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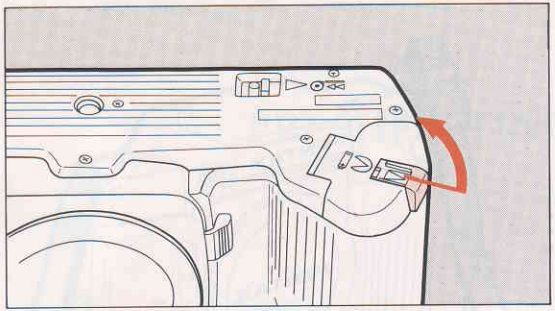
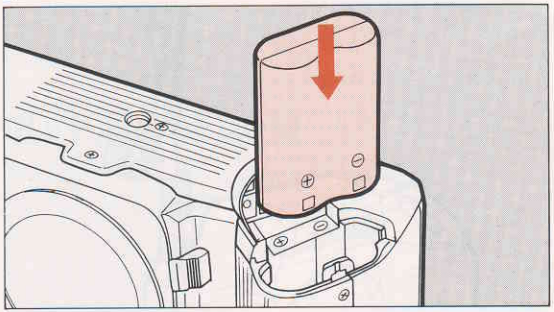
2. POSITIONING BATTERY

1



1. Pull the batt. cover release lever in the direction indicated by [▶] to open the battery-chamber cover.

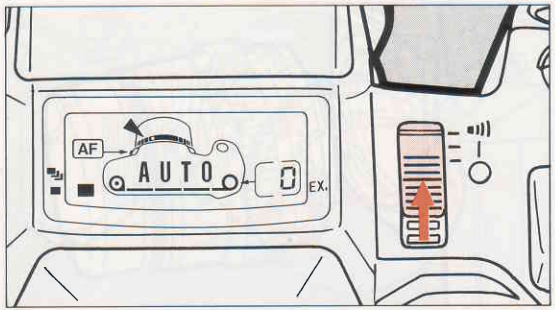
2



2. Position the battery with its metal contact facing down, then close the back cover by reversing step 1.

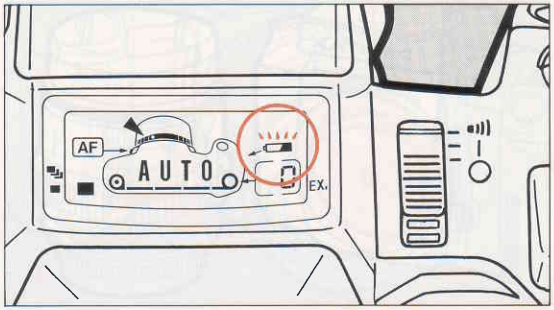
Note: This camera operates on a battery, so be sure to insert one "2CR5" or the same type lithium battery as designated before you start operating it.

3



3. Set the main switch to [•))] and confirm that the auto-exposure mark **[AUTO]** appears in the LCD panel.

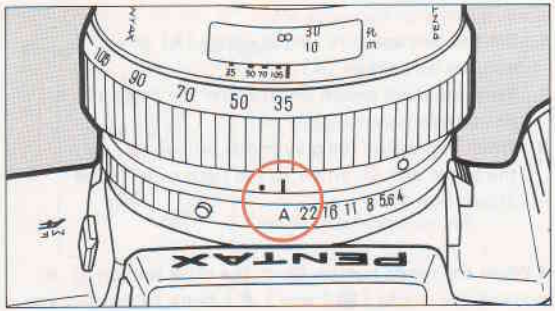
Note: Even if the battery is inserted upside-down, the indications appear in the LCD panel, but the shutter cannot be released.

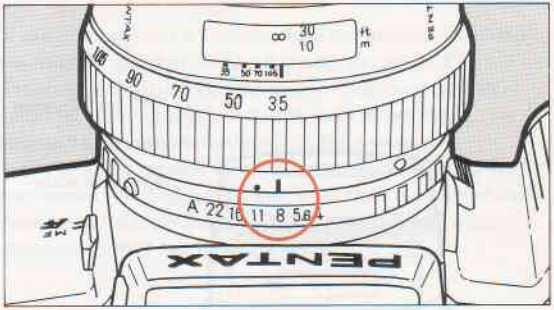


Note: Warning for low battery level

When the battery level becomes low, the low battery warning [▭] comes on, and the battery should be changed as soon as possible. The shutter will lock up shortly after the [▭] starts blinking.

OPERATION OF MAJOR FUNCTIONS

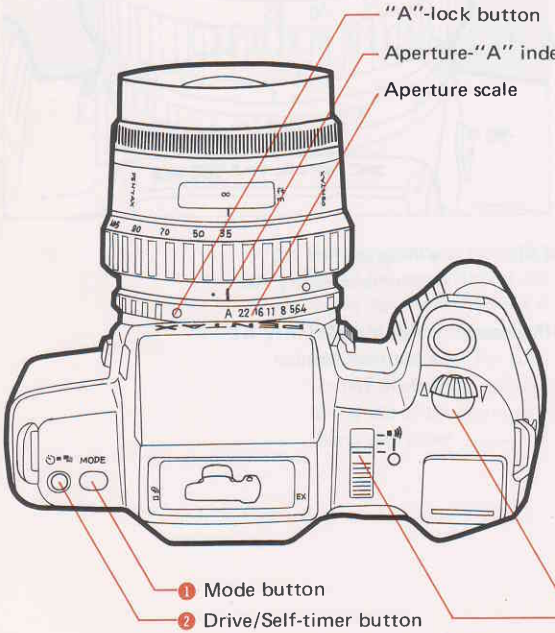




If you use an F-series lens in combination with this camera, you can employ the following exposure modes, in addition to the Programmed AE mode, according to the position of the aperture ring. To set the lens aperture at [A] or any other f-stop, turn the aperture ring while depressing the aperture-A-lock button.

[A]
- Programmed AE
- Shutter-Priority AE

[Manual]
- Aperture-Priority AE
- Metered Manual
- Bulb [B]

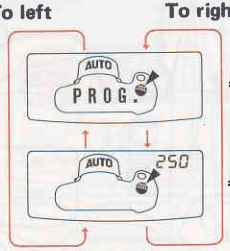


How to select an exposure mode:

1. Set the lens aperture ring at either **[A]** or any f-number other than **[A]**.
2. Turn the main switch on to either the [▪))] or [I] position.
3. While depressing the grey mode button ❶, turn the select dial ❸ either to the right or left. (see illustration-1)

- When the mode button ❶ or the drive button ❷ is pressed, the marks [📷] and [▶] blink to instruct you to use the select dial ❸ next.
- In the Shutter-Priority AE and Metered Manual modes, the marks [📷] and [▶] appear to instruct you to use the select dial ❸ next.
- The exposure mode indication in the LCD panel changes according to the chart.
- If you keep the select dial ❸ turned, the LCD indication changes rapidly.

