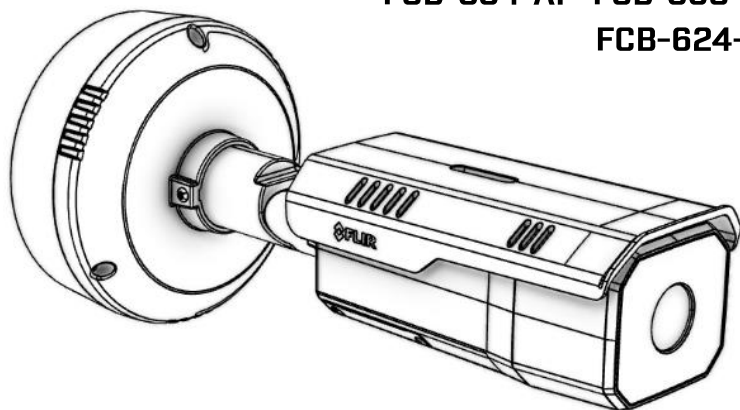


FLIR[®] QUICK INSTALL GUIDE

FCB-SERIES AI

FCB-334-AI FCB-350-AI FCB-618-AI

FCB-624-AI FCB-632-AI



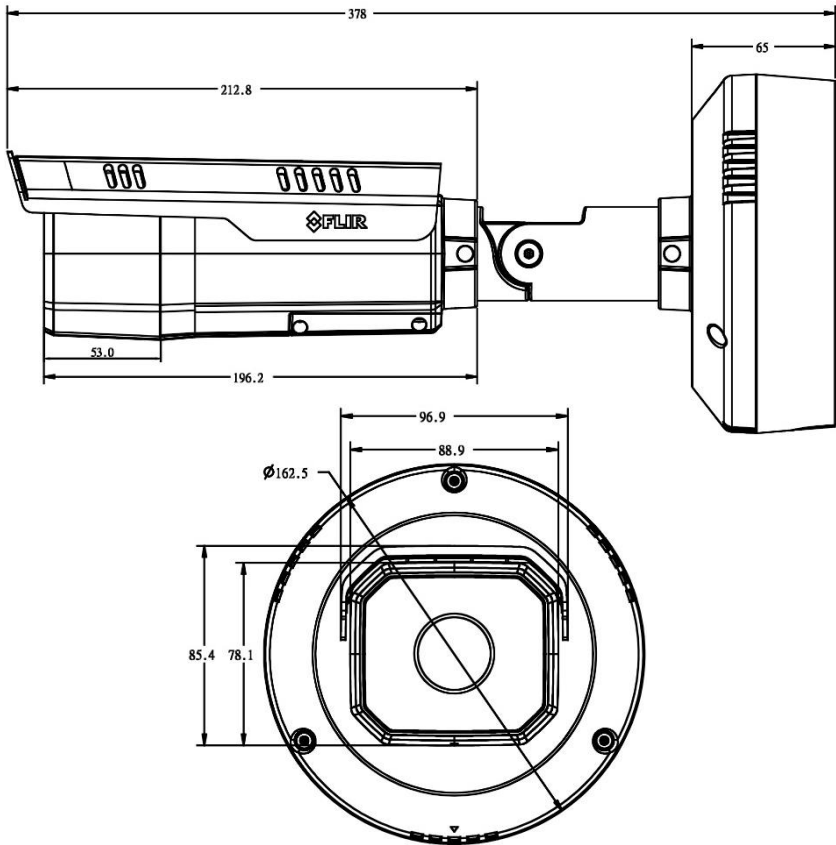
1 Check Contents

The camera kit includes:

- One **FCB-Series AI camera**.
- One **Back Box** (hole caps, plugs, and washers included).
- One **two-pin connector** for the 12 VDC/24 VAC terminal block.
- Two **four-pin connectors** for the Alarm and Audio terminal blocks.
- One **Mounting template sticker**.
- One **rubber multiple-cable gland**.
- Two **plastic screw anchors** for attaching the FCB-Series AI back box to the mounting surface.
- Two **TP4x20 tapping screws** for attaching the FCB-Series AI back box to the mounting surface.
- One **T10 Torx Security wrench**.
- One **T20 Torx Security wrench**.
- One printed **Quick Installation Guide** (this document).

If any of these items are missing or damaged, contact your dealer or Teledyne FLIR Support.

