

CE-VX180QHD(B) Install Guide

Included Items:

- Vandal X Series Dome Camera x 1
- Torx Wrench (T20 Security) x 1
- Instructions x 1
- Test Monitor BNC Lead x 1
- Mounting Screws x 4
- Drywall Anchors x 4

Required Items:

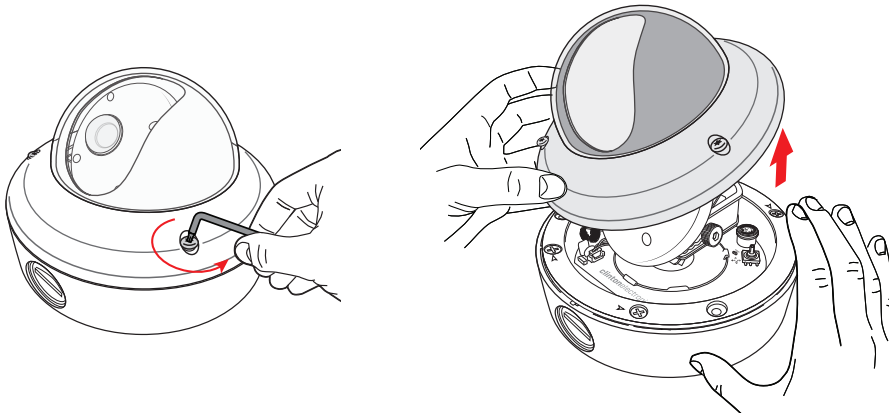
- Phillips Head Screwdriver or Drill with Phillips Head Bit
- DC12V or AC24V Power Supply

Optional Items:

- CE-REMOTE (OSD Remote Control)

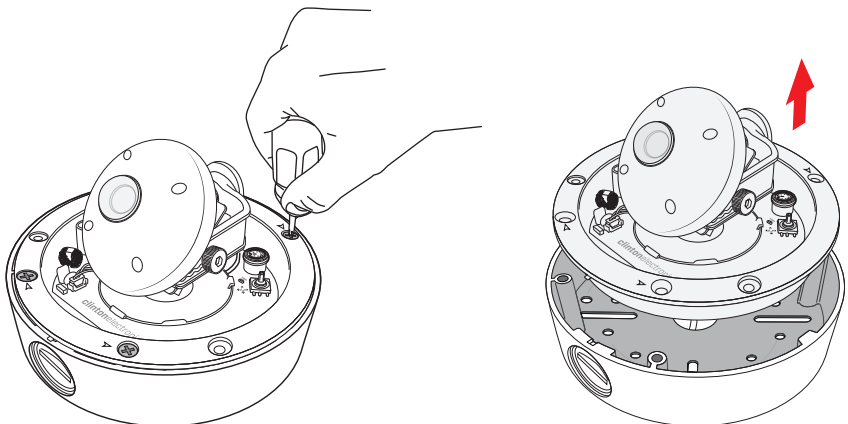
1a. DISASSEMBLE

Use the supplied Torx wrench to loosen the 3 Torx screws that hold the dome assembly onto the base. Remove the top dome cover from the camera base.



1b. DISASSEMBLE

Remove the four Phillips head screws that hold the inner case onto the camera base, then remove the inner camera assembly from the camera base. Keep these 4 screws for final assembly.

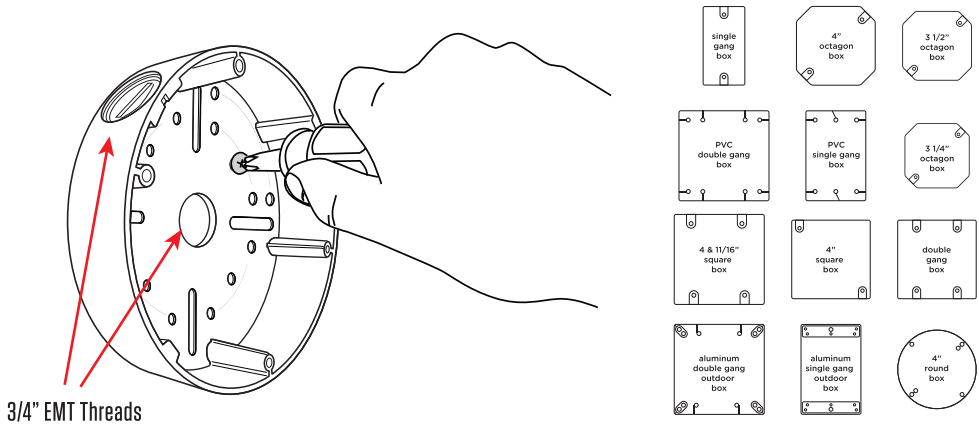


2. MOUNT OUTER CASE

If mounting to solid surface, use the four Phillips head mounting screws & drywall anchors if necessary.

