

PENTAX

6x7

INTERCHANGEABLE LENSES



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67 INTERCHANGEABLE LENSES

PENTAX

Asahi Optical had its beginnings as a lens maker and today is the world's only leading lens maker manufacturing a large format camera. All 67 interchangeable lenses are computer-generation optics designed in the Company's own engineering department, manufactured in its own factories, and tested in its own laboratories. Meticulous quality control over each step of the manufacturing process assures maximum optical performance with every lens in the line.

67 lenses truly exist in a class of their own. Giants in terms of quality, precision and power, each features a precision bayonet mount which matches up with the camera perfectly, and each up through

800mm focal length offers fully automatic diaphragm. In addition, each is of rugged and durable construction for years of reliable use. They also incorporate a host of ingenious features geared toward maximum operating ease.

Another outstanding feature of the 67 lenses is Super-Multi-Coating, Pentax's own unique 7-layer coating process which increases light transmission for brighter and crisper images, and also minimizes flare and ghost images.

Please refer to the sections of these instructions concerning the lens or lenses you have purchased. Lenses with common characteristics are listed at the beginning of the various sections for convenient reference as you thumb through the manual. Sections where no listing is given are general instructions for all lenses; there are also sections devoted to special purpose lenses (see "Contents").

INNER BAYONET MOUNTING LENSES

SMC FISH-EYE TAKUMAR	35mm f/4.5
SMC PENTAX	45mm f/4
SMC PENTAX	55mm f/4
SMC TAKUMAR	75mm f/4.5
SMC PENTAX SHIFT	75mm f/4.5
SMC TAKUMAR	90mm f/2.8
SMC PENTAX	90mm f/2.8
SMC TAKUMAR	105mm f/2.4
SMC PENTAX	165mm f/2.8
SMC TAKUMAR	200mm f/4
SMC TAKUMAR	300mm f/4
SMC PENTAX	500mm f/5.6
SMC PENTAX M*ED (IF)	800mm f/6.7
SMC MACRO TAKUMAR	135mm f/4

Lens Removal : All these 67 lenses mount to the inner bayonet of the Pentax 6×7 camera. To remove the lens on the camera, press the lens bayonet lock as illustrated in Photo A and turn the lens to the left.

When the red dot on the lens lines up with the dot on the camera mount, pull out to remove the lens from the camera body.

Lens Mounting : Align the red dot of the lens with the red dot of the mount and insert the bayonet tabs as illustrated in Photo B. Turn the lens to the right until it locks in place with a click. Wiggle the lens back and forth slightly to test whether it is mounted properly.

A



B



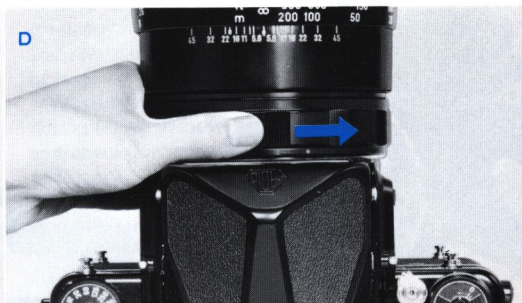
OUTER BAYONET MOUNTING LENSES

SMC TAKUMAR	400mm F4
SMC TAKUMAR	600mm F4
SMC TAKUMAR	800mm F4
SMC REFLEX TAKUMAR	1000mm F8

All these 67 Lenses match with the outer bayonet mount of the 6×7 camera.

To Mount: Loosen the fastener ring surrounding the lens mount and position it with the white dot facing upward (Photo C). Then, match the lens mount with the outer bayonet mount of the camera, insert the bayonet tabs and turn the fastener ring to the right as illustrated in Photo D.

Note: Check that the lens is mounted securely before letting go. If the bayonet tabs have not caught properly, the lens may fall off when you let go.

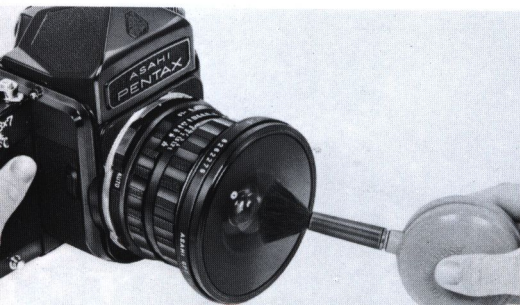


LENS CARE

67 lenses are high precision optical instruments and should be treated accordingly. Protect them from humidity, salt air and dust; do not store them in damp places. It is good practice to protect the lens with a filter when using it near the seashore and other loca-

tions where dust or moisture might accumulate.

Cleaning: Do not wipe the lens with a handkerchief or other rough cloth which might scratch the surface. Use only a rubber blower or soft brushes especially designed for lens



cleaning for removing dust from the surface of a lens. To remove most of the dust, wipe it away or brush it away gently as shown in the photo on the left.

