# **BZ HD Series** Install Guide

#### Included Items:

- BZ Series Camera x 1
- Mounting Plate x 1
- Phillips Screws (M5x25) x 4
- Allen Bolts (M4x8) x 4
- Plastic Washers x 4
- Drywall Anchors x 4
- Foam Gasket x 1
- · 3mm Allen Wrench x 1
- 5mm Allen Wrench x 1 • Instructions x 1

## Required Items:

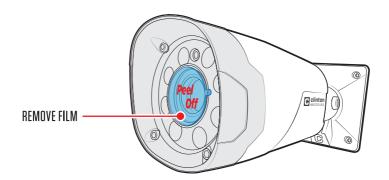
- Phillips Head Screwdriver or Drill with Phillips Head Bit
- · CE-REMOTE (Zoom/Focus & OSD Control)
- DC12V or AC24V Power Supply

#### Optional Items:

- Analog Test Monitor
- 3/4" Drill Bit

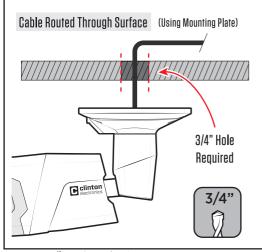
## 1. REMOVE FILM

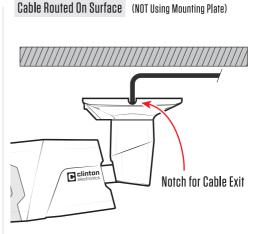
Remove the protective film over the lens of the camera. An out-of-focus, discolored, and poor night-time image can result if this film is not removed.



#### 2. PREPARE MOUNTING SURFACE

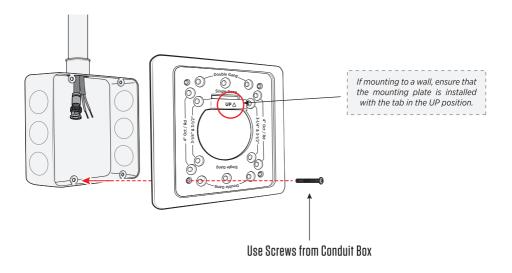
Depending on the installation type: cable routed through the surface or cable routed on surface exterior - a hole may be required. If the cable will be routed through the surface, a 3/4" hole is required to fit the cable and connections through the surface.





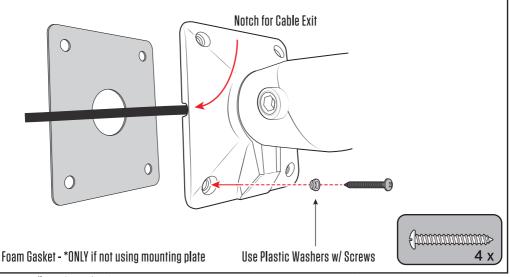
## 3A. INSTALL MOUNTING PLATE - (for conduit box install)

If installing the mounting plate on a conduit box, choose the appropriate hole pattern for that box. Use the screws provided with the conduit box for mounting. If installing the mounting plate on a surface such as wood, use the 4 included Phillips-head screws. When installing the mounting plate onto drywall use the 4 included drywall anchors in conjunction with the screws.



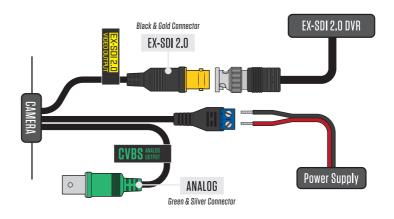
## 3B. INSTALL WITHOUT MOUNTING PLATE - (for cable side exit)

If installing the mounting plate on a surface such as wood, use the 4 included Phillips-head screws and plastic washers. When installing onto drywall use the 4 included drywall anchors in conjunction with the screws. If installing the camera onto a metal structure or bracket (without mounting plate), it is recommended to use the included foam gasket to help prevent damage to the camera caused by power surges.



#### 4. CONNECT CABLES

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.

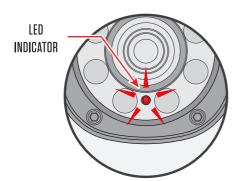


# Default Analog Output: CVBS

Analog Output Selectable: (CVBS / A\_HD / C\_VI / T\_VI)
Refer to included "HD ANALOG" page for information on changing signal type.

\*CE-BZ3HD: Analog is Yellow & Silver Connector. HD Analog not available.

A Power LED Indicator (on the face of the camera) will illuminate RED for 1 second on initial power. If the RED light is ON, either flashing RED or solid RED, check the voltage at the camera. If the RED light is OFF the camera has correct voltage.



# **RVM - Rated Voltage Monitoring**

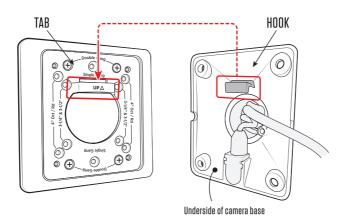
LED COLOR	STATUS
	Safe Power
RED - SOLID	Over 29 Volts (AC24V)
RED - BLINK	Under 10 Volts (DC12V)

An under-powered camera (less than 12 Volts DC) might function initially, but it may stop working at night-time when the IR LEDs are activated (as this draws more power). Constantly under-powering a camera can cause the camera to malfunction.

