■ 电量显示

当热像仪处于开启状态，电池电量等级变化时，电量标识显示于屏幕的右上角，电量标识点亮的部分显示电池剩余电量。电量等级如下：

电量高 🔋	电量中高 🔋
电量中 🔋	电量中低 🔋
电量低 🔋	电量不足 🔋

开机进入实时画面后，屏幕右上角会显示上述电量等级相对应图标。

注意：

① 电量低时，请及时更换电池！

② 在使用充电电池时，电量满格的时间会比较长，即 🔋 切换到 🔋 间隔的时间相对于其它电量等级切换的时间会比较长！

⚠ 使用须知

- 请勿将热像仪指向高强度能量源（包括太阳，激光发射设备及这些设备的反射源），否则可能对热像仪精度产生不利影响，并可能损害或永久损坏热像仪的红外探测器。
- 长期不使用热像仪时，存放期间建议取出电池，并存放于干燥通风环境中。
- 配置激光指示器的热像仪，请勿将激光指示器照射人眼。
- 安装电池时，需注意对应电池盖上正负极位置。

对于用户在使用本产品过程中，因自身原因和第三方原因而造成的差错和事故或者对图像判断错误而产生的财产和人身损害，本公司不承担任何法律责任。

本操作指南是为方便用户使用和了解本公司产品而整理，我们将尽最大的努力保证本指南内容的准确性，但仍不能保证本指南内容的完备性，因为我们的产品一直在持续的更新和升级，故本公司保留随时修改而不另行通知的权利。

