11.4 Installation

The Vandal Proof IP Dome is designed for outdoors. With the standard package, you can install the camera on the wall or ceiling.

Note: You may also install the camera to ceilings, wall corners (concave or convex), and poles with optional mounting kits. For more details, see *GV-Mount Accessories Installation Guide* on the Software CD.

IMPORTANT: When installing the Vandal Proof IP Dome near the corner, maintain at least 25 cm away from the corner (for wall installation) or from the walls (for ceiling installation) to avoid reflection problems.

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1. Remove the housing cover with the supplied torx wrench.
2. Thread wires into the camera.
   A. Unscrew the conduit connector from the back.

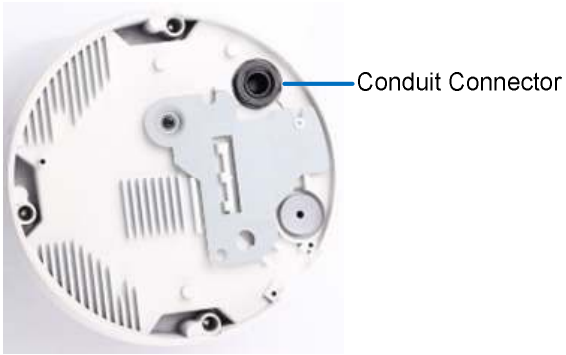

Figure 11-3

B. Unplug the conduit connector inside the housing and disintegrate the connector. You should have 4 parts:

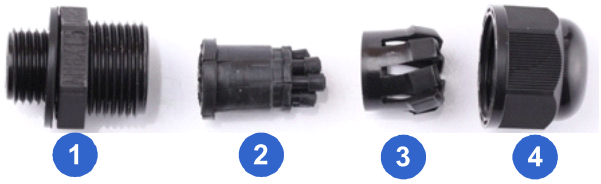

Figure 11-4

C. Remove the terminal block from the power adapter.

D. Thread the audio wires (optional), TV out wire (optional), adapter wires and I/O wires (optional) through the conduit entry and then through part 1, 2, 3 and 4 of the conduit connector.

Tip:

1. To make the threading easier, it is advised to thread the wires in the order described here.
2. Use a pair of pliers to help you pull the wires through the camera.
3. User the supplied ruler and leave adequate length for wires inside the camera housing. The length described below does not include the connector part.

Wires	Length Inside Housing
I/O, power	10 cm
Audio, TV out, LAN/PoE	11 cm

For part 2, there are 8 holes each labeled with its diameter. Remove the plugs and push the wires to the corresponding hole listed below:

Figure 11-5

Hole Diameter	Applied to
2.6 mm	Audio in and audio out TV out wire
2 mm	Adapter wires
1.8 mm	I/O wires

E. Push off the cable seal in the indicated direction. Thread an Internet cable (with RJ-45 connector only on one end) through the cable seal and re-install the cable seal.

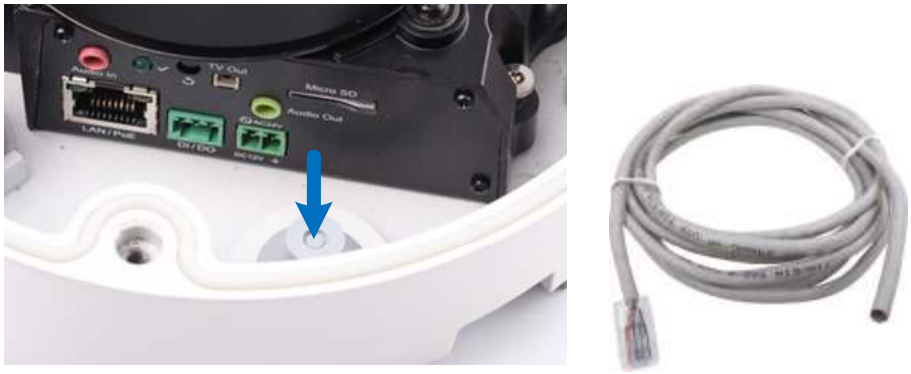

Figure 11-6

3. Connect the wires to the camera.

   A. Install the terminal blocks to the power adapter and I/O devices. See *11.5.1 Power Connection* and *11.5.2 I/O Device Connections.*

   B. Install the supplied RJ-45 connector to the Internet cable.

   C. Plug all the connectors to the camera panel.

Tip: Unscrew the indicated screws and lift the camera to help you connect the wires.

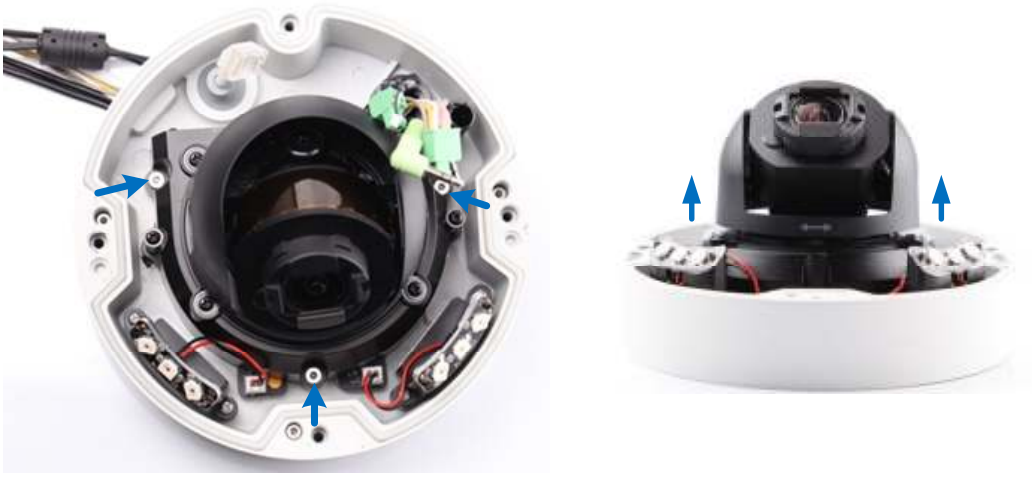

Figure 11-7

   D. Arrange the wires in the conduit connector and re-install it to the camera.

4. Sort out the wires at the back. You can have the wires come out from position A, B or both. The instructions here describe sorting wires for position A.

Figure 11-8

From the back of the camera housing, unscrew and rotate the plate to one side, sort out the wires and secure the plate back.

Figure 11-9

5. Secure the back plate to the wall or ceiling.

   A. Paste the sticker to the wall or ceiling. The arrow on the sticker indicates the direction that the camera faces.

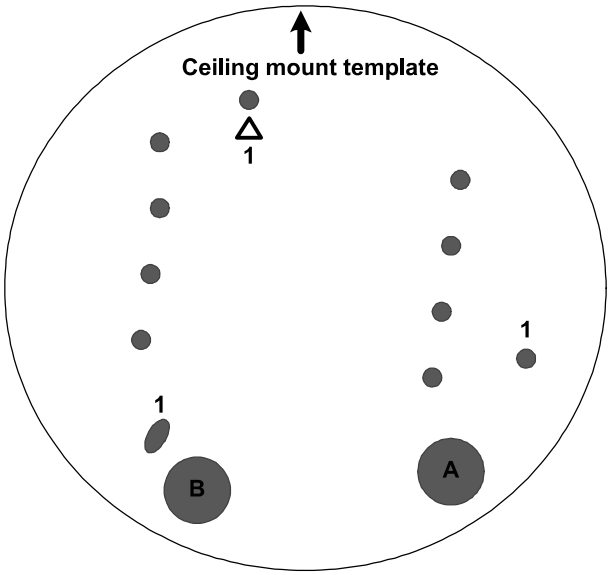

Figure 11-10

   B. Drill 3 holes for screws. The recommended ones are indicated as '1'.

   C. Insert the screw anchors to the 3 holes.

   D. Depending on how you want to run the wires (see step 4). Drill the right hole (Figure 11-10) for position A and the left for position B or both if required.

   E. Secure the back plate to the wall or ceiling with long screws.

6. Secure the camera to the wall or ceiling.

   A. Secure the safety lock to the camera using a short screw. Use flat screw for number 1 and small screw for number 2.

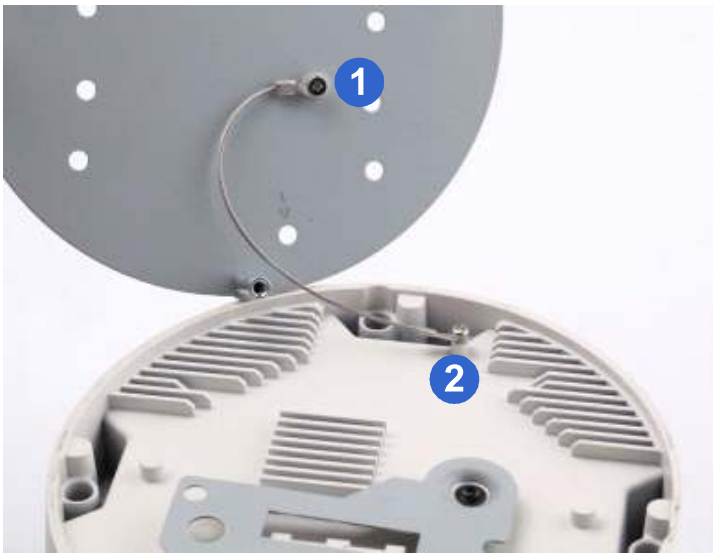

Figure 11-11

   B. Thread all the wires into the wall/ceiling and connect them.

Note: To use the TV out function, connect the black BNC connector to a monitor and select your signal format (NTSC or PAL) at the **TV Out** field on the Web interface. For details, see *17.1.1 Video Settings*.

C. Secure the camera using the torx wrench

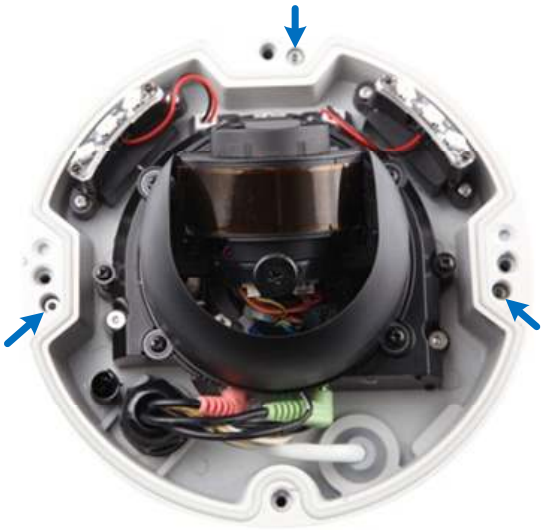

Figure 11-12

7. Access the live view. See *15.1 Accessing the Live View*.
8. Adjust the camera's angle, focus and zoom of the camera.

Pan Adjustment

Figure 11-13

Tilt Adjustment

Figure 11-14

Rotational Adjustment

Figure 11-15

9. Replace the silica gel bag and secure the camera cover using the torx wrench.

IMPORTANT:

1. The gel bag loses its effectiveness when the dry camera is opened. To prevent the lens from fogging up, replace the silica gel bag every time you open the camera and conceal the silica gel bag within 2 minutes of exposing to open air.
2. For each newly replaced silica gel bag, allow it to absorb moisture for at least 5 hours before operating the camera.
3. Make sure the housing cover is properly secured to prevent water from entering and damaging the inner housing.
4. If the center of the camera view is less than 25° to the ceiling/wall, or lower than the grey line (as illustrated below), disassemble the indicated ring so the view is not obstructed. However, with the ring disassembled, slight reflections may occur.

11.5 Connecting the Camera

Connect your Vandal Proof IP Dome to power, network and other wires needed.

11.5.1 Power Connection

There are two ways to supply power to the camera:

- Use a Power over Ethernet (PoE) adapter to connect the camera to the network, and the power will be provided at the same time.
- Use the supplied Terminal Block and power adapter. Insert the wire with white lines to the right pin and the other wire to the left pin.

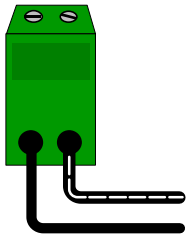

Figure 11-16

11.5.2 I/O Device Connections

The Box Camera support one digital input and one digital output of dry contact.

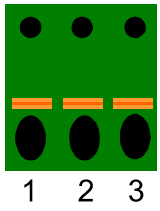

Figure 11-17

Pin	Function
1	Digital Output
2	GND
3	Digital Input

For details on how to enable an installed I/O device, see *17.2 I/O Settings*.

11.5.3 Voltage Load Expansion (Optional)

The camera can only drive a maximum load of **200mA 5V DC**. To expand the maximum voltage load to **10A 250V AC**, **10A 125V AC** or **5A 100V DC**, connect the camera to a GV-Relay V2 module (optional product). Refer to the figure and table below

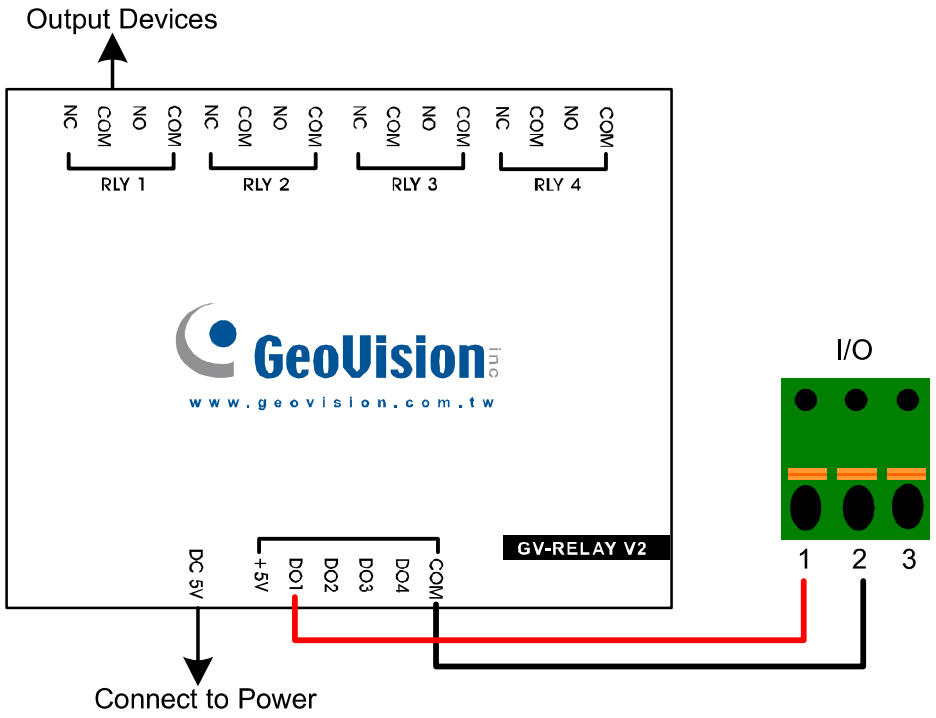

Figure 11-18

GV-Relay V2	Vandal Proof IP Dome
COM	Pin 2 of I/O terminal block
DO1	Pin 1 of I/O terminal block