2 Camera Dimensions



Model	Product Number	Focal Length	Sensor Resolution
FCB 334 AI	427-2064-30-00	6.3 mm	320 x 240
FCB 350 AI	427-2064-20-00	4.3 mm	320 x 240
FCB 618 AI	427-2064-90-00	24 mm	640 x 480
FCB 624 AI	427-2064-82-00	18 mm	640 x 480
FCB 632 AI	427-2064-81-00	14 mm	640 x 480

3 Select a Location

The camera can be mounted **outdoors** or **indoors**.

The camera operates efficiently within a **temperature range** of -40°C to 60°C (-40°F to 140°F) and in environments with **humidity levels** up to 95% non-condensing.

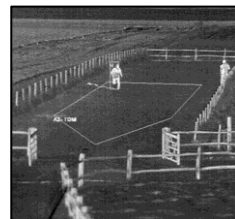
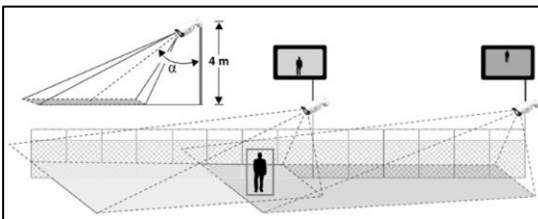
Make sure that the **location provides a suitable method for routing cables** to and from the camera.

Ensure that the camera's **articulated arm can be moved**, and the **camera rotated and tilted** to achieve the desired position.

Ensure you have the **required accessories and tools**.

To fully utilize the camera's **video analytics**, ensure the following mounting requirements are met:

- The camera should be mounted at a **height of at least 4 meters**, with 6 meters being the ideal height.
- The **horizon line should be level and positioned near the top of the frame** for optimal performance.
- For installations with multiple cameras with on-board video analytics, the **fields of view of the cameras should overlap** in order to remove all dead zones in which a camera cannot see a target "head to toe". The camera's on-board analytics must be calibrated before it can detect targets.



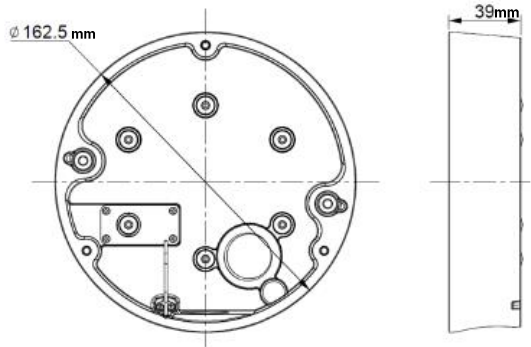
WARNING

- The camera must be installed by qualified personnel and the installation should **conform to all local codes**.
- Except as described in these guides, **do not open** the camera **or attempt to disassemble it**. Attempting to disassemble the camera can cause permanent damage and voids the warranty.

4 Installing the Back Box

Attach the Back Box to a **secure, flush, and vibration-free surface** or to a **standard single gang or double gang electrical box**. Cables can be routed into the back box in two ways:

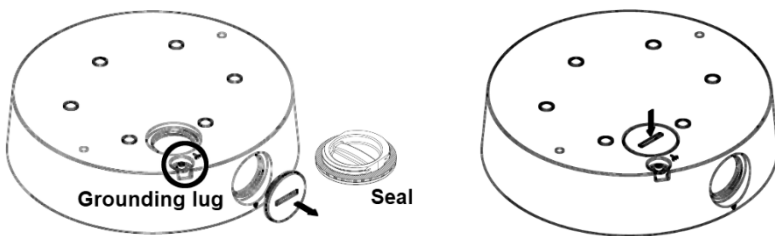
1. Through the 3/4" **side conduit hole** using a compression gland (not included).
2. Through the 3/4" **rear cable entry hole** using the multiple-cable rubber gland and seal included in this kit.



The camera is shipped with a cap and rubber seal attached to the side cable entry hole. If routing cables through the side cable entry hole:

1. Use a coin to **remove the cap and seal** from the side cable entry hole.
2. **Attach the cap and seal** to the rear cable entry hole.

Make sure the cap is **fully tightened**.



WARNING

Anchor a ground strap to the grounding lug on the back box and connect it to the nearest earth-grounding point. Failure to do so can permanently damage the camera.



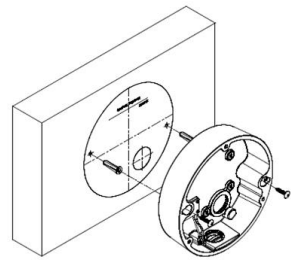
TIP

If using any **mounting accessories not included in the camera kit**, install them according to the installation instructions for the hardware. If necessary, adapt the instructions in this guide to comply with those instructions.

4.1 Attaching the Back Box to a Wall

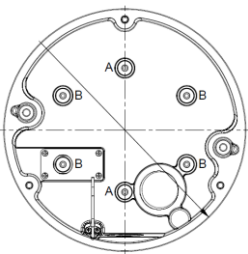
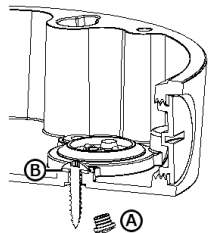
To attach the Back Box to a wall:

- Using the **mounting template sticker** included in the kit, mark the surface and drill two anchor holes.
- (Optional) If necessary, **drill a hole** for routing cables.
- **Hammer two plastic screw anchors** into the drilled holes.
- **Insert the anchors, then attach the back box** to the surface using two 20 mm TP4 tapping screws.



4.2 Attaching the Back Box to an Electrical Box

Using **truss head screws** (not included), attach the back box to the electrical box. The Back Box is shipped with **rubber seals and plugs** attached to the electrical box mounting screw holes. For **the holes you are not using**, leave the seals and plugs in place. For **the holes you are using**, remove the rubber plug labeled A and leave the rubber seal labeled B in place to prevent water from entering the camera.



A: SINGLE GANG
B: DOUBLE GANG

For example, if you are attaching the bracket to a **single gang electrical box**, remove the rubber plugs from the holes marked A on the back box but leave the seals in place.

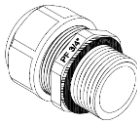
5 Routing the Cables

Cables can be routed into the interior of the Back Box either through the **side conduit hole** or through the **rear cable entry hole**.

5.1 Routing through the Side Conduit

1. **Attach a 3/4" PF thread or NPT thread compression gland** (not included) to the side conduit hole, making sure the thread is waterproofed.

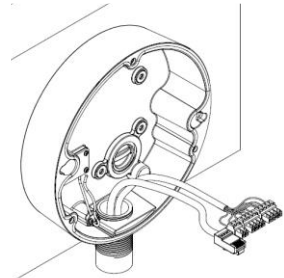
To waterproof a **PF thread**, use a rubber seal.



To waterproof an **NPT thread**, use thread seal tape.

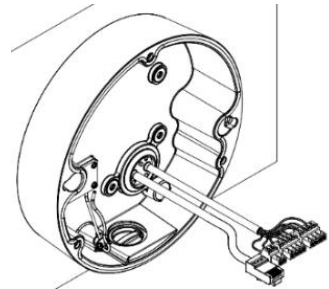


2. Make sure the **seal is securely seated** on the inside and outside of the cable entry hole. To seal any gaps, apply silicone sealant.
3. **Route the unterminated cables** into the back box.
4. **Terminate the cables.** For the Ethernet cable, use an RJ45 connector and an RJ45 crimping tool. For other cables, use the connectors included in the camera kit. For more information, see the camera's documentation.



5.2 Routing through the Rear Entry Hole

1. **Route an unterminated Ethernet cable** through a hole in the cable gland included in the FCB-Series AI kit.
2. (Optional) Route an **unterminated power, alarm, and audio cable** through the other hole in the gland.
3. **Terminate the cables.** For the Ethernet cable, use an RJ45 connector and an RJ45 crimping tool. For other cables, use the cables included in the camera kit.
4. **Attach the gland to the cable entry hole.** Make sure that the side of the gland with the smaller diameter is inside the back box.



6 Camera Connections



Connector	Connection
RJ45	Connect an Ethernet cable from the switch to the RJ45 port for 10/100/1000 Mbps Ethernet and PoE+ (IEEE 802.3at). Ethernet is necessary for video streaming and camera setup. An orange LED means a 1000 Mbps link, green means 10/100 Mbps. A solid LED shows an active connection; flashing indicates network activity.
Power	When using a 24 VAC or 12 VDC power supply, connect it to the power terminal block connector according to the pin assignment on the connector label.
Audio	Attach wires from external audio devices to the terminal block connector for audio in/out according to the pin assignment on the connector label.
Alarm	Attach wires from external devices to the terminal block connector for alarm in/out according to the pin assignment on the connector label.

6.1 Supplying Power to the Camera

The camera can be powered by a **12 VDC power supply**, a **24 VAC power supply**, or using **Power Over Ethernet (PoE+)**.

