, results in more grain and less sharpness in enlargements.



8x10 Format

The Pentax gives a $2\frac{1}{4} \times 2\frac{1}{4}$ inch (55mm x 70mm) negative. With the 6x7, you need enlarge the negative only 3.2 times for an 8x10 print. With only 21% more actual area than $2\frac{1}{4}$ square (6x6) negative, there is fully 50% (two square inches) more usable negative with the 6x7 format over the old 6x6 "square." And it enlarges to all standard paper sizes without cropping, and with five times (500% more) the image area of 35mm, even the fastest films can be used with the comfortable assurance that "fine grain", better color, and excellent image definition will be retained in enlargement or projection.



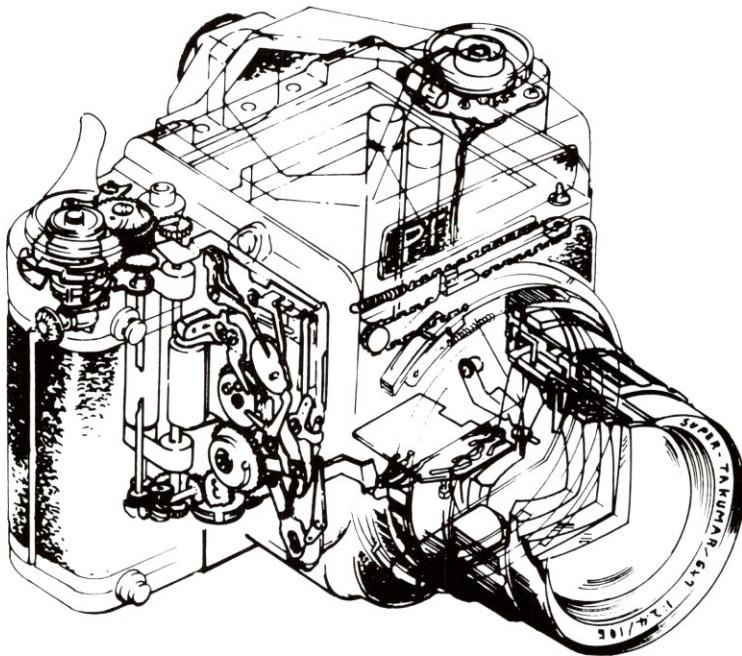
The Pentax Answer

When the engineers at Asahi Optical Company set out to design the Pentax 67, they started from the right premise: they chose the 6x7 format because it is only slightly larger than the 6x6 square format, but offers a full 50% more usable area. And it enlarges to all standard paper sizes without cropping. That's why it is referred to as the ideal format — "It eliminates the problem of negative waste."

Furthermore, as the 6x7 negative is merely 21% larger than the square format, the engineers were able to make it almost as small as cameras using the smaller negative, but designed it exactly like a 35mm SLR. Thus, it offered superb balance and far excelled the box-shaped cameras in handling ease. And while the box cameras were designed principally for waist-level viewing or use with a tripod and later adapted for eye-level use, the Pentax 67 was designed for both hand-holding and eye-level viewing from the very beginning. Its easy handling and rapid response to action facilitates concentration on the image, eliminating the cumbersome operation associated with box-shaped cameras. It's also sealed off from dirt and can be used anywhere — on the ground, vertically on a copy stand, on low-height tripods, in the air, or beneath the sea... The Pentax engineers had the answer. From the very beginning they designed the "ideal camera to match the ideal format."

PENTAX

67 System



Specifications

Type

67 ideal-format single-lens reflex

Film

120 roll-film (10 exposures)/220 roll-film (20 exposures)

Image size

55mm x 70mm (2 1/4" x 2 3/4")

Standard lens

SMC Pentax/67 105mm f/2.4, or SMC Pentax/67 90mm f/2.8. Both have 67 mm filter size

Minimum focusing distance

1 meter (3.3 ft.) with standard lens

Shutter

Electronically-timed, double-curtain focal plane shutter; X, B, 1-1/1000 sec.

Power source

6V silver oxide battery (Eveready #544 or Mallory PX28)

Battery check

Push button with indicator lamp

Viewfinders

Interchangeable Pentaprism Finder; TTL (Exposure Meter) Prism Finder; Folding Focus Hood; Rigid Magnifying Hood. Matte field with central microprism spot focusing screen supplied as standard. Life size image with standard lens.

Reflex mirror

Swing-up-and-back instant return mirror with lock-up provision

Film transport

Rapid-wind lever (180° angle); Shutter is cocked when film is advanced.

Exposure counter

Automatic reset exposure counter

Lens mount

Dual bayonet mounts, inner bayonet: 35mm-300mm and 500mm lenses/outer bayonet: 600-1000mm lenses

Flash synchronization

FP and X terminals/electronic flash at 1/30-1 sec., B

Exposure meter

Accessory pentaprism with through-the-lens meter couples with shutter speed and aperture

Dimensions

184mm W x 149mm H x 156mm D
(7.2" x 5.8" x 6.1")

Weight

Body: (1,280 grams) 45.9 ozs.
Standard lens: (628 grams) 22.1 ozs.
Pentaprism housing: (460 grams)
16.2 ozs.

Cat. No.

15411 67 Body w/body cap, strap and battery

Standard 67 Set:

Cat. No.

15411 67 Body w/body cap, strap and battery.

37966 TTL Meter Pentaprism Finder

29029 SMC 67 105mm f/2.4



PENTAX

67 Viewfinders



TTL Meter Pentaprism Finder

Through-the-lens metering finder couples to lens apertures and shutter speeds for open aperture or stopped-down manual metering. Meter needle visible through viewfinder eyepiece, GPD cells take average reading off camera's focusing screen. Includes shutter Dial Adapter.

EV Range: EV 2.5-19 (w/ISO 100 & 105/2.4 lens)

Manual ISO Settings: ISO 12-3200

Aperture/Speed Range: f/2-22 / 15-1/1000 (w/ISO 100)

Power Source: 6 volt battery in camera (Eveready #544)

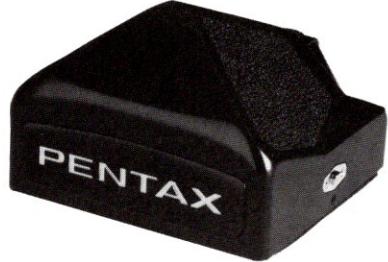
% of Image Area Visible: 90%

Dimensions, WxHxD: 123 x 58 x 89mm (4.8 x 2.3 x 3.5 in.)

Weight: 520 gr. (1 lb., 2 oz.)

Cat. No.

37966 67 TTL Meter Pentaprism Finder w/o case w/Shutter Dial Adapter



Pentaprism Finder

Standard eye-level pentaprism finder (w/o metering capability)

% of Image Area Visible: 90%

Dimensions, WxHxD: 81 x 58 x 91mm (3.2 x 2.3 x 3.6 in.)

Weight: 460 gr. (1 lb.)

Cat. No.

37401 67 Pentaprism Finder w/o case



Folding Focusing Hood

Waist-level finder with flip-up 3.8X magnifier folds down for easier storage. Image is reversed left-to-right.

% of Image Area Visible: 100%

Dimensions, WxHxD: 81 x 26 x 87mm (3.2 x 1 x 3.4 in.)

Weight: 134 gr. (4.7 oz.)

Cat. No.

37403 67 Folding Focusing Hood w/case



Rigid Magnifying Hood

Waist-level type hood w/eyecup encloses focusing screen for bright viewing. Eyepiece magnifies image by 3X and has adjustable -1 ~ -4 diopter. Image is reversed left-to-right.

% of Image Area Visable: 100%

Dimensions, WxHxD: 81 x 82 x 87mm (3.2 x 3.2 x 3.4 in.)

Weight: 251 gr. (8.8 oz.)

Cat. No.

37406 67 Rigid Magnifying Hood w/case

PENTAX

67 Lenses

SMCP 67 Fish-Eye 35mm f/4.5

Minimum Aperture: 22
Lens Construction: 7 groups 11 elements
Angle of View: 180°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 0.45m (1.5 ft.)
Filter Size: Built-in, UV, Y2,O2, R2-w/gelatin filter clip at rear
Lens Hood: N/A
Lens Case: Soft Case S120-150
Maximum Diameter & Length: 102mm x 73mm (4.0" x 2.9")
Weight: 920g (32.5 oz.)
Catalog No.: 29120 SMCP 67 Fish-Eye 35mm f/4.5 w/case



SMCP 67 45mm f/4

Minimum Aperture: 22
Lens Construction: 8 groups 9 elements
Angle of View: 88°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 0.37m (1.2 ft.)
Filter Size: 82mm (Threaded & Bayonet)
Lens Hood: Clip-on #37665
Lens Case: Hard Case #37706, Soft Case S90-100
Maximum Diameter & Length: 91.5mm x 57.5mm (3.6" x 2.3")
Weight: 485g (17.1 oz.)
Catalog No.: 29250 SMCP 67 45mm f/4 w/case



SMCP 67 55mm f/4

Minimum Aperture: 22
Lens Construction: 7 groups 8 elements
Angle of View: 78°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 0.35m (1.1 ft.)
Filter Size: 77mm (Threaded)
Lens Hood: Clip-on #37626
Lens Case: Hard Case #37707, Soft Case S90-140
Maximum Diameter & Length: 92.5mm x 78.5mm (3.6" x 3.1")
Weight: 725g (25.6 oz.)
Catalog No.: 29210 SMCP 67 55mm f/4 w/case

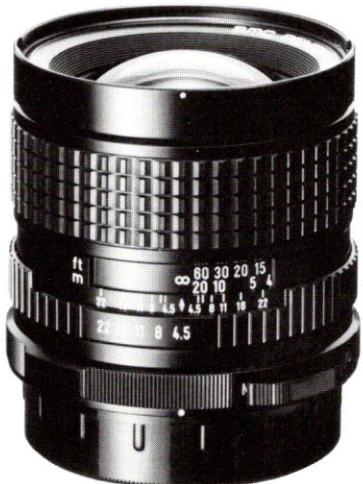


PENTAX

67 Lenses

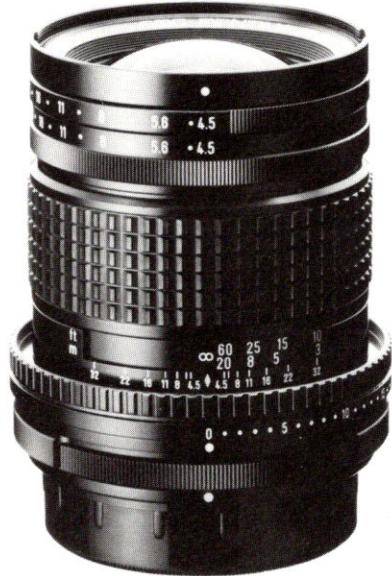
SMCP 67 75mm f/4.5

Minimum Aperture: 22
Lens Construction: 4 groups 5 elements
Angle of View: 61°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 0.7m (2.3 ft.)
Filter Size: 82mm (Threaded & Bayonet)
Lens Hood: Clip-on #37628
Lens Case: Hard Case #37703, Soft Case S90-140
Maximum Diameter & Length: 91.5mm x 81mm (3.6" x 3.2")
Weight: 600g (21.2 oz.)
Catalog No.: 29274 SMCP 67 75mm f/4.5 w/case



SMCP 67 Shift 75mm f/4.5

Minimum Aperture: 32
Lens Construction: 8 groups 9 elements
Angle of View: 61°
Diaphragm: Manual (inner Bayonet Mount)
Minimum Focusing Distance: 0.7m (2.3 ft.)
Maximum Shift: 20mm; Click-Stops at one millimeter intervals
Lens Rotation: 360°; Click-Stops at 30° intervals
Filter Size: 82mm (Threaded & Bayonet) w/gelatin filter clip at rear
Lens Hood: N/A
Lens Case: Hard Case #37705, Soft Case S120-150
Maximum Diameter & Length: 97mm x 106.5mm (3.8" x 4.2")
Weight: 950g (33.5 oz.)
Catalog No.: 29220 SMCP 67 Shift 75mm f/4.5 w/case



SMCP 67 90mm f/2.8

Minimum Aperture: 22
Lens Construction: 5 groups 7 elements
Angle of View: 52°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 0.65m (2.1 ft.)
Filter Size: 67mm (Threaded & Bayonet)
Lens Hood: Screw-on #37600
Lens Case: Soft Case S90-100
Maximum Diameter & Length: 91.5mm x 49mm (3.6" x 1.9")
Weight: 485g (17.1 oz.)
Catalog No.: 29248 SMCP 67 90mm f/2.8 w/case



SMCP 67 105mm f/2.4

Minimum Aperture: 22
Lens Construction: 5 groups 6 elements
Angle of View: 46°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 1.0m (3.3 ft.)
Filter Size: 67mm (Threaded & Bayonet)
Lens Hood: Clip-on #37663
Lens Case: Soft Case S90-100
Maximum Diameter & Length: 91.5mm x 60mm (3.6" x 2.4")
Weight: 590g (20.8 oz.)
Catalog No.: 29029 SMCP 67 105mm f/2.4 w/case



SMCP 67 Soft 120mm f/3.5

Minimum Aperture: 22
Lens Construction: 3 groups 4 elements
Angle of View: 40.5°
Diaphragm: Manual (inner Bayonet Mount)
Minimum Focusing Distance: 0.75m (2.5 ft.)
Filter Size: 77mm (Threaded)
Lens Hood: Screw-on #37639
Lens Case: Soft Case #37724
Maximum Diameter & Length: 89mm x 63.5mm (3.5" x 2.5")
Weight: 520g (18.3 oz.)
Catalog No.: 29294 SMCP 67 Soft 120mm f/3.5 w/case



SMCP 67 Macro 135mm f/4

Minimum Aperture: 32
Lens Construction: 3 groups 5 elements
Angle of View: 36.5°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 0.75m (2.5 ft.)
Maximum Magnification: 0.31X
Filter Size: 67mm (Threaded & Bayonet)
Lens Hood: Screw-on #34325
Lens Case: Hard Case #37720, Soft Case S90-140
Maximum Diameter & Length: 91.5mm x 95mm (3.6" x 3.7")
Weight: 645g (22.8 oz.)
Catalog No.: 29824 SMCP 67 Macro 135mm f/4 w/case



PENTAX

67 Lenses

SMCP 67 165mm f/2.8

Minimum Aperture: 22
Lens Construction: 5 groups 6 elements
Angle of View: 30°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 1.6m (5.2 ft.)
Filter Size: 67mm (Threaded & Bayonet)
Lens Hood: Built-in
Lens Case: Soft Case, S90-140
Maximum Diameter & Length: 91.5mm x 98.5mm (3.6" x 3.9")
Weight: 835g (29.5 oz.)
Catalog No.: 29300 SMCP 67 165mm f/2.8 w/case



SMCP 67 165mm f/4 Leaf Shutter

Minimum Aperture: 32
Lens Construction: 4 groups 5 elements
Angle of View: 30°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 1.6m (5.2 ft.)
Flash Sync Shutter Speeds: 1/60 to 1/500
Filter Size: 77mm (Threaded)
Lens Hood: Screw-on #37639
Lens Case: Soft Case S90-140
Maximum Diameter & Length: 92.5mm x 77mm (3.6" x 3.0")
Weight: 780g (27.5 oz.)
Catalog No.: 29301 SMCP 67 L.S. 165mm f/4 w/case



SMCP 67 200mm f/4

Minimum Aperture: 32
Lens Construction: 4 groups 5 elements
Angle of View: 25°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 1.5m (4.9 ft.)
Filter Size: 77mm (Threaded)
Lens Hood: Screw-on #37637
Lens Case: Hard Case #37719, Soft Case S110-160
Maximum Diameter & Length: 92.5mm x 135mm (3.6" x 5.3")
Weight: 795g (28 oz.)
Catalog No.: 29340 SMCP 67 200mm f/4 w/case



SMCP 67 300mm f/4

Minimum Aperture: 45
Lens Construction: 5 groups 5 elements
Angle of View: 17°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 5.0m (16.4 ft.)
Filter Size: 82mm (Threaded & Bayonet)
Lens Hood: Built-in
Lens Case: Hard Case #37712, Soft Case S110-210
Maximum Diameter & Length: 92.5mm x 186mm (3.6" x 7.3")
Weight: 1,420g (50 oz)
Catalog No.: 29330 SMCP 67 300mm f/4 w/case