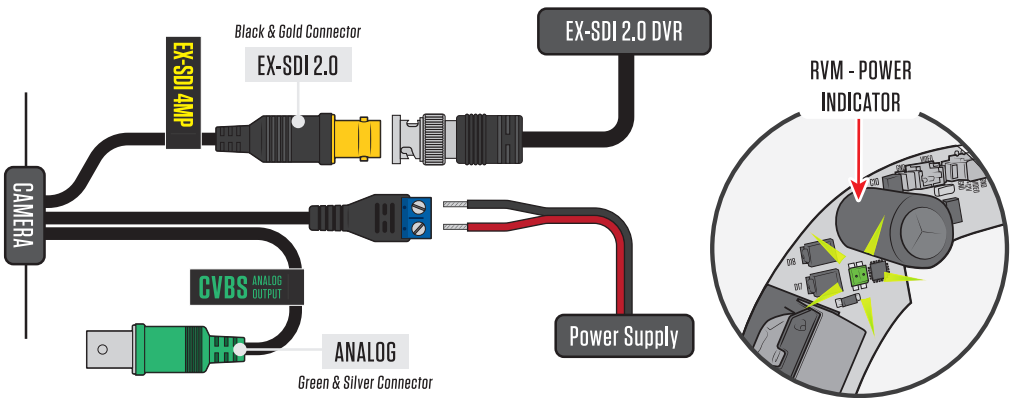
If mounting to a conduit box, choose the mounting hole pattern that best suits your application and use the appropriate screws. Multiple mounting hole patterns are provided.

3/4" EMT conduit can also be attached to the outer case using a threaded 3/4" EMT conduit adapter (not included). Connect either to the hole in the bottom/center of the case or the hole on the side.



3. CONNECT CABLES

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



Analogue Output Selectable: (CVBS / A_HD / C_VI / T_VI)
Refer to included "HD ANALOG" page for information on changing signal type.

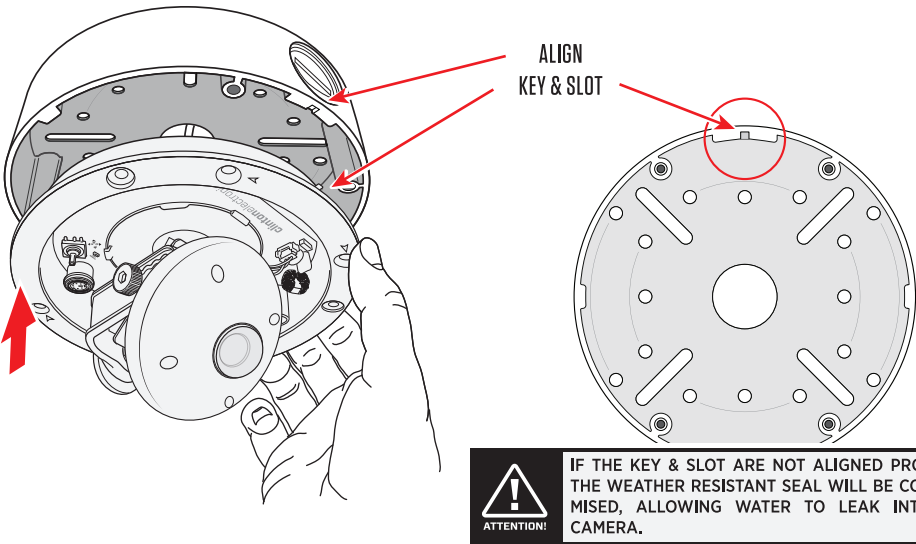
If powered via PoC (Power Over Coax)
The RVM LED Indicator does not function when using PoC. If using PoC, do not connect simultaneous DC12V or AC24V power.

