

# VX2HD/VX3HD Install Guide

For HD-SDI/EX-SDI Vandal X Series Cameras w/ Zoom A/F Lens: CE-VX2HD(B) • CE-VX3HD(B)

## 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:

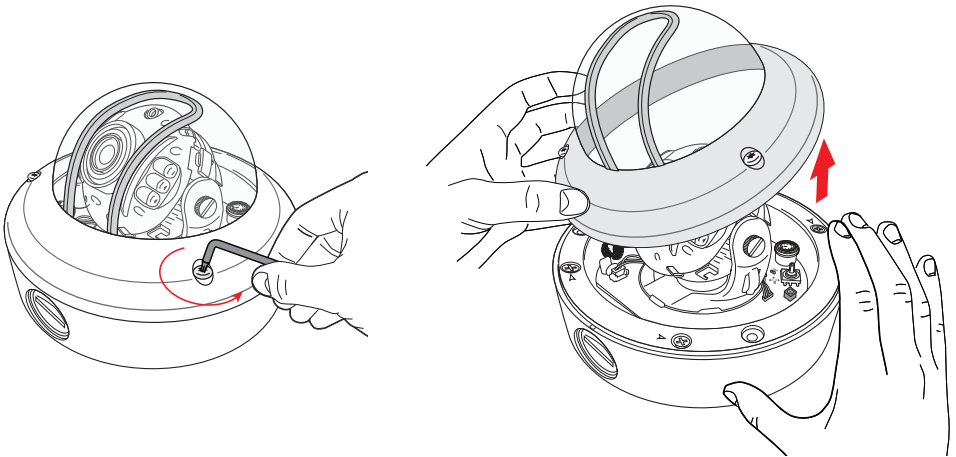
- Phillips Head Screwdriver or Drill with Phillips Head Bit

## Optional Items:

- CE-REMOTE (OSD Remote Control)

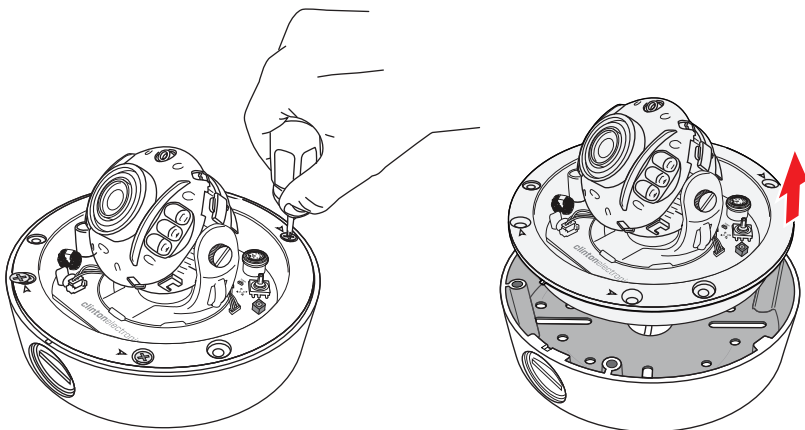
## 1a. DISASSEMBLE

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

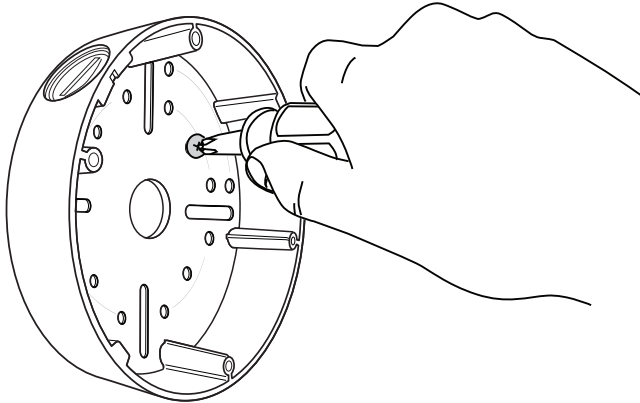
Remove the four Phillips head screws that hold the inner case onto the camera base, then remove the inner camera assembly from the camera base. Keep these 4 screws for final assembly.



