

# VX HD IR Install Guide

For EX-SDI 2.0 VX Series Cameras: CE-VX2HD(B) • CE-VX3HD(B) • CE-VX2HD(B)L

## Included Items:

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

## Required Items:

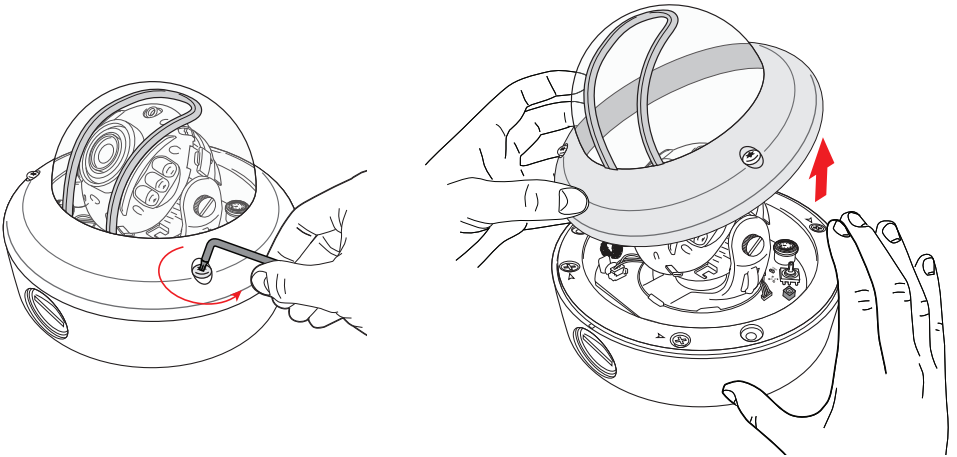
- Phillips Head Screwdriver or Drill with Phillips Head Bit

## Optional Items:

- CE-REMOTE (OSD Remote Control)

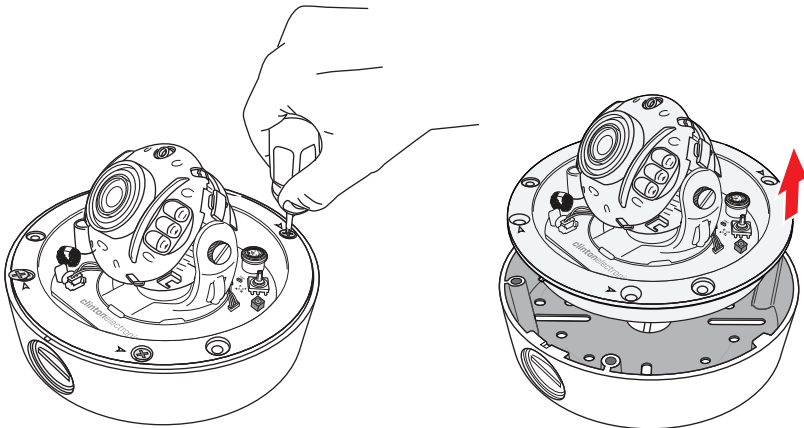
## 1a. DISASSEMBLE

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

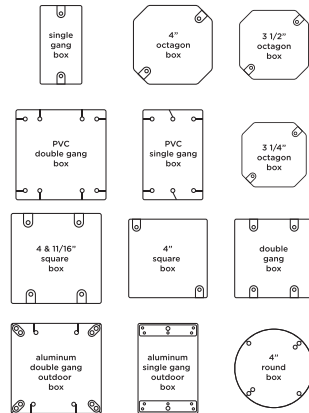
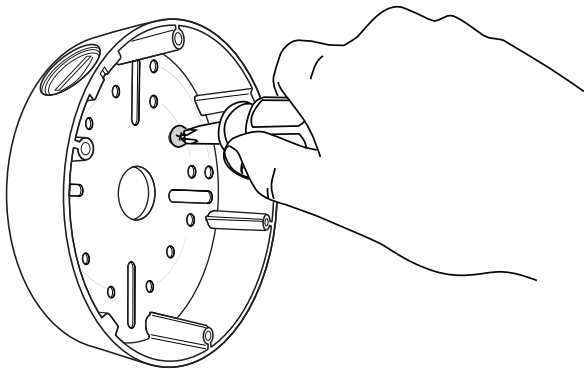
Remove the four Phillips head screws that hold the inner case onto the camera base, then remove the inner camera assembly from the camera base. Keep these 4 screws for final assembly.



