IDX2HD / IDX2HDL Install Guide

For EX-SDI 2.0 / HD-SDI IDX Series Cameras: IDX2HD(B) • IDX2HD(B)L

Included Items:
• IDX Series Camera x 1
• Mounting Plate x 1
• 4x20mm Screws x 4
• Instructions x 1

• Test Monitor BNC Lead x 1
• Mounting Template x 1

Required Items:
• Phillips Head Screwdriver or Drill with Phillips Head Bit

Optional Items:
• CE-REMOTE (OSD Remote Control)

1. INSTALL MOUNTING PLATE

Secure the Mounting Plate to a compatible conduit box (Single Gang, Double Gang, 3-1/4" & 3-1/2", or 4" Oct/Rd) using the screws that came with the conduit box, or mount to a solid surface using the 4 screws included with this camera.
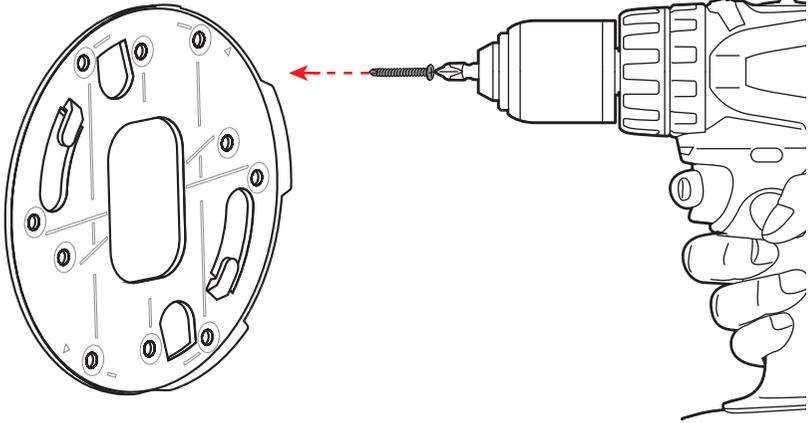
NOTE: It is recommended to use drywall anchors if mounting to drywall. Drywall anchors not included.
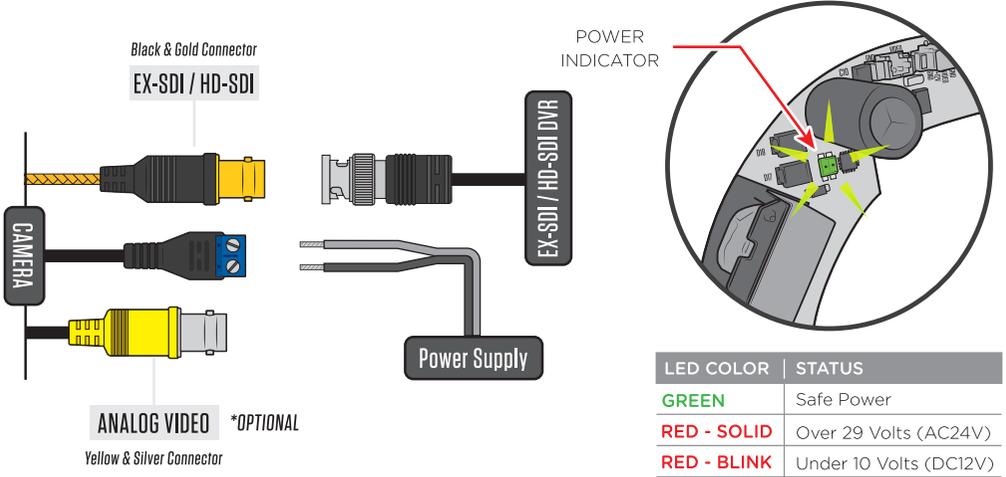
2. REMOVE DOME COVER

Hold the dome cover with one hand while gripping the finger grip tabs on the bottom of the camera base. Turn the finger grip tabs (camera base) counter-clockwise to separate it from the dome cover.

FINGER GRIPS
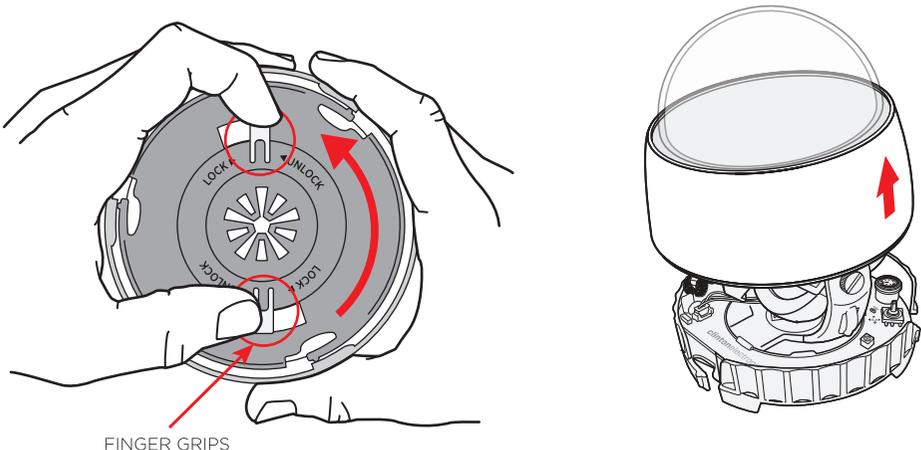
3. CONNECT CABLES

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.

Black & Gold Connector

EX-SDI / HD-SDI

CAMERA

EX-SDI / HD-SDI DVR

Power Supply

ANALOG VIDEO *OPTIONAL*

Yellow & Silver Connector

POWER INDICATOR

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

Inferior quality coax cable or excessively long runs of cable will cause an HD-SDI video signal to be poor or not viewable. It is recommended to test all coax cable to be used as HD-SDI with a HD-SDI Cable Tester.

## 4a. ATTACH CAMERA TO MOUNTING PLATE (for cable exiting through mounting plate)

Attach the camera to the mounting plate by aligning the hooks on the mounting plate to the tabs on the camera base. Twist the camera base clockwise to lock it in place.

HOOK

ALIGN

CAMERA BASE
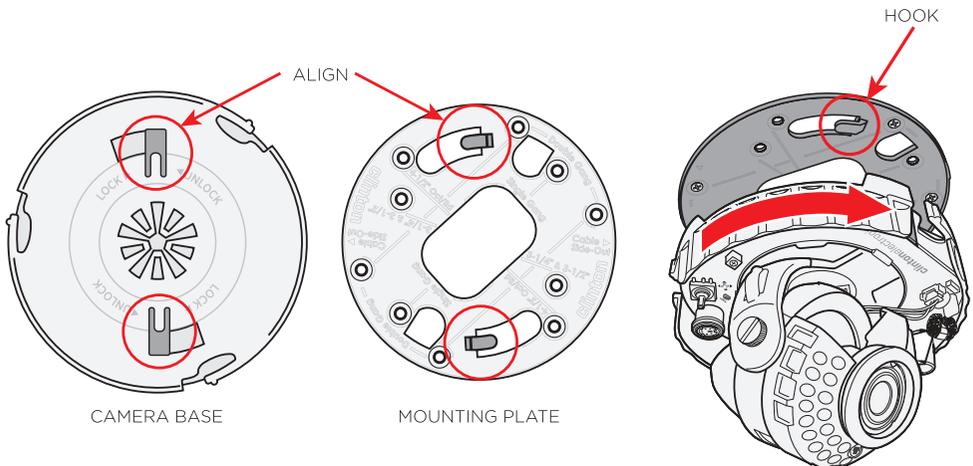
MOUNTING PLATE

4b. ATTACH CAMERA TO MOUNTING PLATE (for cable side exit)

When running the cable out the side of the camera rather than through the center hole in the mounting plate, hold the cable to the camera base where it says "CABLE SIDE OUT." Align the cable exiting the camera to the notched out area on the mounting plate marked "Cable Side-Out"

Attach the camera to the mounting plate by aligning the hooks on the mounting plate to the tabs on the camera base. Twist the camera base clockwise to lock it in place.

CAMERA BASE
(UNDERSIDE)

MOUNTING PLATE
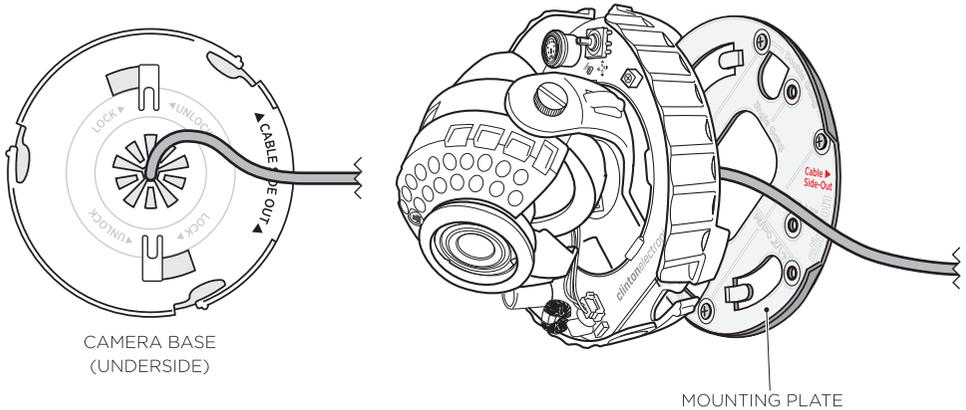
To allow the cable to exit the side of the dome cover, remove the tab marked with an arrow (on the inside of the dome cover) with a pair of needle-nose pliers.

REMOVE TAB

TAB REMOVED

INSIDE OF DOME COVER
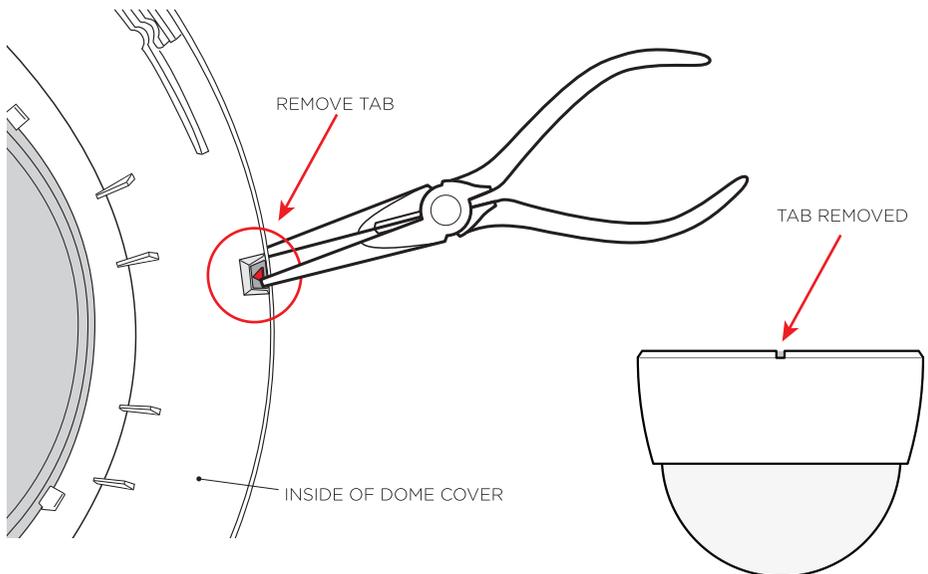
5. TEST MONITOR / OSD CONTROL

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.

TEST MONITOR BNC LEAD

OSD JOYSTICK

CE-REMOTE
sold separately

DIN PORT
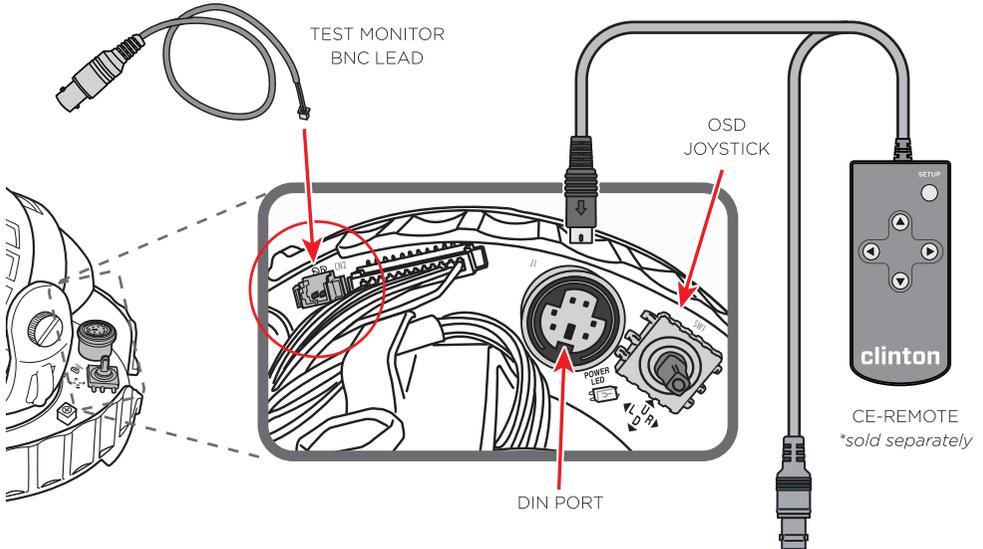
THE TEST MONITOR BNC LEAD & BNC CONNECTION ON CE-REMOTE ARE ANALOG VIDEO OUTPUTS ONLY. CERTAIN OSD MENU OPTIONS ARE EX-SDI ONLY AND WILL NOT DISPLAY VIDEO IF CONNECTED TO AN ANALOG MONITOR.

To test video with an HD-SDI test monitor such as the CE-LCD10-HD, the SDI (digital) video output from the camera must be set to HD-SDI. Refer to OSD Manual for information on switching the SDI video output type. Connect the HD-SDI output from the camera to the HD-SDI input on the test monitor.

HD-SDI BNC CONNECTION (BLACK)
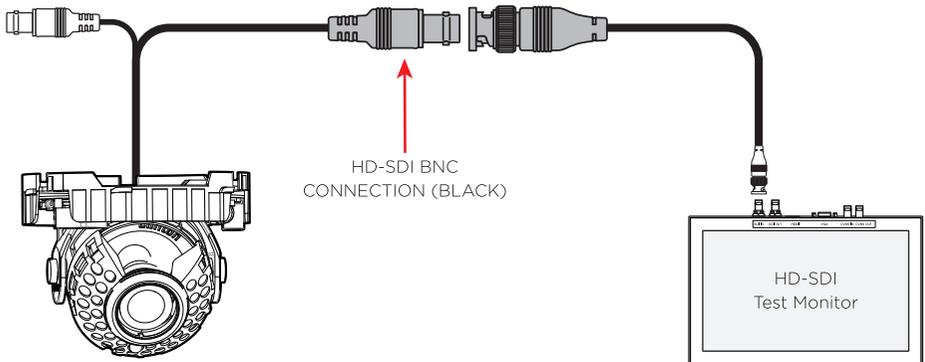
HD-SDI Test Monitor