SMCP-M* 67 400mm f/4 ED(IF)

Minimum Aperture: 45
Lens Construction: 9 groups 9 elements
Angle of View: 12°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 2.8m (9.2 ft.)
Filter Size: 67mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive Trunk Case
Maximum Diameter & Length: 132.5mm x 305mm (5.2" x 12.0")
Weight: 3,700g (130.5 oz)
Catalog No.: 29415 SMCP-M* 67 400mm f/4 ED(IF) w/Trunk Case



SMCP 67 500mm f/5.6

Minimum Aperture: 45
Lens Construction: 4 groups 4 elements
Angle of View: 10°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 8.0m (26.2 ft.)
Filter Size: 95mm (Threaded)
Lens Hood: Built-in
Lens Case: Exclusive Hard Case
Maximum Diameter & Length: 106.5mm x 398mm (4.2" x 15.7")
Weight: 3,200g (112.9 oz)
Catalog No.: 29404 SMCP 67 500mm f/5.6 w/case



PENTAX

67 Lenses

SMC Takumar 67 600mm f/4

Minimum Aperture: 45
Lens Construction: 5 groups 6 elements
Angle of View: 8°
Diaphragm: Manual (outer Bayonet Mount)
Minimum Focusing Distance: 12.0m (39.4 ft.)
Filter Size: 77mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive Trunk Case
Maximum Diameter & Length: 170mm x 370mm (6.7" x 14.6")
Weight: 6,000g (211.6 oz)
Catalog No.: 29424 SMCT 67 600mm f/4 w/Trunk Case



SMC Takumar 67 800mm f/4

Minimum Aperture: 45
Lens Construction: 6 groups 6 elements
Angle of View: 6°
Diaphragm: Manual (outer Bayonet Mount)
Minimum Focusing Distance: 20.0m (65.6 ft.)
Filter Size: 77mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive Trunk Case
Maximum Diameter & Length: 236mm x 611mm (9.3" x 24.0")
Weight: 17,700g (624.3 oz)
Catalog No.: 29434 SMCT 67 800mm f/4 w/Trunk Case



SMCP-M* 67 800mm f/6.7 ED(IF)

Minimum Aperture: 45
Lens Construction: 8 groups 9 elements
Angle of View: 6°
Diaphragm: Fully Automatic (inner Bayonet Mount)
Minimum Focusing Distance: 8.0m (26.2 ft.)
Filter Size: 67mm (rear)
Lens Hood: Built-in
Lens Case: Exclusive Trunk Case
Maximum Diameter & Length: 150mm x 570mm (5.9" x 22.4")
Weight: 6,000g (211.6 oz)
Catalog No.: 29436 SMCP-M* 67 800mm f/6.7 ED(IF) w/Trunk Case & Exclusive 1.4x Rear Converter



SMC Takumar Reflex 67 1000mm f/8

Minimum Aperture: -
Lens Construction: 4 groups 6 elements
Angle of View: 5°
Diaphragm: ND (Controlled by neutral density filters)
Minimum Focusing Distance: 35.0m (114.8 ft.)
Filter Size: Built-in; ND x1, x2, x4, x8; Skylight, Y2, R2
Lens Hood: Built-in
Lens Case: Exclusive Trunk Case
Maximum Diameter & Length: 180mm x 352mm (7.0" x 13.9")
Weight: 6,660g (234.9 oz.)
Catalog No.: 29454 SMCT Reflex 67 1000mm f/8 w/Trunk Case



SMCP 67 Rear Converter 1.4x

Lens Construction: 3 groups 5 elements
Maximum Diameter & Length: 91mm x 39.5mm (3.6" x 1.6")
Weight: 520g (18.3 oz.)
Case: Hard Case #37778, Soft Case S90-100
Usable Lenses: 165mm to 400*mm
Catalog No.: 37932 SMCP 67 Rear Converter 1.4x w/case



SMCP 67 Rear Converter 2x

Lens Construction: 4 groups 6 elements
Maximum Diameter & Length: 91mm x 71.5mm (3.6" x 2.8")
Weight: 560g (19.8 oz.)
Case: Soft Case S90-140
Usable Lenses: 35mm to 400*mm (Except Shift 75mm f/4.5)
Catalog No.: 37934 SMCP 67 Rear Converter 2x w/case



PENTAX

67 Accessories



Auto Extension Tube Set 67

A set of three extension (14, 28 and 56mm), tubes can be used singularly or in combination on the inner bayonet mount of the Pentax 67 with all lenses from 45mm wide-angle to 300mm telephoto. Fully automatic diaphragm action is retained and magnifications greater than life-size can be produced.

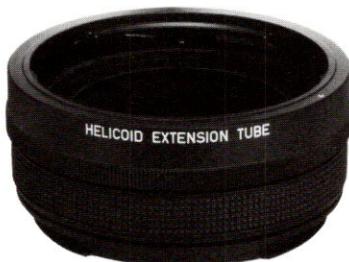
Cat. No. **37910** 67 Auto Extension Tube Set w/Case



Extension Tube Set 67

A two piece extension tube set (23 and 46mm), used on the outer bayonet mount of the Pentax 67 to extend the minimum focusing distance of all ultra telephoto lenses (600mm and longer). The tubes can be used in combination with each other or with the Pentax Rear Converter.

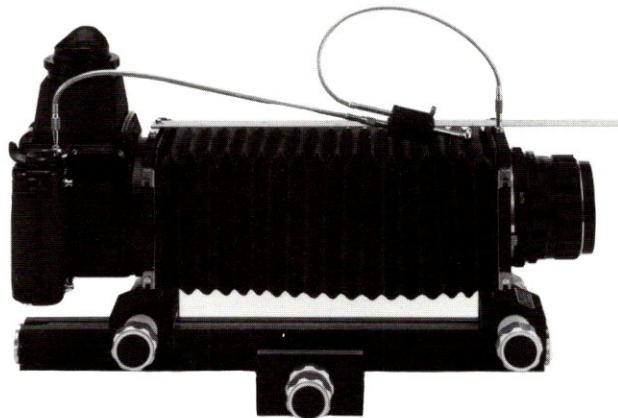
Cat. No. **37900** 67 Extension Tube Set w/Case



Helicoid Extension Tube 67

This single extension tube, (28-56mm), which is used on the inner bayonet mount of the Pentax 67, offers continuously variable extension for precise control of the image size. It is equal to the No. 2 Auto Extension Tube at minimum extension, and to the No. 3 Auto Extension Tube at maximum extension. When used in combination with the standard lens, magnification is 0.3X-0.6X, making it possible to fill the frame with a king-size pack of cigarettes.

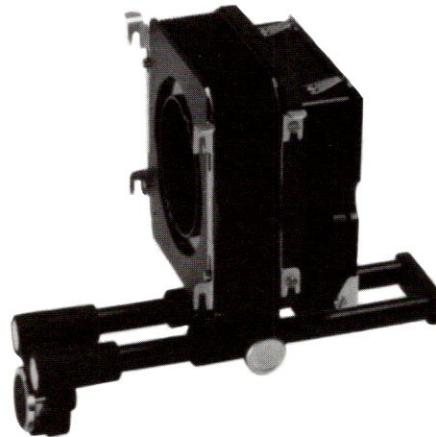
Cat. No. **37919** 67 Helicoid Extension Tube w/Case



Auto Bellows

54-352mm extension range. Magnification of 0.5X to 3.3X is possible with the combination of Auto Bellows and standard lens. Diaphragm automation is retained with the aid of a double cable release, even when the lens is mounted in reverse. All lenses from 90mm to 300mm can be used with the Auto Bellows. Supplied with double cable release and magnification scale.

Cat. No. **37930** 67 Auto Bellows Set



Slide Copier

The Slide Copier is used in conjunction with the Auto Bellows unit to make copies of mounted or unmounted transparencies, whether of the 35mm or 67 format. Life-size or partially cropped duplicates can be made from originals.

Cat. No. **37945** 67 Slide Copier

PENTAX

67 Accessories

49mm Reverse Adapter 67

This adapter makes it possible to use 49mm filter size lenses mounted in reverse on the Helicoid Extension Tube for macrophotography.

Cat. No.

37943 67 49mm Reverse Adapter

67mm Reverse Adapter



The 67mm Reverse Adapter makes it possible to use the 90, 105, and 135mm lenses mounted in reverse on the Helicoid Extension Tube, Auto Extension Tubes, or Auto Bellows for superior optical performance when working at greater-than-life-size magnification.

Cat. No.

37941 67 67mm Reverse Adapter

SMC 67 Close-up Lenses

For the ultimate in close-up convenience, SMC 67 Close-Up Lenses thread quickly and easily into the filter thread of most standard and medium telephoto 67 lenses. Super-Multi-Coated to deliver exceptional image quality even at higher magnification. Two element construction.

Lens	Close-Up Lens	Magnification
SMCT 90mm f/2.8	S82	.11X ~ .24X
SMCT 105mm f/2.4	S82	.13X ~ .27X
SMCT 150mm f/2.8	T132	.11X ~ .24X
SMCT 200mm f/4.0	T132	.15X ~ .26X
	T226	.09X ~ .19X

Cat. No.

37830 67 Close-Up Lens 67mm, S82 w/Plastic Case

37831 67 Close-Up Lens 67mm, T132 w/Plastic Case

37832 67 Close-Up Lens 67mm, T226 w/Plastic Case



67 Correction Lenses

These lenses fit into the eyepiece of the pentaprism finders to correct for near and farsightedness. Available in seven strengths: +2, +1, -1, -2, -3, -4, -5.

Cat. No.

37411 -5 Diopter Correction Lens 67

37412 -4 Diopter Correction Lens 67

37413 -3 Diopter Correction Lens 67

37414 -2 Diopter Correction Lens 67

37415 -1 Diopter Correction Lens 67

37416 +1 Diopter Correction Lens 67

37417 +2 Diopter Correction Lens 67



67 Right-Angle Finder

Attaches to the eyepiece of the standard and TTL Meter Pentaprism Finders for low-angle photography. The image is both laterally correct and unreversed. The entire focusing screen, as well as the exposure meter indicator needle of the TTL Meter Pentaprism Finder, is visible. The eyepiece adjusts from +3 to -5 diopter and accepts the accessory eyecup.

Cat. No.

37420 67 Right-Angle Finder w/Case



67 Magnifier

Magnifies the central area of the focusing screen by 2X for critical focusing. The eye-piece of the magnifier has a built-in +2 to -3 diopter adjustment for optimum viewing comfort. It is hinged at the top, allowing it to be raised out of the way for a final check of the overall composition. Supplied with case.

Cat. No.

37421 67 Magnifier 2X w/case



Eyecup

The rubber Eyecup attaches to the eyepiece of the pentaprism and right-angle finders to prevent extraneous light from obstructing the view or adversely affecting the TTL exposure meter.

Cat. No.

37410 67 Eyecup

67 Accessories



Gelatin Filter Frames

Available in three sizes for the 67 (67mm, 82mm, 100mm). All accept standard 75mm gelatin (acetate) filter squares. The filter frames allow the use of two gelatin (acetate) filters at a time.

Cat. No.

37592 82mm Gelatin Filter Frame 67 (45, 75std., 300)
37593 100mm Gelatin Filter Frame 67 (55/3.5 only)

67 Filters

For 67 lenses only, these filters bayonet mount onto the lens. They are threaded on the front end to accept additional threaded (or bayonet) filters. SMC filters have the same 7 layer coatings as 67 lenses.

67 REGULAR FILTERS (Bayonet mount, w/front threads)

37512	67 Filter 67mm, Morning and Evening (82A)
37532	67 Filter 77mm, Morning and Evening (82A)
37552	67 Filter 82mm, Morning and Evening (82A)
37572	67 Filter 100mm, Morning and Evening (82A)

67 SMC FILTERS (Bayonet mount, w/front threads)

67mm

37506	67 SMC Filter 67mm, UV (ultraviolet)
37507	67 SMC Filter 67mm, Yellow-2 (same as Y8)
37508	67 SMC Filter 67mm, Orange-2 (same as O23A)
37509	67 SMC Filter 67mm, Red-2 (same as R25)
35551	67 SMC Filter 67mm, Skylight (same as 1A thread mount only)

77mm

37526	67 SMC Filter 77mm, UV (ultraviolet)
37527	67 SMC Filter 77mm, Yellow-2 (same as Y8)
37528	67 SMC Filter 77mm, Orange-2 (same as O23A)
37529	67 SMC Filter 77mm, Red-2 (same as R25)
37536	67 SMC Filter 77mm, Skylight (same as 1A)
37537	67 SMC Filter 77mm, Cloudy (same as 81A)

82mm

37546	67 SMC Filter 82mm, UV (ultraviolet)
37547	67 SMC Filter 82mm, Yellow-2 (same as Y8)
37548	67 SMC Filter 82mm, Orange-2 (same as O23A)
37549	67 SMC Filter 82mm, Red-2 (same as R25)
37556	67 SMC Filter 82mm, Skylight (same as 1A)
37557	67 SMC Filter 82mm, Cloudy (same as 81A)

95mm

37580	67 SMC Filter 95mm, UV (ultraviolet)
37581	67 SMC Filter 95mm, Yellow-2 (same as Y8)
37582	67 SMC Filter 95mm, Orange-2 (same as O23A)
37583	67 SMC Filter 95mm, Red-2 (same as R25)
37586	67 SMC Filter 95mm, Skylight (same as 1A)
37587	67 SMC Filter 95mm, Cloudy (same as 81A)

100mm

37566	67 SMC Filter 100mm, UV (ultraviolet)
37567	67 SMC Filter 100mm, Yellow-2 (same as Y8)
37568	67 SMC Filter 100mm, Orange-2 (same as O23A)
37576	67 SMC Filter 100mm, Skylight (same as 1A)

PENTAX

67 Lens Hoods

Lens Product Code	Lens Description	Filter Size	Hood Product Code	Hood
29120	35mm/4.5	81		not recommended
29250	45mm/4	82	37665	PH-SB82
29210	55mm/4	77	37626	PH-SA 77
29274	75mm/4.5	82	37628	PH-SA 82
29220	75mm/4.5 Shift	82		not recommended
29248	90mm/2.8	67	37663	PH-SB67
29029	105mm/2.4	67	37663	PH-SB67
29294	120mm/3.5 Soft	77	37639	RH-RC 77
29824	135mm/4 Macro	67	34325	MH-RA67
29300	165mm/2.8	67		built-in
29301	165mm/4 L.S.	77	37639	RH-RC 77
29340	200mm/4	77	37637	MH-RA 77
29330	300mm/4	82		built-in
29415	400mm/4 ED(IF)	67R		built-in
29404	500mm/5.6	95		built-in
29424	600mm/4	77R		built-in
29434	800mm/4	77R		built-in
29436	800mm/6.7 ED(IF)	67R		built-in
29454	R 1000mm/8	67R		built-in

MH – Metal Hood

PH – Plastic Hood

RH – Rubber Hood

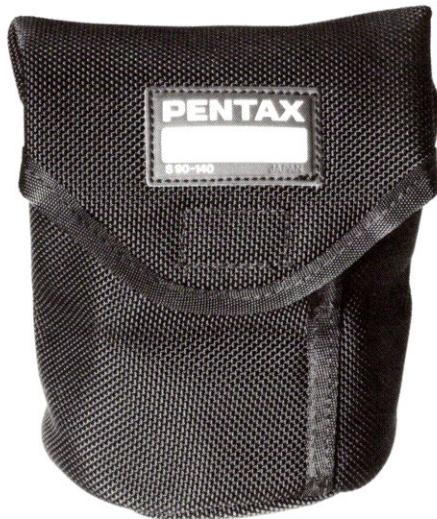
PENTAX

67 Lens Cases

Lens Product Code	Lens Description	Hard Case Product Code	Hard Case	Soft Case Product Code	Soft Case
29120	35mm/4.5		not available	37727	S120-150
29250	45mm/4	37706	67/45	37725	S90-100
29210	55mm/4	37707	67/55	37726	S90-140
29274	75mm/4.5	37703	67/75	37726	S90-140
29220	75mm/4.5 Shift	37705	67/S75	37727	S120-150
29248	90mm/2.8		not available	37725	S90-100
29029	105mm/2.4		not available	37725	S90-100
29294	120mm/3.5 Soft		not available	37724	67/120S
29824	135mm/4 Macro	37720	67/135	37726	S90-140
29300	165mm/2.8		not available	37726	S90-140
29301	165mm/4 L.S.		not available	37726	S90-140
29340	200mm/4	37719	67/200	37729	S110-160
29330	300mm/4	37712	67/300	37728	S110-210
29415	400m/4 ED(IF)	supplied w/exclusive trunk case		not available	
29404	500mm/5.6	supplied w/exclusive hard case		not available	
29424	600mm/4	supplied w/exclusive trunk case		not available	
29434	800mm/4	supplied w/exclusive trunk case		not available	
29436	800mm/6.7 ED(IF)	supplied w/exclusive trunk case		not available	
29454	R 1000mm/8	supplied w/exclusive trunk case		not available	
37932	1.4X Converter	37778	HE-90	37725	S90-100
37934	2X Converter		not available	37726	S90-140



Hard Case



Soft Case

67 Accessories**Carrying Case 67**

A compact case which will hold camera with standard lens and some accessories such as filters, cable releases, and film. Designed to offer adequate protection for the camera, which easily slides in and out of the case.

