



Quickstart Guide

Thermal Imaging Cameras

Thank you for choosing our product. Please thoroughly go through user manual before operation and keep it well for future reference. All photos here are for reference only, and specifications are subject to the physical product.

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- IMPORTANT -

Thank you for purchasing this product. Please read this Guide first and keep it properly for future reference. We hope this product will meet your expectations.

This Guide is a general guide for a series of products, which means that the product you receive may differ from the description in the Guide. The actual product you receive shall prevail.

This Guide is prepared to introduce our products to the users. We will try our best to ensure the accuracy of the Guide, but the completeness of the Guide still cannot be guaranteed, because our products have been continuously upgraded. We reserve the right to modify at any time without prior notice.

- FCC WARNING -

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.

- IMPORTANT -

DANGER

- 1) Please follow the method described in this Guide for charging the cell, and follow the charging procedures and precautions. Improper charging may cause overheating, damage and even personal injury.
- 2) Do not attempt to open or disassemble the cell at any time. If any liquid touches the eyes in case of cell leakage. Please rinse with clean water immediately and seek medical care.

WARNING

- 1) Please keep the device as stable as possible to avoid violent shaking.
- 2) Do not use or store the device in an environment with the temperature higher than the permitted level.
- 3) Do not expose the device directly to high-intensity heat radiation source, such as the sun, laser, spot welding machine, etc..
- 4) Do not block the holes on the device.
- 5) Do not knock, throw or vibrate the device and accessories to avoid damage.

- 6) Do not disassemble the unit by yourself, which may cause damage to the device and loss of warranty rights.
- 7) Do not use soluble or similar liquid on the device and cables, which may cause damage to the device.
- 8) Please do not use the device in an environment with the temperature higher than the permitted level, which may cause damage to the device.
- 9) Please observe the following rules when wiping this device:
 - Non-optical surface: if necessary, use a clean and soft cloth to wipe the non-optical surface of the thermal imaging camera.
 - Optical surface: avoid soiling the optical surface of the lens when using the thermal imaging camera, and especially avoid touching the lens with your hand, because the optical coating on the glass surface may be corroded due to sweat on the hands. When the optical lens surface is contaminated, use a professional lens cloth to carefully clean it.
- 10) Do not put the cell in a high temperature

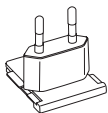
environment or near high-temperature objects.

- 11) Do not short-circuit the positive and negative terminals of the cell.
- 12) Do not place the cell in a humid environment or the water.

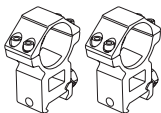
NOTES

- 1) Do not expose the device to dust or moisture. When used in an environment with water, avoid splashing water on the device. The lens shall be covered when the device is not in use.
- 2) When this device is not used, please place the device and all accessories in the special packing box.

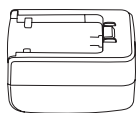
- LIST OF PARTS -



PLUG



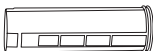
PICATINNY SUPPORT



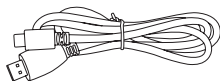
POWER ADAPTER



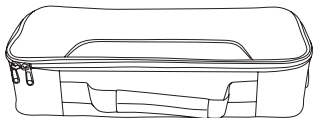
CHARGER



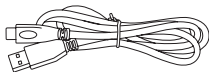
CELL



MICRO HDMI CABLE



BAG



TYPE-C CABLE

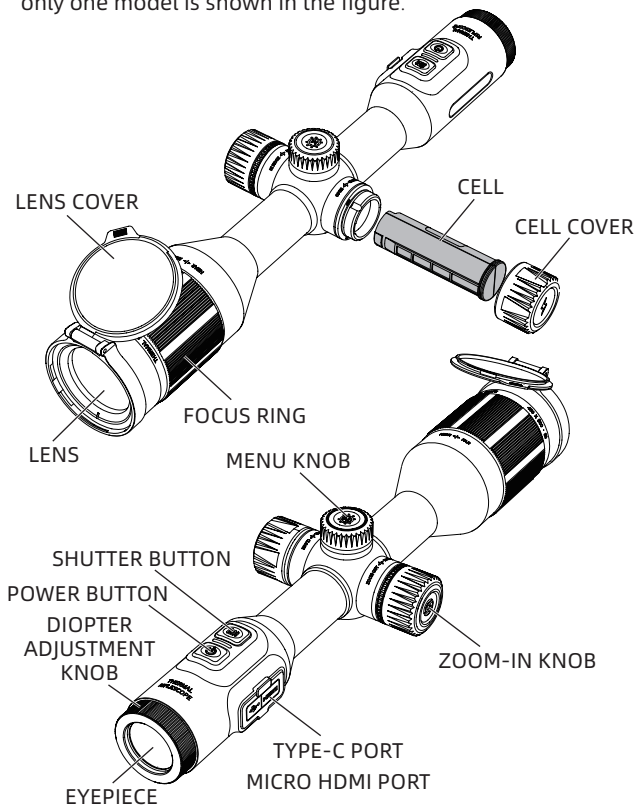
Options:



REMOTE CONTROL

- PRODUCT COMPONENTS -

This Guide is applicable to many models of this series, and only one model is shown in the figure.