## 2. MOUNT OUTER CASE

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

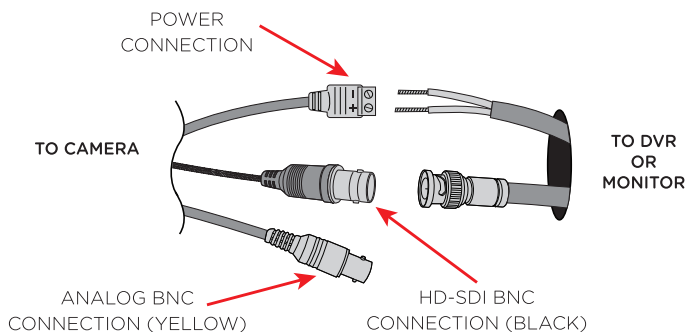
If mounting to a conduit box, choose the mounting hole pattern that best suits your application and use the appropriate screws. Multiple mounting hole patterns are provided.



## 3. ATTACH CABLES

Feed the power and video cables through the desired access hole. There is a hole on the bottom of the case or a hole on the side. (using the side hole requires removing the slotted plug, replace plug from side to bottom).

Make connections to the BNC cable and the power connection. Feed any cable slack into the mounting surface. To ensure quality operation, verify proper BNC and power termination; along with proper voltage at camera.

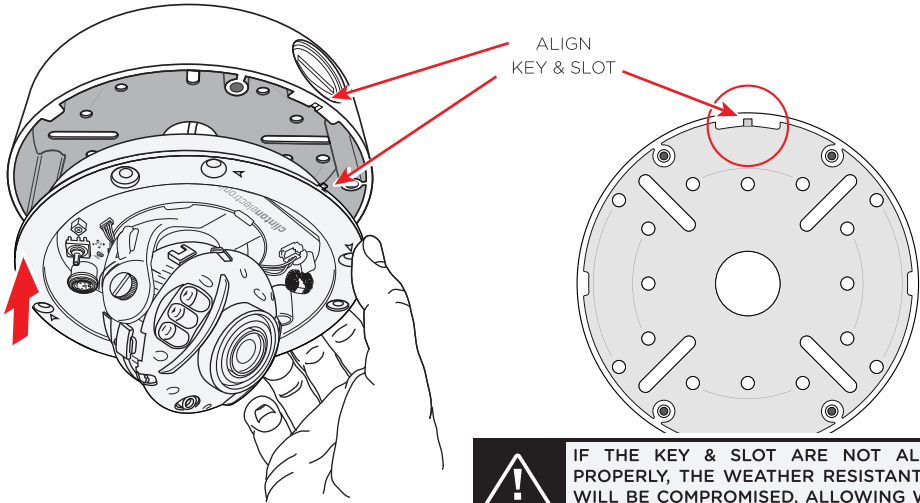


*Inferior quality coax cable or excessively long runs of cable will cause the HD-SDI video signal to be poor or not viewable. It is recommended to test all coax cable to be used as HD-SDI with a HD-SDI Cable Tester.*

## 4a. ATTACH CAMERA

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

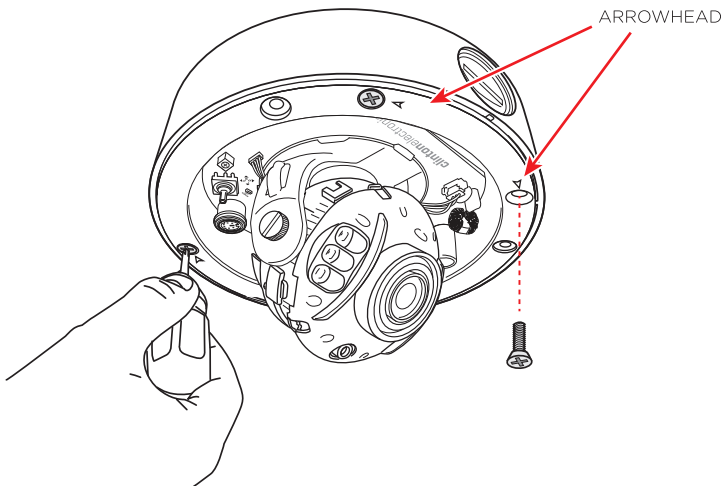
Align the key on the lip of the inner camera assembly with the slot on the camera base when reassembling. If these are not aligned properly the weather resistant seal will be compromised, allowing water to leak into the camera.



IF THE KEY & SLOT ARE NOT ALIGNED PROPERLY, THE WEATHER RESISTANT SEAL WILL BE COMPROMISED, ALLOWING WATER TO LEAK INTO THE CAMERA.

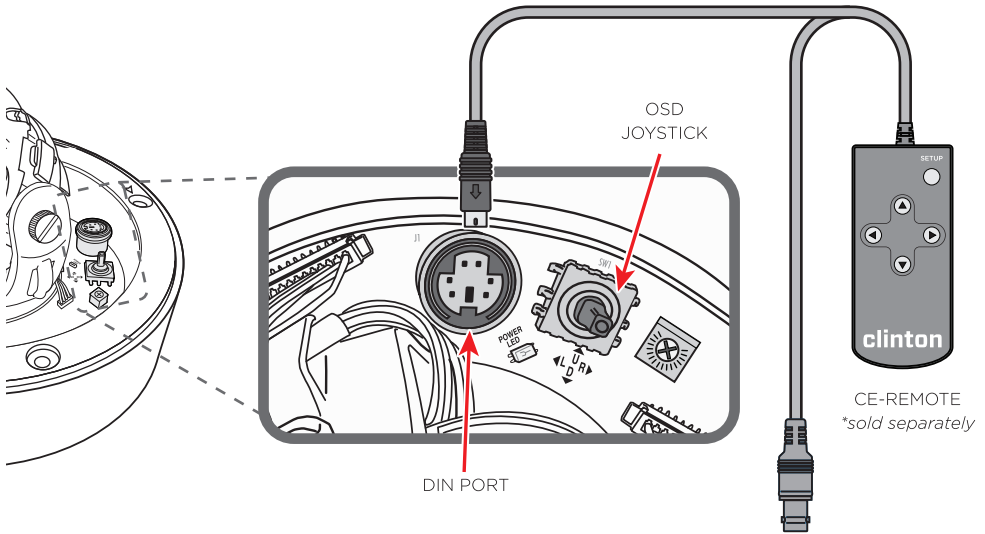
## 4b. ATTACH CAMERA

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



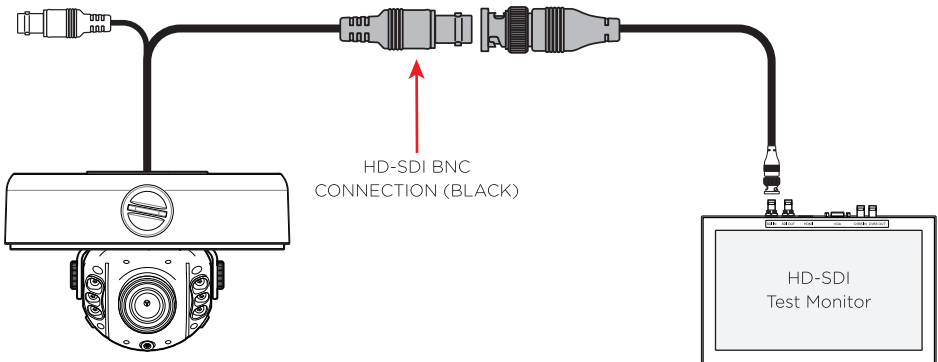
## 5. TEST MONITOR / OSD CONTROL

Before replacing the dome assembly you may wish to test the camera with a test monitor to verify proper camera angle/zoom. To test; plug the CE-REMOTE into the DIN Port, and connect your test monitor to the Analog BNC connection located on the CE-REMOTE cable. This connection does not currently support HD-SDI video. OSD Adjustment can be made by using the OSD Joystick or the optional CE-REMOTE.



**THE TEST MONITOR BNC LEAD & BNC CONNECTION ON CE-REMOTE ARE ANALOG VIDEO OUTPUTS ONLY. CERTAIN OSD MENU OPTIONS ARE HD-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, connect the HD-SDI output from the camera to the HD-SDI input on the test monitor.

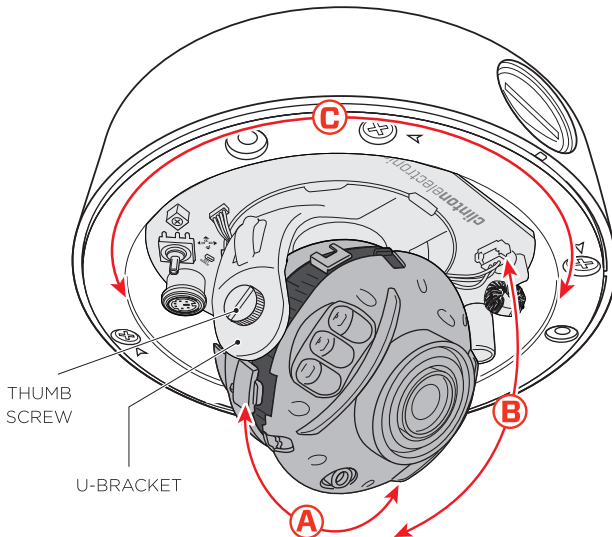


v.03.29.16

## 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.



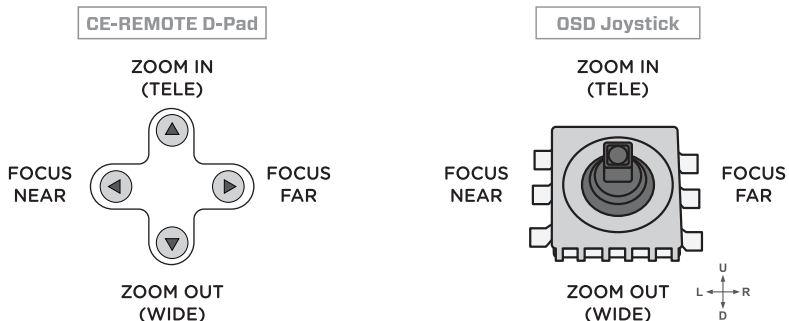
*If the image is flipped; use the camera OSD adjustments to flip/mirror image.*

## 7. 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.

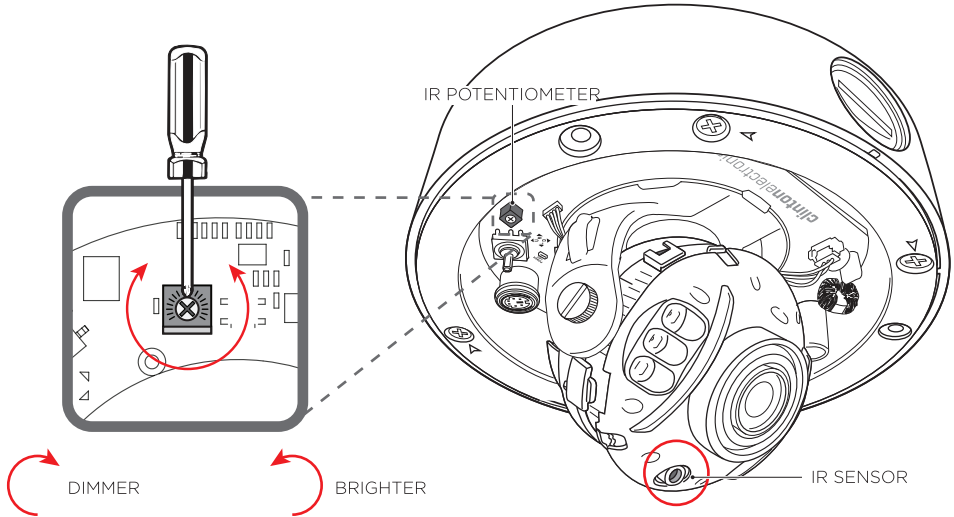
After the zoom adjustment has been made the camera will auto focus again; this can take several seconds.

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.



## 8. IR LED ADJUSTMENT

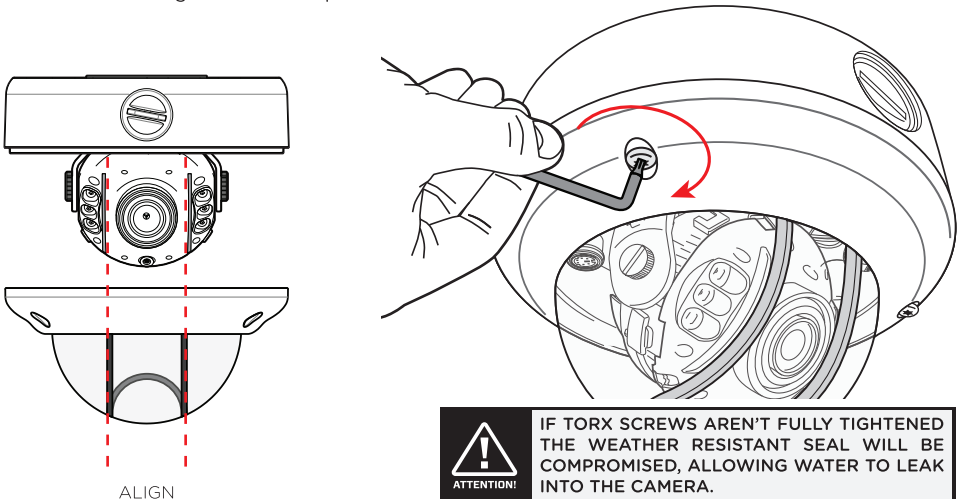
Before replacing the dome cover it is recommended to test the operation and intensity of the IR LEDs. To test, cover the IR Sensor and verify that the IR LEDs turned 'ON'. To adjust the intensity of the IR LEDs, use a Phillips head screwdriver to turn the IR level adjustment potentiometer, (located next 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.

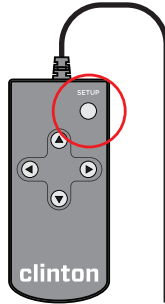
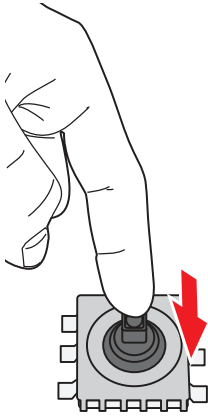


## ZOOM / AUTO FOCUS OSD MENU:

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	
0. ZOOMFOCUS	↕
1. LENS	DC
2. EXPOSURE	↕
3. BACKLIGHT	OFF
4. DAY&NIGHT	EXTERN ↕
5. WHITE BAL	AUTO
6. DNR	MIDDLE
7. IMAGE	↕
8. DIS	OFF
9. MOTION	OFF
10. SYSTEM	↕
11. EXIT	

**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 about 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 lens.

**REFOCUS:** Lens refocuses at a set time/day interval. Useful for applications when the camera will not switch Day/Night modes (SYNC TDN refocus) due to constant lighting.

**RETURN:** Return to main OSD Menu.

0. ZOOMFOCUS	
AF MODE	AUTO
SCANNING	HALF
ONEPUSHAF	ON ↕
SYNC TDN	ON
LENSRESET	ON ↕
REFOCUS	5DAY ↕
RETURN	↕

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

# HD-SDI INSTALL TIPS



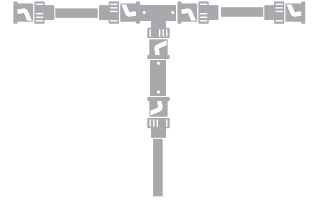
## Existing Coax Cable:

Coax cable that once worked fine for analog may not be suitable for HD-SDI installations. HD-SDI is a digital signal that has a different transmission method than analog. It is important to test the cable before committing to using the existing coax cable for your installation.



## Coax Cable Integrity is Critical:

Do not kink or bend the coax cable at an extreme angle. The integrity of the outer shielding of coax is very important to the HD-SDI signal. Damaged cable reduces the signal strength and could even cause no video.



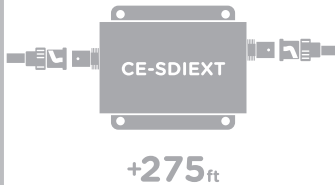
## Avoid Splices:

Splices and poor quality connectors are not suitable for a HD-SDI system. Avoid splices at all costs and only use high quality compression style BNC connectors.



## Typical Distance:

The typical distance for an HD-SDI camera with Clinton CE-CB1000 or CE-CW1000 Siamese cable range from 250-275 feet.



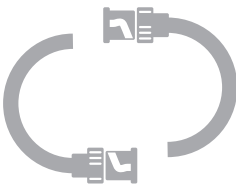
## Longer Distances:

If you plan to run the coax longer than 275 feet, we strongly recommend that you use an HD-SDI extender like the CE-SDIEXT.



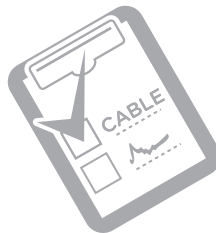
## Coax Cable Testing:

It is advised to use a signal generator (CE-SDIGEN) and a cable tester (CE-SDITEST) to check the cable to see if it will be OK for an acceptable HD-SDI signal.



## Analog and HD-SDI are not interchangeable.

While HD-SDI and Analog share the same type of cable and connectors, that is where the similarities end. Analog cameras will not work on HD-SDI DVRs and HD-SDI cameras will not work on Analog DVRs.



## When in doubt test the cable:

Before you suspect the HD-SDI camera or DVR is defective please check the device with a short piece of coax cable to make sure it is not the cable run causing the trouble.



## We are here to help:

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