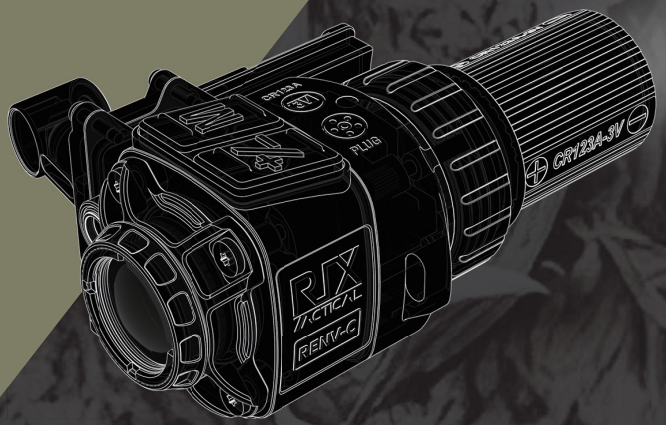
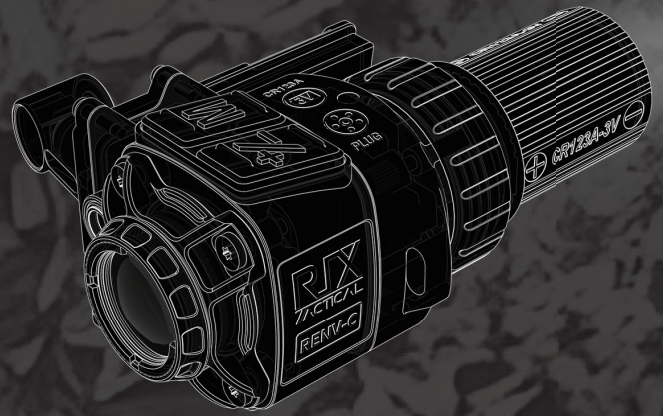


RENV-C



RTX
TACTICAL

TABLE OF CONTENTS

01 IMPORTANT SAFETY INFORMATION

Environmental influences

WARNING! Never point the lens of the device directly at intense heat sources such as the sun or laser equipment.

Risk of swallowing

Caution: Do not place this device in the hands of children. Incorrect handling can cause small parts to come loose which may be swallowed.

Safety instructions for use

- Handle the device with care: rough handling may damage the internal battery.
- Do not expose the device to fire or high temperatures.
- The battery capacity decreases when operated in a cold ambient temperature. This is not a fault and occurs for technical reasons.
- The recommended temperature for using this product is from-40℃ (-40°F) to +60°C (140°F) . Otherwise, it will affect the service life of the product.
- Always store the device in a dry, well-ventilated space.
- If the device has been damaged or the battery is defective, send the device to our after-sales service for repair.

01 IMPORTANT SAFETY INFORMATION

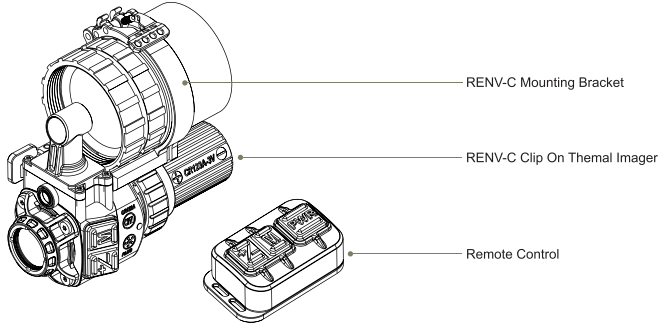
Safety instructions for the power supply unit

- Check the power supply unit for visible damage before use.
- Do not use any defective parts. Defective components must be replaced.
- Do not use the power supply unit in wet or humid environments.

02 SUMMARY

RENV-C is a new generation of clip-on thermal imager, based on advanced LWIR technology. Whether it's at night or in extreme environments, it provides a maximum 87% infrared imaging and information display field of view, ensuring the user's target search and situation awareness capabilities.

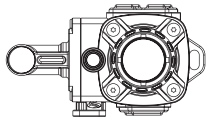
The device utilizes optical collimation superimposition technology, eliminating the need for optical calibration during use. After installation, it can directly fuse information with the image intensifier night vision device, enhancing the capabilities of the existing equipment.



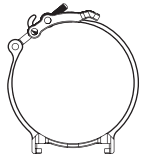
02 SUMMARY

Detector Specifications:	Power Supply:
Detector: 640×512-12um	Power: 1×CR123A Battery (Optional Battery Pack)
Optics Specifications:	Battery Life(22°C): 3 Hours (1×CR123A),10 hours (Battery Pack)
Aperture: F / 1.0	**Physical Specifications**
Magnification : 1×	Compatible:PVS-14 (RNVG, DTNVS, 1431),L3Harris BNVD (PVS-31A, GPNVG)
FOV(H x V),: 35°×30°	Minimum Fusion Distance:10m
Recognition Distance: 275m (Target size: 1.7m×0.5m, P(n)=99%)	Operating Temperature:-40℃ (-40°F) to + 60°C (140°F)
Image Mode And Functions:	Weight:77g / 2.65 oz(w/ Battery),62g / 2.12 oz(w/o Battery)
Image Modes: Highlight / Outline (Adjustable threshold Adjustable breathing)	Dimension:86(L)×65(W)×40(H)mm,3.4"(L) x 2.6"(W) x 1.6"(H)
Automatic Control: ABC , Automatic Shutdown , Auto Standby	Waterproof:1.5m for 0.5 Hour
Bluetooth Remote Control: 2.4G	
Compass: Electronic Compass (degree)	

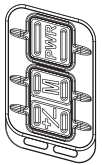
03 PACKING LIST



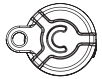
RENV-C Themal Imager



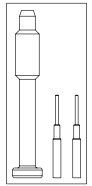
NVD Mounting Bracket



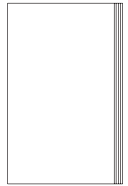
Remote Control



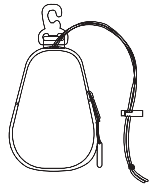
Lens cover



Screwdriver

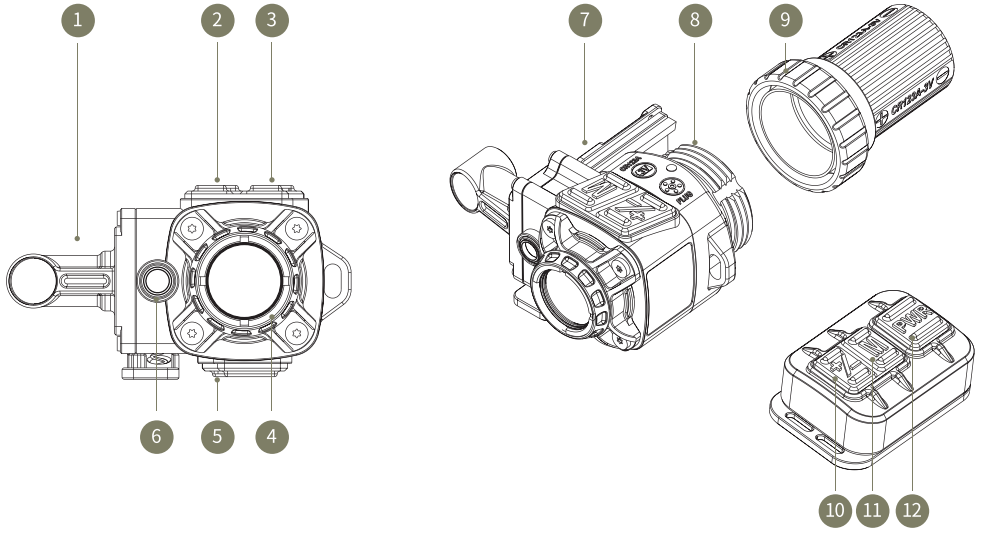


Quick Start Guide
Product manual



Pouch

04 PRODUCT APPEARANCE



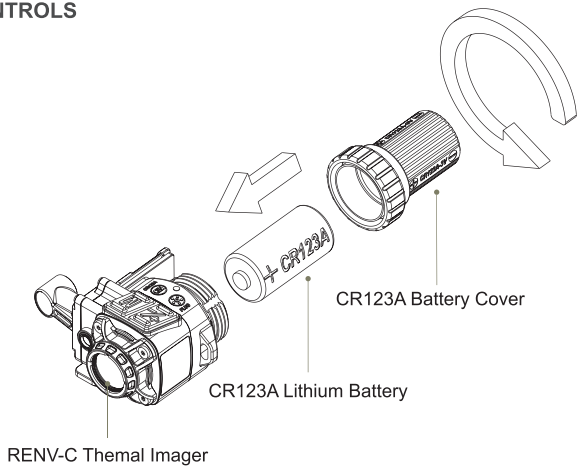
04 PRODUCT APPEARANCE

NOTE

All images used in this instruction manual are for illustrative purpose only.

