

FC-Series O, FC-Series ID Camera Quick Connect Guide



Items Included in Kit

Caution!

Except as described in this guide, do not disassemble the FC-Series camera. Damage to the camera can occur as the result of careless handling or electrostatic discharge (ESD).

Before installing the FC-Series camera you should read and understand the following documents which provide details regarding mechanical dimensions and installation safety.

- *FLIR FC-Series O/ID Installation and User Guide (427-0089-00-12)*
- *FLIR FC-Series Interconnect Document (427-00XX-YY-41)*

Power: Power Over Ethernet Plus (PoE+) or 11 - 32 Vdc or 18 - 32 Vac

Power terminal blocks: wire size from 16 AWG to 20 AWG

Analog Video Cable: BNC-terminated RG-59/U solid-center coax cable

Ethernet Cable: Cat5e or Cat6

Accessory I/O plugs: conductor size 22 - 24 AWG, stranded, 1.6 mm max diameter including insulation for IDC fast connect. Otherwise, 20 - 24 AWG for push-in spring connect, strip ends 6 mm. GPIO accessory cable.

FLIR Systems, Inc.
6769 Hollister Avenue
Goleta, CA 93117
USA
Support: <https://www.flir.com/support/>

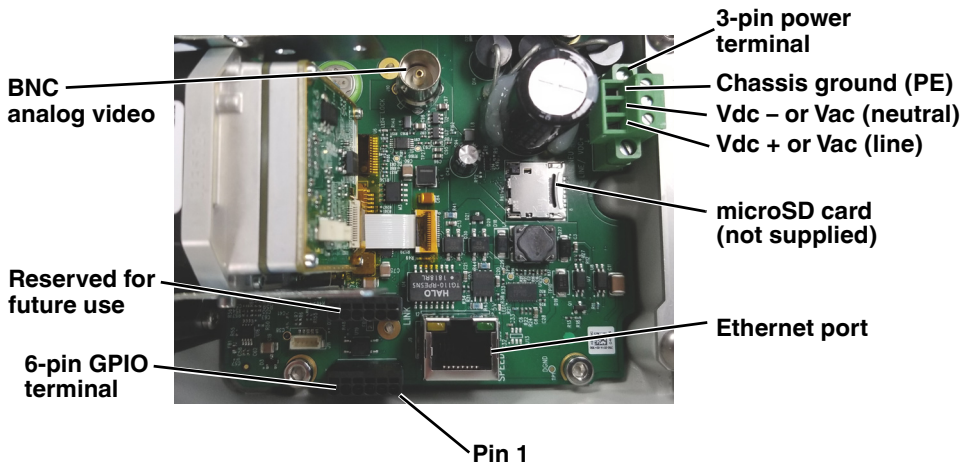
Corporate Headquarters
27700 SW Parkway Ave.
Wilsonville, OR 97070
USA

Step 1 Remove cover: Using 3 mm hex key, loosen four captive screws. Access screws through slots in sunshield. Removing the sunshield is not necessary.

Step 2 Install cables through sealing gland:



Step 3 Terminate cables:




Connection	Purpose	Cable dimensions required for sealing
BNC	Analog video	5.3 mm (0.209 in) minimum; 6.2 mm (0.244 in) maximum
3-pin Terminal	Power, Vac or Vdc	4.5 mm (0.178 in) minimum; 5.2 mm (0.205 in) maximum
Ethernet	PoE power, communications, IP video stream	4.5 mm (0.178 in) minimum; 5.2 mm (0.205 in) maximum
6-pin terminal J5	General purpose I/O (GPIO)	4.5 mm (0.178 in) minimum; 5.2 mm (0.205 in) maximum
6-pin terminal J3 (reserved for future use)	Do not connect	

Step 4 Connect a ground wire between the ground stud on the back of the camera and the nearest earth-grounding point.

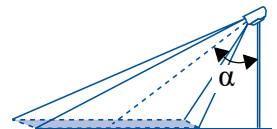
Step 5 Tighten Cable seal gland nut to ensure a watertight seal.