目镜
电源键
电池盖旋钮
雷默接口
镜头
调焦圈

■ 调焦圈

热像仪开机后，应对准观察目标，当观察目标距离发生变化时，图像可能会出现模糊不清，应转动镜头调焦环重新聚焦，直到目标图像清晰。

■ 整机接口

通过雷默接口配套视频线可将热像仪图像输出到外接监视器上显示。

注：视频线为选配件！

■ 电源键

开机：长按电源键，热像仪开启，目镜中出现开机画面；

关机：

手动关机：长按电源键，显示关机进度条，持续至进度条完成后，热像仪关机。

取消关机：进度条完成前，松开电源键，取消关机。

自动关机：可设置自动关机时间，在设置时间内，无任意键操作，则显示关机进度条进度条完成后热像仪关机。

注：自动关机时间选择'无'时，热像仪不会自动关机。

补偿：开机且处于菜单未调出状态时，短按开关机键，完成相应的补偿动作（自动补偿除外）。

向上键
菜单键
向下键

■ 菜单键

场景模式：开机且处于菜单未调出状态时，单击切换森林/沙漠/城市/雪地/默认五种场景模式。

森林模式：`森林` 沙漠模式：`沙漠` 城市模式：`城市`

雪地模式：`雪地` 默认模式：`默认`

确定：开机且处于菜单调出状态时，单击确认保存当前设置，同时返回上一级/退出菜单。

取消：开机且处于菜单调出状态时，长按取消当前设置，同时返回至上一级/退出菜单。

菜单栏：开机且处于菜单未调出状态时，长按进入菜单栏。

退出 `↰`：退出菜单栏。

屏幕亮度 `📱`：可调节屏幕亮度等级，1~10级可调整。

补偿 `C`：可设置自动补偿/场景补偿/快门补偿三种补偿方式。

自动补偿：`Auto` 场景补偿：`C` 快门补偿：`G`

注：场景补偿时，需要盖上镜头盖！

视频输出 `VID`：可开启/关闭视频输出；视频输出开启时，屏幕右下角会显示 `Vide`。

P/N制 `P/N`：视频制式可切换P制/N制。

注：P/N制切换时，需要将热像仪重启后才会切换成功。

热点追踪 `✛`：可设置开关，热点追踪开启时，十字光标追踪 `✛` 场景中温度最高的点；

蓝牙 `*`：蓝牙开时，会搜索连接蓝牙遥控器，连接成功后，可使用蓝牙遥控器控制热像仪上按键的所有功能（开关机功能除外）。

蓝牙开启后：提示"蓝牙遥控器搜索中..."，提示消失后，蓝牙图标闪烁；

蓝牙连接成功：提示"蓝牙连接成功"，提示消失后，蓝牙图标一直显示；

蓝牙连接失败：提示"蓝牙连接失败"，提示消失后，无蓝牙图标显示。

注：蓝牙遥控器为选配件。

自动休眠时间 `💤`：可设置自动休眠时间，设置时间内无任意操作，则进入休眠状态；

可选：不自动休眠 `关` /5分钟 `5min` /10分钟 `10min` /15分钟 `15min`；

取消休眠：休眠后，按任意键，唤醒休眠。

自动关机时间 `⏻`：可设置自动关机时间，设置时间内无任意操作，则进入自动关机状态；

可选：不自动关机 `关` /15分钟 `15min` /30分钟 `30min` / 60分钟 `60min`；

恢复默认值 `↺`：可选择是否恢复默认值。选择'是'，所有参数恢复到出厂设置；选择'否'则取消操作。

对比度 `◑`：可调节图像对比度等级，1~10级可调整。

亮度 `☀`：可调节图像对亮度等级，1~10级可调整。

注：在部分场景模式中，对比度和亮度调节后的值会保存在当前场景模式下。

■ 向上键

放大：开机且处于菜单未调出状态时，单击依次触发图像放大2X/4X正常循环切换；

2X `2X` **/ 4X** `4X`：正常状态不显示放大图标；

上移：开机且处于菜单调出状态时，单击一次，菜单栏选项向上移动一项。

■ 向下键

伪彩模式：开机且处于菜单未调出状态时，单击依次切换白热、黑热、红热、绿热四种伪彩模式；

白热模式 `W`：温度相对较高的物体显示为白色或浅灰色；

黑热模式 `B`：温度相对较高的物体显示为黑色或深灰色；

红热模式 `R`：温度相对较高的物体显示为红色；

绿热模式 `G`：温度相对较高的物体显示为绿色；

下移：开机且处于菜单调出状态，单击一次，菜单栏选项向下移动一项。

Eyepiece

Power Button

Lens

Battery Cover

Ramo Interface

Focusing Ring

■ UP BUTTON

- **ZOOM-IN:** When power is on and the menu is not called out, click in turn to trigger normal recycle switching for 2X/4X zoom-in.
- **2X** 2X **: / 4X** 4X **:** Zoom-in icons are not displayed in normal state.
- **Up:** When power is on and in the menu is called out, clicks the menu bar to move the option up by one item.
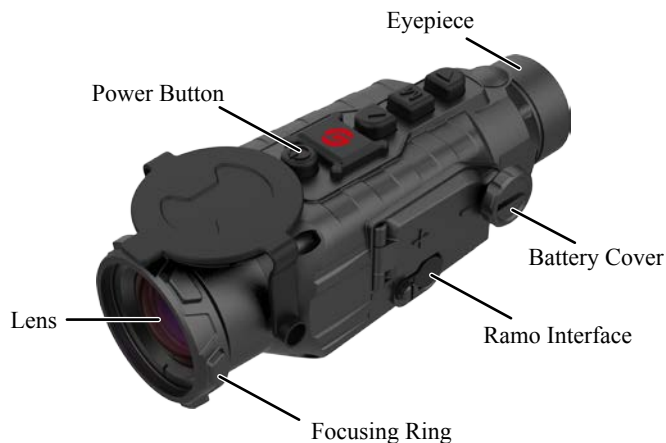

⚠ NOTICE FOR USE

- 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.
- It's recommended to take out the battery and store it in a dry and well ventilated environment if the thermal imager is not going to be used for a long time.
- Human eyes shall not be irradiated by the laser designator of the thermal imager.
- When installing the batteries, you must pay attention to the positive and negative position of the battery cover.

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.

Up Button

Menu Button

Down Button

■ POWER BUTTON

- **POWER ON:** Long press the power button to start the thermal imager, and a startup image is displayed in the eyepiece.
- **POWER-OFF:**
- **MANUAL POWER-OFF:** Long press the power button for display of power-off progress bar until the completion of the progress bar and the thermal imager is powered off.
- **CANCEL POWER-OFF:** Releasing the power button before the completion of progress bar to cancel the power-off.
- **AUTO POWER-OFF:** Time for auto power-off is settable, and if no button operation is carried out within such time, the thermal imager will be powered off after the completion of the power-off progress bar.
  ATTENTION: When "none" is selected for auto power-off time, the thermal imager will not be powered off automatically.
- **COMPENSATION:** Short press the power on/off button when power is on and the menu is not called out, to complete the corresponding compensation actions (except the automatic compensation).

■ DOWN BUTTON

- **PSEUDO-COLOR MODES:** When power is on and the menu is not called out, click in turn to switch four pseudo-color modes of white heat, black heat, red heat, green heat.
- **WHITE HEAT** W **:** Objects at relatively high temperature are displayed to be white or light grey;
- **BLACK HEAT** B **:** Objects at relatively high temperature are displayed to be black or dark grey;
- **RED HEAT** R **:** Objects at relatively high temperature are displayed to be red;
- **GREEN HEAT** G **:** Objects at relatively high temperature are displayed to be green;
- **DOWN:** When power is on and the menu is called out, clicks the menu bar to move the option down by one item.

