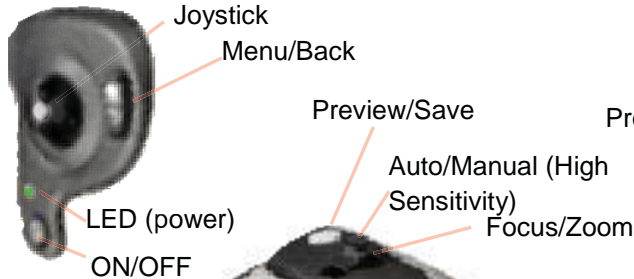


QuickStart FLIR GF309 [Cooled, 3.8-4.05 μm (Flame)] GF 306 [Cooled, 10.7 μm (SF6)]

Right Side Thumb Controls



Right Side Rotating Hand Grip



- 1. MEMORY:** Open the rear Memory cover on the back of the camera. (upper cover) The camera might come with two SD memory cards one marked with the Roman numeral I and II.
 - Place the card marked I in the lower slot marked I (card contacts facing up)
 - Place the second card marked II in the upper II slot (contacts facing down)
 - If you only have one SD card place it in the I slot.
- 2. POWER:** Open the lower cover on the back of the camera and insert a fully charged battery.
 - Power can also be supplied with the provided power converter into the connector under the same cover.
- 3. START:** To start the camera press and release the ON/OFF button on the Right side thumb controls.
 - NOTE: you will hear muffled motor sound as the camera starts and begins to cool the infrared detector. This process should take approximately 7 minutes.
- 4. MODE:** You will need to select a mode of operation. For normal infrared image scanning turn the Mode Selector to Camera mode Fig.1.
 - NOTE: For furnace and other high-temperature applications, mount the heat shield on the camera. You must also enter the correct external optics transmission value of the heat shield into the camera. The external optics transmission value is printed on a label on the inside of the heat shield. You enter the external optics transmission value in the object parameters dialog on the Edit tab. When you remove the heat shield you must reset the external optics transmission to 1.0.
- 5. FOCUS:** In Live mode you can focus the camera by three methods, Autofocus, Electric or Manual.
 - To Autofocus push and release the center of the Focus/Zoom button.
 - If this method does not give you a perfect focus use one of the following methods to further adjust.
 - Electric (motor driven) focus is achieved by push the Focus Button to the left or right.
 - Manually adjust focus by turning the IR Focus Ring on the camera lens either clockwise or counterclockwise.



Fig 1.



Fig 2. Flir 309 Image modes

QuickStart FLIR GF309 [Cooled, 3.8-4.05 μm (Flame)] GF 306 [Cooled, 10.7 μm (SF6)]

6. AUTO ADJUST (Level and Span): The camera needs to be either in Camera or Video Mode

- Push the Auto/Manual (A/M) button to select Auto. The imager will now continuously adjust Level (brightness) and Span (contrast).

7. MANUAL ADJUST (Level and Span): The camera needs to be either in Camera or Video Mode

- Push the Auto/Manual (A/M) button to select Manual. The Span scale temperatures will be highlighted (Fig 3)
- To manually adjust Span move the Joystick left or right
- To manually adjust Level move the Joystick up or down

8. PAUSE IMAGE (Preview, Freeze): (in Camera Mode) To pause and preview an image before saving it press and release the Preview/Save button.

- You can now preview, edit measurements, adjust the image, add a digital photo, delete or save the image

9. SAVE IMAGE: (in Camera Mode) To save an image without pausing, press and hold the Preview/Save button for more than 1 second. (NOTE: it is always best to Pause and preview your image before saving)

10. RECALL IMAGE: Turn the Mode Wheel to Archive mode.

- When the archived image is shown move the joystick left/right to view the next image.
- To view an all the images move the joystick up.
- Then use the joystick up/down/left/right to select an image.

11. PALETTE: In Camera or Video Mode Press the Menu/Back button.

- Move the joystick up/down to enable the list of palettes.
- Move the joystick up/down to select a new palette, and then push the joystick in.
- Push the Menu/Back button

12. RANGE: Press the Temperature Range button on the left side of the camera.

- Use the joystick to select an appropriate temperature range.
- Press the Temperature Range button to confirm and leave the setup menu.

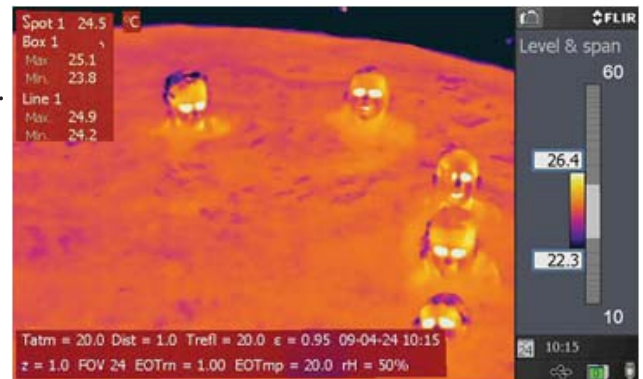


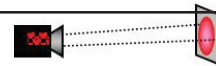
Fig 3

13. EMISSIVITY, BACKGROUND (REFLECTIVE APPARENT TEMP), RELATIVE HUMIDITY, DISTANCE OR ATMOSPHERIC TEMP: The camera needs to be either in Camera or Video Mode.

- Press the Menu/Back button.
- Move the Joystick left/right to the Edit Tab.
- Move the joystick up/down to select Object Parameters; then Push the Joystick to display a dialog box.
- Move the joystick up/down to select the parameter you want to change; then push the joystick.
- Move the joystick up/down to change the value; then push the joystick.
- Press the menu/Back button to confirm change and leave the setup mode.

GF 309

IFOV = 1.3 mRad (Theoretical with 320x240 Detector and standard 24°x18° lens)



Detect 1 in. target @ 63.7ft.

GF 306

IFOV = .8 mRad (Theoretical with 320x240 Detector and standard 14.5°x10.8° lens)



Detect 1 in. target @ 106ft.