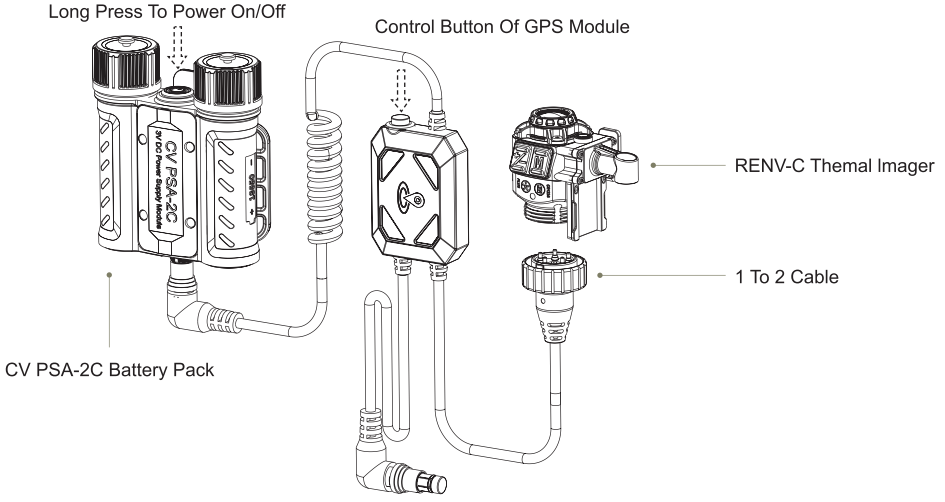
1	Eyepiece	7	Mounting bracket interface
2	Button (M)	8	Battery interface
3	Button (±)	9	CR123A battery cover
4	Objective lens	10	Remote control button (±)
5	Button (PWR)	11	Remote control button (M)
6	Sensor Window	12	Remote control button (PWR)

05 INSTALLATION AND CONTROLS

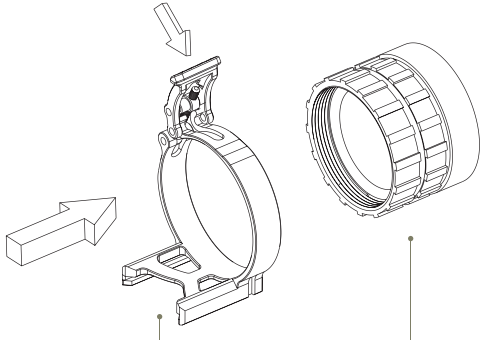


As shown in Figure,install CR123A battery (3V) into the device then rotate and tighten the battery cover.
Attention: Incorrect installation method may cause damage to the equipment.

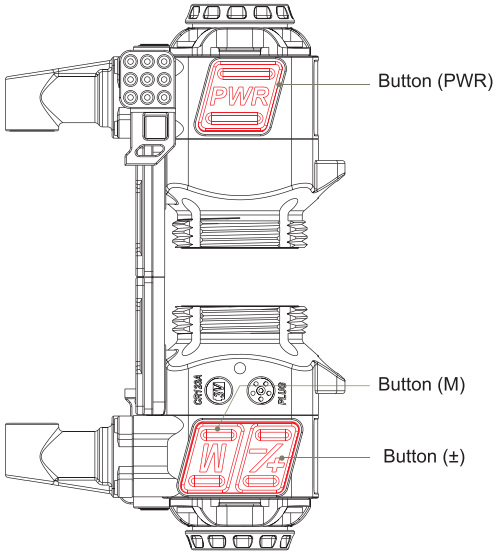
05 INSTALLATION AND CONTROLS



As shown in Figure,install the battery pack and cables.

