



1 Check Contents

Make sure all of the items below are included in the camera kit (images not to scale):

	<i>RJ45 insertion tool</i>		<i>M4x31m m self- tapping screw x 8</i>		<i>Two-pin power connect or</i>
	<i>RJ45 cable connect or</i>		<i>Plastic anchor x 8</i>		<i>Torx Security wrench</i>

2 Select a Location



Warnings

- Placing a camera in an environment subject to extremely high temperature can result in an explosion or the leakage of flammable liquid or gas.
- Subjecting the camera to extremely low air pressure can result in an explosion or the leakage of flammable liquid or gas.
- The camera must be installed by qualified personnel and the installation should conform to all local codes.

The camera can be mounted outdoors or indoors.

The camera's operating temperature range is -35°C to 60°C (-31°F to 140°F), with no more than 90% non-condensing humidity. A heater is not required.

Make sure you have the required accessories and tools. Make sure that the location provides a suitable method for routing cables to and from the camera.

3 Remove Cover and Separate Module

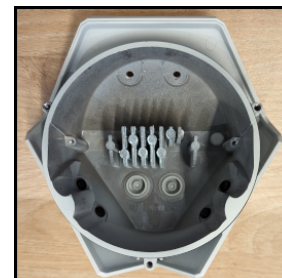
- a. Using the Torx Security wrench included in the camera kit, loosen and remove the three screws that secure the camera cover to the camera housing. Then, remove the cover.



- b. Loosen the two screws securing the camera module to the camera housing and remove the module from the housing.



Camera Module



Camera Housing

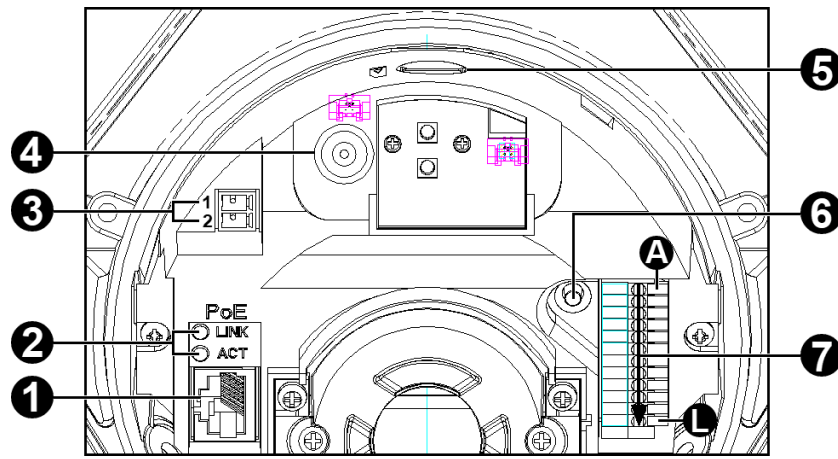
4 Connect the Camera

Teledyne FLIR recommends connecting the camera on a bench or in a lab and configuring it for networking before mounting and aiming it. However, circumstances can dictate adjusting the sequence of the steps. For example, you can mount the camera before configuring it for networking.

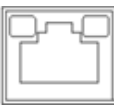
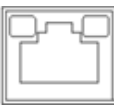


Warning

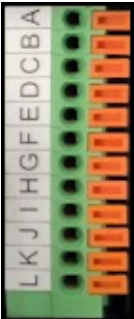
The camera itself does not have a power on/off switch. Do not supply power to the camera until you have completely finished connecting it.



Connectors

Connector / LED		Connection			
1	PoE RJ45	 Attach an Ethernet cable from the network switch to the RJ45 connector for a 10/100/1000 Mbps Ethernet and IEEE 802.3af class 0 PoE connection. Ethernet is required for streaming video and for configuring the camera.			
					
