Hand-Held Thermal Imager

User Manual

Your excellent helper in cable test!

ORIGINAL AUTHENTIC
*Patented products,
Counterfeiting not allowed*

VER : V1

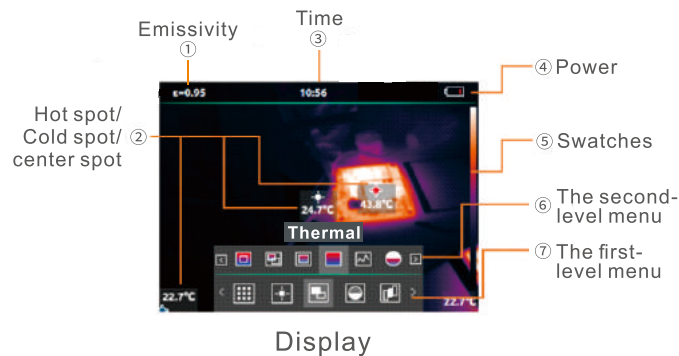⚠ Please read the manual carefully before operating this unit.

✪ The device is powered by lithium battery,please fully charge it when using it for the first time.

✪ Forbidden to be used in the place with dusty, humid and high temperature.

✪ Please use a charger that meets the specifications, otherwise the device may be damaged.

✪ Please do not disassemble the device. Device's repairing and maintenance should under the guidance of professionals.

✪ Please note device with automatic shutdown features, please set the automatic shutdown time according to your need.

✪ Do not operate the communication line during a lightning storm. Please pay attention to lightning strike and your safety.

✪ The device has auto-off function,users can set the auto-off time by needs.

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Thermal

Display

2.ON/OFF

2.1 In the shutdown state, press " ⏎ " button for 1s until "NOYAFA" appears and release to compete the start up.

2.2 In the power on state, press " ⏎ " button for 3s until "NOYAFA" appears and shutdown the device.

2.3 If there is an abnormality when using, press " ⏎ " button for 8s to forced shutdown.

3.Instant measurement

3.1 Turn on the device,point the lens at the testing object,the display shows the infrared image of the testing object.(Show as bellow image)

3.2 Press "UP" or "Down" Button to switch the display image modes:Outline fusion,Overlay fusion,Picture in picture,Thermal,Visible.

3.3 Press "Left" or "Right" button to switch the color palettes: Iron,White hot, Black hot,Rainbow,Hottest,High contrast,Green hot,Lava.
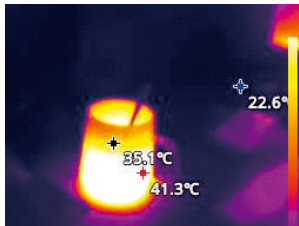
3.4 If the image don't show the temperature,press " OK " button,and choose "measurement" icon, press "right" & "left" button to choose "Center spot", "Hot spot", "Cold spot" to show the temperature.

4.Photography

4.1 Turn on the device.
4.2 Point the lens at the testing object.
4.3 Press the "Trigger" button to take photograph in infrared& visible light image.
4.4 Press "Trigger" button again or press " OK " button to save the photograph; Press "Return" button to delete the photograph.

5.Video

5.1 Turn on the device.
5.2 Point the lens at the testing object.
5.3 Long press the "Trigger" button to record a video.
5.4 Press "Trigger" button again to save the video record to the album.

Operate & Setting

1.Main menu

1.1First-level menu

In power on state,press "OK/Home" button to display the first-level menu and top status bar.

Press "left" / "right" button to choose the menu.

Press "Return" button to exit.

NO.	Function	Icon	Description
1	Settings		Setting function
2	Album		Check photography & video
3	Measurement		Selection for temperature,such as hot spot, cold spot etc.
4	Image mode		Selection for display image mode,such as overlay fusion,picture in picture etc.
5	Color plate		Selction for the color plate,such as rainbow, iron,high contrast etc.

1.2 Second-level menu

In the first-level menu state, press "OK/Home" button to select the icons and enter the second-level menu.

First-level menu
Second-level menu
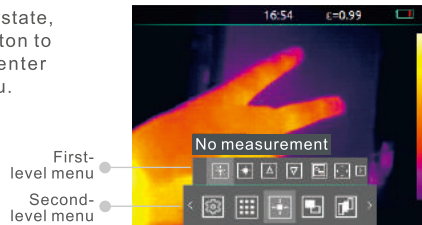
1.2.1 Measurement menu

Measurement

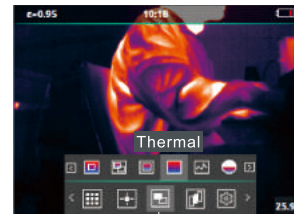| NO.	Function	Icon	Description
1	No measurement		Cancel all measurement settings in this menu
2	Center spot		Measuring the center temperature
3	Hot spot		Tracing and measuring the highest temperature
4	Cold spot		Tracing and measuring the coldest temperature
5	Zone		Select some areas for temperature measurement
6	Edit zone		Edit measuring area