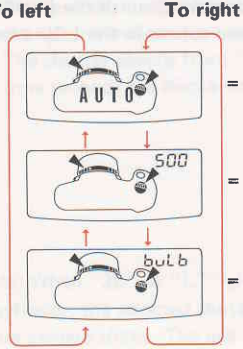
When aperture ring set at "A"



= Programmed AE

= Shutter-Priority AE

When aperture ring set at any f-number other than "A"



= Aperture-Priority AE

= Metered Manual

= Bulb

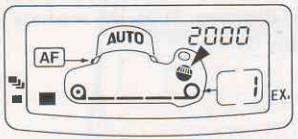
Exposure Control System

In the Programmed AE mode, Aperture priority AE mode and Shutter speed priority AE mode, the **PROCES** (Progressive Contrast Compensation Exposure System) judges adverse lighting conditions such as backlight situation and automatically adjust the exposure.

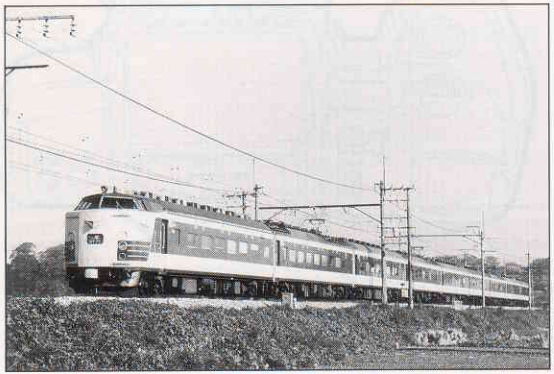
In the Metered manual mode and Exposure memory lock mechanism, the exposure metering system is automatically changed to TTL central area metering. Thus, the accurate exposure control can be easily done.

Shutter-Priority AE mode

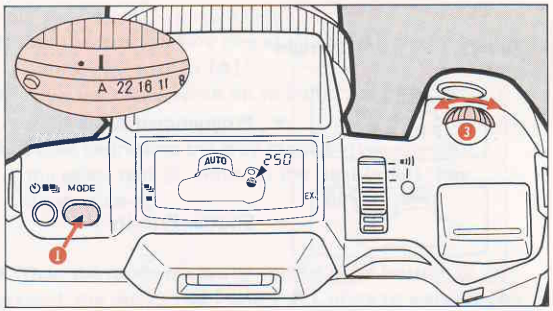
When you select a shutter speed, the camera automatically sets a corresponding aperture, according to lighting conditions, for the best exposure. This mode is especially useful in freezing the action of a fast-moving object with a fast shutter speed or emphasizing motion using a slow shutter speed.



The [ ] indication appears and tells you to turn the select dial to select the shutter speed.

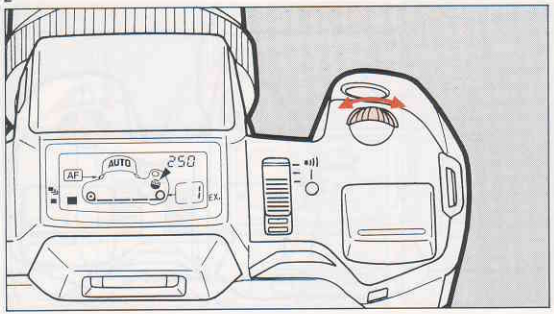


1



1. Set the aperture ring to [A]. Select the Shutter-Priority AE mode by turning the select dial ❸ while pressing down the mode button ❶ until the [**AUTO**] indication and shutter speed appear in the LCD panel.

2



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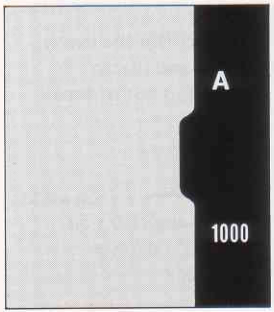
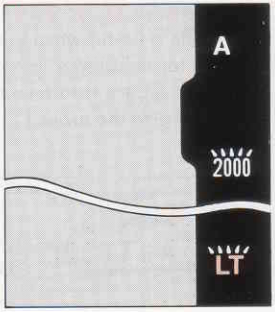


※



2. Select a desired shutter speed. Turn the select dial to the left for faster shutter speeds or to the right for slower ones, and by keeping it turned, you can rapidly change the indication.

* The shutter speeds from "2000" (1/2000) to "1" (one second) are displayed in the LCD panel.

Note: When "30" or "LT" glows or flickers in the viewfinder, the selected shutter speed is slow enough to cause camera shake. The use of a flash or a tripod is recommended.

3. When the shutter release button is pressed lightly, the [A] indication and a selected shutter speed are displayed in the viewfinder. When the selected shutter speed is 1/15 — 1 sec., "LT" glows in the viewfinder.

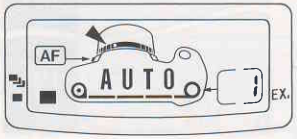
※ Note: Out-of-meter-coupling-range warning

If the subject is too bright or too dark, the viewfinder indication blinks in warning.

If the blinking goes off after shifting the shutter speed to a slower (toward "LT") or faster (toward "2000") setting, you are ready to shoot.

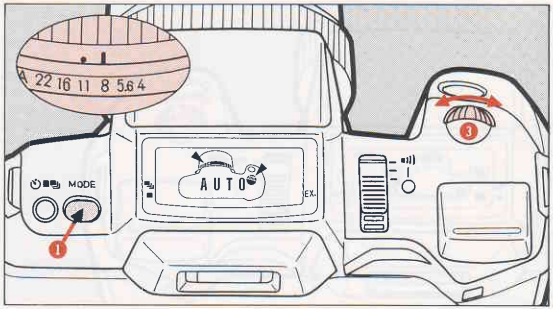
Aperture-Priority AE mode

This mode is useful when you wish to increase the depth of focus for landscapes, group snapshots and macro photos, or reduce it to take the background out of focus and emphasize the subject.



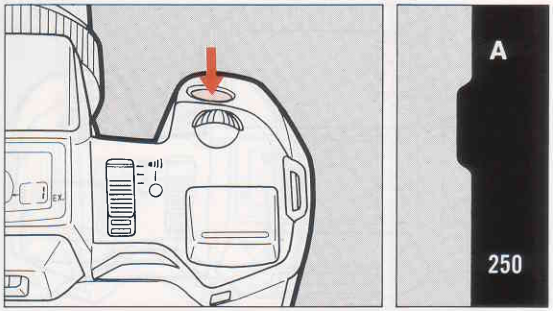
The [ ] indication appears and tells you to select a desired aperture.

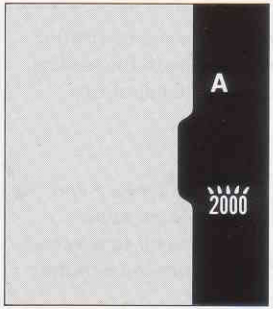
1

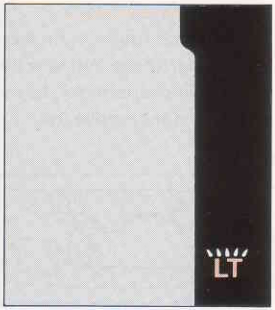


1. Select the Aperture-Priority AE mode by turning the select dial ❸ while pressing down the mode button ❶ until the **[AUTO]** indication appears in the LCD panel.

2







2. When the shutter release button is pressed lightly, the [**A**] indication and a shutter speed appropriate to the selected aperture are displayed in the viewfinder. When the shutter speed is 1/15 ~ 1 sec., "LT" glows or flickers.

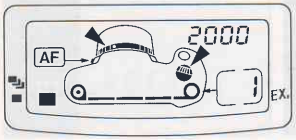
Note: Out-of-meter-coupling-range warning

If the subject is too bright or too dark, the viewfinder indication blinks to warn of extraordinary lighting conditions.

If the blinking goes off after turning the aperture ring either to a smaller aperture (a larger f-number, such as f/22) or to a larger one (a smaller f-number, such as f/1.4), you are ready to shoot.

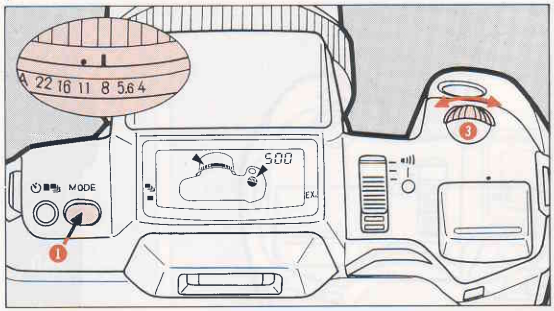
Metered Manual mode

You can not only obtain a correct exposure by shifting the shutter speed and aperture according to the reading on the exposure meter, but you can also adjust the exposure for creative use.



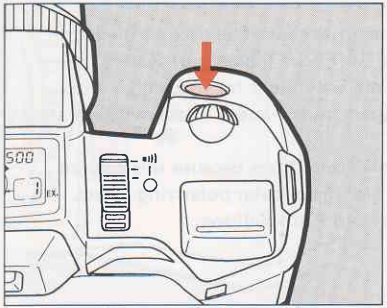
The [ ] and [ ] indications appear, telling you to select an aperture and a shutter speed.

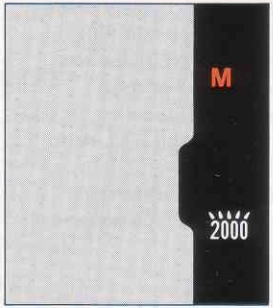
1

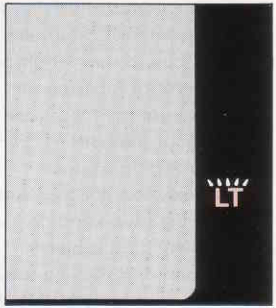


1. Select the Metered Manual mode by turning the select button ❸ while depressing the mode button ❶ until a shutter speed indication appears in the LCD panel.

2







2. When the shutter release button is pressed lightly, the **[M]** indication and a shutter speed appear in the viewfinder. When the shutter speed is 1/15 ~ 1 sec., "LT" glows or flickers.
   For example, if a blinking shutter speed indication appears, the exposure is incorrect. Shift the shutter speed or turn the aperture ring until the blinking indication goes off and a solid shutter speed indication appears.

Note: Out-of-meter-coupling-range warning

If the subject is too bright or too dark, the viewfinder indication blinks to warn of extraordinary lighting conditions.

If the blinking goes off after turning the aperture ring either to a smaller aperture (toward a larger f-number such as f/22) or to a larger one (toward a smaller f-number such as f/1.4), you are ready to shoot.

- If a correct exposure cannot be obtained by turning the aperture ring, select another shutter speed.
- If a correct exposure cannot be obtained by shifting the shutter speed, select another aperture.

DIFFICULT SUBJECTS FOR AUTO FOCUSING

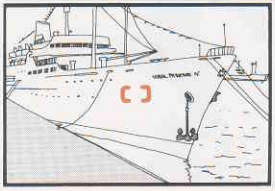
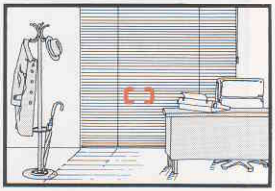
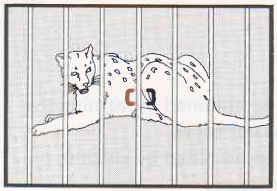
This camera's auto-focusing system is extremely precise and highly sophisticated, yet there are certain types of subjects (due to their brightness, contrast, shape and size) that make focusing very difficult. For these situations, use the focus lock or manual focusing, or take advantage of the built-in RTF (Retractable TTL-Auto Flash) in dark locations.

- Extremely low-contrast subjects (little difference between the bright and dark areas), such as a white wall.
- Extremely dark subjects.
- Extremely fast-moving subjects.
- Subjects with only horizontal lines.
- Subjects with detailed and/or complex patterns.
- Subjects positioned against harsh reflected light, strong backlight or an extremely bright background.
- Subjects composed of elements both near and far within the focus frame.

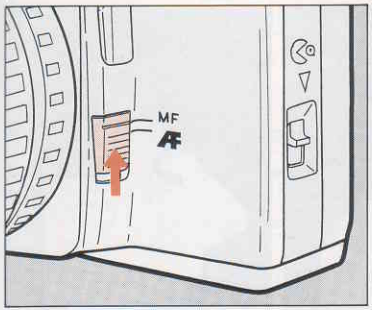
Accessories Not Usable in Auto Focusing

The following accessories cannot be used in the auto-focus mode or the FI (Focus Indication) system. Use the matte area of the viewfinder for focusing.

- Special-effect filters, magic-image attachments or stereo adapters.
- The ordinary polarizing filters because this camera has a half-mirror. Use the circular polarizing filters.
- Extension Tubes and Auto Bellows.


1



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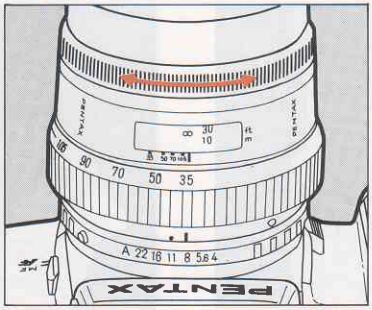

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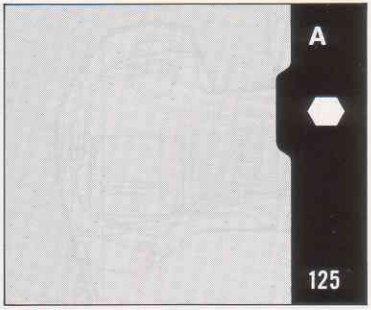
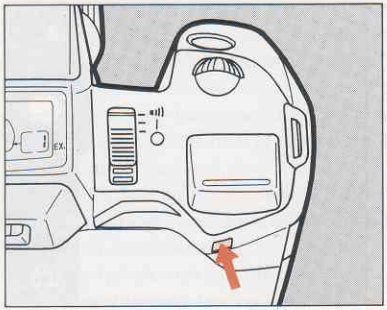


For conventional Pentax K-mount lenses with a maximum aperture of f/5.6 or larger, you can take advantage of the Focus Indication (F.I.) system in manual focus by positioning the subject in the auto-focus frame. This manual focusing method can also be used with F-series lenses.

