

THERMAL CAMERA

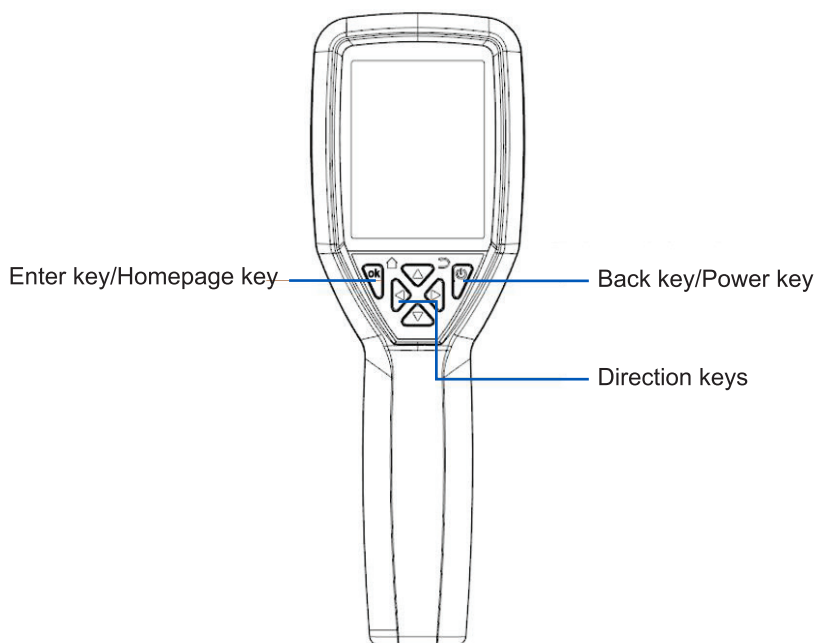
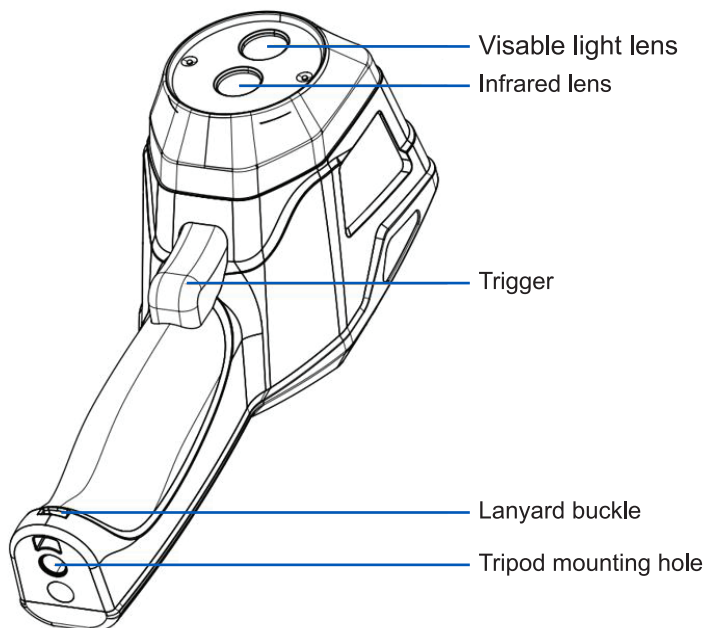
Colour LCD Monitor

USER MANUAL



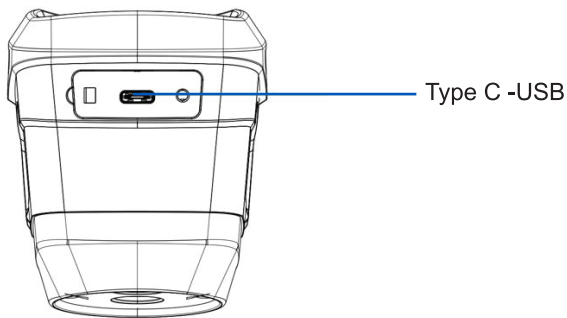
Introduction

Please read this manual carefully before using the Inspection Camera and follow herein instructions to avoid damage caused by improper use.



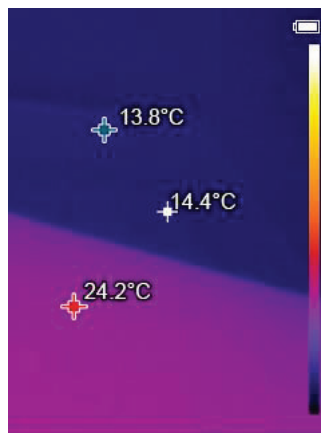
Charging your device

1. **Charge Indication:** The device is charged using a USB Type-C connector. During charging, the screen displays a battery charging symbol showing progress.



Functions and Basic Operations

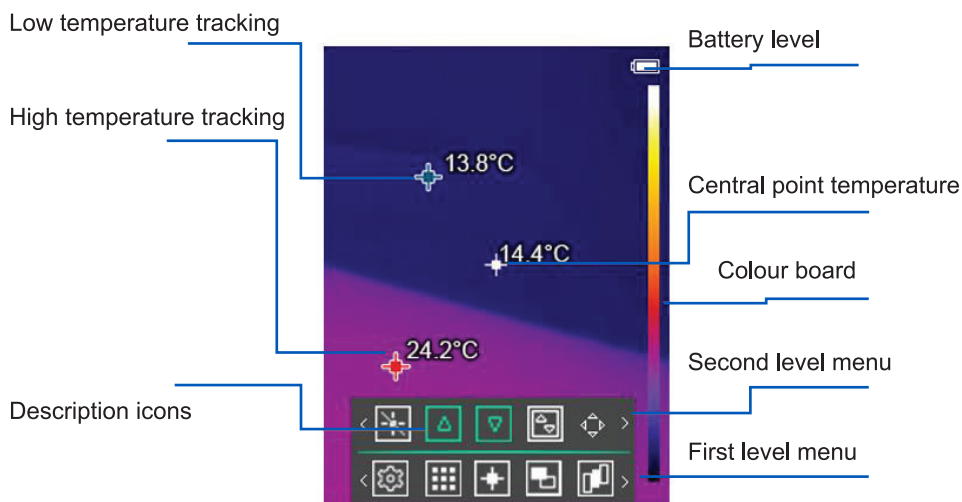
1. **Startup & Shutdown:** Press  to start the device, and long press  to shut down the device.
2. **Main Interface:** Once the device has started, the following main interface will be displayed.



3. **On this interface**, press  or  to switch the color board quickly, and press the  or  key to switch between visible light imaging and infrared imaging.
4. **Take Photos and Record Videos:** When the device is on, press the “Trigger key” to take photos, and long press the “Trigger key” to record videos.

Functions and Basic Operations

- Press the  to display the first level menu interface. Press the  again to display the second level sub menu interface. Press the  or  buttons to select a function from the sub menus. Press the  button to confirm the selection. Press the  button to return to the first level menu.



1st level menu	Sub menu
Measurement	None / Center spot / Hot spot / cold spot / zone / edit zone
Image mode	overlay fusion / picture in picture / fusion ADJ / Offset ADJ
Color palette	Iron / White hot / Black hot / Rainbow / Hottest / High contrast / Green hot / Lava
Thermal AGC	Smooth / Normal / High contrast
Settings	Settings functions (Next page)
Album	Show recorded videos / images

Settings menu

- Press the  button to enter the Settings menu. Press the  or  buttons to scroll through the sub menus. Press the  button to enter the selection. Press the  or  buttons to scroll through options list then press  button to confirm setting. Press the  button to exit to the home screen

Menu	Sub menu
Language	Multiple (Third line of languages is English)
Emissivity	Matt / Semi-matt / semi-glossy / glossy / edit
TisoView	Left / Right
Unit	Celsius / Fahrenheit / Kelvin
Compensation	0.5 M / 1 M / 2 M
Temperature range	-20°C~+550°C

More	Sub menu
Date	Day / Month / Year
Storage	Storage info and Format
Alarm	Upper threshold / Edit / Lower threshold / Edit
Auto power off	5 / 10 / 30 / 60 / Never (Minutes)
Distance unit	Metres / Feet
Temperature Bar	Left / Right
Time / Date stamp	Left / Right
Brightness	Settings
Restore factory settings	Cancel or OK
Upgrade	Updating via computer (When available)
About	Model / SN / firmware info & Software

Album menu

1. Press the  button to enter the Album menu. Press the  or  buttons to scroll through recorded images and videos. Press the  button to view the selection. Press the trigger button to play and pause recorded videos. Press the  button to delete recorded files. Press the  or  buttons to confirm or cancel deletion.

Measurement menu

1. Press the  button to enter the Measurement menu. Press the  or  buttons to show temperature measurement points on screen. None, Center spot, Hot spot, Cold spot, Zone, Edit zone. Press the  to activate points.

Image mode

1. Press the  button to enter the Color palette menu. Press the  or  buttons to change settings between Thermal, Visible, Outline fusion, Overlay fusion, Picture in Picture, Fusion ADJ, Offset ADJ. Press the  button to confirm selection.

Color palette

1. Press the  button to enter the Color palette menu. Press the  or  buttons to change settings between Iron, White hot, Black hot, Rainbow, Hottest and High contrast, Green hot, Lava.

Thermal AGC menu

1. Press the  button to enter the Thermal AGC menu. Press the  or  buttons to change settings between Smooth, Normal and High contrast.

Specifications

Parameters		
Infrared Thermal Imaging	Detector Resolution	120x90
	Spectral Range	8~14um
	Refresh Rate	25Hz
	NETD	60mK@25°C
	FOV	38°x 50°
	Lens	2.3mm F1.1
	Measurement Range	-20~550°
	Measurement Accuracy	±2°C or reading ±2%
	Temperature Measurement	Max, Min, central point measurement, and area measurement of the full screen
	Color Palette	Iron, white hot, black hot, rainbow, hottest, high-contrast, green hot, Lava
Visible Light	Resolution	720P
	Field Angle	55°x 83°
Display	Screen Size	2.8 Inch
	Image Mode	Edgeblending ,overlayblending, picture in picture, infrared, visible light
Universal	Language	English, Chinese, Simplified Chinese, French, German, Spanish, Russian, Dutch, Japanese, Korean, Arabic
	Interface	USB TypeC (for charging and data transmission)
	Protection Level	IP54
	Battery	2600mAh Lithium battery
	Operating Time	Around 4 hours on full battery charge
	Operating Temperature	-10°C~+60°C
	Storage Temperature	-40°C~+85°C
	Product Size	70mmx80mmx200mm
	Net Weight	310g
	PackingSize	115mmx170mmx300mm
Storage	Capacity	8G built-in memory, can store more than 20,000 pictures
	Picture Storage Format	JPG
	Video Format	MP4

What is thermal camera emissivity?

Adjusting the emissivity setting to match the object's surface can make a significant difference, especially in precision measurements.

What is TisoView?

Allows users to see both types of images simultaneously in real time, so it can enhance decision-making while inspecting equipment, systems, or environments.

AGC (Automatic Gain Control).

In a thermal camera is a feature that dynamically adjusts the image contrast and brightness to optimize the visibility of thermal details. Since thermal cameras capture infrared radiation instead of visible light, the raw thermal image may have a very wide range of temperatures, making it difficult to distinguish details without proper adjustment.

Charging and Data transfer.

The Thermal camera can be charged via a USB wall charger or a computer.

(Note) the camera cannot be used when charging via a computer.

Video and Images can be transferred directly to a computer via the included USB TypeC cable.

FW Instructions.

1. Connect the handheld device to the computer with a USB cable
2. Copy the new FW to device folder
3. Disconnect the USB cable
4. Go to Settings->More->Check for upgrades and follow the prompts to complete the upgrade.

Technical assistance

If you need assistance setting up or using your Aerpro product now or in the future, call Aerpro Support Australia

TEL: 03 – 8587 8898 FAX: 03 – 8587 8866 Mon-Fri 9am – 5pm AEST

or EMAIL: service@tdj.com.au

This manual is considered correct at time of printing but is subject to change.

For latest manuals and updates and firmware refer to the website.