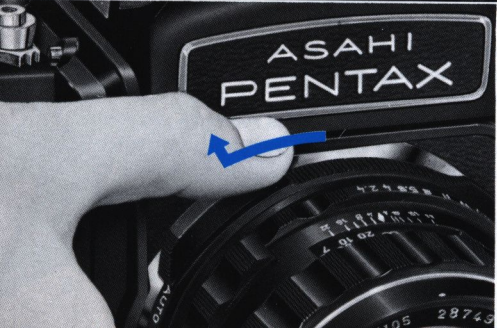
If you should fingerprint a lens surface, or if it is too dirty to clean with a blower, clean the lens with either high-quality lens cleaning paper or a very soft cloth wrapped around the end of a match stick, etc. The cloth or paper can be dampened with lens cleaning solution or alcohol. Wipe gently with a circular motion from the center outward. When cleaning larger lenses, wrap the paper or cloth directly around your finger to clean more effectively. With extremely dirty lenses, shift the cloth or paper frequently to avoid wiping the dirt back onto the lens. A few wipes in this manner

should remove most stains. If gentle cleaning fails to remove a stain, the lens should be taken into an authorized Pentax Service Center for servicing.

Excessive heat, dropping and scratches will also damage lenses. Exercise care so as not to drop lenses and do not toss them around carelessly. Always cover a lens with both front and rear caps when storing it away in its case or bag.

When not using lenses regularly, especially during humid weather, remove it from its case and check for mildew. Dry out the case if necessary. Light mildew can easily be wiped off. If mildew has formed on the inside of the lens, the lens may require repair.

AUTOMATIC DIAPHRAGM LENSES



SMC FISH-EYE TAKUMAR	35mm f/4.5
SMC PENTAX	45mm f/4
SMC PENTAX	55mm f/4
SMC TAKUMAR	75mm f/4.5
SMC PENTAX SHIFT	75mm f/4.5
SMC TAKUMAR	90mm f/2.8
SMC PENTAX	90mm f/2.8
SMC TAKUMAR	105mm f/2.4
SMC PENTAX	165mm f/2.8
SMC TAKUMAR	200mm f/4
SMC TAKUMAR	300mm f/4
SMC PENTAX	500mm f/5.6
SMC PENTAX M*ED (IF)	800mm f/6.7
SMC MACRO TAKUMAR	135mm f/4

2.4 • 4 • 5.6 • 8 • 11 • 16 • 22

3.4 4.8 6.7 9.5 13.5 19

All lenses listed in the chart above feature automatic diaphragms that operate in the same manner. The automatic diaphragm will function normally as long as the AUTO/MAN. lever is set to AUTO.

To preview the depth of field or to release the spring for operating the diaphragm manually, slide the lever downward while pressing on the serrated top as shown in the photo on the adjacent page. When the lever catches

MANUAL DIAPHRAGM LENSES

it will lock on manual (MAN.). To re-engage the automatic diaphragm, press on the lever again and let go so that the lever returns to the AUTO position.

MANUAL DIAPHRAGM LENSES

SMC TAKUMAR	400mm f/4
SMC TAKUMAR	600mm f/4
SMC TAKUMAR	800mm f/4

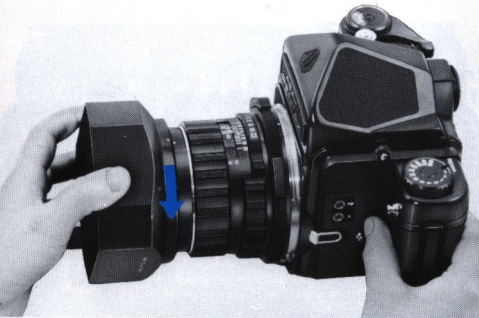
67 lenses from 400mm through 800mm telephoto (except 500mm f/5.6) feature a manual diaphragm which is stopped down by rotating the aperture ring to the various click-stop f-number settings. This method is used with all long telephoto lenses, except the 1000mm reflex telephoto which does not employ a diaphragm. When using manual diaphragm lenses, focus with the lens set at maximum aperture, and then stop it down to shooting aperture just before tripping the shutter.

Preset Diaphragm

The SMC Pentax 75mm shift lens features a preset diaphragm system, whereby the shooting aperture is preset with a preset ring, so focusing and composition are performed at full-aperture. Then, the aperture is stopped down for exposure metering and shooting by turning the aperture ring until it matches up with the preset ring, (Operating details are given in the instruction manual furnished with the lens.).



ACCESSORY LENS HOODS



SMC PENTAX	45mm f/4
SMC PENTAX	55mm f/4
SMC TAKUMAR	75mm f/4.5
SMC TAKUMAR	90mm f/2.8
SMC PENTAX	90mm f/2.8
SMC TAKUMAR	105mm f/2.4
SMC MACRO TAKUMAR	135mm f/4

Lens hoods are available for the various 67 lenses. Certain hoods may be used interchangeably, some fit only one lens, while others are built-in.