1. Set the focus-mode switch to the manual focus position **[MF]**.
2. While pressing the shutter release button lightly, turn the focusing ring either to the right or to the left to adjust the focus.
3. If the green in-focus signal [⬭] comes on in the viewfinder, the focus is correct.
   * With the main switch set at the [•))] position, the correct focus is also confirmed by an electronic tone.

USING EXPOSURE MEMORY LOCK FUNCTION



Memory lock used

Not used

The exposure memory lock function temporarily memorizes the subject's exposure data to adjust the exposure in the automatic exposure mode. This function is especially useful for photographing people against a very contrasty background, such as backlighting or a bright sky.

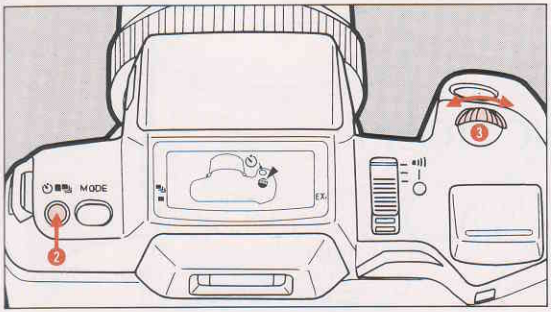
1. Fill the viewfinder with the main element (subject's face, etc.) and press the memory lock [ML] button. As long as the ML button is pressed, the correct exposure is memorized for the subject's face. During memory lock, the exposure indications in the viewfinder blink rapidly.

2. While maintaining the exposure data with the memory lock, compose the image and take the picture. The subject will be correctly exposed. When the shutter is released, the memory lock is canceled.

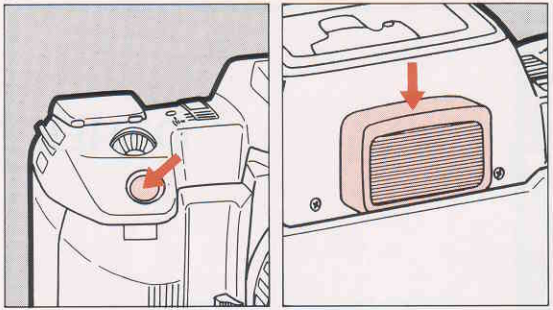
- If you press the shutter release button lightly while the memory lock is activated, the memory is locked as long as the shutter button is depressed, even if you remove your finger from the ML button.

Note: When the [ML] button is pressed in the Metered Manual mode, a shutter speed indication in the viewfinder is fixed and blinks to indicate that the exposure is memorized.

1



2



The self-timer delays shutter release and is useful in taking commemorative pictures that include the photographer.

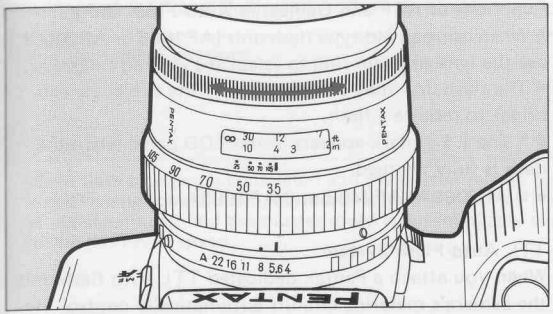
1. Turn the select dial ❸ while depressing the drive button ❷ until the self-timer mark [⏲] appears in the LCD panel.
2. While focusing on the subject, press the shutter release button all the way down, and the shutter will be released after approximately 12 seconds.

* If the main switch is set at the [▪))] position, the self-timer operation is confirmed by a self-timer lamp and an electronic tone. During the last two seconds before shutter release, the lamp blinks and the electronic tone beeps faster.

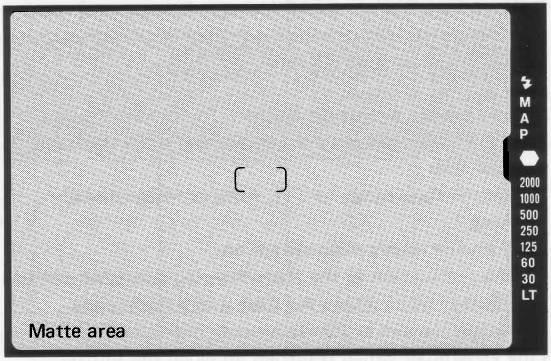
* If you wish to interrupt the self-timer operation after it is activated, turn the main switch off. Also, if you turn the main switch on, the self-timer operation is canceled, and the drive mode is switched for single film-advance photography. (It can also be canceled by switching the drive mode to [■] or [▪▪] .)

When shooting in the AE mode with your eye away from the viewfinder eyepiece, such as in self-timer photography, light entering the eyepiece can cause incorrect exposure reading, resulting in underexposure. Therefore, use the viewfinder cap when taking a self-timer photograph.

OTHER FUNCTIONS



In the following situations, you cannot use the F.I. system, so it is necessary to focus manually using the matte area of the focusing screen.



1. Subjects which the auto-focus system cannot measure accurately or for which the camera does not display the in-focus signal [⬭].
2. Lenses with a maximum aperture smaller than f/5.6.
3. SMC PENTAX BELLOWS 100mm f/4, SMC PENTAX SHIFT 28mm f/3.5 and reflex-type lenses.
4. Screw-type Takumar lenses used with Mount Adapter K (optional).

If the camera is set in an AE (automatic exposure) mode or the Metered Manual mode, a Pentax dedicated auto flash unit can be used anytime.

How to Use an Accessory Flash

1. Remove the camera's hot-shoe cover and attach the flash unit.
2. Set the flash mode to TTL Auto or Programmed Auto.
3. Turn the flash's main switch on.

- The completion of the flash-charging operation can be confirmed by checking the flash unit's flash-ready indicator, as well as the flash-ready indicator [ϟ] in the viewfinder which is turned on when the shutter release button is pressed halfway down. (The indications for the RTF are slightly different.)
- As you remove your finger from the shutter-release button the [ϟ] mark and the glowing of a shutter speed disappear about five seconds later.
- For this camera, please take advantage of the AF400FTZ or AF240FT flash, which possesses the many capabilities shown at right.

Functions of RTF and Dedicated Auto Flash Units

- When using an old-type flash unit (AF160S or AF200S), use the lens aperture ring to select the desired f-number.
- The flash unit may not discharge if the subject is too bright to require a flash.
- * The [ϟ] mark appears in the LCD panel when the flash is fully charged.
- ☆ AF200SA, AF240Z and AF160SA apply.

TTL Auto Flash System

When you attach a Pentax dedicated TTL auto flash unit, the camera's metering circuits automatically control the flash output for a proper exposure by measuring the incoming light reflected off the film plane. Since this system measures only the light reflected by the subject, it ensures accurate exposure control.

