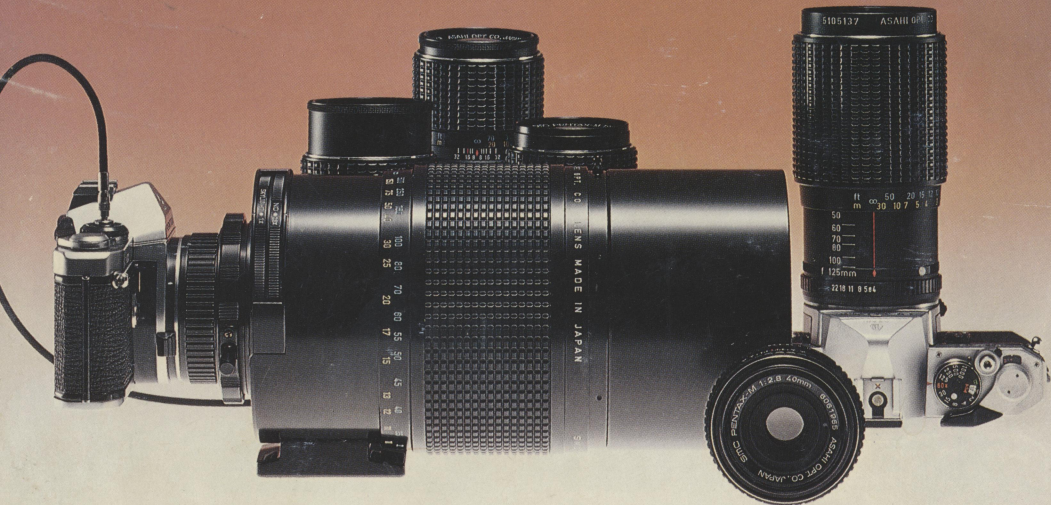


ASAHI

PENTAX

LENSES AND ACCESSORIES



Winder - 1253646 ; Nov. 23, 1978

MX - 9148525

ME - 9893811 ; Nov. 23, 1978

Wistar 135²⁸ 28701347 ; Nov. 23, 1978

Quantaray 28²⁸ 20460 ; Sept. 1977

Pentax 50, 1.4 - 2429649

INDEX

The new enlarged family of SMC Pentax lenses	2
The advantages of interchangeable lenses	3
Super-Multi-Coating: Why SMC Pentax lenses are the finest in the world	3
Choosing your SMC Pentax lenses	4
Fish-eye lens	8
Ultra-wide-angle lenses	9
Wide-angle lenses	11
Standard lenses	14
Telephoto lenses	17
Ultra-telephoto lenses	21
Zoom lenses	24
Macrophotographic lenses	26
Shift lens	27
Specifications of SMC Pentax lenses	28
Asahi Pentax accessories: Preface	32
Lens accessories	33
Close-up accessories	38
Copying accessories	45
For critical focusing	47
For flash photography	49
For photomicrography	52
For special photography	53
Lens adaptors	54
Cases and bags	55
Miscellaneous	58
For professional photography	60

THE NEW ENLARGED FAMILY OF SMC PENTAX LENSES



THE ADVANTAGES OF INTERCHANGEABLE LENSES

THE UNIQUE BAYONET MOUNT OF THE PENTAX MX, ME, K2, KX AND KM ALLOWS INSTANT AND PRECISE LENS INTERCHANGEABILITY.

Today, the single-lens reflex (SLR) offers maximum versatility and handling ease, for focusing is done directly on the large, bright focusing screen of the viewfinder which shows exactly what will be recorded by the film.

Among the many benefits of an SLR are the facts that ultra-close-up (macro) photography and accurate through-the-lens metering are readily accomplished. But the most notable advantage of all is that the lenses are freely interchangeable. It is for this very reason that SLR's are now widely used throughout the world.

INTERCHANGEABLE LENSES ARE ECONOMICAL.

If you were to purchase a wide-angle and a telephoto lens in addition to the standard lens of your camera, you would effectively own three cameras: a wide-angle lens camera, a standard lens camera, and a telephoto lens camera. Each additional lens you purchase is equivalent to purchasing an additional camera. Thus, inter-

changeable lenses offer the user considerable savings. Not only are interchangeable lenses economical, but they permit one to instantly change from wide-angle to telephoto, for example, on the same roll of film.

This is not to imply, however, that you should purchase as many lenses as possible. It is only to help you realize and take advantage of the enormous capabilities of your Pentax camera. The purpose of this booklet is to assist you in selecting the SMC Pentax lenses best suited to your needs.

SUPER-MULTI-COATING: WHY SMC PENTAX LENSES ARE THE FINEST IN THE WORLD

A lens is an amazing device for capturing light rays. However, even under normal conditions a significant percentage of those rays may be lost through internal reflection — reflections within the lens that cause ghosts, flare and an overall loss of contrast.

To combat this, Asahi Pentax applies a 7-layer chemical coating to most glass surfaces of every SMC Pentax lens. Thanks to this Super-Multi-Coating, internal reflection is reduced to less than 0.2%. Contrast is heightened, details are brightened, colors are truer — and flare and ghost images are practically eliminated. No wonder SMC

Pentax lenses are now recognized by professional photographers as being among the finest in the world.

CHOOSING YOUR SMC PENTAX LENSES

1. POINTS FOR CONSIDERATION

The four points most frequently considered when choosing lenses are the following:

- a. Focal length/angle of view
- b. Maximum aperture
- c. Dimensions and weight
- d. Price

2. THE RELATIONSHIP BETWEEN IMAGE SIZE AND FOCAL LENGTH

When camera-to-subject distance remains constant, image size (magnification) is dependent upon focal length.

For example, when a 135mm lens is used, the image will appear 2.7x larger than that of a 50mm standard lens used at the same distance. Long focal length lenses (longer than approx. 50mm) are referred to as TELEPHOTO LENSES.

When a 28mm lens is compared to a 50mm lens, image size or magnification is 0.56x that of the standard lens. In other words, the image will appear slightly larger than 1/2 the image produced by the 50mm lens. The reason for using a 28mm

lens is not to deliberately shrink image size, but (as explained later) to increase the angle of view. It is for this reason that lenses with a focal length shorter than approx. 50mm are called WIDE-ANGLE LENSES.

3. CAMERA-TO-SUBJECT DISTANCE, FOCAL LENGTH AND IMAGE SIZE

When the camera-to-subject distance is changed in proportion to the focal length, image size remains constant. For example, when the same subject is photographed from 10 meters with a 50mm lens, 27 meters with a 135mm lens, and 5.6 meters with a 28mm lens, image size will be the same.

4. THE RELATIONSHIP BETWEEN FOCAL LENGTH AND ANGLE OF VIEW

The shorter the focal length of a lens, the wider the angle of view; the longer the focal length of a lens, the narrower the angle of view. For example, a 28mm wide-angle lens has an angle of view of 75° while a 24mm wide-angle lens has an angle of view of 84°. The angle of view is 18° for a 135mm telephoto lens, but it is 12° for a 200mm telephoto lens.

5. THE NEED FOR TELEPHOTO LENSES

At times, it is impossible to approach the

subject close enough to obtain a satisfactory image size. Of course, the negative can be cropped and greatly enlarged, but it is an unsatisfactory solution because of the resultant loss of sharpness and increase in grain. It is at just such a time that the need for a telephoto lens most clearly manifests itself.

6. THE NEED FOR WIDE-ANGLE LENSES

When photographing a group of people indoors, it is sometimes impossible to include everyone, even if you stand in the furthest corner of the room. Similarly, it is often impossible to photograph a large church, for example, or a panoramic scene with the 50mm standard lens. On such an occasion the need for a wide-angle lens is strongly felt.

7. WHICH SHOULD I PURCHASE FIRST, A WIDE-ANGLE OR A TELEPHOTO LENS?

Before attempting to make the above decision, it is necessary to use the 50mm or 55mm standard lens for about three months. After this period, it will become clear to you which need is greater by simply asking yourself which type of situation you most frequently encounter, No. 5 or No. 6 mentioned above.

8. WHAT FOCAL LENGTH LENS SHOULD I PURCHASE FIRST?

It would be inadvisable for a beginner, who is accustomed to using only the standard lens, to suddenly purchase an ultra-wide-angle or ultra-telephoto lens, for the enormous difference in angle of view would most likely confuse him. The key to success, in any field, is to advance a step at a time.

Those lenses considered to be ultra-wide-angle are the 24mm, 20mm, 18mm, and 15mm; we can also include the 17mm Fish-eye. Lenses representing ultra-telephoto are the 300mm, 400mm, 500mm, and 1000mm focal lengths.

Thus, the clever beginner will select the 28, 30, or 35mm as his first wide-angle and the 85, 100, 120, or 135mm as his first telephoto lens.

9. WHAT ABOUT LENS SPEED?

The maximum aperture of a lens is often referred to as the "speed" of a lens. An f/2 lens, for example, is said to be "faster" than an f/4 lens since faster shutter speeds are usually used at larger lens openings; just how much more or less light enters the lens, when f/2 is compared to other maximum apertures, is indicated in the chart on page 6.

For example, if a picture is taken with an f/2 lens at f/2 (diaphragm completely open), and the same picture is taken with an f/4 lens at f/4, only 1/4 of

the amount of light will reach the film with the f/4 lens. Therefore, the shutter speed must be 4x longer to compensate for the loss of light. Of course, if both of the above lenses are used at the same aperture, for example f/8, the amount of light reaching the film will be exactly the same. Generally speaking, if one desires to take pictures indoors, with the camera handheld and without the use of a flash unit, an f/2 or "faster" (f/1.4, f/1.2) lens will be required. For brightly-lit interiors, an f/2.5 or f/2.8 lens should suffice. If the lens is just to be used outdoors, a maximum aperture of f/3.5, f/4, or f/4.5 will be sufficient. Thus, if you wish to purchase an SMC Pentax 35mm lens, you have a choice of an f/2 or f/2.8. Similarly, if you wish to buy a 135mm lens, you can select from the f/2.5 and f/3.5 lenses.

10. DIMENSIONS AND WEIGHT

Twenty-five of the SMC Pentax lenses are so compact and lightweight that they do not require the use of a tripod. For handheld lenses, you can choose from the 17mm Fish-eye to the 200mm telephoto. Also included is the 45 ~ 125mm zoom lens.

Maximum Aperture	1.2	1.4	2	2.5	2.8	3.5	4	4.5	5.6	8
Amount of Light	2.8x	2x	1	Approx. 2/3x	1/2x	Approx. 1/3x	1/4x	1/5x	1/8x	1/16x

11. PURCHASING TWO LENSES SIMULTANEOUSLY

- a. **Wide-angle and telephoto.** If two lenses are to be purchased simultaneously, the most common choice is that of a wide-angle and a telephoto. However, depending upon the needs of the individual, some users prefer to select two wide-angle or two telephoto lenses. Among those selecting a wide and tele, the most usual procedure is to select a focal length that is relatively close to the standard lens (and consequently easy to handle). Thus, for the wide-angle, the 35mm is most popular, and for the telephoto lens, the 85, 105, or 120mm is usually chosen. For those wishing to travel light, the 85mm and 35mm are often used while the standard lens is left at home. Although we can not say it is the best choice for everyone, those seeking optimum flexibility often choose to use a 28mm and 135mm lens along with their standard lens.
- b. **Two wide-angles.** The most frequently selected pair of wide-angle lenses is the 35 and 28mm

set, although a new trend exhibited by camera enthusiasts favoring wide-angle lenses is to select the 28 and 24mm focal lengths.

- c. **Two telephotos.** For those who favor telephoto lenses, the 135 and 200mm combination proves to be most popular. For maximum versatility the following combinations are recommended (they are listed in order of usefulness for the average amateur): 85 & 135mm, 100 & 150mm, 120 & 200mm. Not only is the 85mm moderate telephoto lens ideal for portraits, but it also excels as a lens for scenics whenever the angle of view of the standard lens proves too wide.
- d. Whatever your choice, a wide and tele, two wide-angles, or two telephotos, it would be a good idea to first purchase the focal lengths that are relatively close to the standard lens. Extreme (ultra) wide and tele lenses are much more difficult for the beginner to master than are their moderate focal length cousins.

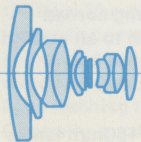
12. SPECIAL NEEDS.

- a. **Macrophotography.** For those who are chiefly interested in macro (close-up) photography there are the 50 and 100mm macro lenses.
- b. **Versatility with a single lens.** For versatility without the need to change lenses, the 45 ~

- 125mm and 85 ~ 210mm zoom lenses are ideal.
- c. **When traveling abroad.** When going abroad and desiring to keep weight down to an absolute minimum, the 28mm lens is ideal as it can encompass picturesque buildings and panoramic landscapes.
- d. **For sports events.** The 135 and 150mm lenses are very useful at sports events.

13. THE WORLD OF INTERCHANGEABLE LENSES

For those who have mastered the standard, moderate wide, and moderate tele lenses; for those who wish to capture dramatic "close-ups" of wild life, or fill the frame with the slowly sinking sun; for those seeking new and fantastic perspective; in a word, for those who wish to be introduced to new worlds of photographic expression, there are the SMC Pentax 300, 400, 500, and 1000mm ultra-telephotos, as well as the 17mm Fish-eye, 135 ~ 600mm telephoto zoom, and 15, 18 and 20mm ultra-wide-angle lenses to choose from.



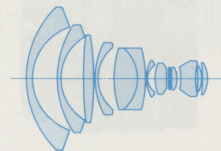
SMC PENTAX FISH-EYE 17mm f/4

The world's most efficient fish-eye lens with a maximum brightness of f/4. The angle of view is approx. 180°, enabling you to view and focus through the viewfinder without locking the reflex mirror up.



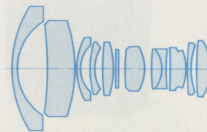
SMC PENTAX 15mm f/3.5

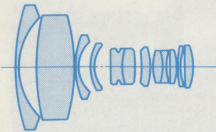
This is an ultra-wide-angle lens with a 111° diagonal field of view and a 100.5° horizontal field of view. An angle of view so large that it will encompass the tallest building or engulf a sweeping landscape. All traces of distortion, even at the edges, have been virtually eliminated, because of its unique optical design. In addition to a colorless filter, there are four built-in filters: UV, Skylight, Y2, O2.



SMC PENTAX 18mm f/3.5

This lens lies between the SMC Pentax 15mm f/3.5 and 20mm f/4 ultra-wide-angle lenses in order of focal length. Compared to the 20mm f/4 ultra-wide, the 18mm f/3.5 offers additional lens speed (f/3.5 vs f/4), greater coverage (100° vs 94°), and four built-in filters. In addition to the built-in filters, the 18mm f/3.5 has provision to accept gelatin filters at the rear of the lens, which is not feasible on the 15mm f/3.5 because of its protruding rear element.



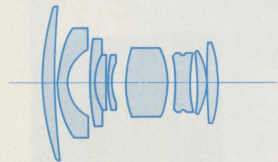


SMC PENTAX 20mm f/4

Relatively compact ultra-wide-angle lens, with a 58mm screw-in filter diameter. Useful for almost every kind of wide-angle photography, especially when photographing sweeping landscapes and towering structures, or when desiring extensive depth of field.

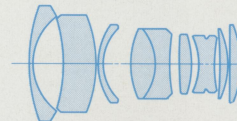
SMC PENTAX 24mm f/2.8

This 24mm optic offers a maximum aperture of f/2.8, which not only makes available-light photography more accessible to the photographer, but also simplifies focusing because of the shallower depth-of-field and brighter image. Moreover, despite its large maximum aperture, it weighs about the same as the standard SMC Pentax-M 50mm lens.



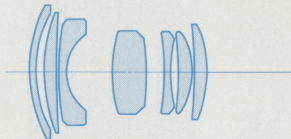
SMC PENTAX 28mm f/2

This lens utilizes a deluxe lens construction of 9 elements in 8 groups, including a floating group of elements to completely eliminate aberrations. Thus, both outstanding performance and high speed are characteristics of this lens.



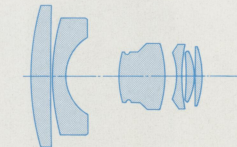
SMC PENTAX-M 28mm f/2.8

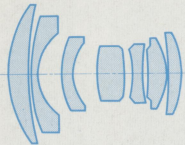
The ideal wide-angle lens for the photographer for whom light weight and compactness are of prime importance. At 156g it is the second lightest in weight and shares the same 49mm filter size as the SMC Pentax-M standard lenses.



SMC PENTAX-M 28mm f/3.5

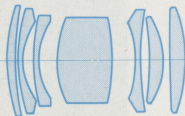
Its wide angle of view (75°), outstanding optical performance, compact size, and moderate price make this wide-angle lens extremely appealing. It is virtually the same in size and weight as the compact SMC Pentax-M 50mm f/1.7 standard lens and shares the same 49mm filter size. Boasting a new lens construction of 6 elements in 6 groups, this new optic attains new heights in resolution and contrast, making it an ideal general purpose wide-angle lens.





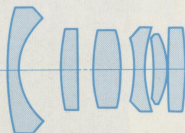
SMC PENTAX 30mm f/2.8

The perfect solution for those trying to choose between the 35 and 28mm focal lengths, as it lies between the two, making an excellent compromise. Other attractive features include light weight and ample (f/2.8) lens speed.



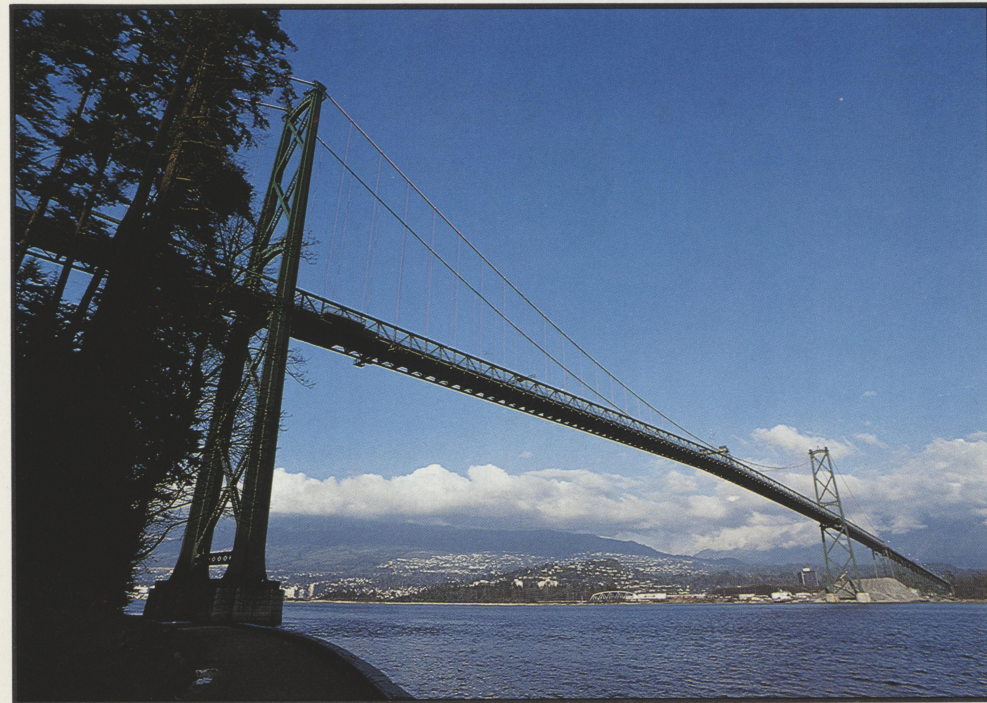
SMC PENTAX-M 35mm f/2

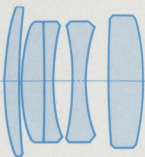
A masterpiece in optical design, because it retains the same lens speed and superb optical performance of its predecessor, the SMC Pentax 35mm f/2, which was 33% greater in length, 36% greater in weight, and used 52mm filters instead of 49mm.