Screw-mount lens hoods: The 90mm and 105mm lenses take the same lens hood; likewise, the 135mm and 150mm lenses. In both cases, after screwing the hood into the threads at the front of the lens as far as it will go, loosen it slightly so that the angle of the hood is square with the camera body.

Spring-type hood: The lens hood for the 55mm f/4 lens is a spring type which clips to the front of the lens easily via two tabs.

Bayonet-mounting lens hood: The lens hood of the 75mm f/4.5 lens attaches to the lens via a two tabbed bayonet fixture. Match up the white dot on the lens hood with the white dot on the lens barrel and turn the hood to the right until it locks in place.

BUILT-IN LENS HOODS

SMC PENTAX	165mm f/2.8
SMC TAKUMAR	200mm f/4
SMC TAKUMAR	300mm f/4
SMC TAKUMAR	400mm f/4
SMC PENTAX	500mm f/5.6
SMC TAKUMAR	600mm f/4
SMC PENTAX M* ED (IF)	800mm f/6.7
SMC TAKUMAR	800mm f/4
SMC REFLEX TAKUMAR	1000mm f/8

Built-in lens hoods

Long telephoto 67 lenses feature built-in lens hoods. This feature is possible as the narrow angle of view permits the use of built-in hoods without vignetting. The built-in hoods on the above lenses are approximately the same diameter as the lens barrel and are extremely easy to use. They may be put into action in an instant merely by extending them out over the lens barrel as shown in the photo. When not using a hood, simply slide it back to its original position. Hoods will extend and retract more smoothly if slightly rotated when manipulated.

CAUTION

Built-in lens hoods cannot be employed with the 165mm, 200mm and 300mm lenses when the Gelatine Filter Frame is being used. Lens hoods for the 165mm and 200mm lenses also cannot be extended when using a polarizing filter.



ACCESSORY FILTERS

Filters Attaching to the front of the lens

The 55mm f/4 lens uses 77mm screw-in filters that fit the threads on the front of the lens. In addition, the spring-type lens hood for this lens may be attached over the filter.

The 75mm lens, the standard lens, and telephoto lenses through 300mm focal length accept bayonet mounting filters of different sizes. These filters attach to the front rim of the lens via two bayonet tabs.

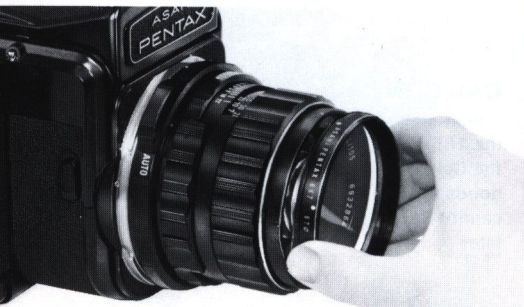
In the case of the 90mm and 105mm lens, as well as the 135mm and 150mm lenses, the respective lens hood may be mounted

over the filter.

Except for the polarizing filter, use of two filters together is not recommended.

Filters Attaching to the Rear of the Lens

- Telephoto lenses from 400mm through 1000mm (except the 500mm lens) are designed to accept both 77mm 67 bayonet filters and 77mm Pentax screw-in filters (SMC Pentax M* ED (F) 800mm f/6.7 via a filter frame). Both types mount to the rear of the lens. Before mounting either, the filter adaptor ring which is housed in the lens mount will



have to be unscrewed and removed (Photo below left).

Bayonet mounting filters: Align the white dot of the filter adaptor ring shown in the middle photo with the dot on the filter and give the filter a 1/6th turn to the right until it bayonets in place. **Screw-in filters:** Simply screw the filter into the threads of the adapter ring.

After you have attached the filter to the ring, screw the ring back into position at the rear of the lens.

NOTE: Slight focal adjustments may be required due to the addition of the rear filter.

Built-in Filters

SMC Fish-Eye Takumar: The SMC Fish-Eye Takumar 67 lens features four built-in filters (UV, Y2, O2 and R2). The filter of your choice may be employed by turning the filter dial on the front rim of the lens. Gelatine filters may also be employed in conjunction with this lens for additional filter applications. Cut gelatine filters to the appropriate size and insert them into the gelatine filter clip at the rear of the lens.



HANDLING UNMOUNTED LENSES



Unmounted lenses which have not been put back into their cases should be handled carefully. They should be placed on a level surface to keep them from falling over or rolling away and damaging the optical system.