■ **MENU BUTTON**

· **Scene Modes:** When power is on and the menu is not called out, click to switch the five scene modes of Forest / Desert / City / Snow / Default.
Forest Mode: `forest` Desert Mode: `desert` City Mode: `city`
Snow Mode: `snow`   Default Mode: `default`

· **Confirmation:** When power is on and the menu is called out, click the Confirm to save the current settings and return to the previous/ exit menu at the same time.

· **Cancel:** When power is on and the menu is called out, long press to cancel the current settings and return to the previous/exit menu at the same time.

· **Menu Bar:** When power is on and the menu is not called out, long press to enter into the menu bar.

· **Exit** ⬑ **:** To exit menu bar.

· **Screen brightness** 🔆 **:** To adjust the grade of screen brightness. Grade 1-10 is adjustable.

· **Compensation** Ⓒ **:** To set a/an automatic compensation / scene compensation / shutter compensation, three types of compensation.
Automatic Compensation: `Auto`   Scene Compensatio: `SC`
Shutter Compensation: 🌀
Attention: Cover the lens cover when in scene compensation!

· **Video Output** 🔲 **:** To open/close video output; when the video output is on, a `VID` will be displayed in the lower right corner of screen.

· **P/N system** `P/N` **:** Video system can be switched to P system/N system.
Attention: Successful P/N system switch requires a restart of thermal imager.

· **Hot point track** 🔲 **:** A switch can be set, and when hot point track is on, cursor ✛ will track the point with the highest temperature in the scene.

· **Bluetooth:** When a Bluetooth ✳ is on, it will search and connect to a Bluetooth remote controller, after which is successfully done, all functions (except power on/off function) of buttons on the thermal imager can be controlled by this Bluetooth remote controller.

· **Bluetooth on:** "Bluetooth is searching…" appears and then quickly disappears, while the Bluetooth icon flickers;

· **Successful Bluetooth connection:** "Bluetooth connection success" appears and then quickly disappears, while the Bluetooth icon displays all the time;

· **Bluetooth connection failure:** "Bluetooth connection failed" appears and then quickly disappears, and the Bluetooth icon disappears;
Remarks: Bluetooth remote controllers are optional accessories.

· **Time for auto sleep:** Click 🌙 to set a time for auto sleep, during which if no operation is carried out, it will enter into a sleeping mode.

Optional: No auto sleep `None` , auto sleep for no operation within 5minutes `5min` / 10minuts `10min` /15minutes `15min` ;
To cancel auto sleep: Press any button to wake the sleep after sleeping.

· **Time for auto power-off** 🕐 **:** Time for auto power-off can be set, during which any operation will stop it from entering an auto power-off mode;
Optional: No auto power-off `None` , auto power-off for no operation within 15minutes `15min` / 30minuts `30min` /60minutes `60min` ;

· **Restore default** ↺ **:** To select whether to restore the default valve or not. Select "yes" to restore all the parameters to factory settings; select "no" to cancel the operation.

· **Contrast** ◑   **:** The grade for image contrast can be adjusted and grade 1-10 is adjustable.

· **Brightness** ☀ **:** The grade for image brightness can be adjusted and grade 1-10 is adjustable.
Remarks: In partial scene mode, the vaule of contrast and brightness adjustment are saved under the currently selected scene mode.

■ **INTERFACES FOR WHOLE UNIT**

· Images from the thermal imager can be out put and displayed on the externally connected monitor via supporting video lines of Ramo interface.
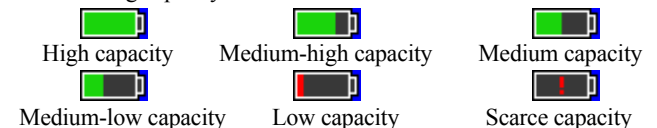*REMARKS: Video lines are optional accessories!*

■ **FOCUSING RING**

· After the thermal imager is powered on, the image may be blurred when the distance to the observed target changes. And the lens focusing ring shall be turned to refocus until the target image is clear.

■ **BATTERY INDICATOR**

· When the thermal imager is powered on, the battery indicator will display in the upper right corner of the screen as the battery capacity levels changes. The alight part of the battery indicator indicates the remaining capacity.

High capacity   Medium-high capacity   Medium capacity

Medium-low capacity   Low capacity   Scarce capacity

· After power-on and entering a real-time image, the previous battery capacity levels shall be displayed in the upper right corner of the screen.

ATTENTION:
① **Replace the battery while the power is low!**
② **In the use of a rechargeable battery, the battery will be full for a longer time, that is, time for switching from** **to** **will be longer than that for switching between other battery capacity levels!**

■ **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.