## 2. MOUNT OUTER CASE

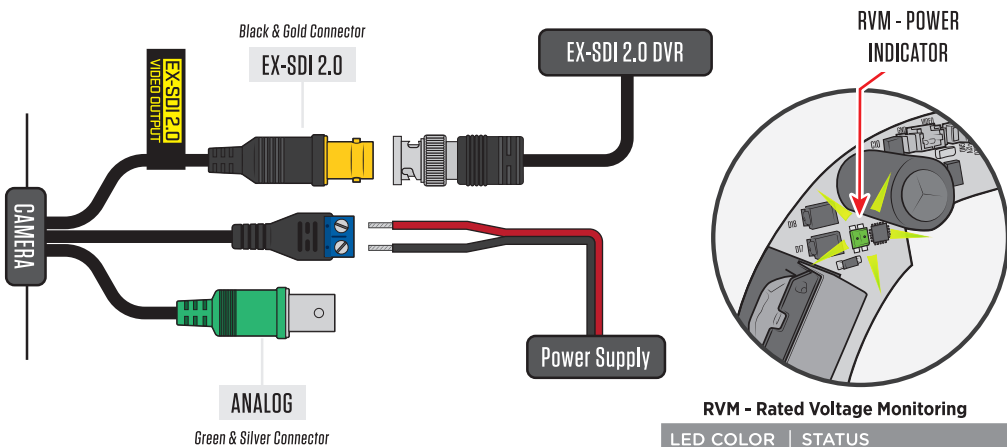
If mounting to solid surface, use the four Phillips head mounting screws & drywall anchors if necessary.

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. 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 card for information on changing signal type.

\*Lite Series Cameras: Yellow & Silver Connector. HD Analog not available.

