

# TrackIR Series Thermal Imager

## Quick Start Guide

TrackIR 50mm

## NOTICE FOR USE

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- Thermal imagers shall not be pointed to high-strength energy sources (including the Sun, laser transmitting equipments and their reflection sources), which otherwise will have a negative influence on its accuracy and damage or permanently damage infrared detector of it.
  - When the thermal imager will be not used for a long time, charge the thermal imager at least 4 hours every two months during the storage, and store the thermal imager in a dry and well-ventilated environment.
  - Do not charge the battery in an environment over 40°C.
- Our company shall not bear any legal responsibility for any mistake and accident caused by own reasons or reasons of any third party in the course of using this product by the user or property loss and personal injury caused by misjudgment against images.

We prepare this guide with the purpose of facilitating users to use and understand our products. We will try our best to ensure the accuracy of contents of this guide, but we still cannot ensure the completeness of contents of it. Since we have been continuously updating and upgrading our products, we reserve the right to modify this guide at any time without prior notice.

# Widget Name



# Buttons function

Buttons	Device current status	Short press	Long press	
Power button	Power-off	/	Power on	
	Power on	Calibration	Display off	Power-off
	Display off	Display on	Power-off	
 Down button	No display in the menu bar	Switch to scene mode	Zoom in	
	Display in the menu bar	Upward switching options	Exit menu display	
Change parameter value				
M Menu button	No display in the menu bar	Enter the shortcut menu	Enter the main menu	
	Display in the menu bar	Enter the sub-menu	Exit the menu bar / back to the previous menu	
		Select option/parameter value		
 Up button	No display in the menu bar	Switch to color palettes mode	Zoom out	
	Menu bar display	Downward switching options	Exit menu display	
		Change parameter value		
Photo / video	Photo mode	Photo	/	
	Video mode	/	Start video recording	
		/	End video recording	

# Shortcut menu

Short press the M button to enter the shortcut menu; Press the Up/Down button to switch between PIP, Screen BRI, Stadiametric Rangefinder, Hot track and Super energy-saving.

- PIP :Select the left / middle / right, the PIP window is open, and the window image is 2X magnification of the main image.
- Screen BRI : Ten brightness levels of 10%-100% can be adjusted.
- Stadiametric rangefinder:The stadiametric rangefinder function can estimate the distance of an target by an known target distance .Three examples of targets are available on the device as a reference: Rabbit (35cm), Boar (90cm), Deer (150cm), and real-time display of distance information of the three animals.

**Operation procedure:** Align the lower horizontal line with the bottom of the target image, press the Up/Down button to change the width between the upper and lower horizontal lines until the upper horizontal line is aligned with the top of the target icon. At this time, the distance can be calculated and displayed automatically.

By comparing the target size with the three reference animal sizes, the user can roughly calculate the distance of the target.

- Hot track : When hot track is turned on, the cross cursor tracks the point with the highest temperature in the scene.
- Super energy-saving : When the Super energy-saving mode is turned on, the screen brightness is reduced to 30%, and the WiFi is turned off; when the Super energy-saving mode is off, the

screen brightness and WiFi are restored to their original state.

**NOTE : If WiFi cannot be turned on, please check if the Super energy-saving mode is off.**

## Main menu

Long press the M button to enter the main menu. Press the Up/Down button to switch between Image quality adjustment, Calibration model, WiFi, Power saving settings, Indication settings, General settings and Other settings.

### Image quality adjustment

- Image enhancement : When the image enhancement is turned on, the effect of the target can be enhanced.
- Scene mode:Image brightness and contrast can be adjusted for each scene mode to achieve the appropriate screen effect.
- Color palettes:
  - Black hot : the object with higher temperature shows in black or dark gray
  - White hot : the object with higher temperature shows in white or light gray
  - Red hot 1 / red hot 2 / red hot 3: the object with higher temperature shows in red, and the red hot area range is different;
- Brightness :1-10 level(s) can be adjusted.
- Contrast :1-10 level(s) can be adjusted.
- Calibration model :

Automatic: The device automatically corrects the image quality without any action.

