This manual is for reference and historical purposes, all rights reserved.

This page is copyright by M. Butkus, NJ.

This page may not be sold or distributed without the expressed permission of the producer

I have no connection with any camera company

On-line camera manual library

This is the full text and images from the manual. This may take 3 full minutes for the PDF file to download.

If you find this manual useful, how about a donation of \$3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your e-mail address so I can thank you. Most other places would charge you \$7.50 for a electronic copy or \$18.00 for a hard to read Xerox copy.

This will allow me to continue to buy new manuals and pay their shipping costs.

It'll make you feel better, won't it?

If you use Pay Pal or wish to use your credit card, click on the secure site on my main page.

HONEYWELL PENTAX OPERATING MANUAL



INDEX

| Nomenclature 2 Depth-of-field guide 22 Specifications 4 Depth-of-field table: SMC Takumar 50mm lens 22 How it works 6 Infra-red photography 2 Setting ASA film speed 8 Multiple exposure 22 Film type reminder dial 8 Important notes 24 Film loading and winding 9 Super-Multi-Coated (SMC) Takumars 25 Exposure factor control dial 10 Takumar interchangeable lenses 22 Diaphragm setting 12 Difference of angle of Takumar lenses 22 Compose and focus 13 List of Takumar interchangeable lenses 33 Through-the-lens metering and automatic shutter 14 Open-aperture or stop-down reading 15 Mechanical shutter 16 Film unloading 17 Camera holding 18 Warranty policy 44 Battery check and replacement 19 Warranty policy 44 | Introduction | 1 | Flash synchronization | 2 |
|--|---|----|---|----|
| How it works 6 Infra-red photography 2 Setting ASA film speed 8 Multiple exposure 2 Film type reminder dial 8 Important notes 2 Film loading and winding 9 Super-Multi-Coated (SMC) Takumars 2 Exposure factor control dial 10 Takumar interchangeable lenses 2 Diaphragm setting 12 Difference of angle of Takumar lenses 2 Compose and focus 13 List of Takumar interchangeable lenses 3 Through-the-lens metering and automatic shutter 14 Specifications of Takumar lenses 3 Open-aperture or stop-down reading 15 Complete system of Honeywell Pentax accessories 4 Pentax Prism Binoculars & Telescopes 4 Film unloading 17 Guide book for Honeywell Pentax system of photography 4 | Nomenclature | 2 | Depth-of-field guide | 2 |
| Setting ASA film speed 8 Multiple exposure 22 Film type reminder dial 8 Important notes 24 Film loading and winding 9 Super-Multi-Coated (SMC) Takumars 25 Exposure factor control dial 10 Takumar interchangeable lenses 25 Diaphragm setting 12 Difference of angle of Takumar lenses 25 Compose and focus 13 List of Takumar interchangeable lenses 36 Through-the-lens metering and automatic shutter 14 Specifications of Takumar lenses 36 Open-aperture or stop-down reading 15 Mechanical shutter 16 Film unloading 17 Camera holding 18 Guide book for Honeywell Pentax system of photography 44 Automatical shutter 16 Guide book for Honeywell Pentax system of photography 44 | Specifications | 4 | $Depth\text{-of-field table: SMC Takumar 50mm lens } \dots \dots$ | 2 |
| Film type reminder dial 8 Important notes 22 Film loading and winding 9 Super-Multi-Coated (SMC) Takumars 22 Exposure factor control dial 10 Takumar interchangeable lenses 22 Diaphragm setting 12 Difference of angle of Takumar lenses 22 Compose and focus 13 List of Takumar interchangeable lenses 33 Through-the-lens metering and automatic shutter 14 Specifications of Takumar lenses 33 Open-aperture or stop-down reading 15 Complete system of Honeywell Pentax accessories 44 Pentax Prism Binoculars & Telescopes 44 Film unloading 17 Guide book for Honeywell Pentax system of photography 44 Camera holding 18 | How it works | 6 | Infra-red photography | 2 |
| Film loading and winding 9 Super-Multi-Coated (SMC) Takumars 22 Exposure factor control dial 10 Takumar interchangeable lenses 22 Diaphragm setting 12 Difference of angle of Takumar lenses 22 Compose and focus 13 List of Takumar interchangeable lenses 33 Through-the-lens metering and automatic shutter 14 Specifications of Takumar lenses 33 Open-aperture or stop-down reading 15 Complete system of Honeywell Pentax accessories 40 Mechanical shutter 16 Pentax Prism Binoculars & Telescopes 40 Film unloading 17 Guide book for Honeywell Pentax System of photography 40 Camera holding 18 Super-Multi-Coated (SMC) Takumars 22 Zakumar interchangeable lenses 22 Compose and focus 13 Complete system of Takumar lenses 33 Complete system of Honeywell Pentax accessories 40 Pentax Prism Binoculars & Telescopes 40 Guide book for Honeywell Pentax system of photography 40 | Setting ASA film speed | 8 | Multiple exposure | 2 |
| Exposure factor control dial 10 Takumar interchangeable lenses 22 Diaphragm setting 12 Difference of angle of Takumar lenses 23 Compose and focus 13 List of Takumar interchangeable lenses 36 Through-the-lens metering and automatic shutter 14 Specifications of Takumar lenses 36 Complete system of Honeywell Pentax accessories 47 Pentax Prism Binoculars & Telescopes 48 Film unloading 17 Guide book for Honeywell Pentax system of photography 49 Camera holding 18 | Film type reminder dial | 8 | Important notes | 26 |
| Diaphragm setting | Film loading and winding | 9 | Super-Multi-Coated (SMC) Takumars | 2 |
| Compose and focus | Exposure factor control dial 1 | .0 | Takumar interchangeable lenses | 29 |
| Through-the-lens metering and automatic shutter 14 Specifications of Takumar lenses 33 Open-aperture or stop-down reading 15 Complete system of Honeywell Pentax accessories 44 Mechanical shutter 16 Pentax Prism Binoculars & Telescopes 45 Film unloading 17 Guide book for Honeywell Pentax Camera holding 18 system of photography 44 | Diaphragm setting | .2 | Difference of angle of Takumar lenses | 29 |
| Open-aperture or stop-down reading 15 Complete system of Honeywell Pentax accessories 40 Pentax Prism Binoculars & Telescopes 40 Film unloading 17 Guide book for Honeywell Pentax System of photography 40 System of photography 40 Pentax System of Pakumar lenses 40 Pentax accessories 40 Pentax Prism Binoculars & Telescopes 40 Pentax P | Compose and focus 1 | 13 | List of Takumar interchangeable lenses | 30 |
| Mechanical shutter 16 Pentax Prism Binoculars & Telescopes 49 Film unloading 17 Guide book for Honeywell Pentax Camera holding 18 system of photography 49 | Through-the-lens metering and automatic shutter 1 | 4 | Specifications of Takumar lenses | 39 |
| Film unloading | Open-aperture or stop-down reading 1 | 15 | Complete system of Honeywell Pentax accessories | 40 |
| Camera holding | Mechanical shutter 1 | 16 | Pentax Prism Binoculars & Telescopes | 4 |
| | Film unloading 1 | 7 | Guide book for Honeywell Pentax | |
| Battery check and replacement 19 Warranty policy 4 | Camera holding | .8 | | 46 |
| Dateery eneek and replacement | Battery check and replacement 1 | 19 | Warranty policy | 48 |