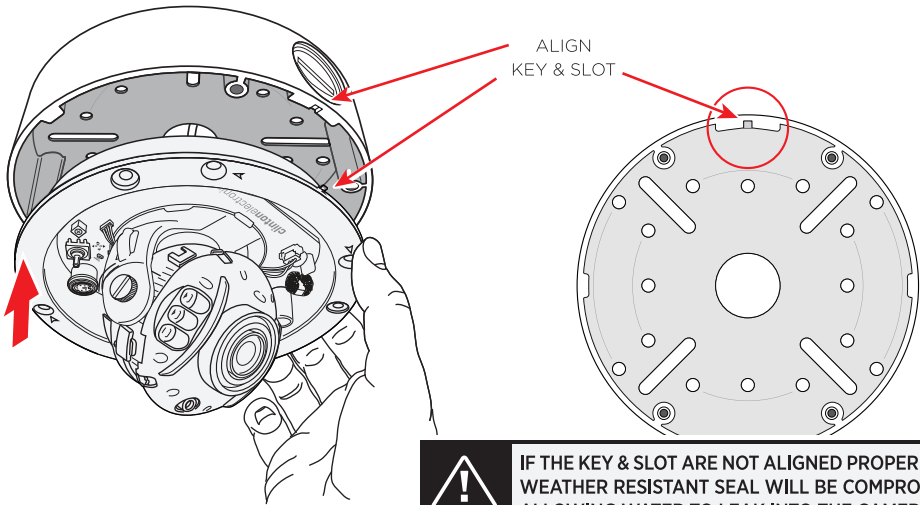
### RVM - Rated Voltage Monitoring

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

## 4a. ATTACH CAMERA

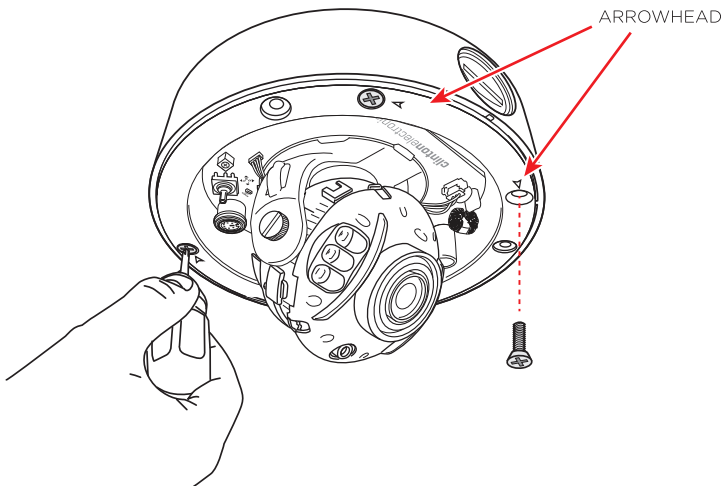
Replace the inner camera assembly into the mounting base as shown below.

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.



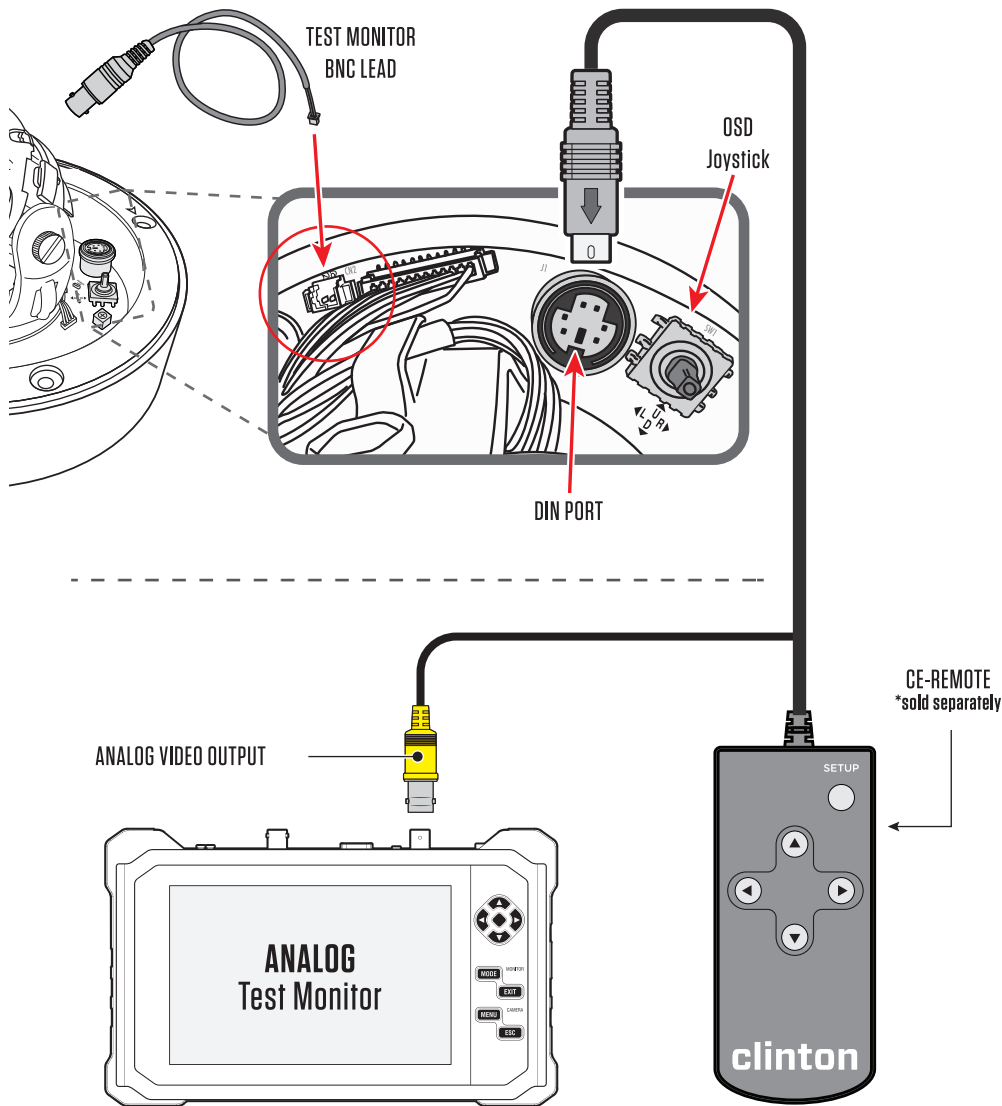
## 4b. ATTACH CAMERA

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.



