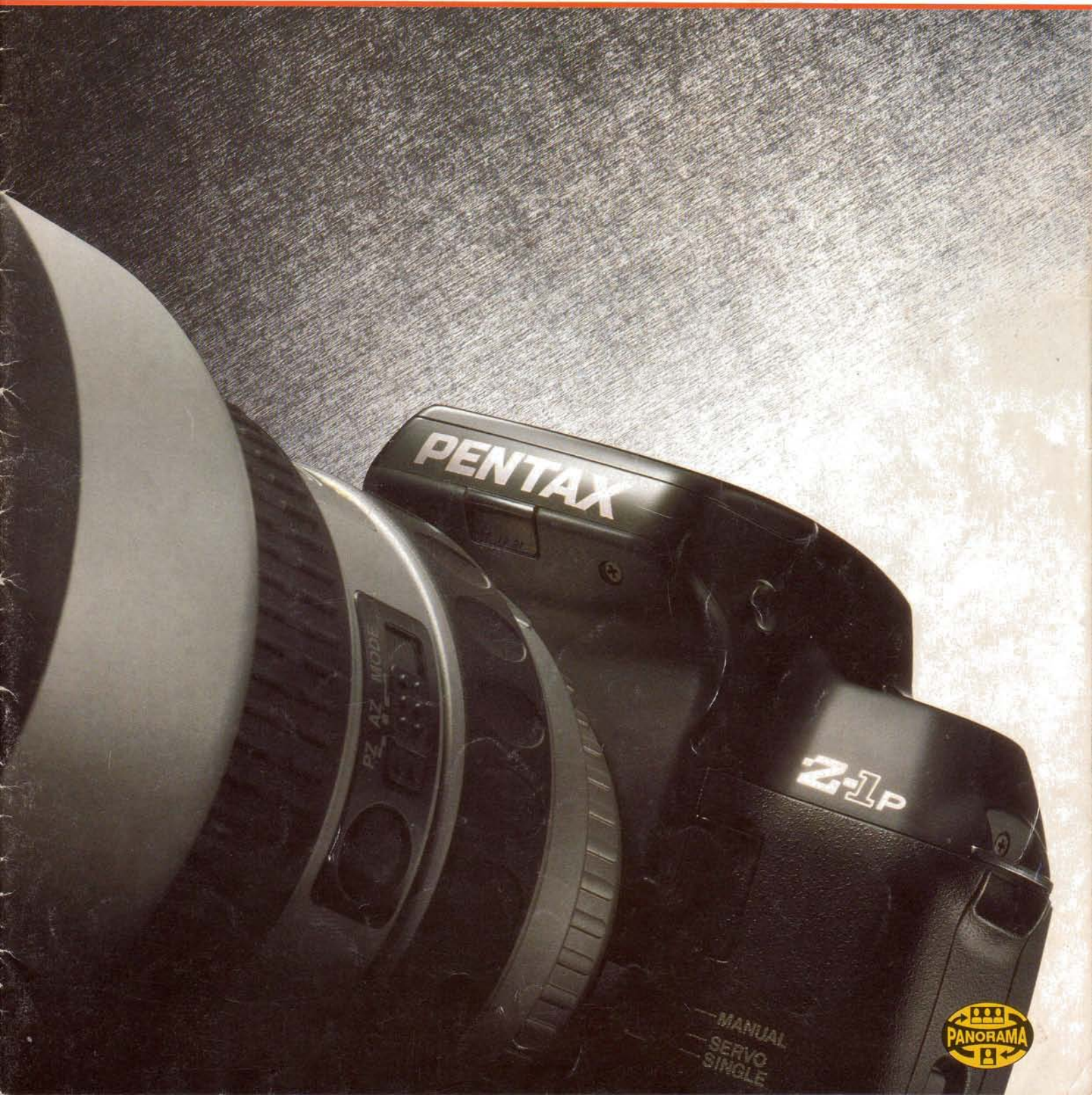


PENTAX

Z-1P

A Photographer-Priority High-Performance Autofocus SLR

75
years
PENTAX





Metering Mode

Memory

Memory

Program Line Selection

User Position

Memory

Exposure Mode

Memory

Built-In Flash Mode

Memory

Drive Mode

Memory

Auto-Bracketing

ON
USER
OFF

Z1P

Pentax Z-1p

The Custom-Programmable SLR that Features Quick Response and Maximum Maneuverability

With the intention of creating a "truly photographer-oriented" autofocus SLR, Pentax designed the Z-1p to accommodate the most discriminating demands of experienced photographers so that they can creatively capture their images with a minimum of effort.

The Z-1p not only assures optimum versatility and maneuverability, but also allows users to fine-tune operation to suit personal preferences. The User Position lets the photographer instantly recall a set of preselected settings, while the Pentax Functions make it possible to reprogram the camera's basic functions to suit each operator's individual requirements.

As the top-of-the-line model of Pentax's renowned Z-series SLR lineup, the Z-1p incorporates a full range of advanced features and user-friendly functions as well as the latest mechanical and electronic technologies — ranging from 1/8000-second shutter and high-speed motor drive to SAFOX II autofocus system and built-in auto flash. A complete selection of high-quality Pentax lenses further enhances the camera's performance.

The Pentax Z-1p — your "personal" SLR offering unmatched performance, unparalleled maneuverability and unlimited creativity.



A Comprehensive Package of User-Friendly Features to Accommodate Personal Requirements

Custom-Programmable Functions

① User Position

The Z-1p's User Position is designed to allow experienced photographers to further develop their individual styles. Once you program your preferences—exposure, metering and film-advance modes, for example—you can recall these settings instantly whenever you select this position.

② Pentax Functions

The Z-1p also lets you reprogram some of its basic functions—up to 15 of them—because SLR users demand a higher level of versatility and maneuverability. One Pentax Function, for example, lets you select a limited-mode setting (Hyper Program and Hyper Manual only) or a full-mode setting offering all of six different exposure modes.

Multi-Mode Exposure System for a Diverse Range of Subjects

In addition to the innovative Hyper Program and versatile Hyper Manual modes, the Z-1p features the Programmed AE, Aperture-Priority AE, Shutter-Priority AE, Bulb and Flash Sync modes to satisfy the most exacting demands of advanced photographers.

Versatile Auto-Bracketing System

The Z-1p's auto-bracketing system is more versatile than ever. It successively takes three frames of picture in the order of proper, under and over exposures in both auto- and manual-exposure modes. It even offers a flash bracketing function in combination with the built-in RTF or a Pentax dedicated flash.

Reliable Three-Mode Metering System

In addition to the sophisticated eight-segment multi-pattern metering, the Z-1p offers the spot and center-weighted metering modes to give you greater flexibility. Switching among the three metering modes is as easy as pressing a button.





Multi-Function RTF & Dedicated Flashes

The built-in auto flash "RTF (Retractable TTL Auto Flash)" is controlled by the advanced TTL Auto Flash system for accurate flash exposures and covers an angle of view as wide as 28mm. It features such capabilities as discharge compensation, flash bracketing, pre-flash emission for red-eye reduction, trailing-shutter-curtain sync, AF spotbeam projector and, in combination with a Pentax dedicated accessory flash unit (AF500FTZ or AF330FTZ), contrast-control flash.

A Complete List of Advanced Features

- 1/8000-second high-speed shutter with 1/250-second flash sync
- Accurate, reliable SAFOX II autofocus system
- Four-frames-per-second high-speed motor drive
- Mid-roll panorama frame switching
- Newly developed Natural-Bright-Matte interchangeable focusing screens
- Intelligent PowerZoom system with creative auto-zoom functions (Image-Size Tracking, Zoom Clip and Zoom Effect)
- Multi-mode self-timer

Easy-to-Follow Viewfinder Display

The multi-data LCD indicator in the viewfinder comes equipped with a helpful bar scale to display exposure status.

Durable, Attractive UV-Coating

The Z-Ip's top cover is treated with durable ultra-violet coating to minimize damage to the camera body and to preserve its attractive black matte finish.

High-Quality Pentax Lenses to Maximize Photographic Possibilities

Pentax offers a complete line of SMC Pentax lenses to maximize the potential of the Z-Ip, ranging from the top-quality FA* lenses to the power-zoom-equipped FA zoom lenses.

Hyper Program: An Innovative Auto-Exposure System with Unmatched Maneuverability



Easy Dial Selection of Intended Exposure Settings

Most of today's programmed auto-exposure modes offer only preprogrammed convenience. As a result, photographers are often forced to suspend shooting to change modes or shift program lines to create desired effects.

Pentax's Hyper Program mode is the ultimate solution. It allows you to change exposure settings without making any mode or program shifts. With this innovative system, you will never again miss a once-in-a-life-time opportunity because of cumbersome exposure control.

Speedy Direct Dial Control

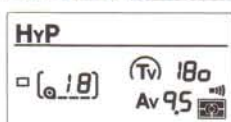
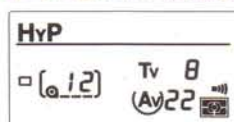
The Tv (shutter-speed) direct dial is positioned within easy reach of your index finger, while the Av (aperture) direct dial is right next to your thumb. So, it is possible to change aperture and shutter-speed settings instantly. The newly selected combination is memorized until you make next adjustments and, of course, the proper exposure is assured all the time.

An Instant Recall of Original Settings

When you need to return to the original exposure settings on the program line, just press the IF (Interactive Function) button on the back panel and the original settings are recalled instantly. This is another benefit of the advanced Hyper Program system.

Random Choice of Four Program Lines

You have four different program lines to choose from depending on your specialty: normal program, high-shutter-speed-priority program, depth-of-field-priority program, and MTF (Modulation Transfer Function) program designed to maximize the potential of each lens. Each program line shifts automatically according to the focal length of the lens in use.



Hyper Manual: A Revolutionary Manual Exposure System with Enhanced Versatility



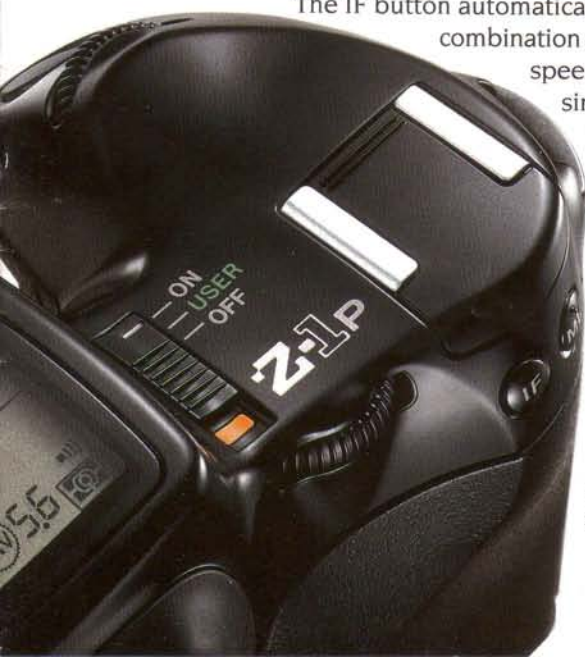
The viewfinder display incorporates a bar scale which describes the subject's exposure status at a glance.

Pushbutton Setting of Proper Values; Dial Control for Desired Effects

The Z-Ip's Hyper Manual mode is a Pentax innovation which greatly improves the operation of manual exposure modes. Unlike conventional systems, which require you to read an exposure meter before adjusting an aperture and a shutter speed, Hyper Manual accomplishes this troublesome process with the push of a button.

The IF button automatically selects the proper combination of aperture and shutter speed. You can create the desired visual effects by adjusting either aperture or shutter speed, or both, using the Av and Tv direct dials.

Press the ML (Memory Lock) button to memorize your intended exposure value. It will be stored in memory even when you change exposure settings to produce different effects.



Other Helpful Exposure Modes

Shutter-Priority AE Mode

You can freeze the action with a fast shutter speed (up to 1/8000 second) or emphasize motion with a slow speed.

Aperture-Priority AE Mode

This mode lets you control the depth of field for landscapes, portraits and macro applications.

Programmed AE Mode

This mode guarantees the best combination of aperture and shutter speed according to the program line.

Bulb Mode

This mode allows extended exposures for night scenes and astronomical photography.

Flash Sync Mode

This mode offers flash sync speeds of 1/250 second for TTL Auto Flash, 1/60 second for contrast-control flash, and 1/125 second for trailing-shutter-curtain sync operation.

Exposure Control: Simple and Effective Ways to Create Distinctive Visual Effects

Auto-Bracketing for Three Different Exposures

In some cases, you can produce more dramatic images by over- or underexposing your subject, rather than staying with the proper exposure. The Z-1p's auto-bracketing function does it all automatically by successively taking three frames of the same subject at different exposure values in the order of proper, under and overexposures. You can adjust the amount of exposure compensation within a range of $\pm 4\text{EV}$ in $1/3\text{EV}$ or $1/2\text{EV}$ steps.



Proper exposure



0.5EV underexposure



0.5EV overexposure

Auto-Bracketing with Exposure Compensation

By combining auto-bracketing with exposure compensation, you can take three different exposures of your subject under an intentionally under- or overexposed condition. In this case, the first frame is taken according to the preselected exposure compensation value.

Auto-bracketing with exposure compensation (with +1EV as a standard setting)



1EV overexposure



0.5EV overexposure



1.5EV overexposure

Auto-Bracketing in Hyper Manual

The Z-1p offers auto-bracketing convenience in Hyper Manual as well, thus eliminating the complicated process of adjusting the aperture and shutter speed and greatly re-

ducing the time required for manual operation. It is a great help for advanced amateurs who like to experiment with exposures.



Memory lock button

Exposure compensation button

Easy-to-Operate Exposure Compensation

Using the exposure compensation button and the Tv direct dial, you can easily apply exposure compensation without taking your eye off the viewfinder. The barscales in the LCD guide panel and the viewfinder indicators show you its application and the amount of compensation (within a $\pm 4\text{EV}$ range in $1/3\text{EV}$ or $1/2\text{EV}$ steps).

One-Touch Memory Lock

One push on the ML button memorizes the current exposure value. In the Hyper Manual mode, you can even change exposure settings without affecting the memorized value.



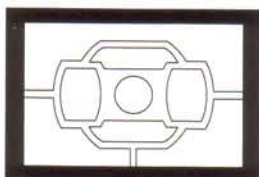
Light Metering: A Flexible Three-Mode System for Optimum Results

Using the metering-mode select switch and the Tv direct dial, you can make speedy selection of one of the Z-1p's three metering modes: Pentax's original eight-segment multi-pattern metering, spot metering for pinpoint measurement, or center-weighted metering for conventional, familiar exposure control. Choose the one that best suits your subject or lighting condition. (The multi-pattern metering is available only with the SMC Pentax FA, F and A lenses.)



Light sensitivity distributions

Multi-pattern metering



Multi-pattern metering

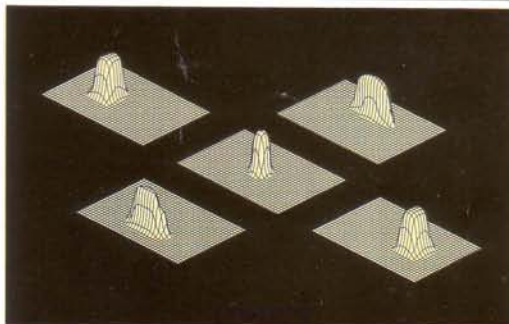
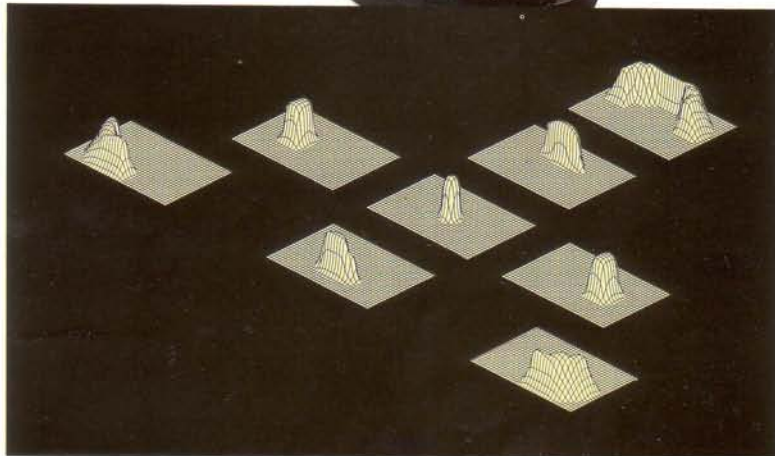
Advanced Eight-Segment Multi-Pattern Metering

In the multi-pattern metering mode, the Z-1p measures the light reaching the eight sensors of the control IC and determines the most appropriate metering pattern for the situation.

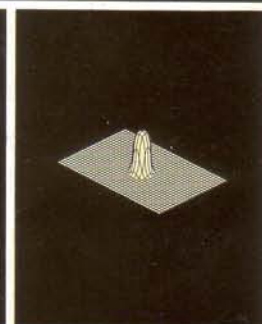
This mode is designed to place priority on shadow areas: Under normal lighting, it takes into account shadowy spots away from the central area; In back-lighting, it assumes the main subject is in shadow and gives more exposure to the darker central area after calculating the proper amount of exposure compensation from the distance of the subject.

The multi-pattern metering also assures true-to-life reproduction of your subject—making it appear exactly the way you see it with your naked eyes. For subjects brighter than EV 14 (at ISO 100), for example, the Z-1p's microcomputer automatically compensates the exposure to make it appear bright on the picture. Yet, it also makes minute exposure adjustments to other areas so as not to lose any detail.

Metering-mode select switch



Center-weighted metering



Spot metering

Spot Metering

This mode measures a mere 2.5% of the entire image area indicated by the central circle in the viewfinder. It helps you properly expose one element of the subject, especially in high-contrast situations. Switch to this mode, for example, to prevent the subject from being overexposed when it is standing against an extremely dark background. If you wish to position your subject off center, use the ML button to maintain the proper exposure before you recompose the image.

Center-Weighted Metering

This mode makes the outcome more predictable for photographers who are used to the conventional metering patterns. It emphasizes the central area, but also takes lighting conditions of peripheral areas into account to determine the proper exposure.

Custom Settings: Functional Provisions to Customize the Z-1p to Your Own Style



A User Position to Program Personal Preferences

As you become more experienced, you develop a certain way of photographing your frequent subjects. That's why Pentax has further advanced its developmental concept of "photographer-priority" SLRs with the Z-1p.

With the new User Position, you can preset the Z-1p for the most preferred or maneuverable combination of features and functions and instantly recall the settings in any situation. In close-up or stage photography, for instance, you can preprogram the metering mode to spot metering. Or, if you often use auto-bracketing for landscapes, memorize it with your most often-used auto-bracketing values.

The Z-1p's User Position lets you create a camera that best accommodates your operational preferences without losing the benefits of automation and technological sophistication.

Pentax Functions: User-Friendly Options to Fine-Tune the Basic Operation

In addition to the User Position, the Z-1p offers 15 Pentax Functions which allow you to preset the principle functions to suit your preferences. In the case of exposure mode, for example, you have a choice between limited- and full-mode settings. Add these Pentax Functions to the User Position, and you have the maximum freedom of customizing the Z-1p just the way you like it.

[PF1] PCV beeper on/off

- 0: Beeper on
- 1: Beeper off

This optional setting cancels PCV signals indicating in-focus position and self-timer operation.

