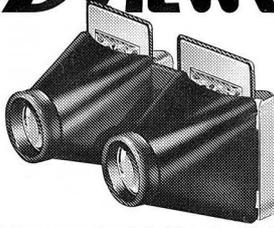


PINSHARP 3D VIEWER



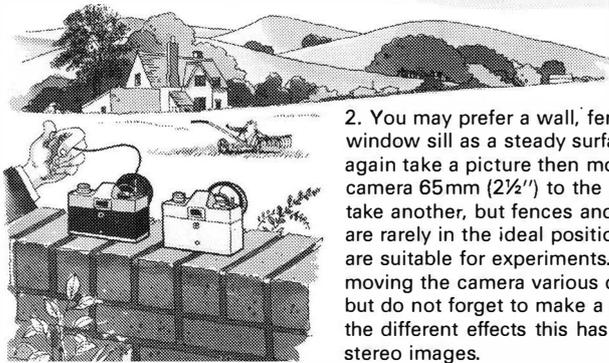
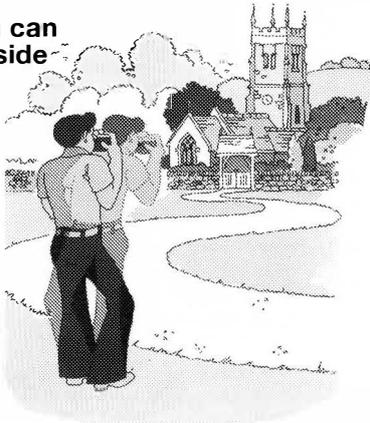
INSTRUCTIONS

How you can take 3D photographs.

Simply take two transparencies of the subject 65mm (2½") apart and put the left transparency in the left side of the Pinsharp 3D Viewer, put the right transparency in the right side of the viewer. When you look into the Pinsharp 3D Viewer you will see the image in full realistic 3D.

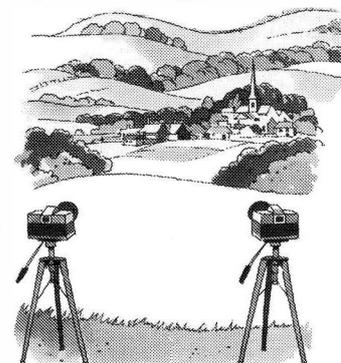
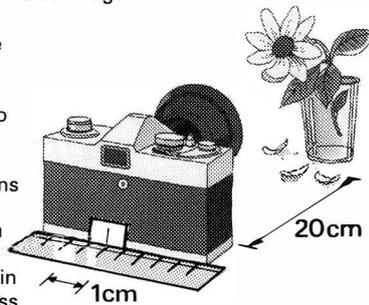
Here are various ways you can take two pictures side by side

1. Hold the camera pointing at the subject and with your body weight standing on your left leg take a picture. Quickly transfer your body weight to your right leg and take the second picture. This is usually about 150mm (6") apart and is perfect for outdoor shots where the nearest object is about 9m (30ft) away and there is nothing moving like traffic or people. It is ideal for architecture and landscapes.

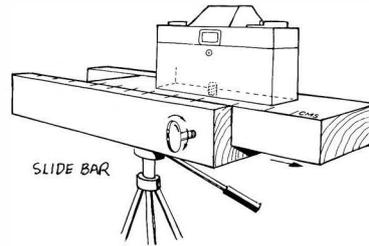
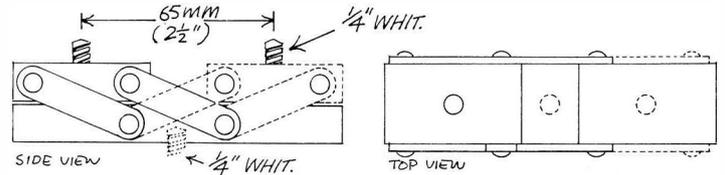


2. You may prefer a wall, fence or window sill as a steady surface. Here again take a picture then move the camera 65mm (2½") to the side and take another, but fences and walls are rarely in the ideal position, but are suitable for experiments. Try moving the camera various distances but do not forget to make a note of the different effects this has on the stereo images.

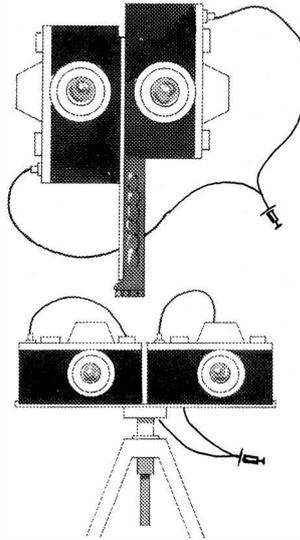
3. Close up 3D photography can be done with one camera simply by reducing the distances apart of the two shots. This is called hypostereo and a good formula for judging distance is to move the camera (or subject) 1/20th of the subject to lens distance, e.g. Lens to subject distance = 20cm, move the camera 1 cm to the side for the second picture. It may be necessary to toe in the camera slightly so you don't miss off part of the image.



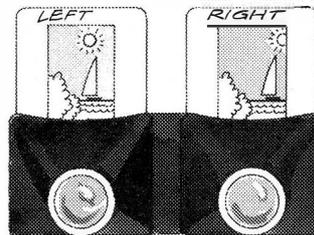
4. The 3D effect of mountains and other distant subjects without any foreground is sometimes disappointing but it can be improved by widening the space between the two stereo shots. This is called Hyperstereo and the distance between each shot is measured in yards instead of inches, depending on the amount of emphasis required. Remember to make sure nothing is too close to the camera when using this technique.



5. D.I.Y. enthusiasts could easily make a sliding or swing bar that fits on top of your tripod. Here again, allow for a variety of distances if you can, but mark the slide bar with measurements for record purposes. Details of two types are illustrated.



6. Using two identical cameras is the best solution to taking good 3D pictures. Mount them horizontally side by side or vertically, but never one above the other. Connect the cable releases to a single button to synchronize the shutters. This will expand the variety of subject matter to almost anything that can be done with a normal 35mm S.L.R. Don't forget to keep the focusing distances and exposure identical and use the same make and speed film in each camera.



How to check which is left and which is right

The best way is to put them in the Pinsharp 3D Viewer and take a look. If they look odd then swap them over and they should be correct. Mark the slides Left and Right for future reference.

1-2



Improve your technique

- Get into the habit of taking the left slide first then the right or vice-versa, so that you can identify slides easily when they come back from processing.
- Maximum depth of field is desirable, as it helps to enhance the stereo effect.
- Choose a subject suitable for 3D with plenty of varied distances.
- Don't take too long in between the two shots as shadows and clouds can move creating an undesirable effect.
- Keep a fixed point in your viewfinder so that the two slides line up perfectly. Motor drive helps because you can keep looking through the viewfinder which makes the whole process faster.

The Pinsharp 3D Viewer was designed in 1982 and is still very popular with 3D enthusiasts. The flexible strip between the two viewers allows quick alignment of the stereo pair which reduces eye strain. The high quality lenses give a wide angle view of the 3D slides and the diffusers are made of clear transparent plastic with an etched surface allowing the maximum amount of light to pass through.

Get in the US at Berezin Stereo Photography Products,
www.berezin.com