# **VX Series** Install Guide

For HD Analog (Non-IR LED) Vandal X Outdoor Dome Cameras

#### Included Items:

- Vandal X Series Dome Camera x 1
- Torx Wrench (T20 Security) x 1
- Instructions x 1
- Focusing Tool (CE-VX60 only) x 1
- Test Monitor BNC Lead x 1
- Mounting Screws x 4
- Drywall Anchors x 4

#### Required Items:

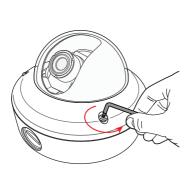
- · Phillips Head Screwdriver or Drill with Phillips Head Bit
- DC12V or AC24V Power Supply

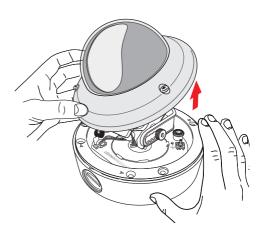
#### Optional Items:

CE-REMOTE (OSD Remote Control)

#### 1a. DISASSEMBLE

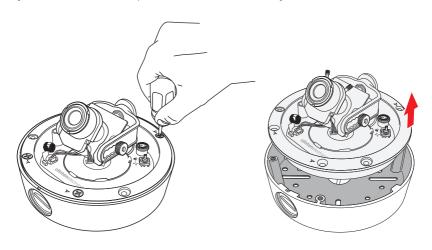
Use the supplied Torx wrench to loosen the 3 Torx screws that hold the dome assembly onto the base. Remove the top dome cover from the camera base.





### 1b. DISASSEMBLE

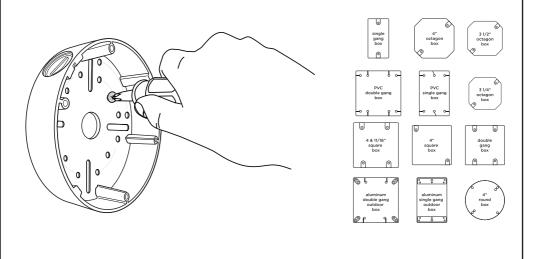
Remove the four Phillips head screws that hold the inner case onto the camera base, then remove the inner camera assembly from the camera base. Keep these 4 screws for final assembly.



### 2. MOUNT OUTER CASE

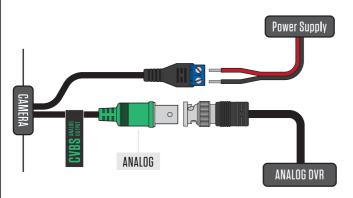
If mounting to solid surface, use the four Phillips head mounting screws & drywall anchors if necessary.

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.

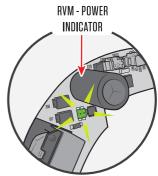


#### 3. CONNECT CABLES

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.







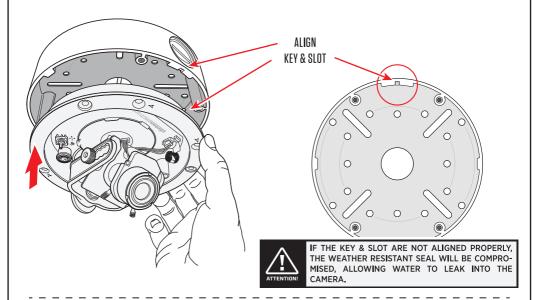
**RVM - Rated Voltage Monitoring** 

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

#### 4a. ATTACH CAMERA

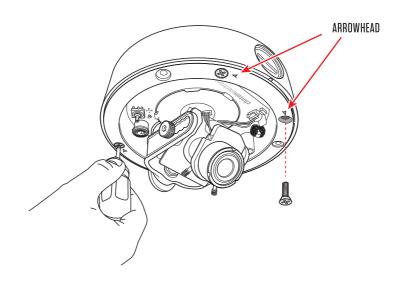
Replace the inner camera assembly into the mounting base as shown below.

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.



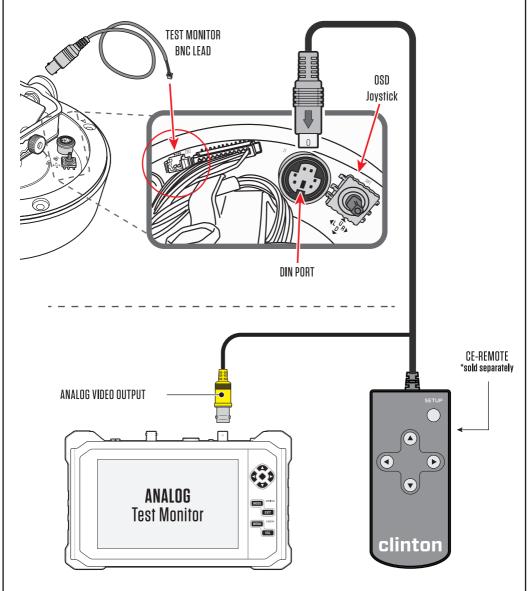
## **4b. ATTACH CAMERA**

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.

