MILESEEY®

TP2 PLUS

Thermal Imager

Warranty Statement

1.1 Warranty Statement

For the complete products manufactured by Mileseey, from the date of initial purchase, there is a two-year warranty under the condition of normal storage, reasonable use, and maintenance. The warranty period for accessories is three months.

This warranty is non-transferable and does not apply to any product damaged due to misuse, negligence, accidents, or abnormal operating conditions.

If any defects occur in the product covered by this warranty, it must not be used further or repaired privately to prevent further damage. The purchaser must immediately report the product defect to Mileseey, otherwise, this warranty will not apply.

If upon inspection by Mileseey, the product or accessory is found to be faulty, the user may contact Mileseey's after-sales service department within the warranty period to negotiate repair or replacement of the product.

1.2 Quality Assurance

The quality management system has been certified according to the ISO9001 standard.

We reserve the right to modify or improve any product without prior notice.

Safety Instructions

⚠ Warning

●Before using cleaning solutions, ensure you have read all applicable Material Safety Data Sheets (SDS) and warning labels on the containers.

●Do not place the product in high-temperature environments exceeding 60°C or in low-temperature environments below -20°C. The device supports operation while charging.

●It is recommended to charge the device in room temperature conditions and when it is turned off. Do not charge in high-temperature environments above 40°C or in low-temperature environments below 0°C.

●Do not operate the device in high-temperature environments exceeding 50°C or in low-temperature environments below -10°C.

●The relative humidity for the device's use is 10% to 95%, non-condensing.

●Do not arbitrarily disassemble or modify the infrared thermal imager.

⚠ Applicability: Class B digital devices.

1. 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,
(2) this device must accept any interference received, including interference that may cause undesired operation.

2. Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: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,

Safety Instructions

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.
Frequency range of WLAN radio module: 5.15~5.85GHz.
Maximum power of WLAN radio module: 13dBm.(Only for EU)
Mileseey Technology Co., Ltd. declares that the radio equipment type TP2 PLUS is in compliance with Directive 2014/53/EU, 2011/65/EU.
To comply wth RF exposure requirements, a minimum separation distance of 0mm must be maintained between the user's body and the handset , including the antenna.

⚠ Caution

●Do not use the product under conditions that exceed the specified environmental requirements. Refer to the product specification sheet for specific environmental requirements.
●Do not apply cleaning solutions or similar liquids directly onto the thermal imager, cables, or other components.
●Be extremely cautious when cleaning the infrared lens. The lens has a delicate coating that can be damaged by rough materials like paper towels or excessive force.
●Avoid pointing the infrared thermal imager towards strong light sources or devices emitting laser radiation, regardless of whether the lens cap is on. This can affect the accuracy of the thermal imager and potentially damage its detector.

User Notice

3.1 Calibration

To ensure the accuracy of temperature measurements, we recommend calibrating the thermal imager annually. This calibration can be performed either by Mileseey or a third-party organization.

3.2 Accuracy

To achieve highly accurate results, we recommend that you wait for 5 minutes after turning on the thermal imager before beginning temperature measurements. (Includes switching temperature ranges)

3.3 Documentation Updates

Our manuals are updated several times a year, and we also regularly issue notices about key product changes. To access the latest manuals and notifications, please visit the Mileseey official website.

3.4 Applicability

This manual applies to all products within a series, which means that some functions described in this manual may not be applicable to a specific model within the series.
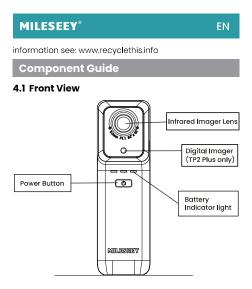
3.5 Disposal of Electronic Waste

2012/19EU (WEEE directive) : Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For properrecycing, return this product to your local supplier upon the purchase of equivalentnew equipment, or dispose of it at designated collection points.For more information see: www.recycle-this.imnfo
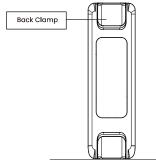

2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more
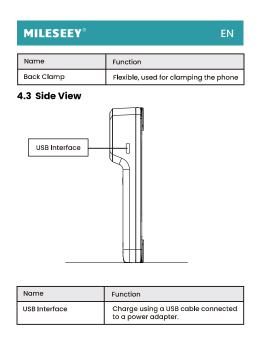
information see: www.recyclethis.info

Component Guide

4.1 Front View

Infrared Imager Lens

Digital Imager
(TP2 Plus only)

Power Button

Battery
Indicator light

4.2 Back View

Back Clamp

Name	Function
Back Clamp	Flexible, used for clamping the phone

4.3 Side View

Name	Function
USB Interface	Charge using a USB cable connected to a power adapter.