*An EX-SDI signal will not display on an Analog or HD-SDI only test monitor.*

6. CAMERA ANGLE ADJUSTMENT
Adjust the angle of the camera as necessary.

A. Lens Rotation: Rotate the IR ball assembly to adjust.

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.
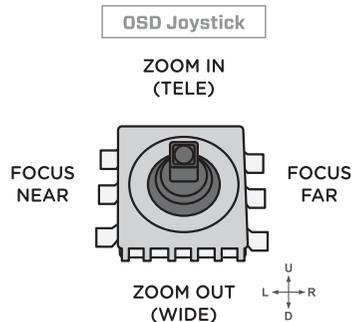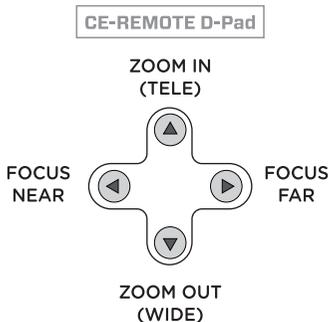
THUMB SCREW

U-BRACKET
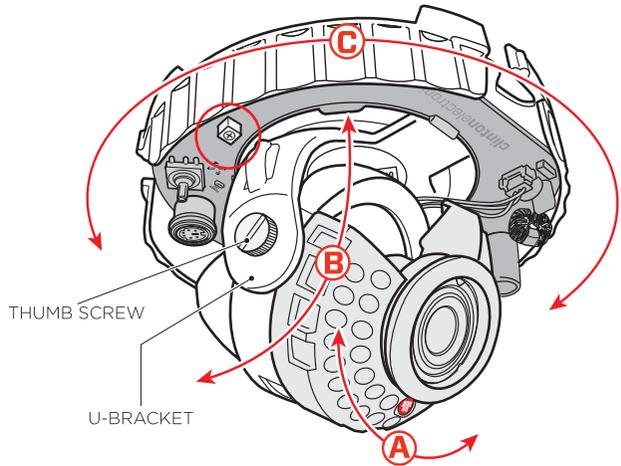
7a. ZOOM / FOCUS ADJUSTMENT
The lens will auto focus once powered; this can take several seconds. To set the zoom either use the OSD Joystick or the directional buttons on the CE-REMOTE. Press UP to zoom in & press DOWN to zoom out.

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.

CE-REMOTE D-Pad	OSD Joystick

ZOOM IN
(TELE)

FOCUS NEAR   FOCUS FAR

ZOOM OUT
(WIDE)

ZOOM IN
(TELE)

FOCUS NEAR   FOCUS FAR

ZOOM OUT
(WIDE)

