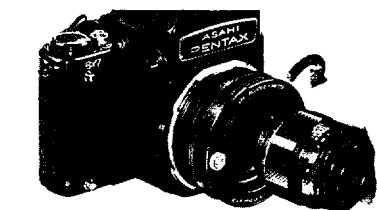
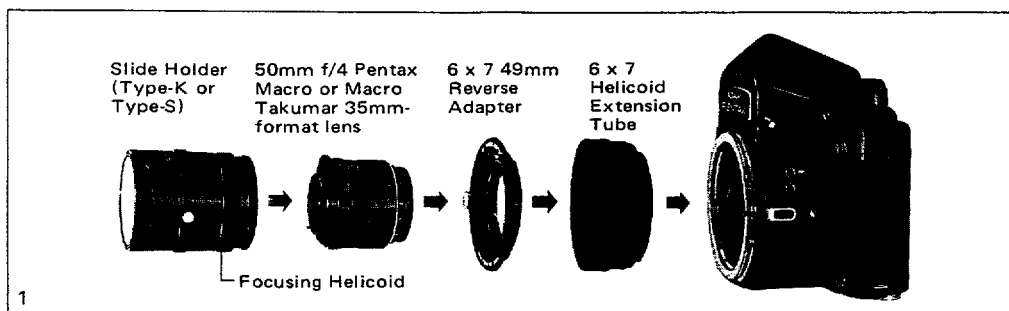


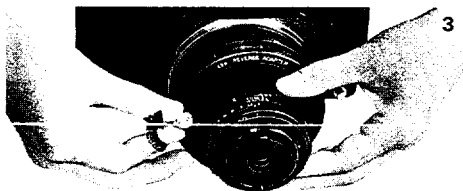
Slide Holder Instructions (for Type-K and Type-S)



MOUNTING THE SLIDE HOLDER

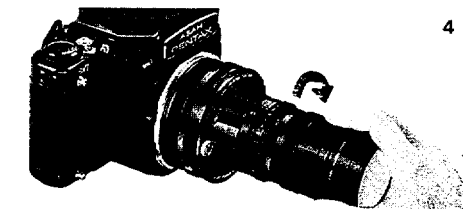


1. Attach the 6 x 7 Helicoid Extension Tube to the 6 x 7 camera; then, fit the 49mm Reverse Adapter unit into the extension tube, and tighten lightly with the screw.



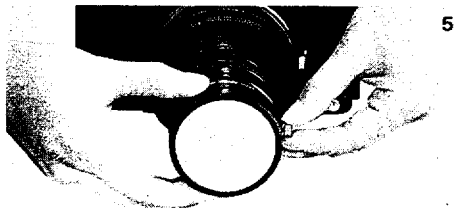
2

2. Screw the 50mm macro lens in reverse position into the Reverse Adapter unit as illustrated.



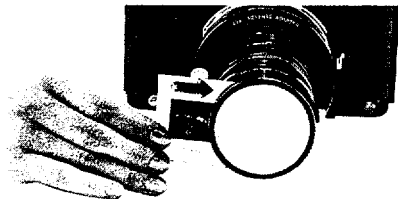
3

3. Loosen the adjuster screw of the Reverse Adapter slightly, and adjust the lens so that the diamond-shaped distance scale index is at the top. Then, retighten the adjuster screw.



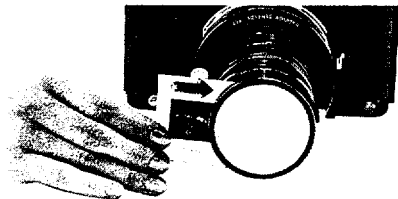
4

4. When using the Macro Takumar lens, screw Slide Holder Type-S onto the screw-mount of the lens so that it fits tightly. With Pentax Bayonet Mount lenses, bayonet Slide Holder K to the lens mount.



5

5. Loosen the adjuster screw of the slider holder unit and turn the ring until the screw is positioned at the side (horizontal to the film plane). Then, retighten the screw.



6

6. Insert the slide into the slider holder as illustrated. The slide holder should be positioned so that the slide is perfectly horizontal to the film plane, with the front of the slide facing the camera.

Coosing Films

Film choice depends upon the type of copying you are doing. For duplicating color slides use color reversal film; to make color prints from color slides use color negative film; to make negatives for black & white prints from color slides, use black & white film such as Neopan F (or Minicopy if high contrast is desired).

For making black & white positives from black & white negative film 35mm Minicopy film (or Neopan F if ultra-fine grain is desired). Color negative film is not suitable for making color positives because of the orange masking on color negatives.

Focusing

When using the Macro Takumar lens the AUTO/MAN lever should be set to AUTO; With Pentax Macro lenses, set the aperture ring at maximum aperture. Then, focus in the normal manner with the focusing ring of the lens. Also adjust the focusing helicoid of the slide holder accordingly. As indicated in the Close-Up Table on page 2, magnification may be varied via the 6 x 7 Helicoid Extension Tube, however, you must refocus after altering the magnification. Focusing is difficult at 2X magnification, thus the lens should be stopped down to approximately f/11 for sharp focus.

Lighting

During the day, the frosted filter on the front of the slide holder offers optimum illumination when pointed toward the sunlight. If the sky is overcast, it should be pointed toward a bright cloud. At night or in a poorly lit room use a 500W color photographic floodlight (reflector lamp) and position it about 30 cm in front of the slide holder. Use of color floodlight is necessary to prevent a red tint when coping reversal color film onto daylight reversal color film or negative color film. Flourescent lighting is not a suitable lighting source for copying with color film.

Color Correction for Reversible color films

Color reproduction irregularities may occur when using lighting sources other than those mentioned above. Color reproduction also varies according to film brand and appropriate adjustments must be made by employing filtration. With other lighting sources Pentax Cloudy and Morn & Eve filters may be useful, or a stronger color correction filter may be required.

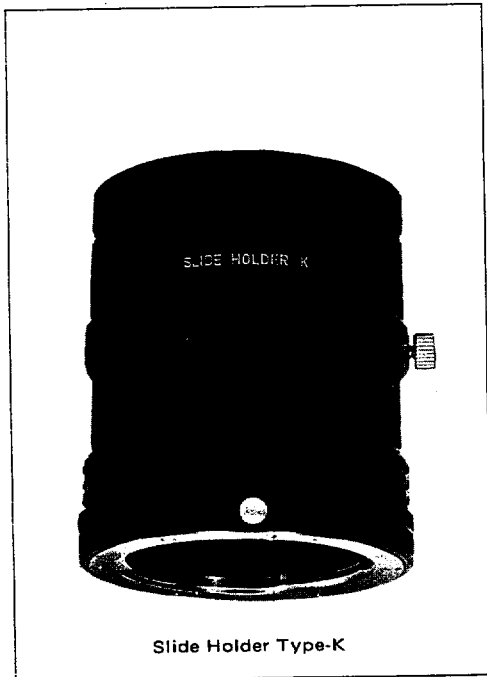
Exposure

With the Pentax 6 x 7 TTL Pentaprism finder and with 35mm cameras featuring built-in meters, exposure readings can easily be made at stopped-down aperture. With reversal color film, the shutter speed should be shorter than 1/10 sec. as color irregularities may occur with these films when longer exposures are used. (If using Kodak color film, refer to Kodak's Color Data Guide for exposure characteristics of Kodak reversal color films.)

If the lighting sources described above are used, underexposure problems should not occur. However, when appropriate exposure cannot be obtained with weaker lighting sources, even with a slow shutter speed, open the lens to a slightly wider aperture.

Optimum Exposure for Duplications

Because of the irregularities described above, it may often be difficult to obtain optimum exposure. With Kodak color reversal film, for example, exposure latitude is $\pm 1/2$ stop, while with Kodak color negative film it is $+1-1/2$ and $-1/2$ stop. However, in the final analysis, subjective judgement will determine which exposure is best. For this reason, we recommend making exposures at $+1/2$ stop, $-1/2$ stop and also the recommended exposure, then, choosing from the three.



The slide holder unit (Type-K and Type-S) were designed principally for duplicating 35mm slides and negatives onto the larger 6 x 7 format with the 6 x 7 camera. However, they may also be used with 35mm Pentax SLR's to duplicate 35mm slides on the same format. Both Type-K and Type-S are identical except for the mount portions: Type-K was designed for use with Pentax bayonet-mount 35mm format lenses, and Type-S with Pentax screw-mount 35mm format lenses.

Although 35mm slides can also be easily duplicated the 35mm format using Slide Holder 1X-K, or Auto Bellows-M in combination with its exclusive slide holder, the larger K-Type and S-Type Slide Holders enable sharp reproduction of 35mm slides and negatives, with less grain for high quality enlargements, if they are duplicated on the large 6 x 7 format.

The following 35mm format interchangeable lenses should be used with the Slide Holders: Macro Takumar 50mm f/4, Pentax-M Macro 50mm f/4, Pentax Macro 50mm f/4 (with the latter, use of the 52mm - 49 mm adapter ring is required.

Size: 62mm dia. x 74mm length **Weight:** 145 grams

Lens	Magnification	Lens Extension	Subject Area	Film-plane-to-subject-distance
Macro Takumar, Pentax Macro 50mm f/4	2.04	Helicoid Extension Tube(max. ext.)	33.8 x 27.0mm	23.5cm
	2.42	Helicoid Extension Tube(min. ext.)	28.5 x 22.7	25.0

With the Pentax-M Macro 50mm lens, magnification is 1.8X at minimum extension, 2.18X at maximum extension.

Copying Accessories used with the 6 x 7 Camera Body

6 x 7 camera body + 6 x 7 Helicoid Extension Tube + 6 x 7 49mm Reverse Adapter + Macro 50mm f/4 lens + Slide Holder (Type- K or Type-S)

Copying Accessories for 35mm Format Duplications
When using the Type-K or Type-S Slide Holder to duplicate 35mm slides with Pentax 35mm cameras (MX, ME, K models and screw-mount Pentaxes), the accessory combinations are the same, except that the equivalent 35mm system accessories are used. For example: 35mm camera body + Extension Tube No. 1 + Reverse Adapter + 50mm Macro lens + Type-K or Type-S Slide Holder. This combination gives 1X (lifesize) magnification. (Pentax-M Macro 50mm f/4 offers magnifications from 1.1 — 1.15X, used with Extension Tube No. 3.)

Non-Macro 50mm Lenses

Although 50mm standard lens have the same focal length as the 50mm macro lens and can be used for slide reproduction, we do not recommend it. Because standard lenses are not optimized for close-up use, sharpness does not compare with that of a macro lens for copying, even when stopped down all the way, thus, high-quality reproductions cannot be made.

Slide Holder Care

The frosted filter at the front of the slide holder is removeable for cleaning. The filter should be cleaned periodically with a soft cloth to ensure quality reproductions. The slide holder is a precision piece of equipment and should be handled carefully.