



CHAPTER 2

Camera Installation

This chapter provides information and instructions for installing the Cisco Video Surveillance 7030 IP Camera, and includes the following topics:

- [Installation Guidelines, page 2-1](#)
- [Warnings Before Installation, page 2-1](#)
- [Installing the IP Camera with a Vandal Resistant Enclosure, page 2-4](#)

Installation Guidelines

This section describes how to install the IP camera. Before installing, review these guidelines:

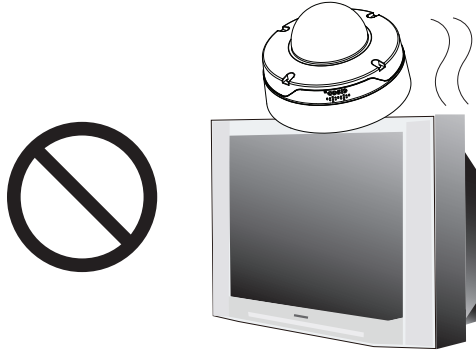
- The IP camera requires a network cable and a connection to a standard 10/100BaseT router or switch. To power the IP camera with Power over Ethernet (PoE), a switch must be 802.3af compliant.
- If you are using the IP camera on a network connection that does not provide PoE, you must use a third-party 24 VAC power adapter.
- If you are using an external speaker, microphone, input device, output device, or pan/tilt control device, you must configure additional settings after installing and performing the initial set up of the IP camera before the external device can fully operate. For detailed information about these settings, see the *Cisco Video Surveillance 7000 Series IP Camera Configuration Guide*.
- If you do not connect an external device (speaker, microphone, input, output, or pan/tilt control) when you perform the following installation procedure, you can install any of these devices later.

Warnings Before Installation

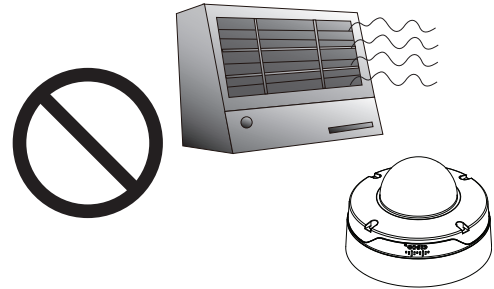
- **Power off the IP Camera as soon as smoke or unusual odors are detected.**
Contact your distributor in the event of this happening.
- **Keep the IP Camera away from water. If the IP Camera becomes wet, power off immediately.**
Contact your distributor in the event of this happening.

Warnings Before Installation

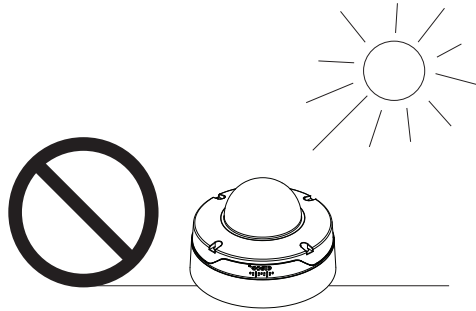
- Do not place the IP Camera around heat sources, such as a television or oven.



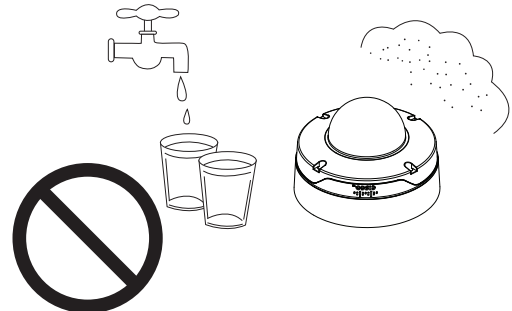
- Refer to your user's manual for the operating temperature.



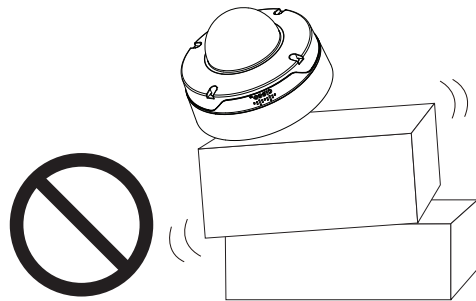
- Keep the IP Camera away from direct sunlight.



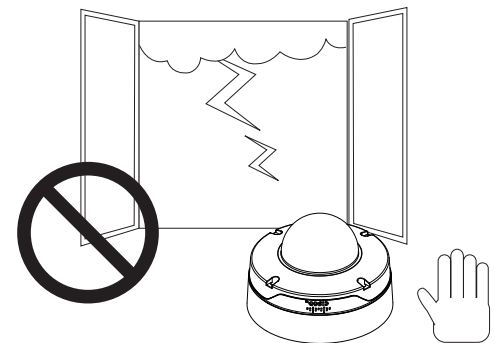
- Do not place the IP Camera in high humidity environments.