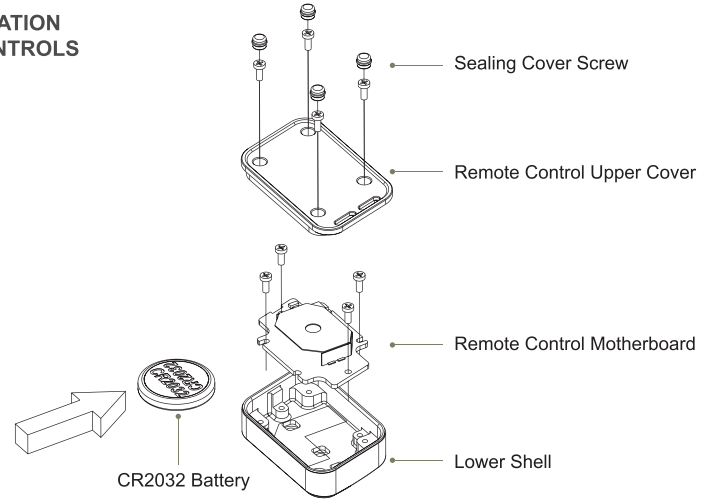


As shown in Figure,insert the mounting bracket onto the Objective Lens, rotate and adjust the tightness of the buckle, then press the buckle to complete the installation.



●Please operate the device as shown in the figure.

Button	Current Status	Short Press	Long Press
	Power off	--	Power on
	Home screen	Shutter correction (Custom Button)	Power off
	Menu interface		
	Home screen	Image modes(Highlight / Outline)	Enter menu
	Menu interface	Scroll down options	Exit menu
	Home screen	Quick adjustment	Adjust switching (Brightness, threshold, frequency)
	Menu interface	Adjust parameter	--



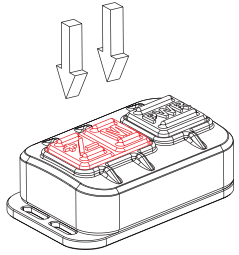
As shown in Figure,remove the 4x Sealing Cover, 4x Screw, and Upper Cover in sequence, remove the motherboard, and then install the CR2032 battery,and install them back in order.

05 INSTALLATION AND CONTROLS

Click the PWR key to start when in use.

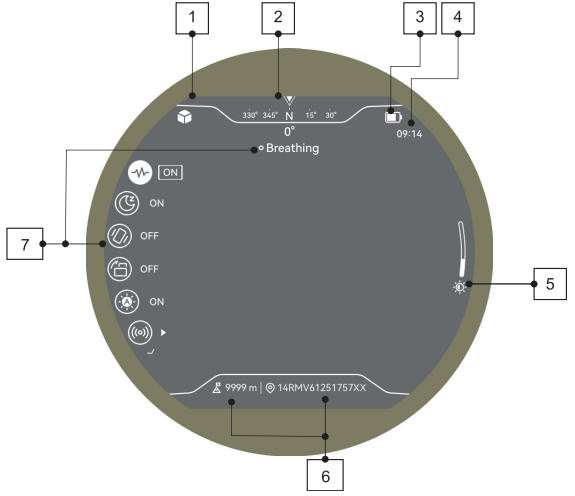
●The remote control has completed function pairing before leaving the factory.

●If there is no response after installing the battery, please turn on the host and remote control, and follow the following steps to pair the remote control buttons:



1. Click the PWR button to start (flashing red light).
2. Press and hold the button (M) and the button (±) simultaneously for 6 seconds (green and red lights flashing).
3. The green light remains on, indicating that the remote control has paired with the nearest host.

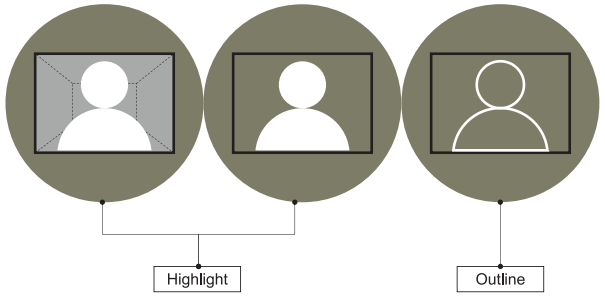
06 STATUS BAR



The status bars at the top, sides, and bottom of the screen show information on the operating status of the RENV-C.

