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
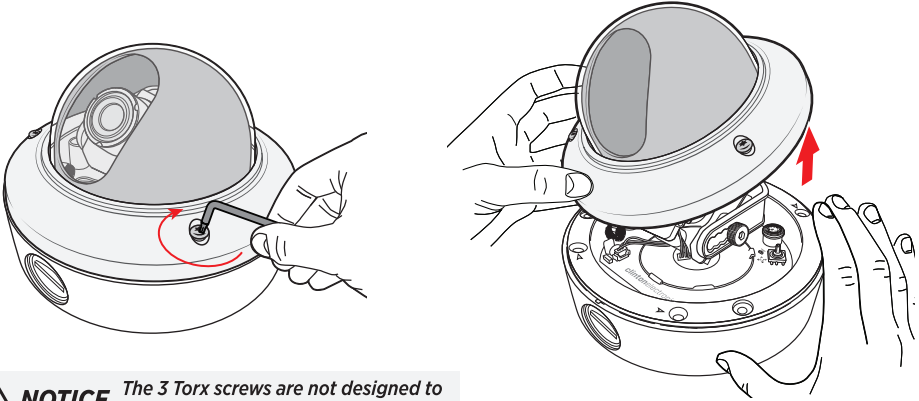- Mounting Screws x 4
- Drywall Anchors x 4

Required Items:
- Phillips Head Screwdriver or Drill with Phillips Head Bit
- DC12V or AC24V Power Supply

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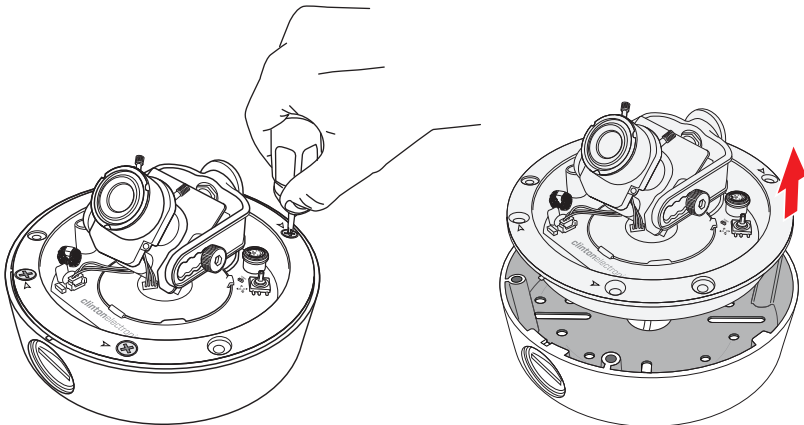- CE-REMOTE (OSD Remote Control)

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.

⚠ **NOTICE** *The 3 Torx screws are not designed to be fully removed from the dome top.*

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.
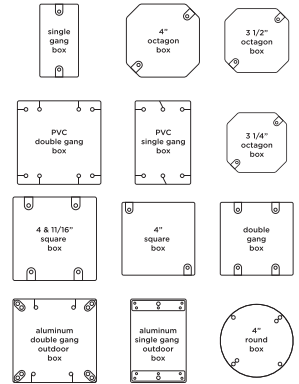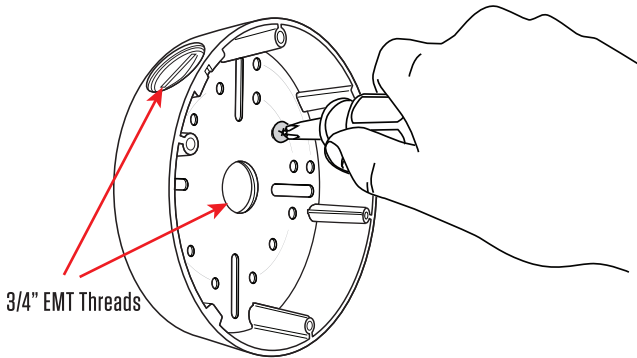
2. MOUNT OUTER CASE