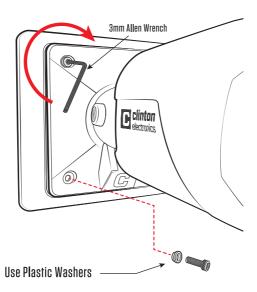
clintonelectronics | 6701 Clinton Road Loves Park, IL 61111 | 800.549.6393 (Support) | www.clintonelectronics.com

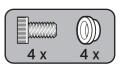
## **5. ATTACH CAMERA TO MOUNTING PLATE**

Align the hook on the underside of the camera to the tab on the mounting plate. Slide the camera base onto the mounting plate.



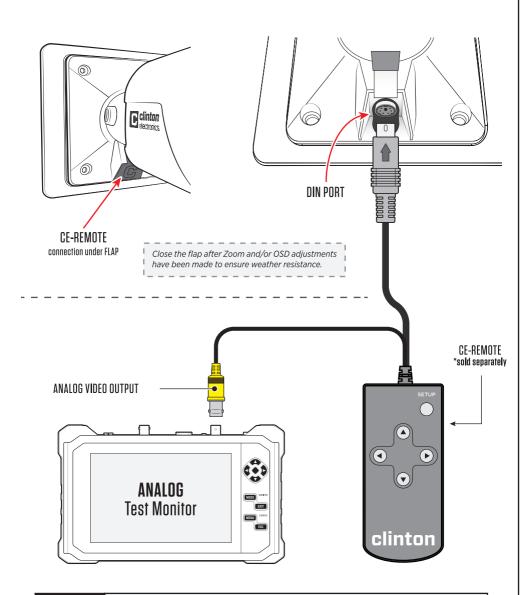
With the camera hooked onto the mounting plate, use the supplied 4 hex head bolts, plastic washers and 3mm Allen wrench to secure onto the mounting plate.





# **6. TEST MONITOR / OSD CONTROL**

Before proceeding with final assembly, it is suggested to test the camera with a test monitor to verify proper camera angle/zoom. To test, lift the rubber flap on the camera base to access the DIN jack, then plug in a CE-REMOTE (sold separately). Connect an analog test monitor to the Yellow connector from the CE-REMOTE.

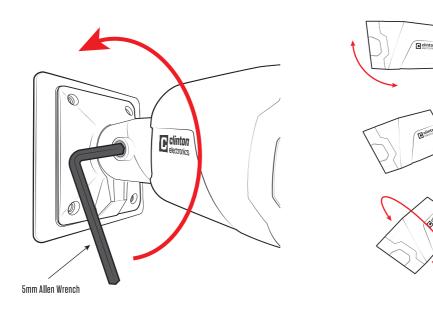




The test monitor connection from the CE-REMOTE is an analog output. The analog output will be the same from these connections as the main Analog connector (green/silver). If the camera is set to an HD Analog option, ensure the test monitor will support that signal type. Certain OSD menu options are EX-SDI only and may not display video if connected to an analog monitor.

#### 7. CAMERA ANGLE ADJUSTMENT

Loosen the hex-head bolt on the camera base with the included 5mm Allen wrench. Adjust the camera angle as needed. After the desired angle is achieved, tighten the hex-head bolt to hold the camera in that position.

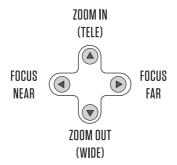


# 8. ZOOM / FOCUS ADJUSTMENT - (for autofocus models only)

The lens will auto focus once powered; this can take several seconds. To set the zoom use 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.

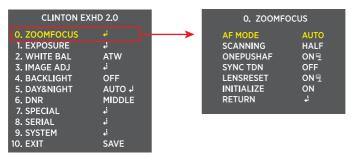




Upon initial installation/power ON of camera, the camera will begin to focus on the current scene. If there is an obstruction of the lens (installer or equipment in-front of the camera), the camera might focus on those objects and could appear out of focus. To refocus the camera either adjust the level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

## 9A. ZOOM / AUTO FOCUS OSD MENU - (for all BZ cameras— except BZ3HD models)

Using the CE-REMOTE press 'SETUP' to access the camera's OSD menu. While on the ZOOMFOCUS option, click press 'SETUP' to enter the sub-menu.



AF MODE: Choose either AUTO or MANUAL.

AUTO will focus automatically after zooming in/out.

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

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

**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.

## 9B. ZOOM / AUTO FOCUS OSD MENU - (for BZ3HD)

Using the CE-REMOTE press 'SETUP' to access the camera's OSD menu. While on the ZOOMFOCUS option, press 'SETUP' to enter the sub-menu.



AF MODE: Choose either CONSTANT, ONE TIME or MANUAL.

**CONSTANT-** the lens will constantly re-adjust the focus depending on how close objects are to the camera. **ONE TIME-** the focus will only be set after any zoom adjustments have been made, it will not re-adjust.

MANUAL- allows for manual focus using the D-Pad on the CE-REMOTE.

**DISTANCE:** Select minimum distance in focus between camera and object.

**ZOOM SPEED:** Set zoom speed: 0 (slow) ~ 7 (fast).

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

LENS RESET: Press and hold the SETUP button to reset the focus of the lens.

E. ZOOM: Set the maximum level of digital zoom.



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

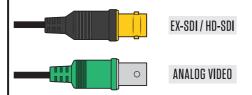
\*BZ3HD default SDI output is set to: **HD-SDI** 

# 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).



# 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.

HDSDí 275 Feet

**EX-5DI** 800 Feet

**EX-5DI 20** (2MP) 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 - Up the Coax Control

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.



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.



\*Refer to camera OSD manual for more information.