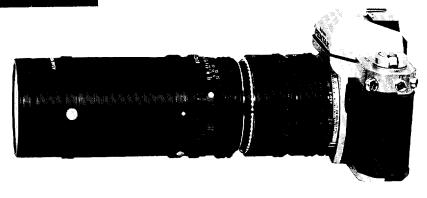
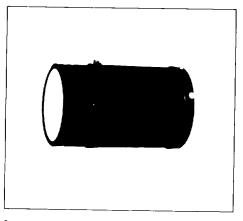


SLIDE HOLDER 1X







Application

The Slide Holder 1X K is designed for making life-size (1x) copies of slides when used in combination with the Auto-Extension Tube Set K (or Extension Tube Set K), the Reverse Adaptor-K 52mm and the SMC Pentax 50mm f/1.4, 55mm f/1.8, or Macro 50mm f/4 lens.

Notes on Copying

1. Copying color slides onto color slide film:
A developing lab can duplicate your color slides by means of a special color copying film, but the color images always suffer. (If you yourself attempt this, the results will, in all probability, be even worse.) If you want a number of color slides of the same scene, try to shoot the required number of pictures in the first place.

2. Making color prints from color slides:

A lab can make color prints from your color slides by the positive-positive method using special color print papers. However, with this method, the contrast becomes stronger and the color rendition deteriorates.

Copying color slides with color negative film and making color prints from the negatives is a superior method. Moreover, if you want to make several color prints from the same color slide, it is less expensive.

Making black & white pictures from color slides:

Color slides can be copied onto black & white film (ultra-fine grain, high-resolution films such as Neopan F and Panatomic-X are

recommended) and enlarged as required during printing. Because the contrast tends to increase in this process, a slight overexposure is recommended, plus shortening the film developing time which will help lower the contrast.

4. Making black & white pictures from black & white slides:

If the original black & white slides are merely letters or linework, copy the original with high-contrast copying film such as Minicopy and Koni-Micro.

If the originals are regular photographs or copies of paintings, copy them with Neopan F or Panatomic-X. The contrast can be adjusted by the use of these films.

Magnification by Lens/Extension Tube Combinations

As the slide-to-lens distance is fixed with the Slide Holder 1X K, the use of extension tubes is limited to these listed in the table. Otherwise, proper focus will not be achieved. Note the

different combinations: No. 2 and 3 tubes for 55mm f/1.8 and No. 1 tube alone for 50mm f/1.4 lens, though the focal lengths of the lenses are similar.

Lens	Extension Tubes		Magnification
55mm f/1.8	Auto Extension Tube K	No. 1 + 3 No. 2 + 3	1.05 1.17
	Extension Tube K	No. 1 + 3	1.05
50mm f/1.4	Auto Extension Tube K	No. 1	1.00
	Extension Tube K	No. 1	0.95
Macro 50mm f/4	Auto Extension Tube K	No. 1	1.05
	Extension Tube K	No. 1	1.00

Details to Remember

1. Slide mount picture size has been designated as 23 x 34mm by international standards. Thus, even if the copying is done at life size, the slide mount frame will be photographed along the picture's edges.

The K2's finder coverage (percent of the 24 x 36mm transparency area visible through the viewfinder) is 95 percent — almost the entire 35mm transparency area. The Pentax KX has a 93 percent finder coverage and the Pentax KM a 90 percent coverage. In all instances, the full area of the slide picture will be photographed, though the picture edges may not appear in the finder.

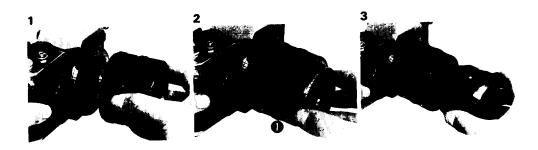
2. On the other hand, if you ask a lab to print your negatives as either color or black & white pictures measuring $4\%'' \times 6\%''$ or less, the picture edges may be eliminated, even though the edges are clearly visible on your negatives. If you order your prints larger than $4\%'' \times 6\%''$, you can ask the lab not to trim the edges.

How to Assemble

As shown in Fig. 1, select the appropriate Auto-Extension Tubes K or Extension Tubes K according to the table on Page 4 and attach them as you would attach a lens to the camera. As shown in Fig. 2, attach the Reverse Adaptor K 52mm onto the extension tube as you would attach a lens. (To detach the reverse adaptor.

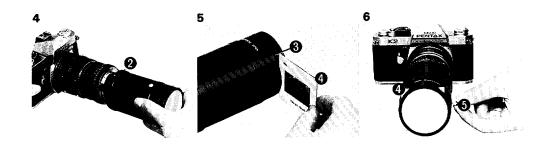
push the unlock button (1) on the extension tube and turn the reverse ring counterclockwise 65°.)

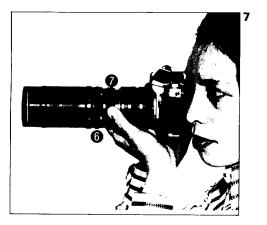
As shown in Fig. 3, screw the lens front into the reverse adaptor until it is secure. Then, attach the slide holder on the rear of the lens as shown in Fig. 4. (To detach the slide



holder, push the unlock button (2) on the slide holder and turn it counterclockwise 65°.) As shown in Fig. 5, insert the slide (4) into the slit (3) of the slide holder and center it. When inserting it, make sure that the slide is not upside down or reversed.

Then, loosen the clamp screw (5) on the slide holder as shown in Fig. 6. While looking from the front, turn the front of the slide holder until the upper edge of the slide (4) comes parallel with the straight line forming the base of the pentaprism housing.





How to Use

Focusing

As shown in Fig. 7, open the aperture (6) fully and turn the focusing ring (7) for focusing. After focusing, stop down the aperture to the desired value.

Be sure to check through the finder to make sure the slide is straight.

As the subject (slide) and the camera are one, there is no danger of camera movement. In this respect, the use of a tripod is not necessary. However, if you are making several duplicates, using a tripod is simply less tiring.

Lighting

- 1. The easiest light source is the sun. However, if you direct your camera toward the blue sky, the colors will all be tinted blue. And if direct sunlight hits the milk-white plate on the front of the slide holder, the shadow of the slide mount will also be photographed.
- 2. At night, use a 500W reflector lamp for color film. The brightness will vary according to the distance between the slide and the light. When using color slide film, it is recommended you use a shutter speed faster than 1/10 sec. (See p. 10)

Lens Aperture

The 50mm f/1.4 and 55mm f/1.8 standard lenses do not perform so well (especially at the picture edges) when they are used for life-size close-ups. Thus, stop down the aperture to f/8 or f/11 when using these lenses for life-size close-ups. Stopping down the aperture further than f/11 will result in diffraction and thus is not recommended.

The SMC Pentax Macro 50mm f/4 lens does perform very well even at a full aperture of f/4 as long as the subject is flat. However, a mounted slide is actually very slightly curved, so stopping down the aperture to f/5.6 is recommended.

Exposure

As the Pentax K2, KX and KM cameras have built-in TTL exposure meters, exposures can easily be determined with the stopped-down aperture. However, the shutter speed scale in the finder is hindered by the slide mount and only the meter needles are visible for meter reading. needles are visible for meter reading. As the lens is mounted in reverse, the automatic diaphragm and full-aperture metering functions are eliminated even when you are using the Auto-Extension Tubes K. If you are planning to purchase extension tubes only for use with the slide holder, the popularly-priced Extension Tubes K may be better. However, if you also plan to use the extension tubes alone for close-

ups, the Auto-Extension Tubes K will be much more convenient.

When working with color slide film, exposures slower than 1/10 sec. — especially those slower than one sec. — may result in underexposure and bad color rendition. (For Kodak color film, see the Kodak Color Data Guide.)
Thus, with the 55mm f/1.8 or 50mm f/1.4 lenses, when working with color film, the lens aperture should be opened up wide. (This is an exception to the rule on Page 10 that with these lenses the aperture must be stopped down to f/8 or f/11.) The SMC Pentax Macro 50mm f/4 lens is particularly advantageous here because it can be used at large apertures.

Aperture Not Shown in Pentax KX Finder
The selected f/stop of almost all SMC Pentax
lenses is shown along the upper edge of the
KX's finder. However, when you are using the
slide holder, the f/stop will not be shown in the
finder because the lens is mounted in reverse.

To Use Older Takumar Lenses
By using two Mount Adaptors K and one
Reverse Adaptor 49mm, the older Takumar
lenses can be used with the slide holder.
However, it is both more expensive and more
complicated and is not particularly recommended.



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