If mounting to a solid surface, use the four Phillips head mounting screws and, if necessary, drywall anchors.
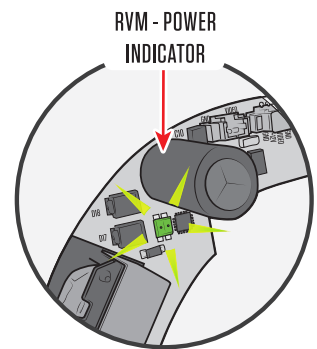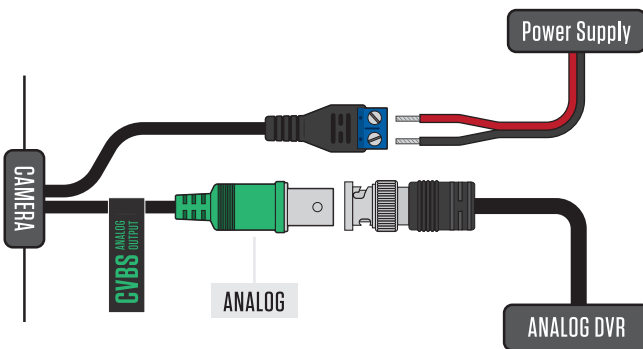
If mounting to a conduit box, choose the best mounting hole pattern for your style of box and use the appropriate screws. There are numerous mounting hole patterns available to accommodate various box types.

To connect 3/4" EMT conduit to the outer case, a 3/4" EMT conduit adapter can also be used (not included). Thread the adapter into the bottom/center hole of the case or the hole on the side.

3/4" EMT Threads

single gang box	4" octagon box	3 1/2" octagon box
PVC double gang box	PVC single gang box	3 1/4" octagon box
4 & 11/16" square box	4" square box	double gang box
aluminum double gang outdoor box	aluminum single gang outdoor box	4" round box

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.

Power Supply

RVM - POWER INDICATOR

CAMERA

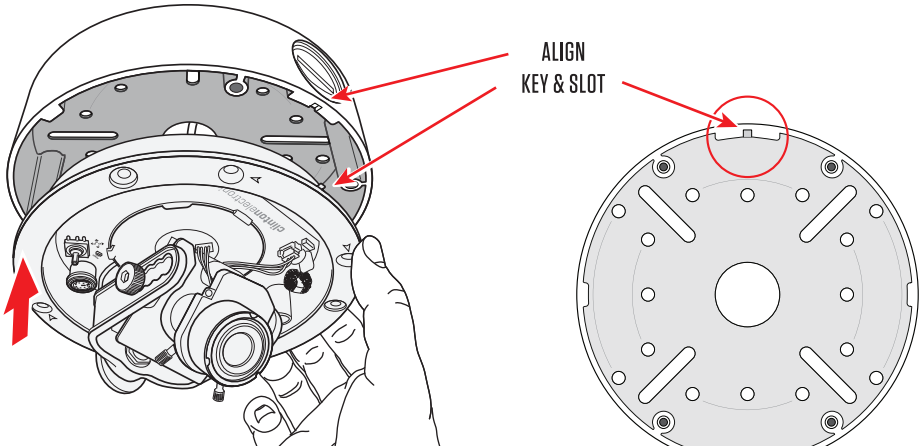CVBS ANALOG OUTPUT

ANALOG

ANALOG DVR

Default Analog Output: CVBS

Analog Output Selectable: (CVBS / A_HD / C_VI / T_VI)
Refer to included "HD ANALOG" page for information on changing signal type.

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.
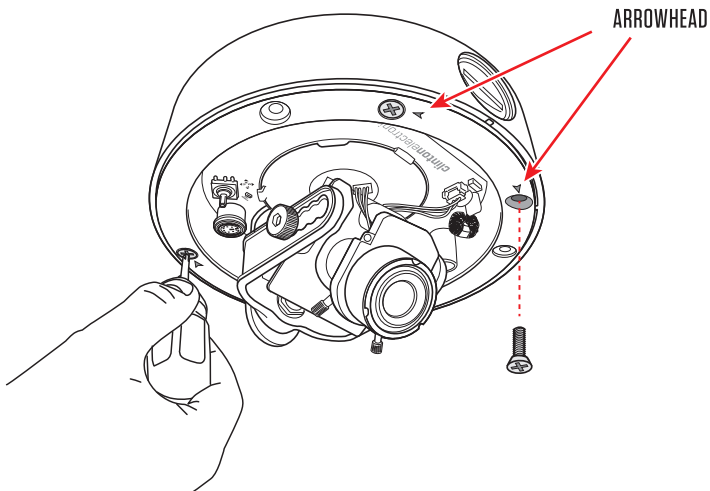