Generally, smaller lenses should be stood on end with the rear mount capped and facing upwards as with the three lenses in the center of the photo. Conversely, the SMC Fish-Eye Takumar 35mm lens should stand on its rear lens cap to avoid scratching its protruding front element. Long telephoto lenses with

tripod mounts should be placed lengthwise on their side; these will topple if stood upright.

Out-of-focus, blurred photographs are almost always caused by camera shake which results from not holding the camera firmly enough. This tendency is more pronounced at slow shutter speeds and with long 67 telephotos, in particular, due to their greater length and forward center of gravity. Greater care is needed with these lenses to avoid camera shake.

TELEPHOTO SHOOTING

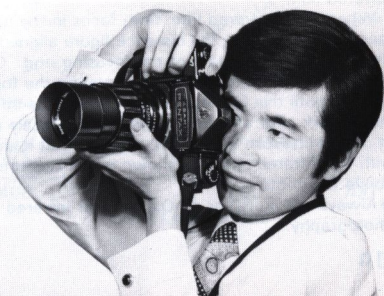
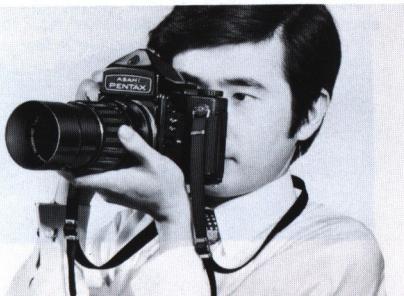
The most effective method of minimizing shake with long telephotos is the use of a good, solid tripod. Excellent results can be obtained by handholding telephotos up to 200mm if held carefully.

Horizontal Handheld Shooting: Rest the mount section of the body and as much of the lens as possible in the palm of your left hand with fingers extended for operating the focus ring. When you are ready to release the shutter, bring both of your elbows in as closely as possible against your body for firm support. When handholding telephotos in excess of

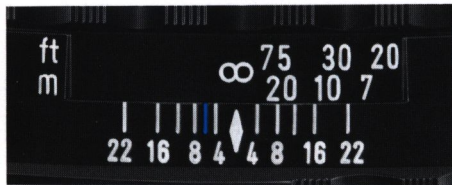
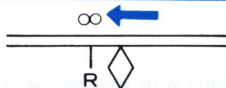
300mm, stand with your legs spread as if you were firing a pistol, and shoot at a slightly leftward angle for added support.

Vertical Shooting with Telephotos: Support the lens with your left hand as shown in the photo on the right below. Added support will be given by holding the camera flat against your forehead.

Handheld telephoto shooting will require some practice; but perfect, blur-free shots are possible in this manner with up to 300mm telephoto.



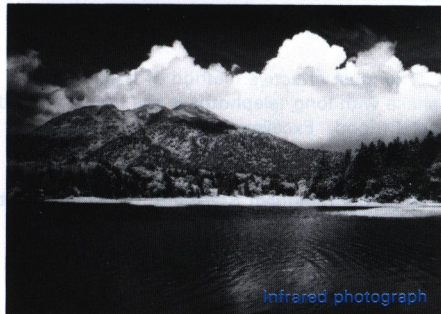
INFRARED PHOTOGRAPHY



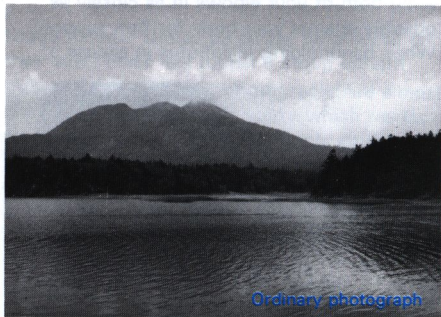
When infrared film is used, the focus of a lens differs somewhat from the norm, and varying degrees of compensation are required which differ from lens to lens. The depth-of-field scale of each 67 lens includes an infrared index mark for focusing with infrared film.

When using infrared film, first, focus in the normal manner; then, check the distance figure aligned with the standard index mark of the focusing ring. Compensate for infrared shooting by rotating the focusing ring until this figure is realigned with the infrared ring index mark. For example, if the distance scale is set at ∞ (infinity) turn the infinity mark so that it aligns with the infrared index as shown in the illustration above the photo.

● Always use an R2 or an O2 filter for infrared photography.