Functions of RTF and Dedicated Auto Flash Units

Camera's Functions	RTF	AF400FTZ AF240FT	AF400T AF280T AF200T AF080C	AF200SA AF240Z AF160SA AF200S AF160S
When flash charging is completed and the shutter release button is depressed halfway down, the flash-ready indicator [ϟ] appears in the viewfinder, and the shutter speed is automatically switched to the flash-sync speed.	○*	○	○	○
With the lens aperture ring locked at the "A" position, the appropriate aperture value is set automatically.	○	○	○	☆
Successful flash discharge is confirmed by the flash-ready indicator [ϟ] in the viewfinder, which either turns off briefly and back on again or blinks after exposure.		○	○	
Flash output is automatically controlled by measuring the amount of light striking the film plane during exposure. (TTL Auto Flash)	○	○	○	
Slow shutter-speed sync operation under 1/100 second is possible in the Metered Manual mode.	○	○	○	○
Built-in AF spotbeam projector for assisting auto focusing in dark locations.	○	○		
Selection of the leading shutter-curtain or trailing shutter-curtain sync mode.		○		

TTL Auto Flash Mode

For Programmed AE and Shutter-Priority AE Modes

- Like the built-in RTF unit, the AF400FTZ or AF240FT, which is designed exclusively for use with this camera, automatically adjusts the shutter speed and aperture according to the subject's brightness, making it easy to accomplish even complicated daylight flash synchronization. (See the operating manual of the flash for more detailed information).
- With a conventional dedicated flash unit (AF400T, AF280T, AF200T and AF080C), a flash-sync speed of 1/100 second and an aperture of f/4 (f/8 for AF080C) are set as soon as the flash is fully charged (at ISO 100). However, these units are not recommended for daylight flash sync photography.

* The aperture is automatically set to f/4 with ISO 100 film. With the zoom lens whose maximum aperture changes from f/4 to f/5.6, for instance, according to the focal length in use, note that shooting at f/5.6 causes underexposure.

For Aperture-Priority AE and Metered Manual modes

- Select the desired f-number using the lens aperture ring.
- The flash-sync speed of 1/100 second is set as soon as the flash is fully charged.

Programmed Auto Flash Mode

For Programmed AE and Shutter-Priority AE Modes

- Set the flash's mode switch at one of the AUTO (red, green or yellow) positions for dedicated flash units such as the AF400T, AF280T, AF200T and AF200SA.
- A combination of a flash-sync speed of 1/100 second and a lens aperture is selected as soon as the flash is fully charged, as indicated in the chart below.

(at ISO 100)

	AF400T	AF280T	AF200T
Red	f/4	f/4	f/2.8
Green	f/8	f/8	f/5.6
Yellow	f/11	—	—

(AF200SA: f/4 at ISO 100)

For Aperture-Priority AE and Metered Manual Modes

- Set the flash's mode switch at one of the AUTO (red, green or yellow) positions.
- Set the same f-number on the lens as the one indicated by the flash's exposure scale.
- The flash-sync speed of 1/100 second is set as soon as the flash is fully charged.

Common Functions of TTL Auto Flash and Programmed Auto Flash Modes

In the Metered Manual mode, slow-shutter-speed synchronization can be used by selecting a shutter speed between 1/60 second and one second. The shutter speed can be selected by turning the select dial to the left or right until the desired speed appears on the LCD panel.

- When the shutter speed is set between 1/2000 second and 1/125 second, it is switched to the flash-sync speed of 1/100 second when the flash is fully charged.

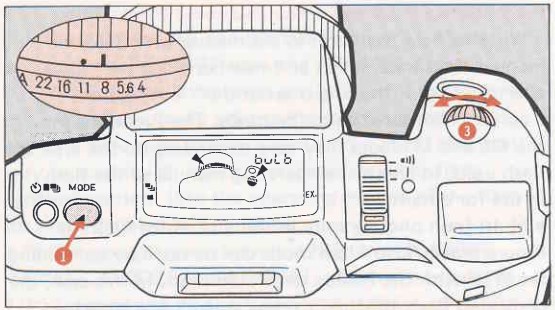
Flash Confirmation Signal (ϟ)

When a proper flash exposure is made in the TTL Auto Flash or Programmed Auto Flash mode while the camera is set in an AE or Metered Manual mode, the flash-ready indicator [ϟ] in the viewfinder confirms it right after the discharge, either by disappearing for a moment and coming back on again or by blinking.

* The AF200SA does not have the flash confirmation signal function.

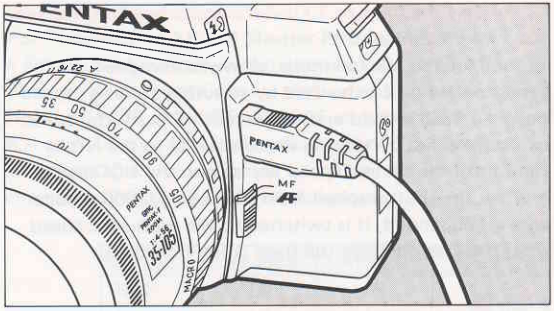
Precautions for Using Pentax Dedicated Flash Units

- When using a flash unit in the manual sync (MS) or manual (M) mode, select an f-number using the lens aperture ring. If the ring is set at the "A" position, a correct exposure cannot be made. The functions in the MS and M modes may vary depending on the type of flash used, so check the operating manual of the flash in use for details.
- Multi-flash photography in the TTL Auto Flash or Programmed Auto Flash mode can be done by combining the RTF with the Pentax dedicated flash. In this case, the dedicated flash attached to the camera's hot shoe has a priority for different functions over the RTF. When combining conventional dedicated flash units, use the lens aperture ring to select the aperture. Be sure to check the flash-ready indicator of the attached flash unit before shooting.
- The TTL Auto Flash or Programmed Auto Flash mode can be used even when the camera is set in the **[bulb]** mode.
- When mounting the AF080C ring flash on the camera's hot shoe, use the Hot-shoe Adapter F which makes it easier to operate the shutter-release button.



This mode is useful in long exposures for photographing fireworks and night scenes. The shutter remains open as long as the shutter release button is held down.

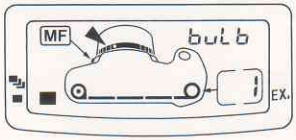
1. Turn the select dial ❸ while pressing down the mode button ❶ until the **[bulb]** indication appears in the LCD panel.
   - When the shutter release button is pressed lightly, the **[M]** indication comes on in the viewfinder. (Set the aperture ring at an f-number other than **[A]**.)



2. When photographing in the bulb mode, use a strong tripod and connect the optional Cable Switch F to the camera's Release socket F.

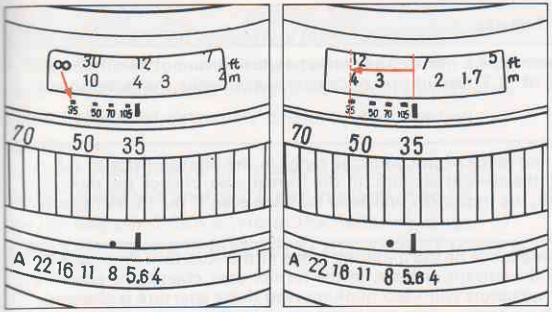
Note:

- The self-timer cannot be used in the bulb mode.
- With a fresh lithium battery at a normal temperature, an exposure of up to ten hours is possible.