5. Quick Operating Guide

Please follow the steps below:
1. Charging: ● Use a 5V 2A power adapter and USB cable to charge the device. ● Please charge the device in room temperature conditions.
2. Power On Press and hold the power button to turn on the device.
3. Locate the Target Aim the thermal imager at the object of your interest.
4. Capturing Images Use the Mobile App on your phone to capture images by pressing the imager button and record videos by pressing the video button.
5. APP Analysis Open the accompanying App for the thermal imager; navigate to the gallery; select the picture you need for secondary analysis, and proceed with the analysis.

APP Description

6.1 App overview

"Thermal TP Series," as the secondary analysis APP accompanying the thermal imager produced by Mileseey, is compatible with the TP series of wireless thermal imagers for observation use. It allows for viewing images in five different modes through the mobile app, including infrared, visible light, and dual-light fusion. The app features capabilities for pseudocolor switching, photography, video recording, and custom temperature analysis with points, lines, and frames.

6.2 App connectivity

(1) Press and hold the power button to turn on the device and ensure that the Bluetooth function of your smartphone is enabled.
(2) Open the "Thermal TP Series" app.
(3) Click on the device you want to connect to.
(4) A pop-up window will prompt the user: "Thermal TP Series wants
to join the wireless network TP2. Cancel or Join?" Click on "Join" to successfully connect (this step is only necessary for iPhone models).
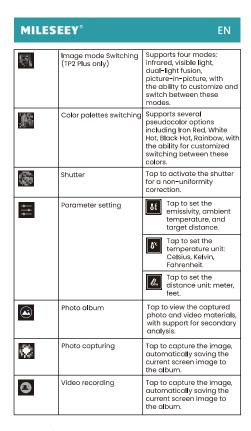
6.3 Introduction of the Main User Interface

Icon	Name	Description
<	Return	Tap to return to the device connection interface.
TP2	Model	Indication of specific model of the device.
⚙	Settings	Tap to perform operations such as setting the temperature range, network settings, etc., and to view the device's remaining battery life and product information.
✦ ▨ ╲ 🗑	Preset template settings	Tap to customize drawing points, lines, frames for temperature analysis, or to delete.
✛	Center, maximum, minimum temperature point setting	Tap to set the center point, maximum, minimum temperature point on or off. When these temperature points are activated, their real-time temperature values are displayed in the top left corner of the screen.

	Image mode Switching (TP2 Plus only)	Supports four modes: infrared, visible light, dual-light fusion, picture-in-picture, with the ability to customize and switch between these modes.
	Color palettes switching	Supports several pseudocolor options including Iron Red, White Hot, Black Hot, Rainbow, with the ability for customized switching between these colors.
	Shutter	Tap to activate the shutter for a non-uniformity correction.
	Parameter setting	Tap to set the emissivity, ambient temperature, and target distance.
		Tap to set the temperature unit: Celsius, Kelvin, Fahrenheit.
		Tap to set the distance unit: meter, feet.
	Photo album	Tap to view the captured photo and video materials, with support for secondary analysis.
	Photo capturing	Tap to capture the image, automatically saving the current screen image to the album.
	Video recording	Tap to capture the image, automatically saving the current screen image to the album.

6.4 Setting Interface

Measurement Range:
Options for low and high temperature ranges are available; supports automatic switching of temperature ranges.

Auto Power-Off:
Supports custom settings for no auto shut-down, or automatic shut-down after 10 or 20 minutes.

Factory Reset:
Tap to perform a factory reset.After resetting to factory settings, all device information will be erased.

Battery Capacity:
Displays remaining battery life.

Device Info:
Allows viewing of the device model, PN(Part Number), SN (Serial Number), and firmware version number.

Cleaning

7.1 Clean the exterior casing, cables, and other components of the thermal imager.

Clean the exterior casing, cables, and other components of the thermal imager	
Cleaning Solution	You can use one of the following liquids: Warm water Mild cleaning solution
Cleaning Tool	Soft cloth
Cleaning Steps	Please follow the following steps: Dip a soft cloth in the cleaning solution. Wring out the soft cloth to remove excess cleaning solution. Use the soft cloth to clean the components.

⚠ **Warning:**

Avoid applying the solution or similar liquids directly onto the thermal imager, cables, or other components, to prevent damage to the device.