Infrared photograph



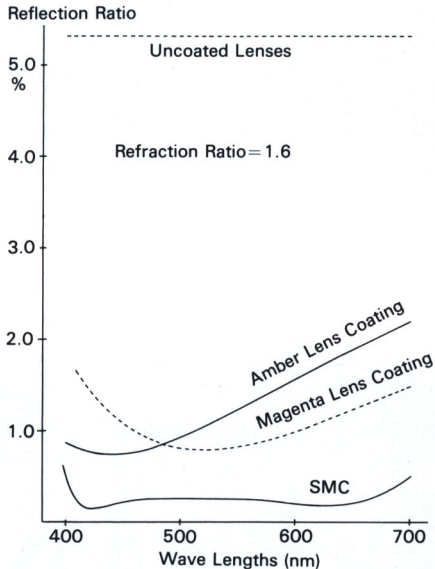
Ordinary photograph

SUPER-MULTI-COATING

Before the 1970's, the use of multilayer lens coating was limited mainly to laizers, window glass for space satellites and special optical equipment. In 1972, however, Asahi Optical broke the barrier by marketing its first series of Super-Multi-Coated (SMC) lenses for use in photographic lenses. Since then, further refinements have lead to the application of Super-Multi-Coating to almost all lens surfaces, making it the most thorough lens coating on any camera lens today.

An uncoated lens has a glass-air interface reflection ratio of about 5% of the incident light, which results in a considerable loss of lens speed. Single-layer coatings and conventional multi-coatings featuring two to three layers further decrease this light loss to between 1% and 2% as indicated in the chart. Even at this level, however, with multiple-element lenses total light loss ranges between 10% 10% and 20%, which still results in low contrast and permits a considerable amount of flare.

Today's SMC Takumar and SMC Pentax lenses feature 7 layers of Super-Multi-Coating on most all elements inside the lens as well as out, and up to an amazing 99.8% of the incident light—which means that the glass-air interface reflection has been reduced to an unprecedented 0.2%. As a result, even the slightest reflections are minimized. Contrast and resolution are increased to give sharper images, while flare and ghost images have been virtually eliminated. In addition, as reflection control is almost flat against the entire range of visible light, color fidelity is improved remarkably, and the reproduction of black tones, often a problem, is strikingly successful.



TRIPOD MOUNTS/VERTICAL SHOOTING WITH LONG TELEPHOTOS

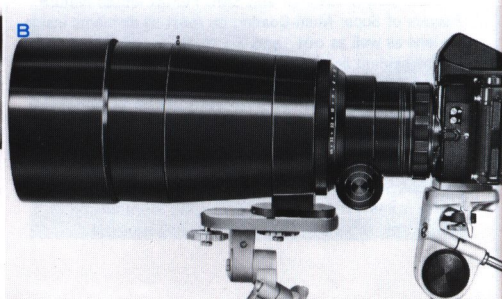
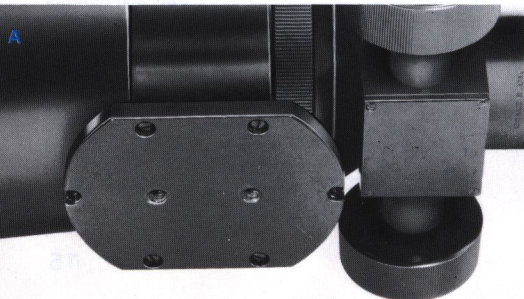
SMC TAKUMAR	400mm f/4
SMC PENTAX	500mm f/5.6
SMC TAKUMAR	600mm f/4
SMC PENTAX M* ED (IF)	800mm f/6.7
SMC TAKUMAR	800mm f/4
SMC REFLEX TAKUMAR	1000mm f/8

CAUTION

With the exception of the 500mm f/5.6 lens the tripod mounts of 67 lenses cannot be removed or rotated.

Tripod Mounts: Long 67 telephoto lenses are quite large and balance would be poor if a tripod were mounted only to the camera body, this could also result in damage to the camera.

Each of the lenses listed on the left feature a built-on tripod mount in order to give the lens added support. As even the slightest movement can cause blur with high-powered 67



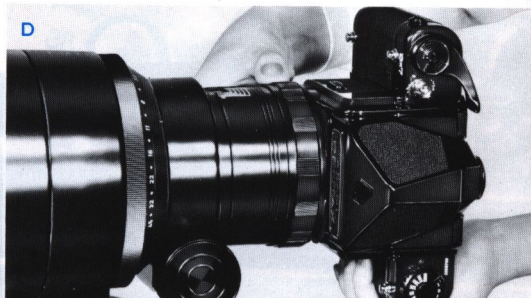
telephoto lenses, a firm, sturdy tripod should be used.

Blur is most pronounced at shutter speeds between $1/60$ and $1/4$ sec. When using long telephotos at these speeds, attach a tripod firmly to the tripod mount as shown in Photo B. Even better results will be assured if a second tripod is attached to the camera body.

6×7 cameras with a mirror-lock feature should be used with the mirror locked up to further reduce the possibility of blur.



Mounting the Camera Vertically: To shoot with the camera in vertical position, slightly loosen the fastener ring shown in Photo C and position it so that the white dot is at a 90-degree angle. Then, insert the lens mount into the camera mount, making sure the bayonet tabs insert properly. Once inserted, tighten the fastener ring by turning it to the left if you are behind the camera. Check that the bayonet has locked properly before letting go of the camera (Photo D).

