

Specifications

Model: LA9006

**Lens Type**: 3D, parallel view, all manual, no electronics **Lens system**: 38 mm, f11, 2 elements, plastic polymer

composite

Sensor Format: ~ (22 - 24) x (14.5 - 16) mm subframe digital

SLR sensor - equivalent to 1.5-1.6x crop

Diaphragm: Twin Blade, f11, f16, f22 with click stops

Focus adjustment: Focusing ring.

**Focusing range**: 9 - 33 inches (23 - 85 cm) measured from the front of the lens.

Lens Extension: 52 mm filter mount for lightweight accessories such as filters and number 1 - 4 closeup lenses.

Special Feature: Gives a digital SLR camera macro 3D capabilities using normal processing. Retains many of the features of an SLR camera, such as through the lens viewing, auto exposure. TTL flash.

Digital SLR body mounts: Pentax K, Canon EOS, Nikon N, Minolta AF. Sony Alpha. Samsung GX (Pentax K).

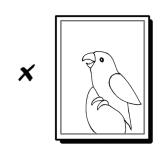
- Line up the index mark on the back of the 3D Macro Lens in a Cap with the index mark on the camera body and attach it to the camera.
- 2. This lens is for use with subframe Single Lens Reflex (SLR) cameras with the image sensor format stated on the box. Mostly, these will be digital SLR cameras. If used with a full-frame camera, the surplus image area will have to be cropped off. Some new digital SLR cameras will do this automatically.
- 3. This is a manual lens. There are no electronics. Turn off auto-focusing before using the lens. Auto-exposure should work. If not, turn that off as well.

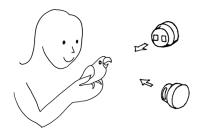
- When mounting the lens on the camera make sure it is aligned on the horizontal. This may affect vertical alignment of the image pair.
- 5. Usage: First select aperture by turning the aperture ring. There are three click stop apertures. Set focus from 23 cm (9 in.) to 85 cm (33 in.). All distances are measured from the front panel of the lens, not the film plane.
- The lens works with TTL flash, Aperture Priority (AV) or Program (P) mode exposure on many cameras. For manual control use a light meter or exposure chart.
- 7 The 3D Macro Lens in a cap has no auto diaphragm, so the viewfinder image darkens when f/22 is chosen. This allows the user to judge depth of field, and

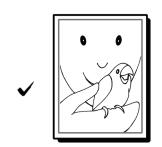
- has no adverse effect on the final picture.
- 3. When composing pictures, photographers usually adjust focus based on what they see in the viewfinder. With a macro lens this may be difficult. An alternative way would be to first decide on the distance to the subject, set the focus accordingly, and then position the camera in the correct place.
- Depth of field helps stereo photography, so a fast film compensates for a small aperture. ISO settings from 200-400 give excellent results.
- 10. For each aperture, the Depth of Field scale gives a distance range in which all objects will be sharp. For example, when the lens is set to f/11, and the subject is in focus at 30 cm, the

- depth of field will be 27-33 cm. At f/22, 23-38 cm.
- The 52 mm thread on the lens can be used for mounting filters or closeup lenses (nos. 1, 2 and 3). Attachments should be selected and used with care so as not to damage the filter thread.
- 12. To protect the 3D Macro Lens in a Cap, the focusing ring should be set to the "PARK" position before storing or transporting the lens.
- 13. 3D photographs taken by this lens are best viewed with Loreo 3D Viewers. Some people are able to free view stereo images. The image pairs do not correspond exactly, so viewing methods which require exact symmetry may not be suitable.

- 14. 3D photo tips: As in conventional photography, the subject of your picture will usually be placed in the center. Exposure is best if the light source is behind the photographer. In 3D Macro photography, lighting and exposure are especially important.
- 15. Stereo photography is different from ordinary photography. A 3D camera or lens records both the shape of things and the depth of the scene.
- 16. 3D pictures should show foreground objects as well as the background scene. When photographing a person, include objects in front, and an interesting view behind.
- 17. Important notice: You can point the camera up or down, but always keep it horizontal.

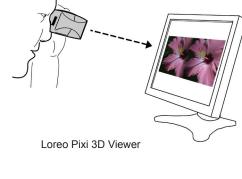






- Never hold your camera vertical, since you would not be able to view the pictures in 3D.
- 18. Printing: The Loreo 3D Lens
  System takes two pictures in
  each frame, viewable immediately after processing. 4R (4 x
  6 inches) prints work best.
  Normal prints should be made,
  NOT half frame photographs.
- 19. Viewing: Put the pictures in the Loreo Deluxe 3D Viewer (bottom left) and hold the eyepiece about 6 inches from your eyes. It may take a few seconds for your eyes to adjust to the stereo image.
- 20. Different people have different eyesight, so you may have to move the viewer closer or further away from your eyes for the stereo effect to appear.

21. For best clarity when viewing 3D pictures avoid bright lights reflecting on the viewing lens surface. Natural light falling on the stereo print, not on the stereo lens, will always give the best stereo effect.





Loreo Deluxe 3D Viewer

22. Sharing: One of the great joys of 3D photography is in sharing images with friends and family. Foldable, mailable viewers such as the Lite 3D Viewer (print viewing) and Pixi 3D Viewer (screen viewing) are ideal for this purpose. Remember that not everyone may be able to immediately see 3D effect like you can. Take the time to explain how it works.

## **Care and Troubleshooting**

- . Slight rain or salt water splashes on the lens body should be harmless. Wipe with a clean cloth. A soiled lens may be gently cleaned with lens tissue moistened with lens cleaning fluid.

  Never put liquid lens cleaner directly onto any lens. Do not wipe with a dry tissue as it may scratch the lens surface.
- Nikon digital SLR cameras may need to be switched to manual mode before they will function with a non-Nikon lens. Sony SLR cameras need to have the shutter lock disabled. Some Sony SLR cameras have to function in manual mode.