1. FOCUS RING

After the thermal imaging camera is turned on, it shall be aimed at the target. When the distance between the observation target changes, the image may be blurred. Therefore, it is necessary to turn the lens focus ring to refocus until the target image is clear.

2. LENS COVER

Please cover the lens to protect the lens when the product is not in use!

3. USB TYPE-C PORT

The external port with USB cable can be connected to the external power supply to charge the product. The output of the external power supply is 5V2A.

4. MICRO HDMI

Through the video cable of the external port, the external power supply and the external screen can be connected at the same time, and the image of the thermal imaging camera can be output to the external monitor for display.

5. CELL COVER

When the cell of the product is used, it is the inlet for disassembling and installing the cell.

⚠ NOTE: please insert the cell in the direction shown in the figure, and do not push the cell forcibly.

- QUICKSTART INSTRUCTIONS -

Button	Current Device Status	Rotation	Press	Long Press
Power button	Power on	/	Compensation	Display off / off
	Power off	/	/	Power on
	Display off	/	Display on	/
Menu knob	Menu bar not shown	Switch to color palettes	/	/
	Menu bar display	Toggle options	/	/
Menu button	Menu bar not shown	/	Shortcut menu	Menu
	Menu bar display	/	Select current option	Return to previous option
Zoom-in knob	Menu bar not shown	Zoom in or zoom out	/	/
		/	Times zoom-in	/

[BUTTON DESCRIPTION]

1. POWER BUTTON

POWER ON:

Long press and hold the power button until the startup

picture appears in the eyepiece, then the infrared gunsight can be switched on successfully.

POWER OFF:

- a. Manual power-off: long press and hold the power button, the power-off progress bar will be displayed, and the power-off succeeds after the progress bar is finished.
- b. Automatic power-off: In the set automatic power-off time, without any button operation, the automatic power-off.

DISPLAY OFF:

Press and hold the power button, the progress bar of power-off will be displayed. Before the progress bar is finished, the power-off will be canceled and the Display off mode will be entered.

DISPLAY ON:

In Display off mode, press any button to wake the screen.

COMPENSATION:

When it is turned on and the menu is out of the state, short-press the power on/off button to complete the corresponding compensation action (except automatic compensation).

2. MENU KNOB

Quick color palette switching: when it is turned on and

in the state where the menu is not brought out, turn the menu knob counterclockwise to switch between white hot, black hot, adjustable red hot, iron red, blue hot/green hot pseudo color in turn.

Menu movement: When powered on and in the menu out state, turn the menu knob clockwise to move menu or option down/to the left; Turn the knob counterclockwise to move menu or option up/To the right.

3. MENU BUTTON

SHORTCUT MENU:

When it is powered on and the menu is not recalled, short-press the Menu button, and the shortcut menu option will appear.

MAIN MENU:

Main menu option will appear if Menu button is pressed for long time when it is powered on and menu is called out state.

CONFIRM AND BACK/EXIT:

When it is powered on and in the menu recall state, short-press the Menu button to confirm the current selection and return to the previous menu; Press and hold the menu button to return to or exit the menu without saving the current settings.

4. ZOOM-IN KNOB

ZOOM-IN:

When it is turned on and in the menu with the approximate range not invoked, rotate the zoom knob clockwise to enlarge the image in 0.1 steps, and stop when the zoom in is the maximum value.

ZOOM-OUT:

When it is turned on and in the menu with the approximate range not called, rotate the zoom knob counterclockwise to reduce the image by 0.1, and stop when it reaches the minimum value.

TIMES ZOOM-IN:

When it is turned on and in the menu, and the approximate range measurement is not called, the times zoom-in can be obtained by short-pressing the zoom knob.

5. SHUTTER BUTTON

TAKE PHOTOS:

When it is turned on and in the state where the menu is not recalled, short-press, take a photo and freeze the frame for 300ms to restore the real-time image.

VIDEO RECORDING:

When it is turned on and in the state where the menu is not called, long press and hold the photographing

button to start recording, and then long press and hold the recording again to finish recording.

During the video recording, short-press to take photos and freeze for 300ms to restore the real-time picture.

[FUNCTION DESCRIPTION]

1. SHORTCUT MENU

- PIP: There are top left, top middle, and top right positions to choose from.
- Screen BRI: Screen BRI level can be adjusted, 1-10 levels can be adjusted.
- Approximate ranging: the position of the lower horizontal line remains unchanged, and the upper horizontal line can be moved by the Rotary menu knob to estimate the target distance
- Hot track: a white cross cursor is displayed when it is turned on to trace the highest temperature point in the full image
- Super energy-saving: After being turned on, ARM will be switched to low-power mode, OLED brightness will be fixed to 20% and cannot be adjusted, and WIFI will not be turned on. If the current WIFI is already on, WIFI will be turned off, and the shooting record function cannot be turned on, if you are currently in shooting recording mode, the prompt is turned off.

Zeroing distance: the current zeroing distance can be adjusted quickly.

2. MAIN MENU

- Image quality enhancement: image quality can be adjusted by turning on.
- Scene mode: Three scene modes, natural/enhanced/highlight, can be set.
- Color palette: can be adjusted in white hot/black hot/adjustable red hot/iron red/blue hot/green hot.
Brightness: detector brightness can be adjusted with 1-10 levels.

⚠ NOTE: The adjusted brightness value will be saved in the current scene mode.

- Contrast: Adjustable for 1-10 levels.

⚠ NOTE: The adjusted contrast value will be saved in the current scene mode.

- Compensation mode: automatic compensation/scene compensation/shutter compensation can be set.
- Zeroing individual setting: 10 groups of zeroing individual setting parameters can be saved. The zeroing distance, zeroing location, scale mark type, scale mark color and scale mark brightness need to be saved.

- Scale mark type: Ten types in total can be selected.
Scale mark color: can be selected in black/white/
yellow/green/blue/red.
 - Scale mark brightness: the scale mark brightness
can be adjusted with 1-10 levels.
 - WiFi:
The WiFi can be used to transmit real-time video
to the mobile phone after the mobile phone client
is connected to the device, and the device can be
operated through the APP to access the photos/
videos of the device, photos/videos can be played,
shared, deleted, etc.
- ⚠ NOTE: Search and download 'TargetIR' APP in the
mobile phone APP store, open the APP, find the
WiFi name 'SCOPE-TI-xxxx' in the settings of mobile
phone WiFi, and enter the password '12345678',
remote operation after successful connection.**
- Recording mode: it can be selected in single
shooting/shooting record after being turned on.
 - Watermark Settings: can be selected in Time Only/
Date Only/Time Date/Off when turned on.
 - Auto Stand-by: the Auto Stand-by time can be set to
5/10/15 min. If there is no operation within the set
time, the sleep state will be entered.

- Automatic power-off: The automatic power-off time can be set to 15/30/60 minutes. If there is no button operation at the set time, the power-off will be entered, and the power-off will be completed.
- Charging indicator lamp: Switch that controls the charging port indicator lamp.
- Time format: selectable between 12H/24H.
- Date format: Optional from YYYY-MM-DD/MM-DD-YYYY/DD-MM-YYYY.
- Time setting: enter the time adjustment port, rotate the menu knob to move among the various options, and press the Menu button to enter the next level adjustment state. At this time, rotate the menu knob to move between the specific time values.
- Language setting: Available in Chinese/English/Russian/German/French.
- Memory card formatting: you can select formatting memory card, select 'yes', memory card formatting, select 'no', cancel the operation.
- Restore default: You can choose whether to restore the default values. Select 'Yes' to restore all parameters to factory settings; Select 'No' to cancel the operation.
- About: Check the current device in the

APP,ARM,MCU,FPGA version number and MAC address.

- External ranging (cursor): the external ranging cursor switch can be controlled.

⚠ NOTE: It shall be used together with optional accessories.

- Remote control: After being turned on, it will search for Bluetooth remote control connection. After successful connection, all functions of the button on the gunsight can be controlled by the Bluetooth remote control (except the function required by long Press).

⚠ NOTE: It shall be used together with optional accessories.

- Ranging calibration: When the distance measuring coordinate position adjustment port is entered, the screen magnification is 1X by default. At this time, the abscissa/ordinate can be adjusted by rotating the menu knob or the zoom knob.

⚠ NOTE: It shall be used together with optional accessories.

- Power display: When the thermal imaging camera is turned on and the cell power level changes, the power indicator will be displayed in the upper right

corner of the screen, and the part with the power indicator on will display the remaining power of the cell.

- After the power-on screen enters the real-time picture, the icon corresponding to the above power level will be displayed in the upper right corner of the screen. The electricity level is as follows:



High power



High and medium power



Medium power



Medium and low power



Low power



Extremely low power

⚠ NOTE: When the power is low, please replace the cell or charge it in time!

- TROUBLESHOOTING -

1. Device fails to start.

Solution: Replace the cell or connect the adapter for charging.

2. The device cannot take photos/record.

Solution: the internal storage space of the device is full, format the memory card.

3. The device display time does not match the actual time display.

Solution: Reset the time and date of the device in the menu.

4. Screen goes out during use.

Solution: Short-press any button to wake up the hibernation and light up the screen.

5. The image of the device is blurred during use.

Solution: turn the lens to focus manually until the display is clear.

- STORAGE AND TRANSPORT -

The following is the correct storage and transportation of the product. To prevent danger, property loss, etc., please read the manual carefully before using the device. Strictly observe it, and keep the instruction properly after reading it.

Storage:

1. The packaged product shall be stored in a well-ventilated, clean, condensate-free and corrosive gas-free room with temperature of $-30\text{ }^{\circ}\text{C} \sim 60\text{ }^{\circ}\text{C}$ and relative humidity not exceeding 95%.
2. Please take it out and charge it once every 3 months.

Transport:

During transport, it shall be protected against rain, water flooding and falling, without severe vibration and impact. It shall be handled with care and throwing is strictly prohibited.

Special statement: the version of the Guide will be updated after the technical improvement of the product.