[PF2] Limited- or full-mode selection for exposure modes

- 0: Hyper Program and Hyper Manual (plus Aperture-Priority AE with lens aperture ring set at other than "A")
- 1: Hyper Program, Hyper Manual, Shutter-Priority AE, Aperture-Priority AE, Bulb and Flash Sync

The initial setting offers only two primary exposure modes because Hyper Program and Hyper Manual are used in most situations. The optional setting offers a wider range of exposure modes for specialized applications.

[PF3] Exposure compensation increment

- 0: 1/3EV
- 1: 1/2EV

The initial setting offers 1/3EV-step compensation for each click of the dial. The optional setting changes it to 1/2EV steps. The maximum compensation range is ± 4 EV in both settings.



[PF4] Shutter speed increment

- 0: 1EV
- 1: 1/2EV

The optional setting gives intermediate speeds, such as 1/750, 1/1500 and 1/3000 second, in the Hyper Manual and Shutter-Priority AE modes.

[PH5] Av/Tv auto shift in Hyper Program

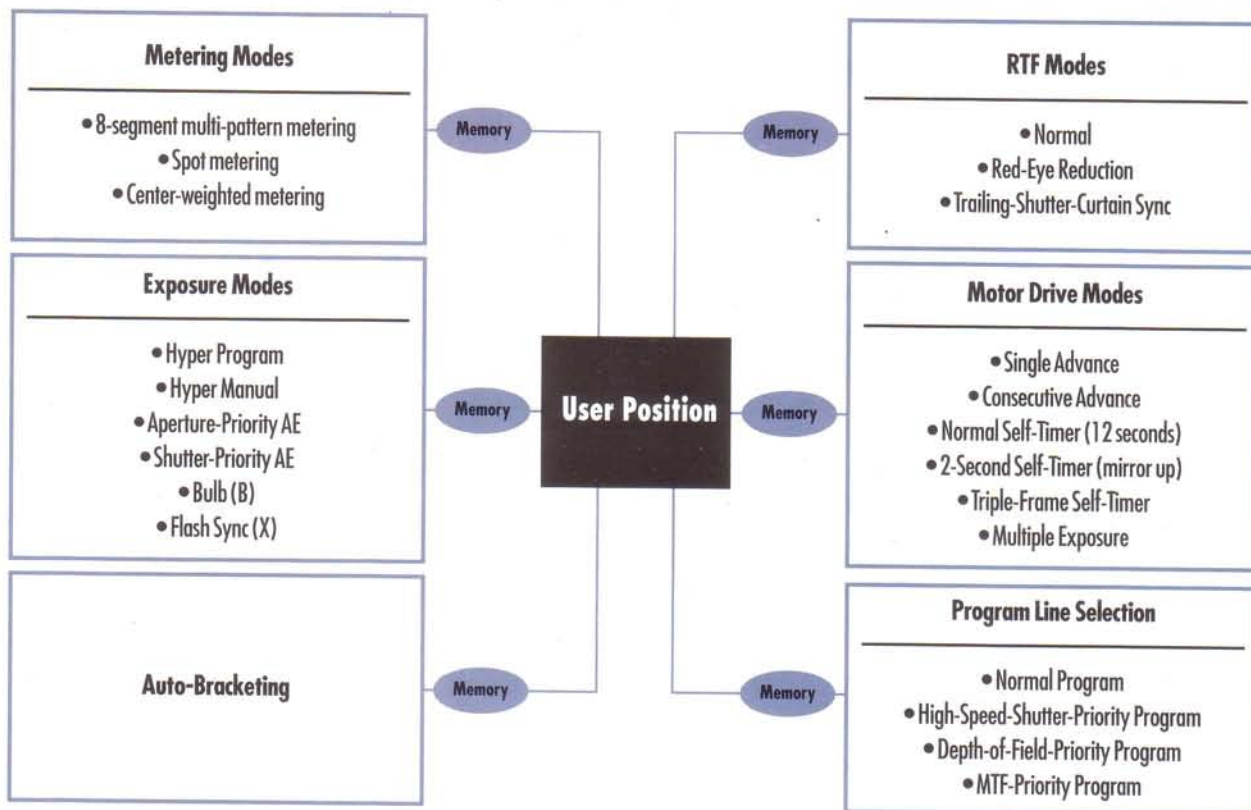
- 0: Av/Tv auto-shift on
- 1: Av/Tv auto-shift off

In the Hyper Program mode, the initial setting automatically shifts the aperture (Av) and shutter speed (Tv) beyond the metering coupling range to assure proper exposure. The optional setting maintains the selected Av or Tv values even outside the coupling range and provides a warning in the viewfinder.

[PF6] Av/Tv shift with IF button in Hyper Manual

- 0: Simultaneous Av/Tv shift along program line
- 1: Av fixed, Tv shifted for proper exposure
- 2: Tv fixed, Av shifted for proper exposure
- 3: Shift canceled (IF button inactive)

When the IF button is pressed in the Hyper Manual mode, the initial setting resets Av and Tv values back to the program line for proper exposure. Optional settings 1 and 2 adjust each independently in Aperture-Priority or Shutter-Priority operation respectively, to allow more versatile Hyper Manual operation. Optional setting 3 makes the IF button inactive.



[PF7] Av/Tv shift for flash sync between RTF and dedicated flash using IF button in Hyper Manual

- 0: Priority on Program Flash line
- 1: Priority on incident-light line

With flash sync (250X) between the RTF and a Pentax dedicated flash in the Hyper Manual mode, the Program Flash mode is inactive, but the IF button resets Av and Tv values back on the Program Flash line. The optional setting cancels this initial setting and adjusts Av and Tv values along the incident-light-priority line.

[PF8] DX- or manual-priority film speed setting

- 0: DX priority
- 1: Manual priority

When a new roll of film is loaded, the initial setting automatically sets the ISO film speed by reading a DX bar code. The optional setting allows you to set the film speed manually.



[PF 9] AF lock/unlock with memory lock

- 0: Only exposure locked
- 1: Exposure and autofocus locked simultaneously

The ML (Memory Lock) button normally memorizes only exposure settings. The optional setting locks both exposure settings and autofocus mechanism.

[PF10] Pre-recharge shutter release with RTF

- 0: Release locked before complete recharge
- 1: Release possible during recharge

The initial setting locks the shutter until the RTF is fully recharged. The optional setting permits shutter release during recharge to deal with unexpected situations.



[PF11] Film leader roll-in selection

- 0: Leader rolled into cartridge
- 1: Leader left outside cartridge

The original setting rewinds the film completely into the cartridge. The optional setting leaves the film leader out of the cartridge.