RVM - Rated Voltage Monitoring	
LED COLOR	STATUS
GREEN	Safe Power
RED - SOLID	Over 29 Volts (AC24V)
RED - BLINK	Under 10 Volts (DC12V)

4a. ATTACH CAMERA

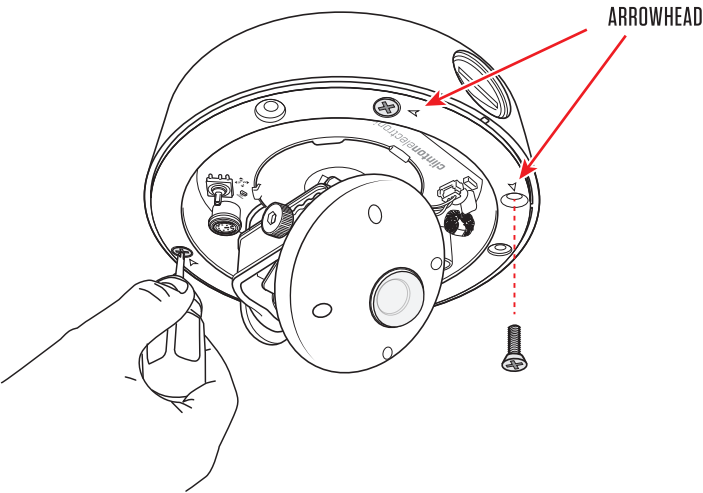
Replace the inner camera assembly into the mounting base as shown below.

Align the key on the lip of the inner camera assembly with the slot on the camera base when reassembling. If these are not aligned properly the weather resistant seal will be compromised, allowing water to leak into the camera.



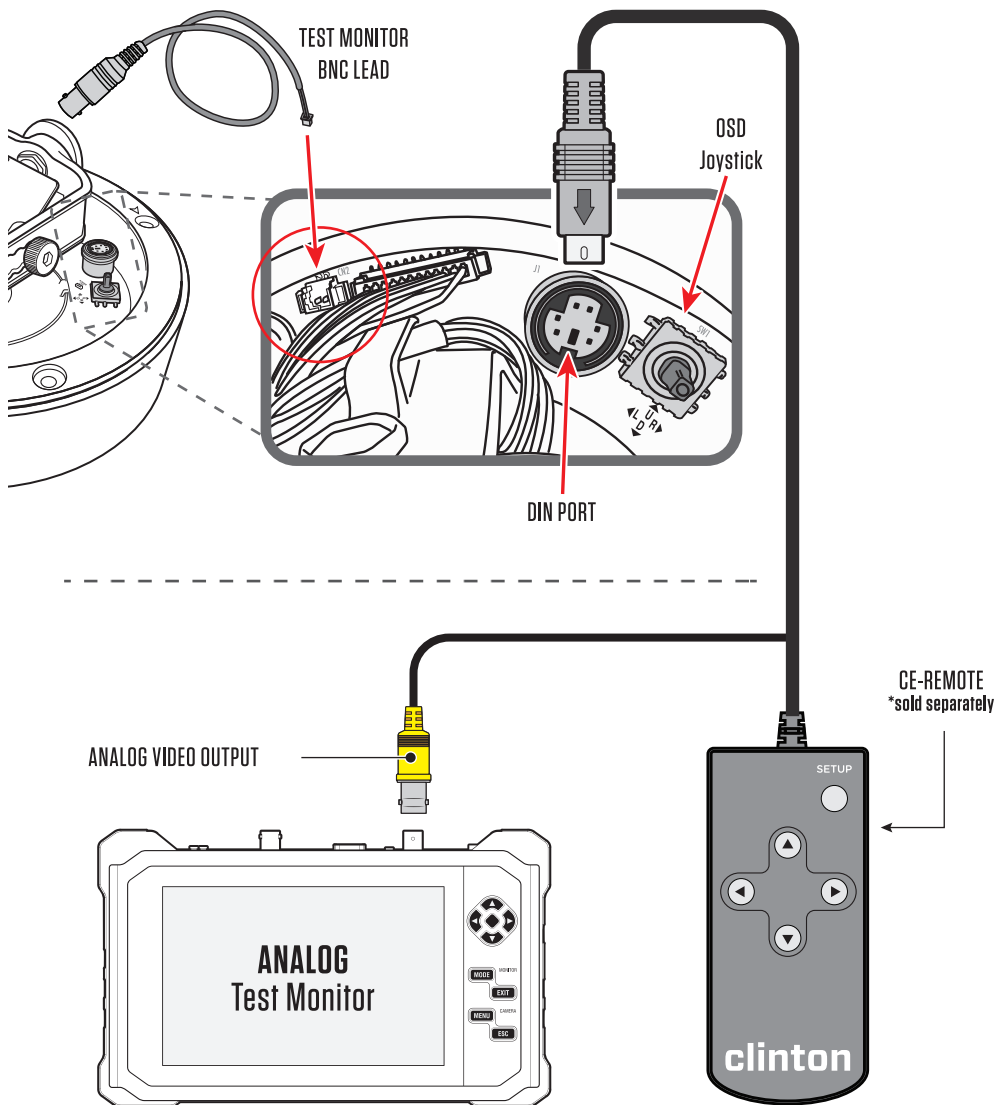
4b. ATTACH CAMERA

Replace the four Phillips head screws that hold the inner case to the camera base. The four holes are marked with arrowheads.



5. TEST MONITOR / OSD CONTROL

To test the camera with a test monitor use either the supplied Test Monitor BNC Lead or optional CE-REMOTE. The Test Monitor BNC Lead plugs into the small, 2 PIN connector (marked CN2) next to the wide 12 wire connection on the circuit board. The CE-REMOTE plugs into the DIN Port. OSD Adjustment can be made by using the OSD Joystick or the optional CE-REMOTE. Refer to OSD Manual for detailed instructions on adjusting camera settings.



NOTICE

The test monitor connection on the CE-REMOTE and the 2-pin connector on the camera board are analog video outputs. The analog output will be the same from these connections as the main Analog connector (green/silver). If the camera is set to an HD Analog option, ensure the test monitor will support that signal type. Certain OSD menu options are EX-SDI only and may not display video if connected to an analog monitor.

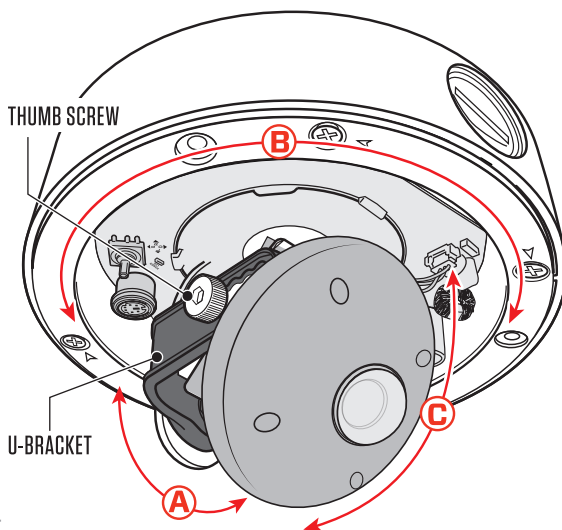
6. CAMERA ANGLE ADJUSTMENT

Adjust the angle of the camera as necessary.

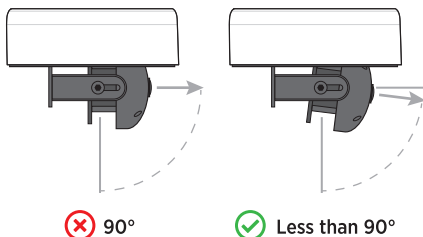
A. Lens Rotation: Rotate the U-Bracket on the gimbal to adjust.

B. Camera Plate Rotation/Pan: Pinch the gimbal U-Bracket and rotate the camera assembly on the base.

C. Lens Angle/Tilt: Loosen thumb screws on each side to adjust the tilt of the lens. Loosely place the dome cover over the camera to ensure the lens is not obstructed. *Do not fully tilt the camera 90° flat, it will interfere with the dome cover and the image will be partially obscured.*