ALIGN
KEY & SLOT

⚠ **ATTENTION**   *If the key & slot are not aligned properly, the weather resistant seal will be compromised, allowing water to leak into the camera.*
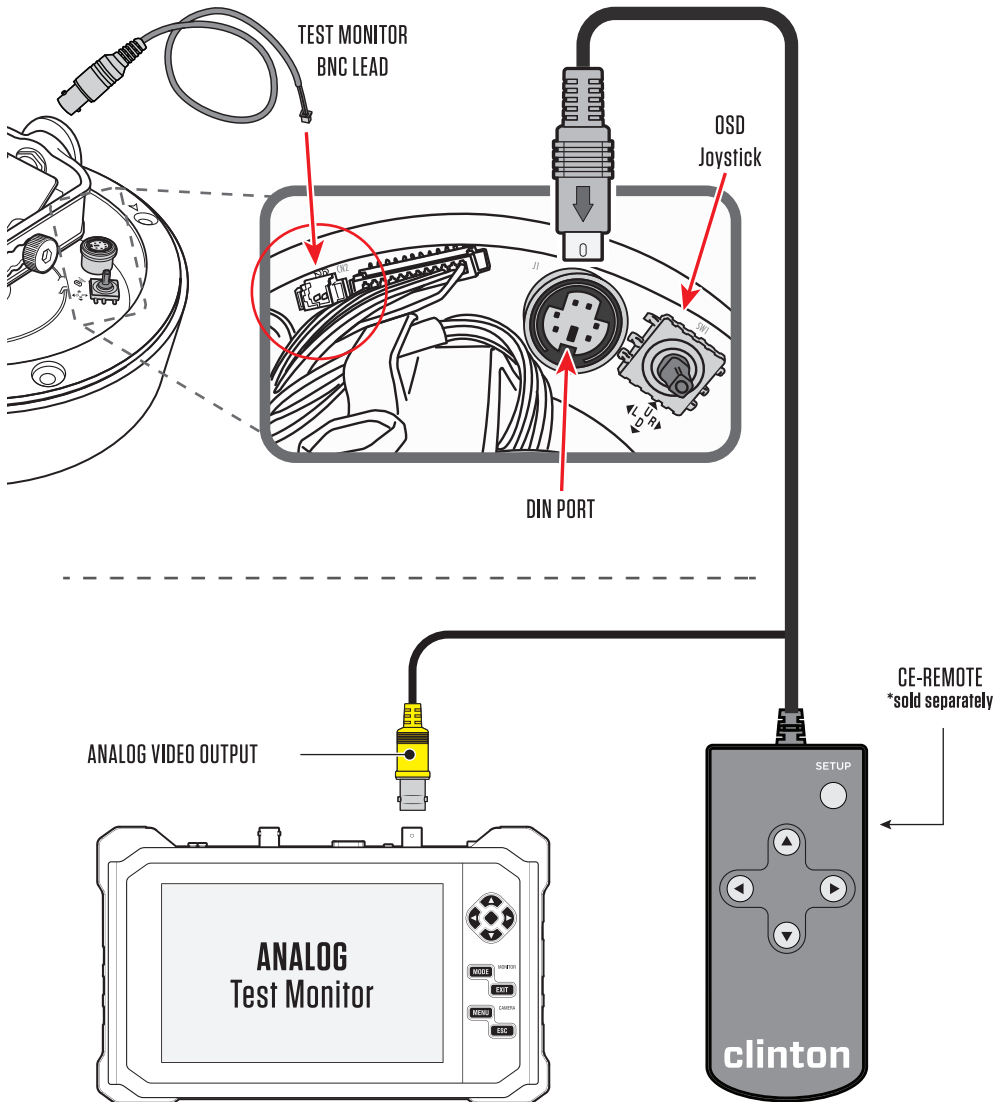
4b. ATTACH CAMERA

