

ThOR 6 mini Series

COMPACT THERMAL RIFLESCOPE



MANUAL



ATN EUROPE LTD

Welcome to the ATN Family!

Thank you for choosing the **ThOR 6 mini Compact Thermal Riflescope!**

This manual will guide you through the setup, operation, and maintenance of your device to ensure optimal performance and long service life.

Please read this manual carefully before using the product and retain it for future reference.

REVISION HISTORY

Version	Revision Text	Released
V1.0.0	First release	November 2025

ABOUT THIS MANUAL

- This manual is provided **for reference only**. Minor differences may exist between the descriptions in this manual and the actual product.
- We are **not liable for any loss or damage** resulting from operation of the product in ways that are not in accordance with this manual.
- The manual may be updated in accordance with the latest **laws, regulations, or product revisions**. For detailed or updated information, please refer to the printed manual, QR code, or our official website.
- All **designs, features, and software** are subject to change without prior notice. Product updates may result in differences between your device and the information in this document.
- **Printing errors or discrepancies** in function descriptions, operations, or technical data may occur. In case of doubt or dispute, we reserve the right of final interpretation.
- If the PDF version of this manual cannot be opened, please **update your reader software** or try another standard PDF reader.
- All **trademarks and registered trademarks** mentioned in this manual are the property of their respective owners.
- If any issues occur while using the device, please **contact your supplier, local distributor, or customer service** for assistance.
- In the event of any uncertainty or disagreement, the manufacturer reserves the **right of final explanation**.

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1. PRODUCT INTRODUCTION

The **ThOR 6 mini Compact Thermal RifleScope** provides high-precision thermal imaging with exceptional clarity and a fast frame rate, ensuring smooth and accurate target tracking even in dynamic environments.

Designed for continuous operation under all lighting and weather conditions, the riflescope detects the thermal signatures of objects, animals, and structures in complete darkness, fog, haze, or intense light — maintaining optimal situational awareness in every scenario.

Built for demanding field applications, the **ThOR 6 mini** delivers reliable performance, advanced image processing, and consistent visual quality across a wide range of operational environments.

2. PRODUCT OVERVIEW

2.1 PACKAGE CONTENTS



ATN THOR 6 mini



2x18650 battery



USB Type-C cable



Battery charger



Lens cloth



Mount

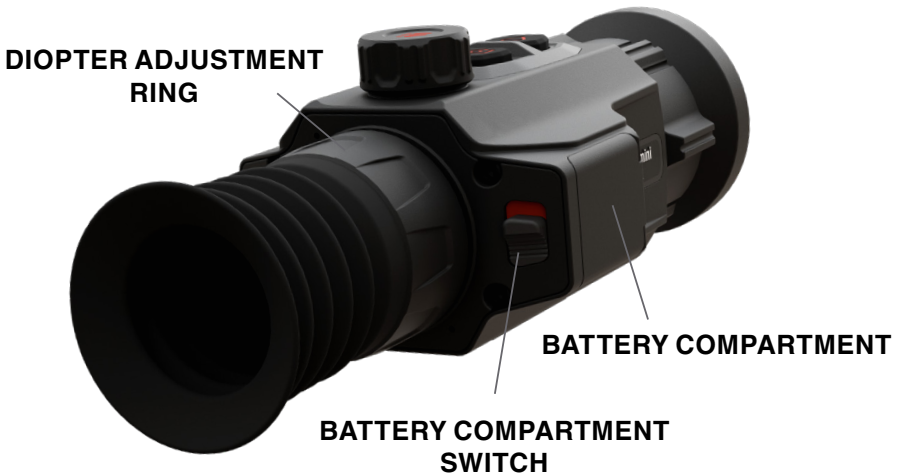


Carrying bag



**Heated target
for zeroing**

2.2 DEVICE DESCRIPTION



CAUTION!

