

CE-VX180X2QHD(B) Install Guide

Included Items:

- Dual 180° VX Dome Camera x 1
- Torx Wrench (T20 Security) x 1
- Instructions x 1
- Test Monitor BNC Lead x 1
- Mounting Screws x 4
- Drywall Anchors x 4

Required Items:

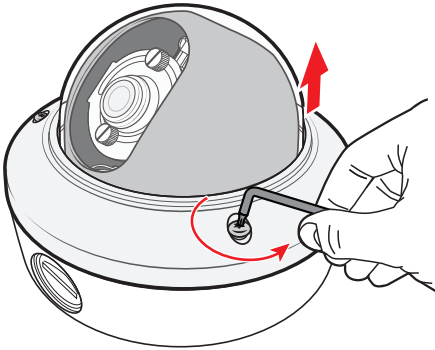
- Phillips Head Screwdriver or Drill with Phillips Head Bit
- DC12V or AC24V Power Supply

Optional Items:

- CE-REMOTE (OSD Remote Control)

1a. DISASSEMBLE

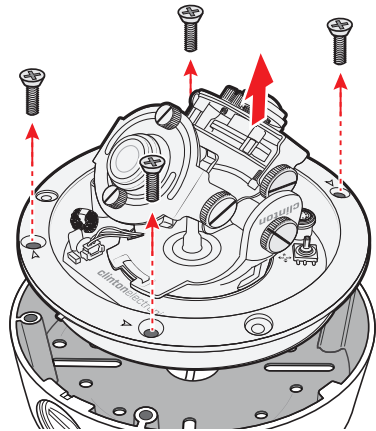
Use the supplied Torx wrench to loosen the 3 Torx screws that hold the dome assembly onto the base. Remove the top dome cover from the camera base.



⚠ 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.

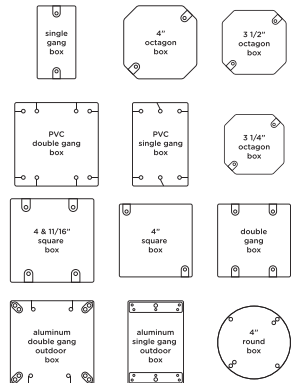
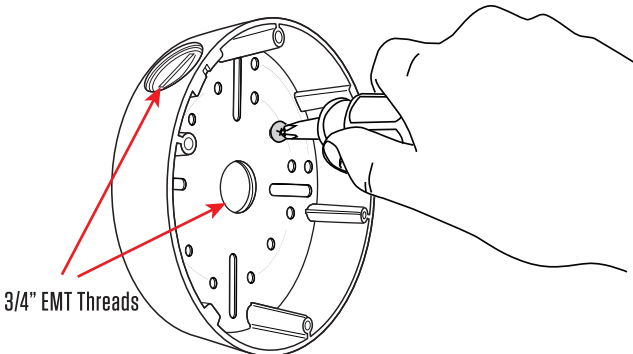