Cat. No.

37770 67 Carrying Case

37760 Case for 67 Pentaprism Finder

**67 Metal Trunk Case Pro II**

A professional compartment type case designed exclusively for the Pentax 67. This strong aluminum case will hold two camera bodies, 3 to 4 lenses, and accessories. Dimensions (WxHxD): 17 $\frac{3}{4}$ "x11 $\frac{1}{4}$ "x10 $\frac{1}{4}$ ". Weight 12lb., 5oz.

Cat. No.

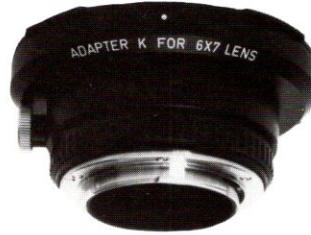
37776 67 Metal Trunk Case Pro II

**67 Hand Grip**

The grip can easily be attached or removed with a single hand and has an accessory shoe to accept flash units. Once attached to the camera, this accessory offers a secure grip for the left hand.

Cat. No.

37970 67 Hand Grip

**67 Adapter for Pentax 35mm Bayonet Mount Cameras**

This adapter fits Pentax Bayonet Mount cameras and permit the use of 67 lenses with them. With this adapter, the lens will focus to infinity, however, it cannot be used with automatic diaphragm or open aperture metering. When used on any Pentax automatic camera, aperture priority exposure automation is retained within the measurable range. When used with the 67 lenses with a built-in tripod socket, this adapter allows the camera to change its position vertically or horizontally while the lens remains on the tripod.

Cat. No.

37954 67 Lens Adapter (B) for Pentax Bayonet Mount Cameras

**Quick Focusing Rings 67**

With the Quick Focusing Ring in place it is possible to focus the lens with the fingers of the left hand at the same time they grasp the camera Grip. There are not any Quick Focusing Rings for the current 55/4, 120 soft focus, 165 leaf, current 200, and 300mm and longer lenses.

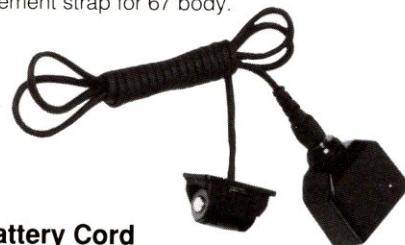
Cat. No.

37980 67 Quick Focus Ring A (older 55/4, 90std., 105, 135, 150, older 200/4)

37982 67 Quick Focus Ring B (35, 45, 55/3.5, 75, 75s, 90 leaf, 165 std.)

67 Camera Strap

37430 67 Camera Strap with connectors
Replacement strap for 67 body.

**67 Remote Battery Cord**

When batteries are used at below-freezing temperatures, their voltage may drop, causing malfunction of the electronic shutter. The Remote Battery Cord is designed to eliminate the possibility of this problem occurring with the Pentax 67. One end of the cord contains the battery chamber and fits in a warm pocket, while the opposite end of the cord is plugged into the camera.

Cat. No.

37990 67 Remote Battery Cord (1.5M) w/battery chamber protector

PENTAX

67 Accessories



67 TTL Shutter Dial Adapter Ring

The TTL Shutter Dial Adapter Ring is used when the 67 TTL Meter Pentaprism Finder is installed. The Adapter Ring increases the diameter of the 67's normal shutter dial for easier shutter speed adjustment.

Cat. No.
37992

67 TTL Shutter Dial Adapter Ring



Hot-Shoe Adapter LS

This adapter is needed when the 645's or 67's leaf-shutter lens and the clip-on type electronic flash are used in combination. It is first attached to the 645 camera body or the 67 Grip, onto which the flash unit is mounted. The sync cord is connected to the X-sync socket on the lens. This combination, however, does not permit TTL Auto Flash photography.

Cat. No.
38460

Hot-Shoe Adapter LS (30cm, 11.8 in.)



Quick Shoe 645/67

This accessory enables you to attach the camera to the tripod or detach the camera from the tripod in seconds. The unit consists of the tripod shoe that attaches to the tripod head and the adapter that attaches to the camera. The adapter 645/67 is used for the Pentax 645 or 67 camera.

Cat. No.

38456 Quick Shoe (mounts on tripod)

38458 Quick Shoe Adapter 645/67 (mounts on camera)

38464 Quick Shoe 645/67 set (38456 and 38458)



Flash Bracket AF-400T bracket for 67

The AF-400T is a totally professional auto flash unit with advanced capabilities which will surely appeal to 67 users. Pentax provides a special bracket which allows you to attach the AF-400T to the 67 for greater handling convenience.

Cat. No.
37973

AF-400T 67 Bracket



Adapter 645 for 67 Lens

This adapter enables you to use the Pentax 67 lens with the Pentax 645 body.

When 67 lenses are used with this adapter, open aperture metering is maintained and three of the 645's exposure modes can be used – aperture priority, TTL flash, and metering manual.

Cat. No.
38454

645 Adapter for 67 System Lenses

67 TTL Pentaprism Case

Hard leather case with padded interior and snap lid.

Cat. No.
37760

Case for 67 TTL Pentaprism Finder

67 Caps

Cat. No.

37432 67 Body Cap (covers bayonet mount on 67 body)

37433 67 Prism Cover (covers bottom of viewfinders)

37434 67 Finder Cap (covers 67 focusing screen)

37800 67 Rear Lens Cap, Inner Bayonet (for all inner bayonet mount lenses)

37801 67 Rear Lens Cap, Outer Bayonet (for all outer bayonet mount lenses)

37814 100mm Lens Cap (slip-on for 35mm F.E.)

31653 67mm Lens Cap F (clip-on)

31702 77mm Lens Cap A (clip-on)

31815 103mm Lens Cap (slip-on for 55mm/f3.5, 500mm f/S.E.)

31820 82mm Lens Cap F (clip-on)

Lens Focal Lengths

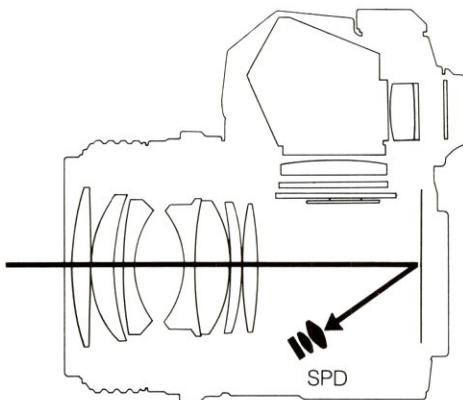
Format Comparison of Lens Focal Lengths

Approximate Angle of View*	35mm Format	645 Format	67 Format
180°	16mm		35mm
90°	20mm	35mm	45mm
75°	28mm	45mm	55mm
63°	35mm	55mm	75mm
50°		75mm (standard)	90mm
45°	50mm (standard)		105mm (standard)
40°			120mm
34°		120mm (mac.)	135mm
30°	85mm	135mm	165mm
25°	100mm	150mm	200mm
20°	135mm	200mm	
16°			300mm
13°	200mm	300mm	400mm
10°			500mm
8°	300mm		600mm
7°		600mm	
6°	400mm		800mm
5°	500mm		1000mm

*See lens specifications for exact angle of view.

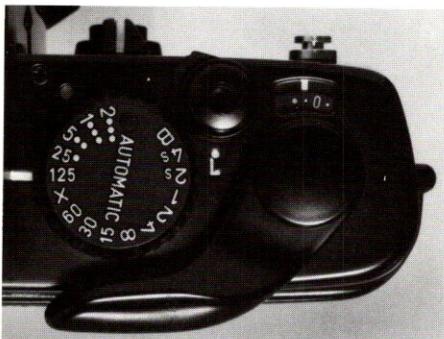
PENTAX

LX SLR Camera



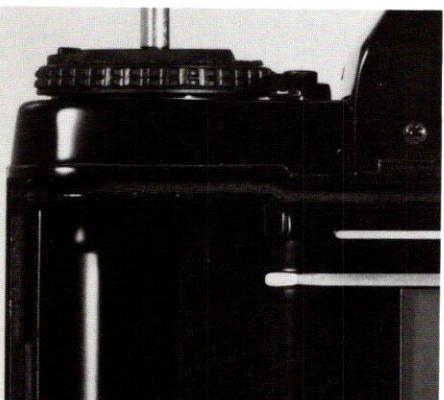
I.D.M. Light Measurement

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



Electro-Mechanical Shutter

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



Moisture and Dust Resistance

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



A New Dimension In Professional Photography

- Unique LX Integrated Direct Metering light measurement system reads directly off the film plane in automatic for unparalleled exposure accuracy regardless of how rapidly or subtly lighting may change.
- Pentax-engineered dual-system instant return mirror transmits significantly more light to the camera's new generation SPD cell for ultra-sensitive, ultra-accurate center-weighted manual readings.
- Exclusive Pentax titanium electro-mechanical shutter delivers electronically-controlled stepless speeds from 1/2000th second to a full 125 seconds.
- Full range of manual speeds from 1/2000th second to "X" (1/75th second) available... even if the batteries fail!
- A complete system of interchangeable viewfinders and focusing screens... including the unique Pentax System Finder with its fully interchangeable eyepieces.
- Fully integrated auto flash control reads both ambient light and electronic flash at the film plane with the AF-200T, AF-280T or powerful AF-400T flash units.
- Two-way exposure counter provides exact frame location at all times and makes random access multiple exposures quick and easy.
- Special sealings and gaskets at key finder and body locations provide added resistance against moisture and dust.
- Full data viewfinder display includes aperture, color-coded shutter speed scale, exposure compensation warning, over- and under-exposure warnings...and more!

Cat. No.

09010	LX Body, Black
30961	Eye-Level Finder FA-1 w/Hot-shoe
20907	SMCP-FA 50mm f/1.7
20817	SMCP-FA 50mm f/1.4
20987	SMCP-A 50mm f/1.2
32810	Soft Case LX
37124	Accessory Grip A
37352	Battery Cord LX

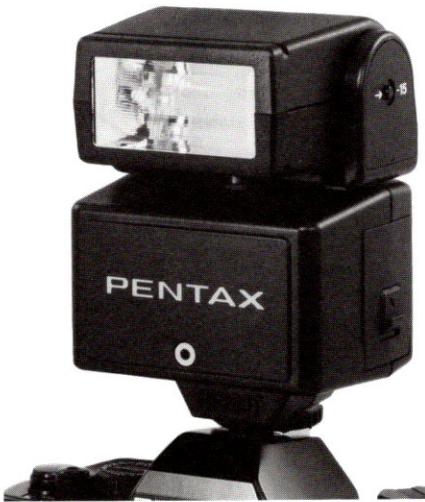
PENTAX

LX SLR Camera



New Levels of Handling Ease

With the standard FA-1 viewfinder and a 50mm lens, the LX opens up a new dimension in small, light and rugged professional systems cameras. All controls are positioned for maximum ease of operation and convenience. Because light is measured in the body, the need for special finder couplings and bulky accessories has been eliminated ensuring a camera with superb balance and handling ease with both eye-level and waist-level finders.



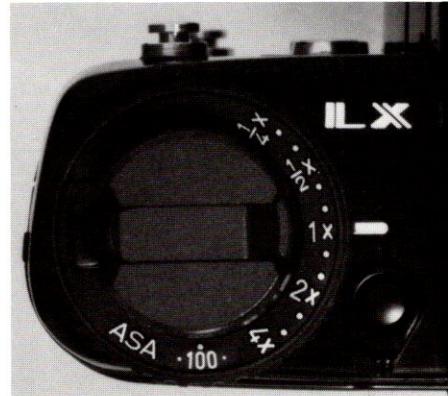
Integrated Auto Flash Control

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



Random Access Multiple Exposures

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



Exposure Compensation Dial

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



Multi-Function Lever

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

Specifications

Type

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

Lens Mount

Pentax Bayonet Mount with fully automatic diaphragm coupling. Can use Pentax K, M, A, F, and FA series bayonet mount lenses. Screw Mount lenses adaptable with Mount Adapter B.

Shutter

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

Flash Control

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

Flash Synchronization

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

Self-Timer/Preview

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

Exposure Control

Open aperture, center-weighted, through-the-lens light metering for both automatic and manual modes. Integrated Direct Metering (IDM) system measures light at the film plane

via Silicon Photo Diode (SPD); high speed measurements for automatic operation are made off digital pattern on front shutter curtain, slow speed measurements off curtain pattern and film; automatic electronic flash/ambient light measurement with TTL "T"-type flash models. Exposure range from EV 1 to EV 19 (ASA 100, f/1.4); stepless automatic exposure range extends to EV -5.5 to EV 20 (125 seconds at f/1.2 to 1/2000th second at f/22 at ASA 100 under normal temperatures and humidity). Meter activated by light pressure on shutter release with automatic shut off after approximately 25 seconds.

Film Speed Range

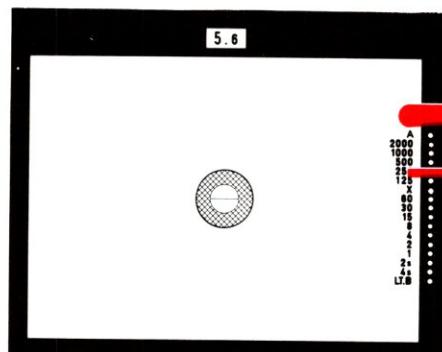
ASA 6—3200.

Exposure Compensation

Up to plus or minus 2 EV automatic exposure compensation in automatic mode by dial control; dial indexed at 1/4X, 1/2X, 1X, 2X and 4X with click stops at 1/3 EV positions; red flag appears in viewfinder to indicate dial is off "1X" normal exposure position; dial lock provided at "1X" with push button release.

Viewfinder

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



Viewfinder Display

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

Focusing Screen

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

Film Loading

Pentax Magic Needle Loading System.

Film Transport

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

Exposure Counter

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

Film Rewind

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

Power Source

Two 1.5-volt silver-oxide batteries (A76 or equivalent) power all electronic systems in both automatic and manual modes; LED flickers in viewfinder to indicate low battery condition; mirror locks when batteries fail, with reset via moving shutter dial to mechanical speed setting.

Mirror

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

Back Cover

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

Body Size

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

Weight

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

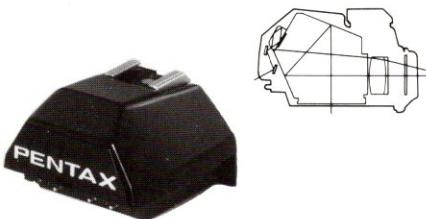
Other Features

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

PENTAX

LX Finder System

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

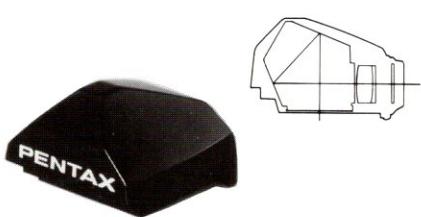


FA-1 Eye-Level Finder

Ideal as the standard LX viewfinder, the FA-1 combines eye-level pentaprism viewing with built-in diopter correction and a TTL-coupled "X" sync hot-shoe for the ultimate flash convenience.

FA-1W Eye-Level Finder

The same features as the FA-1 Finder with an extended diopter correction range.



FA-2 Eye-Level Finder

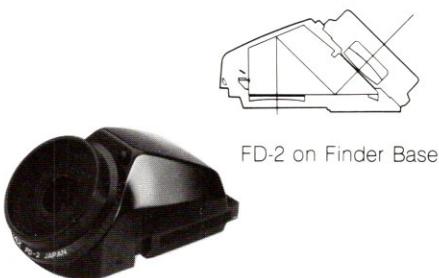
The versatility of the FA-1 Finder without the built-in hot-shoe for electronic flash. Bright eye-level pentaprism viewing, built-in diopter correction.

Finder	Magnification	Diopter	EyePoint	Shutter Speed Visible	Aperture Visible
FA-1	0.9X	- 1.5 - 0Dpt	15.8mm	•	•
FA-1W	0.84X	- 3 - + 1Dpt	15mm	•	•
FA-2	0.9X	- 1.5 - 0Dpt	15.8mm	•	
FB-1+FC-1	0.55X	- 0.95Dpt	60mm	•	•
FB-1+FD-1	0.95X	- 4.5 - + 3.5Dpt	15mm	•	•
FB-1+FD-2	0.84X	- 1Dpt	15mm	•	
FE-1	1.35X	- 5 - + 4Dpt	20mm		
FF-1	1.05X	- 1.1Dpt	15mm	•	

* Image laterally reversed

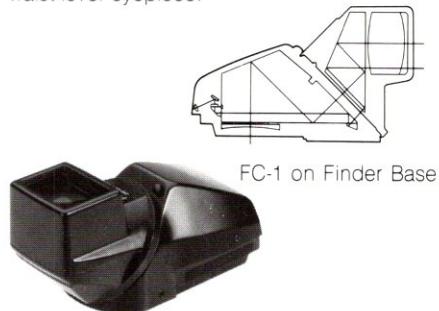
FB-1 System Finder Base

A virtual viewing system within a system, this exclusive Pentax Finder Base accepts any of 3 optional viewing eyepieces. Each eyepiece bayonet mounts quickly and easily.



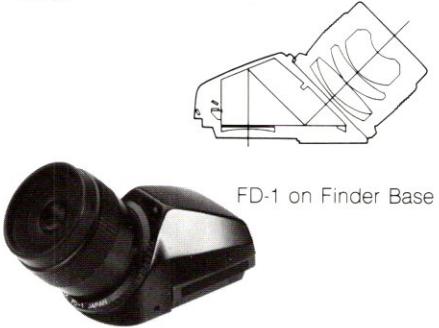
FD-2 Standard Eyepiece

Provides a convenient 45° viewing angle to eliminate the fatigue often experienced in photomicrography and copy work. Ideal as a waist-level eyepiece.



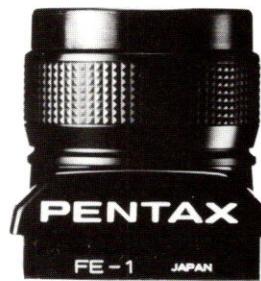
FC-1 Action Eyepiece

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



FD-1 Magni-Eyepiece

A magnifying eyepiece with built-in diopter correction plus a convenient 45° viewing angle.



FE-1 Magni-Finder

Combines the benefits of waist-level viewing with high image magnification making it excellent for close-up photography or any situation where critical focusing is important. Built-in diopter correction. Image is laterally reversed.



FF-1 Waist-Level Finder

A space saving Finder that folds almost flat yet pops up in an instant to provide bright, clear waist-level viewing. Built-in flip-up magnifier. Image is laterally reversed.

ORDERING INFORMATION

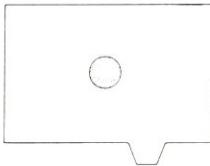
Cat. No.	
30961	FA-1 Eye-Level Finder with Hot-Shoe
30962	FA-2 Eye-Level Finder
30963	FA-1W Eye-Level Finder with Hot-Shoe
30964	FB-1 System Finder Base
30981	FC-1 Action Eyepiece (for FB-1 Base)
30982	FD-1 Magni-Eyepiece (for FB-1 Base)
30983	FD-2 Standard Eyepiece (for FB-1 Base)
30965	FE-1 Magni-Finder
30966	FF-1 Waist-Level Finder
30971	Case for Finders
30972	Case for System Finder with Eyepiece
30871	Diopter Adjuster Tool (replacement)

PENTAX

LX Focusing Screens

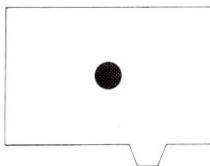
For added flexibility, twelve different LX interchangeable focusing screens are available to meet photographic demands from fast action sports to photomicrography and astrophotography.

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



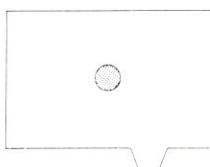
SC-21

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



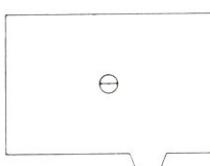
SA-21

A highly versatile yet simple screen comprised of a center microp Prism grid on a ground glass field. Ideal for general applications with most lenses.



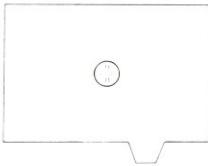
SA-23

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



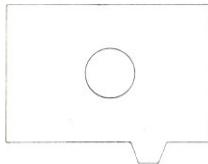
SB-21

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



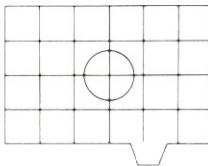
SD-21

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



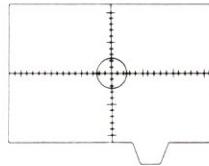
SE-20

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



SG-20

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



SI-20

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



SA-37, SA-32

This microp Prism grid covers the entire surface and provides a brighter viewfinder image. It offers easier focusing, especially with small aperture telephoto lenses and with high-magnification close-ups. For use with lenses having a maximum aperture of f/1.8 or smaller. The SA-37 is better for 200-1200mm telephotos.

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

SC-26 A central split image circle surrounded by a Microp Prism collar.

SA-26 A central microp Prism surrounded by a ground field

SE-25 A all matte ground-glass screen

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



Cat. No.

30861 Focusing Screen SC-21 (Replacement)

30862 Focusing Screen SA-21

30863 Focusing Screen SA-23

30864 Focusing Screen SB-21

30865 Focusing Screen SD-21

30866 Focusing Screen SE-20

30867 Focusing Screen SG-20

30868 Focusing Screen SI-20

30881 Focusing Screen SC-26

30882 Focusing Screen SA-26

30883 Focusing Screen SE-25

30884 Focusing Screen SA-37

30885 Focusing Screen SA-32

PENTAX

LX Motor Drive System



LX Camera With Motor Drive LX and NiCad Battery Pack M

Specifications

Type

Designed for exclusive use with the Pentax LX.

Useable Shutter Speeds

All continuously variable speeds from 1/2 seconds to 1/2000th second in automatic; all manual speeds from 4 seconds to 1/2000th second (except B).

C/S Dial

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

Power Sources

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

Battery Chargers

Charge Pack M; AC Power Pack M.

Shutter Release

By the Shutter Release Button on the LX or by release mechanism on power source unit; remotely via Remote Trigger Cord M; Motor Drive Remote Control Cord, Infrared Remote Control System

Exposure Counter

Employs two-way exposure counter built into Pentax LX.

Film Rewind

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

Remote Control

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

Confirmation LED

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

Tripod Socket

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

Other Features

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

Size

146mm W x 31mm H x 36mm D
5.7" W x 1.2" H x 1.4" D

Weight

240 grams (8.5 ounces)

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

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

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

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

ORDERING INFORMATION

Cat. No.

37100 Motor Drive LX with 3m Power Cord

37232 Motor Drive NiCad Battery Pack LX

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

PENTAX

LX Motor Drive System



NiCad Battery Pack LX

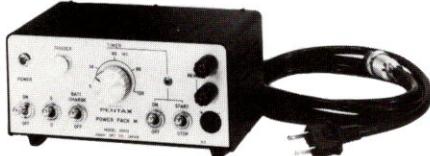
Extremely compact and lightweight, this rechargeable battery pack is the perfect complement to the Pentax LX/Motor Drive combination ensuring maximum handling ease and convenience. It attaches quickly and securely to the Motor Drive via the tripod socket eliminating the need for cumbersome cords yet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

Dimensions and Weight

146mm L x 26.5mm H x 40mm D;
225 grams
5.75" L x 1" H x 1.57mm D 7.94 ounces

Cat. No.

37232 NiCad Battery Pack LX
(also fits MX) (Requires either
Charge Pack M or Power Pack M
for recharging)



Power Pack M

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

Cat. No.

37202 Power Pack M (AC)

Motor Drive Remote Control Cord

Connects to Ni-Cd Battery Pack LX (or Battery Pack M). Shutter release button on the other end controls cameras equipped with Motor Drive LX (or MX). 5m long.

Cat. No.

37362 Motor Drive Remote Control Cord
(LX, MX)



Battery Grip M

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

Dimension and Weight

78mm W x 143mm H x 53mm D; 203 grams
3.1" W x 5.6" H x 2.1" D; 7.1 ounces
(Weights are less batteries)

Cat. No.

37123 Battery Grip M (batteries not
included)



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

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

Cat. No.

37215 Power Cord M (3M)
37216 Power Cord M (10M)
37380 Remote Trigger Connector M

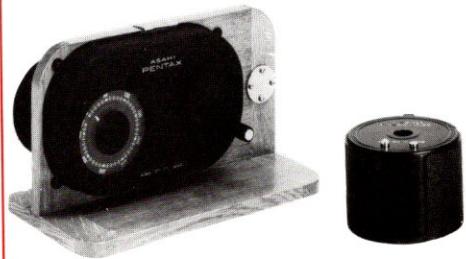


Charge Pack M

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

Cat. No.

37142 Charge Pack M



Bulk Film Cartridge and Cartridge Loader 250

Replacement Bulk Film Cartridge (for LX Bulk Film Back) holds up to 250 exposures. Using the Cartridge Loader 250, cartridges can be loaded quickly and conveniently in the darkroom from 100ft. bulk film rolls.

Cat. No.

37170 Cartridge for Bulk Film Magazine
(1 ea.)
37180 Cartridge Loader for Bulk Film
Magazine

PENTAX

Winder LX



Pentax LX with Winder LX

Specifications

Type

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

C/S Dial

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

Usable Shutter Speeds

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

Power Source

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

Shutter Release

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

Confirmation LED

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

Film Rewind

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

Attachment Method

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

Tripod Socket

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

Other Features

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

Dimensions

146mm W x 39mm H x 44mm D
5.7" W x 1.5" H x 1.7" D

Weight

286 grams (10.1 ounces)

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

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

Cat No.

37387 Winder LX
37353 Remote Battery Pack for Winder LX
37361 Remote Control Cord for Winder LX (5m, 16.4 ft.)

PENTAX

Dial Data LX



Specifications

Type

Designed for exclusive use with the Pentax LX.

Attachment

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

Available Data

Data can be selected from three dials. Year Dial may be used to imprint the years from 91-02 (1991-2002) or f/stop numbers from f/1.2 to f/45. Month Dial allows for months of the year (0-12), shutter speeds from 4 seconds to 1/2000th second plus "Auto" and the letters from "A" to "M." Day Dial provides days from 1-31 and numbers from 0 to 36.

Recording System

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

ASA Range

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

Confirmation LED

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

Battery Check

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

Power Source

Three 1.5 volt Silver Oxide or Alkaline batteries

Other Features

Mounts without interference when using flash, tripod or other accessories.

Records data in synchronization with Winder LX or Motor Drive LX at full operating speeds.

Dimensions

147mm W x 53mm H x 29mm D
5.8" W x 2.1" H x 1.1" D

Weight

105 grams (2.7 ounces)

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

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



Cat. No.

37146 Dial Data LX (with batteries)

PENTAX

LX Accessories



Hand Grips

Hand grips improve handling security and ease of operation with the LX body. Accessory Grip A is made of dense plastic that can be carved or shaped to fit the hand. Accessory Grip B is pre-molded. Both grips attach to the strap lugs on the front of the LX.

Cat. No.

37124 Accessory Grip A for LX (for shaping)



Straps

Strap lugs on the LX are positioned for carrying the LX horizontally or vertically. All strap fasteners can be attached with a coin and offer positive lock-on with 360° rotation.

Cat. No.

37310 Strap Fasteners only for LX (one piece)
32956 Fashion Strap for LX without Fasteners
32954 Strap LX with Fasteners

Caps

Cat. No.

31030 Body Viewfinder Cap for LX (covers LX focusing screen)
31031 Finder Bottom Cap for LX (covers bottom of viewfinders)
31032 Base Mount Cap for FA-1 Finder
31033 Eyepiece Mount Cap for FA-1 Eyepieces (FC-1, FD-1, FD-2)

Cases

These soft, genuine leather, eveready-style cases for the LX have interchangeable front and back covers.

Cat. No.

32520 Soft Case for LX w/Watch Data Back
32521 Front Cover for LX w/Watch Data Back
32522 Back Cover for LX w/Watch Data Back
32810 Soft Case LX (for body & 50mm/2.0, 1.7, 1.4 lenses)
32812 Front Cover T3 for Soft Case LX*
32820 Front Cover for Soft Case LX (fits 50mm/2.0, 1.7, 1.4 lenses)
32825 Back Cover for Soft Case LX
37147 Back Cover for LX w/Dial Data Back

Blimp Case fits LX with Finder (or M-series camera) with winder or motor drive & battery pack attached. Reduces noise from shutter/film advance operation. Built-in "glove" allows insertion of hand to hold and fire camera.

Cat. No.

33919 Blimp Case for LX (or M-series) camera

Holster Case LX-T fits the LX with a longer lens attached (up to 300mm). Case can be attached to belt or carried with shoulder strap.

Cat. No.

33918 Holster Case LX-T

Other

Cat. No.

30951 Shutter Button Attachment (screws into LX shutter button to provide broader surface and more control for shutter finger)
30871 Diopter Adjuster (screwdriver for diopter adjustment on FA-1, FA-1W, FA-2 Finders)
31018 Sync Terminal Cap (covers TTL sync terminals on LX body)
37352 Remote battery Cord LX (Cold weather camera battery holder for LX. Battery holder stays in pocket w/cord connection to LX).

PENTAX

Spotmeter V-FL



1° Spot Exposure readings directly in foot lamberts.

The easiest and most accurate method to evaluate scene brightness is with the new Spotmeter V-FL from Pentax. With the amazing ability to read a 1° area, TV and film metering will never be the same.

Both the viewfinder scale and the calculator dial are calibrated directly in foot lamberts (ft/L), eliminating the time required, and the chance for error, for converting EV values into foot lamberts.

As luminance values are determined by metering both the brightest and the darkest areas in a given area, the calculator dial features two scales for easy calculation of luminance ratio variations. And with the 1° spot readings, you have the assurance that both bright and dark readings will be highly precise, with the accuracy you have come to expect of the Pentax Silicon Photo Diode (SPD) cells.

The inner scale of the calculator dial features a foot lambert scale ranging from 0.125 to 16000 ft/L; while the outer scale indicates corresponding luminance ratios from 1:1 to 1:128,000. By simply matching the foot lambert reading of the darkest area metered to the 1:1 index mark, the luminance ratio is instantly calculated.

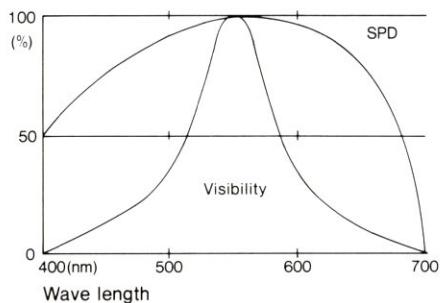
The new Spotmeter V-FL incorporates all of the technology and dependability of the famous Pentax Spotmeter V — acclaimed by professionals around the world for accuracy and dependability.

Now, whether its matching live TV studio conditions with film materials, establishing TV or motion picture light for new productions, setting up home video cameras, measuring industrial or office lighting conditions for safety regulations, or performing numerous laboratory and technical operations, the new Spotmeter V-FL from Pentax is your assurance of fast, easy, precise and accurate foot lambert measurement.