The [▲] indication appears, telling you to select an aperture.

INFRARED INDEX

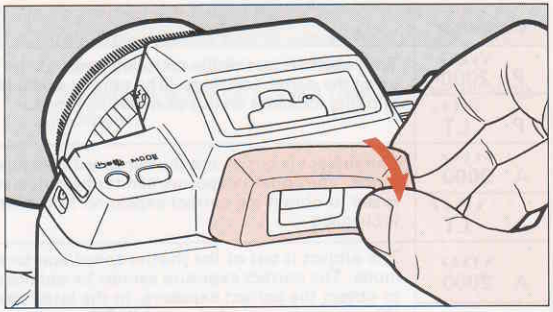


In infrared photography when using infrared film and an R2 or O2 filter, you need to adjust the focusing to compensate for infrared rays, which are different from the visible rays of normal photography.

Memorize the subject's distance indicated on the lens distance scale after focusing, then turn the focusing ring to align that distance setting with the red infrared index before shooting. As shown above, for instance, when the zoom ring is at 35, move the distance figure to the infrared index of 35.

• Be sure to set the focus-mode switch at the **[MF]** position before turning the focusing ring manually.

EYECUP FB



The Eyecup FB is attached to the viewfinder accessory groove.

When using such accessories as "Diopter Correction Lenses M," "Viewfinder Cap M," etc., remove the Eyecup FB from the camera.

VIEWFINDER WARNINGS

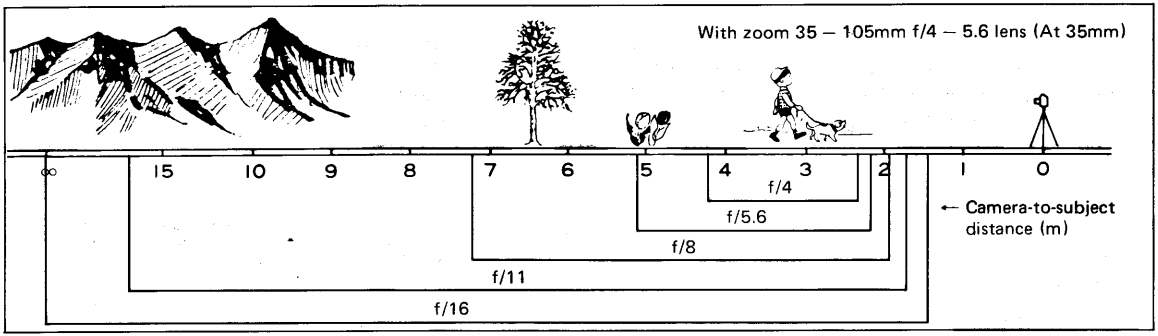
Viewfinder	Remarks
P 2000	The subject is out of the metering range of the Programmed AE mode. The correct exposure cannot be obtained using the current settings. (The normal-speed blinking of "LT" warns you of camera shake, while the faster-speed blinking indicates an out-of-metering range.)
P LT	
A 2000	The subject is out of the shutter-speed/aperture coupling range or the metering range in the Shutter-Priority AE mode. The correct exposure cannot be obtained using the current settings. In the former case, change the shutter speed to obtain the correct exposure. In the latter case, the indicators will keep blinking even if the shutter speed is changed.
A LT	
A 2000	The subject is out of the shutter-speed/aperture coupling range or the metering range in the Aperture-Priority AE mode. The correct exposure cannot be obtained using the current settings. In the former case, change the aperture to obtain the correct exposure. In the latter case, the indicators will keep blinking even if the aperture is changed. (The normal-speed blinking of "LT" warns you of camera shake, while the faster-speed blinking indicates an out-of-metering range.)
A LT	
M 500 125	The subject is out of the Metered Manual mode's correct exposure range. Change the shutter speed and/or the aperture until only one solidly lit indicator remains; this indicates correct exposure is possible.
M 250 60	
M 2000	The subject is out of the Metered Manual mode's metering range. The indicators will keep blinking even if the shutter speed and/or the aperture are changed. The correct exposure cannot be obtained using the current settings.
M LT	
P 250	When the exposure memory lock is in use, the viewfinder indicators blink to confirm it.
P 60	The low battery level is warned by blinking indications. The battery mark [▭] also blinks in the LCD panel.
ϟ	When the subject requires the use of flash, the [ϟ] mark blinks and tells you to use flash.

Out-of-meter-coupling-range warning

- The warning is indicated by a blinking light.
- "Out-of-metering-range" means the subject is beyond the measurable limits of the camera's exposure meter because of extremely bright or dark lighting conditions.
- "Out-of-coupling-range" means a combination of shutter speed and aperture is not available even if the lighting condition is within the metering range.
- The [ᵛᵛᵛᵛ] mark in the chart at left indicates blinking.

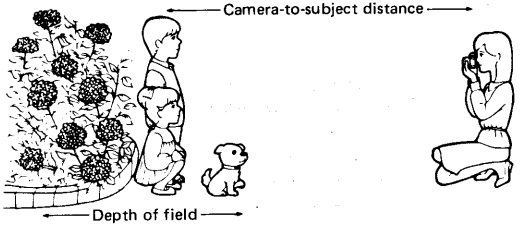
How to photograph an out-of-metering-range subject:

1. If the subject is too bright, use an ND (neutral density) filter (available at camera shops).
2. If the subject is too dark, use a flash or other lighting equipment.



Depth of field refers to the range around the optimum focusing point of the subject in which the elements at different distances are in focus.

The depth of field increases as the aperture becomes smaller, as the focal length of the lens becomes shorter, and as the subject is positioned farther away. By changing apertures, you can control the depth of field and create different visual effects.



* Some zoom lenses do not have a depth-of-field scale due to mechanical reasons.

Aperture set at maximum

Aperture set at minimum

FUNCTIONS USING CONVENTIONAL PENTAX LENSES

Camera's Functions / SMC Pentax Lenses	Exposure Mode		Focusing Mode			
	Programmed AE Shutter-Priority AE	Aperture-Priority AE Metered Manual	Auto Focus		Manual Focus	
				With AF Adapter 1.7X	FI System	Matte Screen Focusing
F-series lenses	○	○	○	——	○	○
A-series lenses	○	○	x	○*	○*	○
M-series lenses	x	○	x	○*	○*	○
Pentax lenses	x	○	x	○*	○*	○
Takumar lenses	x	○*	x	x	x	○

* Note: Conventional Pentax lenses have the following restrictions:

- The Focus Indication (F.I.) system of the manual focusing mode [MF] can only be used for lenses with the maximum aperture of f/5.6 or larger.
- The auto-focus system using the SMC PENTAX-F AF Adapter 1.7X can only be used for lenses with the maximum aperture of f/2.8 or larger. (For details, please read the operation manual of the SMC PENTAX-F AF Adaptor 1.7X.)