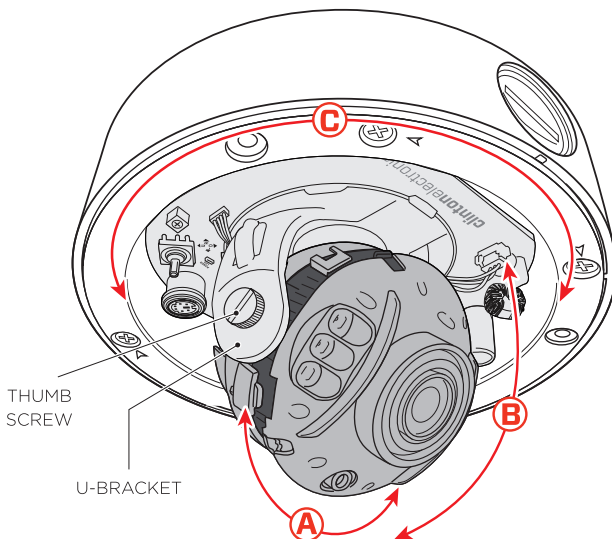
**NOTICE**

The test monitor connection on the CE-REMOTE and the 2-pin connector on the camera board are analog video outputs. The output will be the same from these connections as the main Analog connector. 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 notched area on the camera assembly.
- B. Lens Angle:** Loosen thumb screws on each side to adjust the tilt of the lens.
- C. Camera Plate Rotation:** Pinch the gimbal U-Bracket and rotate the camera assembly on the base.



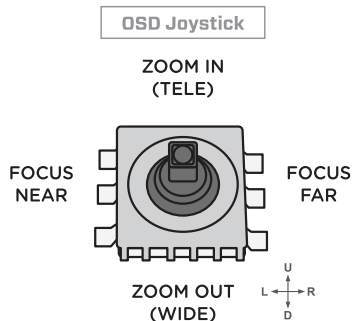
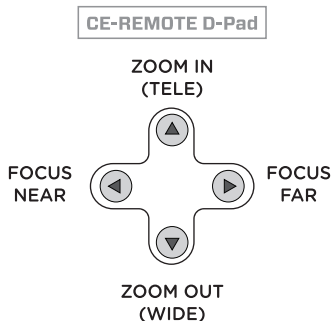
*\*If the camera image is upside-down and needs to be flipped/rotated, it may be easier to flip/rotate the image via the OSD Menu; (Main Menu/Special/Rotate). Refer to OSD manual for more information.*

## 7a. ZOOM / FOCUS ADJUSTMENT

The lens will auto focus once powered; this can take several seconds. To set the zoom either use the OSD Joystick or the directional buttons on the CE-REMOTE. Press UP to zoom in & press DOWN to zoom out.

After the zoom adjustment has been made the camera will auto focus again; this can take several seconds.

To manually adjust the focus: from the OSD Menu, change the AF MODE to Manual, then press either the LEFT or RIGHT buttons to manually set the focus. The camera will no longer Auto Focus if set to Manual.



### NOTICE

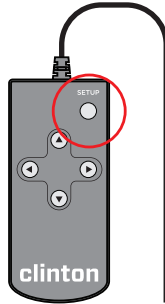
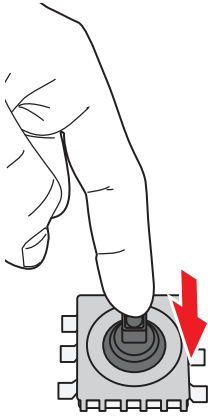
Upon initial installation/power ON of camera the camera will begin to focus on the current scene. If there is an obstruction of the lens (installer or equipment in-front of camera), the camera might focus on those objects and could appear out of focus. To refocus the camera either adjust the level of zoom (zoom in / zoom out) or power cycle the camera (power off - power on).

## 7b. ZOOM / AUTO FOCUS OSD MENU:

The Vandal X Series cameras with the Zoom A/F lens have a special set of OSD Menu options.