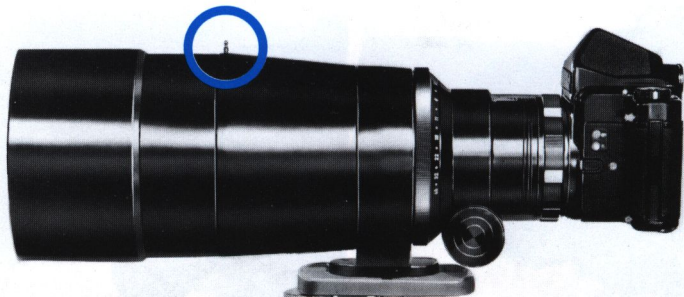


SIGHTING AND FOCUSING WITH LONG TELEPHOTOS

SMC PENTAX	500mm f/5.6
SMC TAKUMAR	600mm f/4
SMC PENTAX M* ED (IF)	800mm f/6.7
SMC TAKUMAR	800mm f/4
SMC REFLEX TAKUMAR	1000mm f/8

Sighting: Most of the subjects shot with a high-powered telephoto lens are at great distances from the camera and are often difficult to bring into the limited angle of view of these lenses. Longer 67 telephotos are equipped with a sight, such as the one pictured below, built onto the top of the lens barrel. Using the sight to locate distant subjects is much easier than trying to sight them directly with the viewfinder.

To use the sight, simply aim the lens at the subject as if you were pointing a rifle at a target and place the subject in the sight. Then, proceed by centering the subject in the finder. The sight is also useful for picking out moving



subjects which would be extremely difficult to locate otherwise.

Focusing: Focusing with the long telephoto lenses (except the 500mm lens) is accomplished via two focusing knobs located opposite each other at the base of the rear of the lens. For accurate focusing, turn both knobs slowly with both hands. When the subject is moving, loosen the panning lever of the tripod and follow the subject by moving the camera with your right hand, while you focus by turning the left focusing knob with your left hand. Be sure to retighten the tripod panning lever after shooting in the above manner: otherwise, the lens may fall forward,



knocking over the tripod.

NOTE:

With certain long telephotos, the focusing ring will not stop at the infinity setting, but may go slightly beyond. This is a design feature which has been provided to compensate in shooting conditions such as extreme heat which prevent the lens from focusing precisely at infinity.



SMC TAKUMAR 90mm f/2.8 LEAF SHUTTER LENS

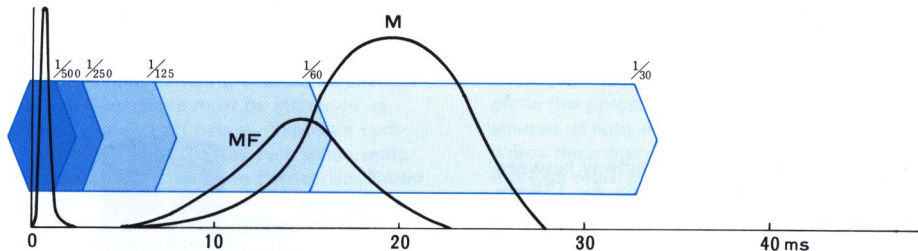


The SMC Takumar 90mm lens is a multi-functional lens with a built-in leaf shutter. It also features its own shutter speed settings from 1/30 to 1/500 sec., which are extremely convenient for overcoming the flash synchronism problems inherent in the focal plane shutter. In addition, it produces easy and efficient multiple exposures and includes a built-in X-flash terminal along with a cable release contact. Basic applications are as follows: (for detailed operating instructions, refer to the instructions accompanying the lens).



1. Used as is without cocking the lens shutter, it functions as a normal standard lens with fully automatic diaphragm action.
2. Use with the lens shutter cocked and the lens' U-S lever set to "U" it provides fill-in flash at speeds from 1/30 to 1/500 sec. (the minimum speed for fill-in flash is 1/30 sec). In this instance, set the camera's shutter speed dial to 1/8 sec. or slower. Then, hook an electronic flash to the lens' X-synch terminal. When you trip the shutter your exposure will be made with the leaf shutter in the lens.

Electronic Flash



3. Used with the lens shutter cocked and the U-S lever set to "S" it may be used for producing multiple exposures and also for reducing camera shake. In this instance, the camera's shutter is locked opened by turning it to the special time setting and tripping the lens shutter. Repeat the process for additional exposures. (Details on the methods for tripping the shutter and multiple exposure techniques are given in the individual instruction manual for this lens.)

Notes on Flash Photography with the Lens Shutter

1. Electronic flash units synchronize at all settings from 1/30 to 1/500 sec.
2. MF and M flash bulbs are the most suitable for bulb flash with the lens shutter. Both types will give full flash at the 1/30 shutter speed setting.
 - MF bulbs will produce half flash at 1/60 sec.
 - FP bulbs will give 2/3 flash at 1/30 sec; 1/5 flash at 1/60 sec.