[PF12] Auto/manual start of film rewind

- 0: Rewind starts automatically
- 1: Rewind starts with manual command

The auto-return function automatically starts rewinding the film when it reaches its end. The optional setting activates the rewind mechanism only at your command, so you can avoid rewind noise in undesirable situations.

[PF13] AF activation with power zoom

- 0: AF interactive with power zoom
- 1: AF independent of power zoom

The initial setting activates the autofocus system as soon as power zoom starts. The optional setting makes it independent of power-zoom operation.

[PF14] Zooming direction of Zoom Effect

- 0: Wide angle to telephoto
- 1: Telephoto to wideangle

The optional setting reverses the zoom direction—from the telephoto end to the wide-angle side.

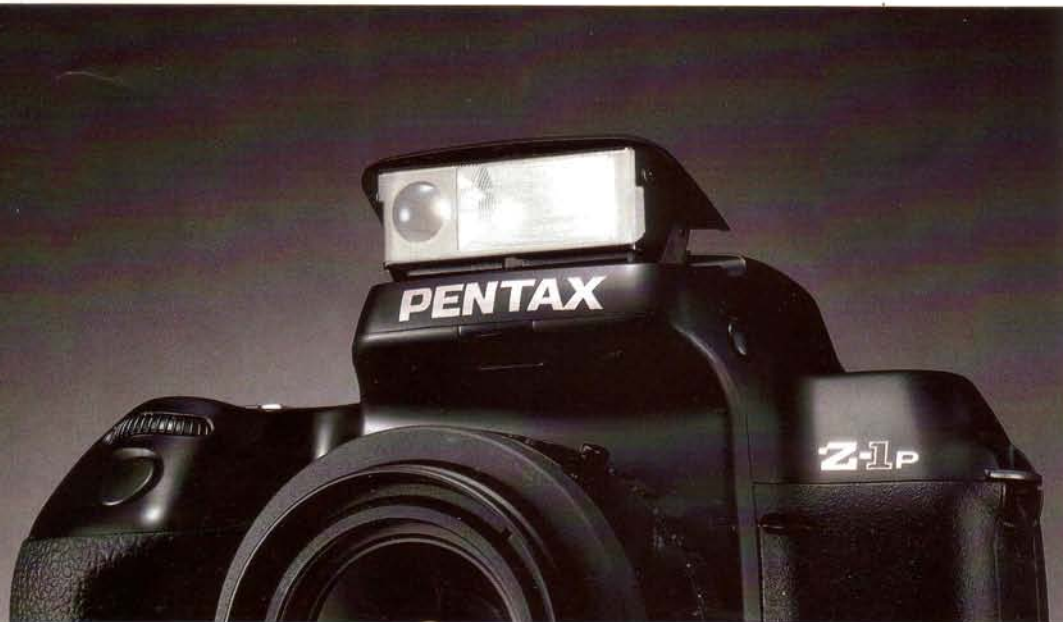


[PF15] Mid-exposure power zoom selection

- 0: Power zoom inactivated
- 1: Power zoom possible

The power zoom mechanism is inactivated during an exposure with the initial setting. The optional setting allows power zooming during an exposure.

RTF: A Versatile Built-in Auto Flash Responsive to Sophisticated Applications



Red-Eye Reduction

When you select the red-eye reduction mode, the RTF gives a pre-flash emission approximately 0.7 seconds before a main emission. It minimizes the red-eye effect when taking portraits in the dark.

Trailing-Curtain Sync for Natural Traces

Unlike normal flash modes, the trailing-shutter-curtain sync mode makes an emission a moment before the trailing curtain comes into motion to create a more natural flash-assisted image of your subject on the move.

Dependable TTL-Controlled Operation

It has been one of Pentax's main design concepts that a compact illumination source be incorporated into SLRs. With a guide number of 14 (ISO100/m) and a wide-angle coverage up to 28mm*, the Z-1p's RTF (Retractable TTL Auto Flash) offers a great variety of features through the accurate TTL Auto Flash exposure system.

** Some lenses may cause vignetting with their lens barrels.*



Program Flash for Hands-Off Exposure Control

In the Hyper Program and Programmed AE modes, the RTF is automatically switched to the Program Flash mode in poor lighting conditions. Then, the TTL Auto Flash system selects the optimum combination of exposure settings and regulates the amount of discharge according to the light reaching the film plane. It not only makes daylight sync flash operation automatic, but simplifies sophisticated slow-shutter-speed sync flash technique in the Hyper Program, Hyper Manual and Shutter-Priority AE modes.

Flash Bracketing for Three Distinctive Images

The flash bracketing function allows you to take three pictures with varied images (proper, under and over exposures) in succession by automatically adjusting the amount of flash discharge for each frame. It is especially effective in daylight sync flash photography with the main subject standing close to the camera because you can change exposures on the subject (within a range of $\pm 4\text{EV}$ in $1/3\text{EV}$ or $1/2\text{EV}$ steps) without affecting the exposure on the background. This function can be used with a Pentax dedicated flash unit (AF500FTZ or AF330FTZ) as well.



Proper exposure



0.3EV underexposure



0.3EV overexposure

High-Performance, Multi-Featured Pentax Dedicated Flash Units

Flash Discharge Compensation for Comprehensive Exposure Control

The RTF lets you control the amount of flash discharge (+1EV to -3EV in 1/3EV or 1/2EV steps) to create the desired visual effects, even in the auto flash modes. In portraits taken with slow-shutter-speed sync flash technique, for example, you can avoid applying excessive illumination on the subject while keeping the background bright with incident light. Since you control only the amount of discharge without changing exposure settings, you can capture more natural expressions of your subject. This function is usable with a Pentax dedicated flash unit (AF500FTZ or AF330FTZ) as well.



-0.3EV compensation

Advanced Contrast-Control Flash in Combination with a Dedicated Flash

The Z-Ip can simultaneously trigger emissions of the built-in RTF and a Pentax dedicated flash unit (AF500FTZ or AF330FTZ) mounted on the hotshoe. In such twin-flash situations, it offers a contrast-control flash function which sets the illumination ratio between the RTF and the external flash unit at one to two. For example, this function allows you to set up the external flash unit for bounced or diffused lighting while using the RTF as a catch light. This function is operable even when the red-eye reduction flash mode is selected.

Contrast-control flash



RTF with AF500FTZ (bounced flash)

AF500FTZ

With a large guide number of 30 at 24mm or 50 at 85mm (at ISO100/m), this powerful flash features an auto zoom mechanism as well as bounce-flash, trailing-shutter-curtain sync, multi-flash, slave-flash and AF spot-beam capabilities. In combination with optional accessories, it also allows remote flash applications in the TTL Auto Flash mode.