Using the OSD Joystick click 'IN' (downwards toward the base of the cameras) or using the D-Pad on the CE-REMOTE press 'SETUP.'

While on the ZOOMFOCUS option, click IN or press SETUP to enter the sub-menu.



CLINTON EXHD 2.0	
0. ZOOMFOCUS	↵
1. EXPOSURE	↵
2. WHITE BAL	ATW
3. IMAGE ADJ	↵
4. BACKLIGHT	OFF
5. DAY&NIGHT	AUTO ↵
6. DNR	MIDDLE
7. SPECIAL	↵
8. SERIAL	↵
9. SYSTEM	↵
10. EXIT	SAVE ↵

**AF MODE:** Choose either AUTO or MANUAL.

**AUTO** will focus automatically after zooming in/out.

**MANUAL** allows for manual focus using the joystick or D-Pad of CE-REMOTE.

**SCANNING:** Choose either HALF or FULL.

**HALF-** the lens scans only the current focal length, taking up to 30 seconds.

**FULL-** the lens scans the entire focal length, taking up to 1 minute or longer.

**ONEPUSHAF:** Press and hold the SETUP button to force the lens to Auto Focus to the current zoom level/focal length.

**SYNC TDN:** Set to ON to automatically change the focus when the camera switches from Day to Night mode.

**LENSRESET:** Press and hold the SETUP button to reset the focus of the lens.

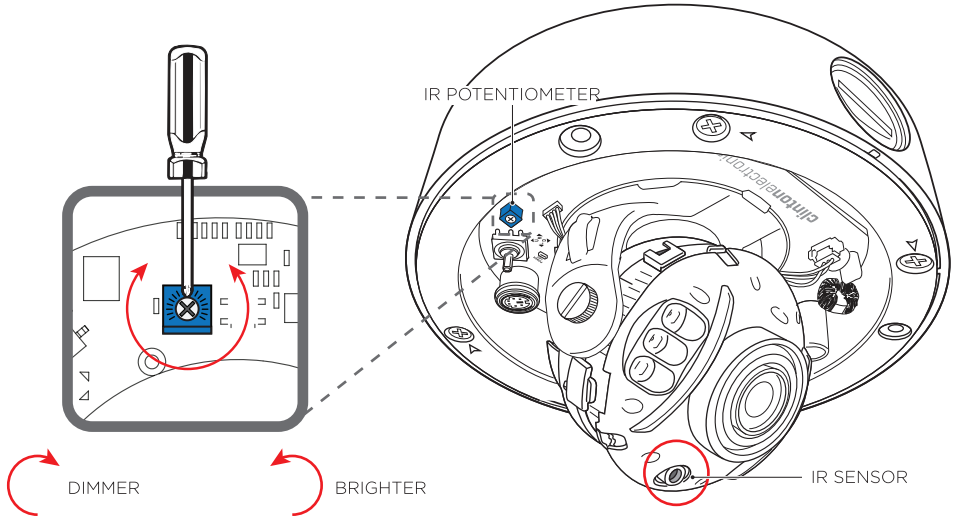
**INITIALIZE:** When 'ON' the lens will automatically refocus during boot up/power on, even if set to Manual. For areas prone to storms/power outages set to 'OFF' to lock the focus and prevent the camera from refocusing during boot up.

