

THERMAL CAMERA

Colour LCD Monitor

G2000T



USER MANUAL

Contents

1 Proper Use & Safety	2	10 Factory Reset	5
2 Product Overview	2	11 Format	5
3 Package Contents	2	12 Temp Units	5
4 Parts & Button Functions	3	13 Thermal Fusion	5
5 Display Icons	4	14 Palette	5
6 Getting Started	4	15 Emissivity	6
7 Basic Operations	4	16 HI/LO Temp & Alarm	6
8 Playback & Files	4	17 Connecting to a PC	6
9 Language / Date / Auto Off	5	18 Care · Specs · FAQ	6-7

1 Proper Use & Safety

This device is intended only for the following use:

- Checking insulation and heating systems
- Monitoring heat flow
- Searching for overheated parts or thermal bridges

Only operate in dry areas. Any other use that is not expressly permitted in this instruction manual may pose a serious hazard to the user and result in damage to the device. The operator or user of the machine is responsible for any accidents or personal injury and/or material damage to third parties or their property.

The machine is intended to be used by do-it-yourselfers. It was not designed for heavy commercial use — the warranty is void in the case of commercial use. The manufacturer is not liable for damage caused by improper use or incorrect operation.

2 Product Overview

Thank you for purchasing the Aerpro G2000T Thermal Image Camera. This device combines a thermal image and visible image, digital photography and video recording, allowing you to capture your measurement data. It is ideal for inspecting insulation, heating systems and electrical equipment. Please read this manual carefully before using the product.



3 Package Contents

Your package includes:

G2000T Thermal Image Camera ×1

USB Data Cable ×1

QR Insert ×1

Soft Storage Bag ×1

Lanyard ×1

4 Parts & Button Functions



Fig. 1 Front view (1-6) · Fig. 2 Rear View (10-12)

No.	Component	Function
1	LCD display	2.8-inch colour display (240×320)
2	 Power / Zoom / Delete	Long press to turn the camera on/off; short press to zoom, or short press to delete in playback mode
3	 Down / Fusion blend	Short press to navigate down in menus, or decrease the fusion blend level
4	 Set	Short press to confirm setting changes
5	 Up / Fusion blend	Short press to navigate up in menus, or increase the fusion blend level
6	 Menu / Playback / Return	Long press to enter the setting menu; short press to enter playback, or to return in menu / playback modes
7	USB port	USB Type-C port for data transfer
8	Micro SD card slot	Supports up to 128 GB (not included)
9	Battery compartment & cover	Compartment (with cover) for 4×AA batteries, at the base of the handle
10	CMOS camera	640×480 visual CMOS sensor camera
11	Thermal sensor	32×32 @ 9 Hz Thermal sensor
12	Take photo / video button	Short press to take a photo/video; long press to switch between photo and video mode

5 Display Icons

The following indicators may appear on the LCD display during use.

Take photo / video button

Short press to take a photo/video; long press to switch between photo and video mode

1	Photo or video mode
2	Prioritises internal memory
3	Prioritises external SD card
4	Recording timer
5	HI/LO temp alarm
6	Battery status
7	Zoom steps
8	Current palette

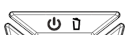
9	Lowest temp spot (green)
10	Centre target spot (white)
11	Highest temp spot (red)
12	Highest temp reading
13	Lowest temp reading
14	Current emissivity
15	Date & time

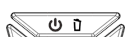
6 Getting Started

6.1 Installing AA batteries

1. Open the battery compartment (12) at the base of the handle.
2. Follow the battery installation icon to insert the 4×AA batteries (17), observing the correct polarity.
3. Close the compartment cover (13) securely before operation.

6.2 Powering on / off

Turn on: long-press the Power button  (2) until the screen lights up.

Turn off: long-press the Power button  (2) until the screen turns off.

7 Basic Operations

7.1 Taking photos

Photo mode is the default. Short-press the Take photo/video button (7) to capture a photo.

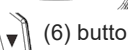
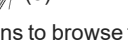
7.2 Recording videos

1. Long-press the Take photo/video button (7) to switch to recording mode.
2. Press the Take photo/video button (7) again to start recording. Press again to stop; recorded videos are saved automatically.

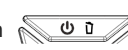
Caution: Do NOT remove the external SD card while the device is recording video, taking a photo, or in playback mode. This may cause file corruption or loss.