2	LINK	Green LED that indicates the camera is powered up.			
	ACT	Orange LED lights up when a good network connection exists and flashes to indicate network activity.			
 Warning		The PoE unit and all interconnected equipment must be installed indoors within the same building, including all PoE-powered network connections, as described by Environment A of the IEEE 802.3af standard.			
3	Two-pin power terminal block	1	24 VAC 1	12 VDC +	If using a 24V AC or 12V DC power supply, attach wires from the power supply to the two-pin connector included in the camera kit according to the pin assignment shown. Then, attach the connector to the terminal block.
		2	24 VAC 2	12 VDC -	
 Warning		The power cord to the 12V DC or 24V AC power supply unit must be connected to a socket outlet with an earthing connector.			
4	Built-in microphone	N/A			
5	microSD card slot	For video clip and snapshot recording and file storage, insert a microSDXC card (maximum 1 TB) in the slot. When the camera is powered on, do not remove the microSD card.			

Connector / LED		Connection
6	Default button	To restore the camera to its factory defaults, use a proper tool to press the default button for at least 20 seconds.
7	12-pin alarm and audio I/O connector	Attach wires from external alarm, audio, and other I/O devices to the connector according to the pin assignment below.

12-Pin Alarm and Audio I/O Connector	Pin	Connection	Pin	Connection
	A	GND	G	Audio In L
	B	BNC	H	Alarm In 2 +
	C	GND	I	Alarm In -
	D	Audio Out R	J	Alarm In 1 +
	E	Audio Out L	K	Alarm Out -
	F	Audio In R	L	Alarm Out +



Warnings

- Do not connect an external power supply to the 12-pin alarm and audio I/O connector.
- This product contains a battery that is soldered to the PCB. There is a risk of explosion if the battery is replaced by an incorrect type. **Do not replace the battery.** The battery should be disposed of in accordance with the battery manufacturer's instructions.

5 Configure for Networking

To discover the camera on the network, Teledyne FLIR recommends using the FLIR Discovery Network Assistant (DNA) tool, which does not require a license to use, and is [a free download from the Teledyne FLIR website](#). After downloading the DNA ZIP file, extract it.

You can configure the camera using the DNA tool, the camera's web page, or a supported VMS.

	DNA tool	Camera's web page
Discover camera IP address	•	
Configure IP address, mask, and gateway	•	•
Change user credentials	•	•
Configure DNS settings, MTU, and Ethernet speed		•

	DNA tool	Camera's web page
Change video format	•	•
Configure more than one camera at the same time	•	

While the software is open, click the Help icon .

For information about using the camera's web page to configure the camera, see the camera's installation and user guide. For information about using a supported VMS to configure the camera, see the VMS documentation.

By default, DHCP is enabled on the camera and a DHCP server on the network assigns the camera an IP address. If the camera cannot connect to a DHCP server, the camera's default IP address is 192.168.0.250. For example, if the camera is managed by FLIR Horizon or Meridian VMS and the VMS is configured as a DHCP server, the VMS automatically assigns the camera an IP address.

If the camera is managed by FLIR Latitude VMS or is on a network with static IP addressing, you can manually specify the camera's IP address using the DNA tool or the camera's web page.

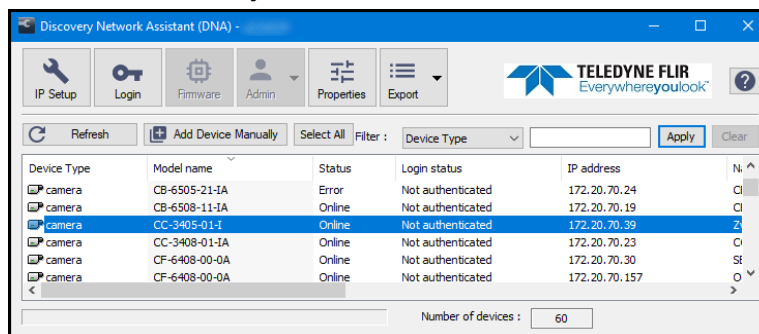
To manually specify the camera's IP address using the DNA tool:

a. Make sure the camera and the PC are on the same LAN segment.

b. Run the DNA tool (DNA.exe) by double-clicking .

The Discover List appears, showing compatible devices on the LAN segment and their current IP addresses.