ZOOMFOCUS	
AF MODE	AUTO
SCANNING	FULL
ONEPUSHAF	ON ↵
SYNC TDN	OFF
LENSRESET	ON ↵
INITIALIZE	ON
RETURN	↵

*Refer to OSD Manual for detailed instructions on adjusting camera settings.*

## 8. IR LED ADJUSTMENT

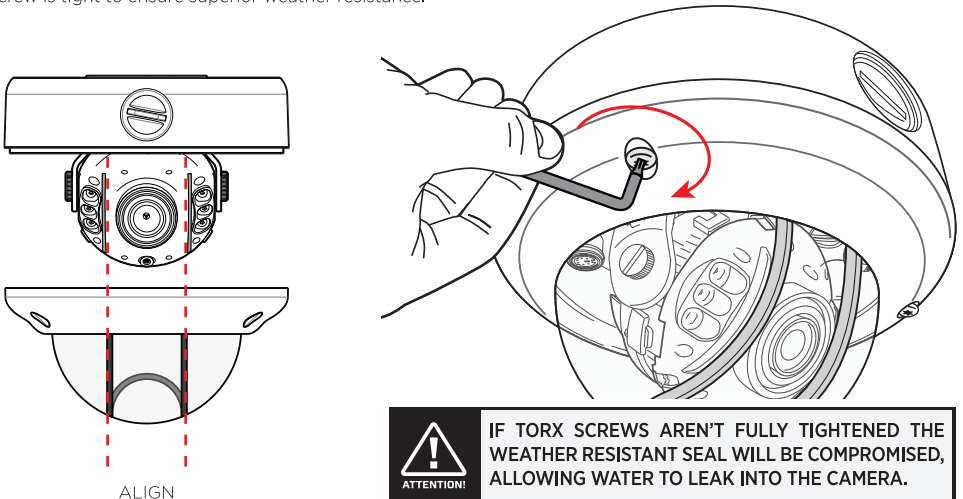
Before replacing the dome cover it is recommended to test the operation and intensity of the IR LEDs. To test, cover the IR Sensor and verify that the IR LEDs turned 'ON'. To adjust the intensity of the IR LEDs, use a Phillips head screwdriver to turn the IR level adjustment potentiometer, (located next to the OSD Joystick on the board). Turn the screw to the LEFT (counter-clockwise) for brighter LEDs or to the RIGHT (clockwise) for dimmer LEDs.



## 9. REASSEMBLE

Replace the dome cover onto the camera base. Align the IR Shield tracks with the guides on the camera assembly by turning the dome bubble. The cover must be loose, with no pressure applied, to turn the bubble. (it may be easier to turn the bubble with the cover removed).

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.



# EX-SDI Install Tips

*The default SDI output (black connector) is set to: EX-SDI 2.0*

## COMPATIBILITY

While EX-SDI, HD-SDI and Analog share the same type of cable and connectors, that is where the similarities end.

- EX-SDI will not work on Analog only DVRs
- EX-SDI will not work on C\_VI, T\_VI, A\_HD DVRs
- EX-SDI will not work on HD-SDI only DVRs

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



EX-SDI / HD-SDI



ANALOG VIDEO

\*Lite Series Cameras: Analog is Yellow & Silver Connector.

## DISTANCES

The camera is defaulted to EX-SDI 2.0, which is capable of transmitting video up to 1,400' over RG59 coax cable.

Distances will vary depending on coax integrity.

**HDSDI** 275 Feet

**EX-SDI** 800 Feet

**EX-SDI 2.0** 1,400 Feet

Cable splices, improper BNC termination, damaged shielding, kinks and severe bends in the cable will reduce the possible distance of the video transmission.

\*Greater distances are possible using RG6 Quad-Shield cable.

## UCC - Universal Coax Comm.

For UCC to function, SDI Output from the camera must be set to EX-SDI 2.0 & connected DVR must be EX-SDI 2.0/UCC compatible. The ID & Baudrate must match on Camera and DVR.

To change the ID & Baudrate of the camera: Enter the camera's OSD menu- then access the SERIAL Menu and scroll to CAM ID and/or BAUDRATE to set the desired settings.

SERIAL	
CAM ID	1
ID DISPLAY	OFF
BAUDRATE	9600
RETURN	↓

**If set to HD-SDI or EX-SDI 1.0, UCC may NOT function.**

\*Refer to DVR manual to adjust ID & Baudrate settings.

\*\*Depending on DVR model, there may be an option for UCC Type (A/B). For most 2MP cameras select Type B.

## SDI Output

To change the digital video output of the camera (SDI Output): Enter the camera's OSD menu- then access the SYSTEM Menu and scroll to SDI Output and move left or right to change to the desired output.

SYSTEM	
SDI OUTPUT	EX-SDI 2.0
FRAME RATE	1080 30p
VIDEOSYS	NTSC
CVBS FILTER	OFF
LANGUAGE	ENG
CAM TITLE	OFF
RESET	ON
RETURN	↓

HD-SDI / EX-SDI 1.0 / EX-SDI 2.0

\*Refer to camera OSD manual for more information.

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

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

v.06.04.19