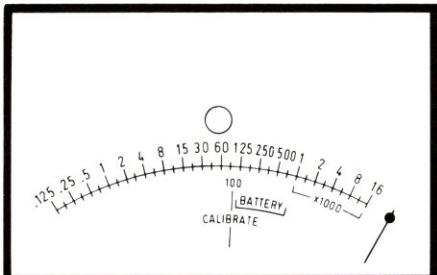
Cat. No.
36127 Spotmeter V-FL w/Case

PENTAX

Spotmeter V-FL



The Spotmeter V-FL SPD spectroscopic sensitivity.



The viewfinder of the Spotmeter V-FL



With the etched 1° circle on the subject area a direct reading in foot lamberts (ft/L) is made. Luminance ratios are determined by reading both the brightest and the darkest spots in a given area. If the brightest spot reads 1000 ft/L, for instance, and the darkest spot reads 2 ft/L, align the 2 ft/L index on the inner scale to the 1:1 luminance ratio index mark on the outer scale. A glance at the 1000 ft/L position (which was the brightest spot measured) on the inner scale immediately informs you that the luminance ratio is 500:1.

Specifications

Measuring ranges:

0.125 to 16000 ft/L.
Scene luminance 1.5:1

Luminance ratio 1:1 to 128000:1

Measuring Angle:

Circle of 1° of arc in center of finder.

Measuring Distances:

From about 5 ft. (1.5m) to infinity — fixed focal length. (Focusing down to about 3 ft. (1 meter) possible by turning the eyepiece.

Measuring Method:

Spot measuring of reflected light. (Meter switches on when button is pressed).

Photosensitive Cell:

Silicon photo diode (SPD)

Power Supply:

Three 1.5v silver batteries. (Eveready S76 or equivalent)

Battery Check:

Battery check indicated in viewfinder.

Viewfinder:

Single lens reflex pentaprism type with unreversed, laterally correct image. Even illumination achieved with finely grooved fresnel lens. 1° spot indicated in center of viewfinder. Field of view 21° diagonal, 17° horizontal and 12° vertical. Magnification 1.5X. Adjustable eyepiece correction 0 to -1 diopter.

Filter Accessory Size:

46mm

Calibration:

Adjustment screw with calibration indicated in viewfinder.

Weight:

15.9 oz (450g) with batteries.

Dimensions:

2.5" W x 6.4" H x 5" L
(62mm x 163mm x 127mm)

Width of grip: 1.3" (34mm)

Additional:

Scale illumination for low ft/L levels.
Equipped with tripod socket, accepts
46mm filters, supplied with Case, Wrist
Strap, batteries and Lens Cap.

Cat. No.

36127 Spotmeter V-FL w/Case

PENTAX

Digital Spotmeter



1° Precision exposure meter with rugged solid state digital readout.

A major breakthrough in exposure metering technology, the Pentax Digital Spotmeter selectively pinpoints with extreme accuracy the correct exposures in the deepest shadows and the brightest highlights. It can also measure contrast ratios and serve as a brightness meter in T.V. or motion picture studios. The Pentax Digital Spotmeter has a 1° pinpoint metering angle which is comparable to the field of view of a 2,000mm lens for a 35mm camera, and has a measuring range of EV 1-20. It can be used to measure exposures by four different methods: general measuring, averaging, highlight reading and shadow reading. It is therefore ideally suited to the most exacting needs of any photographer, professional or amateur.

Weighing only 9.1 oz., its bright fixed focus, through-the-lens viewfinder presents a slightly 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 areas.

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

The Pentax Digital Spotmeter also has a IRE (Institute of Radio Engineers) scale for determining which highlights at any given exposure would be washed out and which shadows would be underexposed. The meter also has a Cine Index for motion picture use. The Pentax Digital Spotmeter has a black finish and is powered by one 6V silver oxide battery, has a tripod socket and is supplied with case, wrist strap and lens cap.

Cat. No.
36141 Digital Spotmeter w/Case

Specifications on next page.

PENTAX

Digital Spotmeter

IRE Scale

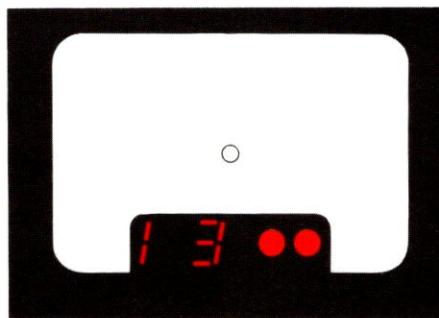
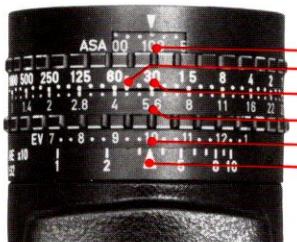
Named for the Institute of Radio Engineers, IRE units provide a means for the percentage-wise comparison of energy. The IRE scales from 1-10 cover 5 EV and "f/stop" levels, representing the maximum and minimum light levels which will reproduce on reversal-type films. This "5 stop" range also represents a contrast range of 1:32 making the spotmeter invaluable for television use and motion picture production. For general photographic applications it enables highlight and shadow readings quickly and easily. Exceptional exposures under difficult lighting conditions are instantly determined:

• Highlight Reading Method

In this method priority is given to the reproduction of the bright highlights. If the contrast ratio is particularly strong, the shadows will tend to be blackened right out. For example, when aiming at the people under a spotlight on a stage with a black background or when trying to capture the color of neon lights at night, this method will prove very successful. Measure the brightest highlight, and align the exposure value with the IRE Scale at position 10 (not the central standard index mark) on the far right hand side. Then choose any aperture/shutter speed combination. With reversible color film, shadow detail with an EV reading no lower than that corresponding to an IRE index of 1 (when the highlight EV has been set to an IRE index of 10) will be reproduced. All darker areas will be pitch black.

• Shadow Reading Method

This method is just the opposite of the highlight reading method, priority being given to the reproduction of detail in the dark shadows. If the contrast is very strong, the brighter parts of the highlights will appear just plain white. Measure the shadow area, align the exposure value with the IRE Scale at position 1, and then select suitable exposure combinations. Details of highlight areas which give an EV reading no higher than the EV value corresponding to the IRE index scale position 10 (when measuring the shadows) will still be reproduced. Anything brighter than that will come out all white. The readings given by ordinary exposure meters when measuring fields with extensive shadow areas such as a night scene, usually result in overexposure. But the accuracy of the Digital Spotmeter ensures just the right exposure setting for realistic results.



Viewfinder of Digital Spotmeter shows 1° area of meter coverage and LED panel. Each illuminated dot beside the EV number represents $\frac{1}{3}$ EV, thus the reading shown above is $13\frac{2}{3}$ EV. When the exposure value exceeds 19 ($19\frac{2}{3}$ EV) or falls below 1, zero [0] is displayed.

Specifications

Measuring Ranges:

EV 1-20 [at ASA 100] (EV 20 displayed as "0") ASA 6-6400; Shutter Speeds 1/4000 sec-4 minutes; Apertures f/1-f/128; Scales marked 1/3rd EV increments from 1-19 2/3, IRE 1-10.

Measuring Angle:

Circle of 1° of arc in center of finder.

Measuring Distances:

From about 5 ft. (1.5m) to infinity — fixed focal length. (Focusing down to about 3 ft. (1 meter) possible by turning the eyepiece)

Measuring Method:

Spot measuring of reflected light. (Meter switches on when button pressed).

Exposure Read-Out:

LED digital display of EV numbers. Also displays one or two dots — each dot represents $\frac{1}{3}$ EV.

Photosensitive Cell:

Silicon Photo Diode (SPD)

Power Supply:

One 6v silver battery (Mallory PX28 or equivalent).

Viewfinder:

Single lens reflex pentaprism type with unreversed, laterally correct image. Objective and eyepiece lenses Super-Multi-Coated and pentaprism specially silvered for brilliant viewfinder image. Even illumination achieved with finely grooved fresnel lens. 1° spot indicated in center of viewfinder, and large LED panel at bottom. Total viewfinder coverage similar in shape to that of a 35mm SLR viewfinder with a diagonal field of view of 26°, horizontal field of 22° and vertical field of 14°. Adjustable eyepiece correction from -2 to +1 diopter.

Filter Size:

40.5mm

Weight:

9.1oz (258g) with battery.

Dimensions:

1.7"D x 5.7"H x 3.3"W
(44mm x 144mm x 83mm)

Additional:

Equipped with Tripod Socket, accepts 40.5mm filters, supplied with Case, Wrist Strap, battery and Lens Cap. Cat. No.

36141 Digital Spotmeter w/Case

PENTAX

Spotmeter V



The Pentax Spotmeter V for Precision Exposure Metering

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

One of the keys to good photography is accurate exposure metering. This is especially true in professional circles where reversal color film requiring an exposure accuracy of 1/3rd of an f/stop is often employed, and in TV and movie film making where subject illumination has to be measured by spot metering methods. The metering angle in ordinary cameras is about 50°, and only one exposure reading is produced. Pentax Spotmeters have a very small metering angle of only 1°. Consequently, they can measure many different parts of the field to be photographed. They can also give a rapid indication of the amount of contrast. When the spot is moved quickly back and forth between the brightest and the darkest areas, the needle deflections will be greater for the stronger contrasts, and smaller for the weaker contrasts.

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

The Pentax Spotmeter V incorporates a single lens reflex optical system, constituting the ideal in precision exposure metering. The 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 1.5v (Eveready S76) silver batteries in the power supply provide very stable voltage, a prerequisite for highly accurate measuring capability. The single linear meter scale in the viewfinder makes needle deflections very easy to read, and an IRE index scale can be read off directly from EV values on the side dial. The push button meter switch ensures that the batteries are not consumed unnecessarily. With the vast technical know-how of the makers of the Pentax Spotmeter V, it has consistently advanced, adding one improvement upon another. Whether it be commercial filming, night scenes, the stage, or the TV studio, no other exposure meter comes anywhere near the Spotmeter V.

Specifications on next page.

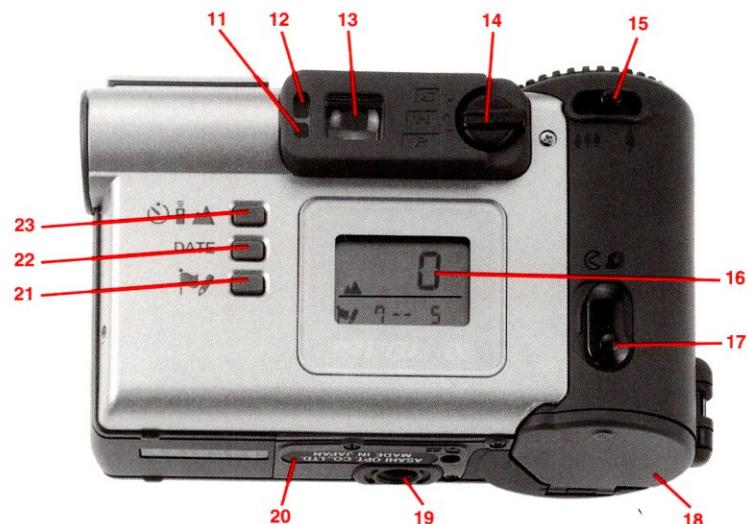
Cat. No.

36130 Spotmeter V w/Case

Advanced Photo System

PENTAX

efina



- 1. Mode Dial
- 2. Viewfinder Window
- 3. Autofocus Window
- 4. Light Sensor Window
- 5. Built-in Flash
- 6. Battery Cover
- 7. Protective Front Cover
- 8. Lens
- 9. Self-timer Lamp
- 10. Remote Control Receiver
- 11. Red (Flash) Lamp
- 12. Green (Autofocus) Lamp
- 13. Viewfinder Eyepiece
- 14. Print Type (C, H & P) Switch Lever
- 15. Zoom Lever
- 16. LCD Panel
- 17. Film Cartridge Compartment Lever
- 18. Film Cartridge Compartment Cover
- 19. Tripod Socket
- 20. Mid-roll Rewind Button
- 21. Title Button
- 22. Date Button
- 23. Self-timer/Remote Control/Landscape Button

- Advanced photo system film format
- Ultra compact and lightweight design
- 24mm-48mm 2x SMC power zoom lens (approximately 30mm-60mm in 35mm format)
- Autofocus and programmed auto exposure
- Easy drop-in film loading
- Automatic backlight compensation
- Automatic film advance and rewind
- Built-in auto flash, with red-eye reduction
- Fill flash and slow speed sync modes
- Focus Lock
- Close focusing to 2 feet
- Infinity landscape mode
- Mid roll rewind possible
- Remote control capability
- Print quality improvement (PQI)
- Choice of 3 film formats (C, H, & P)
- Ten second self timer
- 31 subtitles in 12 languages
- Date and subtitle imprinting

Ordering Information:
10210 efina Advanced Photo System Camera

UPC Codes:
027075041967

* The expression "Panorama" indicates a format equal in width to a conventional film frame, but narrower across the top and bottom.



Specifications

Type

IX240 fully automatic lens-shutter camera with built-in lens, autofocus, auto exposure and auto flash.

Film

IX240 (Advanced Photo System) cartridge film. Film-speed setting: Auto film-speed setting from ISO 25 to ISO 1000.

Lens

Focal length: 24mm-48mm (approx. 30mm-60mm in 35mm format film).

Aperture: f/4.5-f/8.0.

Lens construction: 5 elements in 5 groups. Shooting distance: 0.65m (2.1 feet) - infinity. Shooting area at minimum shooting distance: 1/13x (at tele).

Finder

Type: Actual image zoom viewfinder.

Display: 1) Hi-vision (H) frame,

2) Autofocus frame, 3) Panorama (P) frame,

4) Panorama close-distance frame,

5) 135 format (C) frame, 6) Green LED lamp (lit in-focus signal blinking: close-distance warning, 7) Red LED lamp (lit: flash-ready status, blinking: flash being charged).

Focusing

System: Infrared active autofocus system (single beam).

Focusing range: 0.65m (2.1 feet) to infinity.

Focus lock: Shutter release button half-way down.

Metering

System: Programmed auto exposure with multi metering.

Range: 1) Auto mode

(24 mm ISO 100) EV 4.5 - EV 16

(48 mm ISO 100) EV 11.5 - EV 18

2) Slow shutter speed

(24 mm ISO 100) EV 8 - EV 16

(48 mm ISO 100) EV 8 - EV 18

Shutter

System: Programmed AE electronic lens shutter.

Speeds: Approx. 1/400 sec. to 1/3 sec., 1/2 sec. to 5 min. in bulb.

Shooting Mode

1-frame, self-timer, remote-control and landscape shooting.

Print Format

System: Electronic recording of selected format.

Selection (PAR)

Printing Type: H/P/C switchable.

Self-timer

10-second delay electronic self-timer.

Cancellation is possible.

Remote Control

Infrared wireless remote control.

Flash

Built-in auto flash with red-eye reduction mode. Automatic discharge under low light and backlight conditions in auto mode.

Flash-on and flash-off modes. Daylight-sync and slow shutter-sync available.

Recycling time: Approx. 5 sec. with fresh lithium battery.

Effective range: 1) 0.65m-3.8m (24mm ISO 100)

2) 0.65m-2.1m (48mm ISO 100).

Loading/Winding

One-touch loading, automatic winding.

Rewinding

Automatic rewinding at end of roll.

Possible to rewind at mid-roll with rewind button.

Magnetic Recording

Type: 1 track digital recording.

Printing contents: Year/month/day/hour and minute imprinting. PAR (print format), PQI (Print Quality Improvement) information and title.

External LCD

Exposure counter, loading error, date, film speed (ISO)

Indication

Film type total film numbers, selected title and language-selection number. Zooming lever, battery mark, cartridge mark, red-eye reduction, flash-on and flash-off. Self-timer, remote-control and landscape marks.

Power Source

3V lithium battery (CR2).

Dimensions: 97.2 x 55 x 32.5mm.

