

There are a number of reasons why stereo (3-D) slides are a desirable addition to any collection of gems and minerals. Samples which cannot be gathered because of size, prior ownership, or other restriction can readily be "included." Likewise, samples which are traded or sold are not lost from the collection. A series of slides can show all sides of the sample, without the risk of dropping by a spectator or other problems of handling. Of course, any photograph can do the above, but only stereo slides provide an image as realistic as the specimen itself. And, a set of 3-D slides with a viewer makes a wonderful gift.

Stereo slides can be taken with any 35 mm camera by means of an adapter costing slightly over \$30. The adapter to fit your camera, along with a stereo viewer, punch for assuring proper alignment in the viewer, and instruction manual, can be obtained by writing to Tri-Delta Engineering, Box 53, Fairlawn, New Jersey 07410, for further information.

The stereo adapter is screwed into the filter-threads of your camera lens and you are ready to take 3-D pictures. Stereo and non-stereo pictures can be intermixed on the same roll of film.

Camera settings are made in the usual way. Because of the prism system of the adapter, the camera must be tilted forward or backwards about 90° for use. Framing your subject may be difficult or impossible through your camera viewing system at this angle. However, the adapter has its own viewfinder which allows you to frame quite accurately. So, focus, set your shutter and aperture, and trip the shutter — simplicity in itself.

For every 3-D shot you have made, you will find a full 35 mm frame divided into a pair of images rotated into a head-to-head configuration. This pair of images is mounted in a regular 2-x2-inch slide mount and may be viewed in the Tri-Delta hand-viewer.

A 35mm camera with the Tri-Delta stereo adapter, hand-held viewer, punch for correct alignment of slides, and an assortment of stereo slides.



Want to make striking 3-D slides of your collection? With a few simple accessories you can set up for —

STEREO PHOTOGRAPHY OF GEMS AND MINERALS

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Because each slide is in a regular 35 mm mount, they may be shown in two-dimensions with any 35 mm slide projector. They can be viewed in 3-D with that same projector and some additional accessories from Tri-Delta.

The system is simple, but for optimum results a few suggestions should be followed. Whenever possible, use small lens apertures (represented by larger f/ numbers). At large apertures (smaller f/ numbers) the tops of the two stereo images are apt to overlap. At f/8, two distinct images form and at smaller apertures, such as f/16, the images are separated by a distinct dark line. In addition to improved separation, the depth of field is greater at smaller apertures. This means that more of your image will be in focus, which usually enhances the 3-D picture.

Avoid getting too close to your subject. Most cameras do not focus to less than about three feet, but even this may be too close. The brain has difficulty fusing the two stereo images of a close-up — you will find yourself straining to look cross-eyed.

With large specimens, and pictures to show locale, you will not have problems of getting too close. But, small specimens beg to be photographed from up close in order to get a larger image. A good way to avoid this problem is to use a 2X or 3X extender for your lens. The extender is an accessory lens which fits between the camera body and your lens to provide a telephoto effect. In practice, the extender allows you to magnify the image of a small specimen without getting too close.

Be careful in framing when using the extender. With a single-lens reflex camera, if you can look through the viewfinder, you can frame without danger. If this cannot be done, experience will show what portion of the adapter viewfinder image corresponds to the magnified image seen by the camera.

Indoors, for your small specimens,

use electronic or blue flash for lighting with daylight type film. You can then use the same film outdoors. In addition, the flash can provide enough light to allow the use of small apertures for your lens, as recommended earlier. For better contrast, hold the flash at about 45° from the camera to specimen line and about 45° above the plane of the specimen. An extension cord for the flash and a bulb or cable release for the shutter are handy here.

Finally, use care in selecting your photo-finisher. Since each pair of images is mounted in a regular 35 mm frame, there is no special mounting, with the resultant extra cost, required. However, every stereo pair looks, at first glance, like the now-popular half-frame images. There is a chance that your full-frame stereo pairs could come back cut apart and mounted individually as half-frame slides. A note like "Caution: Mount head-to-head pairs as full-frame 35 mm," taped to the cartridge and, "Refer to service department," are enough to safeguard your slides with Kodak. But the high-volume, low-cost photofinishers will probably ignore your plea. To be safe, request that they develop only, not mount, your slides. You can do the mounting yourself with mounts from a camera store and a hot iron.

Have a good time "collecting."

Stereo slide of petrified coral, taken with a normal 50mm lens and a 3X extender, lighted from above and to left by electronic flash.