2. MOUNT OUTER CASE

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

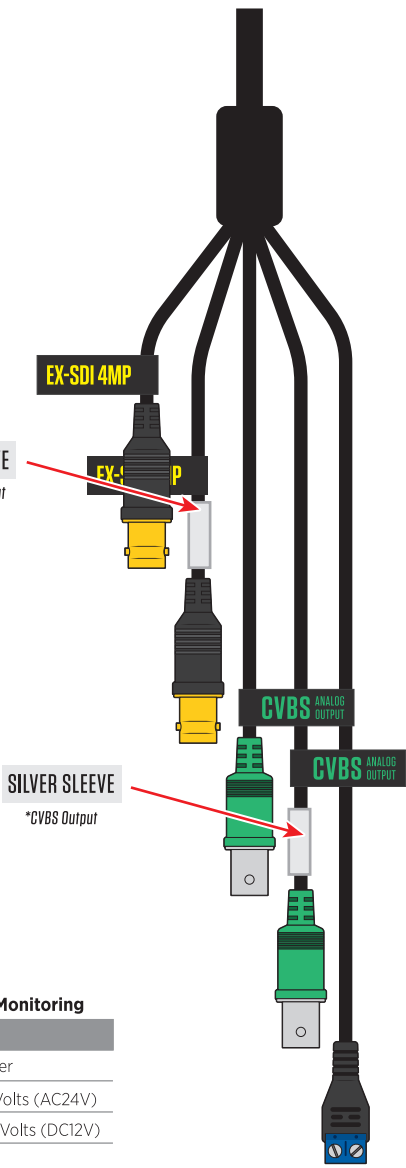
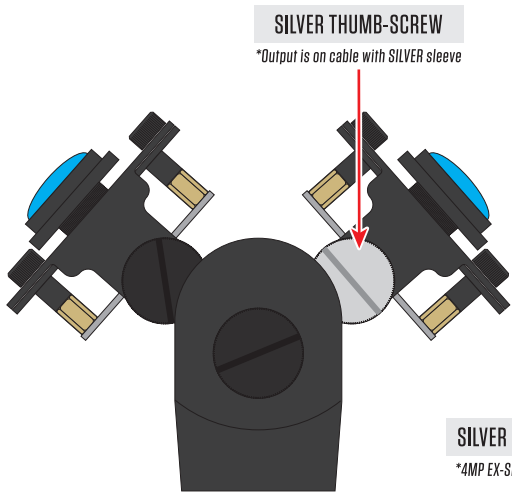
If mounting to a conduit box, choose the best mounting hole pattern for your style of box and use the appropriate screws. There are numerous mounting hole patterns available to accommodate various box types.

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.



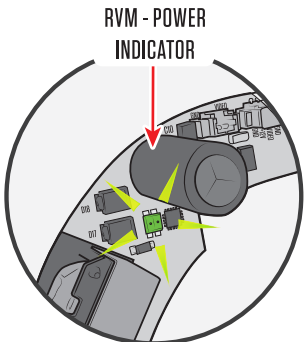
3. CONNECT CABLES

Make video connections to the appropriate BNC cables and connect to power. Each camera will have two video outputs. The cables with the SILVER sleeve are for the camera with the SILVER thumb screw. The BLACK and GOLD BNC connectors are for 4MP EX-SDI output, while the GREEN and SILVER BNC connectors are for HD Analog / Analog output.



Default SDI Output: 4MP EX-SDI
 EX-SDI Output Selectable: (4MP EX-SDI / EX-SDI 2.0 / EX-SDI / HD-SDI)
 Refer to included "4MP EX-SDI" page for information on changing signal type.

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

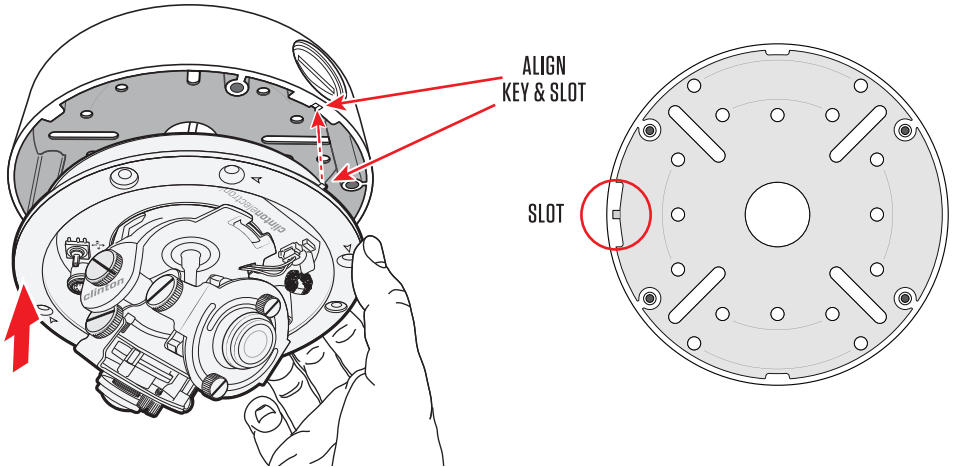
| LED COLOR | STATUS |
|-------------|------------------------|
| GREEN | Safe Power |
| RED - SOLID | Over 29 Volts (AC24V) |
| RED - BLINK | Under 10 Volts (DC12V) |

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. If the LED indicator is blinking or solid red, refer to the table above and make the necessary power adjustments.