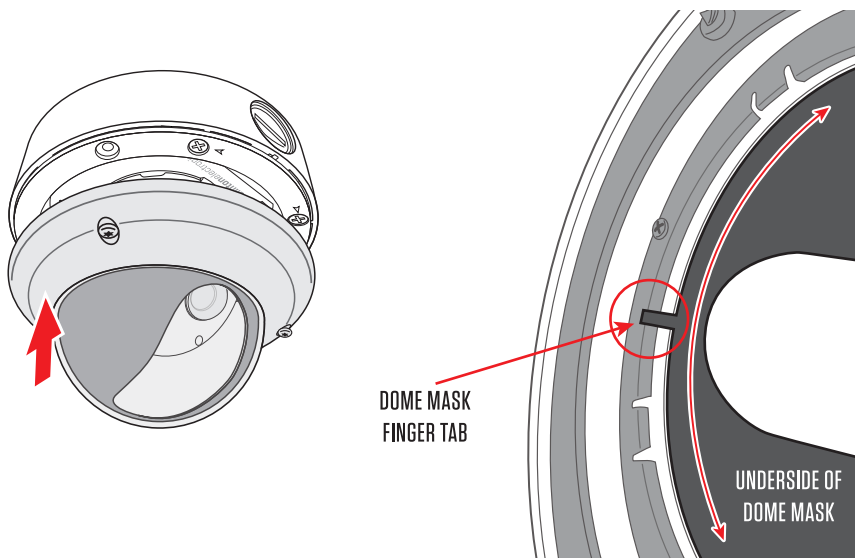


**If the camera image is upside-down and needs to be flipped/rotated, it may be easier to flip/rotate the image via the OSD Menu; (Main Menu/Special/Rotate). Refer to OSD manual for more information.*



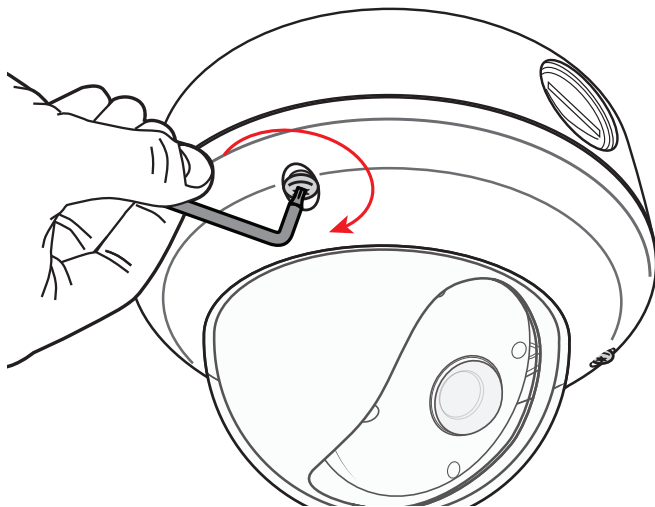
7. REPLACE DOME COVER

Carefully install the dome cover onto the camera base. If the cut-out in the dome mask does not align with the lens of the camera, rotate the dome mask using the finger tab located directly under the cut-out.



8. REASSEMBLE

Using the supplied Torx wrench, tighten the 3 Torx screws that hold the dome cover onto the base. Make sure each screw is tight to ensure superior weather resistance.



ATTENTION!

IF TORX SCREWS AREN'T FULLY TIGHTENED THE WEATHER RESISTANT SEAL WILL BE COMPROMISED, ALLOWING WATER TO LEAK INTO THE CAMERA.

9. PERIODIC DOME CLEANING

Over time, dome cameras will collect dirt and dust on the outside of the polycarbonate dome bubble— often resulting in blurry/out of focus images. We recommend periodically cleaning the dome to ensure optimal day and night image quality.

To clean the outside of the dome: first use compressed air to blow off any significant amounts of dirt/dust – then use warm, soapy water and a damp micro-fiber cloth towel to clean. Dry with a separate, clean micro-fiber cloth towel.

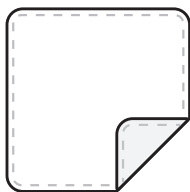
Glass cleaner, Ammonia, alcohol and/or other solvents should never be used to clean the dome. These products contain harsh chemicals that can cause corrosion and reduce optical clarity. Paper towels, shop-rags, or other rough fabric should also never be used to dry the dome as they can scratch the dome.



SAFE TO USE



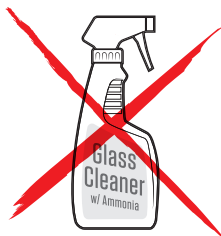
Warm Soapy Water



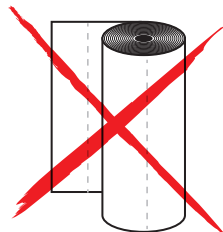
Micro-Fiber Cloth



DO NOT USE



Glass Cleaner



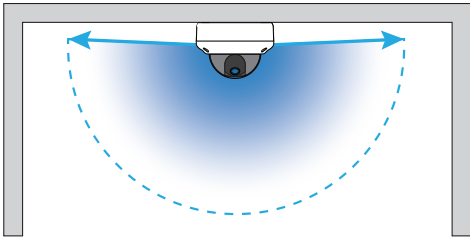
Paper Towels

180° Camera Best Practices

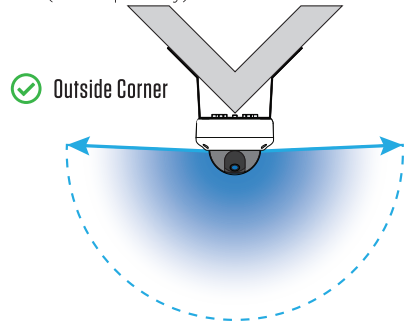
COMMON INSTALLATIONS

For an optimal unobstructed field-of-view, install the 180° camera in the center of a wall on or near the ceiling. Outside corners can also provide wide, open views. Use the CE-UCB-CRNR (sold separately) to mount the camera to an outer corner.