SMC MACRO TAKUMAR 135mm F4

With a focal length exactly midway between standard and moderate telephoto, the 135mm Macro Takumar allows you to work far enough from the subject for interesting perspective, and leaves ample working space for lighting, etc. At close-up distances it produces extremely sharp images required for close focusing and copy work. In addition, resolution remains sharp without requiring that the lens aperture be stopped down.

This lens has a maximum close-up range from 1/3 to 1/2 life-size and also has the capability for long distance shooting at the infinity setting, giving nearly the same results of a general purpose lens of similar focal length. Nearly distortion-free, it is also excellent for blue prints and related copy work.

magnification settings



Magnifications and Exposure Factors

A reading of 3.2 on the magnification scale indicates that a magnification of $1/3.2$ will be obtained. When metering with an independent light meter, exposure must be increased as indicated in the chart below. Exposure compensation is not required as such when using the accessory TTL metering Pentaprism Finder. However, film reciprocity varies with different films, and required compensation should be made accordingly in compliance with the manufacturer's guide, with or without TTL metering.

In close-up work, the depth of field is generally shallow. Best results can be obtained by preselecting the lens aperture. However, as inbetween shutter speeds are not available, the aperture should be opened up an additional $1/2$ stop at the 1.5 magnification setting. At the "2" setting, lower the shutter speed 1 step, or open up the aperture a full extra stop.

SMC MACRO TAKUMAR EXPOSURE FACTORS

MAGNIFICATION	$\infty - 1/10$	$1/8 - 1/4$	$1/3.7 - 1/3.2$
EXPOSURE FACTOR	$\times 1$	$\times 1.5$	$\times 2$

Why Exposure Compensation is Necessary

With close-ups, the volume of light reaching the film plane decreases by half in proportion to magnification increase. TTL meters overcome this problem by measuring the total amount of light entering the lens. However, unless the meter is located behind the lens, this loss requires compensation.

Irregularities in Color Film

With time exposures in excess of 1 sec. using color film, certain irregularities in film response often lead to underexposure; thus, exposure times often have to be increased at slow speeds. Moreover, with most reverse color films, color reproduction characteristics change with exposures longer than $1/10$ second. However, irregularities can be avoided by using CC filters. Refer to guides published by the respective manufacturer for exact data concerning color reproduction characteristics and required compensation for the film in use.

SMC REFLEX TAKUMAR 1000mm f/8

The 1000mm SMC Takumar Reflex lens is an extremely compact, lightweight and fast lens in proportion to its extensive focal length. The short lens barrel design has been made possible by employment of a system of reflex mirrors. The doughnut-shaped reflex design also creates an interesting out-of-focus high-lighting effect with this lens.



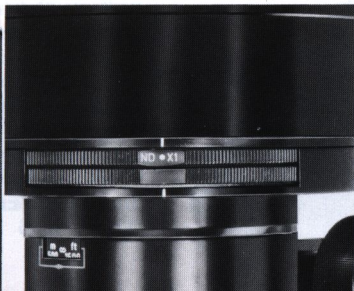
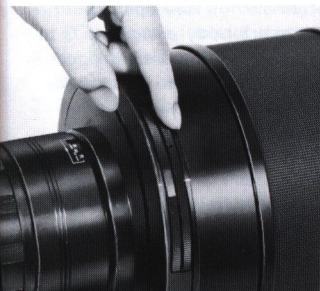
ND FILTER	× 1	× 2	× 2.8	× 4
EQUIVALENT F-NUMBER	8	11	13.5	16

Diaphragms are not employed with the reflex lens design. Light adjustments with the 1000 mm Takumar are made by employing a system of four ND (Neutral Density) filters which are built into the lens and serve as substitutes for lens aperture settings. These do not, however, increase the depth of field as does stopping down a lens. The depth of field for the standard f/8 aperture of this lens remains in effect, regardless of the filter used.

An ND filter ring is located on the rear section of the lens barrel as shown in the photos below. To change filters, rotate the ring until the desired filter aligns with the white index

mark. Be sure the filter click-stops in place or it will not align properly.

The 1000mm Reflex Takumar also has three regular filters built in (Skylight, Y2 and R2). The control ring for these is located adjacent to the ND filter ring at the rear of the lens. Rotate the ring the same as the ND ring until the engraving indicating the desired filter aligns with the index. There is also a blank setting in addition to the three filter settings which features a neutral colorless glass lens. Numerals beside the filter designations on the filter rings indicate filter factors. (Refer to page 11 for instructions on the use of other filters).