7.2 Clean the infrared imager lens

Clean the infrared imager lens	
Cleaning Solution	You can use one of the following liquids: A commercial lens cleaning solution with an isopropyl alcohol concentration of over 30%. 96% concentration ethanol (C_2H_5OH).
Cleaning Tool	Degreasing Cotton/Cotton Swab
Cleaning Steps	Please follow the following steps: Dip a piece of degreasing cotton in a small amount of cleaning solution. Squeeze the degreasing cotton to remove excess cleaning solution. Gently wipe the lens with the degreasing cotton. The cotton should be used only once and not reused.

⚠ **Warning:**

When cleaning the infrared lens, avoid applying excessive force. This could damage the lens's anti-reflective coating.

Technical Parameter

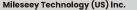| Model	TP2 Plus
Thermal Sensor	Uncooled Vanadium Oxide
Thermal Resolution	256x192
Pixel Pitch	12µm
Wavelength Range	7.5 ~ 14 µm
Frame Rate	25Hz
Focal Length	3.2mm
Lens Aperture	F1.1
Field of View	56°×42°
Type of Focus	Fixed
Focal Distance	0.3m~
IFOV	3.75mrad
NETD	40mK
Visible Light Camera (TP2 Plus only)	200w
Color Palettes	White Hot/Black Hot/ Rainbow/Rainbow HC/ Lron/Lava/RdGy
Imaging Mode (TP2 Plus only)	Infrared, Visible Light, Picture in Picture, Fusion
Remote Access and Control	Capable Of Connecting To Smart Devices Via WiFi From A Distance Of Up To 26ft (8m)
Device Compatibility	Supports Smartphones with iOS 12.0 Or Higher And Android 9.0 Or Higher.
Clamp Width	Minimum 131/Maximum 165mm
Data Capturing	Video, Still Image
Picture Format	.jpg
Video Format	MP4
OTA	Supports OTA (Over-The-Air) upgrades.
WiFi	IEEE 802.11 a/b/g/n/ac

Temperature Range	TP2 PLUS: -20~+150℃, +100~+550℃ TP2: -20~+150℃, +100~+400℃ (Supports Auto Switch)
Accuracy	Reading accuracy of ±2% or ±2ºC (which ever is greater) @ ambient temperature of -10-50ºC.
Temperature Analysis	Coldest And Hottest Points, Central Point, And Custom Measurements (Supports 3 Custom Points, 3 Custom Lines, 3 Custom Frames)
Emissivity Setting	0.01-1.00
Connecting Solution	USB Type-C
Battery	1050mAh
Charging Time	1.5h
Charging Temperature	0~+40ºC (Do Not Charge The Device In High-Temperature Environments Above 40ºC Or In Low-Temperature Environments Below 0ºC.)
Charging Solution	WiFi, USB Type-C
Battery Runtime	2h, with Battery Indicator
Operating Temperature	-10~+50ºC
Storage Temperature	-20~+60ºC
Relative Humidity	10%-90% (Non-Condensing)
IP Rating	IP54
Drop Rating	2m
Certification	CE/FCC/RoHS/TELEC/DGM/TSCA/WEEE
Shock & Vibration	2G (IEC60068-2-6), 25G (IEC60068-2-29)
Dimensions	135.6mm x 41mm x 29.1mm
Net Weight	125g

Contact Information

Mileseey Technology (US) Inc.
Office Add: 17800 CASTLETON ST STE 665 CITY OF
INDUSTRY, CA 91748
Manufacturer: Shenzhen Mileseey Technology Co., Ltd.
Add: No.3601 Block A, Tanglang Town Plaza West,
Fuguang Community, Taoyuan Street, Nanshan District,
Shenzhen, China
Website: www.mileseey.net
Store: www.mileseeytools.com
E-mail: service@mileseey.com
Made in China
MILESEEY has started researching, developing,and
manufacturing of high-quality optical products including
golf & hunting rangefinder, laser measure device and
thermal & digital night visions since 2009. Focusing on
the development, researching, and manufacturing for
over 12 years, we strive to provide you with
premium-quality products and satisfying customer
service to make your life easier and smarter.

FCC Caution

§ 15.19 Labeling requirements.
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.

§ 15.21 Information to user.
Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

§ 15.105 Information to the user.
Note: 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.

Body   Operation
This device was tested for typical body operations. To comply with RF exposure requirements, a minimum separation distance of 5mm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.