

4MP / 2MP Box Camera Install Guide

CE-X1QHD Included Items:

- 4MP EX-SDI Box Camera x 1
- 2.8-12mm (4MP) CS Mount Lens x 1

CE-X1QHD Required Items:

- DC12V or AC24V Power Supply
- Box Camera Mounting Bracket

CE-X1QHD-NL Included Items:

- 4MP EX-SDI Box Camera x 1

CE-X1QHD-NL Required Items:

- CS-Mount Lens (suggested 4MP+ resolution)
- DC12V or AC24V Power Supply
- Box Camera Mounting Bracket

CE-X1HD Included Items:

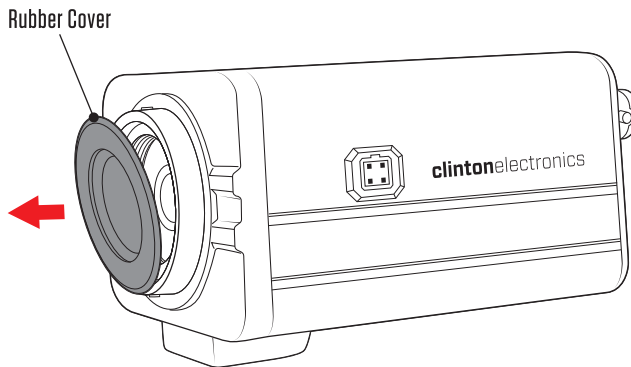
- 2MP EX-SDI Box Camera x 1

CE-X1HD Required Items:

- CS-Mount Lens (suggested 2MP+ resolution)
- DC12V or AC24V Power Supply
- Box Camera Mounting Bracket

1. REMOVE COVER

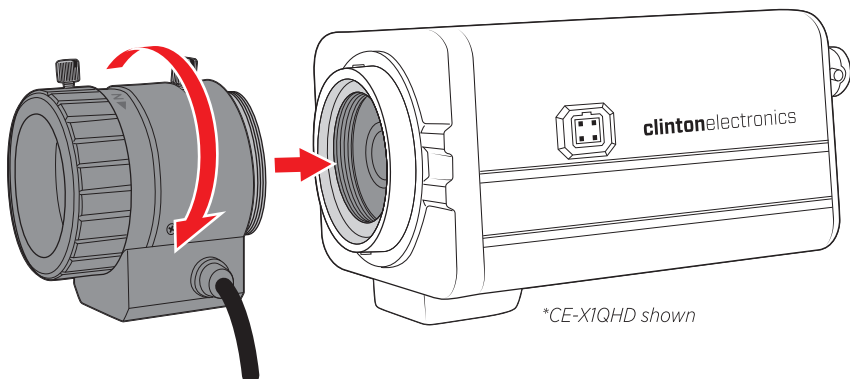
Remove the protective rubber cover from the camera front in preparation for lens installation. Take care not to touch the image sensor when the cover is removed.



2. ATTACH LENS

Remove the protective caps from the lens. Screw a CS-Mount lens clockwise into camera body.

If using a C-Mount lens: The use of a C-Mount lens adapter between the lens and the camera body is required. Failure to use the C-Mount Lens Adapter when using a C-Mount lens could result in damaging the camera sensor.

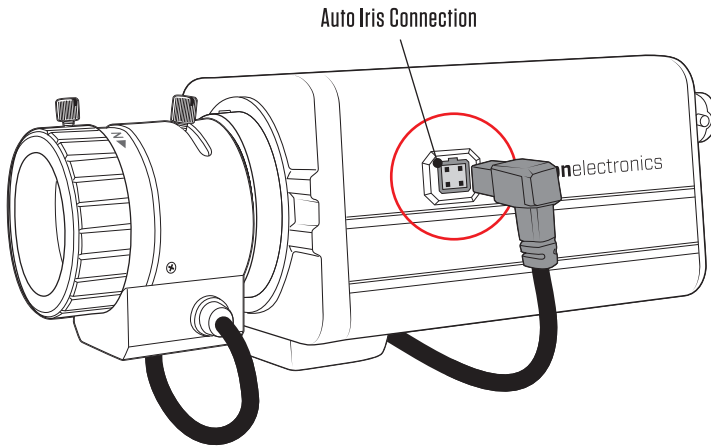


*CE-X1QHD shown

*CE-X1QHD-NL & CE-X1HD: Lens sold separately. Lens shown may vary from actual lens used.

3. CONNECT AUTO IRIS

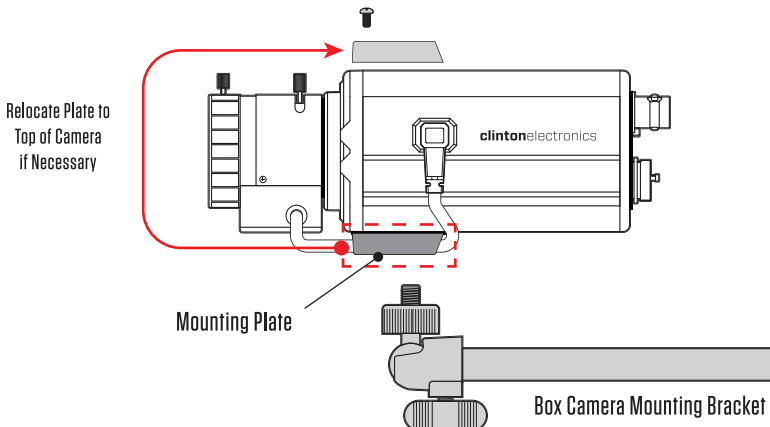
Insert the auto iris connection plug into the auto iris jack located on the side of the camera body.



4. MOUNT CAMERA TO BRACKET

Thread 1/4"-20 bolt from mounting bracket into the threaded hole on the mounting plate on the camera housing.

If necessary the mounting plate can be relocated to the top of the camera. Remove the 2 pan head screws from the mounting plate, then remove the 2 flat head screws from the top of the camera. Attach the mounting plate to the top of the camera using the 2 pan head screws and replace the 2 flat head screws into the bottom holes on the camera.

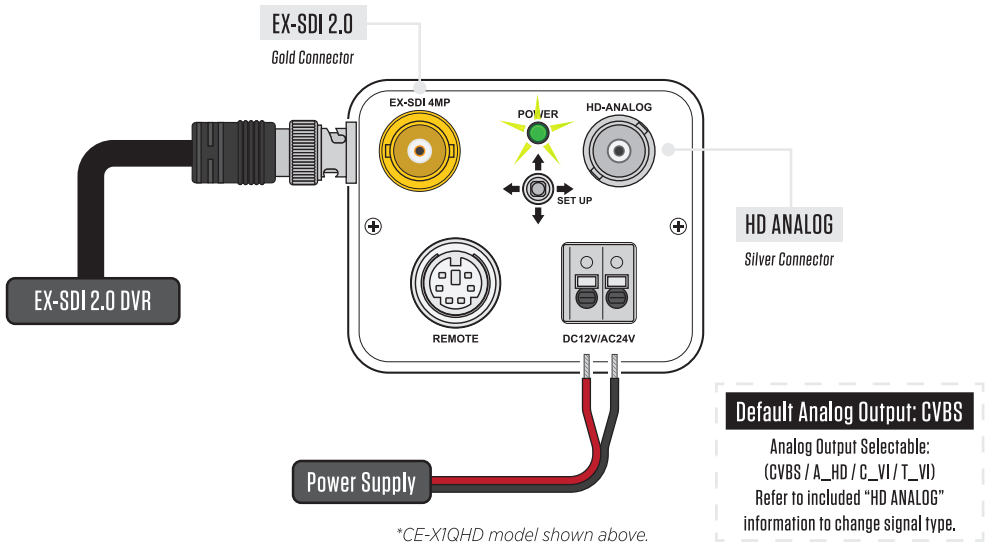


**Mounting Bracket sold separately. Mounting bracket shown may vary from actual mounting bracket used.*

5. CONNECT VIDEO & POWER

Make connections to the BNC cable and the power connection. Feed any cable slack into the mounting surface. A Power LED will illuminate GREEN when the camera is receiving power. To ensure quality operation, verify proper BNC and power termination, along with proper voltage at camera.

Use the **Gold BNC** connector for **EX-SDI 2.0** Output (Silver connector is HD Analog).

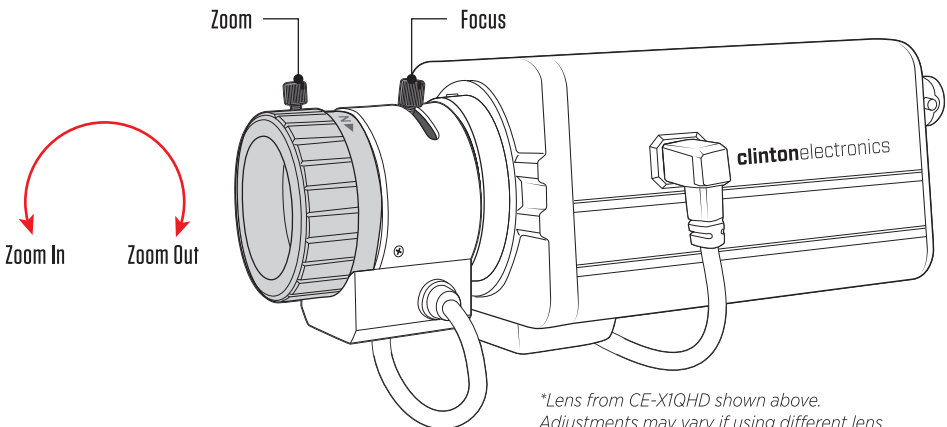


6. ZOOM/FOCUS ADJUSTMENT

To adjust the zoom and focus of the camera first loosen the appropriate adjustment knob.