SMC PENTAX-M 35mm f/2.8

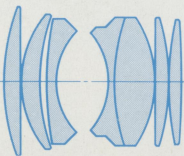
For those not requiring the one stop additional speed offered by the 35mm f/2 model, the SMC Pentax-M 35mm f/2.8 will be found very attractive, as it is approximately 20% lighter in weight and, needless to add, more attractively priced.





SMC PENTAX-M 40mm f/2.8

The incredible standard lens everyone is speaking about. A mere 18mm in depth and 110g in weight, it represents the ultimate in compactness. Moreover, offering 10° more coverage than a 50mm lens, it is extremely versatile.

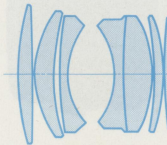


SMC PENTAX 50mm f/1.2

A superlative standard lens, created out of Asahi Pentax's rich experience in the field of optical technology. Excellent in contrast and resolution, and suited for almost all picture-taking needs.

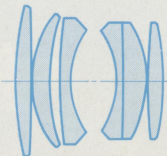
SMC PENTAX-M 50mm f/1.4

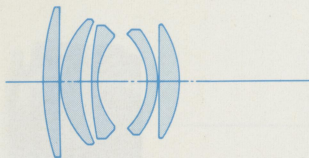
Designed in keeping with the compactness of the Pentax ME and MX cameras, this high speed standard lens weighs approximately 20% less than most other lenses of similar focal length and lens speed, and is one of the very few accepting 49mm filters.



SMC PENTAX-M 50mm f/1.7

An excellent choice for those seeking both compactness and high speed combined in a single lens. It is more than a full stop faster than the SMC Pentax-M 40mm f/2.8 lens, as well as 16% shorter and 20% lighter than the SMC Pentax-M 50mm f/1.4 lens.





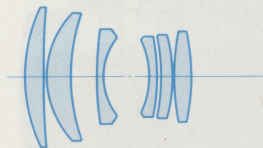
SMC PENTAX-M 50mm f/2

Slightly longer in focal length than the 40mm standard lens, this lens offers more pleasing perspective for portraiture. Additionally, it is "fast" enough for use in dim light without the need of flash.



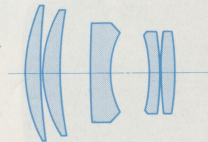
SMC PENTAX 85mm f/1.8

Creates a soft-focus effect in the areas just beyond the depth-of-field. Ideal for portraiture, indoors or out. The moderate distance required between the photographer and the subject makes this lens particularly excellent for pictures of children, animals, night time street scenes, illuminated buildings, and for theater and ceremonial pictures.



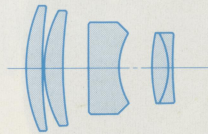
SMC PENTAX-M 100mm f/2.8

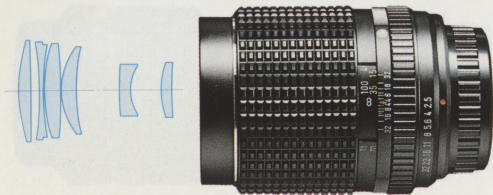
Although this lens is 15mm longer in focal length than the 85mm f/1.8, it is physically 1/2 millimeter shorter in length and weighs 32% less, making it an ideal telephoto lens. Moreover, it shares the 49mm filter size of the SMC Pentax-M standard lenses.



SMC PENTAX 120mm f/2.8

Extremely versatile, light-weight and compactly designed. Useful for snapshots, portraiture and other kinds of telephotography.

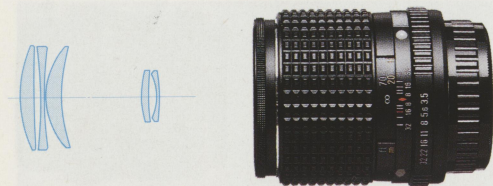


**SMC PENTAX 135mm f/2.5**

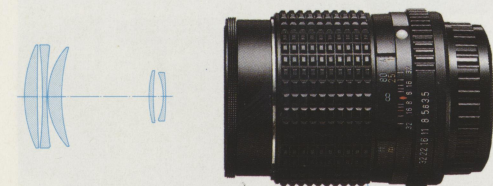
One of the fastest of the SMC Pentax telephoto lenses. Well-balanced and lightweight with an unusually short lens barrel. Ideal for night scenes, theater shooting, sports and snapshot portraits. Highly effective for color photography.

SMC PENTAX-M 135mm f/3.5

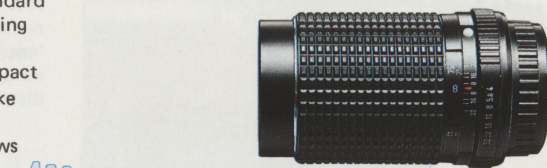
Here is a lens that offers 2.7x greater magnification than the SMC Pentax-M 50mm f/1.4 lens and yet weighs only 13% more. It is ideal for all applications of telephotography: portraiture, wildlife, sports, and candid photography.

**SMC PENTAX-M 150mm f/3.5**

21mm shorter and 50g lighter than its highly popular predecessor, this new, compact 150mm lens weighs less than the standard SMC Pentax 50mm f/1.2 lens while offering 3x magnification. You will find this handheldable telephoto lens the ideal solution for following action, as well as useful for candid photography, portraiture, and "close-ups" of distant subjects. Moreover, while its size has been reduced, the already outstanding optical performance of the previous model has been further enhanced in the compact SMC Pentax-M 150mm f/3.5 telephoto lens.

**SMC PENTAX 150mm f/4**

Having three times the focal length of the standard lens, this lens is particularly suitable for shooting subjects which require an intermediate angle between the 135mm and 200mm lenses. Compact and lightweight, this lens looks and handles like a 135mm lens, and is only 7mm longer. Excellent for candid shots, scenics, sports, news events, stage performances, nature, etc.

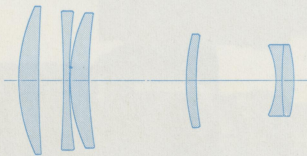
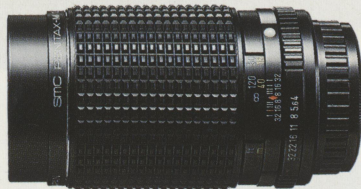
**SMC PENTAX 200mm f/2.5**

In testimony of its role as a leader in the field of optics and ever mindful of the needs of the professional photographer, Asahi Optical has introduced the first 200 lens with an f/2.5 maximum aperture. This ultra high-speed telephoto lens is well suited for available light photography, such as at indoor and nighttime sporting events. Even when used wide-open, its 6 element, 6-group optical design ensures high contrast and definition, as well as attractive out-of-focus highlights.

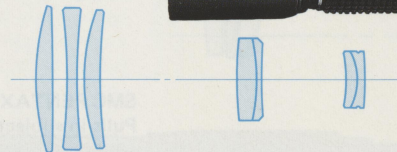


SMC PENTAX-M 200mm f/4

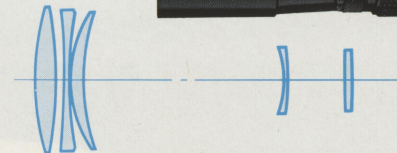
It is easy to smash the distance barrier when you are working with this 4x magnification telephoto lens. Furthermore, the shallow depth of field automatically isolates your subject from a distracting background.

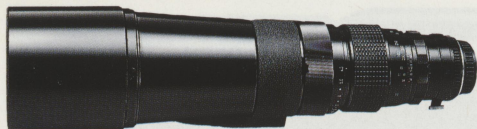
**SMC PENTAX 300mm f/4**

Light enough for handheld shooting, this lens provides spectacular telephotographic effects. Even with the diaphragm fully open, aberrations are reduced to a minimum. Gives needle-sharp resolution to every picture.

**SMC PENTAX 400mm f/5.6**

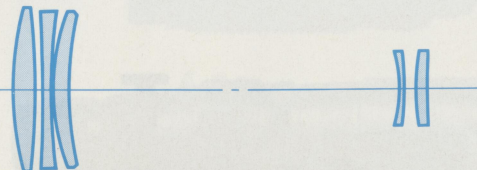
Ideal for professionals, especially for outdoor sports, news and night-life photography. For a lens with a focal length of 400mm, it is extremely compact and light in weight.





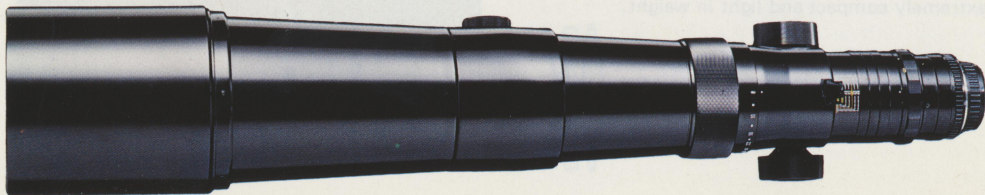
SMC PENTAX 500mm f/4.5

Compact and lightweight for such a high-performance lens, this powerful long-focus lens brings the inaccessible within reach. The image is bright enough to make composing and focusing easy, and produces edge-to-edge coverage with very high resolution.



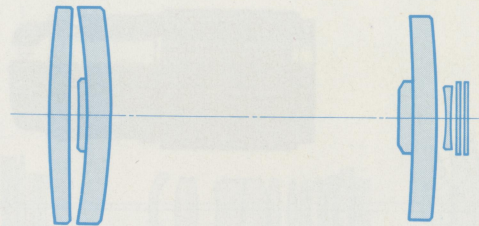
SMC PENTAX 1000mm f/8

Pulls in subjects which are too far away even to be seen by the naked eye. The ultimate in fine optics for the photographer who specializes in news, sports, scientific and wildlife photography. Fast, accurate focusing with manual diaphragm. Furnished with built-on lens hood (optional wooden tripod).



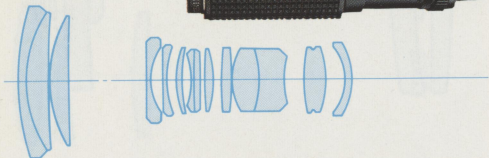
SMC PENTAX REFLEX 1000mm f/11

The Reflex 1000mm f/11 is approximately 1/3 that of the SMC Pentax 1000mm f/8 in length, and less than half of it in weight. In addition to its highly welcome portability, this new reflex optic focuses down to 8m, equalling the minimum focusing distance of most 400mm lenses while offering 2.5x additional magnification.

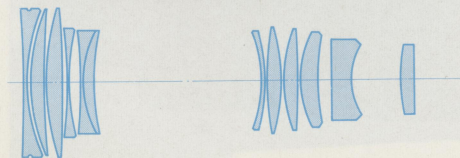




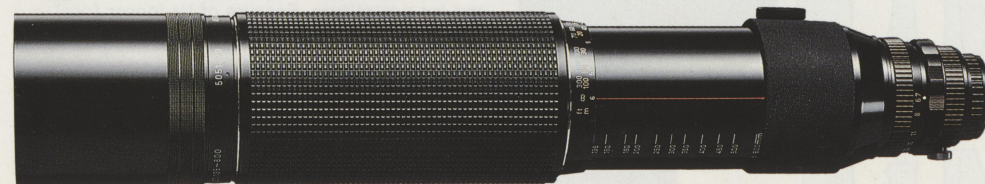
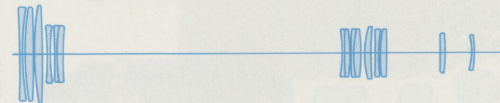
SMC PENTAX ZOOM 45 ~ 125mm f/4
A multi-purpose lens capable of doing the work of half a dozen lenses: 45, 50, and 55mm standard lenses, as well as 85, 100, and 125mm telephoto lenses (and everything in-between). Zooming ratio is 3:1, and a broad focal length of 45mm to 125mm can be achieved in spite of its relatively short barrel. Useful for a wide scope of photographic assignments: landscapes, action shots, portraiture, travel shots, etc.

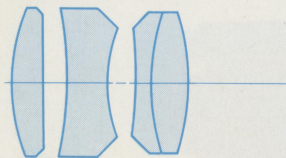


SMC PENTAX ZOOM 85 ~ 210mm f/3.5
Special features of this lens include its relatively large aperture of f/3.5 (approximately one stop faster than its f/4.5 counterpart), extended focusing to 1.9m, and a new optical formula to assure exceptional quality at all distances and focal lengths.

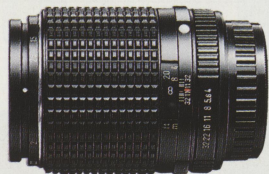
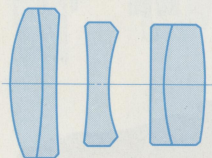


SMC PENTAX ZOOM 135 ~ 600mm f/6.7
Provides remarkable sharpness and contrast for its zooming ratio. The single action zooming of this lens makes it highly useful for professional sports, press and wildlife photographers.

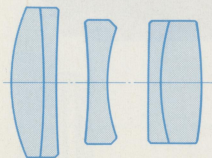




SMC PENTAX-M MACRO 50mm f/4
Designed chiefly for excellence in macrophotographic work, this highly versatile lens can also be used as a standard focal length lens. In combination with a Reverse Adaptor K, it can also provide greater-than-life-size magnification.

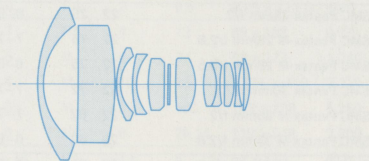


SMC PENTAX M MACRO 100mm f/4
Suitable for close-up and macrophotography, as well as normal shooting. Especially useful for shooting nature pictures, for reproduction work and for portraiture. Because of its longer focal length, this lens provides greater magnification than the Macro 50mm f/4.



SMC PENTAX BELLOWS 100mm f/4
This compact and lightweight lens and a Pentax Bellows unit K is all you need to be prepared for all types of nature studies. Whether it is a blackbird perched on a tree, a pine cone dangling from a branch, or an insect basking in the sun, they are all within your grasp, as the SMC Pentax Bellows 100mm f/4 offers uninterrupted focusing from infinity to greater than life-size.

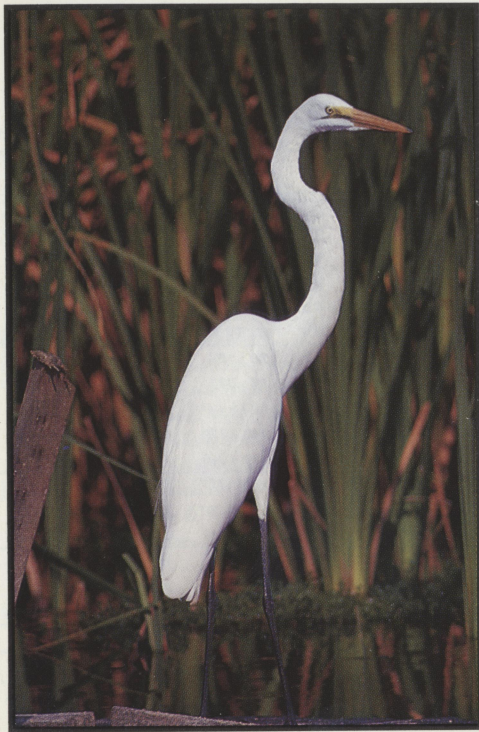
SMC PENTAX SHIFT 28mm f/3.5
A problem constantly plaguing photographers, especially in architectural photography, is that of converging lines. This lens is the intelligent solution to the above dilemma. More than merely a solution, it serves as creative tool. For one always has a choice of correcting, not correcting, or overcorrecting to achieve the most attractive, dynamic, or creative effect. And because the shifting movement is continuously variable, any in-between setting may be used to accomplish the perfect effect.



● Type	● Name of Lens	● Minimum Aperture		● Angle of View (Degrees)	● Lens Construction (Groups-Elements)	● Diaphragm	● Minimum Focusing Distance		● Maximum Diameter & Length (φmm x mm)	● Weight		● Filter Size (mm)
		mm	ft.				m.	ft.		gr.	oz.	
Fish-eye	SMC Pentax Fish-Eye 17mm f/4	22	180	7-11	FA		0.2	0.66	64.5 x 34	234	8.19	BI
Ultra-wide-angle	SMC Pentax 15mm f/3.5	22	111	12-13	FA		0.3	1.0	80 x 81.5	550	19.25	BI
	SMC Pentax 18mm f/3.5	22	100	11-12	FA		0.25	0.79	63 x 61.5	328	11.48	BI
	SMC Pentax 20mm f/4	22	94	10-12	FA		0.25	0.8	63 x 57	300	10.5	58
	SMC Pentax 24mm f/2.8	22	84	8-9	FA		0.25	0.79	63 x 41.5	194	6.79	52
	SMC Pentax 28mm f/2	22	75	8-9	FA		0.30	1.0	62.5 x 69	423	14.8	52
Wide-angle	● SMC Pentax-M 28mm f/2.8	22	75	7-7	FA		0.30	1.0	63 x 31	156	5.50	49
	● SMC Pentax-M 28mm f/3.5	22	75	6-6	FA		0.30	1.0	63 x 31.5	180	6.35	49
	SMC Pentax 30mm f/2.8	22	72	7-7	FA		0.30	1.0	63 x 39.5	215	7.52	52
	● SMC Pentax-M 35mm f/2	22	62	7-7	FA		0.30	1.0	63 x 42	205	7.18	49
	● SMC Pentax-M 35mm f/2.8	22	62	6-6	FA		0.30	1.0	63 x 35.5	174	6.14	49
	● SMC Pentax-M 40mm f/2.8	22	56	4-5	FA		0.60	2.0	63 x 18	110	3.88	49
Standard	SMC Pentax 50mm f/1.2	22	46	6-7	FA		0.45	1.5	65 x 48.5	385	13.48	52
	● SMC Pentax-M 50mm f/1.4	22	46	6-7	FA		0.45	1.5	63 x 37	238	8.4	49
	● SMC Pentax-M 50mm f/1.7	22	46	5-6	FA		0.45	1.5	63 x 31	185	6.53	49
	● SMC Pentax-M 50mm f/2	22	46	5-5	FA		0.45	1.5	63 x 31	170	6.0	49
	● SMC Pentax-M 50mm f/2	22	46	5-5	FA		0.45	1.5	63 x 31	170	6.0	49
Telephoto	SMC Pentax 85mm f/1.8	22	29	6-6	FA		0.85	2.75	64 x 56	331	11.59	52
	● SMC Pentax-M 100mm f/2.8	22	24.5	5-5	FA		1.0	3.3	62.5 x 55.7	225	7.88	49
	SMC Pentax 120mm f/2.8	32	21	4-5	FA		1.2	4	62.5 x 74.5	355	12.43	52

● Type	● Name of Lens	● Minimum Aperture		● Angle of View (Degrees)	● Lens Construction (Groups-Elements)	● Diaphragm	● Minimum Focusing Distance		● Maximum Diameter & Length (φmm x mm)	● Weight		● Filter Size (mm)
		mm	ft.				m.	ft.		gr.	oz.	
Telephoto	SMC Pentax 135mm f/2.5	32	18	6-6	FA		1.5	5	67.5 x 85.9	470	16.45	58
	● SMC Pentax-M 135mm f/3.5	32	18	5-5	FA		1.5	5	62.5 x 65.7	276	9.74	49
	● SMC Pentax-M 150mm f/3.5	32	17	5-5	FA		1.8	6	62.5 x 75	290	10.23	49
	SMC Pentax 150mm f/4	32	17	5-5	FA		1.8	6	62.5 x 96	338	11.83	52
	SMC Pentax 200mm f/2.5	32	12	6-6	FA		2.0	6.5	89 x 145	1019	35.9	77
	● SMC Pentax-M 200mm f/4	32	12	5-6	FA		2	6.5	63.5 x 111.0	405	14.18	52
Ultra telephoto	SMC Pentax 300mm f/4	32	8	5-7	FA		4	13	85 x 188	942	32.97	77
	SMC Pentax 400mm f/5.6	45	9	5-5	M		8	27	85 x 277	1,240	43.4	77
	SMC Pentax 500mm f/4.5	45	5	4-4	M		10	35	126.5 x 440	3,330	116.6	52
	SMC Pentax 1000mm f/8	45	2.5	5-5	M		30	100	143 x 738	5,250	183.8	52
	SMC Pentax Reflex 1000mm f/11	—	2.5	4-6	ND		8	26.24	119 x 248	2,300	80.5	BI/52
	SMC Pentax Zoom 45~125mm f/4	22	50.5-20	11-14	FA		1.5	5	69 x 127	612	21.42	67
Zoom	SMC Pentax Zoom 85~210mm f/3.5	32	29-12	11-12	FA		3.5	6.23	76.5 x 207.5	1,050	36.75	67
	SMC Pentax Zoom 135~600mm f/6.7	45	18-4	12-15	M		6	20	105 x 582	4,070	142.5	52
	● SMC Pentax-M Macro 50mm f/4	32	46	3-4	FA		0.234	0.77	63 x 42.5	160	5.6	49
Macro	● SMC Pentax-M Macro 100mm f/4	32	24.5	3-5	FA		0.45	1.48	64.6 x 77.5	355	12.43	49
	SMC Pentax Bellows 100mm f/4	32	24.5	3-5	FA/M		—	—	60 x 40	186	6.51	52
	SMC Pentax Shift 28mm f/3.5	22	75	11-12	M		0.3	1.0	80 x 92.5	611	21.39	BI
Shift												

BI... Filters built-in FA... Fully automatic M... Manual ND... ND filters built-in ●... Supplied only with K 1000 ●... Compact lens



Taken with Asahi Pentax ME and
SMC Pentax-M 50mm lens.

Taken with Asahi Pentax MX and
SMC Pentax-M 200mm lens.



ASAHI PENTAX ACCESSORIES: TO BROADEN YOUR PHOTOGRAPHIC HORIZONS

To help you get the most out of the Asahi Pentax camera you've just bought, on the following pages you will find descriptions of the broad range of accessories Pentax offers. By selecting various items from these pages, you can actually tailor an entire "Pentax System" to your own particular photographic needs. And naturally if you have any questions or problems, your Asahi Pentax dealer is always ready to help.

FILTERS

Filters have an important function in photography. They affect some of the light rays which pass through to the film so that the color or nature of this light is changed.

Filters may be classified roughly into three groups: (1) filters for black-and-white film, (2) filters for color reversal film, and (3) filters for all color (reversal and negative) film.

The principal filters for black-and-white film are: UV, Y1, Y2, O2, R2, and YG. Principal filters for color reversal work are: Skylight, Cloudy, and Morning and Evening. Available for all color films are: filters for flash and filters for photoflood.

Applications —

- UV (ultra-violet) filter — absorbs (or holds back) ultraviolet light rays (invisible to the human eye) and reduces distant haze in the picture. This filter is often kept on the lens constantly for protection.
 - Y1 (pale yellow) filter — slightly absorbs blue, emphasizing the contrast between the blue sky and white clouds.
 - Y2 (medium yellow) filter — has a stronger effect than Y1, bringing out the white of the clouds.
 - O2 (orange) filter & R2 (red) filter — have stronger correction of blue than the Y2, giving the maximum sky/cloud contrast.
- The R2 filter is absolutely necessary for infra-red photography.





Size	COLOR					BLACK & WHITE					
	Skylight	Cloudy	Morning & Evening	Flash	Flood	UV	Y1	Y2	O2	R2	YG
49mm Standard	•	•	•	•	•	•	•	•	•	•	•
" SMC	•	•				•		•	•	•	
52mm Standard	•	•	•	•	•	•	•	•	•	•	•
" SMC	•	•				•		•	•	•	
58mm Standard	•					•		•	•		
" SMC	•	•				•		•	•	•	
67mm Standard	•					•		•	•		
" SMC	•	•				•		•	•	•	
77mm Standard	•					•		•	•		
" SMC	•	•				•		•	•	•	

- YG (yellow green) filter — slightly darkens the sky and all red tones. Recommended for outdoor portraits as this filter darkens flesh tones slightly.

Of the above filters, the Y2 and O2 are a "must" for landscape photography.

- Skylight filter — absorbs blue and ultra-violet light rays. Preferable for landscape photography when the bright sky is to be toned down while the foreground requires no correction. Note: The Skylight filter may be very useful for color photography. But remember that the color rendering abilities of a film vary according to its brand.

- Cloudy — suitable for use on cloudy days to lighten excess blue.
- Morning & Evening — suitable for use at sunset and sunrise to lighten excess red.
- Filter for flash — used to bring light from a flash into balance with daylight film. It should not be used with a color flash bulb, sealed in blue glass.
- Filter for photoflood — used to bring photoflood lighting into balance with daylight film. It should not be used with a color photoflood or photospot.

Polarizing Filter

Light is "polarized" when it is reflected from the surface of glass, water or any other high-gloss medium. The light from the sky, particularly at an angle of 60° — 90° to the position of the sun, is also polarized. A polarizing filter reduces or eliminates surface reflections when photographing subjects behind glass, under the sea, etc.; it also darkens blue skies without affecting the rest of the scene. This type of filter can be used very effectively for color photography. (You can examine the actual effect of a polarizing filter by attaching one to a Pentax camera and looking through the viewfinder as you adjust the filter.)

SMC Filters

SMC filters are multi-layer coated as precisely as are SMC Pentax lenses themselves. They never impair the performance of these lenses, nor do they ever cause a loss of sharpness or contrast. They are very useful aids for photography. SMC filters are available in four sizes: 49mm (UV, Y2, O2, R2, Skylight, Cloudy), 52mm (UV, Y2, O2, R2, Skylight, Cloudy), 58mm (UV, Y2, O2) Sklight), 67mm (UV, Y2, O2, Skylight) and 77mm (UV, Y2, O2, Skylight).



GELATIN FILTER HOLDER

The Pentax Gelatin Filter Holder holds three-inch square Kodak or other gelatin filters. The accessory filter frame is used in conjunction with the holder, while the Kodak gelatin filter frame can also be used. Once the filter is inserted into its frame it is simply sandwiched in the holder—a feature which makes filter changes extremely easy.

The holder mounts conveniently to the front of the lens in the same manner as a spring-mounted lenshood. Three sizes are available: 49mm, 52mm and 58mm.



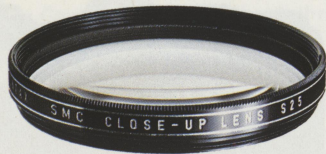
LENS HOOD

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

In addition, a lens hood protects the lens against dust, dirt and fingerprints; it even helps keep out rain. Therefore, this lens accessory is often used simply for lens protection.

Using a spring mechanism, Pentax lens hoods fit directly onto the rim of the lens. They will not slip off easily, even if the camera is handled roughly.



**CLOSE-UP LENSES**

An SMC Close-Up Lens can be threaded into the front lens frame of an SMC Pentax lens for crisp macrophotography. The entire range gives you the convenience of automatic diaphragm setting and open-aperture metering.