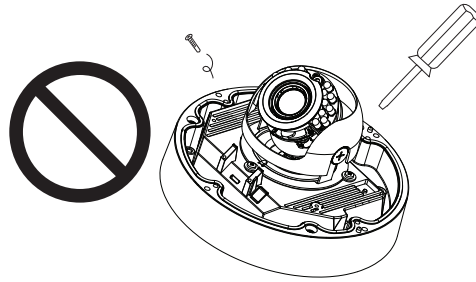
- Do not place the IP Camera on unsteady surfaces.



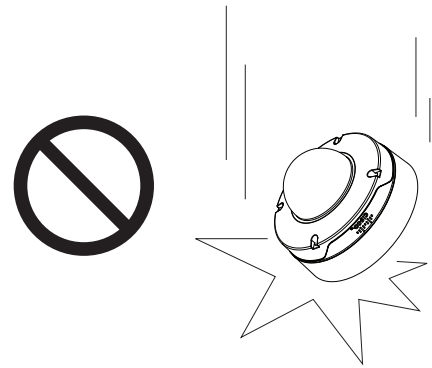
- Do not touch the IP Camera during a lightning storm.



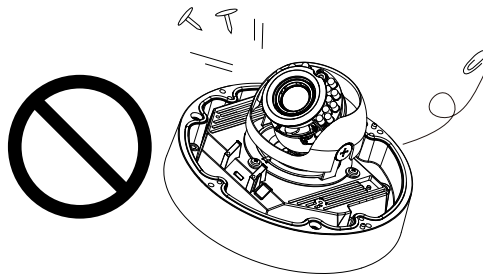
- Do not disassemble the IP Camera.



- Do not drop the IP Camera.



- Do not insert sharp or tiny objects into the IP Camera.



 **Warning**

Installation of the equipment must comply with local and national electrical codes. Statement 1074

 **Warning**

The power supply must be placed indoors. Statement 331



Note If you use the IP camera outdoors, place the camera and the power supply in a suitable NEMA enclosure.

 **Warning**

This product must be connected to a power-over-ethernet (PoE) IEEE 802.3af compliant power source or an IEC60950 compliant limited power source. Statement 353

 **Caution**

Inline power circuits provide current through the communication cable. Use the Cisco provided cable or a minimum 24AWG communication cable.



Note

The power adapter that you use with the IP camera must provide power that is within +/-10% of the required power.

**Note**

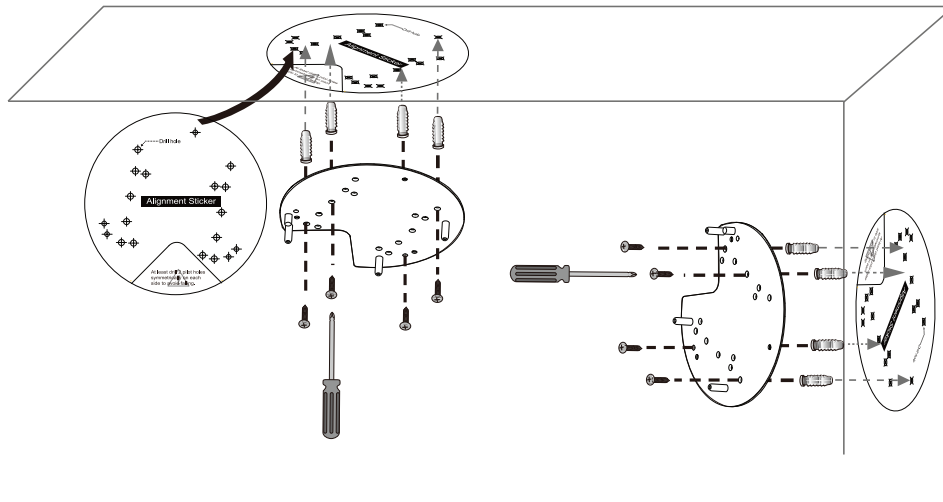
The equipment is to be connected to a Listed class 2, limited power source.

Installing the IP Camera with a Vandal Resistant Enclosure

To install the IP camera to a ceiling or wall using a vandal resistant (VR) enclosure, perform the following steps.

Procedure

- Step 1** Attach the included alignment sticker to the ceiling or wall.
- Step 2** Using the circle marks on the sticker, drill at least two pilot holes symmetrically on each side (four holes total) into the ceiling or wall. Then hammer the included wall anchors into the holes.
- Step 3** Secure the mounting plate to the ceiling or wall with the four included screws.



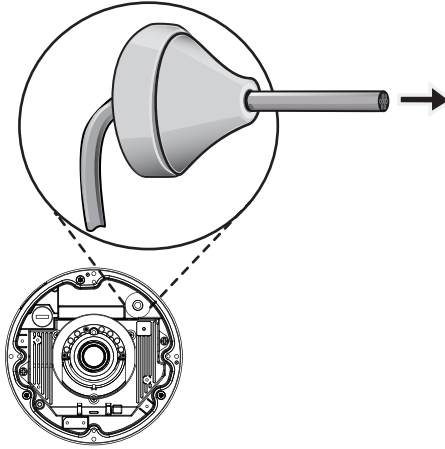
- Step 4** Do one of the following to feed the cables to the IP camera:
 - Cut out a section of the ceiling or wall that corresponds to the triangular cutout on the alignment sticker, and feed cables through a ceiling or wall.
 - Use a screwdriver to remove the cutout on the side of the conduit base, connect a cable conduit, and feed the cables through the side of the conduit base.

Step 5 Perform the following steps to install and connect an RJ45 Ethernet cable.

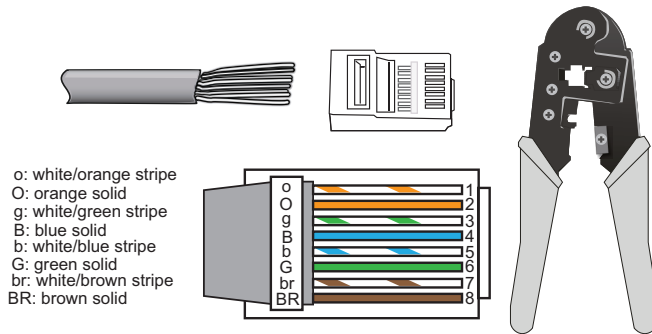


Note We recommended using 24AWG (0.51 mm) gauge cable.

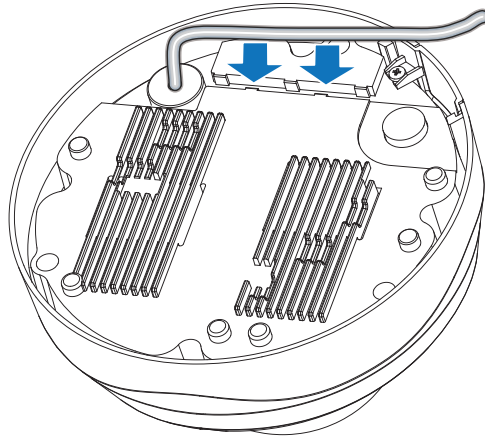
- a. Drill a hole on the rubber seal plug and insert an Ethernet cable (without a connector) through the opening.



- b. Strip about 1/2 inch (12 mm) of the sheath from the Ethernet cable.
- c. Use an RJ45 crimping tool to attach the Ethernet wires to a connector. When done, connect the cable to the camera's Ethernet RJ45 socket.

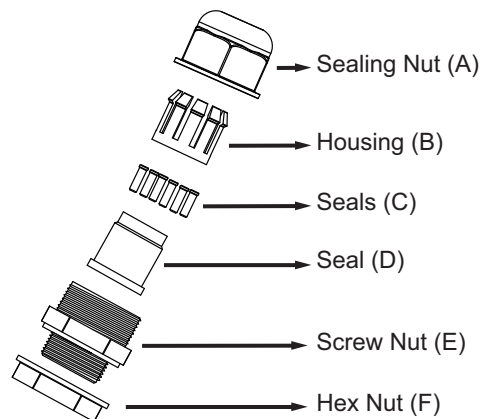


- d. Press the Ethernet cable into the routing path at the bottom of the camera so that the cable will not get in the way when the metal mounting plate is attached.



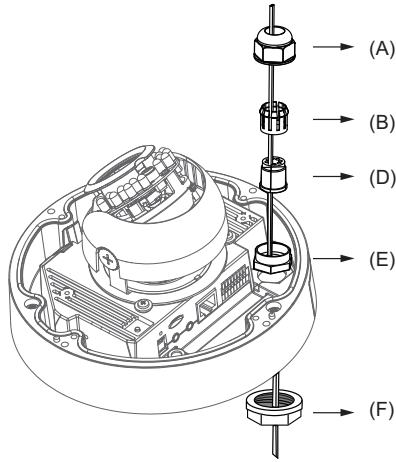
Step 6 (Optional) Perform the following steps to install and connect an external power cable and I/O cables for external devices:

- a. Disassemble the components of the waterproof connector into parts (A) ~ (F).