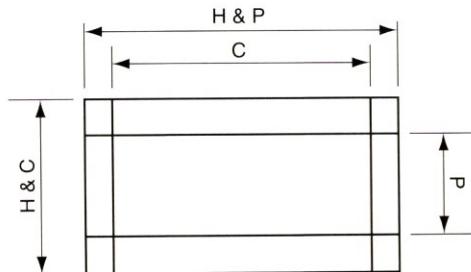
Country Codes (12)

1. Danish
2. Finnish
3. French
4. German
5. Italian
6. Japanese
8. Norwegian
9. Portuguese
10. Spanish
11. Swedish
12. British English
13. American English

Titles (31)

0. Christmas	16. Season's Greetings
1. Birthday	17. Happy Birthday
2. Vacation	18. Congratulations
3. Honeymoon	19. Merry Christmas
4. Wedding	20. Festival
5. Hanukkah	21. First Day of School
6. Graduation	22. Tour
7. Family	23. New Year's
8. Party	24. Easter
9. Holiday	25. Happy New Year
10. Anniversary	26. Reunion
11. Friends	27. Father's Day
12. School Event	28. Mother's Day
13. Trip	29. Memories
14. I Love You	30. Baptism
15. Thank you	

Three format options for each film frame.



Formats and recommended print dimensions

Format	Recommended Print Size
C-Type	3.5 x 5 4 x 6
H-Type	3.5 x 6 4 x 7
P-Type	3.5 x 8.5 3.5 x 10.5 4 x 10 4 x 11.5

Digital

PENTAX

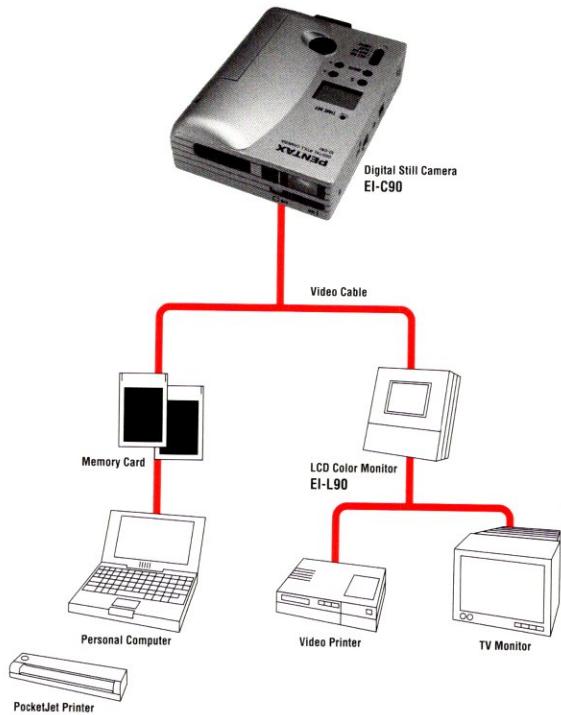
EI-C90/EI-L90

Digital Camera



Introducing the EI-C90 Digital Camera/EI-L90 Color LCD Monitor from Pentax

- Ultra compact and lightweight design
- Easy to use
- 1/4" High resolution CCD with 410,000 pixels
- Sharp 768x560 pixel, 24-bit image resolution
- Record in compressed (JPEG) or uncompressed (Tiff) format
- Dual power source for extended use
- Detachable large 2" color monitor with extremely sharp 110,000 pixel resolution
- 2 MB built-in memory
- Accepts PCMCIA type I and type II memory cards for additional storage
- 5.2mm f/2.8 focus free lens (equivalent to 50mm in 35mm format)
- Live action video mode
- Focuses down to 0.8" with macro switch
- Connect to TV for impressive slide shows and business presentations
- Programmed automatic exposure
- Built-in automatic flash
- Easy to download images to your computer
- Packaged with software for easy photo manipulation and storage
- Exposure compensation
- AC adapter
- Four or nine thumbnail preview
- Auto playback



Ordering Information:

KB30000 Pentax EI-C90 Digital Camera Kit

EI-C90 Camera, EI-L90 Monitor,
AC Adapter,
EI-YV90 Video Cable,
EI-YM90 Mac Interface Converter,
EI-YI90 Interface Cable, Utilities Software,
Manipulation Software

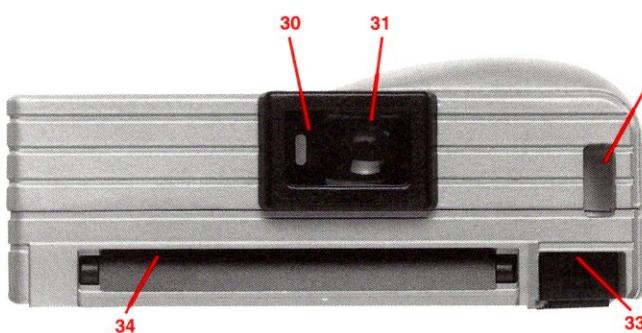
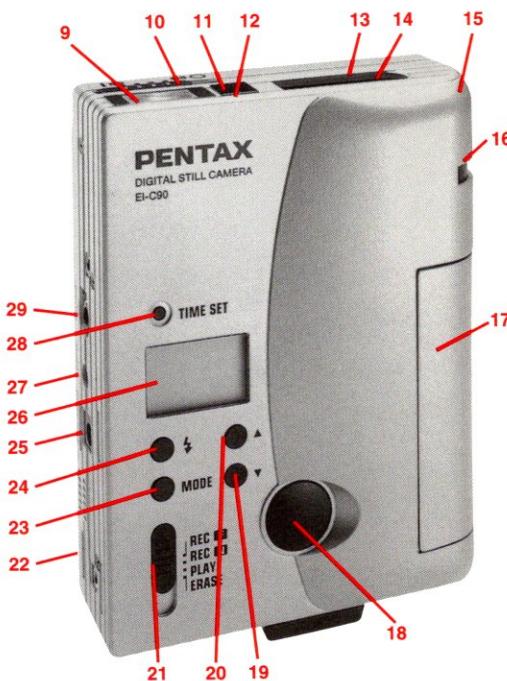
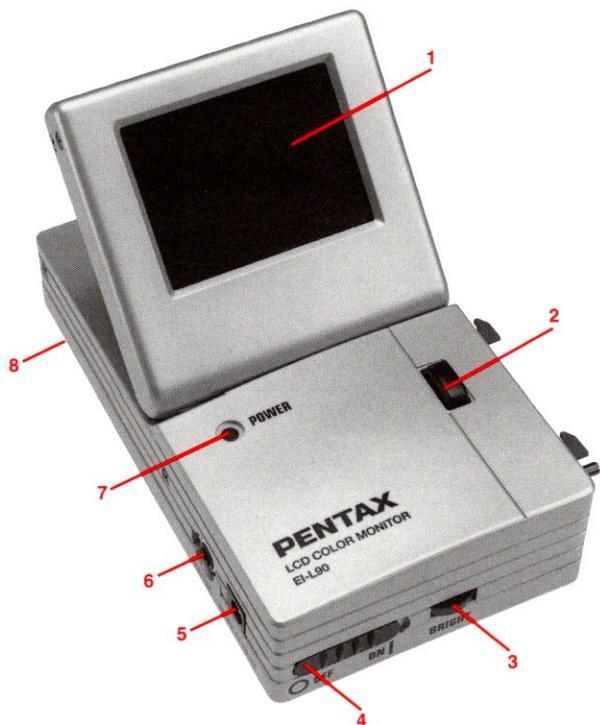
UPC Codes:

027075300002

PENTAX

EI-C90/EI-L90

Digital Camera



1. LCD Color Monitor Screen
2. Monitor Unlock Button
3. Brightness Control dial
4. Power Switch
5. DC Input Terminal
6. Digital Interface Terminal
7. LED Power Indicator
8. Battery Compartment (underneath)
9. Built-in Flash
10. Power Switch
11. Self-timer Lamp
12. Light Sensor Window
13. Lens Protector
14. Lens
15. Tripod Socket
16. Macro Adjustment Lever
17. Battery Chamber Cover

18. Shutter Release Button
19. Down Button
20. Up Button
21. Slide Mode Switch
22. Interface Connector for EI-L90 LCD Color Monitor
23. Mode Button
24. Flash Mode Button
25. DC Input Terminal
26. LCD Information Panel
27. Video Output Terminal
28. Date Adjustment Button
29. Digital Interface Terminal
30. Exposure/Built-in Flash Information Lamp
31. Viewfinder Window
32. Strap Lug
33. PC Card Eject Button
34. PC Card Slot

PENTAX

EI-C90/EI-L90

Digital Camera

Specifications

Recording Format

Digital recording
(uncompressed/compressed)

Uncompression Format

Conforms to TIFF standard

Compression Format

Conforms to JPEG baseline standard

Recording Medium

PCMCIA/JEIDA standard PC card
(ATA flash card or SRAM card)

Built-in Memory

2 MB flash memory

Image Resolution

768x560 pixels, 24-bit RGB
(in uncompressed format)

Monitor Signal Format

Conforms to NTSC standard format

Image Sensor

1/4" CCD with 410,000 pixels

Lens

Fixed-focus 5.2mm f/2.8 lens (equivalent to 50mm in 35mm format) Macro setting is switchable

Shutter Speeds

1/1000 sec. – 1/8 sec.

Exposure Control

Programmed AE

White Balance

Automatic

Focusing Range

1m (3.3 ft.) – infinity / 2cm – 1m
(0.8 in. – 3.3 ft.) at Macro setting

Flash

Built-in type with guide number 6, effective range 1 – 3m (3.3 – 9.8 ft.)

Viewfinder

Optical viewfinder

Self-timer

Built-in type with 10-second delay

Power Source

Two lithium batteries (CR2 type) or AC adapter

Dimensions (W x H x D)

107 x 81 x 27mm (4.2 x 3.2 x 1.1 in.)
(D: 37mm (1.5 in.) at grip)

Weight

180g (6.4 oz.) without batteries

Additional Kit Components



AC Adapter



EI-YV90 Video Cable



EI-YI90 Interface Cable

Items not shown:

EI-YM90 Mac Interface Converter
4 (AA) Batteries
2 (CR2) Batteries
Utility Software
Manipulation Software

Additional Accessories



4MB Flash
Memory Card



10MB Flash
Memory Card



20MB Flash
Memory Card

EI-C90 System Bag**Ordering Information:**

88050 4MB Flash Memory Card
88051 10MB Flash Memory Card
88052 20MB Flash Memory Card
84670 EI-C90 System Bag

UPC Codes:

027075880504
027075880511
027075880528
027075846708

Binoculars

PENTAX

Binoculars

8 x 21 UCF Mini
10 x 21 UCF Mini
Synchronized Dual-axis,
Single Body,
Ultra Compact,
Lightweight



Ordering Information:

Product Code

62191

8x21 UCF Mini

Binoculars

UPC Code: 027075039612

62192

10x21 UCF Mini

Binoculars

UPC Code: 027075039629

Includes case, strap and lens caps.

- New, ultra compact body.
- Contemporary design.
- Revolutionary dual-axis, single body housing with synchronized eye-piece adjustment assures correct optical alignment for comfortable viewing.
- Fast and easy center focusing for handling ease.
- Pentax multi-coating eliminates harmful ultraviolet rays while improving light transmission for high contrast images with no glare or flare.
- Inverted porro prism design results in a light, compact design.
- Rubber coating protects against shock, dust and scratches while providing an easily gripped surface.
- High-quality BaK-4 prisms transmit more light at the edges to enhance illumination for easier viewing in all lighting.
- Choice of 8x21 or 10x21 magnification to suit every use.
- Pentax quality and craftsmanship assure binoculars designed to look better and last longer.
- Protected by a limited lifetime warranty.

PENTAX

Binoculars

8 x 21 UCF Mini

10 x 21 UCF Mini

Synchronized Dual-axis,
Single Body,
Ultra Compact,
Lightweight

Specifications

	8 x 21 UCF Mini	10 x 21 UCF Mini
Type:	Porro-prism center focusing	Porro-prism center focusing
Lens Construction:		
Objective Lens:	2 elements in 1 group	2 elements in 1 group
Eyepiece Lens:	3 elements in 2 groups	3 elements in 2 groups
Magnification:	8X	10X
Objective Lens Diameter:	21mm	21mm
Real Field of View:	6.2 degrees	5.0 degrees
Apparent Field of View:	50 degrees	50 degrees
Field of View at 1000m:	108m	87m
Field of View at 1000 yd.:	324 ft.	261 ft.
Exit Pupil:	2.6mm	2.1mm
Relative Brightness:	6.7	4.4
Eye Relief:	13mm	9.5mm
Diopter Adjustment Range:	± 4 Diopter	± 4 Diopter
Eye Width Adjustment Range:	57.5mm - 71.5mm (2.3 in. - 2.8 in.)	57.5mm - 71.5mm (2.3 in. - 2.8 in.)
Focusing Range:	3m - infinity (9.8 ft. - infinity)	3m - infinity (9.8 ft. - infinity)
Eyepiece Ring:	Collapsible type	Collapsible type
Body Color:	Black & Gray	Black & Gray
Height & Width:	86 x 105mm (3.4 in. x 4.1 in.)	82 x 105mm (3.2 in. x 4.1 in.)
Thickness:	50mm (2 in.)	50mm (2 in.)
Weight:	210g (7.4 oz.)	210g (7.4 oz.)
Accessories:	Eyepiece lens cap, Case, Neck strap	Eyepiece lens cap, Case, Neck strap
UPC Code:	027075039612	027075039629

PENTAX

Binoculars

8 x 24 UCF V, 10 x 24 UCF V

12 x 24 UCF V, 16 x 24 UCF V

Synchronized Dual-axis, Single Body,
Compact, Lightweight Binoculars



Ordering Information:

Product Code

62181

8x24 UCF V

Porro Prism Binoculars

UPC Code: 027075038240

62182

10x24 UCF V

Porro Prism Binoculars

UPC Code: 027075038257

62183

12x24 UCF V

Porro Prism Binoculars

UPC Code: 027075038264

62184

16x24 UCF V

Porro Prism Binoculars

UPC Code: 027075038271

Includes case, strap and lens caps.

- New contemporary design.
- Revolutionary dual-axis, single body housing with synchronized eye-piece adjustment assures correct optical alignment for comfortable viewing.
- Central fingertip control locks in diopter adjustment from +/- 4 diopters.
- Fast and easy center focusing for handling ease.
- Pentax multi-coating eliminates harmful ultraviolet rays while improving light transmission for high contrast images with no glare or flare.
- Inverted porro prism design results in a light, compact design.
- Rubber coating protects against shock, dust and scratches while providing an easily gripped surface.
- High-quality BaK-4 prisms transmit more light at the edges to enhance illumination for easier viewing in all lighting.
- Choice of 8X, 10X, 12X or 16X magnification to suit every use.
- Pentax quality and craftsmanship assure binoculars designed to look better and last longer.
- Protected by a limited lifetime warranty.

PENTAX

Binoculars

8 x 24 UCF V, 10 x 24 UCF V
12 x 24 UCF V, 16 x 24 UCF V

Specifications

	8 x 24 UCF V	10 x 24 UCF V
Type:	Porro-prism center focusing (Linked dual axis)	Porro-prism center focusing (Linked dual axis)
Lens Construction:		
Objective Lens:	2 elements in 1 group	2 elements in 1 group
Eyepiece Lens:	5 elements in 5 groups	5 elements in 5 groups
Magnification:	8X	10X
Objective Lens Diameter:	24mm	24mm
Real Field of View:	6.2°	5.0°
Apparent Field of View:	50°	50°
Field of View at 1000m:	108m	87m
Field of View at 1000 yd.:	324'	261'
Exit Pupil:	3.0mm	2.4mm
Eye Relief:	15mm	15mm
Brightness:	9.0	5.8
Diopter Adjustment Range:	±4 Diopter	±4 Diopter
Eye Distance		
Adjustment Range:	55mm - 74mm (2.1" - 2.9")	55mm - 74mm (2.1" - 2.9")
Focusing Range:	3m - infinity (9.8' - infinity)	3m - infinity (9.8' - infinity)
Eyepiece Ring:	Slide Type	Slide Type
Body Color	(Black & Gray)	(Black & Gray)
Height & Width	107mm x 111mm (4.2" - 4.4")	107mm x 111mm (4.2" - 4.4")
Thickness:	63mm (2.4")	63mm (2.4")
Weight:	300g (10.6 oz)	300g (10.6 oz)
Accessories:	Eyepiece lens cap, Case, Neck strap	Eyepiece lens cap, Case, Neck strap

	12 x 24 UCF V	16 x 24 UCF V
Type:	Porro-prism center focusing (Linked dual axis)	Porro-prism center focusing (Linked dual axis)
Lens Construction:		
Objective Lens:	2 elements, 1 group	2 elements, 1 group
Eyepiece Lens:	5 elements in 5 groups	5 elements in 5 groups
Magnification:	12X	16X
Objective Lens Diameter:	24mm	24mm
Real Field of View:	4.2°	3.1°
Apparent Field of View:	50°	50°
Field of View at 1000m:	73m	54m
Field of View at 1000 yd.:	219'	162'
Exit Pupil:	2.0mm	1.5mm
Eye Relief:	15mm	15mm
Brightness:	4.0	2.3
Diopter Adjustment Range:	± 4 Diopter	± 4 Diopter
Eye Distance		
Adjustment Range:	55mm - 74mm (2.1" - 2.9")	55mm - 74mm (2.1" - 2.9")
Focusing Range:	3m - infinity (9.8' - infinity)	3m - infinity (9.8' - infinity)
Eyepiece Ring:	Slide Type	Slide Type
Body Color:	Black & Gray	Black & Gray
Height & Width:	107mm x 112mm (4.4" - 4.4")	107mm x 112mm (4.4" - 4.4")
Thickness:	63mm (2.4")	63mm (2.4")
Weight:	300g (10.6 oz)	300g (10.6 oz)
Accessories:	Eyepiece lens cap, Case, Neck strap	Eyepiece lens cap, Case, Neck strap

PENTAX

Binoculars

**8x24 UCF WR, 10x24 UCF WR
12x24 UCF WR, 16x24 UCF WR**

**Weather Resistant
Synchronized Dual-Axis,
Single Body, Compact,
Lightweight**



Ordering Information:

Product Code

62171

8x24 UCF WR

Binoculars

UPC Code: 027075036581

62172

10x24 UCF WR

Binoculars

UPC Code: 027075036598

62175

12x24 UCF WR

Binoculars

UPC Code: 027075038356

62176

16x24 UCF WR

Binoculars

UPC Code: 027075038363

Includes case, strap and lens caps.

- All new weather resistant models.
- New contemporary design.
- Revolutionary dual-axis, single body housing with synchronized eye-piece adjustment assures correct optical alignment for comfortable viewing.
- Central fingertip control locks in diopter adjustment from +/-4 diopters.
- Fast and easy center focusing for handling ease.
- Pentax multi-coating eliminates harmful ultraviolet rays while improving light transmission for high contrast images with no glare or flare.
- Inverted porro prism design results in a light, compact design.
- Rubber coating protects against weather, shock, dust and scratches while providing an easily gripped surface.
- High-quality BaK-4 prisms transmit more light at the edges to enhance illumination for easier viewing in all lighting.
- Choice of 8X, 10X, 12X, and 16X magnification to suit every use.
- Pentax quality and craftsmanship assure binoculars designed to look better and last longer.
- Tripod socket on all models.
- Protected by a limited lifetime warranty.

PENTAX

Binoculars

8x24 UCF WR, 10x24 UCF WR
12x24 UCF WR, 16x24 UCF WR

Specifications

	8 x 24 UCF WR	10 x 24 UCF WR
Type:	Porro-prism center focusing (linked dual-axis). Fully retractable diopter adjusting ring. Weather resistant. Objective lens protective glass.	
Lens Construction:		
Objective Lens:	2 elements in 1 group	2 elements in 1 group
Eyepiece Lens:	3 elements in 2 groups	3 elements in 2 groups
Magnification:	8X	10X
Objective Lens Diameter:	24mm	24mm
Angle of View:	7.5°	6.0°
Field of View at 1000m:	131m	105m
Field of View at 1000 yd.:	393'	315'
Exit Pupil:	3.0mm	2.4mm
Eye Relief:	13.0mm	10.0mm
Relative Brightness:	9.0	5.8
Diopter Adjustment:	± 4 Diopter	± 4 Diopter
Eye Width Adjustment:	56mm - 74mm (2.2" - 2.9")	56mm-74mm (2.2" - 2.9")
Focusing Range:	4m - infinity (13.1' - infinity)	4m - infinity (13.1' - infinity)
Eyepiece Ring:	Slidable type	Slidable type
Body Color:	Black & Gray	Black & Gray
Height & Width:	112.5 x 109.5mm (4.3" x 4.4")	112.5 x 106mm (4.2" x 4.4")
Thickness:	60mm (2.4")	60mm (2.4")
Weight:	330g (11.6 oz)	330g (11.6 oz)
Accessories:	Eyepiece lens cap, Case, Neck strap	Eyepiece lens cap, Case, Neck strap
UPC Code:	027075036581	027075036598

12 x 24 UCF WR

	12 x 24 UCF WR	16 x 24 UCF WR
Type:	Porro-prism center focusing (linked dual-axis). Fully retractable diopter adjusting ring. Weather resistant. Objective lens protective glass.	
Lens Construction:		
Objective Lens:	2 elements, 1 group	2 elements, 1 group
Eyepiece Lens:	4 elements in 3 groups	5 elements in 3 groups
Magnification:	12X	16X
Objective Lens Diameter:	24mm	24mm
Angle of View:	5.0°	3.2°
Apparent Field of View:	60.0°	51.0°
Field of View at 1000m:	87m	56m
Field of View at 1000 yd.:	262'	168'
Exit Pupil:	2.0mm	1.5mm
Eye Relief:	10.0mm	8.0mm
Relative Brightness:	4.0	2.3
Diopter Adjustment:	± 4 Diopter	± 4 Diopter
Eye Width Adjustment:	56mm - 74mm (2.2" - 2.9")	56mm - 74mm (2.2" - 2.9")
Focusing Range:	4m - infinity (13.1' - infinity)	4m - infinity (13.1' - infinity)
Eyepiece Ring:	Slidable type	Slidable type
Body Color:	Black & Gray	Black & Gray
Height & Width:	106 x 113mm (4.2" x 4.4")	110 x 113mm (4.3" x 4.4")
Thickness:	60mm (2.4")	60mm (2.4")
Weight:	350g (12.30 oz)	350g (12.30 oz)
Accessories:	Eyepiece lens cap, case, neck strap	Eyepiece lens cap, case, neck strap
UPC Code:	027075038356	027075038363

PENTAX

Binoculars

8-20 x 24 UCF Zoom
High-performance Zoom,
Single Body, Compact,
Lightweight Binoculars



Ordering Information:

Product Code

62185

8-20x24 UCF Zoom

Binoculars

UPC Code: 027075039285

- Magnification power range from eight to twenty.
- Newly developed zoom optics to eliminate focus shift during magnification changes eliminates need to re-adjust focus.
- Sharp image throughout the field of view by eliminating vignetting around the edges.
- Minimizes chromatic aberrations to produce true-to-life image.
- High quality BaK-4 prisms transmit more light to enhance illumination for easier viewing in all lighting.
- Fast and easy center focusing for handling ease.
- Pentax multi-coating eliminates harmful ultraviolet rays which improves light transmission for high contrast images with no glare or flare.
- Inverted porro-prism design results in light, compact design.
- Rubber coating protects against shock, dust and scratches while providing an easily gripped surface.
- Protected by a limited lifetime warranty.

PENTAX

Binoculars

8-20 x 24 UCF Zoom

Specifications

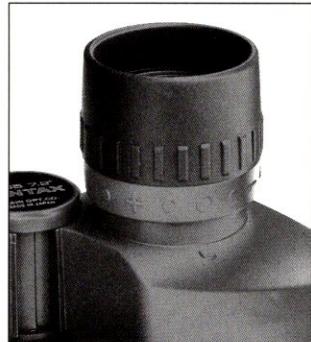
8-20 x 24 UCF Zoom

Type:	Center-focus center-zoom porro-prism binoculars
Lens Construction:	
Objective Lens:	2 elements in 1 group
Eyepiece Lens:	6 elements in 4 groups
Magnification:	8X - 20X
Objective Lens Diameter:	24mm
Real Field of View:	5.3° (8x) - 2.5° (20x)
Apparent Field of View:	42.4° (8x) - 50.0° (20x)
Field of View at 1000m:	93m (8x)- 44m (20x)
Field of View at 1000 yd.:	279 ft. (8x)- 132 ft. (20x)
Exit Pupil:	3.0mm (8x) - 1.2mm (20x)
Eye Relief:	15mm (20x)
Brightness:	9.0 (8x) - 1.4 (20x)
Diopter Adjustment Range:	±4 Diopter
Eye Distance	
Adjustment Range:	56mm - 73mm
Focusing Range:	1.9m - infinity (6.2 ft. to infinity)
Eyepiece Ring:	Sliding Type
Dimensions:	134 (H) x 122 (W) x 66 (D) mm (5.3" x 4.8" x 2.6")
Weight:	485g (17.1 oz)

PENTAX

Binoculars

7x35 PCF III,
8x40 PCF III, 7x50 PCF III,
10x50 PCF III, 12x50 PCF III,
16x50 PCF III, 20x50 PCF III
Seven New Models To Fit All
Your Binocular Needs



click-stop diopter.

Ordering Information

Product Codes

65771

7 x 35 PCF III

Porro prism Binoculars

UPC Code: 027075038288

65772

8 x 40 PCF III

Porro prism Binoculars

UPC Code: 027075038295

65773

7 x 50 PCF III

Porro prism Binoculars

UPC Code: 027075038301

65774

10 x 50 PCF III

Porro prism Binoculars

UPC Code: 027075038318

65775

12 x 50 PCF III

Porro prism Binoculars

UPC Code: 027075038325

65776

16 x 50 PCF III

Porro prism Binoculars

UPC Code: 027075038332

65777

20 x 50 PCF III

Porro prism Binoculars

UPC Code: 027075038349

Includes case, strap and lens caps.

- Superb quality, attractive price and finely constructed porro prism binoculars in a comprehensive range of magnifications.
- Mechanical focus lock feature allows user to lock in at a specific distance for convenient focus-free viewing.
- Click-stop diopter adjustment locks in right eyepiece diopter setting.
- Convenient center focusing to instantly bring images into focus.
- Ruggedly constructed with rubber covering to protect the optical and mechanical systems.
- High-performance BaK-4 prisms enhance illumination by transmitting more light at the edges and eliminate shadows for brighter, clearer images.
- Non-slip rubber exterior and new ergonomic design provide a firm grip for easier handling.
- Pentax multi-coated optics eliminate harmful ultraviolet rays while improving light transmission for brighter, clearer images and less glare under poor and difficult lighting.
- Folding rubber eyecups and long eye relief provide viewing comfort for eyeglass wearers and non-wearers.
- Pentax quality and craftsmanship assure binoculars designed to look better and last longer.
- Protected by a limited lifetime warranty.

PENTAX

Binoculars

7x35 PCF III,
8x40 PCF III, 7x50 PCF III,
10x50 PCF III, 12x50 PCF III,
16x50 PCF III, 20x50 PCF III

Specifications

	7 x 35 PCF III	8 x 40 PCF III	7 x 50 PCF III
Type:	Porro-prism center focusing		
Lens Construction:			
Objective Lens:	2 elements, 1 group	2 elements, 1 group	2 elements, 1 group
Eyespiece Lens:	3 elements, 2 groups	3 elements, 2 groups	3 elements, 2 groups
Magnification:	7X	8X	7X
Objective Lens Diameter:	35mm	40mm	50mm
Real Field of View:	7.2°	6.3°	6.2°
Apparent Field of View:	50'	50'	43°
Field of View at 1000m:	126m	110m	108m
Field of View at 1000 yd.:	378'	330'	324'
Exit Pupil:	5.0mm	5.0mm	7.1mm
Eye Relief:	20mm	20mm	20mm
Relative Brightness:	25.0	25.0	51.0
Diopter Adjustment Range:	± 4 diopter	± 4 diopter	± 2 diopter
Eye Distance Adjustment Range:	57mm - 72mm (2.2" - 2.8")	57mm - 72mm (2.2" - 2.8")	57mm - 72mm (2.2" - 2.8")
Focusing Range:	3.5m to infinity (11.5' - infinity)	3.5m to infinity (11.5' - infinity)	6m to infinity (20' - infinity)
Eyespiece Ring:	Collapsible type	Collapsible type	Collapsible type
Body Color:	(Black & Gray)	(Black & Gray)	(Black & Gray)
Height & Width:	125mm x 168mm (4.9" x 6.6")	145mm x 171mm (5.7" x 6.7")	199mm x 181mm (7.8" x 7.1")
Thickness:	76mm (3.0")	77mm (3.0")	82mm (3.2")
Weight:	700g (24.7 oz)	760g (26.8 oz)	900g (31.7 oz)
Accessories:	Objective lens cap, Eyespiece lens cap, Case, Neck strap		

	10 x 50 PCF III	12 x 50 PCF III	16 x 50 PCF III	20 x 50 PCF III
Type:	Porro-prism center focusing			
Lens Construction:				
Objective Lens:	2 elements, 1 group	2 elements, 1 group	2 elements, 1 group	2 elements, 1 group
Eyespiece Lens:	3 elements, 2 groups	4 elements, 3 groups	4 elements, 3 groups	5 elements, 4 groups
Magnification:	10X	12X	16X	20X
Objective Lens Diameter:	50mm	50mm	50mm	50mm
Real Field of View	5.0°	4.2°	3.1°	2.5°
Apparent Field of View:	50'	50'	50°	50°
Field of View at 1000m:	87m	73m	54m	44m
Field of View at 1000 yd.:	261'	219'	162'	132'
Exit Pupil:	5.0mm	4.2mm	3.1mm	2.5mm
Eye Relief:	20mm	20mm	20mm	20mm
Relative Brightness:	25.0	17.4	9.6	6.3
Diopter Adjustment Range:	± 4 Diopter	± 4 Diopter	± 4 Diopter	± 4 Diopter
Eye Distance Adjustment Range:	57mm-72mm (2.2" - 2.8")	57mm-72mm (2.2" - 2.8")	57mm-72mm (2.2" - 2.8")	57mm-72mm (2.2" - 2.8")
Focusing Range:	5.5m to infinity (18' - infinity)	5.5m to infinity (18' - infinity)	5.5m to infinity (18' - infinity)	5.5m to infinity (18' - infinity)
Eyespiece Ring:	Collapsible type	Collapsible type	Collapsible type	Collapsible type
Body Color:	(Black & Gray)	(Black & Gray)	(Black & Gray)	(Black & Gray)
Height & Width:	187mm x 181mm (7.4" x 7.1")	191mm x 131mm (7.5" x 7.1")	199mm x 181mm (7.8" x 7.1")	199mm x 181mm (7.8" x 7.1")
Thickness	82mm (3.2")	82mm (3.2")	82mm (3.2")	82mm (3.2")
Weight:	880g (31.0 oz)	900g (31.7 oz)	900g (31.7 oz)	910g (32.1 oz)
Accessories:	Objective lens cap, Eyespiece lens cap, Case, Neck strap			

PENTAX

Binoculars

8 x 42 DCF HR

10 x 42 DCF HR

12 x 42 DCF HR

Lightweight,
Long Eye Relief,
Weather Proof,
Roof Prism



Ordering Information:

Product Code

62530

8x42 DCF HR

62540

10x42 DCF HR

62550

12x42 DCF HR

Includes case, strap and lens caps.

- New lighter weight... 4.6 oz. lighter.
- Longer eye relief (8x-22mm, 10x-20mm and 12x-18mm)
- Newly designed high resolution optical construction.
- Each model has a tripod socket.
- Rubber covered exterior finish and weather proof construction make these binoculars ideal for all outdoor applications.
- Center focusing instantly brings images into focus.
- Click adjustment locks in eyepiece diopter setting.
- Pentax multi-coated optics eliminate harmful ultraviolet rays while delivering bright, clear, glare-free images.
- 8X, 10X, or 12X magnification and extra large 42mm diameter objective lens deliver bright images under all lighting conditions.
- Focusing range from a close 13.1 feet to infinity.
- Ergonomic design and non-slip grained exterior provide a firm grip and easy handling.
- Pentax quality and craftsmanship assure binoculars designed to look better and last longer.
- Protected by a limited lifetime warranty.