Widen the viewing angle (zoom out) by rotating the zoom knob clockwise. To narrow the viewing angle (zoom in) rotate the zoom knob counter-clockwise. Rotate the focus knob Left or Right to adjust the focus of the lens.

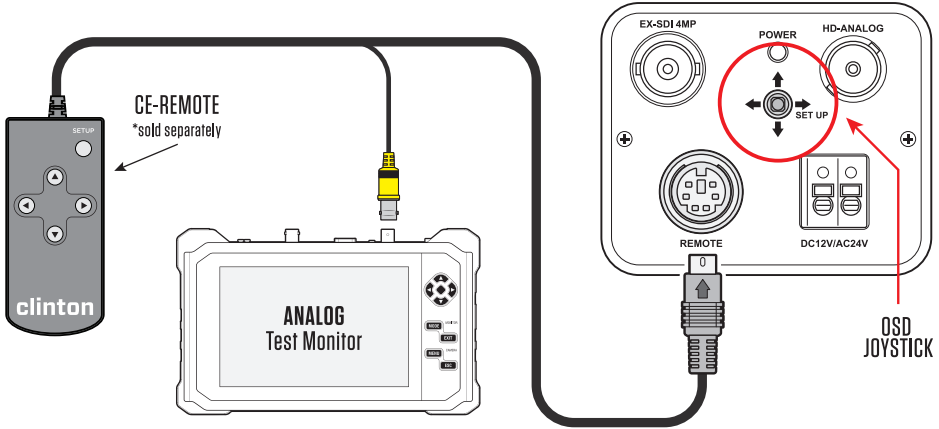
Tighten the adjustment knobs when zoom/focus adjustments are complete.



TIP: Tighten the Focus adjustment knob first. Lightly tighten the zoom knob. Then if needed, rotate the barrel of the lens to slightly zoom the lens in/out to correct the focus if it came out of adjustment when tightening the focus knob. Fully tighten the Zoom adjustment knob when complete.

7. OSD CONTROL

Before completing the installation you may wish to test the camera with a test monitor and make adjustments to the camera settings in the OSD (On Screen Display) Menu. Press the SETUP joystick "IN" to access the main menu, or attach the CE-REMOTE* to the DIN-Jack marked 'REMOTE' on the back of the camera and press the SETUP button on the CE-REMOTE.



The test monitor connection on the CE-REMOTE is an analog output. The analog output will be the same from this connection as the main Analog connector. If the camera is set to an HD Analog option, ensure the test monitor will support that signal type.

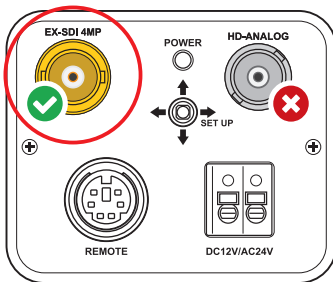
EX-SDI Install Tips

The default SDI output is set to: **EX-SDI 2.0** (GE-X1QHD is 4MP EX-SDI 2.0 - 1440p 30)

EX-SDI Compatibility

While the two video outputs on the back of the camera share the same style connection, they're different signal types that are not compatible with each other.

When making video connections, ensure the correct BNC connector is used (GOLD Connector is EX-SDI, SILVER Connector is Analog).



- EX-SDI will not work on HD Analog only DVRs & Devices
- HD Analog will not work on EX-SDI only DVRs & Devices

Change SDI Output

To change the SDI Output: Enter the OSD Menu of the camera, then access the SYSTEM Menu.

First, change the frame rate from **1440p** to **1080p**, then select the desired SDI Output (**EX-SDI 2.0**, **EX-SDI 1.0**, or **HD-SDI**).

Step 1:
Change Frame Rate

Step 2:
Change Output

SYSTEM	
SDI OUTPUT	EX-SDI 4MP
HD ANALOG	CVBS
FRAME RATE	1440p 30
VIDEOSYS	NTSC
CVBS FILTER	OFF

*Refer to camera OSD manual for more information.