

HD Lens User Manual

V1.0.0

The following content provides users with instructions on how to use the product safely. Please read it carefully before use.

Warning

- Do not get the inside of the lens wet, as this may cause fire or short circuit. If an accident occurs, disconnect the lens cable immediately.
- Avoid looking directly at any intense light source through the lens, such as the sun. As this may harm your eyes.

Notice

- Before powering on the lens, always ensure that all components are connected correctly.
- When installing or removing the lens cable, firmly pinch the connection terminals and do not pull or twist the cable with force, as this may result in a fire or a short circuit.
- Do not place or use the lens facing the sun, as this may cause fire due to the focused sunlight.
- If you observe any abnormalities, such as unexpected delays, unusual noises, odors, or any other malfunctions, please turn off the power supply to the lens immediately, unplug the lens cable, and reach out to us.

Precautions

- The lens is a precision optical product. Please refrain from using it in environments with strong vibrations.
- When the lens is moved from a low-temperature environment to a high-temperature or humid one, it may fog up. To prevent this fogging, please be mindful of the temperature difference in the surroundings before using the lens.
- To store the lens safely, please avoid environments with high temperatures, humidity, corrosive gases, or high salinity.
- When the lens is not in use for an extended period, please cover it with the lens cap.

Installation and Usage

Before installing the lens, please make sure it matches the camera interface. C-mount lenses can be directly installed on C-mount cameras, or installed on CS cameras with a C-CS adapter. CS-mount lenses can only be installed on CS cameras. Please ensure that there is no dirt on the lens surface before installation; otherwise, it may affect image clarity.

Note

Some lens mounts have a steering mechanism. Once the threaded section is securely screwed in, you can continue to rotate the lens to adjust its angle.

1 Zoom

- 1) Loosen the zoom locking pin, rotate the zoom ring, and choose the appropriate focal length according to the scene requirements.
The "W" mark represents short focal length, "T" mark represents long focal length.
- 2) Tighten the zoom locking pin.

2 Focus (Contains Fixed-focus FA Lenses Microfocus Operation)

- 1) Loosen the focus locking pin and rotate the focus ring to achieve the clearest image.
- 2) Tighten the focus locking pin and ensure the image is clear.

3 Adjust Back Focus

If you still cannot get a clear image when focusing, please adjust the lens back focus as follows:

- 1) Open the lens aperture.
- 2) Confirm that the lens and camera interface are compatible.
- 3) Rotate the zoom ring to the W position and the focus ring to the N position.
- 4) Adjust camera's back focus by adding or removing spacers to ensure a clear focus.
- 5) Ensure that the lens can focus clearly at long, medium, and short focal lengths. (If the image is still out of focus, please repeat the steps above.)

4 Adjust Aperture Size

- 1) Control the Aperture by DC Drive
 - This lens does not contain a built-in magnification control circuit (Automatic aperture control circuit board).
 - The lens shutter is driven by the camera DC signal.
 - The camera using this lens must either provide a DC control signal or have a switch socket for video signal/DC signal control.

Figure 1

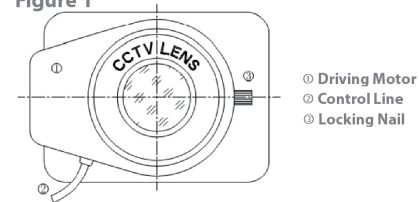
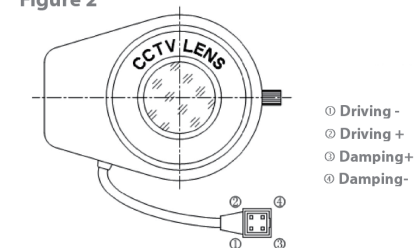


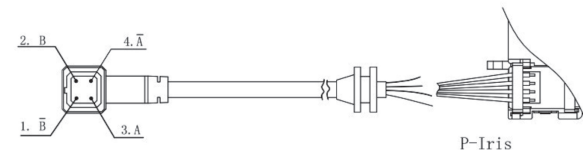
Figure 2



2) P-iris Controlling Aperture

The digital aperture is regulated by a stepper motor, and when paired with the specialized software of the corresponding camera, it can be systematically adjusted within a range to ensure optimal light levels.

This lens must be used with a professional network camera capable of providing P-iris control signals.



3) Manual Controlling Aperture

- ① Loosen the manual aperture locking pin.
- ② Rotate the manual aperture adjustment ring to adjust the aperture size.
- ③ Tighten the manual aperture locking pin.

4 Lens Maintenance

The lens surface uses a special optical coating to increase light transmittance. The lens performance will be compromised if the surface is covered by dust, grease, fingerprints, or other kinds of dirt. In severe cases, it can cause lens glare. Dirt and other contaminants may cause the lens surface to mold or become discolored.

You can clean the lens as the following steps.

- 1) Remove dust from the lens surface.
 - Use an oil-free soft brush or air brush (for photography) to remove surface debris and dust.
- 2) Remove grease from the lens surface.
 - Use a clean, soft cloth to wipe away any water droplets and grease. Then, blow dry the lens surface before disinfecting it with a non-fading absorbent cotton cloth that contains alcohol, lens cleaning paper, and lens cleaning fluid.
 - Gently wipe the lens from the center to the edge using a soft cloth, then take another clean soft cloth to wipe the lens again until it is completely clean.