AF330FTZ

This compact flash has a guide number of 20 at 28mm or 33 at 85mm (at ISO100/m) and features an auto zoom mechanism as well as AF spotbeam and trailing-shutter-curtain sync capabilities in the TTL Auto Flash mode.

AF140C Macro Flash

Specially designed to eliminate the subject's shadows in close-up applications, this macro flash has a guide number of 14 (at ISO100/m) and offers the TTL Auto Flash and manual flash capabilities.



Other Advanced Features: Useful Extras that Come Standard

1/8000-Second Shutter with 1/250-Second Flash Sync

The Z-1p incorporates a reliable high-speed shutter unit to give you greater freedom of expression. The fastest shutter speed (1/8000 second) lets you capture a flash of the subject's movement with extreme sharpness. It also allows you to purposely open up an aperture to create an image with a narrow in-focus area, particularly in combination with the large-aperture SMC Pentax FA* lenses.

Its flash sync speed of 1/250 second — one of the fastest among flash-equipped autofocus SLRs currently on the market — helps you capture more natural images of your subject in daylight sync flash photography.

Dependable High-Precision Autofocus with Predictive AF Mode

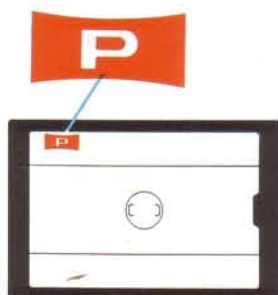
The much improved SAFOX II sensor unit — the core of the Z-1p's phase-matching autofocus system — guarantees accurate focus of the subject even under extremely poor illumination (at EV-1). The focus mode (AF Single, AF Servo and Manual) is selectable with single-action switching.

In the AF Servo mode, the Z-1p automatically switches to the Predictive AF mode when the subject is in motion at a speed faster than 1.5mm/sec. on the film plane. As a result, a subject on the move is always captured in sharp focus.



Mid-Roll Switching to a Panorama Frame

With simple switching, you can instantly change the picture format from standard to "Panorama," which is ideal for breathtaking landscapes or group shots.



Panorama mark in the viewfinder

High-Speed Motor Drive

The Z-1p is equipped with a high-speed motor drive (approx. four frames per second). This not only increases the number of exposures possible in action photography in the consecutive advance mode, but also reduces intervals between exposures in the single advance mode. As a result, you can capture those decisive moments you might otherwise have missed in the past.

This built-in motor drive also speeds up film rewind operation (approx. 10 seconds for a roll of 24-exposure film and approx. 15 seconds for 36-exposure film). Coupled with the quick loading mechanism, the time required for film changes is greatly reduced.



Newly Developed "Natural-Bright-Matte" Focusing Screens

Pentax offers six "Natural-Bright-Matte" interchangeable focusing screens with the Z-1p, including the standard "Panorama Spot Matte." They assure uniform light dispersion, easier focusing, better color rendition and finer definition of out-of-focus area. They also make it easy to check the depth-of-field with a preview button.

A Comparison of light dispersion using laser beam



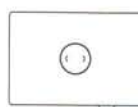
Natural-Bright-Matte



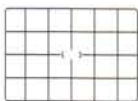
Conventional screen



AF Frame Matte [FF-60]
A plain screen with an autofocus frame in the center.



Center Spot Matte [FS-60]
A plain screen with autofocus and spot metering frames.



Cross Hair Matte [FG-60]
A screen with 6mm squares for precise alignment.



Scale Matte [FI-60]
A screen with vertical and horizontal scales.



Golden Section Matte [FK-60]
A screen with lines indicating the golden section.

A Multi-Mode Self-Timer

The Z-1p's self-timer offers three functional modes: the standard 12-second mode; the three-frame mode; and the two-second mode. By combining the three-frame mode with auto-bracketing, you can capture three pictures with different exposures. In any mode, operation is confirmed by an LED indicator and a PCV beeper.

An AF Spotbeam Projector

With the RTF in operation, the AF spotbeam projector is automatically activated when the illumination on the subject is dimmer than approximately 5EV. By projecting a striped pattern onto the subject, it helps the Z-1p measure the subject's distance accurately even in the dark, up to approximately six meters (20 feet) away. (Available only in the AF Single mode.)



A Built-in Diopter Adjuster

A diopter adjuster helps you obtain the clearest viewfinder image of the subject (within the adjustable range between -2.5 and +1.5 diopters).

PCV Sound for Audible Confirmation

You hear PCV (Piezo-Ceramic-Vibration) sounds when the subject is captured in focus or the self-timer is in operation. The beeper can be turned off by reprogramming the Pentax Function 1.

Data Back (Optional)

You can choose one of four data combinations and record it on your pictures with simple pushbutton operation: [month/day/year], [day/month/year], [year/month/day] and [day/hour/minute].

A Grip Strap (Optional)

The Grip Strap FdP greatly improves your hold of the Z-1p and also allows speedy camera installation to a tripod in combination with the optional Quick Shoe.

Pentax Original "Intelligent Power Zoom" System

The SMC Pentax FA* and FA "Intelligent Power Zoom" lenses offer responsive three-speed power zooming, which assures speedy, accurate framing with easy control of the zoom ring. They also feature three unique auto-zoom functions: "Image-Size Tracking" to capture the subject in the same size regardless of distance; "Zoom Clip" to instantly return to a preset focal-length point from any other setting; and "Zoom Effect" to create dramatic streaking effects in an image.

Multiple Exposure

This function lets you make two to nine exposures on a single frame of film to create eye-catching images.

Depth-of-Field Preview

When the lens' aperture ring is set at a position other than "A (Auto)," you can check the depth of field with pushbutton ease.