THIS PRODUCT CONTAINS NATURAL RUBBER LATEX, WHICH MAY CAUSE ALLERGIC REACTIONS

The instructions in this manual are for informational use only and subject to change without notice. This manual is not to be construed as a commitment by ATN Corp. ATN Corp. assumes no responsibility or liability for any errors or inaccuracies that may appear in this book.

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2.3 BUTTON DESCRIPTION

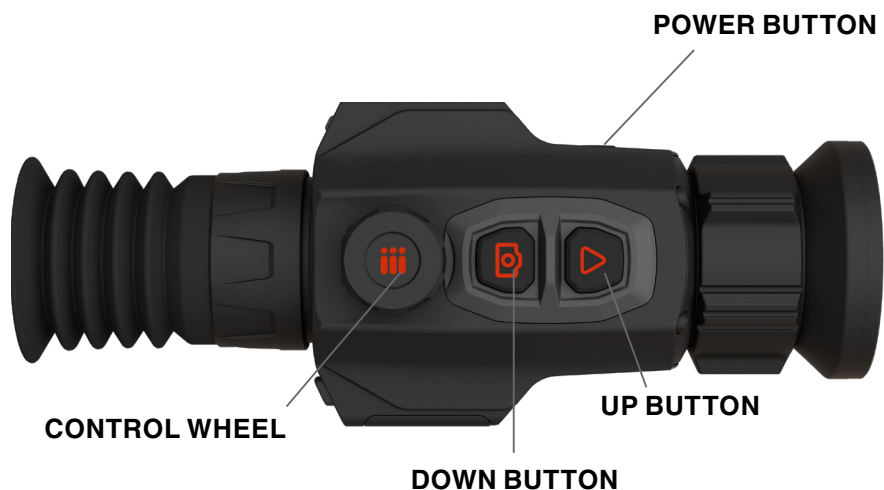


Table 2.3.1 Button description

Button	Current Status	Short Press	Long Press
POWER BUTTON	Powered off	—	Power on the device
	Home screen	NUC (Non-Uniformity Correction)	On the Home screen, a 3-2-1 countdown prompt appears: <ul style="list-style-type: none"> • If the Power button is released during the count-down, the device enters into Standby mode. • When the countdown completes, the device will power off.
	Quick/Main Menu interface	Return to home screen	
UP BUTTON	Home screen	Turn PIP on/off	Change Palette
DOWN BUTTON	Home screen	Take a photo	Start/Stop video recording
CLICK CONTROL WHEEL	Home screen	Enter the Quick Menu interface	Enter the Main Menu interface
	Quick Menu interface	Adjust parameters	Save and back
	Main Menu interface	Adjust parameters / Enter the submenu	Save and back
	Zeroing/ Pixel Correction interface	Switch the movement direction	Save and back

Button	Current Status	Short Press	Long Press
ROTATE CONTROL WHEEL	Home screen	PIP is ON: zoom PIP image PIP is OFF: zoom main image	
	Quick Menu interface	Change options and values	
	Main Menu interface	Change options and values	
	Zeroing/ Pixel Correction interface	Change reticle position	

2.4 SPECIFICATIONS

	ThOR 6 mini 215	ThOR 6 mini 225	ThOR 6 mini 325	ThOR 6 mini 335	ThOR 6 mini 635	ThOR 6 mini 650
Model	TIWST6M215	TIWST6M225	TIWST6M325	TIWST6M335	TIWST6M635	TIWST6M650
Detector Type	12 μ m VOx Uncooled Focal Plane Array					
Sensor Resolution	256x192	256x192	384x288	384x288	640x512	640x512
Refresh Rate	50 Hz					
Thermal Sensitivity (NETD)	≤ 20 mK		≤ 18 mK		≤ 18 mK	
SharpIR[®]	Yes					
Non-Uniformity Correction (NUC)	Auto / Semi Auto / Manual					
Lens System	15 mm (Ge); F/1.0	25 mm (Ge); F/1.0	25 mm (Ge); F/1.0	35 mm (Ge); F/1.0	35 mm (Ge); F/1.0	50 mm (Ge); F/1.0
Field of View (HxV)	11.7° x 8.8°	7.0° x 5.3°	10.5° x 7.9°	7.5° x 5.7°	12.5° x 10.0°	8.8° x 7.0°
Focus Mechanism	Manual, Front Lens Adjustment					
Magnification	2-16x	3.5-28x	2.5-20x	3.5-28x	2-16x	3-24x
Digital Zoom	1x, 2x, 4x, 8x					
Zoom Type	Step & Smooth Zoom					
Detection Range	1200 m	1500 m	2300 m	2710 m	3000 m	3500 m
Display Resolution	0.32" OLED, 800x600	0.32" OLED, 800x600	0.49" OLED, 1920x1080	0.49" OLED, 1920x1080	0.49" OLED, 1920x1080	0.49" OLED, 1920x1080
Picture-in-Picture (PIP)	Yes					

