

# CE-MC1QHD Install Guide

## Included Items:

- "Multi" Camera Assembly x 1
- 3M Double-sided Tape x 1
- Metal Face Plate x 1
- Acrylic Face Plate x 1
- Phillips-head Screws x 4
- Power Pigtail x 1
- Instructions x 1

## Required Items:

- Phillips Head Screwdriver or Drill with Phillips Head Bit
- DC12V Power Supply
- Test Monitor

## Optional Items:

- 1/8" Drill Bit & 3/4" Spade Drill Bit
- Glass Cleaner
- 3/4" EMT Conduit Adapter & Nut
- 1/4"-20 Camera Bracket



**ATTENTION! This is a 12 Volt DC Only Camera!**

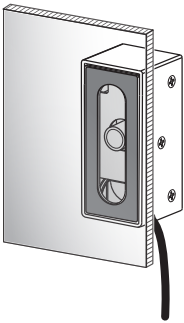


## CHOOSE INSTALLATION CONFIGURATION

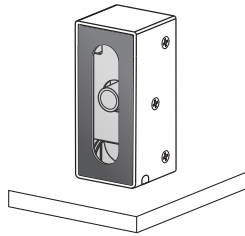
This camera can be installed in a variety of ways. It can be installed directly to outward facing glass, installed onto most solid surfaces, installed on the end of 3/4" EMT conduit adapter, or installed onto 1/4"-20 camera mounts.

*The camera is intended to be installed with a vertical orientation. For horizontal installation, jump to Step #9.*

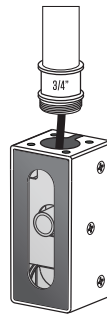
### GLASS MOUNT



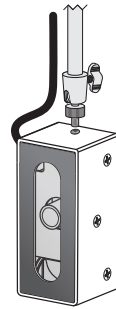
### SURFACE MOUNT



### 3/4" EMT MOUNT

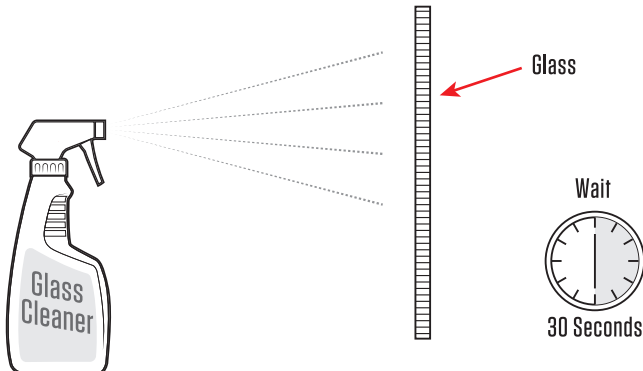


### 1/4"-20 MOUNT



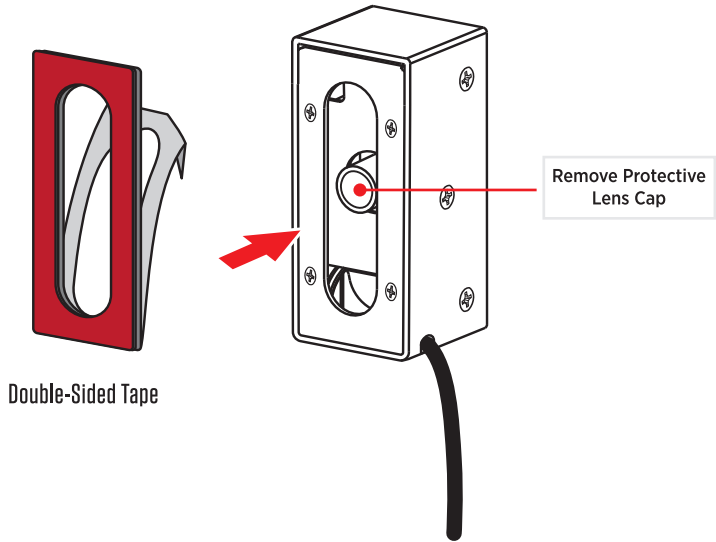
## 1A. GLASS MOUNT: Clean Glass

It is very important that the glass surface the camera will be installed onto is clean. A dirty surface will not only limit how well the adhesive bonds to the glass, it can also cause poor camera image. Use glass cleaner or a mild soap/water mix to clean the glass, then wait at least 30 seconds for the surface to dry.



## 1B. GLASS MOUNT: Apply Double-sided Tape

Remove the backing from one side of the double-sided adhesive. Make sure the front surface of the camera is clean, then carefully apply the exposed adhesive to the front of the camera. If the front of the camera is not clean (greasy finger prints, dirt, dust, etc.) the adhesive may eventually fail.

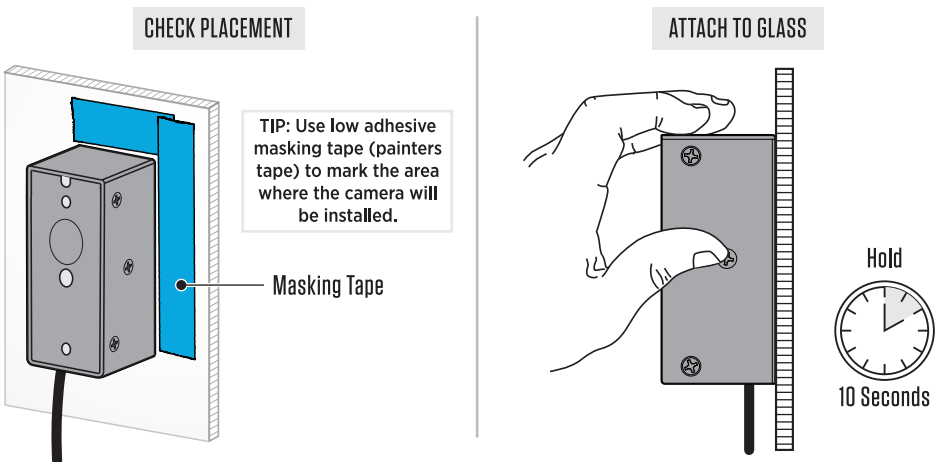


## 1C. GLASS MOUNT: Attach Camera to Glass

Before attaching the camera to the glass it's recommended to verify the intended install location is correct with a test monitor. The double-sided tape is not designed to be removed— it is a one time only application.

Remove the outward facing backing from the double-sided tape once the camera position has been verified.

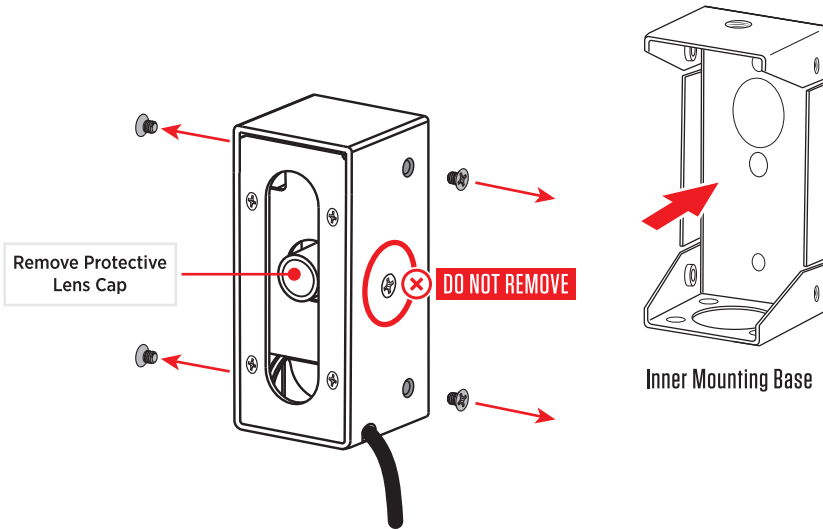
Firmly apply the camera to a clean glass surface. Hold in place for 10 seconds to ensure the adhesive bonds with the glass. The camera should be installed with the cable facing downwards for the image to be correct. If the cable is facing up, the image can be rotated 180° using the OSD— refer to included OSD manual.



## 2A. SURFACE, 3/4" EMT, and 1/4"-20 MOUNT: Disassemble Camera

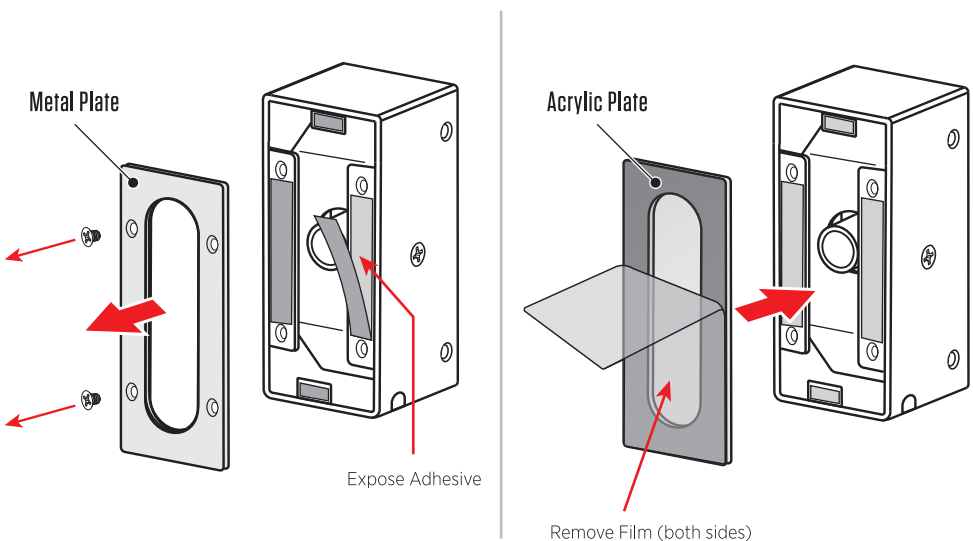
Using a Phillips-head screwdriver, remove the four case screws from the sides of the housing then remove the inner mounting base by pulling away from the front housing.

**DO NOT REMOVE THE MIDDLE SCREW ON EACH SIDE OF THE HOUSING! These screws are for adjusting the camera angle.**



## 2B. REMOVE METAL FACE PLATE: Surface, 3/4" EMT, And 1/4"-20 Mount

Using a Phillips-head screwdriver, remove the four screws from the face plate on the front of the camera housing. Peel off the backing paper from the pre-installed double-sided tape. Next remove the protective film from both sides of the acrylic plate and attach to the front of the camera housing. Press and hold firmly for a few seconds to ensure the adhesive bonds with the acrylic.



### 3A. SURFACE MOUNT

#### For Hidden Cable Method (Horizontal/Counter-Top or Wall Mount):

To run the cable through the surface, concealing the cable, drill a 3/4" hole in the mounting surface at the center of where the camera will be mounted.

#### For Surface Run Cable Method:

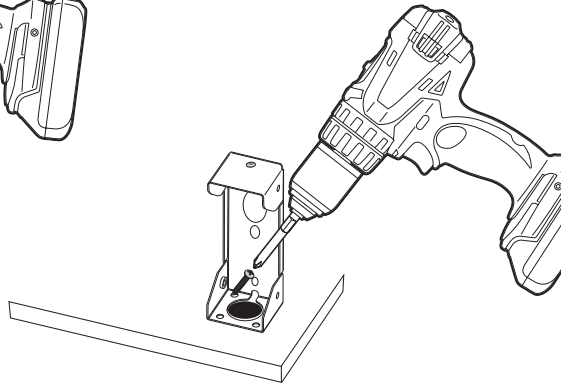
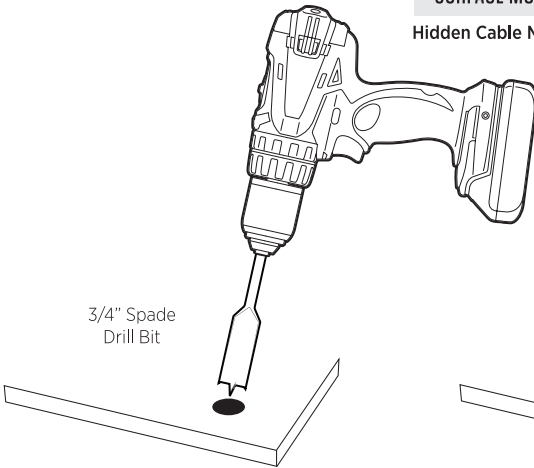
To install the camera with surface mounted cable, run the camera's cable into the slot on the bottom-rear of the mounting base.