This handsome professional case is designed exclusively for the 6×7 system and features a wide-mouth lid that swings fully opened. The case houses the camera body along with 3 to 4 interchangeable lenses and contains pouches and additional space for film and accessories. Lenses bayonet in place inside the case for added security and to enable rapid changes. Extra solid construction with an aluminum outer casing.

Size: 27.5cm (H)×46cm (L)×22.5cm (W)

Weight: 6.95 kilograms

INTERCHANGEABLE LENS ACCESSORIES

Soft Lens Case

A fine looking soft buckskin case which comes in handy for protecting lenses where hard cases would take up too much space.

Fits all 67 lenses from 35mm f/4.5 thru 200mm f/4.



Lens and Body Caps

1. Front Lens Cap (for 67mm lenses)

Covers the front of the lens and protects the front element from scratches when the lens is not being used.

2. Rear Lens Cap A must for storing lenses.

Fits over the rear lens mount and protects both the mount and the rear element.

3. Body Mount Cap Fits over the lens mount on the camera body to protect the inside of the camera without lenses.



1

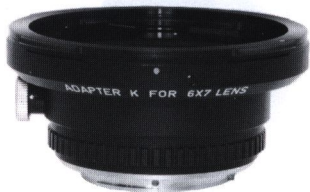


2



3

K & P MOUNT ADAPTORS/6×7 BODY



K & P MOUNT ADAPTORS

Adaptors are available for using 67 lenses with 35mm Pentax-mount cameras. The adaptor range covers 75mm to 1000mm telephoto.

Adaptor K fits SLR's with the Pentax bayonet mount;

Adaptor P fits cameras with the Pentax screw mount (S-Series).

Both adaptors permit both horizontal and vertical mounting.

● Automatic diaphragms do not function when using the adaptors.

Pentax 6×7 Body

Without finders and other accessories, the basic Pentax 6×7 camera body is priced economically enough to permit use of two bodies in your 6×7 system. In addition, a full range of accessories is available, including optional finders and focusing screens, auto bellows, extensions tubes, slide copier, telephoto converters, correction lenses, magnifier, accessory grip and quick focusing ring to name a few. (For details, ask your Pentax dealer for a "6×7 System" brochure.)

LENS SPECIFICATIONS

67 INTERCHANGEABLE LENSES		Lens Construction	Diaphragm	Angle of View	Minimum Focusing Distance(m)	Minimum Aperture	Minimum Diameter (mm)	Length (mm)	Weight (g)	Filter Size (mm)
SMC Fish-Eye-Takumar	35mm f/4.5	7-11	FA	180°	0.45	22	102	73	920	●
SMC Pentax	45mm f/4	8-9	FA	89°	0.37	22	91.5	57.5	485	82
SMC Pentax	55mm f/4	8-9	FA	78°	0.40	22	91.5	75.5	615	77
SMC Takumar	75mm f/4.5	4-5	FA	61°	0.70	22	91.5	81	600	82
SMC Pentax Shift	75mm f/4.5	8-9	M	61°	0.70	32	97	106.5	950	82
○ SMC Takumar	90mm f/2.8	5-6	FA	53°	0.85	22	91.5	63	610	67
SMC Pentax	90mm f/2.8	5-7	FA	53°	0.65	22	91.5	49	485	67
SMC Takumar	105mm f/2.4	5-6	FA	46°	1.00	22	91.5	60	615	67
SMC Macro-Takumar	135mm f/4	3-5	FA	36.5°	0.75	32	91.5	95	645	67
SMC Pentax	165mm f/2.8	5-6	FA	30°	1.6	22	91.5	98.5	835	67
SMC Takumar	200mm f/4	4-4	FA	25°	2.50	22	91.5	120	900	67
SMC Takumar	300mm f/4	5-5	FA	17°	5.00	45	93	186	1,430	82
SMC Takumar	400mm f/4	5-5	M	12.5°	8.00	45	115	287	2,570	77
SMC Pentax	500mm f/5.6	4-4	FA	10.2°	8.00	45	106.5	398	3,200	95
SMC Takumar	600mm f/4	5-6	M	8.5°	12.00	45	170	370	6,000	77
* SMC Pentax M*ED (IF)	800mm f/6.7	8-9	FA	6.4°	8.00	45	150	565	6,500	67
SMC Takumar	800mm f/4	6-6	M	6.4°	20.00	45	236	611	17,700	77
SMC Reflex-Takumar	1000mm f/8	4-6	●	5.1°	35.00	—	180	352	6,660	77

SMC=Super-Multi-Coated FA=Fully Automatic M=Manual ●UV,Y2,O2 & R2 filters built-in ●ND filter built-in ●Y2,R2 & ND filters built-in
 ED=Extra-low Dispersion IF=Inner Focus * When 800mm f/6.7 lens is combined with a Rear Converter T5-1.4x, it functions as a 1120mm f/9.5
 super telephoto lens. ○With a built-in leaf shutter



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