HONEYWELL PENTAX ES

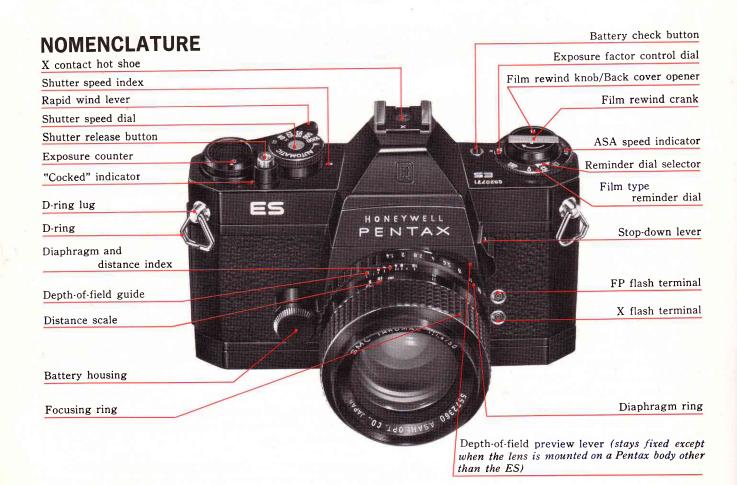
Your Honeywell Pentax ES is the most exciting 35mm SLR camera on the market today. It comes equipped with a through-the-lens metering system with focal-plane electronic shutter for automatic exposure control. The fully automatic electronic shutter operates just like an electronic computer assuring you of perfect exposures everytime. The new electronic shutter lets you shoot automatically at any speed between 1/1000 and 8 seconds! If the exact shutter speed should be 1/459, 1/733 or 1/952 seconds, then that's the shutter speed that will be automatically selected. The patented memory device and electronic shutter make it possible. There's also an exposure control dial for intentional over- or under-exposures.

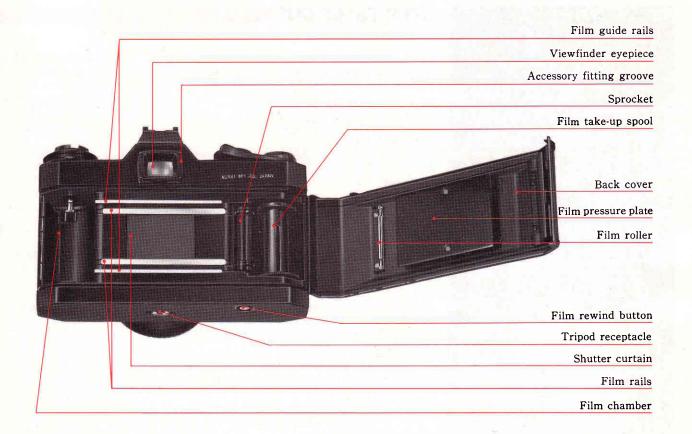
The Pentax ES is the only automatic single-lens reflex camera that works automatically without special lenses. It operates automatically with virtually all Takumar lenses, as well as bellows, extension tubes, and other close-up accessories. The reason is, unlike other cameras, the automation is incorporated into the body itself, not

into the lens. Your Pentax ES is equipped with a Super-Multi-Coated Takumar lens. Exclusively developed by Pentax, Super-Multi-Coated Takumar lenses reduce flare and boost contrast to a degree far beyond what was previously possible in optical technology. Your pictures will have more detail and richer colors than is possible with any other system at any price.

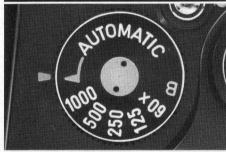
In addition to the exclusive new features of the Pentax ES, you'll find many of the refinements that have established Pentax as the leading fine camera maker in the world. The ES retains the same traditional compactness and classic feel. It also is designed for use with the accessories from the Pentax system, including all the superb Takumar lenses ranging from dynamic wideangle to powerful telephoto. The Pentax system is ready to grow with you.

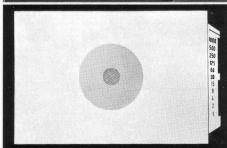
The Pentax ES is an excellent choice in a fine camera. We wish you exciting photography in the years to come.











SPECIFICATIONS

Type

35mm through-the-lens metering single-lens reflex camera with focal-plane electronic shutter for automatic exposure control.

Film and Picture Size

35mm film (20 or 36 exposures). $24mm \times 36mm$.

Standard Lenses

Super-Multi-Coatad Takumar 50mm f/1.4 and 55mm f/1.8 with fully automatic diaphragm. 7 elements in 6 groups. Distance scale: 1.5 feet (0.45m) to infinity. Filter size: 49mm. With depth-of-field scale.

Shutters

Through-the-lens metering electronic shutter for automatic exposure control + mechanical shutter for manual speed selection. Horizontal run focal plane shutter.

Electronic shutter speeds: Unlimited variation between 8 and 1/1000 sec. Mechanical shutter: B, 1/60 (X), 1/125, 1/250, 1/500 & 1/1000 sec.

Viewfinder

Eye-level pentaprism finder with Fresnel lens + microprism. $0.89 \times$ magnification with 50mm lens. -1.0 dioptry. Shutter speed calibration, through-the-lens meter needle and battery "check" mark in the viewfinder screen.