06 STATUS BAR

1.Image Mode : Display the current image mode (highlight, outline).
Highlight: The target is displayed in full infrared, the threshold can be adjusted by100%-10%, and the image will be switched from thermal image to highlight.
Outline: The target is displayed in outline, the threshold can be adjusted by 100%-10%, and the image will change the target details.
(Please adjust the threshold according to the actual use environment to achieve the best use effect)



06 STATUS BAR

2.Compass: Display current orientation.
3.Battery: Display current power.
4.Time
5.Quick Adjustment: Adjust parameters for brightness, frequency, and threshold (100% -10%)
Brightness Adjust the thermal image brightness.
Frequency When the Breathing mode is started, breathing speed can be adjusted through options.
Threshold Adjust the threshold function.
6.GNSS: Display current location information.

7.Menu: Adjust menu functions.

(Long Press Button (M) to enter the menu, then short press Button (M) to wrap lines)

Breathing	Turn the breathing function on/off After the function is turned on, the highlight and contour modes will be in the breathing display state, and the speed can be adjusted through frequency adjustment on the main interface
Dormancy	Turn the dormancy function on/off When the Dormancy function is activated, the infrared image will stop outputting and only provide sensor information such as a compass for display
Auto Standby	Turn the Auto Standby function on/off When the function is activated, the device will enter sleep mode if there is no movement for 1 minute, and automatically shut down if there is no movement for 10 minutes
Filp Up And Shut Down	Turn the function on/off When the device detects an upward flip, the device will enter sleep mode; the device will automatically shut down after 10 minutes of upward flip
Auto Brightness	Turn the Auto Brightness function on/off Under this function, the screen brightness will be automatically controlled according to the set value, and it also has a manual adjustment function

06 STATUS BAR

Sensor	Compass	Set the status (including Standard, NO., AC, OFF) Standard: Full display status NO.: Simplified display AC: Compass calibration OFF: Turn off the compass
	Bluetooth	Turn Bluetooth function on/off
	GNSS	Switching between Lat/Lon and MGRS display states
	UTC	Set the current time zone
	EXIT	Save the current settings and exit the previous level
Set	PWR Custom	Set the status (including correction, breathing, dormancy , Auto Brightness)
	Interface	Set the status(3/3, 2/3, 1/3) The interface can be set with different brightness values to prevent burns

06 STATUS BAR

Set	Outline Thickness	Set the status(3/3，2/3，1/3) Outline thickness can be set for easy target differentiation
	Calibration	Perform imaging offset calibration
	Pal Out	Turn pal out function on/off
	Auto Correction	Turn the auto-correction function on/off
	Information	Display current product software
	Reset	Reset the settings function
	EXIT	Save the current settings and exit the previous level
EXIT	Save and exit	

07 GENERAL TROUBLE SHOOTING

The table below outlines common issues and troubleshooting steps for the RENV-C.

Issue	Possible Causes	Troubleshooting Steps
The device Is not able to turn on	1. Low power 2. The battery cover is not installed properly	1. Confirm that the voltage of the CR123A battery is greater than 2.8V 2. Check if the battery compartment cover is installed properly 3. Check if there are any debris inside the battery cover
Device has no image	1. Check if it is turned on 2. Confirm if the environment is too bright 3. Confirm whether to activate the dormancy function	1.Replace the battery with a new one and install the battery correctly according to the instructions 2.Turn on the main power supply of the battery compartment and confirm that the power supply interface is installed normally

The mounting bracket cannot be tightened	Incorrect adaptation installation not carried out	1.Please install according to the compatibility range supported by the mounting bracket (36.5mm-37.5mm) 2.Please rotate the buckle, adjust the tightness, and adapt to different diameters for installation
Target not fused	Target distance too close	Targets that are too close will not be able to be fused for display. Please use the device to observe targets 30 meters away
Remote control not working	1.Check battery status 2.Check connection status 3.Check usage distance	1.Check the status of the indicator. If there is no prompt light when pressing the power on button, please replace the battery 2.Attempt to reconnect to the host and operate again 3.Pay attention to the distance and it is recommended to use the remote control within a range of 1 meter

The image is fuzzy, not clear, not balanced, or has artifacts	Non-uniformity correction is required	Press PWR for calibration, or turn on automatic Non uniformity correction
The GUI is clear, but the image is fuzzy	There is dust on the interior or exterior optical surfaces of the lens	Wipe the external optical surface with the included microfiber lens cloth


5
YEAR
WARRANTY
Thermal & Fusion Devices