These attachment lenses are available in the following types:

• Type	• SMC Pentax Lens	• Lens-to-subject distance range	• Magnification
S40	50mm f/1.7, 50mm f/1.4, 55mm f/1.8, 40mm f/2.8	48.0~27.0cm (with 50mm f/1.7 lens)	1/7.6~1/3.5 (with 50mm f/1.7 lens)
S25	50mm f/1.7, 50mm f/1.4, 55mm f/1.8, 40mm f/2.8	32.6~22.0cm (with 50mm f/1.7 lens)	1/4.8~1/2.7 (with 50mm f/1.7 lens)
T80	85mm~150mm	91.6~50.5cm (with 85mm f/1.8 lens)	1/9.4~1/4.2 (with 85mm f/1.8 lens)
T160	100mm~150mm	175.0~89.5cm (with 135mm f/3.5 lens)	1/11.9~1/4.9 (with 135mm f/3.5 lens)
T95	135mm f/2.5, 200mm f/4	114.0~84.0cm (with 200mm f/4 lens)	1/4.8~1/2.6 (with 200mm f/4 lens)
T183	135mm f/2.5, 200mm f/4	202.0~113.0cm (with 200mm f/4 lens)	1/9.1~1/3.8 (with 200mm f/4 lens)

AUTO EXTENSION TUBE K 50mm

When employed in conjunction with the SMC Pentax Macro 100mm f/4 lens, this extension tube enables magnifications from 1/2X to 1X (life size). For its range, it proves to be an economical alternative to purchasing the entire Auto Extension Tube Set K. With 120mm to 135mm lenses close-ups in excess of 0.4X can be obtained; with 200mm lenses, close-ups in the vicinity of 0.25X are obtainable. It also affords the convenience of automatic diaphragm operation and open-aperture metering.

**AUTO EXTENSION TUBE K 100mm**

Auto Extension Tube K 100mm permits both automatic diaphragm operation and open-aperture metering. Magnifications in the vicinity of 1X are obtainable with 100mm lenses; 0.8X close-ups with 120mm to 135mm lenses; 0.5 with 200mm lenses, and 0.35X with 300mm lenses. Both Auto Extension Tubes K 50mm and K 100mm may also be employed to bring about striking increases in the close-up capabilities of telephoto lenses.



AUTO EXTENSION TUBE SET K

The Auto Extension Tube Set K consists of three different rings, which can be used either individually or in combination. Magnifications up to life-size can be provided by attaching the #3 ring to the SMC Pentax Macro 50mm f/4 lens. This set allows you the convenience of automatic diaphragm operation and open-aperture metering.



MANUAL EXTENSION TUBE SET K

The Manual Extension Tube Set K is identical with the automatic one except that it provides manual diaphragm operation and stop-down metering.



HELICOID EXTENSION TUBE K

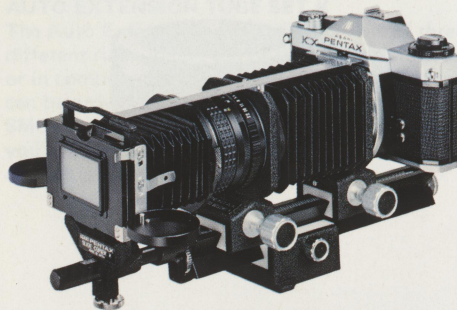
The Helicoid Extension Tube K provides variable tube extension for close-up work. Magnification is 0.47x to 0.99x with the 55mm lens.



REVERSE ADAPTOR K

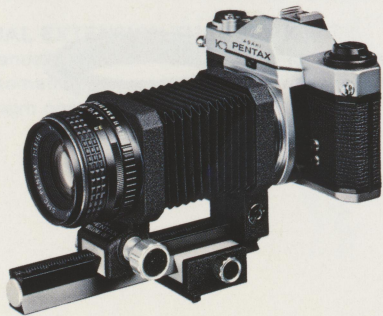
Regardless of the lens being used, whenever working with magnifications greater than life size, better results can be achieved by reversing the lens. This adaptor is available in two sizes: 49mm and 52mm. One side of the appropriate adaptor screws into the front threads of the lens, and the opposite side bayonets into the body mount.





AUTO BELLOWS K & SLIDE COPIER K

Auto Bellows K can be extended from 38mm to 170mm. This unit has a lens-reversing system, double cable release for operating the automatic diaphragm and a measuring scale that indicates how far the bellows has been drawn out. The tripod receptacle is movable. Auto Bellows K has a minimum extension of 38mm; the minimum magnification is 0.73 with a 50mm lens. The Slide Copier K attaches to the Auto Bellows for quick, accurate slide duplication and partial slide magnification.



Bellows Unit K

Compactly designed, Bellows Unit K can be extended from 32mm to 137mm. This unit does not permit automatic diaphragm setting, nor is it used with the Slide Copier K. The tripod receptacle is movable. With a 50mm lens this unit provides a minimum magnification of 0.62x.

Slide Holder 1x, K

Slide Holder 1x, K serves the same purpose as Slide Copier K of Auto Bellows K. When used with an Auto Extension Tube K or Extension Tube K, this unit allows the standard lens or Macro 50mm f/4 lens to make slide duplications with 1x magnification. The cost of such slide duplications is less than that of copying the original picture onto transparency film.



FINE FOCUS ADJUSTOR

When close-ups are to be made with a large magnification (e.g., 5X or more), focusing can easily be done by using the Fine Focus Adjustor for precisely setting the position of the lens, or extension tube. This device is also useful for making close-ups with a predetermined magnification. (If the lens alone is moved for focusing, it causes a change in magnification.) Provided with a tripod receptacle. (Fine Focus Adjustor units II and III are also available.)



MACROPHOTO STAND/LIGHTING TABLE

The Macrophoto Stand is an extremely compact unit convenient for ultra close-ups and macrophotography. Magnifications are continuously variable from 1/2X to 1.9X when the stand is employed with Fine Focus Adjustor III, the Macro 50mm f/4 lens, Auto Extension Tube Set K and Reverse Adaptor K. When employed with Auto Bellows K, magnifications from 0.7X - 3.1X are obtainable. Also, includes a reversible grey/black stage plate; the grey side has an 18% reflectivity, making it ideal for taking test exposure readings.

A "trans-illuminating" Lighting Table is also available as a Macrophoto Stand accessory. By replacing the grey/black stage plate of the Macrophoto Stand with a transparent glass stage plate, permeable lighting is provided from beneath the stage via a built-in tungsten lamp. For brighter lighting, a built-in mirror may be angled to reflect light from the Autorobo or other electronic flash units, reflector lamps, a 35mm slide projector and other commercially available lighting sources.

The Macrophoto Stand/Lighting Table combination also comes in handy for slide copying when the accessory 35mm format and 6 x 7 format slide carriers are employed. (Both items must be purchased separately.)



• *These items are scheduled to go on sale in late 1977.*

COPY STAND III & III P

The Copy Stand aligns the camera quickly and accurately for copy work. It is equipped with a fine adjustment device which facilitates accurate focusing.

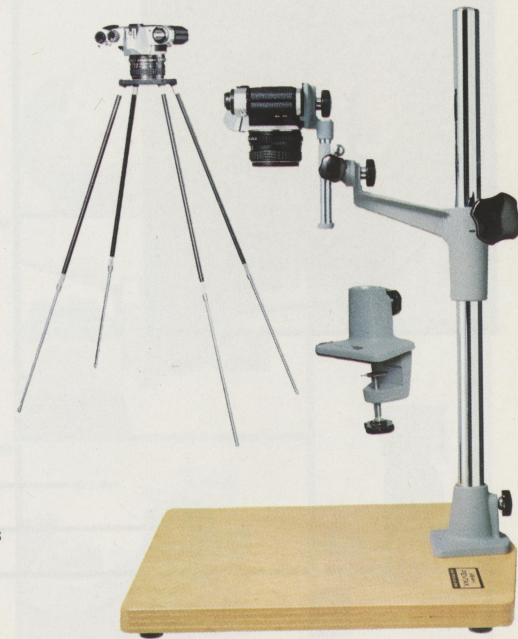
Model III is a fixed type. Model III P is portable, its base serving as a carrying case when the unit is disassembled. Each model has an 18% standard reflector which facilitates exposure measurement.

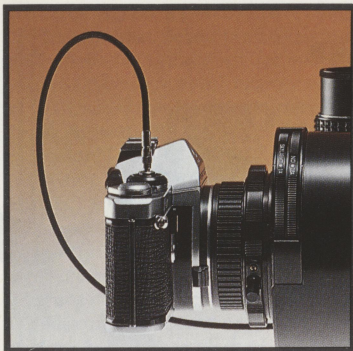
TABLE CLAMP

The table clamp is useful for fixing the Copy Stand III's leg to a table top less than 6cm thick.

49mm AND 52mm COPIPOD

The Copipod is a compact, portable copy stand which attaches to the 49mm or 52mm threads of the camera lens or close-up lens. The lens board has four calibrated, telescoping legs, and Copipod is packed with a soft, pouch case.





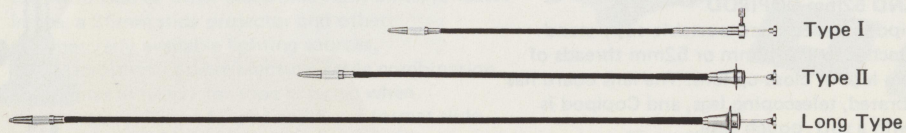
CABLE RELEASES

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

Type I — For time exposures, release the shutter at the B setting and then lock the release by screwing in the stopper.

Type II — Loosen the stopper and release the shutter at B (Bulb); the release is locked automatically.

Long Type — 50cm long, convenient for releasing the shutter from a distance.



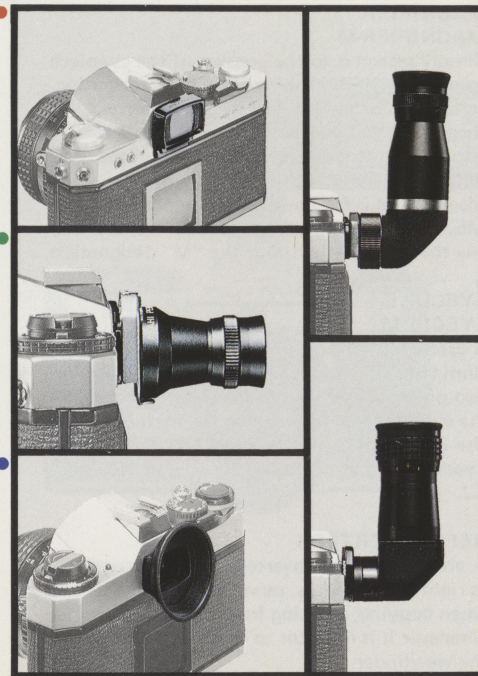
CORRECTION LENS ADAPTOR CORRECTION LENS ADAPTOR-M

A clip-on prescription eyepiece designed for eyeglass wearers. Specially ground corrective lenses are available in 8 diopters. Adaptor-M is designed for use with the Pentax MX and ME. For the Pentax KM, KX, and K2, use the adaptor without the "M" designation.