Body Design: Ergonomic Form for Optimum Holding Comfort and Easy Access to Controllers

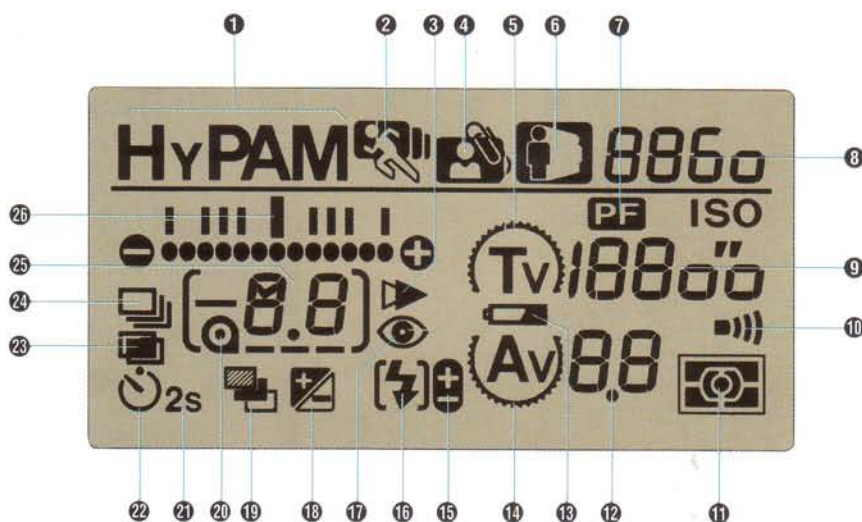
- 1 AF spotbeam projector
- 2 Preview button
- 3 Hand grip
- 4 Lens lock button
- 5 RTF built-in flash
- 6 Self-timer lamp
- 7 Zoom set button
- 8 Tripod socket
- 9 Focusing ring
- 10 Distance scale window
- 11 Auto zoom switch
- 12 Zoom scale window
- 13 Aperture ring
- 14 LCD panel
- 15 Mode set button
- 16 Mode dial
- 17 Av direct dial
- 18 Hotshoe
- 19 Strap lug
- 20 Main switch
- 21 Tv direct dial
- 22 Shutter release button
- 23 Power zoom ring
- 24 Viewfinder
- 25 Diopter adjustment lever
- 26 Metering mode switch button
- 27 Exposure compensation button
- 28 IF (Interactive Function) button
- 29 ML (Memory lock) button
- 30 Film information window
- 31 Panorama switch
- 32 Eyecup Fd
- 33 Focus mode switch
- 34 Flash pop-up button
- 35 Cable release socket
- 36 Back cover release lever



Data Display System: At-a-Glance Communication of Vital Information

A Large LCD Guide Panel

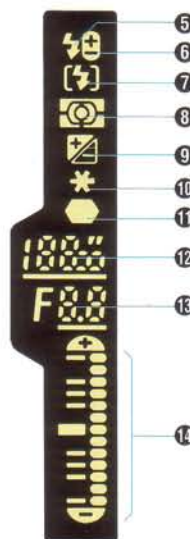
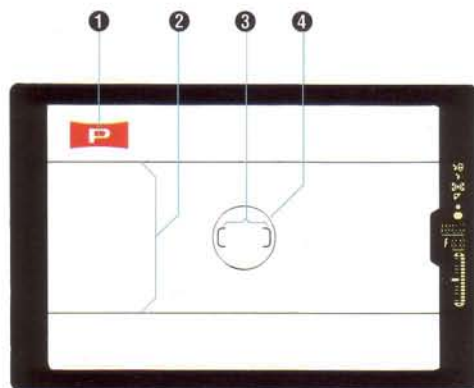
The Z-1p incorporates a large, easy-to-follow LCD guide panel, which is ideally positioned on top of the pentaprism. Using a combination of symbols and digits, this multi-information panel provides a full range of operational data at a quick glance. In addition, its EL (Electro-Luminescence) illuminator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



- 1 Exposure mode
- 2 Image-Size Tracking
- 3 Trailing-shutter-curtain sync flash
- 4 Zoom Clip
- 5 Tv direct dial
- 6 Zoom Effect
- 7 Pentax Functions
- 8 ISO film speed
- 9 Tv value (Shutter speed)
- 10 PCV audible signal
- 11 Multi-segment metering
- 12 Av value (Aperture)
- 13 Battery exhaustion warning
- 14 Av direct dial
- 15 Exposure compensation with flash
- 16 Built-in RTF flash information
- 17 Red-eye reduction flash
- 18 Exposure compensation
- 19 Auto-bracketing
- 20 Film status
- 21 Self-timer with 2-sec. delay
- 22 Self-timer with 12-sec. 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 an easy-to-read bar scale which indicates critical exposure data, including an exposure status (proper, under or over) in the Hyper Manual mode and an exposure compensation value. It also comes equipped with a backlight illuminator, which is automatically activated during shooting.



- 1 Panorama mode
- 2 Panorama frame
- 3 Autofocus frame
- 4 Spot metering frame
- 5 Accessory flash information
- 6 Exposure compensation with flash
- 7 Built-in RTF flash information
- 8 Metering mode
- 9 Exposure compensation
- 10 Memory lock
- 11 In-focus
- 12 Tv value (shutter speed)
- 13 Av value (aperture)
- 14 Exposure compensation scale/bar graph

Pentax Lenses: For the Highest Level of Photographic Expressions



FA* 24mm f/2.0 AL(IF)



FA 28mm f/2.8 AL



FA 50mm f/1.4



FA 50mm f/1.7



FA* 85mm f/1.4 (IF)



FA 135mm f/2.8 (IF)



FA* 200mm f/2.8 ED(IF)



FA* 300mm f/2.8 ED(IF)



FA* 300mm f/4.5 ED(IF)



FA* 600mm f/4.0 ED(IF)