8 Playback & File Management

8.1 Viewing photos and videos

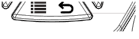
1. Short-press the Playback button  (5) to enter playback mode.
2. Use the Up  (4) / Down  (6) buttons to browse files.

8.2 Deleting files

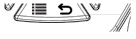
1. In playback mode, short-press Up  (4) / Down  (6) to select a file, then short-press the Delete button  (2) to activate delete mode.
2. Short-press Down  (6) to confirm deletion of the current file, or Up  (4) to cancel.

Note: Playback prioritises external SD card contents. Remove the external SD card first to view internal storage. Do not remove the SD card while deleting files, as this may cause file corruption or loss.

9 Language, Date & Auto Off

To reach any setting, long-press the Menu button  (5) to enter the Setting Menu, then use Up  (4) / Down  (6) to select an item and Set  (3) to enter it.

Language

Select *Language*, press Set  (3), then use Up (4) / Down (6) to choose your option and Set (3) to confirm. Press Return  (5) to return to the main interface.

Date & Time

Select *Date & Time* and press Set (3). Use Up (4) / Down (6) to adjust each number and Set (3) to confirm the changes.

Auto Off

Select *Auto Off* and press Set (3). Use Up (4) / Down (6) to choose a time option and Set (3) to confirm.

10–12 Factory Reset, Format & Temp Units

10 Factory Reset

Select *Factory Reset* and press Set (3). Use Up (4) / Down (6) to choose “Yes” to reset to factory defaults, or “No” to return to the setting menu.

11 Format

Select *Format* and press Set (3). Choose “Yes” to format the inserted micro-SD card, or “No” to return to the setting menu.

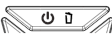
Note: Remove the external SD card first before formatting the built-in internal memory (the device prioritises the external SD card).

12 Temp Units

Select *Temp Units* and press Set (3). Choose “Celsius/°C” or “Fahrenheit/°F”, then press Set (3) to confirm.

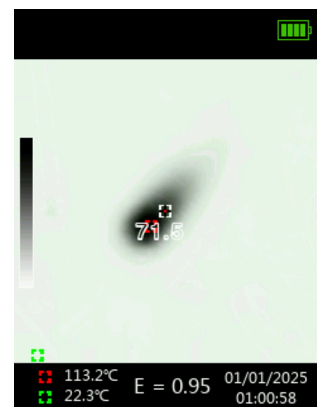
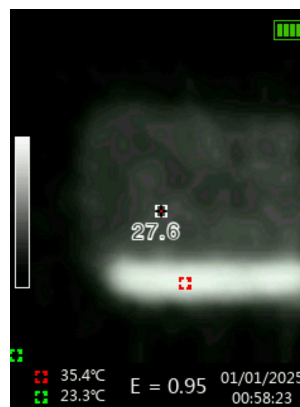
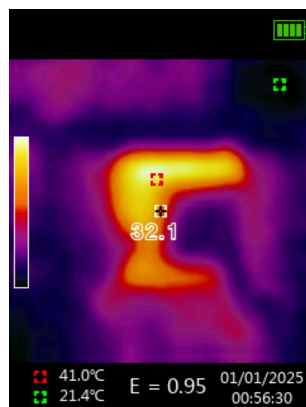
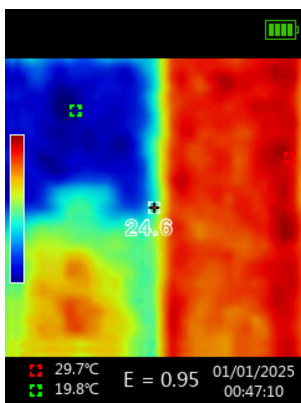
13–14 Thermal Fusion & Palette

13 Thermal Fusion

Select *Thermal Fusion* and choose a distance or the user-defined option, then press Set (3). In user-defined mode, align the thermal and visual images by short-pressing Power  (2), Up  (4), Menu  (5) and Down  (6) to move the overlay, then Set (3) to confirm.

14 Palette

Select *Palette* and press Set (3). There are four colour palettes — RainBow, IronRed, WhiteHeat and BlackHeat. Use Up (4) / Down (6) to select the desired palette and Set (3) to confirm.



15 Emissivity

Select *Emissivity* and press Set (3), then use Up (4) / Down (6) to change the emissivity rate.