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

ARROWHEAD

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.
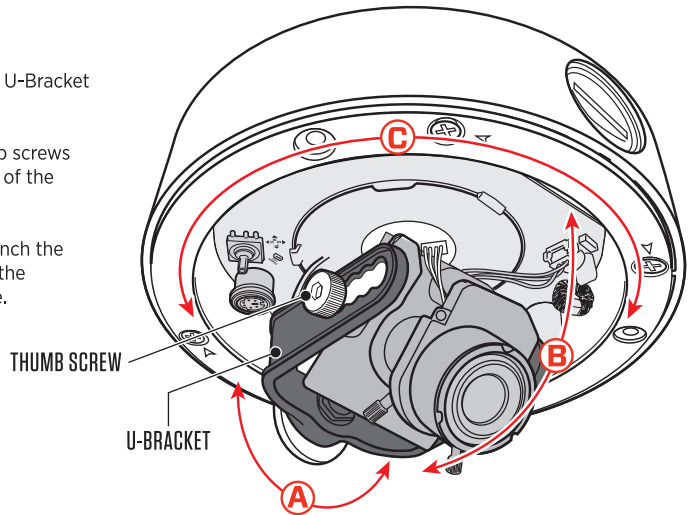
TEST MONITOR
BNC LEAD

OSD
Joystick

DIN PORT

CE-REMOTE
*sold separately

ANALOG VIDEO OUTPUT

ANALOG
Test Monitor

SETUP

clinton

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

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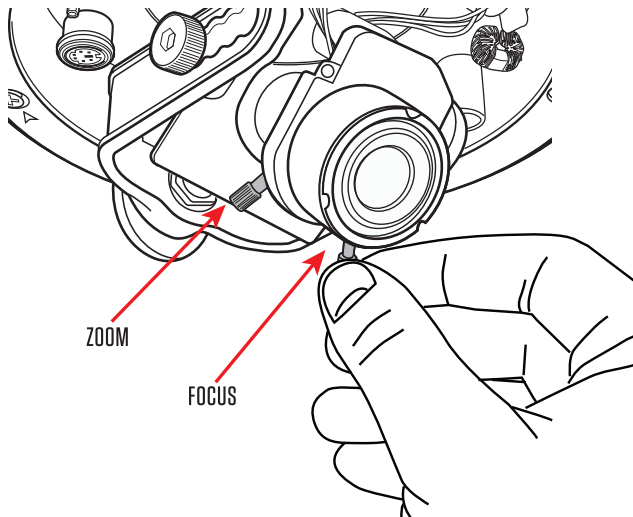
Adjust the angle of the camera as necessary.

A. Lens Rotation: Rotate the U-Bracket on the gimbal 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

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.
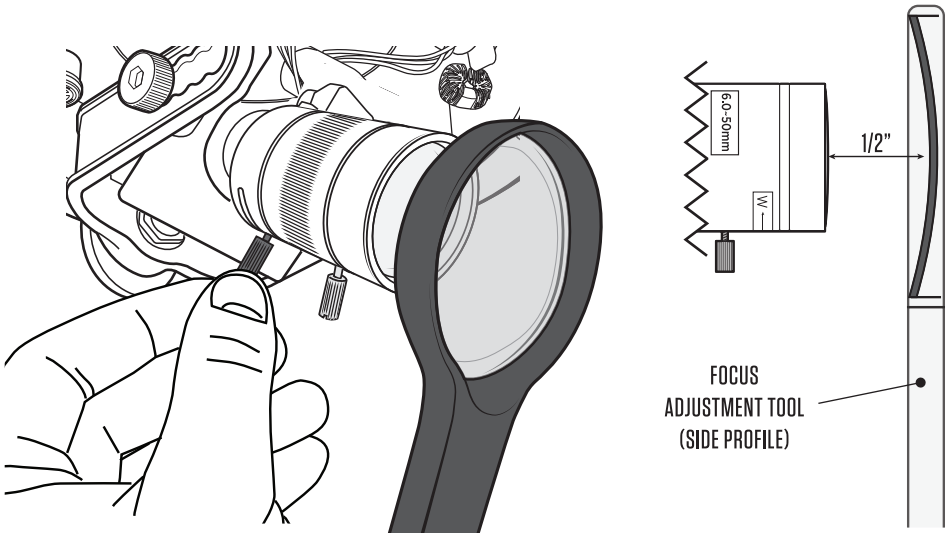
ZOOM