Maximum Power Consumption	12 VDC (1.25 A)	24 VAC (1.2 A)	PoE+ (0.3 A)
Heater OFF	7.2 W	7.0 W	6.8 W
Heater ON	12.4 W	12.5 W	13 W

For assistance purchasing a power supply, contact Teledyne FLIR support.



WARNING

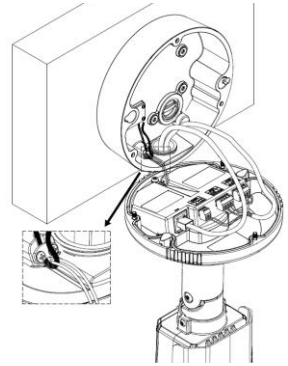
The power cord to the **12 VDC** or **24 VAC** power supply unit must be connected to a socket outlet with an **earthing connector**.

The **PoE+ unit and all interconnected equipment must be installed indoors** within the same building, including all PoE-powered network connections, as described in Environment A of the IEEE 802.3at standard.

All electrical work must be performed by qualified service personnel in accordance with local regulatory requirements.

7 Mounting the Camera

The example shows an FCB-Series AI camera's Back Box attached to a wall, with an Ethernet cable and a power, alarm, and audio cable routed through the side cable entry hole and connected to the camera. The safety wire and clip are enlarged. **Ensure the safety wire on the camera assembly is attached to the clip on the back box.**



When attaching the camera assembly to the back box, **align the triangles on both the camera assembly and the back box** (see figure A below). This makes sure the guide pins inside the camera assembly are aligned with the guide holes on the back box. Using the T20 Torx Security wrench, **tighten the three set screws that secure the camera assembly to the back box**.

FCB-Series AI cameras are designed to operate in rugged environments. The sun shield is coated to prevent damage from sunlight or rain. To **adjust the sun shield**, use the T20 Torx security wrench to loosen the two screws on the shield hood (see figure B below) and move the shield forward or backward, considering the lens coverage. Then, securely tighten the two screws.

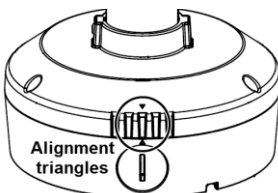


Figure A

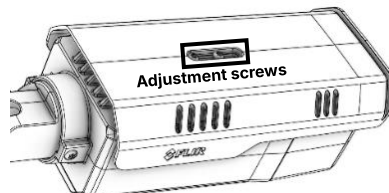
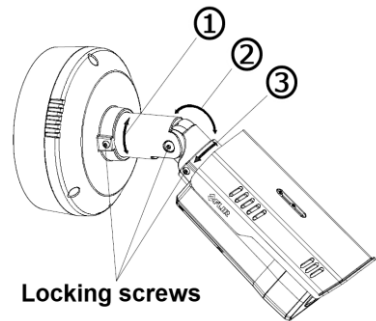


Figure B

8 Aiming the Camera

While securely holding the camera, use a T20 Torx security wrench to loosen the locking screws that adjust the camera's pan, tilt, and rotation.

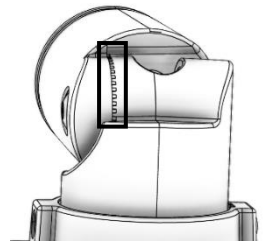
1. Retaining ring for **pan** adjustment (range 355°).
2. Bracket for **tilt** adjustment (range 90°).
3. Retaining ring for spin **rotation** (range 355°).



Use the **pan adjustment ring (1)** to point the camera in the direction of the area to be surveilled. Please note that an incorrect pan position will prevent the camera from tilting toward the scene, and a mechanical stopper will block the camera body from rotating to an upright orientation.

Use **tilt adjustment (2)** to modify the vertical angle. Ensure the **toothed surfaces are properly aligned** and meet evenly, as seen in the figure.

Use the **rotation ring (3)** to ensure the **horizon line is completely horizontal** in the frame, which is necessary for video analytics functionalities.



9 Network Configuration

The camera can be configured using the **FLIR Discovery Network Assistant** tool, the camera's **web interface**, or a **supported Video Management System (VMS) software**.

The **FLIR Network Discovery Assistant tool** is a free download from the product's web page on the Teledyne FLIR website and can be used to discover the camera in the network, configure its network settings (IP address, mask, and gateway), user credentials, etc. This tool is especially useful for changing the settings of multiple compatible cameras without connecting to each camera's web interface individually. **Download the DNA tool using the provided QR code.**



The camera's **built-in web interface is accessible through any modern web browser** by entering the camera's IP address into the browser's address bar. It provides a comprehensive range of features that allow users to configure all major camera

functions. These include network settings (such as IP address, subnet mask, gateway, DNS, MTU, and Ethernet speed), user groups and access credentials, video analytics, connections to external devices, and an extensive array of video streaming and output options.