PENTAX

Binoculars

8 x 42 DCF HR

10 x 42 DCF HR

12 x 42 DCF HR

Lightweight,
Long Eye Relief,
Weather Proof,
Roof Prism

Specifications

	8 x 42 DCF HR	10 x 42 DCF HR	12 x 42 DCF HR
Type:	Roof-prism center focusing	Weather Resistant	
Lens Construction:			
Objective Lens:	2 elements in 1 group	2 elements in 1 group	2 elements in 1 group
Eyespiece Lens:	3 elements in 2 groups	4 elements in 3 groups	4 elements in 3 groups
Magnification:	8X	10X	12X
Objective Lens Diameter:	42mm	42mm	42mm
Angle of View:	6.2 degrees	5.0 degrees	4.2 degrees
Apparent Field View:	50 degrees	50 degrees	50 degrees
Field of View at 1000m:	108m	87m	73m
Field of View at 1000 yd.:	324 ft.	261 ft.	219 ft.
Exit Pupil:	5.25mm	4.20mm	3.50mm
Relative Brightness:	27.6	17.6	12.3
Eye Relief:	22mm	20mm	18mm
Diopter Adjustment:	+/- 3 Diopter	+/- 4 Diopter	+/- 6 Diopter
Eye Width Adjustment:	56 to 75mm (2.2 in. to 2.9 in.)	56 to 75mm (2.2 in. to 2.9 in.)	56 to 75mm (2.2 in. to 2.9 in.)
Focusing Range:	4m to infinity (13.1 ft. to infinity)	4m to infinity (13.1 ft. to infinity)	4m to infinity (13.1 ft. to infinity)
Eyespiece Ring:	Collapsible type	Collapsible type	Collapsible type
Body Color:	Black & Gray	Black & Gray	Black & Gray
Height & Width	172 x 127mm (6.8 in. x 5.0 in.)	189 x 127mm (6.7 in. x 5.0 in.)	189 x 127mm (6.7 in. x 5.0 in.)
Thickness	59mm(2.3 in.)	59mm(2.3 in.)	59mm(2.3 in.)
Weight:	680g (24.0 oz.)	680g (24.0 oz.)	680g (24.0 oz.)
Accessories:	Objective lens cap, Eyespiece lens cap, Case, Neck strap		
UPC Code:	027075036604	027075036611	027075036628

PENTAX
Binoculars
7 x 50 PIF
10 x 50 PIF
New!
Waterproof Porro Prism
Binoculars



Ordering Information:

Product Code

61600

7x50 PIF

Porro Prism Binoculars

Product Code

61610

10x50 PIF

Porro Prism Binoculars

Includes case, strap and lens caps.

- Newly designed precision optical instruments combining the benefits of exceptionally bright viewing, 7X or 10X image magnification, and special protection against shock, moisture, and dust.
- Nitrogen filled and sealed to prevent water leakage... submersible to 16.5 feet.
- Rubber armored, military type construction... made to withstand the most rugged use while delivering superb optical performance.
- High quality BaK-4 prisms transmit more light at the edges, providing more illumination for high overall image quality and easier viewing.
- All optical surfaces receive Pentax's super-multi-coating (SMC), for high-contrast images and near-perfect light transmission.
- Limited lifetime warranty.

PENTAX

Binoculars

7 x 50 PIF

10 x 50 PIF

New!

Waterproof Porro Prism
Binoculars

Specifications

Type:

7 x 50 PIF

Waterproof (nitrogen filled), porro-prism individual focusing, flat field, rubber armor finish, super multi coating, BaK-4 prism.

Lens Construction:

2 elements in 1 group

2 elements in 1 group

Objective Lens:

3 elements in 5 groups

6 elements in 4 groups

Eyepiece Lens:

7X

10X

Magnification:

50mm

50mm

Objective Lens Diameter:

7.3 degrees

6.5 degrees

Angle of View:

128m

114m

Field of View at 1000m:

384'

342'

Field of View at 1000 yd.:

7.1mm

5.0mm

Exit Pupil:

20mm

15mm

Eye Relief:

50.4

25.0

Relative Brightness:

+/‐ 4 Diopter

+/‐ 4 Diopter

Diopter Adjustment:

58mm - 77mm (2.3" - 3.0")

58mm - 77mm (2.3" - 3.0")

Eye Width Adjustment:

10.0m - infinity (32.8' - infinity)

10.0m - infinity (32.8' - infinity)

Focusing Range:

Black & Gray rubber coating

Black & Gray rubber coating

Other:

195 x 210 x 110mm

195 x 210 x 110mm

Size (H/W/D):

7.7" x 8.3" x 4.3"

7.7" x 8.3" x 4.3"

Weight:

1600g (56 oz.)

1600g (56 oz.)

Accessories:

Eyepiece lens cap, Case, Neck strap

Eyepiece lens cap, Case, Neck strap



PENTAX

Binoculars

7 x 20 DCF

9 x 20 DCF

**Compact, Roof Prism,
Center Focus Binoculars**

Ordering Information:

Product Code

62320

Pentax 7x20 DCF

Compact, Roof Prism Binocular

Product Code

62330

Pentax 9x20 DCF

Compact, Roof Prism Binocular

Includes case, strap and lens caps.

- Compact, rugged, lightweight construction makes these binoculars ideal for all kinds of outdoor and indoor viewing activities.
- Small enough to fit in a pocket or purse.
- Duo-tone rubber coating gives added protection against shock and corrosion.
- Unique ergonomic design and non-slip grained exterior provide a firm grip and easy handling.
- Pentax multi-coated lenses eliminate harmful ultraviolet rays while delivering sharp, crisp images.
- Smooth, accurate internal center focusing system.
- Retractable rubber-covered eyepiece rings allow eyeglass and non-eye-glass wearers to see the entire field of view.
- Close 8.2 feet focusing.
- Pentax quality and craftsmanship assure binoculars designed to look better and last longer.
- Protected by a limited lifetime warranty.

Specifications

Type:

7 x 20 DCF

Compact, roof prism, center focusing binoculars

Lens Construction:

Objective Lens:

3 elements in 2 groups (multi-coated)

3 elements in 2 groups (multi-coated)

Eyepiece Lens:

3 elements in 2 groups (multi-coated)

4 elements in 3 groups (multi-coated)

Prism:

Roof prism

Roof prism

Magnification:

7x

9x

Objective Lens Diameter:

20mm

20mm

Angle of View:

7.5 degrees

6.2 degrees

Field of View at 1000 m:

131m

108m

Field of View at 1000 yd.:

393yd.

324yd.

Exit Pupil:

2.9mm

2.2mm

Eye Relief:

12mm

10mm

Relative Brightness:

8.2

4.9

Diopter Adjustment:

+/- 4 Diopter

+/- 4 Diopter

Eye Width Adjustment:

58mm - 71mm (2.3" - 2.8")

58mm - 71mm (2.3" - 2.8")

Focusing Range:

2.5m - infinity (8.2' - infinity)

2.5m - infinity (8.2' - infinity)

Other:

Black & gray rubber body covering

Black & gray rubber body covering

Size (H/W/D):

93.5 x 102 x 32mm (3.7" x 4.0" x 1.3")

91 x 102 x 32mm (3.6" x 4.0" x 1.3")

Weight:

210g (7.4 oz.)

210g (7.4 oz.)

Accessories:

Case, strap and lens caps.

Case, strap and lens caps.

PENTAX Binoculars

7 x 20 Monocular
Viewing Versatility
That Goes Beyond!

The Difference Is Clear!



Product Code: #61305

Includes 22X Close-up Lens,
Close-up Stand and belt type
carrying case; lens cap
and eye cap.

- A pocket-sized precision instrument offering you both the 7x magnification of a telescope and the 22x power of a microscope for incomparable viewing versatility.
- So compact, it goes wherever you go—measures just 3.8" high without its accessory close-up stand and weighs just over 3 ounces.
- Focuses as close as 4 meters or 13.1 feet for any application where close focusing is required.
- Separate 22x Close-up Lens attaches to the monocular quickly and easily for microscopic viewing or use the lens by itself as a handy 3x reading magnifier.
- The 7x magnification of the monocular itself is ideal for hand held viewing—great for sports action, observing wildlife, or enjoying concerts.

PENTAX

Binoculars

7 x 20 Monocular
Viewing Versatility
That Goes Beyond!

Specifications

Model Designation	Monoocular 7 x 20
Magnification	7X
Diameter of Front (Objective) Lens	20mm
Diameter of Exit Pupil	2.8mm
Angle of View	7.5°
Relative Brightness	8.2
Twilight Factor	11.8
Field of View at 1000 Yards	393 feet
Field of View at 1000 Meters	131 meters
Height	less stand 3.8" (97mm) with stand 7.1" (180.5mm)
Weight	less stand 2.1 oz. (60g) with stand 3.2 oz. (90g)
Type of Focusing Mechanism	Focusing ring around eyepiece



Plenty of power for almost any viewing need yet so compact it goes where large binoculars can't.

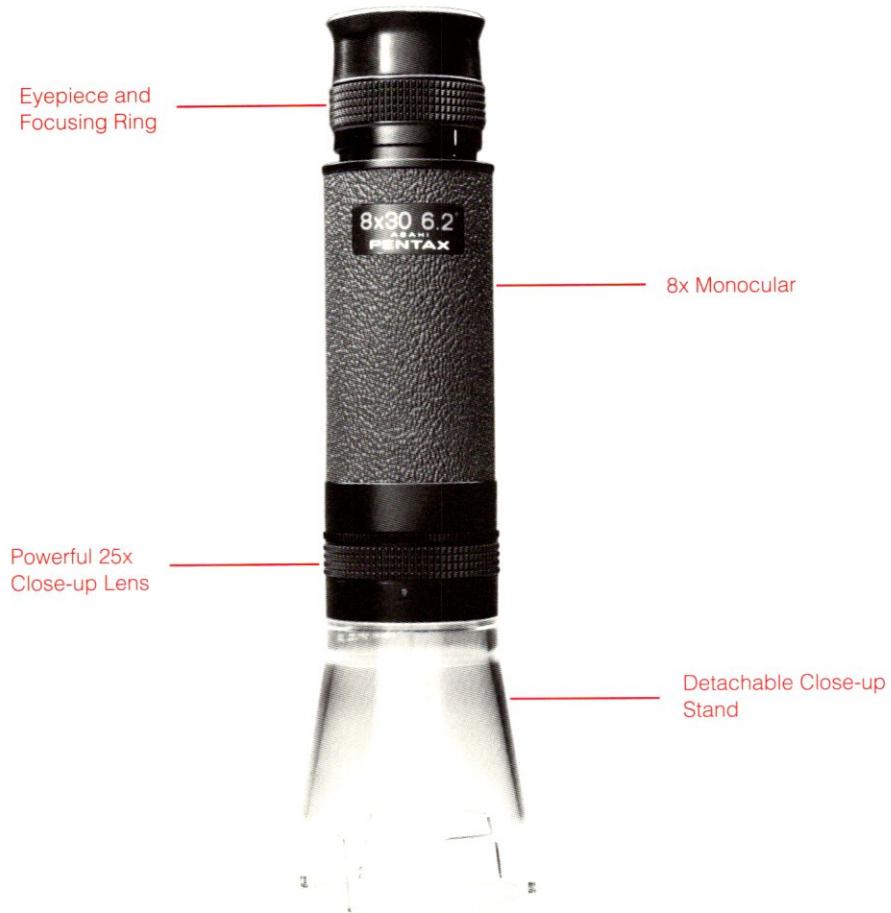
Attach the accessory stand and 22x Close-up Lens and get an entirely new view of everything from coins and stamps to the workings of a watch.

Special Features 22X Close-up Lens provides for microscopic application

Accessories Included 22X Close-up Lens, close-up stand, carrying case

Ordering Information	Product Code	Description
	61305	Pentax Monocular 7 x 20

PENTAX
Binoculars
8 x 30 Monocular



Ordering Information:

Product Code

62202

Pentax

Monocular 8x30

Includes 25x Close-up Lens,
close-up stand, carrying case

- A high precision, ultra-practical optical instrument combining a powerful 8x telescope and 25x microscope in one compact unit.
- Superb Pentax roof prism optics ensure sharp, crisp images in a pocket-sized instrument just 4.9" high and weighing only 7.8 oz.– goes where large binoculars can't!
- A built-in scale can be used to calculate approximate distances of telephoto objects or measure microscopic subjects between 0.1mm and 4mm when the close-up lens is attached.
- Separate 25x Close-up Lens attaches quickly to the objective lens to convert the monocular into a 25 power microscope.

PENTAX

Binoculars

8x30 Monocular

Specifications

Model Designation

Monocular 8 x 30

Magnification:

8X

Diameter of Front (Objective) Lens:

30mm

Diameter of Exit Pupil:

3.7mm

Angle of View:

6.2 degrees (monocular only)

8mm (with close-up lens)

Relative Brightness:

14.4

Field of View at 1000 yd.:

324 ft.

Field of View at 1000m:

108m

Height:

less stand 4.9" (124mm)

with stand 8.9" (213mm)

112-104mm

Objective Focal Length:

less stand 7.8 oz. (220g)

Weight:

with stand 9.2 oz. (260g)

Type of Focusing Mechanism:

Focusing ring around eyepiece

Special Features:

25x Close-up Lens provides for microscope applications with scale
provided from 0.1mm to 4mm (0.1mm gradations)

Accessories Included:

25x Close-up Lens, close-up stand, carrying case

PENTAX Binoculars

FB•8, FB•10
Roof Prism Construction,
Ultra Lightweight,
Compact,
Elegant Styling



Binoculars are
Actual Size



Ordering Information

Product Codes

62337

FB•8 Binoculars

UPC Code: 027075041448

62338

FB•10 Binoculars

UPC Code: 027075041455

Includes case and strap.

- Outstanding optical performance offered by roof prism system incorporating aspherical lens elements.
- Sleek and sophisticated compact design provided by aluminum alloy housing offers the benefits of reduced size and weight plus durability.
- Durable aluminum alloy housing.
- Same size as a credit card, weighing only 4.6 oz., they fit easily in a shirt pocket.
- High definition TV-image proportions (16 by 9, vertical to horizontal) to assure the user comfortable viewing.
- Pentax multi-coated lenses eliminate harmful ultraviolet rays while improving light transmission for high contrast images with no glare or flare.
- Two different magnifications: standard eight-times magnification type (FB•8) and high-power ten-times magnification type (FB•10). The highest magnification in its class.
- Diopter can be easily adjusted by turning a knob located on the underside of the body.
- Ideal for indoor applications and close-up viewing with a minimum focusing distance of 6.2 feet.
- “Sliding eye-distance adjustment system” synchronizes the movement of both barrels, thus the focusing ring is always positioned in the center for easy operation with either hand.
- Protected by a limited lifetime warranty.

PENTAX

Binoculars

FB•8, FB•10

Specifications

FB•8

Type: Roof-prism center focusing
Lens Construction: 2 elements, 1 group
Objective Lens: 2 elements, 1 group
Eyepiece Lens: 4 elements, 3 groups
Magnification: 8X
Objective Lens Diameter: 18mm
Real Field of View: 7.5°
Apparent Field of View: 60°
Field of View at 1000m: 131m
Field of View at 1000 yd.: 393'
Exit Pupil: 2.3mm
Eye Relief: 11mm
Relative Brightness: 2.9
Diopter Adjustment Range: ± 4 diopter
Eye Width Adjustment Range: 54mm - 72mm (2.1" - 2.8")
Focusing Range: 1.9m to infinity (6.2' - infinity)
Eyepiece Ring: Rigid type
Body Color: Silver
Height & Width: 58mm x 86mm
(2.3" x 3.4")
Thickness: 17mm (0.67")
Weight: 130g (4.6 oz)
Accessories: Case and Neck strap

FB•10

Type: Roof-prism center focusing
Lens Construction: 2 elements, 1 group
Objective Lens: 2 elements, 1 group
Eyepiece Lens: 4 elements, 3 groups
Magnification: 10X
Objective Lens Diameter: 18mm
Real Field of View: 6°
Apparent Field of View: 60°
Field of View at 1000m: 105m
Field of View at 1000 yd.: 315'
Exit Pupil: 1.8mm
Eye Relief: 10mm
Relative Brightness: 1.8
Diopter Adjustment Range: ± 4 diopter
Eye Width Adjustment Range: 54mm - 72mm (2.1" - 2.8")
Focusing Range: 1.9m to infinity (6.2' - infinity)
Eyepiece Ring: Rigid type
Body Color: Silver
Height & Width: 58mm x 86mm
(2.3" x 3.4")
Thickness: 17mm (0.67")
Weight: 130g (4.6 oz)
Accessories: Case and Neck strap

PENTAX

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