1.2.2 Image mode menu

Image mode

NO.	Function	Icon	Description
1	Outline fusion		Fusion of edge lines observed by visible light and infrared thermal imaging
2	Overlay fusion		Infrared thermal imaging and visible light overlay display
3	Picture in picture		Infrared thermal imaging as a picture-in-picture display in the center of the visible light
4	Thermal		Only display thermal image
5	Visible		Only display visible light image
6	Fusion ADJ		Only adjust blending for overlay blending
7	Offset ADJ		The fusion can be adjusted when the fusion deviates

1.2.3 Color palettes menu

Palettes

NO.	Function	Icon
1	Iron	
2	White hot	
3	Black hot	
4	Rainbow	
5	Hottest	
6	High contrast	
7	Green hot	
8	Lava	

1.2.4 Settings interface as bellow:

No.	Function	Description
1	Language	中文（简体）, 中文（繁体）, English,Français,Deutsch, Españoll,Nederlands,日本語,한국인,العربية
2	Emissivity	Matt,Semi-matt,Glossy,Semi-glossy,Edit
3	Unit	Celsius ,Fahrenheit,Kelvin
4	Alarm	Alarm setting is to set alarm the temperature above or below the threshold value on the screen
5	LED	ON/OFF
6	More	Other settings(Storage,Date,Auto Power off, Temperature Bar,Brightness)

1.2.5 Upgrade

Connect the device to the computer with a USB cable, copy the upgrade package file into the root directory of the thermal imager, disconnect the USB connection, then click Check Upgrade, wait for the prompt to complete the upgrade, and ensure that the thermal imager has enough power during the upgrade process.
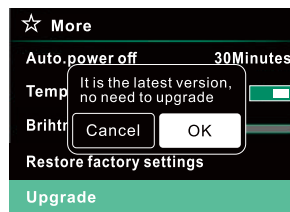
2.Charging & export data

2.1 Charging

Use the Type-C charging interface to charge, it is recommended to use a 5V 1A or 5V 2A charger.

Battery power display   Charging status power display   In the shutdown state, always on to display charging status.

2.2 Export data

Connect the computer with a USB Type-C cable, the thermal imager will generate a Udisk drive, and you can copy photos and videos to the computer through Windows.

Product Maintenance

1.Battery service and replacement

If the battery cannot be charged and needs to be replaced, please contact your local dealer for return to the factory for repair and replacement.

2.Calibration

The thermal imager has been calibrated before leaving the factory. If you need to calibrate, please contact your local dealer.

3.Clean

Wipe the case with a damp cloth when necessary, please use high-quality lens cleaning supplies to wipe off dust or stains on the instrument lens and display window, do not use abrasives or solvents to clean the case, lens or display window.

Technical Indexes

Specification		
Infrared thermal	Resolution	256x192
	Infrared spectral bandwidth	8~14um
	Frame rate	25Hz
	NETD	70mK@25℃
	HFOV	55.6°
	Lens	Athermalized Fixed Focus Lens
	Temperature measurement range	Low temperature:-20~150℃,high temperature:120~400℃
	Measurement accuracy	+/-2℃ or +/-2% of reading
	Temperature measurement	Iron Red,Rainbow,Red hot,Black hot,white hot, High contrast,green hot,lava pattern
	Color palettes	Support the highest point, the lowest point, the centerpoint temperature measurement in the whole screenand the regional temperature measurement
Visible light	Resolution	720P
	Visible field angle	83°x55°
Image disply	Display size	3.5 inches
	Image mode	Overlay fusion, Outline fusion,Picture-in-Picture,Thermal,visible
Others	Lanuage	中文(简体),中文(繁体),English,Français,Deutsch, Españoll,Nederlands,日本語,한국인,العربية
	Port	USB Type-C(support to charge and export data)
	Battery	2600mAh lithium battery
	Working time	4 hours (full power)
	Working temperature	-10℃~+60℃
	Storage temperature	-40℃~+85℃
	Product size	230mmx100mmx90mm
Storage	Capacity	8G build-in memory
	Image format	JPG
	Video format	Mp4

Common Material Emissivity

Material	Emissivity	Material	Emissivity
Asphalt	0.90-0.98	Cloth (black)	0.98
Concrete	0.94	Skin (human body)	0.98
Cement	0.96	Leather	0.75-0.80
Sand	0.9	Charcoal (powder)	0.96
Earth	0.92-0.96	Paint	0.80-0.95
Water	0.92-0.96	Lacquer (matte)	0.97
Ice	0.96-0.98	Rubber (black)	0.94
Snow	0.83	Plastic	0.85-0.95
Glass	0.90-0.95	Wood	0.9
Pottery	0.90-0.94	Paper	0.70-0.94
Marble	0.94	Chromium oxide	0.81
Plaster	0.80-0.90	Copper oxide	0.78
Stucco	0.89-0.91	Iron oxide	0.78-0.82
Brick	0.93-0.96	Textile	0.9

Packing List

Carry bag	1pc	Manual	1pc
Hand-held thermal imager	1pc	Color box	1pc
Type-C USB cable	1pc	Battery-Note card	1pc

设 计	品 名		样 式	印刷要求
CZG	NF-526E说明书骑马订英文-V1 20230731		骑马订	彩色
日 期	品 号		页 码	
2023.07.31			16P	
样 品	尺 寸		材 质	
	210×145mm		128g铜版纸	
变更记录				