



SETTING UP YOUR THERMAL IMAGER

INSTALLING THE MICRO SD CARD

Before you begin to use your thermal imaging camera, a microSD card must be inserted. A microSD card is a memory device that allows you to store images recorded by your thermal imaging camera. Please follow the steps below to insert the microSD card. **PLEASE NOTE:** You can easily damage the microSD card by improper operation. Please be careful when inserting, removing, or handling the microSD card.

On one side of your thermal imaging camera there is a rubber plug protecting the microSD slot and the USB connector from dust and damage. Please pull it up slightly and gently, and turn it 90° clockwise.

 Insert the microSD card and push it all the way inside the slot until you hear a "click", the microSD card is now locked in place.

Once the microSD card is installed, place the rubber plug back to secure the area against damage.

BASIC OPERATION



- 1. Power On: Press the POWER 🕁 key (2) to power on the unit.
- Taking a thermal image and temperature: After powering on, simply aim at the measure target with the INFRARED LENS (10) to get the fusion images and temperature immediately. Please make sure the target area is within the field of view. Note: There is a cursor on the screen. The cursor shows the temperature of the object located in the middle of the screen.
- 3. Save Images: Press the TRIGGER (11) to save the thermal image to the micro SD card.
- 4. Power Off: Press the POWER [ひ] key (2) for more than 3 sec. to power off the unit. Auto power off time is about 1 minute. (Please see the FUNCTIONS section to learn how to adjust the auto off time.)

FUNCTIONS

IRONBOW

- Display Mode: Press MODE [🖾] key (4) to switch the display mode.
- (Fusion-Thermal-Visual) Note: Fusion is the default mode.
- Color Palettes: Press COLOR PALETTE [] key (3) to select the color palette, (4 selectable color palettes).
- (4 selectable color palettes)

RAINBOW HIGH CONTRAST

GRAY SCALE

Press COLOR PALETTE [1] key (3) for 3 seconds to enter the fixed range mode (the icon of the fixed range mode is \bigcirc) After that, the user can fix the range by pressing the TRIGGER (11) while scanning.

- °C/°F: Press UNIT [[°]E] key (5) to convert temperature unit.
- Display Functions: Press MENU [[•]] key (6) for the display functions featured in the chart below, then press the COLOR PALETTE [II] key (3) or MODE [¹/_☉] key (4) to select the function. Press the UNIT [[•]/_〒] key (5) to set the function and then press the TRIGGER (11) to select or confirm it.

| Cursor Measurement | The cursor shows the temperature of the object located in the middle of the screen. Hide the cursor measurement |
|--------------------|--|
| Brightness | 3-level brightness: 🌣 Low 🔹 Medium 🔅 High |
| I Fusion Ratio | Fusion images by 3-level ratio of combining thermal and visual images. $\square > \square > \square = \square$ (\square is the default mode) |

| File Management | | Browse images from the micro SD card Note: If you want to manage images, please use the USB cable to connect the device and the computer) |
|-----------------|----------------------|--|
| Settings | Emissivity | The default emissivity is 0.95, or select other default emissivity: Blackbody: 1.0, Matt: 0.95, Semi-matt: 0.8, Semi-glossy: 0.6, Glossy: 0.3 Select Set Value to adjust the emissivity (0.1 to 1, in 0.01 steps) |
| | HAL | When the reading is outside the High Alarm (HAL) or Lo Alarm (LAL) limit, the reading (HAL: red texts, LAL: blue texts) shown at the top left corner of the screen will flash with two short |
| | LAL | beep sounds constantly. Select Set HA temp or Set LA temp to adjust the limits or select ON/OFF to turn on/off the alert. |
| | Save file as | Save the file as photograph or record |
| | Auto off | The default setting is "Auto off 1 min", you can select other de- fault values: 5, 10, 20 minutes or "No auto off" . Manually power off the device by pressing Power [\bigcirc] key (2) for 3 seconds. |
| | Target distance | The maximum distance between the thermal imaging camera and the target: 1m, 2m or 3m |
| | Languages | Select: English/French/Spanish/Portuguese/German/ Dutch/Italian/Traditional Chinese/Simplified Chinese |
| | Set time and date | Set the date and time in MM/DD/YYYY (month/day/year) and HH/MM/SS (hour/minute/second) formats. |

STORAGE & CLEANING

The thermal imaging camera should be stored at room temperature. The sensor lens is the most delicate part of the thermometer. The lens should be kept clean at all times, care should be taken when cleaning the lens using only a soft cloth or cotton swab with water or medical alcohol. Allowing the lens to fully dry before using the thermometer. Do not submerge any part of the thermometer.

BATTERIES

The thermometer incorporates visual low battery indication as follows:

"Battery OK": Measurements are

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possible

"Battery Low":

Battery needs to be replaced, measurements are still possible

- "Battery Exhausted: Measurements are not possible
- . When the 'Low Battery' icon indicates the battery is low, the battery should be recharged by a USB port.
- Dispose of used batteries properly and keep away from children.
- . If the device is not to be used for a long time, turn the power off, remove and store the batteries in a cool, dry place.
- · Please Note: It is important to turn the instrument off before replacing the battery otherwise the thermometer may malfunction

SPECIFICATIONS:

| Thermal Image Resolution: | 32 x 32 |
|--------------------------------|--|
| Visual Image Resolution: | 640 x 480 |
| Measurement Range: | -20 to 350°C (-4 to 662°F) |
| Accuracy(Tamb=20~26°C): | \pm 2% of reading, or 2°C (4°F) whichever is greater |
| Thermal Sensitivity: | 0.1°C (0.1°F) |
| Frame Rate: | 9 Hz |
| Field of View: | 33 x 33 deg |
| Emissivity Range: | 0.95 default - adjustable 0.1 to 1 (in 0.01 steps) |
| Focus: | Focus free |
| LCD (inch): | 2.8 |
| LCD type: | Color |
| Memory Type: | Support micro SD card up to 32 gb (16 gb micro SD card provided) |
| Spectral Range: | 8 - 14 um |
| Interface: | USB |
| Battery Type: | 3.7 V Li-ion rechargeable battery |
| Battery Life (with backlight): | 3 hrs continuous use |
| Dimensions: | 96.29 x 74.03 x 233.68 mm (3.79 x 2.91 x 9.20 inch) |
| Weight: | 345 grams (12.7 oz) Including batteries |
| | |

EMC/CRFI: Reading may be affected if the unit is operated within radio frequency electromagnetic field strength of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected.