

INSTRUCTION

ZOOM SLIDE DUPLICATOR (ZSD) FOR 35mm & 110 FILMS AND SLIDES

COPYING RATIO BETWEEN APPROXIMATELY 1:1 — 2.50 DEPENDING ON ORIGINAL SLIDE SIZE

This Zoom Slide Duplicator which we shall call ZSD hereunder has 3 elements, coated optics and a calibrated helicoid barrel. By adjusting the magnification on this calibrated barrel and the calibrated main barrel, duplicating of various ratios can be made.

Also by using color correction filters (52mm) between the film and white diffusion plate, the color of the copied film can be adjusted to suit your requirements.

HOW TO ATTACH TO YOUR CAMERA:

1. You will require a suitable JESSOP T mount to fit your camera. Item 4
2. Screw the appropriate T-Mount Adapter onto the ZSD and mount the duplicator on your camera.
3. Loosen the three set screws on the T Mount Adapter and turn the camera until it is aligned with the red dot on the main barrel of the ZSD and then tighten the three set screws.

SETTING THE MAGNIFICATION AND FOCUS

1. Insert the slide carrier (Item 5) complete with the slide to be copied, into the carrier channel (Item 6) between the main barrel and the diffusion plate (Item 3). Adjust the slide squarely by loosening the protruding screw on the front of the main barrel (Item 7) and turning the carrier until the slide is square in the viewfinder. Then tighten the screw. Adjust the carrier channel up or down and the slide carrier from side to side so that the image is in line with the viewfinder.
2. Turn the calibrated magnification ring (Item 9) to the approximate magnification required.
3. Now point your camera complete with zoom duplicator mounted, towards a bright light (i.e. table lamp, photo flood, etc). It will help if the complete outfit is mounted on a tripod.
4. Loosen the protruding screw at the rear of the main barrel (Item 8). Look through the SLR viewfinder and slide the calibrated inner barrel (Item 1) until sharp focus of the slide to be copied is obtained. Tighten the screw so that the inner barrel is held firm. If the magnification is not exactly what you require, readjust the calibrated magnification ring and refocus accordingly.
5. Most SLR cameras will obtain slightly bigger copies on the film than the image seen through the viewfinder.
6. When using a colour correction filter, unscrew the white diffusion plate and fit a 52mm filter into place and then screw the white diffusion plate back in place.

LIGHTING

When all the adjustments are set correctly, point the ZSD towards a suitable light source such as daylight, electronic flash, colour corrected lightbox or tungsten lighting. Make the final adjustment regarding the correct exposure and shutter speed in the same way as you would when taking regular pictures. NOTE, although natural daylight is acceptable under most circumstances, a more controllable light source is recommended if the results are to remain at a consistent level.

EXPOSURE:

The following table offers Exposure Suggestions when using an electronic flash with a guide No.14 These tables should be used as a starting point only.

ASA FILM SPEED	SHUTTER SPEED	DISTANCE
100	1/60 second	30cm
200	1/60 second	50cm
400	1/60 second	80cm

Please note that some SLR Cameras will not synchronize at shutter speeds faster than 1/60 sec therefore distances must be adjusted between camera and flash in accordance to the ASA Film Speed to get good duplicates.