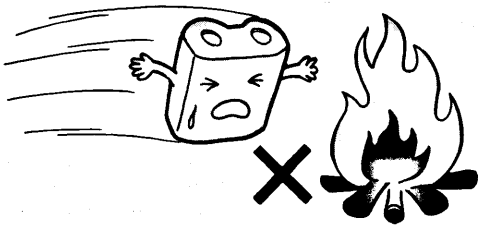
* The metering system is switched to stop-down metering.

- Manual focusing can be done using the peripheral matte area of a focusing screen without being affected by the auto-focus frame [ ].

With screw-mount Takumar lenses, the in-focus signal [○] is not displayed.

PRECAUTIONS ON BATTERY

- This camera is powered by one "2CR5"-type lithium battery.
- Inserting or handling the battery improperly may result in leakage, heat generation or explosion. Be sure to insert the battery with its (+) or (–) side facing correctly as indicated in the chamber.
- When not using the camera for an extended period of time, remove the battery from the camera and keep it somewhere beyond reach of small children. An old battery is apt to leak and can cause damage to the battery chamber.
- Never try to break up, or recharge the battery, or throw old ones into fire; they may explode.
- The battery may not function properly in low temperatures, although it depends on the type and brand.



- Just to be safe, carry a spare battery when shooting outdoors or on a trip.
- When storing the camera in a bag or a case, make sure the main switch is turned off, to avoid accidental shutter release and unnecessary battery consumption.
- When the built-in flash (RTF) is used continuously, the battery may heat slightly, but it does not mean the battery is faulty; it is one of the battery's characteristics.

- **Battery life** (according to number of rolls of film used and use of bulb mode):

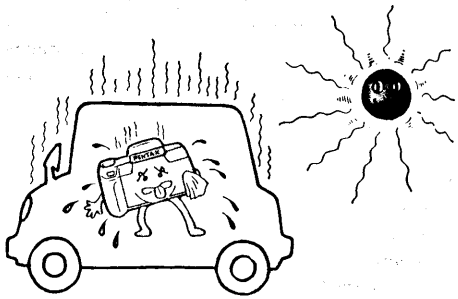
Normal temperature	Without RTF	Approx. 150 rolls
	With RTF (used for 50% of exposures)	Approx. 40 rolls
	With RTF (used for every exposure)	Approx. 20 rolls
Bulb exposure time (at normal temperature)		Approx. 10 hours

- Under Pentax testing conditions
- The number of rolls is based on use of 24 exposure film.

TAKING CARE OF YOUR CAMERA

Your Pentax camera is a sophisticated, precision instrument built to give long-lasting, reliable service. It will serve you well if you treat it right, with proper handling and reasonable care. The major cause of damage are:

1. Dropping or banging the camera against immovable objects, which can damage the camera in many ways.
2. Water damage, particularly if the camera is submerged in salt water. Your camera is not water-proof! It must be protected from salt breeze, salt spray at the beach, splashing of any kind, and shielded from the rain. If your camera does get soaked, wipe it dry immediately and rush it to a Pentax service center.



3. Dirt and sand can cause serious damage to the shutter and other moving parts of the camera. Your camera needs periodic cleaning to keep it operating properly. To remove dirt and dust, you need lens-cleaning fluid, lens-cleaning tissues, bulb-type ear syringe, camel's hair-brush, etc. Never use a solvent such as thinner or alcohol.
4. Humidity and temperature extremes should be avoided. Keep your camera out of direct sunlight, car trunks, and glove compartments.
   Shooting outdoors in winter presents a problem since batteries won't function if they get too cold. In cold weather carry your camera under your coat or jacket to keep the batteries warm. The temperatures at which this camera should function properly are approx. 50°

~–10°C. Sudden changes in temperature will often cause moisture to condense inside or outside your camera. This is a possible source of rust, which may be extremely harmful to the mechanism. Furthermore, if the camera is taken from a warm temperature to a sub-freezing one, further damage may result from the formation of icelets. Thus, sudden temperature changes should be avoided as much as possible, As a guide, a temperature change of 10°C should be allowed to take place gradually over a period of at least 30 minutes. If this is not possible, keeping the camera in its case or bag will help somewhat in minimizing the effects of a rapid temperature change.

5. Vibration experienced when you are traveling in a car, plane, or ship, can cause screws to loosen. To minimize this problem use foam-rubber padding about one inch thick to line the buttom of your camera bag.
6. When mounting your camera on a tripod, make sure the tripod screw is no longer than 5.5mm, which is the depth of your camera's tripod socket. If you use a longer screw, you will possibly puncture the tripod socket, after which the camera will not function properly.

Precautions on LCD Display

- In temperatures over approximately 60°C, the LCD display may darken. It will return to its normal condition under normal temperatures.
- In low temperatures, the LCD display may respond more slowly. This is due to the characteristics of the liquid used and is not a malfunction.

Backup Circuits for LCD Display

Even when the battery is removed for replacement during shooting, the built-in backup circuits retains data such as the frame number and the ISO film speed in memory until a new battery is inserted.

Special notes on accessories

- When the Auto Bellows A is combined with this camera, the Double Release A cannot be used. When shooting with the camera held vertically, keep the camera's grip on the upper side.
- When using the "Adapter K for 645 Lens" with this camera, note that the fixing screw may hit the camera, depending on where the adapter is fitted.
- The Magnifier F, Eyecup F, and Hotshoe Cover F, which are the accessories for the SFX/SF1, cannot be used with your camera. Use the Magnifier M.

SPECIFICATIONS

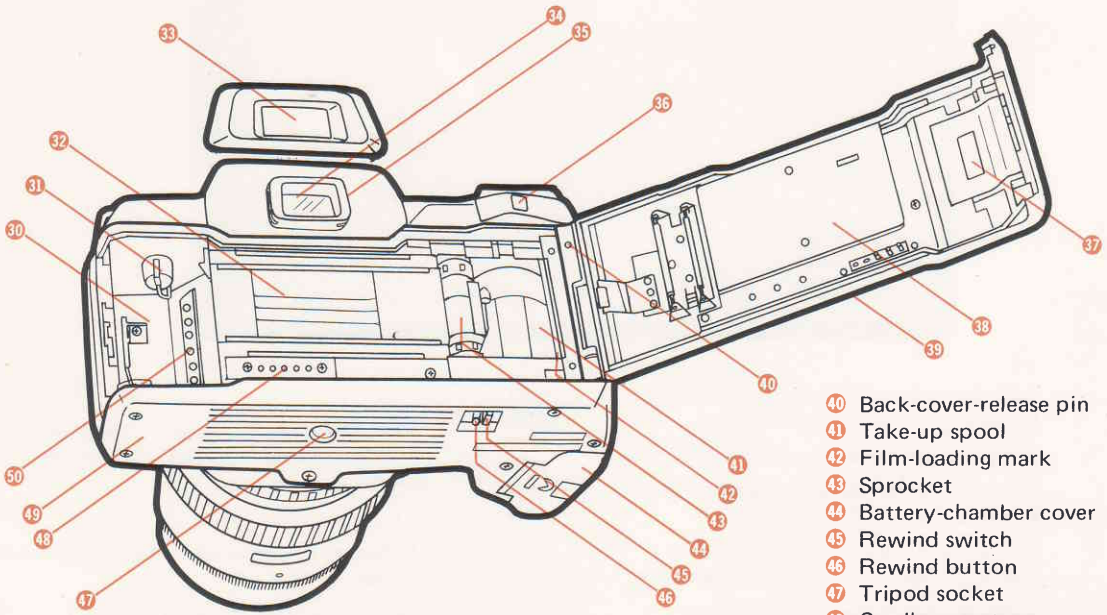
Type:	TTL auto-focus, multi-exposure-mode, fully automatic 35mm SLR with built-in RTF (Retractable TTL Auto Flash).
Film:	35mm perforated cartridge film.
Format:	25mm x 36mm.
Lens:	SMC Pentax-F. (K-and KA-mount lenses with maximum aperture of f/5.6 or larger usable in Focus Indication system.)
Lens Mount:	Pentax KAF-mount with auto-focus coupler and lens/focus information contacts. (Compatible with K and KA mounts.)
Focusing System:	Pentax TTL phase-matching auto-focus system. Usable illumination range: EV 2 to EV 18 (at ISO 100). Focusing modes: (1) AF Single (with focus-lock device) and (2) Manual. Focusing response: approx. 0.3 sec. (from infinity to minimum focusing distance using SMC Pentax-F 35mm–70mm f/3.5–f/4.5 lens). AF assisting system: AF spotbeam projector of RTF for automatic beam casting under low-light conditions with efective range of 1m to 4m.
Exposure Control:	Light metering: TTL center-weighted PROCES (Progressive Contrast-compensation Exposure System) with automatic exposure compensation depending on brightness difference between two divided sections in viewfinder field. Metering range: EV 1 to EV 19 (ISO 100 with f/1.4 lens). Exposure modes: (1) Programmed AE; (2) Shutter-Priority AE; (3) Aperture-Priority AE; (4) Metered Manual; (5) Bulb; (6) TTL Auto Flash; and (7) Programmed Auto Flash. Exposure compensation: automatic compensation by contrast variation or via exposure-memory-lock button.
Shutter:	Electronically controlled vartical-run focal-plane shutter. Shutter speeds: (1) auto: 1/2000 sec. to 30 sec.; (2) manual: 1/2000 sec. to 1 sec.; (3) bulb.
Viewfinder:	Pentaprism finder. Field of view: 92%. Magnification: 0.82X (with 50mm f/1.4 lens at infinity. -1 diopter eyepiece. Aspheric-Micro-Matte focusing screen. LED indications: In-focus, Programmed AE, Aperture-Priority AE, Shutter-Priority AE, Metered Manual, shutter speed, low-light warning/flash readiness, flash-exposure confirmation with dedicated flash unit and memory-lock warning.

External LCD Information:	Focus mode, exposure mode, shutter speed, RTF recommendation (low-light warning), recharge completion, successful discharge, illumination-angle warning, exposure counter, film winder mode, film loading/winding/rewinding, film loading error, self-timer, low battery warning and aperture-ring/ select dial instructions.
Mirror:	Swing-up-type instant-return mirror with AF secondary mirror.
Built-in Flash:	RTF (Retractable TTL Auto Flash) with AF spotbeam projector. Guide number: 12 (at ISO 100/m). Illumination angle: coverage for angle of view of lenses with focal length of 35mm or longer. Recycling time: approx. 4 sec. with fresh lithium battery.
Flash Synchronization:	With built-in RTF or via accessory hotshoe. Sync speed: 1/100 sec. set automatically with RTF or dedicated auto flash upon full charge. Automatic flash-exposure adjustment by built-in RTF, AF400FTZ and AF240FT according to lighting conditions (1/60 sec. to 1/100 sec. and f/2.8 to f/11 at ISO 100 with automatic determination of discharge). TTL Auto Flash mode possible with Pentax dedicated flash units (AF400FTZ, AF240FT, AF400T, AF280T, AF200T and AF080C).
Film Advance/ Rewind:	Automatic winding/rewinding and automatic rewind stop by built-in film winder. Advance modes: (1) single frame and (2) consecutive (at approx. 2 frames/sec.).
Film Speed Setting:	Automatic with DX-coded film from ISO 25 to 5000. (Fixed setting at ISO 100 with non-DX-coded film.)
Self-timer:	Electronically controlled type with delay time of approx. 12 sec. Operation confirmation by LED indicator, PCV beep tone and LCD panel.
Power Source:	One 6V lithium battery (2CR5).
Dimensions:	152.5mm(W) x 96mm(H) x 63.5mm(D) (6.0" x 3.7" x 2.5")
Weight:	630g (22.2 oz.).

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT ANY OBLIGATION ON THE PART OF THE MANUFACTURER.

30 Film chamber
31 Rewind shaft
32 Shutter curtain
33 Eyecup FB

34 Viewfinder eyepiece
35 Viewfinder-accessory groove
36 Memory-lock (ML) button
37 Film-information window
38 Pressure plate
39 Back cover



40 Back-cover-release pin
41 Take-up spool
42 Film-loading mark
43 Sprocket
44 Battery-chamber cover
45 Rewind switch
46 Rewind button
47 Tripod socket
48 Cordless contacts
49 Bottom cover
50 DX-information pins

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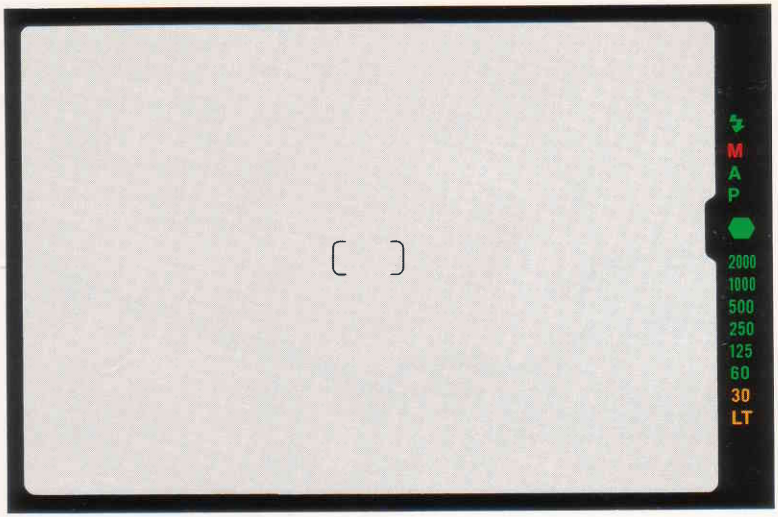
VIEWFINDER INDICATION



[ ]	Indicates the auto-focus frame where the subject should be positioned.
ϟ	Indicates the condition of the RTF.
M	Indicates the Metered Manual mode is selected.
A	Indicates the Shutter-Priority AE or Aperture-Priority AE mode is selected.
P	Indicates the Programmed AE mode is selected.
⬡	Indicates the condition of focusing.

2000 1000 500 250 125 60	Indicates a shutter speed. "2000" means 1/2000 second and "60" means 1/60 second.
30	Indicates a shutter speed prone to camera shake.
LT	Warns of a shutter speed slower than 1/15 sec.