Scene: The user manually corrects the image quality as needed, and the lens cover needs to be attached before calibration.

Shutter: The user manually corrects the image quality as needed, and the device shutter closes for calibration.

- WiFi :It can be connected to the mobile phone via WiFi, and the thermal imager can be operated remotely via the mobile phone APP.

When WiFi is turned on, but not connected, the WiFi icon flashes and the WiFi name is displayed at the top of the screen;

When the WiFi is connected, the WiFi icon is always on.

Mobile phone APP :Search and download 'TrackIR' APP in the mobile phone app market, open the app, and find the WiFi name of 'Handheld-TI-XXXX' in the mobile phone WiFi settings, enter the password '12345678', then after the connection is successful, the user can operate remotely.

Android: Please search and download in the 360 app market, Google play.

IOS: Please search and download in the APP store.

### **Power saving settings**

- Auto Stand-by :If there is no operation during the set time, it enters Stand-by mode. If the work indicator is on before entering lock mode, the work indicator will flash in Stand-by mode.

- Auto power-off : If there is no operation in the setting time, power-off.

Note: Stand-by mode and power-off cannot be performed while WiFi is connected.

### **Indication settings**

- Charging indication :In the charging state, control the opening or closing of the charging indicator.
- Working indication :In the normal working state, control the opening or closing of the work indicator.

### **General settings**

- Time style:12H/24H, users can choose different time styles according to their usage habits.
- Date style:Users can choose different date styles according to their usage habits.
- Time setup :Users can adjust the current date and time of the device.
- Watermark settings:Users can choose the display style of date and time watermark on the screen according to their usage habits.
- Language settings : English/Russian/German/French/Chinese, users can adjust the device language according to their needs.
- Memory card formatting : Memory card formatting and empty the memory.



- Restore default : Restore the factory state.

### Other settings (Optional feature settings)

- Ranging: The rangefinder data can be controlled to be turned on/off, and the  $\oplus$  appearing when 'Ranging' is turned on is the actual measurement point and the measurement data is displayed.

Ranging coordinates correction: This feature is available for devices equipped with rangefinders. When the ranging information is significantly different from the actual distance, the ranging coordinates function is used to correct the ranging position.

Note: When the 'ranging' function is turned on, it can't be amplified or reduced to ensure the ranging accuracy.

- Cursor : The laser cursor can be turned on/off, and the  $\oplus$  appearing when the ' Ranging ' is on is the actual laser pointing point.

Cursor coordinates: This feature is only available for devices equipped with laser indicators. When laser indicator indicates that the error is large, the cursor coordinates function is used to correct the laser indication position.

## Charging



When using the thermal imager for the first time, make sure to charge the thermal imager for at least 4 hours with a matching USB charger.

When charging, please unplug the USB cover at the bottom of the thermal imager, insert the matching TypeC USB charging cable, and plug in the power, and then the charging begins.

Charging specifications: 5V, 2A

Charging indicator is red during normal charging

Charging indicator is green when charging is complete

**Note :** When charging after the device is powered on Charging when power on  Indicates that the external power supply is supplying power to the device to ensure normal operation, but is not charging the battery  Indicates that the external power supply is also charging the battery while powering the device to ensure normal operation.

## Video output

There is a video output port beside the USB interface on the side of the thermal imager, and the external video is always in the state of power on.

The image of the thermal imager can be output to the external screen through the matching HDMI video cable. There are two display modes, namely the external screen and the screen of the device, but only one mode can be selected!

**Note:** When HDMI is used to connect the external display screen, the real-time screen can only be viewed by the external display. There is no screen display on the screen of this device. When the HDMI cable is unplugged, the screen of the device is restored.

## FCC Warning Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

The manual version will be updated after technical improvement.



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