FOCUS

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

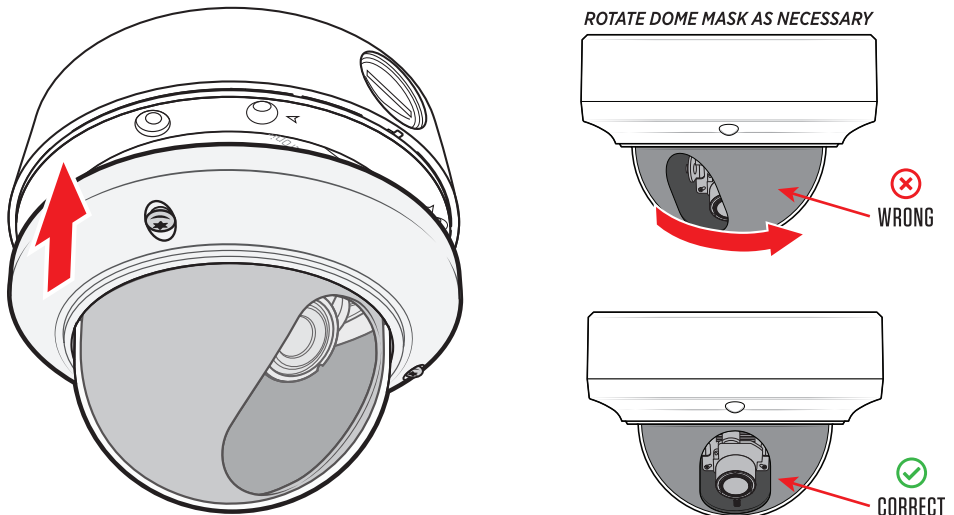**Lens shown and adjustments may vary depending on camera model.*

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.

6.0~50mm
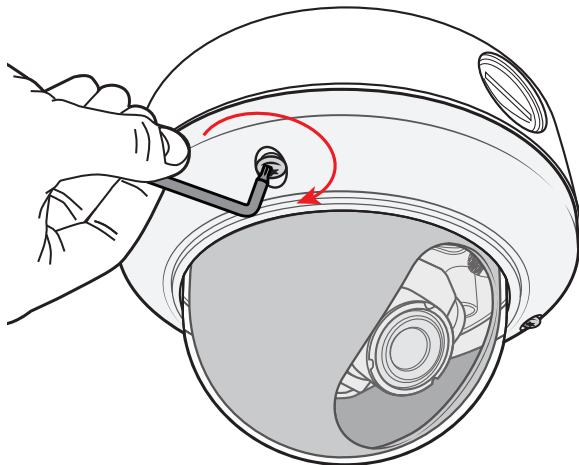
W

1/2"

FOCUS
ADJUSTMENT TOOL
(SIDE PROFILE)

8a. REASSEMBLE

Remove any protective film from the outer and/or inner dome. Carefully install the dome cover onto the camera base. Rotate the dome mask as needed if the cut-out in the dome mask does not align with the camera lens.

ROTATE DOME MASK AS NECESSARY

WRONG

CORRECT

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.

⚠ **ATTENTION** *If the torx screws aren't fully tightened the weather resistant seal will be compromised, allowing water to leak into the camera.*

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.

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.
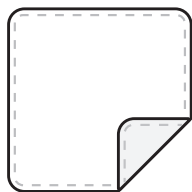
Glass cleaner, Ammonia, alcohol and/or other solvents should never be used to clean the dome. These products contain harsh chemicals that can cause corrosion and reduce optical clarity. Paper towels, shop-rags, or other rough fabric should also never be used to dry the dome as they can scratch the dome.
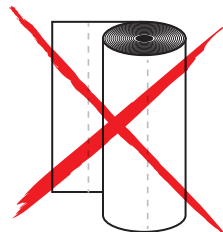
✓ SAFE TO USE   ✗ DO NOT USE

Warm Soapy Water   Micro-Fiber Cloth   Glass Cleaner   Paper Towels

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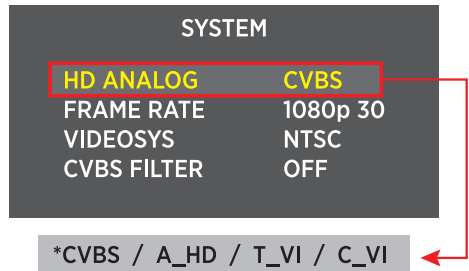
Because there are signal tuning variations between each HD Analog DVR manufacturer— we can not guarantee that the HD Analog output from the camera will display correctly with off-brand equipment.

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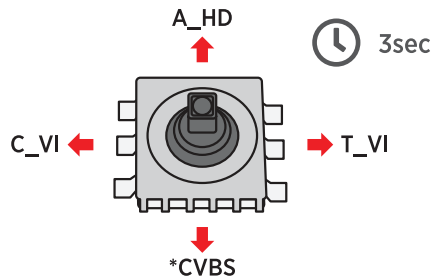
Changing the HD Analog Output here also affects the analog test monitor outputs on the CE-REMOTE and the 2-pin test monitor connection located on the camera board.

SYSTEM	
HD ANALOG	CVBS
FRAME RATE	1080p 30
VIDEOSYS	NTSC
CVBS FILTER	OFF

*CVBS / A_HD / T_VI / C_VI

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**

A_HD

3sec

C_VI   T_VI

*CVBS

HD Analog Distance

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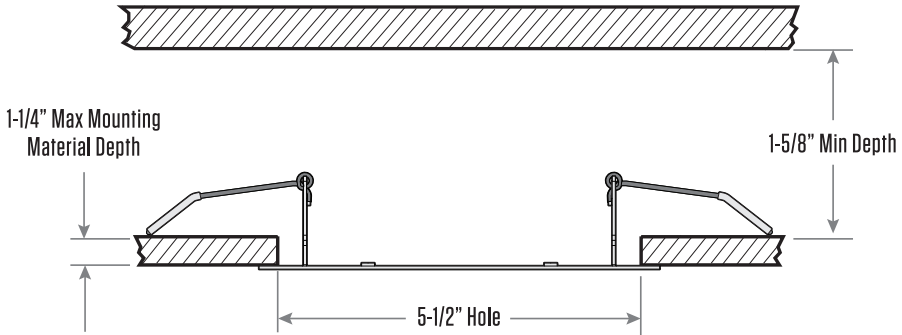
CE-VXRM(B) Install Guide

Included Items:
• Vandal X Recess Mount x 1
• Instructions x 1

Required Items:
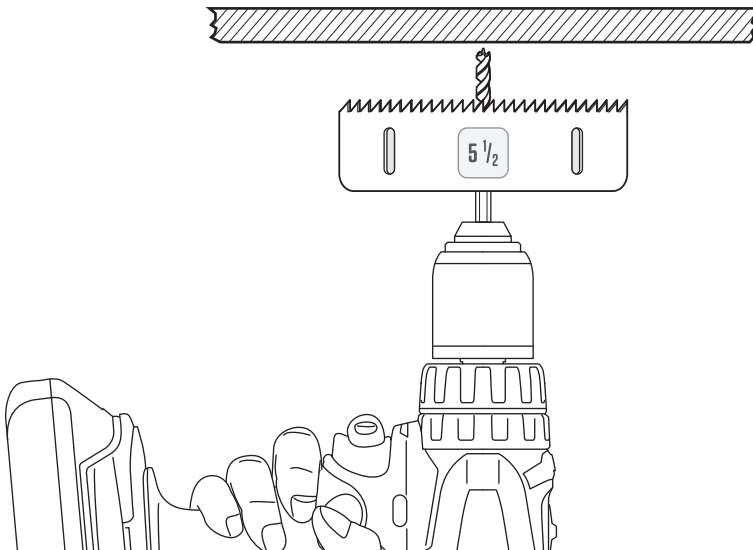• Vandal X Dome Camera
• Drill & 5-1/2" Hole Saw

1. PREPARE MOUNTING SURFACE

The Vandal X Recess Mount requires a minimum 1-5/8" depth and can be installed into mounting surfaces up to 1-1/4" thick. Verify that the intended mounting surface meets these requirements before proceeding with the installation.

1-1/4" Max Mounting Material Depth

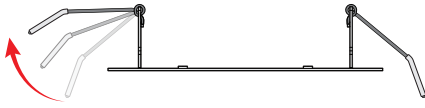1-5/8" Min Depth

5-1/2" Hole

2. CUT HOLE

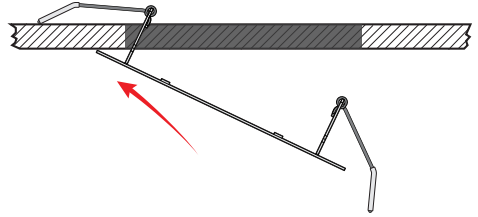Cut a hole into the mounting surface with a 5-1/2" hole saw.

5 ½

3. INSERT RECESS MOUNT

(A) Pull one of the spring mounts upwards slightly, (B) then guide the spring into the hole. (C) Pull the other spring mount into the hole and (D) guide the Recess Mount into the hole.
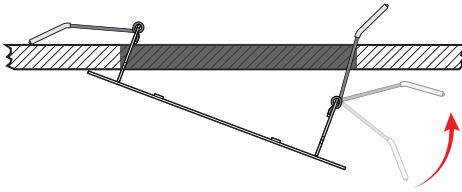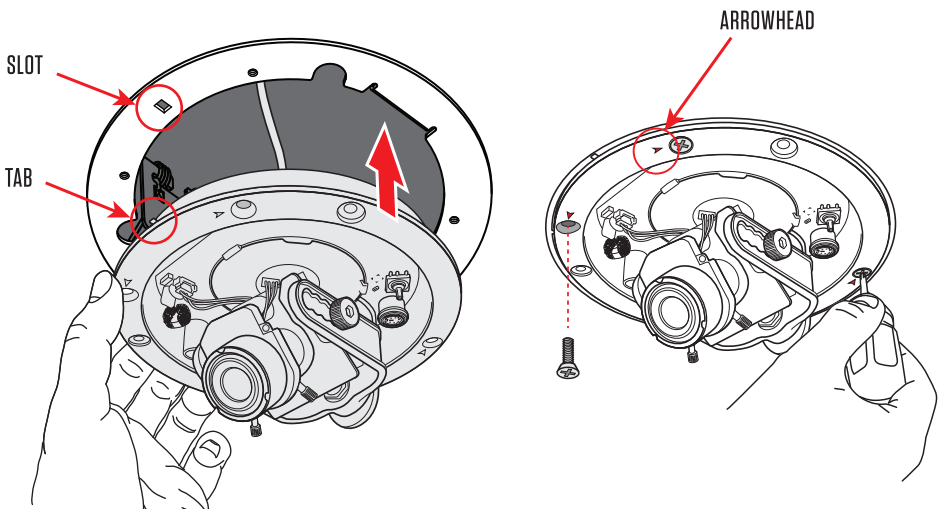
A.

B.

C.

D.

4. INSTALL VX CAMERA

Disassemble the Vandal X camera as detailed in the install guide for that camera. Feed the power and video cables through the hole in the surface and Recess Mount and make connections. Align the tab on the camera with the slot in the Recess Mount when reassembling. Install the 4 screws (included with camera) to attach the camera assembly to the Recess Mount. The 4 holes are marked with arrowheads.

SLOT

TAB

ARROWHEAD

Make any required adjustments to the camera, then install the dome top as detailed in the install guide for the camera.