SMC CORRECTION LENSES SMC CORRECTION LENSES-M

SMC Correction Lenses are available in -5, -4, -3, -2, -1, +1, +2 and +3 D (Diopter). Since the eyepiece lens of your Pentax camera is between -0.5 D and -1.0 D, a farsighted person normally requiring +2 D, should utilize a +3 D (+2 D - [-1.0 D] = +3 D) SMC Correction Lens. Similarly, a nearsighted person normally requiring -2 D should utilize a -1 D (-2 D - [-1.0 D] = -1 D) SMC Correction Lens.

SMC Correction Lenses-M are designed for use with the Pentax MX and ME. For the Pentax K 1000, KM, KX, and K2, use the correction lenses without the "M" designation.



● **MAGNIFIER MAGNIFIER-M**

Simply attach it to the grooves of the eyepiece to magnify the central portion of the focusing screen 2X for critical focusing. The hinged magnifier can be raised to view the entire focusing screen, and is designed to accept SMC Correction Lenses as well.

Magnifier-M is for use with the Pentax MX and ME. For the Pentax K 1000, KM, KX, and K2, use the magnifier without the "M" designation.

● **EYECUP II EYECUP-M**

A useful aid for non-eyeglass wearers as it eliminates reflections for clear viewing, and also prevents extraneous light from entering the eyepiece and influencing the meter. Use Eyecup-M for the Pentax MX or ME, and Eyecup II for the Pentax K1000, KM, KX, or K2.

● **REFCONVERTERS**

Asahi Pentax Refconverters, also referred to as right-angle finders, serve as an invaluable aid when copying, working from a low angle, or whenever it is difficult to directly view through the viewfinder.

REFCONVERTER II REFCONVERTER-M

These Refconverters are extremely easy to use as the image appears exactly as it does when directly viewing through the viewfinder of the camera, non-reversed and laterally correct. The Refconverters have provision for diopter adjustment, and come with rubber eyecups.

Refconverter-M has a built-in 2X magnifier which is brought into action by simply moving a switch. For the Pentax MX or ME, use Refconverter-M. For the Pentax KX or K2, use Refconverter II.

REFCONVERTER

The image in the Refconverter without the "II" designation appears laterally reversed. Therefore, if it were to be used with the KX or K2, the figures in the shutter speed scale or aperture read-out in the viewfinder would appear backwards, making it inconvenient to use. For the above reason, this Refconverter is only recommended for use with the Pentax K 1000 or KM.

AUTOROBO

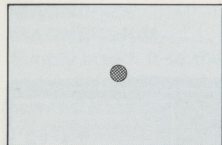
An automatic electronic flash unit with hot-shoe contact. This unit has an electronic 'eye' which measures the light reflected from the subject and automatically controls flash output for perfect exposure. The guide number is 24 for ASA 100 (manual setting). Angular spread is 50° vertically and 65° horizontally. Other features of this unit include the automatic light output stabilizer, open flash button and 2-step pilot lamp indication.



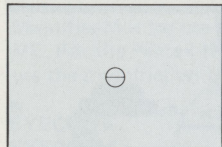
FOR FLASH PHOTOGRAPHY



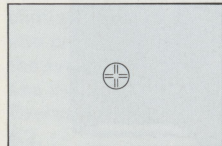
SA-1



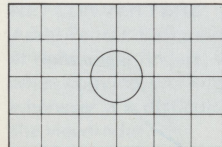
SB-1



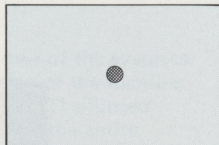
SD-1



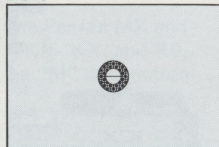
SG



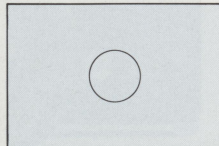
SA-3



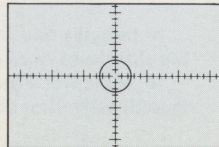
SC-1



SE



SI



INTERCHANGEABLE FOCUSING SCREENS FOR THE ASAHI PENTAX MX

The SMC Pentax family of lenses has grown over a relatively short period of time from a group of modest size to the complete system of nearly 40 lenses that it is today. Because it is comprised of a large variety of lenses, including fish-eye, ultra-wide, high speed, shift, macro, and ultra-telephoto, it is desirable to have a set of interchangeable focusing screens available to assist the photographer in coping with the problems of trying to attain the highest degree of focusing accuracy with an extremely wide range of lenses. As the interchangeable focusing screens are specifically designed for use with SMC Pentax lenses, the photographer is assured of the ultimate in focusing ease. The focusing screens are easily inserted in, or removed from the mirror chamber of the Pentax MX. Furthermore, each screen is packed with a tool to simplify replacement.

• Focusing Screen Types

SA-1 The same screen as the SC-1, but with the split-image circle removed and the micro-prism collar appearing as a central micro-prism grid. It satisfies the needs of the photographer who finds the range-finder distracting and desires a relatively

plain screen with the emphasis upon a large ground glass area. The versatility of the screen nearly equals that of the SC-1, and it can be used with an equal number of lenses.

SA-3 Similar to SA-1, but the angle formed by the prisms in the micro-prism grid is greater to simplify focusing with high speed ($f/1.2 - f/2.8$) lenses.

SB-1 Like the SA-1 screen, this focusing screen is designed for the photographer who desires a relatively plain screen. But a split-image circle is used instead of a micro-prism grid. Since it is the same as SC-1, minus the microprism collar, it is nearly as versatile and can be used with an equal number of lenses.

SC-1 This is the standard screen of the MX which is equipped with a central range-finder circle surrounded by a micro-prism collar in a ground glass field. Its three-way focusing capabilities make it the most versatile of the available screens.

SD-1 An all mat focusing screen with central cross hairs. Ideal for photomicrography and astrophotography. Also suitable for macrophotography when working with a dark viewfinder because of the large magnification.

SE Equipped with an all mat ground glass. Because of the absence of a split-image or micro-prism focusing aid which blacks out at small

apertures, this screen is ideally suited for focusing with ultra telephoto lenses having apertures of $f/5.6$ or smaller. It is also well suited for work with macro lenses, or even for general purpose work when the photographer favors a plain focusing screen to concentrate on composition without distraction.

SG The same as the SE screen, but with etched lines forming 6mm squares. In addition to serving the same purpose as an SE screen, it is useful in architectural photography, especially when working with the SMC Pentax shift lens, as the etched lines serve as guide lines to assure that the lines of the subject appear parallel and perpendicular. The points of the grid are also useful as a compositional aid as well as an aid for the alignment of images when creating double exposures.

SI An all mat screen, the same as SE, but with the addition of engraved scales. Designed for use with bellows and microscopes, as the scales can be used to learn the subject size and image magnification.

**MICROSCOPE ADAPTOR K**

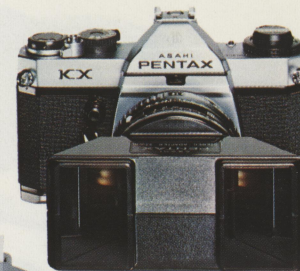
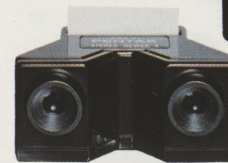
This adaptor is designed to fit the camera body directly onto a microscope. It can be used with any microscope having a 25mm diameter tube.

**MICROSCOPE LENS ADAPTOR K**

Microscope Lens Adaptor K is used to adapt special-purpose objective lenses (Olympus Mplan 1.3X, 2.5X, 5X, 10X, 20X) or special-purpose macro lenses (Zuiko Macro 20mm f/3.5, Zuiko Macro 38mm f/3.5) to the Pentax K Mount. The special lenses are merely screwed into one side of the adaptor and the other fits directly to the K Mount. When fitted to Auto Bellows K or Bellows Unit K, this adaptor permits varied macro magnifications from 2X to 10X.

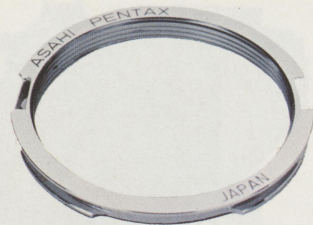
**49mm AND 52mm STEREO ADAPTOR
STEREO VIEWER II**

Stunning 3-D slides are extremely simple to make. Merely attach the Stereo Adaptor to your standard 50 or 55mm lens and shoot at f/5.6 or f/8. After receiving the slides back from your photofinisher, view them in Stereo Viewer II. The most dramatic effects are obtained when the subject is photographed from a distance of four meters or less.

**MIRROR ADAPTOR**

The Mirror Adaptor consists of a 45° reflex mirror which enables the user to take candid or clandestine shots through a window in the side of the adaptor. (The front of the adaptor has a dummy lens.) This Adaptor fits the SMC Pentax 200mm f/4 lens.





MOUNT ADAPTOR K

The Mount Adaptor K fits the new Pentax cameras and permits screw-mount Takumar lenses to be used on them. When used with this adaptor, a screw-mount lens will focus to infinity but it cannot be used for automatic diaphragm operation or open-aperture metering.