Note: Even when emissivity and reflected background are set correctly, it is still difficult to accurately estimate the temperature of a surface with low emissivity. The lower the emissivity, the higher the probability of measurement error.

Reference Emissivity Table

Asphalt	0.90–0.98	Concrete	0.94	Cement	0.96
Sand	0.90	Earth	0.92–0.96	Water	0.92–0.96
Ice	0.96–0.98	Snow	0.83	Glass	0.90–0.95
Ceramic	0.90–0.94	Marble	0.94	Gypsum plaster	0.80–0.90
Stucco	0.89–0.91	Brick	0.93–0.96	Fabric (black)	0.98
Human skin	0.98	Soap bubbles	0.75–0.80	Coal (powdered)	0.96
Paint (glossy)	0.80–0.95	Paint (matt)	0.97	Rubber (black)	0.94
Plastic	0.85–0.95	Wood	0.90	Paper	0.70–0.94
Chromium oxide	0.81	Copper oxide	0.78	Iron oxide	0.78–0.82
Textiles	0.90				

16 HI/LO Temp & Alarm

16.1 HI/LOTemp

Select *H&L Temp* and press Set (3). Use Up (4) / Down (6) to enable the high- and low-temperature indicators on the display.

16.2 HI/LOAlarm

Select *Alarm* and press Set (3). Use Up (4) / Down (6) to select the high or low temperature, and Set (3) to adjust the alarm temperature.

When the measured temperature reaches the set high or low limit, an alarm icon appears on the display as a reminder.

17 Connecting to a PC

Use the supplied USB cable (15) to connect the thermal image camera's USB Type-C port (8) to a computer for data transfer.

Note: Playback prioritises external SD card contents — remove the external SD card first to view internal memory. Do NOT remove the SD card or unplug the USB while files are transferring, as this may cause file corruption or loss.

Cleaning, Maintenance & Storage

Any repair or maintenance work not described in these instructions should be carried out by our Service Centre. Only use original replacement parts.

WARNING — Electric shock! Never spray the device with water. **NOTICE** — Risk of damage: chemical substances may attack the plastic parts. Do not use any cleaning agents or solvents.

- Always disconnect the device from the power supply before cleaning.
- Always keep the device in a clean operating condition.
- Use a dry, lint-free cloth for general cleaning; if necessary, wipe the outer cover with a damp cloth.
- Use a high-quality lens cleaner to remove stains or dust from the visual camera (10), thermal sensor (11) and LCD display (1). Aggressive cleaning agents can cause the device to malfunction.

18 Specifications

Thermal Imaging	Thermal sensor resolution	32×32 pixels
	Measuring range	−10°C to 1000°C
	Basic accuracy	±3% or ±3°C (tested at 25°C, whichever is greater)
	Frame rate	9 Hz
	Thermal sensitivity	254 mK
	Field of view	33°×33°
	Emissivity (adjustable)	0.01–1.0
Visible Light	Photo / Video Resolution	640×480 pixels
	Colour palettes	RainBow, IronRed, WhiteHeat, BlackHeat
Display & Memory	LCD size	2.8" · 240×320
	Storage	1.0 GB internal · Micro-SD Expansion (FAT32) 128 GB supported
General	Power supply	4×AA 1.5 V alkaline batteries
	Interface	USB Type-C (data transfer)
	Operating temperature	0–45°C
	Storage temperature	0–45°C
	Storage formats	JPG (photo) · MP4 (video)

FAQ

What is thermal camera emissivity?

Adjusting the emissivity setting to match the object's surface can make a significant difference, especially in precision measurements. See the reference table on page 8.

What is Thermal Fusion?

Thermal Fusion overlays the thermal image onto the visible-light image so you can see both types of information at once in real time, making it easier to identify exactly where a hot or cold spot is located.

Why do my photos and videos not appear on the computer?

The camera prioritises the external SD card. Remove the external SD card first to view the internal memory. Video and images can be transferred directly to a computer via the included USB Type-C cable.

The device does not power on.

Check that four fresh AA batteries are installed with the correct polarity and that the compartment cover is closed securely. Replace all four batteries together.

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 MON-FRI 9AM – 5PM AEST. If you would like to download a digital copy of this manual, or other Aerpro manuals/software, please visit the <http://aerpro.com> website.

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