Focusing

Turn the distance scale ring until the subject image in the viewfinder comes into sharp focus. Minimum focusing distance: 1.5 feet (0.45m).

Reflex Mirror

Instant return type.

Film Advance

Ratchet type rapid wind lever. 10° pre-advance and 160° advance angle.

Film Rewind

Rapid rewind crank. Film rewind button on base of camera body releases film from take-up spool for rewind.

Film Exposure Counter

Automatic re-set type.

Cocked Indicator

A red disk appears in a small window alongside the shutter release button when the shutter is cocked, and blacks out when it is released.

Lens Mount

42mm thread (Pentax-mount).

Flash Synchronization

FP+X contacts for conventional flash cord connection. X contact on hot shoe for convenient cordless flash connection.

Exposure Meter

CdS-activated through-the-lens meter for open-diaphragm and stop-down reading. Light measurement range: EV1 $-\,18$ with ASA 100 film. ASA speed scale: 20 $-\,1600$.

Exposure Factor Control Dial

 $1 \times$ for normal exposure. $2 \times$, $4 \times$, $1/2 \times$ for intentional over- or under-exposure.

Battery

6V silver battery (Eveready #544).

Film Type Indicator

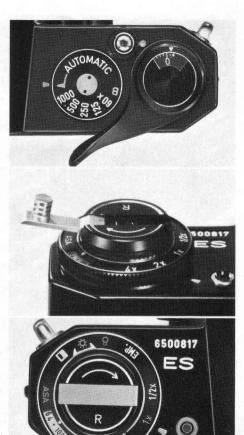
■ (black & white), ☆ (color daylight), 8 (color tungsten) and EMP. (empty).

Dimension

Width 5.6" (143mm) × height 3.86" (98mm) × thickness 3.6" (91mm).

Weight

2 lb. 1 oz. (940 gr.)



HOW IT WORKS

A silver battery is packed separately. Be sure to insert it into the battery housing before operating the camera. For insertion, refer to page 19.



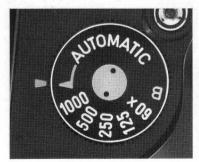
1. Load your film and set ASA film speed.



2. Keep this at "1x" for normal exposure.



3. Pre-select f/stop.



4. Set shutter speed dial at "AUTO-MATIC".



5. Keep this lever down for openaperture exposure reading. (Lens aperture stays fully open, and stops down to pre-selected f/stop as you depress shutter release.) Move it up for depth-of-field preview or for stop-down exposure reading. (Lens aperture actually stops down to pre-selected f/stop.)







- 6. Through-the-lens meter reading. Softly depress shutter button. Electric circuit is now switched on. Meter needle starts moving and indicates correct shutter speed.
- 7. Electronic memory device stores exposure reading information, whether through open-aperture or stopped-down aperture.
- 8. Depress shutter release button completely.
- 9. Memory device automatically releases electronic shutter.



CORRECT EXPOSURE

SETTING ASA FILM SPEED



The ASA film speed is given in the data sheet packed with each roll of film. The higher the ASA number, the more sensitive the film.

Lift the outer ring of the exposure factor control dial, and turn it until the same number as the ASA number of the loaded film appears in the ASA speed indicator window.

| ASA | 1250 | 1000 | 640 500 | 320 250 | 160 125 | 80 | 50 40 | 25 | |
|-----|------|------|---------|---------|---------|-----|-------|----|----|
| | 1600 | 800 | 4 400 | 200 | | 64 | | 32 | 20 |
| DIN | 33 | 30 | 27 | 24 | 21 | . 1 | 18 | 15 | |

FILM TYPE REMINDER DIAL

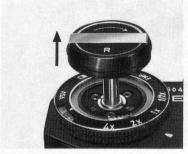
Use this dial as a reminder of the type of film loaded. To set the dial, pull out the rewind knob softly, and move the selector to ☆ for daylight type color film, ❸ for tungsten type color film, ⑤ for black-and-white and EMP. when the film is not loaded.

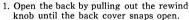




FILM LOADING AND WINDING

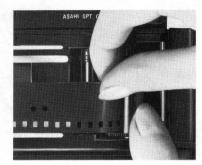
Avoid direct light when loading your film.



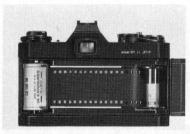








2. Place the film cassette properly into the cassette chamber, and push down the rewind knob. Insert the film leader into the slot of the take up spool.



3. Advance the film by alternately turning the rapid wind lever and depressing the shutter button until both sprockets engage the film perforations properly. Close the back by pressing it firmly. Take up slack in the cassette by gently turning the rewind knob clockwise.





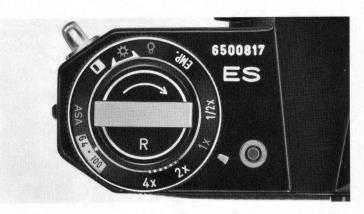
- 4. Cock the rapid wind lever, and watch to see that the film rewind knob automatically turns counterclockwise, indicating that the film is properly loaded and is moving from cassette to take-up spool. Trip the shutter.
- 5. The first portions of the film cannot be used for picture taking as they have already been exposed to light. Generally, two or three blank exposures should be made before taking your first picture. Therefore, advance the film until the exposure counter turns to "1", indicating that the first picture is ready to be taken.

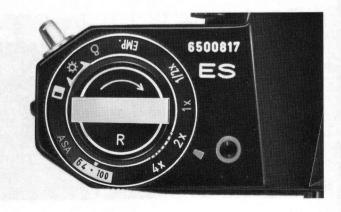
EXPOSURE FACTOR CONTROL DIAL

The scale $(4 \times 2 \times 1 \times 1/2 \times)$ indicates exposure factor.

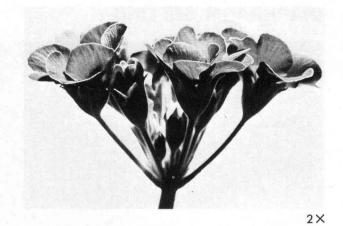
Turn the outer ring of the film type dial, and set $1 \times$ against the orange arrow for normal exposures.

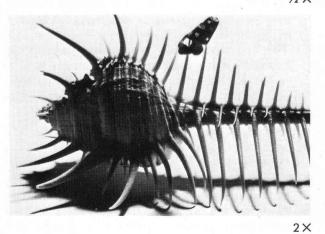
Use this control only when necessary to give intentional over- or under-exposures within the range of these factors while working on "AUTO-MATIC". For example, set the dial at $2\times$ or $4\times$ when shooting against the light, and at $1/2\times$ against dark backgrounds. In addition, the dial can be set between the indicated positions to achieve more specific exposure control.







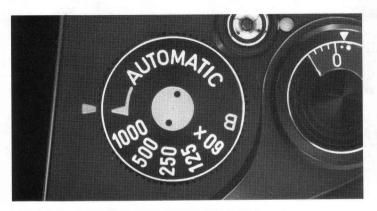






4×

DIAPHRAGM SETTING



Set the shutter speed dial at "AUTOMATIC".

Rotate the diaphragm ring to pre-select the desired aperture such as follows:

| Fine weather | f/8-f/11 |
|----------------|-------------|
| Cloudy weather | f/4 - f/5.6 |
| Indoor | f/2 - f/2.8 |



This is a rough guide to acquaint you with the automatic shutter operation. As you get used to it, you will have your own yardstick for aperture pre-selection depending on your subject and lighting conditions.

The shutter speed of the ES is automatically determined at any speed within the range of 8 to 1/1000 sec. according to the brightness of your subjects.

COMPOSE AND FOCUS

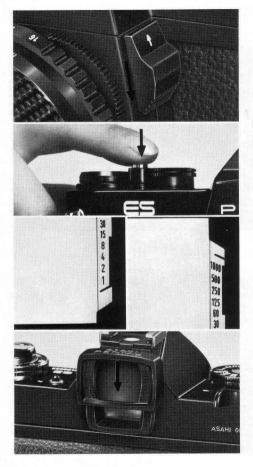
While viewing through the viewfinder, turn the focusing ring until your subject image comes into sharp focus.

Pentax cameras have a Fresnel lens with a microprism center underneath the ground glass. As you look through the finder, you will see that the Fresnel lens consists of many concentric rings which provide the brightest possible image on the ground glass.

The microprism is the center portion of this diagram. When your subject is in focus, the image in the microprism will be sharp and perfectly clear. If your subject is not in focus, the microprism will break the image into many small dots, much like an engraver's screen. You can focus your subject on any portion of the ground glass.







THROUGH-THE-LENS METERING AND AUTOMATIC SHUTTER

For open-aperture reading, be sure that the stop-down lever is DOWN.

After cocking the rapid wind lever, press the shutter release button lightly to switch on the electric circuit. The meter needle in the view-finder indicates the correct shutter speed.

If the needle goes above "1000", close down the diaphragm until the needle moves below "1000". If the needle goes below "1", the shutter speed indicates an exposure longer than 1 second. The electronic shutter of the ES is guaranteed to work properly down to 8 sec. (When making longer exposures with your eye off the viewfinder, use the viewfinder cap to shield the light coming in through the viewfinder, as it may interrupt the correct exposure.)

Caution: At slow speeds — slower than $1/30 \, \text{sec.}$ — support your camera rigidly or use a tripod to prevent camera movement.

Depress the shutter release button completely when ready to take your picture. When the shutter is released and your finger is off the shutter button, the meter circuit is off and the needle will return to the top of the scale.

OPEN-APERTURE OR STOP-DOWN READING

With the new Super-Multi-Coated (SMC) Takumar lenses with an open-aperture reading pin (1), mounted directly on the ES camera body, the through-the-lens meter reads exposure through the fully-open aperture or stopped-down taking aperture for correct automatic exposure, For open-aperture reading, the stop-down lever should be DOWN; for stop-down reading, push up the lever.

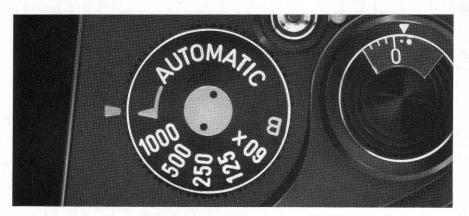
With all other lenses, or when using Extension Tubes, Bellows Unit or Microscope Adapter, remember always to push up the stop-down lever for stopped-down aperture reading and correct automatic exposure.

The SMC Takumar 85mm f/1.9 (photo at the top right) and SMC Takumar-Zoom 85mm~210mm lenses do not have the open-aperture reading pin ①, and therefore, they should be used on the ES for stop-down reading.

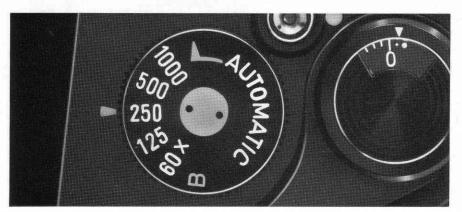
Also remember that the through-the-lens metering does not work unless the shutter dial is set at "AUTOMATIC".



MECHANICAL SHUTTER



In addition to the electronic shutter for automatic exposure control, the ES has a mechanical shutter for speeds: 1/60 X for electronic flash synchronization, 1/125, 1/250, 1/500, 1/1000 sec. plus B (Bulb).



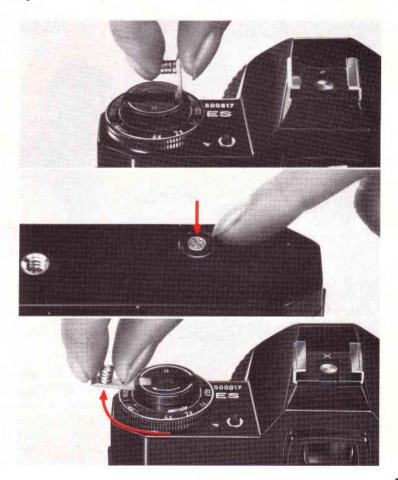
To operate at any one of these speeds, just turn the shutter dial from "AUTOMATIC" to the desired speed setting. Now the electric circuit and through-the-lens meter circuit are off.

FILM UNLOADING

After the final picture on the roll has been taken, the rapid wind lever will not turn, indicating that the film must be rewound.

Unfold the rewind crank. Depress the film rewind release button and turn the rewind crank as indicated to rewind the film into the film cassette. Rewind until the tension on the crank lessens, indicating that the leader end of the film has been released from the take-up spool.

Pull out the film rewind knob (the back will open automatically), and remove the film cassette. AVOID DIRECT LIGHT WHEN LOADING OR UNLOADING THE FILM.