4a. ATTACH CAMERA

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

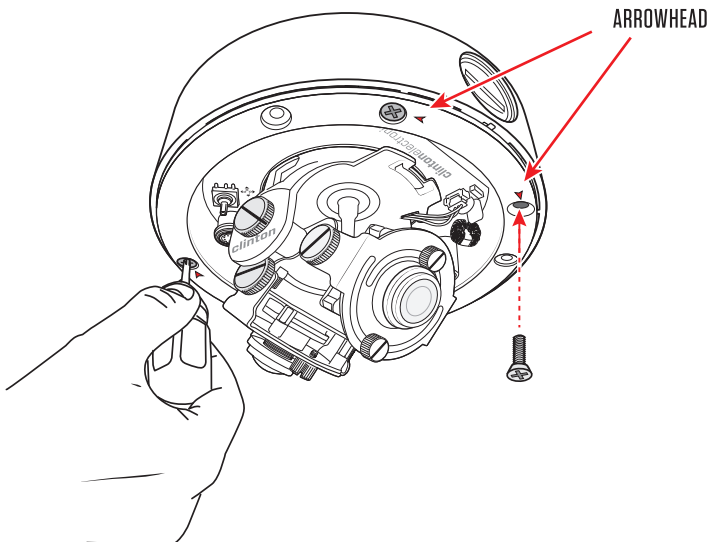
Align the key on the lip of the inner camera assembly with the slot on the camera base when reassembling. If these are not aligned properly the weather resistant seal will be compromised, allowing water to leak into the camera.



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

Reinstall the four Phillips head screws that were removed in step 1b which hold the inner case to the camera base. The four holes are marked with arrowheads.