- b. Place the screw nut (E) on the power and I/O cable opening.

- c. Feed the power cable through the waterproof connector (F --> E --> D --> B --> A). Be sure to feed enough power cable length through the waterproof connector to connect the power cable to the GPIO block.

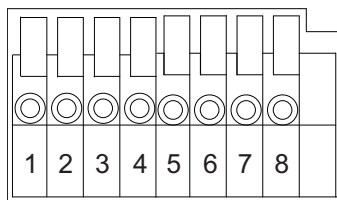


Note There are 8 holes on the seal (D), and the widest holes with a crack on the side are specific for power cables.

- d. Feed the I/O cables through the waterproof connector (F --> E --> D --> B --> A). Be sure to feed enough I/O cable length through the waterproof connector to connect the I/O cable to the GPIO block.

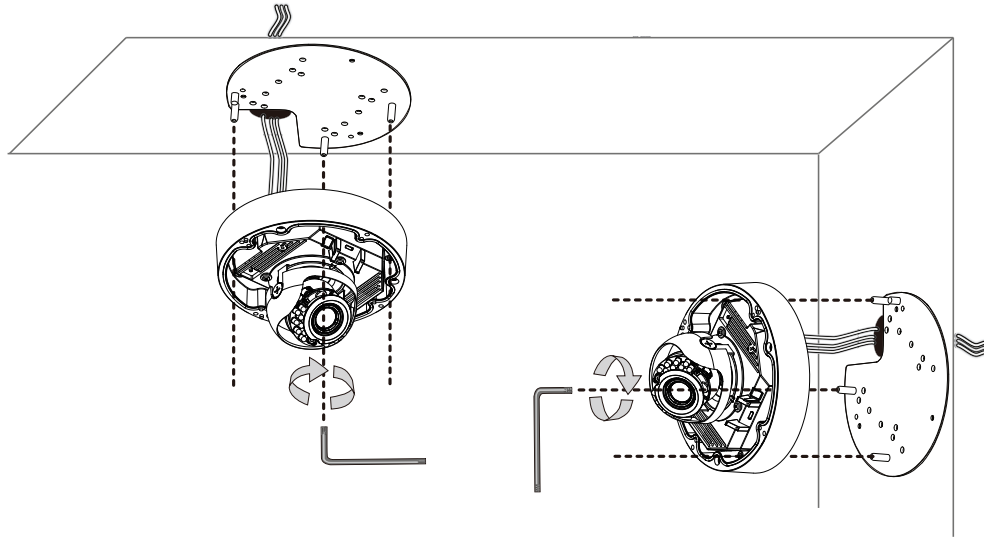
The recommended cable gauge is 2.0 ~ 2.8 mm.

- e. Push the seal (D) into the housing (B).
- f. Insert the seals (C) into unused holes on the seal (D) to avoid moisture.
- g. Secure the sealing nut (A) tightly and hex nut (F) from the bottom of the camera.
- h. Connect the power and I/O cables to the GPIO terminal block



Pin	Description
1	24 VAC
2	24 VAC
3	DI-
4	DI3+
5	DI2+
6	DI1+
7	DO-
8	DO+

- Step 7** Use the included L-type wrench to secure the conduit base to the mounting plate with the three included screws.



- Step 8** (Optional) Use mini cable with BNC connector to temporarily attach an NTSC or PAL compliant analog video display device to the analog video out port on the rear of the IP camera.

**Note**

The mini cable with BNC adapter is included in the audio/video cables accessory kit, which you can purchase from Cisco (Cisco part number CIVS-AVCABLE).

Analog video is enabled by default to allow you to adjust the camera field of view during installation. However, it is not supported as a normal camera feed and is automatically disabled when any of the following camera settings are made:

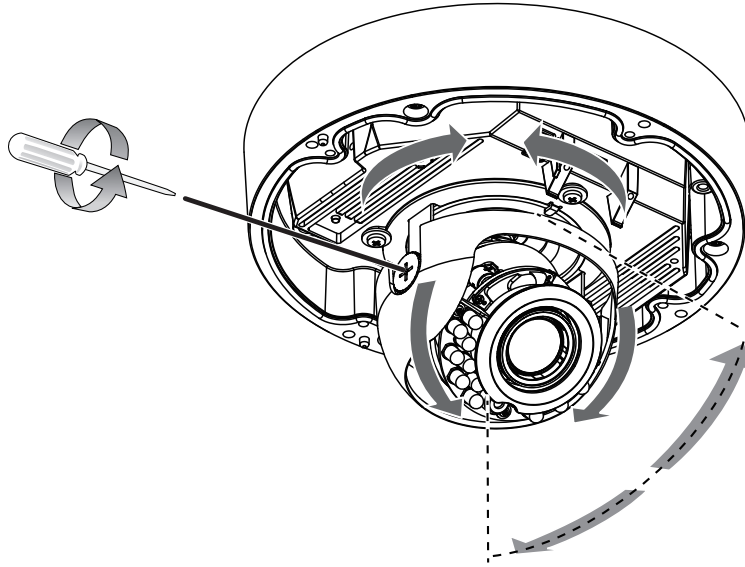
- The primary video stream frame rate must be set higher than 15 fps.
- The secondary video stream must be enabled.

**Note**

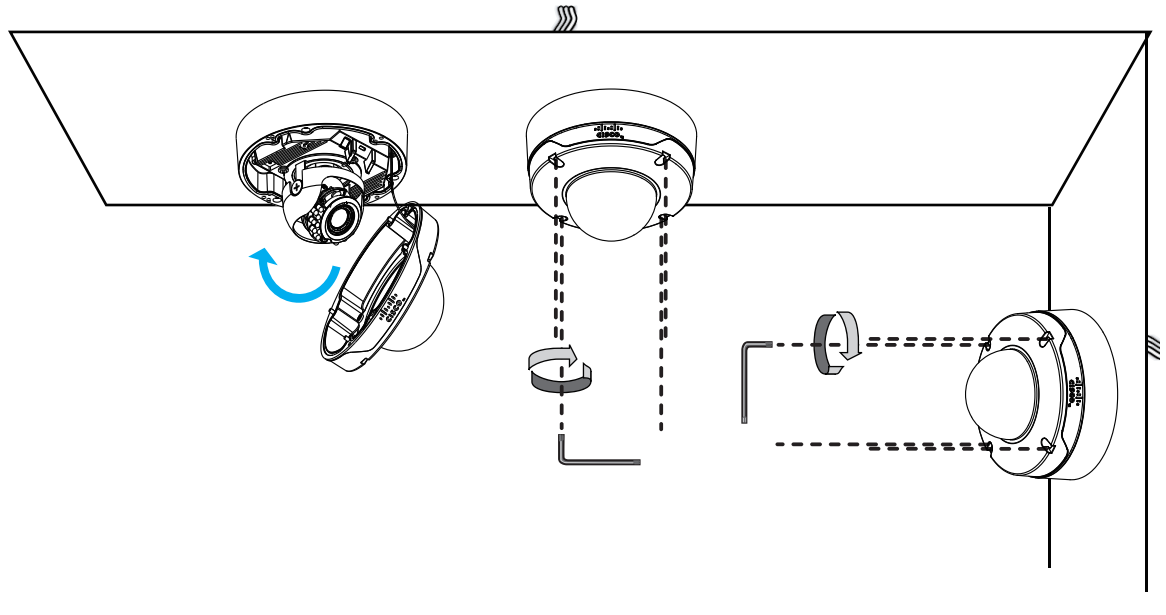
We recommend that you disable analog video after installation. To disable analog video, see the *Cisco Video Surveillance 7000 Series IP Camera Configuration Guide*.

- Step 9** While viewing video from the IP camera, perform the following steps to adjust the 3-axis field of view:
- a. Grip the two tilt adjustment screws and pan the IP camera left or right.
 - b. Loosen the two tilt adjustment screws, tilt the IP camera, then tighten the screws.

- c. Rotate the IP camera to adjust the horizontal orientation until you achieve a level image.



- Step 10** (Optional) If the IP camera is installed in a high humidity environment, remove the wrapper from the included silica gel pack and place the pack with the camera inside the VR housing. Ensure that the silica gel pack does not obstruct the IP camera field of view.
- Step 11** Attach the dome cover to the camera by aligning it with the mounting holes.
- Step 12** Use the included wrench and tighten the four dome cover screws to secure the dome cover to the camera. Make sure all parts of the camera are securely installed.



What to do next

Complete the following procedures:

- After you install the IP camera, follow the instructions in the [“Performing the Initial Setup of the IP Camera”](#) section on page 3-1 to access the IP camera through your network.

- After completing the initial setup, use the IP camera user interface to adjust the focal length and zoom factor. For more information, see the [“Adjusting the IP Camera Focus and Zoom”](#) section on page 4-3.