U
L ← → R
D

⚠ **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 IDX Series cameras with the Motorized Zoom/Focus 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.
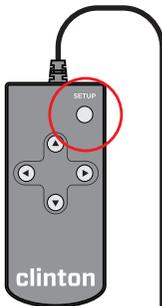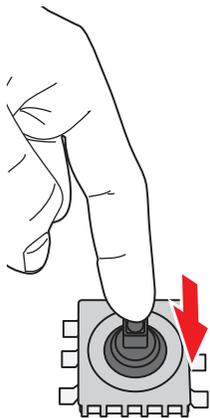
```
              EXHD 2.0

 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.

IR POTENTIOMETER

DIMMER   BRIGHTER
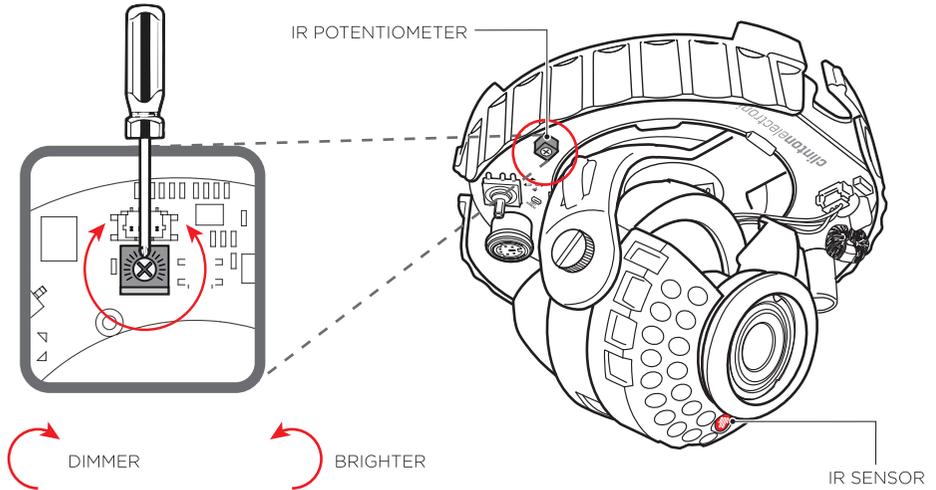
IR SENSOR

9. REPLACE DOME COVER

Carefully replace the dome cover onto the camera assembly by twisting the dome cover clockwise to lock into place. Make sure the IR Sensor is free from obstruction and will not be covered by the dome cover once it is re-attached. If the sensor is covered it will cause the IR LEDs to be on all the time.
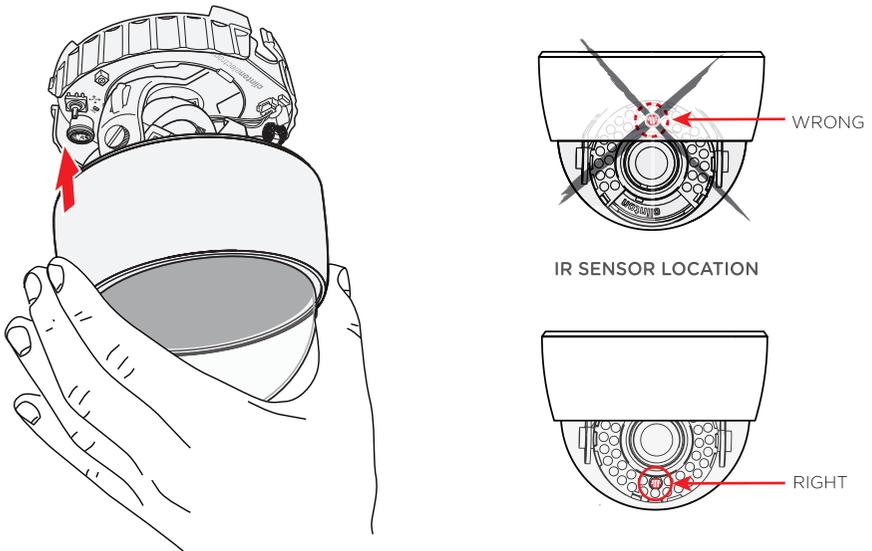
WRONG

IR SENSOR LOCATION

RIGHT

EX-SDI Install Tips

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 & Devices**
- **EX-SDI will not work on CVI, TVI, AHD DVRs & Devices**
- **EX-SDI will not work on HD-SDI only DVRs & Devices**

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

EX-SDI / HD-SDI

ANALOG VIDEO

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.
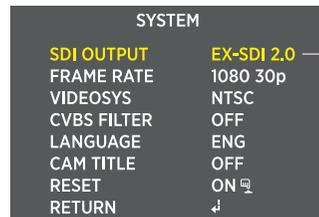
SERIAL	
CAM ID	1
ID DISPLAY	OFF
BAUDRATE	9600
RETURN	↵
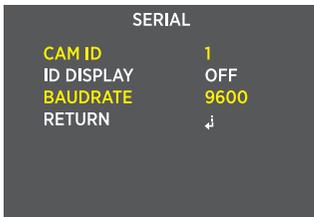
If set to HD-SDI or EX-SDI; UCC will NOT function.

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

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