✓ Center of Room



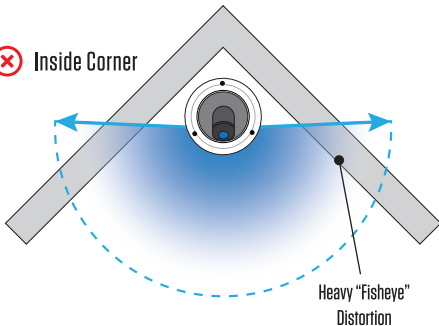
✓ Outside Corner



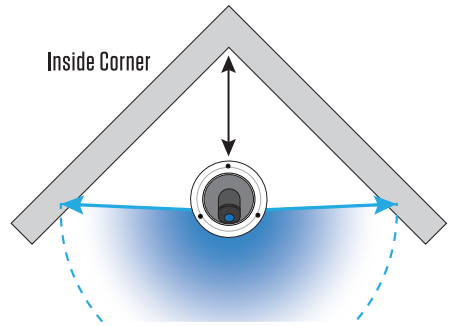
AVOID TIGHT, INSIDE CORNERS

When installing on an inside corner, it's best to move the camera away from the corner a few feet to avoid the corner walls from taking up the majority of the scene.

✗ Inside Corner

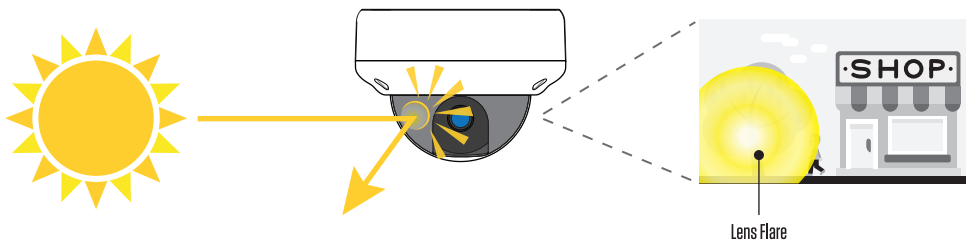


Inside Corner



AVOID DIRECT SUNLIGHT

The convex design of the 180° makes the camera prone to lens flares caused by direct sunlight. Lens flares can occur even if the lens does not directly point at the bright light source. The result is an over-exposed portion of the image. To reduce lens flare, angle the camera down and away from the bright light source or install it higher up to increase the downward angle.



**This camera's default SDI video output is set to: EX-SDI 4MP*

4MP EX-SDI Compatibility

The EX-SDI 4 Megapixel camera image will only display on a **4MP EX-SDI DVR** or other EX-SDI 4MP device.

Use the **BLACK BNC connector for EX-SDI 4MP** Output (Green connector is analog).



4MP Distance

The camera is defaulted to **EX-SDI 4MP**, which is capable of transmitting video up to **800'** over RG59 coax cable.

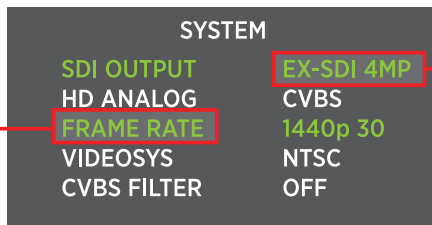
For greater distance change the SDI Output to a lower resolution (2MP).

SDI OUTPUT	DISTANCE	RESOLUTION
EX-SDI 4MP	800'	QHD - 1440p
EX-SDI 2.0	1,400'	FHD - 1080p
EX-SDI 1.0	800'	FHD - 1080p
HD-SDI	275'	FHD - 1080p

4MP SDI Output

To change the 4MP Output: Enter the OSD Menu of the camera, then access the SYSTEM Menu. Change the frame rate from **1440p 30** to **1080p 30**, 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

If you need further help call Clinton Electronics Technical Support at 800-549-6393.

**Information in this document is subject to change without notice*

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