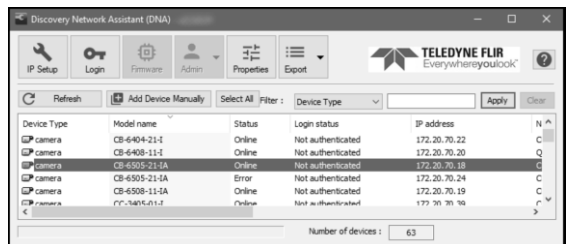
TIPS

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, users can manually specify the camera's IP address using the DNA tool or the camera's web interface.

9.1 Using FLIR's Dynamic Network Assistant Tool to Change the IP Address of the Camera

When the camera is connected to a network where several other cameras are connected, it is highly advisable to make sure that **all cameras have a unique IP address**. To do so, the **DNA tool** can be used to manually set up each individual camera's address.



1. Make sure the camera and the PC are on the **same LAN segment**.
2. **Execute the DNA tool** (DNA.exe) by double-clicking. The Discover List is displayed, showing compatible devices on the LAN segment and their current IP addresses.
3. Check that the camera's **status is Online** in the DNA Discover List. When configuring for the first time or after a factory reset, DNA logs in automatically with the default username and password (admin).
4. Verify that the camera's Login **status is Authenticated**. If not, authenticate the camera using the custom username and password.

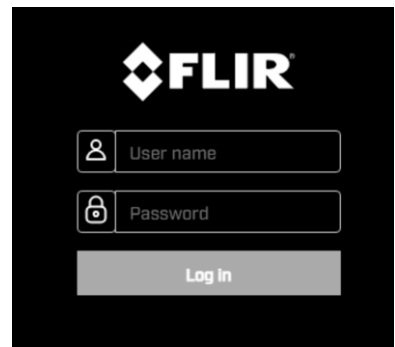
5. Select the camera from the Discover List, and then **IP Setup**.
6. In IP Setup window, **uncheck the Use DHCP box** and **specify the new IP address**. It is also possible to specify the **Mask** and **Gateway**.
7. Finally, **select Update** and wait for **OK** status to appear, and then select **Close**.



10 Camera Set Up Using the Web Interface

Depending on the installation and use, camera setup may include **formatting the microSD card**, **adjusting video and thermal settings**, **configuring network security**, and **setting alarm parameters**.

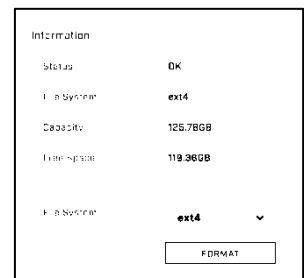
Many of these configuration steps can be performed either before or after mounting the camera. However, some steps, such as configuring video analytics, should only be performed after the camera is mounted.



To access the camera's web interface, enter its **IP address** (default is **192.168.0.250**) in any modern browser (such as Google Chrome) and **enter the credentials** for the default admin account (**admin** for both username and password) or another user with admin or expert privileges.

To **format the microSD card**, open System Settings, select SD Card, choose the format (ext4 recommended), and click Format. For more information on inserting the microSD card, see section 11.

For detailed instructions, refer to the camera's **Installation and User Guide**.



11 Troubleshooting

To access the camera's **default button**, **reset button**, and **microSD card slot**, remove the access cover by loosening the four screws at the bottom of the camera.



- **DEFAULT:** Press this button for at least 10 seconds to restore the camera to its factory settings.
- **RESET:** Press this button for at least 10 seconds to restart the camera.
- **STATUS LED**, indicates:
 - **Green:** Three minutes after a successful boot, turns off.
 - **Amber:** Flashes while a Firmware upgrade is in progress.
 - **Red:** Solid for first 2-3 seconds at start up. If LED remains red, an error occurred. Reset or Default the camera to try again.
- **Console multipin connector:** To be used by maintenance personnel to diagnose and repair the camera.
- **MicroSD card slot:** Insert a microSDXC card in the card slot (maximum 2 TB SD Bus Mode UHS I) to store files, video recordings and snapshots. Do not remove the microSD card while the camera is ON.

For further assistance, please see the **Installation & Use Guide**.

12 Registering the Product

You can register
your product here:



For more information,
visit:

