Video output

A video output port is provided next to the USB interface at the bottom of the thermal imager, and will output the image of the thermal imager to an external monitor for display through the supplied video cable.
Simultaneously press "**Image Mode Button + Zoom Button**" to turn on the video output; in the video output status, there is a video output icon.

Cursor switch

Simultaneously press the "**Image Mode Button + Brightness Button**" to switch on/off the cursor.

⚠ Notice for use

- 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 2.5 hours every two months during the storage, and store the thermal imager in a dry and well-ventilated environment.

- Human eyes shall not be irradiated by the laser designator of the thermal imager.

- Do not charge the battery in an environment over 40℃.

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.

Statement：
This guide is applicable to the IR510 Nano series products, including the following four models. The differences are as follows, please carefully read this guide before using the thermal imager.

Model	Lens		Function
	19mm	25mm (supports expansion lens)	Wifi(APP)
IR510 N1	√	×	×
IR510 N1 WIFI	√	×	√
IR510 N2	×	√	×
IR510 N2 WIFI	×	√	√

Power button

The thermal imager has three power states: Power On, Standby and Power Off;

- **Power On:** Press and hold the power button for 2 seconds, so that the thermal imager is turned on, and the startup screen appears on the eyepiece;

- **Standby:**
  Manual standby: Press the power button to enter the standby mode in the power-on status;
  Automatic standby: In the power-on status, if there is no button operation within five minutes, the automatic standby prompt will pop up; The automatic standby will be cancelled by any button operation during the standby prompt display;
  Cancel Standby: In the standby mode, press any button to cancel standby.

- **Power Off:**
  Manual power off: Press and hold the power button for 2 seconds so that the thermal imager is powered off;
  Auto power off: In the standby state, if there is no button operation within 30 minutes (default), the thermal imager will automatically shut down.

Brightness button

Click to set five brightness levels of the image;

- **Light/laser indicator**   Press and hold the button to switch on/off the light/laser indicator.

Notice: This model is equipped with a 25mm extended lens which can block the laser emission.

Charging

Before using the thermal imager for the first time, be sure to charge the thermal imager for at least three hours with the matched USB charger.
During charging, please pull out the USB cover at the bottom of the thermal imager, insert the supplied USB charging cable, and engage the power to charge the battery. (Charging voltage is 5V)

- During normal charging, the charge indication light will turn red.
- When the charging is completed, the charge indication light will turn green.

Hot Track

Simultaneously press "**Brightness Button+Zoom Button**" to turn on the Hot Track, the cross cursor tracks the point of the highest temperature.

Diopter adjustment

The diopter adjustment knob is used to adjust the eyepiece diopter in order to suit users of different-level myopia.

Zoom button

Click this button to enlarge the image by 2x and 4x in turns

- **Freeze:** Press and hold the button to freeze the current screen with the Frz icon appearing at the left upper corner of the screen. Press any button to retrieve the real-time screen.

Image mode button

Click this button to switch the white hot mode, black hot mode and red hot mode.

- **White Hot Mode**   The object with higher temperature shows in white or light gray.
- **Black Hot Mode**   The object with higher temperature shows in black or dark gray.
- **Red Hot Mode**   The object with higher temperature shows in red.
- **Highlight Mode**   Highlighting the higher temperature target white-hot mode, increase the contrast between target and background.
- ※ **WiFi switch**   Press and hold the "Image Mode Button" to switch on/off WiFi.
- ※ **WiFi Connection**
  The thermal imager can be connected by WIFI and mobile phone, and most all functions（except Startup and Shutdown）of its buttons being controlled remotely by APP on mobile phone.
- ※ **APP**
  Users need to search and download "Thermal Viewer" APP from a mobile phone application market, then open the APP, find the WIFI "Handheld-TI" and enter the password "12345678". Once the connection is successful, users can operate the thermal imager remotely.
- ※ **APP more functions:**
  Image enhancement, Image brightness, Image contrast, Auto Stand-by time, Auto power-off time, Photo/video, Working indication, Charging indication and Cursor adjustment settings.
  Notice: ※ It means to be only for IR510N1 WiFi and IR510N2 WiFi.

Battery status indication

When the thermal imager is turned on, the battery power identification is shown at the lower left corner of the screen. The lighted battery power identification shows the remaining battery power.

Full   **Half full**   **Poor**