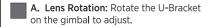




The test monitor connection on the CE-REMOTE and the 2-pin connector on the camera board will match the output from the main Analog connector. If the camera is set to an HD Analog option, ensure the test monitor will support that signal type.

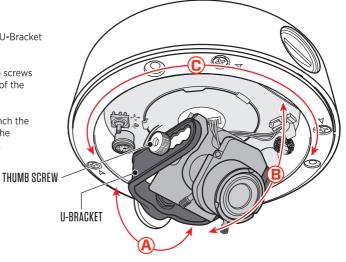
### **6. CAMERA ANGLE ADJUSTMENT**

Adjust the angle of the camera as necessary.





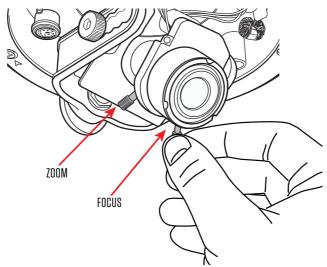
C. Camera Plate Rotation: Pinch the gimbal U-Bracket and rotate the camera assembly on the base.



\*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: Camera models w/ 2.8~12mm Lens

Loosen the appropriate adjustment lever by turning counter-clockwise. To widen the viewing angle (zoom the image out), rotate the ZOOM lever to the RIGHT (Counter-clockwise). To narrow the viewing angle (zoom the image in), rotate the ZOOM lever to the LEFT (Clockwise). Adjust the focus near or far as needed by moving the FOCUS lever Left or Right to focus the lens.

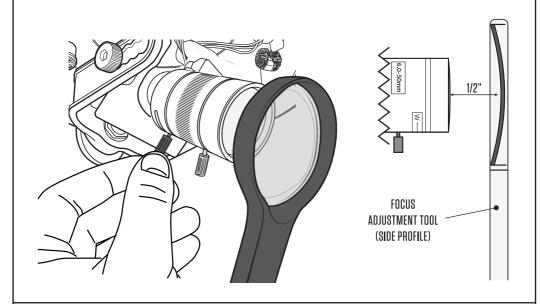


After zoom / focus adjustments have been made, tighten the adjustment levers to lock the adjustments.

\*Lens shown and adjustments may vary depending on camera model.

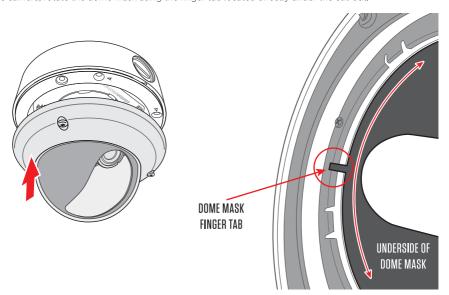
# 7b. FOCUS ADJUSTMENT: CE-VX60(B) w/ 6~50mm lens

With a test monitor attached, place the supplied focus adjustment tool approximately 1/2" in front of the lens (concave side in), to simulate the dome being attached. Adjust the lens as needed to achieve proper focus. If the focus tool is not used, the image will be blurry/out of focus when the dome cover is attached.



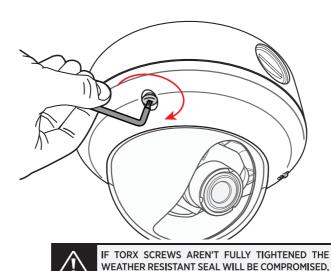
## 8a. REASSEMBLE

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.



#### 8b. 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.



## 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.

ALLOWING WATER TO LEAK INTO THE CAMERA.

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.



# \*This camera's default **Analog** video output is set to: **CVBS**

# **HD Analog Compatibility**

While Analog (CVBS) and HD Analog (T\_VI, C\_VI, A\_HD) share the same type of connectors, they're different signal types that are not compatible with each other.

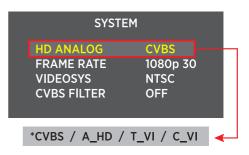
Because there are signal tuning variations between each HD Analog DVR manufacturer— we can not guarantee that the HD Analog output from the camera will display correctly with off-brand equipment.

# HD Analog Output Through the OSD Menu

Before changing the HD Analog output of the camera, check the compatibility of the DVR to ensure that it can accept the desired camera output. Selecting an incorrect HD Analog output from the camera can result in poor video quality or no video on the DVR.

To change the HD Analog Output: Enter the OSD Menu of the camera, then access the SYSTEM Menu. Select the desired HD Analog Output using left or right (CVBS, A\_HD, T\_VI, or C\_VI).

Changing the HD Analog Output here also affects the analog test monitor outputs on the CE-REMOTE and the 2-pin test monitor connection located on the camera board



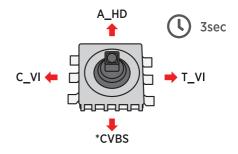
# HD Analog Output Using the Joystick

Move and Hold the OSD Joystick in the desired direction (Up, Down, Left, Right) for 3 seconds to change the output signal type.

Up: A\_HD

Down: **CVBS** (default)

Left: **C\_VI** Right: **T\_VI** 



# **HD Analog Distance**

HD Analog signals degrade with long runs of cable. The image can appear washed out and lacking color saturation (black & white).