CAMERA HOLDING



In horizontal position A.
Hold the camera firmly with your left hand, and draw your arm close to your body.



In vertical position B. Hold your camera tightly to your forehead with your left hand, and draw your right arm close to your body.



In vertical position C. Hold your camera tightly to your forehead with your left hand, raise your right arm and draw your left arm to your body.

As a general rule, your camera should be held more firmly by the left hand which does not release the shutter. If you hold your camera with the right hand—the hand which releases the shutter—it may cause camera movement. Very often, pictures which are not sharp are due to movement of the camera. When you focus with the camera held horizontally (Position A), hold the lens barrel as illustrated. Cradle the camera with your left hand thumb and little finger.

Turn the focusing ring with your thumb and index finger. When holding the camera vertically, some people release the shutter with the thumb (Position B), while others release it with the index finger (Position C). Position C is more desirable for fast focusing and shooting. With the Pentax, whether held vertically or horizontally, you see your subject image through the lens, enabling you to compose, focus and shoot with a minimum of time and effort.

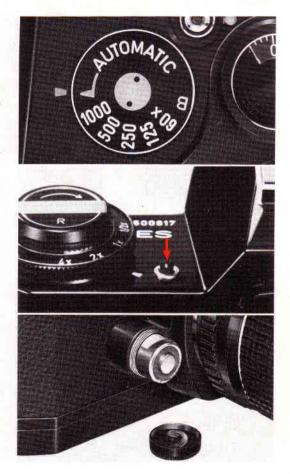
BATTERY CHECK AND REPLACEMENT

A silver battery powers the through-the-lens meter and electronic shutter. The power circuit is on only when you depress the shutter release (lightly for meter reading and completely for electronic shutter) with the shutter speed dial set at "AUTOMATIC". When not operating the camera be sure to keep the shutter dial off the "AUTOMATIC" setting and set to any mechanical shutter setting so that you prevent wasting the battery power if the shutter release button is accidentally depressed.

The battery lasts about one year. To check its life, set the shutter speed dial at "AUTOMATIC", and push the black check button alongside the exposure factor control dial. If the meter needle drops to the notch facing "30", the battery has sufficient capacity. If it does not, replace the battery. (If you release the shutter at "AUTOMATIC" setting when the battery is dead, the shutter will operate at the mechanical shutter speed of 1/1000 sec.)

For replacement, use Eveready #544 6V silver battery. Open the battery housing cover on the body front. When inserting, be sure that the (-) of the battery faces inward.

Caution: Do not throw a dead battery into fire, as it may explode. Also, keep it beyond the reach of small children.



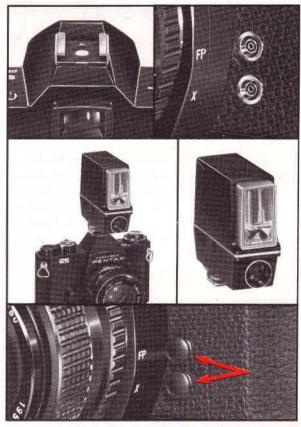
FLASH SYNCHRONIZATION

The Pentax ES has FP and X terminals at the front of the camera body, and an additional X contact on the built-in hot shoe atop the pentaprism housing. As indicated in the table, set the shutter dial at 1/60 X for electronic flash, with the flash cord plugged into the X terminal. Set the shutter dial at 1/60 or faster for FP class flash bulb, with the cord plugged into the FP terminal.

| SHUTTER | SPEED | 1/1000 | 1/500 | 1/250 | 1/125 | 1/60X |
|------------|-------|--------|-------|---------|-------|---------------------|
| FLASH | FP | | F | P CLASS | | |
| TERMINAL X | | | | | | Electronic Flash |

Use the hot shoe flash contact when using a shoe-mount electronic flash like a Honeywell Auto Strobonar with a flash contact on the foot. In this case, you do not have to plug the flash cord into the X terminal on the body front.

The hot shoe flash contact turns to "hot" (switched on) only when you insert a shoe-mount electronic flash. It remains "cold" (disconnected) and you never get a shock even when using an electronic flash with its cord plugged into the X terminal on the body front.



When not using these terminals, keep the plugs inserted in the terminals.