6 x 7 LENS MOUNT ADAPTOR K

This Adaptor fits the new Pentax cameras and permits a 6 x 7 camera lens to be used with them. With this adaptor, the lens will focus to infinity but can only be used for manual diaphragm operation and stop-down metering. When used with an ultra-telephoto lens, this Adaptor allows the camera to change its position vertically or horizontally while the lens remains on the tripod.

SOFT EVEREADY CASES

Perfectly contoured to fit your Pentax cameras, thereby offering optimum protection. The front cover of the soft case for the MX or ME is designed to hold the SMC Pentax-M 50mm f/1.4 or f/1.7 lens. Separate front cases are available for the SMC Pentax-M 40mm f/2.8 and SMC Pentax 50mm f/1.2 lenses. Soft cases are available in three types: MX/ME, K2, and KX/KM.

TELEPHOTO LENS FRONT CASES

Telephoto lens front cases are available in two sizes, Medium and Jumbo, to fit the soft cases designed for the Pentax MX/ME, K2, and KX/KM. These large front cases are designed to hold telephoto or large wide-angle lenses.

Medium: Will comfortably hold 18mm f/3.5, 20mm f/4, 28mm f/2, and 85-105mm telephoto lenses.

Jumbo: Will comfortably hold 120-150mm telephoto lenses; however, will not accept 15mm f/3.5 or Shift 28mm f/3.5.

SHORT SOFT CASE

The short soft case, which fits around rather than over the lens, allows you to use the camera without removing it from the case. It makes the shutter "click" practically inaudible, so it is very useful for shooting on-stage performers. This case also protects the camera against rain and snow and even against cold temperatures. In addition, it allows you to focus, advance film or change lenses without removing the camera from the case. It comes complete with an exclusive short cable release. It is available in four types: MX, ME, K2/KX, KM.



- 1 K2 Soft Eveready Case
- 2 MX Soft Eveready Case
- 3 ME Soft Eveready Case
- 4 Jumbo Front Case
- 5 Short Soft Case



STANDARD LENS CASE (HARD)

This case protects a standard lens while it is not in use.



SOFT LENS CASES

Black, buckskin cases available in two sizes:

Large: (80mm D x 200mm L) Accepts telephoto lenses up to 200mm.

Small: (80mm D x 135mm L) Accepts lenses up to 135mm; however, will not accept 15mm f/3.5 or Shift 28mm f/3.5.

CAMERA BAGS AND CASES

Ten handy camera bags and cases in assorted sizes and capacities, especially designed for photographers who like variety in their shooting and need a sure way to carry their equipment. Whether it's just two or three extra accessories, or lots of lenses, filters and a second camera, Pentax bags and cases make the carrying easy. Compact, safe and in style, too. For a short trip downtown or even a long journey overseas.





49mm AND 52mm LENS CAPS

These spring-loaded caps can be attached to or removed from the lens just as easily as lens hoods, and fit most lenses (large diameter lenses use slip-on lens caps). For SMC Pentax-M 50mm f/1.4, 50mm f/1.7, and 40mm f/2.8 lenses, use a 49mm lens cap. For SMC Pentax 50mm f/1.2, 50mm f/1.4, and 55mm f/1.8 lenses, use a 52mm lens cap.

LENS MOUNT CAP K

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

BODY CAP K

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

49mm → 52mm ADAPTOR

This adaptor permits the use of a 52mm diameter SMC Pentax filter where normally you would use a 49mm diameter Takumar lens filter.

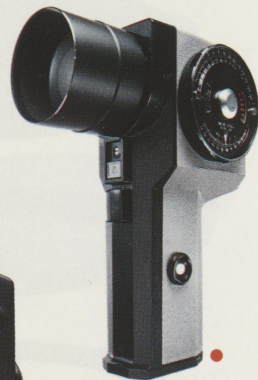
52mm → 49mm ADAPTOR

This adaptor permits the use of a 49mm diameter Takumar lens filter where normally you would use a 52mm diameter SMC Pentax lens filter. Note that this adaptor cannot be used for the SMC Pentax 85mm f/1.8 lens.

FILM MAGAZINE

The film magazine is designed to load bulk film into the Pentax camera.





SPOTMETER V

To expand the scope of the Asahi Pentax Spotmeter even further, model V utilizes a silicon photo diode which makes possible a virtually instantaneous response as well as a broad measuring range of EV 1 - 19. The perfect exposure measurement tool for the professional photographer.

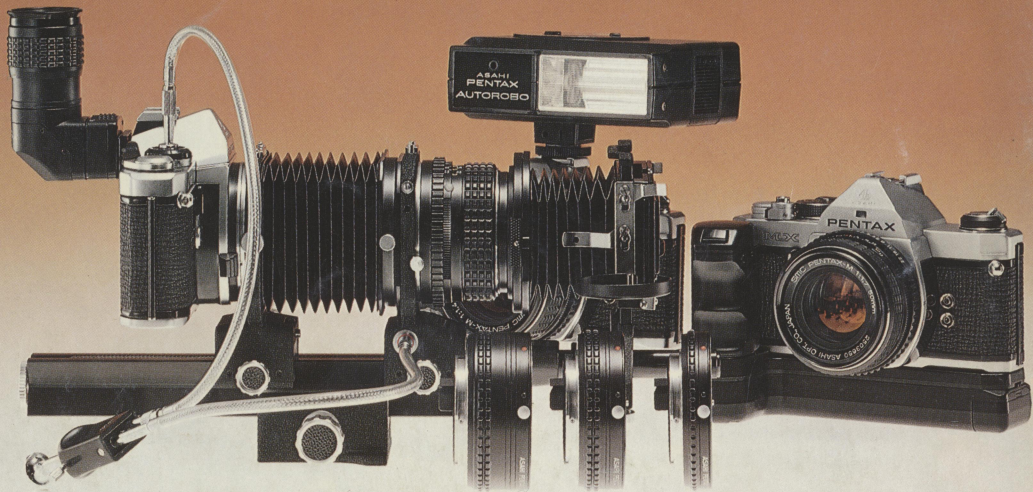
DIGITAL SPOTMETER

This highly compact and lightweight model has an LED digital read-out in the viewfinder, thereby offering maximum visibility, regardless of the prevailing lighting conditions. Moreover, greater resistance to shock is a natural consequence of the elimination of a moving needle.

When the exposure measurement button is depressed, the correct exposure is immediately displayed within the viewfinder as an EV number rounded off to the nearest 1/3 EV.



ASAHI OPTICAL CO., LTD. C.P.O. 895, Tokyo 100-91, JAPAN
ASAHI OPTICAL EUROPE N.V. Weiveldlaan 3-5, 1930 Zaventem, BELGIUM
PENTAX Handelsgesellschaft mbH. 2000 Hamburg 54 (Lokstedt), Grandweg 64, WEST GERMANY
ASAHI OPTICAL BRASILEIRA IND. E COM. LTDA. Rua Estados Unidos, 1053, São Paulo-SP, BRASIL
PENTAX CORPORATION 9 Inverness Drive East, Englewood, Colorado 80110, U.S.A.



06771

Printed in Japan

CameraTrax

CT24-35-1075

218-219-220

GreyCard

CameraTrax

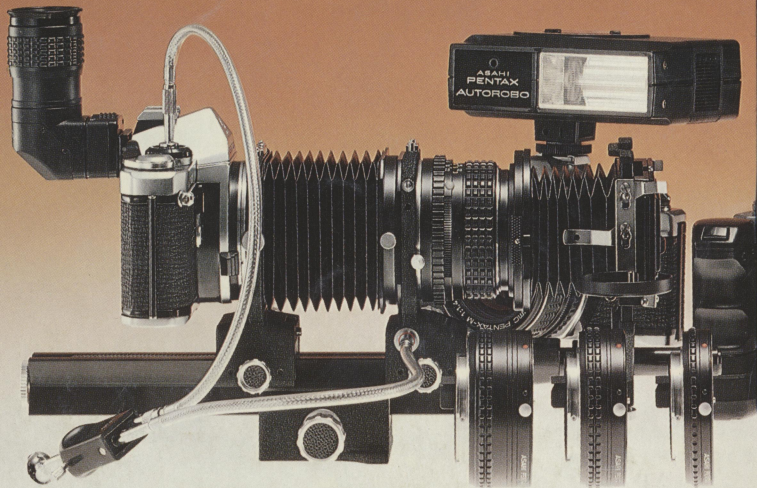
www.CameraTrax.com

24ColorCard

056-058-058	084-088-090	119-121-125	160-164-165	204-206-207	244-245-245
000-136-168	189-086-151	242-204-059	172-062-067	072-154-083	049-072-150
230-163-054	163-193-073	091-064-107	194-083-101	070-095-177	224-127-061
093-190-171	127-129-176	091-110-073	088-123-157	194-148-132	115-087-077



ASAHI OPTICAL CO., LTD. C.P.O. 895, Tokyo 100-91, JAPAN
ASAHI OPTICAL EUROPE N.V. Weiveldlaan 3-5, 1930 Zaventem, BELGIUM
PENTAX Handelsgesellschaft mbH. 2000 Hamburg 54 (Lokstedt), Grandweg 64, WEST GERMANY
ASAHI OPTICAL BRASILEIRA IND. E COM. LTDA. Rua Estados Unidos, 1053, São Paulo-SP, BRASIL
PENTAX CORPORATION 9 Inverness Drive East, Englewood, Colorado 80110, U.S.A.



© Eastman Kodak Company, 1995

KODAK Gray Scale



A 1 2 3 4 5 6 M 8 9 10 11 12 13 14 15 B 17 18 19