

PINHOLE LENS

CT-0420SG

Please follow the instructions in this manual to obtain the optimum results from this unit.

We also recommend that you keep this manual handy for future reference.

1. SAFETY PRECAUTIONS

- Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
- Make sure to observe the instructions in this manual as the conventions of safety symbols and messages regarded as very important precautions are included.
- We also recommend you keep this instruction manual handy for future reference.



WARNING

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

- Don't look through the lens directly at the sunshine this could cause blindness.



CAUTION

Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

- Ensure that the lens is securely tightened. If it is not tightened or firmly secured after installation, it could fall down, possibly resulting in personal injury.

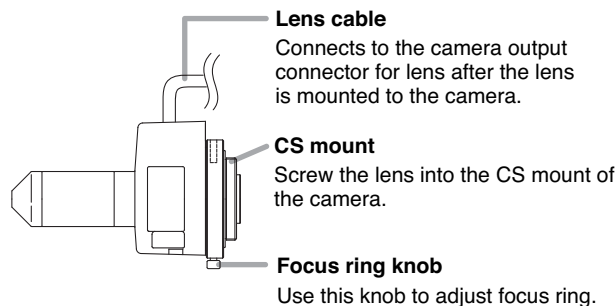
2. GENERAL DESCRIPTION

The TOA Pinhole Lens is a DC controlled automatic iris lens. The automatic iris close system protects the imager and filter from extremely bright lights when power is switched off.

3. HANDLING PRECAUTIONS

- Because the lens features a CS mount with its flange back (the distance between the mount surface and the focal point) of 12.5 mm long, make sure that the camera you use has the same flange back length.
- Use the lens under only DC control.
- Do not give a great shock nor vibration to the lens.
- Avoid using the lens (camera) in dusty area or being splashed by water.
- Do not touch directly or rub the lens surface firmly. When dust is on the lens, blow off with a blower or brush it off. When soiled with oil or dirt, gently wipe down the lens spirally and outwardly from the center with a lens cleaning paper damped slightly with a liquid cleaner sold in the market.
- Unnecessarily rotating the iris control may make the video signal level too high or too low, causing the lens to malfunction.

4. NOMENCLATURE AND FUNCTIONS



5. MOUNTING TO CAMERA

- (1) Fix the lens in position by turning it clockwise as far as it will go.
- (2) Adjust the mount position.
Loosen the lens by turning it one counterclockwise rotation from the fixed position. Pushing the lens strongly toward the camera, turn it until it reaches the desired new position. Turn the lens clockwise once more to fix it in position again, then check to confirm that this position is correct. (The position of the camera mount remains adjustable as long as the lens is pushed strongly in the direction of the camera.)

Note

If the mount position does not change, repeat Step 2 to adjust the position by pushing the lens toward the camera a little more strongly.

6. FOCUS ADJUSTMENT

Loosen the focus ring knob, then focus the camera on the object by turning the focus ring. The object that was brought into focus in bright locations could be out of focus in dark conditions. It is recommended to focus the camera on the object in dark conditions or using a commercially available ND filter. For the camera equipped with the adjustment switch, set it to "ON" position before focusing.

7. SPECIFICATIONS

Focal Length	4 mm
Maximum Aperture Ratio	1 : 2.0
Angle of View	1/ 3 type CCD Opposite angle: 86.1°
	Horizontal: 68.4°
	Vertical: 51.2°
	1/ 4 type CCD Opposite angle: 64.1°
	Horizontal: 51.2°
	Vertical: 38.3°
Aperture Range	F2.0 – F64
Minimum Object Distance	0.3 m (11.81")
Back Focus Length	8.55 mm
Flange Back Length	12.5 mm
Lens Mount	CS mount
Operating Temperature	– 20°C to +50°C (no condensation) (– 4°F to +122°F)
Finish	Black
Dimensions	36.5 (W) x 42.3 (H) x 65.9 (D) mm (1.44" x 1.67" x 2.59")
Weight	79 g (0.17 lb)

Note

The design and specifications are subject to change without notice for improvement.