SMC Pentax Lenses

	● Focal length (mm) / Maximum aperture (f)	● Angle of view (degrees)	● Lens construction (groups-elements)	● Minimum aperture	● m	● ft.	● Minimum focusing distance	● Filter size (mm)	● Maximum diameter & length (2mm × mm)	● g	● oz.
• Wide angle	FA* 24mm f/2.0 AL(IF)	84	9-11	22	0.3	1.0	67	72.5 × 65.5	405	14.3	
	FA 28mm f/2.8 AL	75	5-5	22	0.3	1.0	49	65.0 × 40.5	185	6.5	
• Standard	FA 50mm f/1.4	47	6-7	22	0.45	1.5	49	65.0 × 37.0	220	7.8	
	FA 50mm f/1.7	47	5-6	22	0.45	1.5	49	65.0 × 37.0	170	6.0	
• Medium telephoto	FA* 85mm f/1.4 (IF)	28.5	7-8	22	0.85	2.6	67	79.0 × 70.0	550	19.4	
	FA 135mm f/2.8 (IF)	18	7-8	32	0.7	2.3	52	65.0 × 80.0	375	13.2	
• Telephoto	FA* 200mm f/2.8 ED(IF)	12.5	8-9	32	1.2	3.6	77	82.5 × 134.0	785	27.7	
	FA* 300mm f/2.8 ED(IF)	8.2	7-10	32	2.0	6.6	43 ①	123.0 × 24.7	2,495	88.2	
	FA* 300mm f/4.5 ED(IF)	8.2	7-9	32	2.0	6.6	67	72.5 × 160.0	935	33.0	
• Super telephoto	FA* 600mm f/4.0 ED(IF) ▼	4.1	7-9	32	5.0	16.4	43 ①	176.0 × 456.5	6,800	240.3	
• Zoom	FA* Zoom 28mm-70mm f/2.8 AL	75-34.5	11-14	22	0.43	1.4	67	84.5 × 104.0	800	28.3	
	FA Zoom 28mm-80mm f/3.5-f/4.7	75-30.5	8-8	22-32	0.4	1.3	58	71.0 × 83.5	380	13.4	
	FA Zoom 28mm-105mm f/4.0-f/5.6	75-23.5	11-13	22-32	0.43	1.4	58	72.5 × 95.5	515	18.2	
	F Zoom 35mm-80mm f/4.0-f/5.6 (manual zoom)	63-30.5	6-7	22-32	0.4	1.3	49	65.0 × 58.0	185	6.5	
	FA Zoom 70mm-200mm f/4.0-f/5.6	34.5-12.5	8-10	32-45	1.1	3.6	49	73.0 × 116.5	465	16.4	
	FA* Zoom 80mm-200mm f/2.8 ED(IF)	30.5-12.5	13-16	32	1.4	4.6	77	87.5 × 191.5	1,510	53.4	
	F Zoom 80mm-200mm f/4.7-f/5.6 (manual zoom)	30.5-12.5	7-11	32-38	1.1	3.6	49	65.0 × 97.5	295	10.4	
	FA Zoom 100mm-300mm f/4.5-f/5.6	24.5-8.2	8-12	32-38	1.5	5.0	58	73.0 × 154.5	605	21.4	
	FA* Zoom 250mm-600mm f/5.6 ED(IF) ▼	9.9-4.1	16-18	32	3.5	11.5	43 ①	134.0 × 442.0	5,400	190.8	
	• Special application	FA Macro 50mm f/2.8	47	7-8	32	0.195	0.6	52	68.0 × 70.0	385	13.6
FA Macro 100mm f/2.8		24.5	8-9	32	0.306	1.0	58	74.0 × 103.5	600	21.2	
F Soft 85mm f/2.8		28.5	4-5	32	0.5	1.6	52	66.0 × 60.0	300	10.6	



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



FA Zoom 28mm-80mm
f/3.5-f/4.7



FA Zoom 28mm-105mm
f/4.0-f/5.6



F Zoom 35mm-80mm
f/4.0-f/5.6
(manual zoom)



FA Zoom 70mm-200mm
f/4.0-f/5.6



F Zoom 80mm-200mm
f/4.7-f/5.6 (manual zoom)



FA* Zoom 80mm-200mm f/2.8 ED[IF]



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



FA* Zoom 250mm-600mm f/5.6 ED[IF]



FA Macro 50mm f/2.8



FA Macro 100mm f/2.8



F Soft 85mm f/2.8



	Focal length (mm) / Maximum aperture (f)	Angle of view (degrees)	Lens construction (groups-elements)	Minimum aperture (f)		Minimum focusing distance	Filter size (mm)	Maximum diameter & length (2mm × mm)		Weight
				m	ft.			mm	g	oz.
• Fish-eye	A Fish-Eye 16mm f/2.8	180	7-9	22	0.2	0.7	67	65.0 × 56.0	320	11.3
• Ultra wide angle	A 15mm f/3.5	111	12-13	22	0.3	1.0	67	80.0 × 81.5	595	21.0
	A 20mm f/2.8	94	9-10	22	0.25	0.8	67	70.0 × 43.5	245	8.7
• Standard	A 50mm f/1.2	47	6-7	22	0.45	1.5	52	64.5 × 47.5	345	12.2
	A 50mm f/2.0	47	5-5	22	0.45	1.5	49	63.0 × 31.0	145	5.1
• Super telephoto	A* 400mm f/2.8 ED[IF] ▼	6.2	8-8	32	4.0	13.3	49	164.0 × 325.0	6,000	212.0
	A 400mm f/5.6	6.2	6-7	45	2.8	9.3	77	85.0 × 277.0	1,240	43.8
	A* 600mm f/5.6 ED[IF] ▼	4.1	6-8	45	5.5	18.3	49	133.0 × 386.0	3,280	115.9
	A* 1200mm f/8.0 ED[IF] ▼	2.1	8-9	45	8.0	26.7	49	170.0 × 684.0	8,580	303.2
• Macro	A* Macro 200mm f/4.0 ED	12.5	9-10	32	0.55	1.8	58	70.5 × 145.0	895	31.6

• FA*- and FA-series zoom lenses incorporate the Intelligent Power Zoom mechanism.

• FA*, FA- and F-series lenses feature autofocus operation with the Z-Ip.

• A-series lenses are manual-focus models.

However, those with a maximum aperture of f/2.8 or larger can be used for autofocus operation in combination with the optical AF Adapter 1.7X.

① Rear-mount 43mm filters (SKY, CL, UV, Y2, O2 & R2) provided as accessory. Gelatin filters usable.

② Filters (SKY, Y2 & O2) built-in. Gelatin filters usable.

③ Filters (SKY, UV, Y2 & O2) built in.

▲ Apertures between f/2.8 and f/5.6 controlled manually; apertures between f/5.6 and f/32.0 controlled automatically.

▼ Produced by order.

Pentax Z-1p 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 unconditional autofocus operation; (2) Pentax KA- and K-mount lenses for autofocus operation with AF adapter.

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: EV-I-EV18 (at ISO 100/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 illumination [1m-6m]

Exposure Control:

- Metering system: (1) TTL open-aperture eight-segment multi-pattern metering (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: $\pm 4\text{EV}$. (1/3EV or 1/2EV increment selectable with Pentax Function).
- Memory lock: 5-second memory with ML button. (Memory extendable).
- Auto-bracketing: 3 frames in order of proper/under/over exposures within range of $\pm 4\text{EV}$ (1/3EV or 1/2EV increment selectable). Combination use with exposure compensation 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/horizontally.
- Magnification: 0.8X (with 50mm f/1.4 lens at infinity).

Viewfinder Display:

- Type: multi-data LCD 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.).

Film speed setting:

Automatic with DX-coded film (ISO25-ISO5000). Manual setting available (ISO6-ISO6400 in 1/3EV steps).

Built-in flash:

- Type: Retractable TTL auto flash (RTF).
- Guide number: 14 (at ISO 100/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 spot-beam projector 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.

Pentax Functions: 15 custom-programmable functions.

Main switch: (1) OFF; (2) "User" Position; (3) ON (full-speck 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.

- Design and specifications are subject to change without notice.
- 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.
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