Step 6 Replace cover: Alternately tighten the four captive screws in the cover; torque to 1.8 N-m (16.0 in-lbs).

Step 7 Discover camera: Power the camera. With a PC connected to the camera network, use the DNA utility to discover and display the camera's current IP address.

- Download the DNA utility from the product web page at: <https://www.flir.com/browse/security/thermal-security-cameras/>
- Un-zip the utility, then double-click and run the executable file  **DNA.exe**. All the units on the VLAN are discovered.
- Select the camera, then select **Assign IP** to change the IP address. When set to DHCP, if a DHCP server is not on the network, the address will default to 192.168.0.250.
- Double-click the camera in DNA's **Discovery List**. The unit's **Login** window opens in a web browser.
- Enter the User Name ("admin") and default password ("admin"). The camera's web page opens.
- For additional instructions on using DNA, refer to the DNA User's Manual available in the Help (?) link while the software is running.

Step 8 Mount camera. Typically direct the camera towards the ground with a tilt angle α of 45° to 60° . Include as little skyline as possible in the field of view.



Step 9 Calibrate Analytics. **FC-Series ID only**

- On the camera's **Setup > Analytics** web page, ensure analytics is on (green button) and click the Calibration Tools icon.




- To automatically calibrate detection settings, from the **Calibration Mode** drop-down list, select *Auto*.
- Click **Relearn**. The camera automatically calibrates the depth. Ensure a person is walking throughout the FoV until finished.

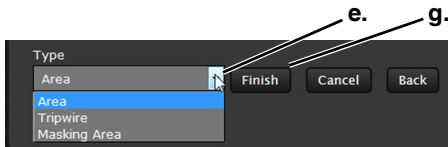


- The On-Screen Display shows the auto calibration progress as a percentage in the upper corner of the video. If the auto calibration

takes more than 5 or 10 minutes, manual calibration may be required. Refer to the *FC-Series O/ID Installation and User Guide*.

AutoCalibration: Learning (69%)
Warning: time needed to calibrate is longer than expected

- e. To create an *Area*, *Tripwire*, or *Masking Area*, click the  icon and select from the **Type** drop-down list.



- f. Define *Areas*, *Tripwires*, or *Masking Areas* by clicking vertex locations on the screen.

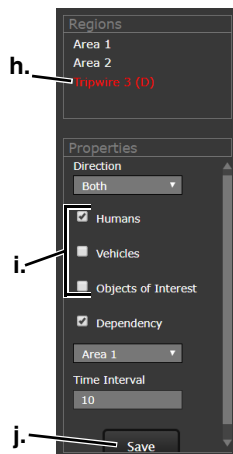
- g. Click **Finish**.

- h. If defining a tripwire, select the tripwire in the **Regions** pane and set the direction of the detection from the **Direction** drop-down list.

- i. Check **Humans**, **Vehicles**, or **Objects of Interest** as required. You can also establish a dependency between two regions.

- j. Click **Save**.

- k. To create additional rules, repeat steps e through j. You can create four of each type.



Step 10 Check Calibration. FC-Series ID only

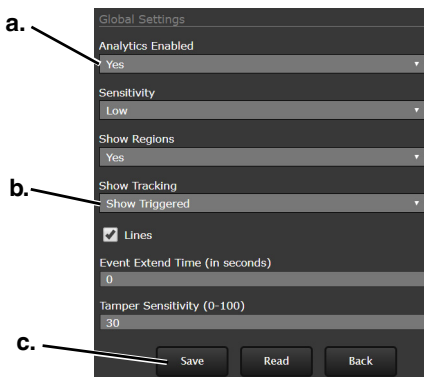
- a. Click the  icon and ensure **Analytics Enabled** is **Yes**.

- b. Set **Show Tracking** to *Show Triggered* then check the **Lines** box.

- c. Click **Save**.

- d. Have subjects (person, car, truck, etc) enter areas or cross tripwires at various distances from the camera. The boxes should be classified correctly and the direction across tripwires should be as expected.

- e. Refer to the *FC-Series O/ID Installation and User Guide* to set alarm conditions and actions.



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