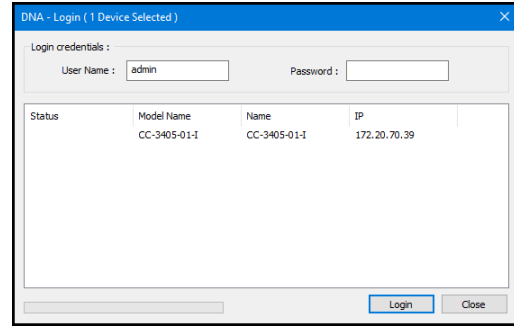
c. In the DNA Discover List, verify that the camera's status is Online.



If this is the first time you are configuring the camera or if it is the first time after resetting the camera to its factory defaults, DNA automatically logs in to the camera with user name *admin* and its default password (*admin*).

If the *admin* user's password is not the default password, you need to authenticate the camera.

1. In the DNA Discover List, select the camera and then click **Login** .
2. In the **DNA - Login** window, type *admin* or the name of any user assigned Admin privileges; and the password.
If necessary, contact the person who configured the camera's users.
3. Click **Login**, wait for  Ok status to appear, and then click **Close**.



DNA - Login (1 Device Selected)

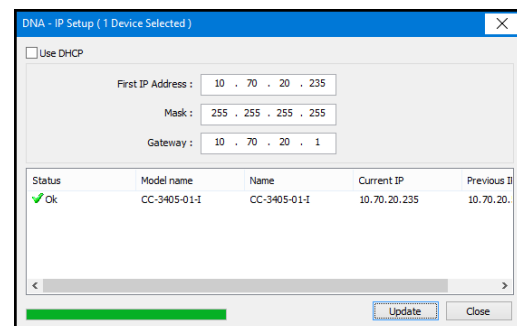
Login credentials :

User Name : Password :

Status	Model Name	Name	IP
	CC-3405-01-I	CC-3405-01-I	172.20.70.39

- d. Verify that the camera's Login status is Authenticated.
- e. Change the camera's IP address.

1. Right-click the camera and select **IP Setup**.
2. In the **DNA - IP Setup** window, clear *Use DHCP* and specify the camera's *IP address*. You can also specify the *Mask* (default: 255.255.255.0) and *Gateway*.
Then, click **Update**, wait for  Ok status to appear, and then click **Close**.



DNA - IP Setup (1 Device Selected)

☐ Use DHCP

First IP Address :

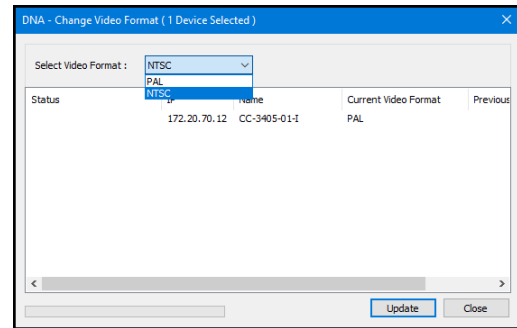
Mask :

Gateway :

Status	Model name	Name	Current IP	Previous IP
 Ok	CC-3405-01-I	CC-3405-01-I	10.70.20.235	10.70.20.

6 Change Video Format (Optional)

By default, NTSC is the camera's video format. You can change the camera's video format to PAL using the DNA tool.



- In the DNA Discover List, right-click the camera and select **Change Video Format**.
- In the **Change Video Format** window, select PAL. If Shutter WDR 30 FPS NTSC is the camera's current video format, it changes to Shutter WDR 25 FPS PAL. Likewise, if Linear 60 FPS NTSC is the camera's current video format, it changes to Linear 50 FPS PAL.
- Click **Update**, wait for Ok status to appear, and then click **Close**.

7 Re-attach Module and Cover

To prevent damaging the camera's internal components while moving it from the bench or lab to its mounting location:

- Re-attach the camera module to the housing. Align the two screw holes on the module with the holes on the housing and then secure the module to the housing using the two screws removed earlier.
- Re-attach the cover to the module. Using the Torx Security wrench, tighten the three screws that secure the camera cover to the camera housing.

8 Install Mounting Hardware (Optional)

Using the hardware included in the camera kit, you can mount the camera in a corner consisting of two walls and a ceiling. For information about other mounting options, including the list of Teledyne FLIR mounting accessories that support the camera, see the camera's installation and user guide.

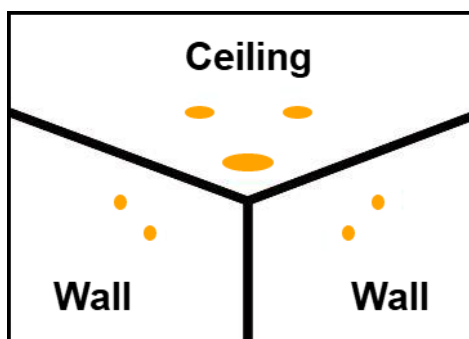
If you are using mounting hardware not included in the camera kit, install it according to the installation instructions for the hardware. If necessary, adapt the instructions in this guide to those instructions.

9 Remove Cover and Separate Module

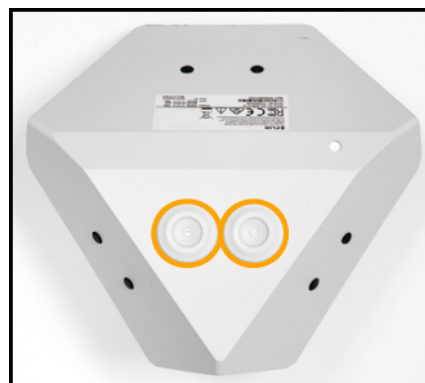
Repeat the steps described in [3 Remove Cover and Separate Module](#).

10 Mount and Connect the Camera

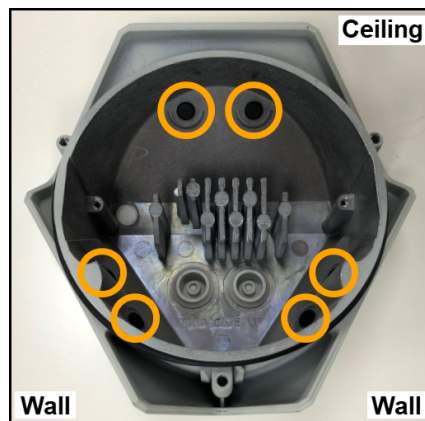
- a. Punch a hole in one or both of the waterproof rubber glands on the back of the camera housing for cable entry. Teledyne FLIR recommends using cables with diameters between 5~10 mm.
- b. Remove the plugs from the mounting screw holes on the camera housing. Use the holes to mark the locations for the mounting screws on the ceiling and on the walls. Then, mark the location on either the ceiling or on a wall for a hole through which to route the cables.



With Cable Hole on the Ceiling



Cable Entry Glands



Mounting Screw Holes

- c. At the location for the cable hole, drill or cut the hole. Then, route the cables through it.
- d. At each mounting screw mark, drill a hole slightly smaller than the supplied plastic screw anchors. Then, insert plastic screw anchors into the drilled holes.
- e. Drill a hole in the center of one or both cable glands.
- f. Route cables straight through the holes in the glands. Do not bend the cables, which can damage the glands.

To route a terminated Ethernet cable through a hole in the gland, use the supplied RJ45 insertion tool. Attach the tool to the RJ45 plug. Then, route the tool, plug, and cable straight through the hole. Remove the tool.

You can route an unterminated Ethernet cable through a hole. Then, using the included RJ45 connector and a cable crimping tool, terminate the cable.

For all other camera connections, route unterminated cables through the hole in the gland.



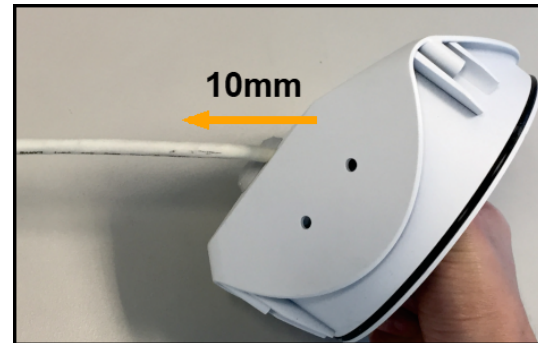
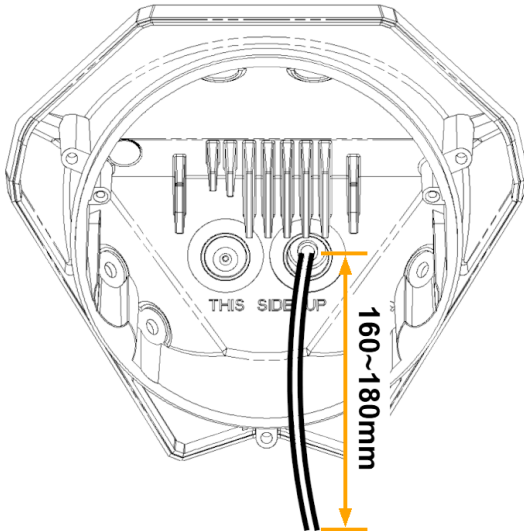
*RJ45 Insertion Tool
Attached to Terminated Ethernet Cable*



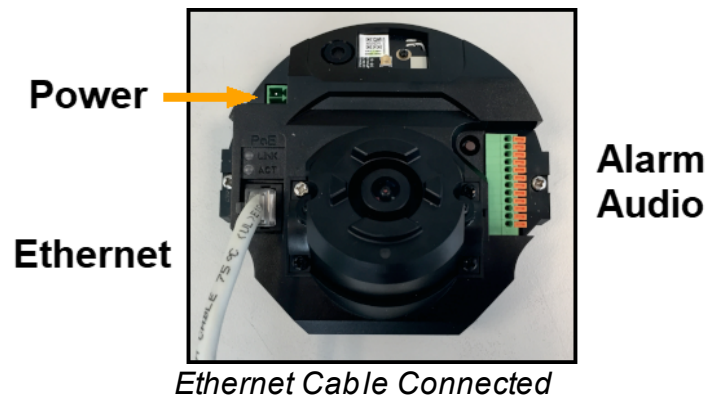
Important

- Except when using the RJ45 insertion tool, routing a terminated cable through a hole in a gland compromises the camera's waterproof integrity.
- To make sure the connector fits inside the camera housing, use the RJ45 connector included in the camera kit or an Ethernet cable that does not have a boot, shroud, or sleeve protecting the RJ45 connector. For example, do not use a snagless Ethernet cable.

Teledyne FLIR recommends pulling the cables into the housing between 160~180mm.



- f. Pull cables back through the rubber glands 10mm so that the rubber glands extend out from the housing.
Make sure the glands are locked in position.
- h. Attach the camera housing to the mounting surfaces. Align the mounting screw holes on the camera housing with the plastic screw anchors in the ceiling and in the walls. Use the M4x31mm self-tapping screws included in the camera kit.
- i. Connect the camera (see [4 Connect the Camera](#)).
- j. Re-attach the camera module (see [7 Re-attach Module and Cover](#)).



Ethernet Cable Connected

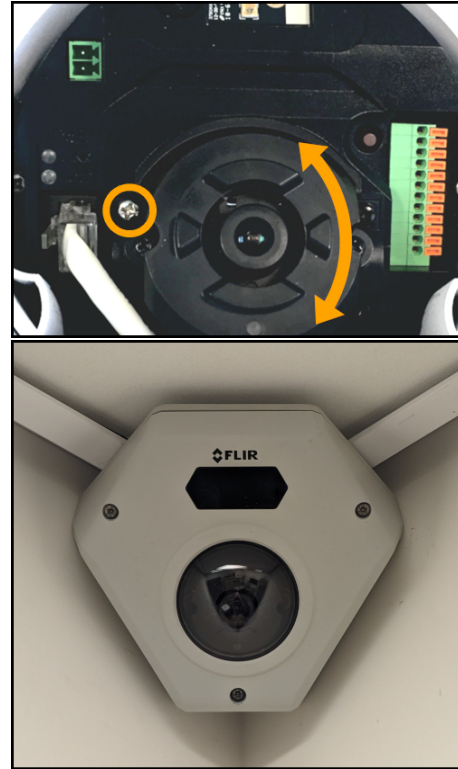
11 Aim the Camera

You can adjust the camera's tilt angle -15°~15°.

