QUICK USER MANUAL

Handheld Thermography

Model: B160

Warnings

Before using the camera, please make sure that you have read and understand the warnings described below.

※ Do not open the case without permission, repair or modification, maintenance issues can only be conducted by the company's qualified professionals!

※ It is strictly forbidden to point the lens of the equipment directly at strong or high-temperature radiation source (such as the sun), to avoid damage to the equipment's accuracy or even permanent damage!

※ Equipment storage – the camera should be placed in a cool dry, ventilated environment without strong electromagnetic fields! Storage temperature should be higher than -40 ℃ or lower than 70 ℃!

※ Unless otherwise noted, the device must not be used at temperatures above + 50 ° C or below -20 ° C, this may damage the camera!

※ Before use, please make sure the equipment case is not damaged, the battery has no liquid deformation, this is to ensure the safe use of the equipment!

※ The device may need 3 to 5 minutes of preheating before accurately reading temperature data!

※ The equipment is manufactured with accurate calibration. It is recommended that the equipment be sent back for calibration once a year to ensure the stability of the device!

※ Due to the revision upgrades, this user manual will be updated from time to time. For the latest version, please contact customer service or official website to download。

Detector burns, damage, and other problems which are caused by improper use of the camera by customers is not covered by the warranty.

Contents

Thermal Imager Case Contents

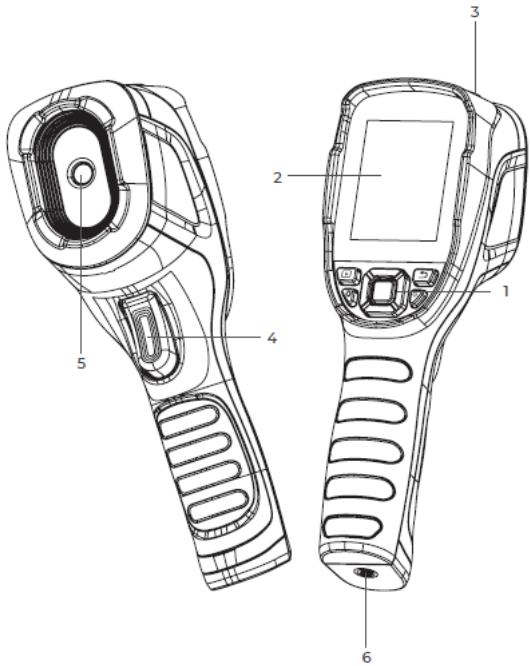
Package

When you receive the thermal imager, check that it is complete and in good condition and contact the supplier if it is damaged.

The basic package contains the following parts：

- Camera* 1
- Carry Bag * 1
- Charger * 1
- USB cable * 1
- Manual * 1

Camera Description



1. Keyboard

	Power Button	Long press to power ON / OFF; Short press for wake-up/ hibernation
	Return Button	Short press to return to the previous page
	Albums Button	Short press to view saved photos
	Shutter Button	Short press to refresh temperature data
	Up / Down / Left / Right Buttons	Short press UP/Down to set the Palette; short press Left/Right to set the Zoom Level
	OK Button	Short press to show the pop-out navigation menu; short press again to confirm an action or message

2. 2.8-Inch Screen

3. USB Type-C Port
   Type-C port is used for charging, and file transfer.

4. Camera Button
   Short press to take a photo, then short press the ***OK Button*** to save the photo.

5. Infrared Camera

6. Screw Hole (1 / 4-20 unc)

Camera Operation

Quick start

1. Ensure the battery is fully charged. Power on the camera by long pressing the power button 

2. To take a photo press the trigger button

3. To view image. Press the Albums Button 

4. To change the Palette. Press the Up/Down buttons 

5. To Zoom In/Out Press the Left/ Right Buttons 

6. To Enter the navigation menu short press the OK Button. 

Navigation Menu Description

PCOLOR : Change the Palette color

OSD : Center Spot, Max temp spot, Min temp spot, Emissivity, MEAS Distance, Custom Spot, Date.

TISR : Super Resolution

MEAS PARAMS : Emissivity, ENV TEMP, Meas Distance

MEAS MODE : -20°C ~150°C, 100°C~550°C

TEMP UNIT : °C, °F, °K

TEMP ALARM : Above Alarm, High Temp Setting, Below Alarm, Low Temp Setting, Alarm Capture, Capture Interval, Captures Num

CUSTOM SPOT : Set custom spot

PHOTO SET : Auto Save

SHUTTER SET : Auto Shutter, Shutter Interval

System Settings : Auto Off, Device Info, RESET, Format Memory, Brightness, PICQUALITY, Language, Date & Time

Emissivity Table

Materials	Surface condition	Temperature (℃)	Emissivity (ε)
Aluminum	Non-oxidized	100	0.20
	Oxidized	100	0.55
Brass	Lustrous	38	0.22
	Oxidized	100	0.61
Copper	Serious oxidized	20	0.78
Iron	Oxidized	100	0.74
	Rusty	25	0.65
Cast iron	Oxidized	200	0.64
	Not oxidized	100	0.21
Nickel	Oxidized	200	0.37
Stainless steel	Not oxidized	60	0.85
Steel	800℃ oxidized	200	0.79
Concrete	Surface	20	0.92
Paint	White	100	0.92
	Natural black	100	0.97
Carbon	Black smoke	25	0.95
	Candle smoke	20	0.95
	Graphite rough surface	20	0.98
Oil paint	16 color averages	100	0.94

Paper	White	20	0.93
Sand	Surface	20	0.90
Water	Distilled water	30	0.96
Skin	Human	35	0.80
Ceramics	Fine	21	0.90
	Coarse	21	0.93