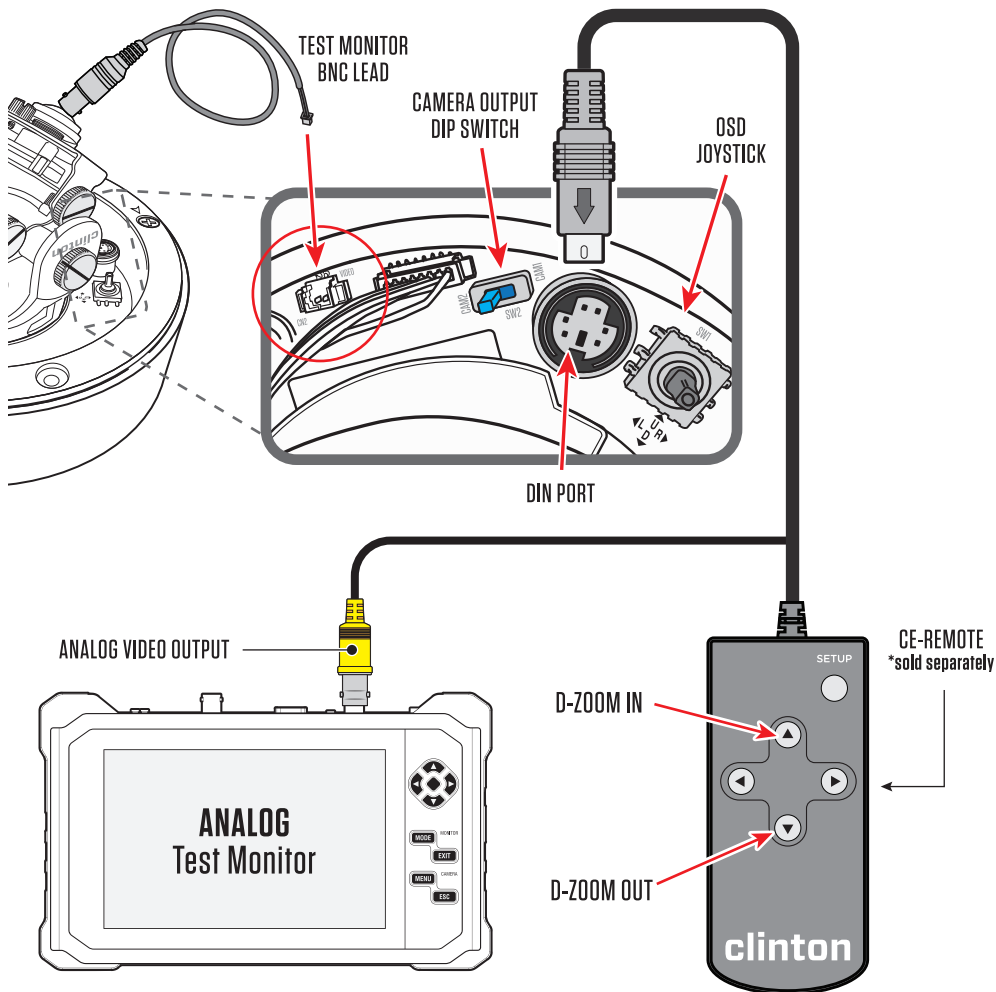


5. TEST MONITOR / OSD CONTROL

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, 8 wire connection on the circuit board. The CE-REMOTE plugs into the DIN Port.

To change from Camera 1 to Camera 2 for test monitor viewing: locate the blue dip-switch next to the DIN Port, then slide left or right to change cameras.

OSD adjustments can be made by using the OSD Joystick or the optional CE-REMOTE. Refer to OSD Manual for detailed instructions on adjusting camera settings.



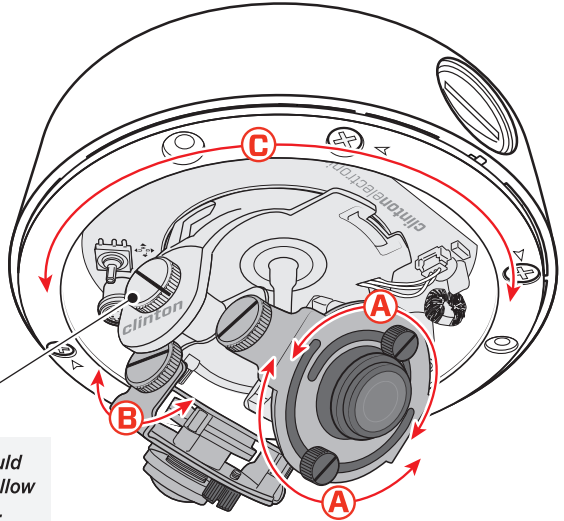
The image from the camera can be digitally zoomed in before entering the camera's OSD menu by pushing the 'UP' button on the CE-REMOTE (pressing 'DOWN' will zoom out the image). When the camera is set to 4MP the maximum zoom level is x14, and when the camera is set to 2MP the maximum zoom level is x8.

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.

6a. CAMERA ANGLE ADJUSTMENT

Adjust the angle of the camera as necessary.

- A. Lens Rotation:** Loosen the thumb screws on the face of the camera to rotate the lens. See step 6b below about lens rotation.
- B. Lens Tilt:** Loosen the thumb screws on each side to adjust the tilt of the lens. There are angle adjustment stops on the bracket that prevents tilting each lens too far in either direction.
- C. Camera Plate Rotation/Pan:** Pinch the gimbal U-Bracket and rotate the camera assembly on the base.

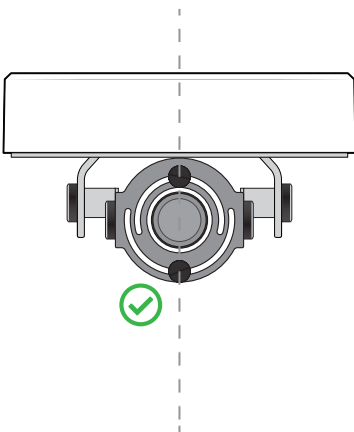


⚠ NOTICE The center thumb screws should not be loosened. They don't allow any additional tilt adjustment.

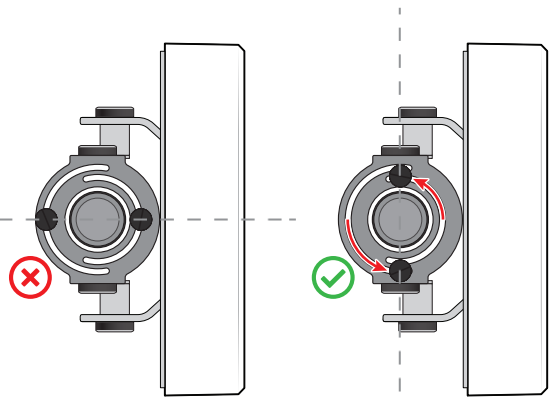
6b. CAMERA ANGLE ADJUSTMENT

Depending on the desired angle of view or how the camera is installed (ceiling or wall mount), the camera modules may need to be rotated 90 degrees. To rotate the camera module, first loosen the two thumb screws on the face of the camera, then rotate as necessary and tighten the thumb screws to secure. The thumb screws should be aligned "vertically" for correct image. If the image needs to be rotated 180 degrees, go to the camera's OSD menu and select Main Menu > Special > Rotate.

CEILING MOUNT



WALL MOUNT

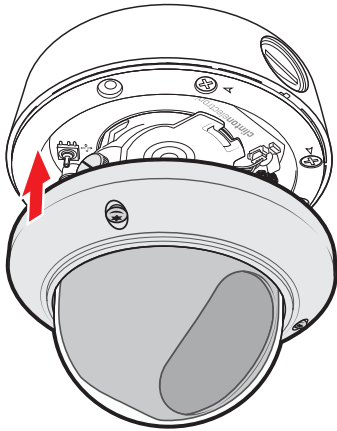


Camera image will be rotated 90°

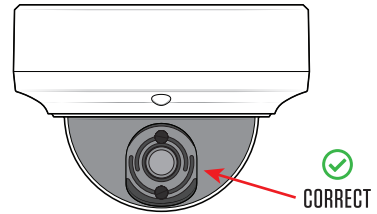
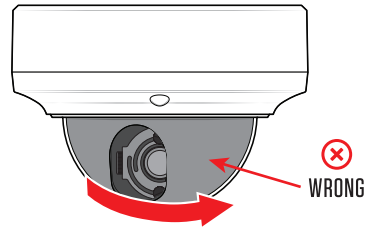
Thumb screws aligned "Vertically" for correct image

7. REPLACE DOME COVER

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-outs in the dome mask do not align with the camera lenses.

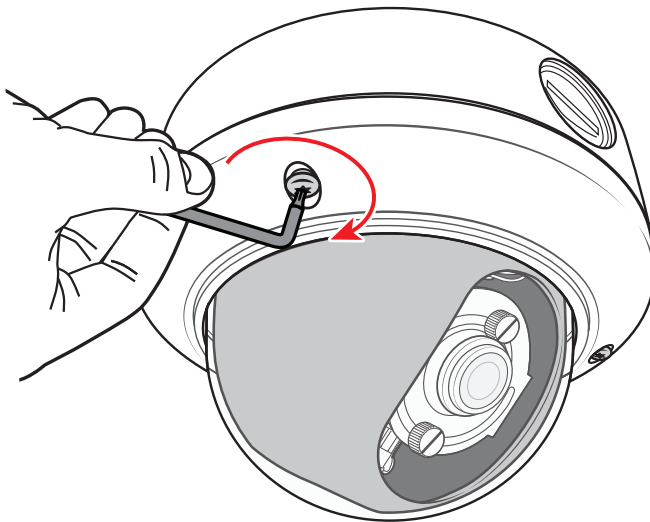


ROTATE DOME MASK AS NECESSARY



8. 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.

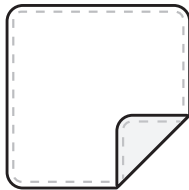
To clean the outside of the dome: first use compressed air to blow off any significant amounts of dirt/dust – then use warm, soapy water and a damp micro-fiber cloth towel to clean. Dry with a separate, clean micro-fiber cloth towel.

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

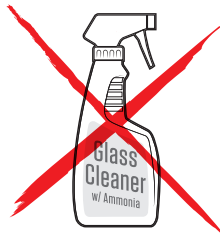


Warm Soapy Water

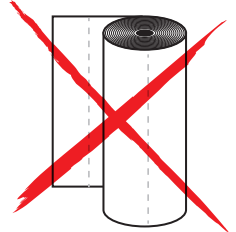


Micro-Fiber Cloth

✘ DO NOT USE



Glass Cleaner



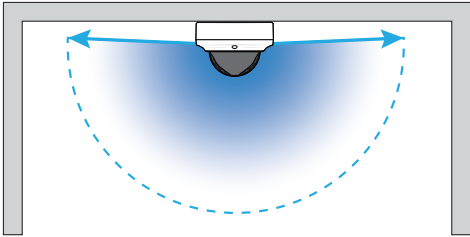
Paper Towels

CE-VX180X2QHD(B) Best Practices

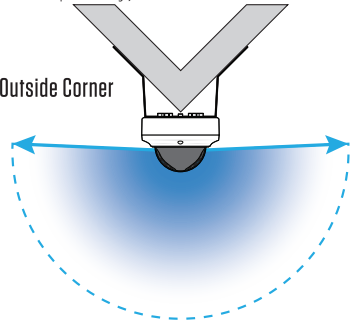
COMMON INSTALLATIONS

For an optimal unobstructed field-of-view, install the CE-VX180X2QHD camera in the center of a wall or ceiling. Outside corners can also provide wide, open views. Use the CE-UCB-CRNR (sold separately) to mount the camera to an outer corner.

✔ Center of Room or Hallway



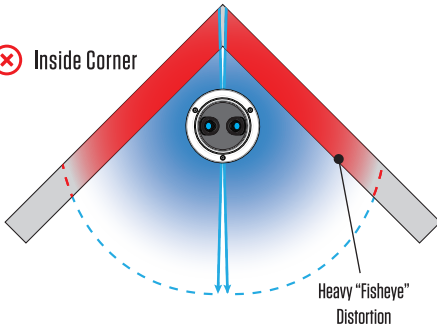
✔ Outside Corner



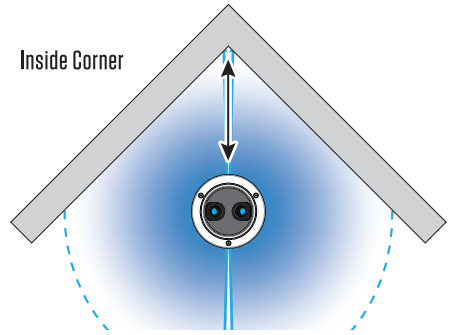
AVOID INSIDE CORNERS

If installing on an inside corner, it's best to move the camera away from the corner a few feet to avoid the corner walls from taking up the majority of the scene and to lessen the heavy fisheye distortion effect.

✘ Inside Corner



Inside Corner



AVOID DIRECT SUNLIGHT

The convex design of the 180° makes the camera prone to lens flares caused by direct sunlight. Lens flares can occur even if the lens does not directly point at the bright light source. The result is an over-exposed portion of the image. To reduce lens flare, angle the camera down and away from the bright light source or install it higher up to increase the downward angle.