- a. Loosen the screw locking the camera lens tilt angle.
- b. Tilt the lens until satisfied with the field of view.

To see the camera's field of view using the camera's web page, make sure the camera is otherwise securely mounted and connected. Then, provide power to the camera. Using the instructions in [12 Complete Camera Setup](#), access the camera.

- c. Tighten the screw.
- d. Re-attach the camera cover (see [7 Re-attach Module and Cover](#)).



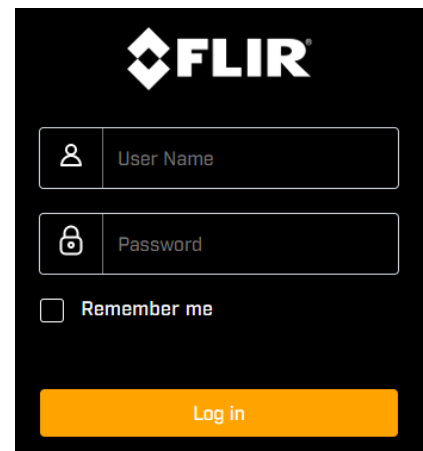
Installation Complete

12 Complete Camera Setup

To complete camera setup — for example, to format the microSD card — you need to access the camera's web page with the default *admin* user or with another user assigned Admin or Expert privileges. The camera web page supports the latest version of Google Chrome® and other popular web browsers.

To access the camera's web page:

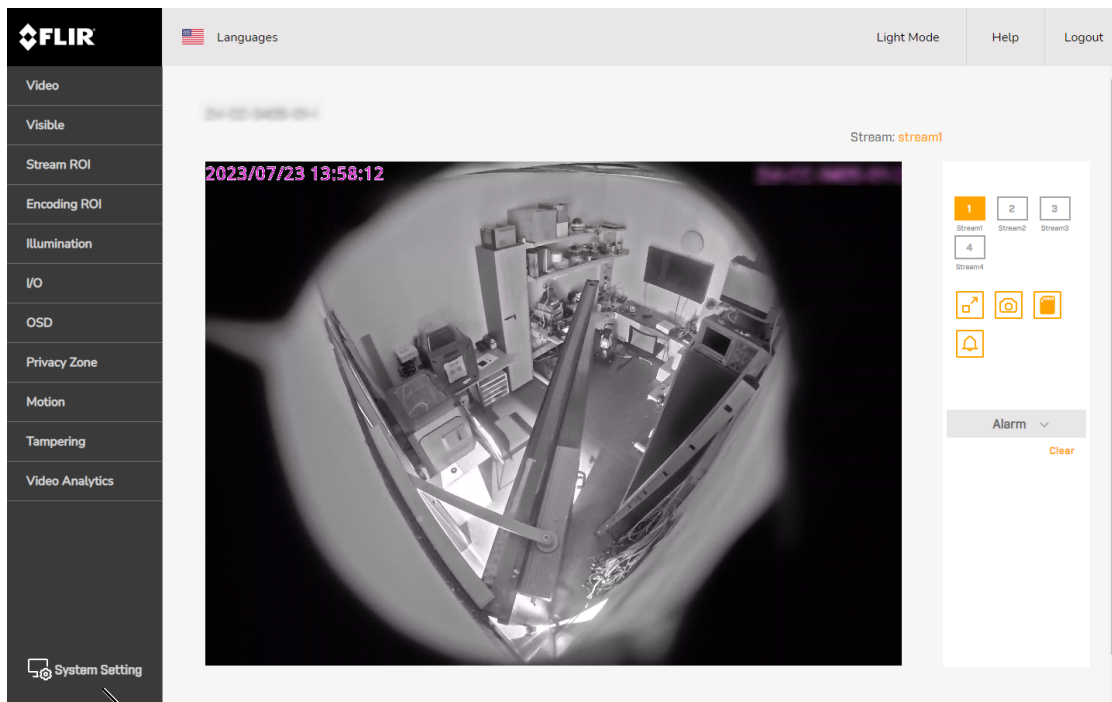
- a. Do one of the following:
 - In the Teledyne FLIR Discovery Network Assistant (DNA) tool, double-click the camera in the Discover List.
 - Type the camera's IP address in a browser's address bar (when the PC and the camera are on the same network). If you do not know the camera's IP address, you can use the DNA tool to discover it.
- b. On the login screen, enter a user name and password. If necessary, contact the person who configured the camera's users and passwords.



When logging in to the camera for the first time or for the first time after resetting the camera to its factory defaults:

1. Log in with user name *admin* and the default password, *admin*.
2. Specify a new password for *admin*:
 - must be 8-64 characters
 - can include the following special characters: @#~!\$<>+_-.,*?
 - cannot include four-digit sequences (for example, 1234)
 - cannot include four repeating characters (for example, aaaa)
3. Log back in using the new password.

The camera's View Settings home page opens.

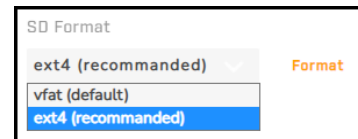


System Settings

Camera Web Page for Admin / Expert Users - Light Mode

To format the microSD card:

- a. Click **System Settings**. Then, open the SD Card page.
- b. Under SD Format, select *vfat* (default) or *ext4* (recommended).
- c. Click **Format**.



Additional Configuration Steps

Depending on installation and use, completing camera setup can also consist of configuring or modifying the default video stream and visible picture settings; network security settings; and alarm settings.

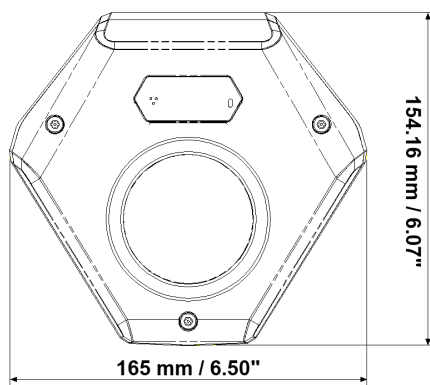
Many configuration steps can be performed before or after mounting the camera. However, some of them can or should only be performed after mounting the camera. For example, configure the camera's motion detection after mounting the camera.

For more information about configuring the camera, see the camera's installation and user guide.

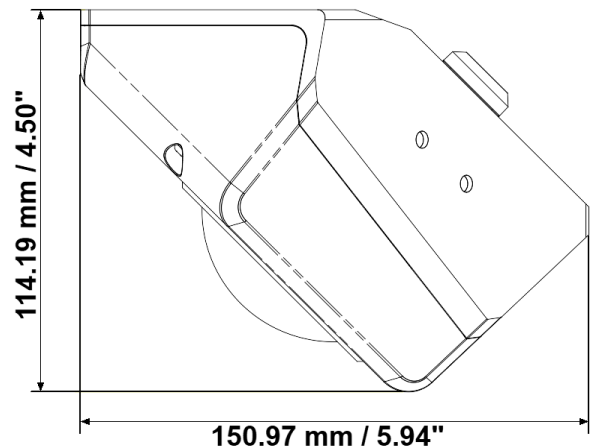
13 Attach the Camera to a Supported VMS

After mounting the camera and discovering or defining its IP address, use VMS Discovery/Attach procedures to attach the camera to a supported VMS.

Camera Dimensions



Front View



Side View

Register the Product

Register the product at <https://customer.flir.com>.

For warranty information, see <https://www.flir.com/support-center/warranty/security/flir-security-product-warranties/>.