### 3B. MOUNT BASE

Attach the base to the mounting surface using the included Phillips-head screws. Depending on the length of your driver bit, it may be necessary to attach the mounting screws at an angle when installing. 1/8" pilot holes are recommended for laminate surfaces. *\*Note that after mounting the camera base, each side of the housing must be accessible with a screwdriver to re-attach the cover and adjust the camera angle.*

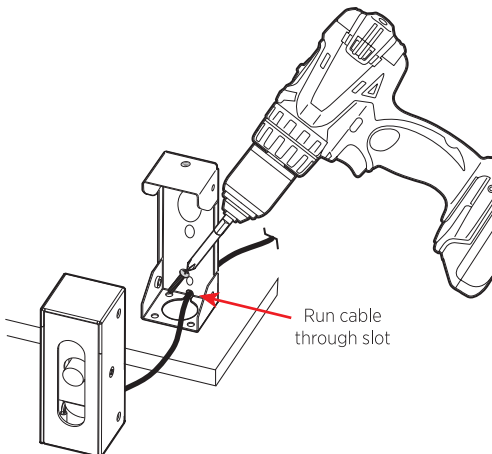
#### SURFACE MOUNT

##### Hidden Cable Method



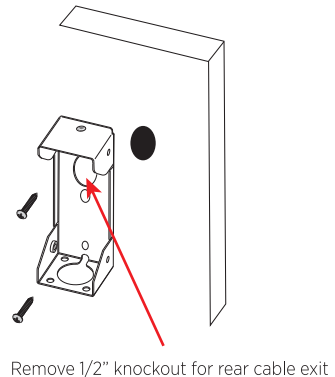
#### SURFACE MOUNT

##### Surface Run Cable Method



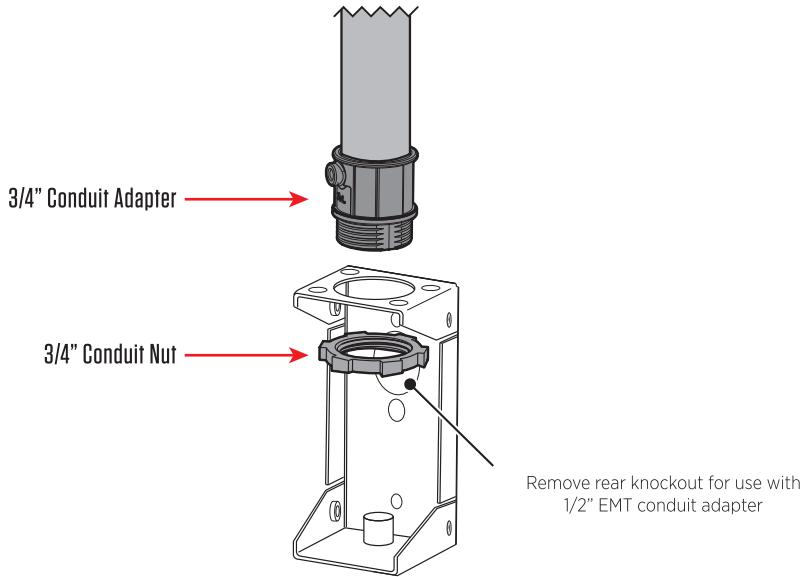
#### WALL MOUNT

##### Hidden Cable Method



#### 4. 3/4" EMT CONDUIT MOUNT

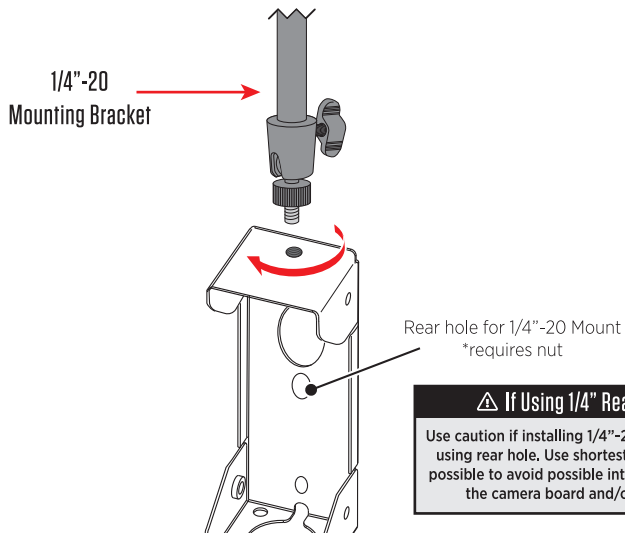
If connecting to conduit, insert a 3/4" conduit adapter (not included) into the hole and attach a conduit adapter nut on the inside of the mounting base. Attach mounting base to surface if necessary.



#### 5. 1/4"-20 MOUNT

Thread 1/4"-20 bolt from mounting bracket of choice into the threaded hole on the mounting plate on the camera housing. (Camera bracket sold separately)

Alternatively— the center, rear hole can be used instead of the top threaded hole. A 1/4"-20 nut is required (not included) if attaching to mounting bracket using this method.

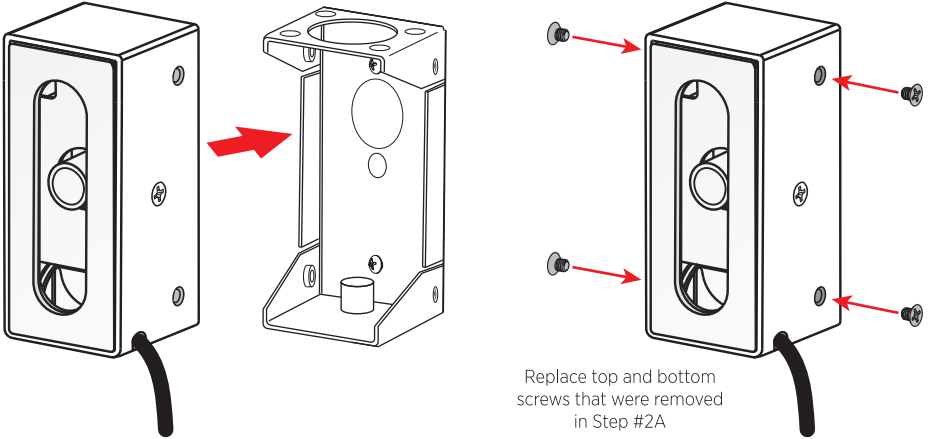


**⚠ If Using 1/4" Rear Hole**  
Use caution if installing 1/4"-20 bolt and nut using rear hole. Use shortest bolt and nut possible to avoid possible interference with the camera board and/or cables.

## 6. REASSEMBLE

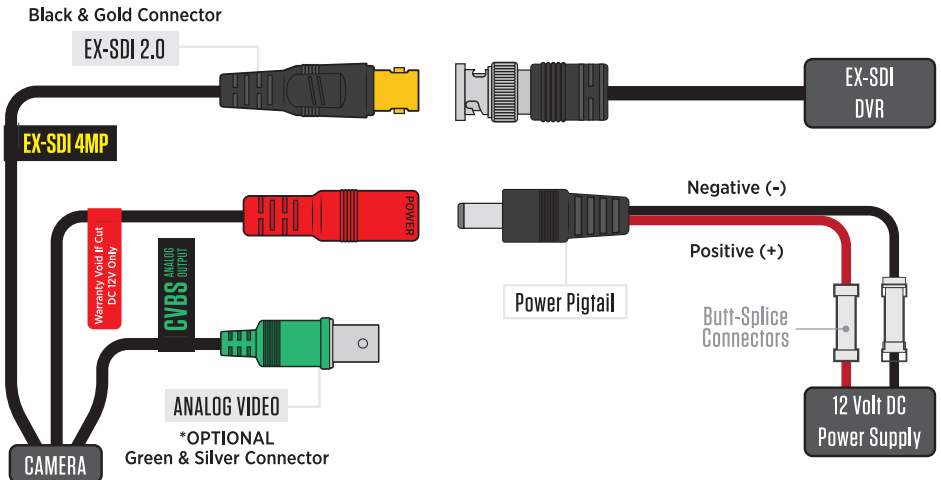
Feed any cable slack into the hole in the mounting surface and align the front housing onto the base. Guide the front camera assembly onto the mounting base.

Insert and secure the four Phillips-head screws into the sides of the case.



## 7. CONNECT CABLES

Make connections to the power and BNC cable (BLACK connector is for EX-SDI, GREEN connector is for Analog video). **Use 12 Volt DC only for camera power!** If using 18/2 wire for power wire, use the supplied Power Pigtail and attach to wire with appropriate wire connectors, such as butt-splice connectors (not included).



Analog Output Selectable: (CVBS / A\_HD / C\_VI / T\_VI)  
Refer to included information for changing signal type.



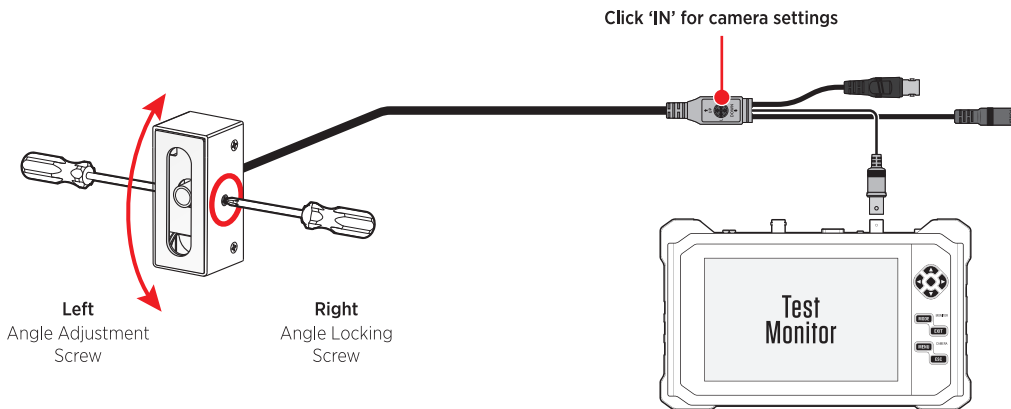
### USE 12 VOLT POWER SUPPLY

USING A 24 VOLT POWER SUPPLY WILL CAUSE DAMAGE TO THE CAMERA AND CAN CAUSE POTENTIAL FIRE OR ELECTRIC SHOCK HAZARDS.

## 8. ADJUST CAMERA ANGLE (Optional)

To adjust the camera angle use two Phillips Head Screwdrivers, one placed on each side of the housing. When viewed from the front of the camera, the center screw on the left is the angle adjustment screw, and the center right screw is the angle locking screw. Loosen the locking screw first, then move the camera with the angle adjustment screw. When finished, tighten the locking screw.

To verify proper camera angle and/or make OSD adjustments, connect to a test monitor using either Analog or EX-SDI connection from the camera. OSD (On Screen Display) adjustments can be made by using the Joystick on the cable.



## 9. HORIZONTAL INSTALLATION (Optional)

The camera assembly is designed to be installed vertically— allowing for up/down tilt adjustments. If installed horizontally, the image from the camera will be rotated 90°.

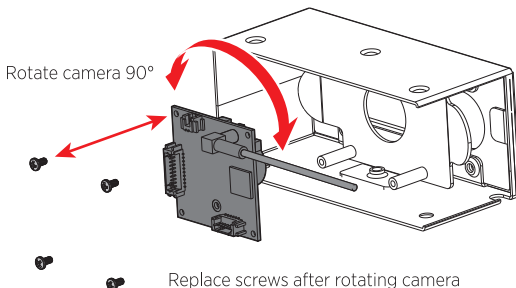
For horizontal installation, the internal camera assembly can be rotated— allowing for left/right pan adjustments. Carefully remove the (4) Phillips-head screws from the camera board. Take care not to lose the screws. Rotate the camera board 90° in the desired direction while avoiding touching the lens. Replace the (4) Phillips-head screws.

For correct orientation of the camera, the 'UP' label (viewable from the front of the camera board) indicates the camera is in the correct up position. If the camera image is upside-down after installation, it can be flipped 180° through the OSD menu.

❌ Camera not rotated 90°



✅ Camera rotated 90°



*\*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).



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

## 4MP Distance

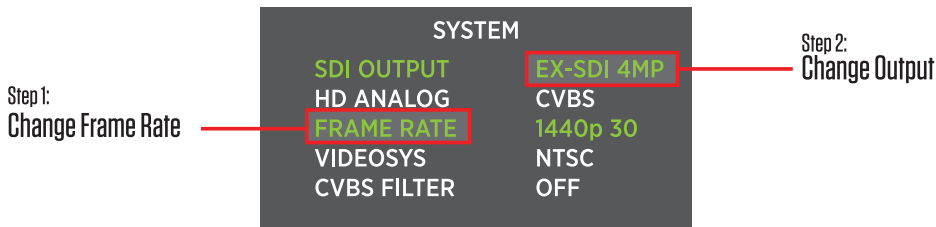
The camera is defaulted to **EX-SDI 4MP**, which is capable of transmitting video up to **800'** over RG59 coax cable.

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**).



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