	ThOR 6 mini 215	ThOR 6 mini 225	ThOR 6 mini 325	ThOR 6 mini 335	ThOR 6 mini 635	ThOR 6 mini 650
Reticle Types			10 Styles			
Zeroing Freeze			Yes			
Color Palettes		White Hot, Black Hot, Iron Red, Alarm, Green Hot, Sepia				
Eye Relief			50 mm			
Diopter Range			-5 to +5 D			
Battery Type			1 x 18650 Rechargeable (Replaceable)			
Battery Life	~8 hrs	~8 hrs	~7 hrs	~7 hrs	~7 hrs	~7 hrs
Supports External Power Supply			Yes, USB Type-C (5 VDC / 2A)			
Internal Storage			64 GB			
Video / Audio Recording			Yes			
Geomagnetic + Gyroscope			Yes			
Hot Point Tracking			Yes			
Reticle Transparency Control			Yes			
Internal Gallery			Yes			
Recoil Activated Video (RAV)			Yes			
Standby / Sleep Mode			Yes			
Start Up Time			<7 seconds (instant from Standby)			
Media Output			USB Type-C			

	ThOR 6 mini 215	ThOR 6 mini 225	ThOR 6 mini 325	ThOR 6 mini 335	ThOR 6 mini 635	ThOR 6 mini 650
Built-in Wi-Fi (Hotspot)			Yes			
App (Apple Store / Google Play)			Yes (ATN Connect 6 – iOS & Android)			
Material			Magnesium Alloy			
Mounting			Picatinny Rail			
Weight	500 g	528 g	528 g	540 g	540 g	580 g
Dimensions (L x W x H)	180×65×65 mm	180×65×65 mm	180×65×65 mm	190×65×65 mm	190×65×65 mm	200×65×65 mm
Max Recoil Rating						6000 Joules / 1000g acceleration over 0.4 ms
Operating Temperature						-30°C to 55°C
Waterproof / IP Rating						IP67

Actual battery life may vary depending on the frequency of feature usage such as Wi-Fi, video recording, and other power-consuming functions.

Design and software improvements may be implemented to enhance product performance without prior notice.

The latest version of this user manual is available for download at: www.atneu.com.

2.5 MOUNTING THE RIFLESCOPE

Follow the steps below to correctly mount your **ThOR 6 mini Compact Thermal Riflescope** using the supplied **QD (Quick-Detach) mount**. The QD mount secures to the rifle rail with two bolts and locks with quick-release levers for fast, repeatable installation and removal.



Steps

1. Prepare the QD mount

- Check the provided Picatinny QD mount and the screws for mechanical damage.
- Use the two provided with the mount screws to attach the ThOR 6 mini to the QD mount. The orientation must be such that the mount is protruding forward to the objective lens of the thermal sight.
- Make sure the conic heads of the screws are lying in their beds in the mount properly and tighten the two screws.
- Open the QD levers so the mount can be placed on the Picatinny rail of the weapon platform.
- Ensure the two mounting bolts with the quick-release levers are loosely installed so that the mount can sit fully on the upper surface of the teeth of the Picatinny rail of the weapon platform.

2. Position the ThOR 6 mini

Place the ThOR 6 mini together with the assembled QD mount and move it to the desired fore/aft position on the weapon platform Picatinny rail for the desired eye relief and balance.

3. Attach assembly to the Picatinny rail

- Place the mount assembly onto the rifle rail at the chosen position.
- Close the QD quick-release levers to lock the mount onto the rail.
- Check if the lever tension needs adjustment, It should be moving freely about 60% of the travel from open to closed position. The tension needs to increase in the last 30-40% of movement to the fully closed position.
- If it is too loose or too tight - open the levers and push them in, so that their threaded nuts pop out from the opposite side of the QD mount.
- With the nuts popped out - rotate them CW or CCW to tighten or loosen them. Then release the pressure from the lever side so they can sink back into their nests.

4. Final alignment and tightening

- With the levers closed and the QD mount tightened to the rail of the weapon platform, ensure the riflescope is level.
- Confirm the QD levers are firmly closed, locked and the mount is securely fixed.

3. DEVICE OPERATION

3.1 POWER SUPPLY

The ThOR 6 mini Compact Thermal RifleScope is powered by a **single removable 18650 rechargeable battery** (included in the package).

The device can also be powered or charged directly through the **USB Type-C port**.

Note

- ***When connecting external power via Type-C, the device can operate and charge simultaneously.***
- ***Always ensure the battery is fully charged before extended use in the field.***

3.1.1 INSTALLING THE BATTERY

Open the cover of the battery compartment located on the right side of the rifleScope.

Insert the provided **18650 rechargeable battery**, ensuring it is installed according to the **polarity markings** on the device housing.

Close the battery compartment cover securely.

Tip

Use only high-quality, button-top 18650 batteries to ensure stable contact and reliable power supply.

3.1.2 CHARGING THE DEVICE

You can charge the rifleScope through the **Type-C port** using the included data cable.

The **battery level indicator** is displayed on the status bar when the device is powered on. Charge the unit promptly when the level is low to ensure proper operation.

Charging Guidelines:

- Maintain a battery temperature between **32°F** and **140°F** during charging.
- Always use the **original charging cable** supplied with the device.

Charging Steps:

- **Open** the rubber cover protecting the **Type-C port**.
- **Connect** the provided **Type-C cable** to the port and a power source.

Charging Indicator States:

- **Red and green flashing alternately** – Charging error.
- **Red light on** – Charging in progress.
- **Green light on** – Fully charged.
- **Light off** – Not connected or not charging.

Recommendation

Fully charge the device before first use and recharge every 3–6 months during long-term storage to maintain battery health.

3.2 POWER ON / OFF

Power On

Press and hold the **Power button** until the ATN logo appears on the display. After startup, remove the **lens cover** before operation.

Power Off

Press and hold the **Power button** until the countdown **3-2-1** finishes. Once the countdown completes, the riflescope will power off automatically.

Standby Mode

To enter **Standby Mode**, press and hold the **Power button**, then **release it before** the countdown **3-2-1** ends.

To wake the riflescope from **Standby Mode**, short-press the **Power button** once.

Tip

If you hold the button until the countdown finishes, the device will shut down completely.

Releasing it early activates Standby Mode, allowing faster wake-up and lower power consumption.

3.3 CONTROLS

When the riflescope is powered on, press and hold the **Control Wheel** to open the Main Menu.

The functions of the buttons are as follows:

- Rotate the Control Wheel to navigate up or down through the menu.
- Press the Control Wheel to select or confirm a setting.
- Press and hold the Control Wheel to go back if you are in a submenu. Press the Power button to exit the menu.

3.4 INITIAL SETUP

When starting the riflescope for the first time, or after performing a factory reset, you will need to set the **language**, **Wi-Fi password**, and **device time**.

Step 1: Power On

Press and hold the **Power button** to turn on the riflescope. The **Language Selection** screen will appear.

Step 2: Set Language

1. Rotate the **Control Wheel** to highlight your preferred language.
2. Press the **Control Wheel** to confirm. The **Wi-Fi Password** screen will appear.

Step 3: Set Wi-Fi Password

1. Rotate the **Control Wheel** to select a digit, or choose **Skip** to use the default password "12345678."
2. Press the **Control Wheel** to confirm the selection.
3. Rotate again to adjust the value, then press to save. Repeat steps 1–3 for each digit of the password. Once complete, select **Next** and press the Control Wheel.

Step 4: Set Device Time

1. Rotate the **Control Wheel** to select the time field (hours, minutes, seconds).
2. Press to confirm, then rotate to adjust. Repeat for each field. Once done, select **Next** and press the Control Wheel.

The main viewing screen will appear, and the riflescope is ready for use.

3.5 IMAGE ADJUSTMENT

3.5.1 DIOPTER ADJUSTMENT



To achieve a sharp and comfortable view, adjust the **diopter ring** according to your eyesight.

It is recommended to perform this adjustment before configuring other settings.

Steps:

1. Aim the riflescope at a well-lit target or a clear background.
2. Look through the eyepiece and slowly rotate the **diopter adjustment ring** clockwise or counterclockwise until the on-screen

icons and image appear sharp and clear.

3.5.2 FOCUS ADJUSTMENT



Manually rotate the **Focus adjustment ring** to achieve a clear image of the target.

Steps:

1. Aim the riflescope at your target.
2. Rotate the **Focus adjustment ring** clockwise or counterclockwise until the image becomes crisp and well-defined.

3.5.3 STATUS BAR DISPLAY



The **Status Bar** provides real-time information such as battery level, zoom, and connection status.





To enable or disable the status bar:




1. Press and hold the **Control Wheel** to open the **Main Menu**.
2. Rotate the Control Wheel to navigate to **Settings** → **Status Bar**.
3. Press the **Control Wheel** to toggle the Status Bar **On** or **Off**.
4. The **status bar** will now appear (or disappear) on the display.

Tip

Keeping the status bar enabled ensures you can monitor key system parameters during operation.

Table 3.5.3 Description of status bar

Icon	Name	Description
	Record Audio	<ul style="list-style-type: none"> • The microphone is active — videos will be recorded with sound. • The microphone is turned off — videos will be recorded without sound.
	Forest Mode	Optimizes the thermal image for environments with dense foliage, enhancing object visibility and fine detail in areas with heavy vegetation.
	RAV	<ul style="list-style-type: none"> • When RAV is enabled, the riflescope automatically starts video recording once the impact sensor detects a shot. • When RAV is disabled, the riflescope will not start recording automatically.
	Digital Zoom	Supports multiple levels of digital zoom. The available zoom magnification may vary depending on the model.

Icon	Name	Description
	Wi-Fi	<ul style="list-style-type: none"> • The Wi-Fi module is active — the device can connect to a smartphone or other devices. • Wi-Fi is turned off — wireless connection is unavailable.
		
	Battery level	Displays the current battery charge level in real time.

3.5.4 ADJUSTING BRIGHTNESS

Adjusts the overall display brightness. Increasing the level makes the image appear brighter.

To adjust brightness:

1. Press the **Control Wheel** to open the **Quick Menu**.
2. Rotate the **Control Wheel** to select **Brightness**.
3. Press the **Control Wheel** to confirm.
4. Rotate the **Control Wheel** to increase or decrease brightness.

Tip

Higher brightness levels improve visibility in daylight, while lower levels are recommended for night operations.

3.5.5 ADJUSTING SHARPNESS

Controls the clarity of object edges in the image. Higher sharpness levels make contours appear more defined.

To adjust sharpness:

1. Press the **Control Wheel** to open the **Quick Menu**.
2. Rotate the **Control Wheel** to select **Sharpness**.
3. Press the **Control Wheel** to confirm.
4. Rotate the **Control Wheel** to increase or decrease sharpness.

Tip

A moderate sharpness level provides a natural and balanced image.

3.6 VIDEOS RECORDING AND CAPTURING IMAGES

3.6.1 RECORDING VIDEOS

To manually record a video, follow these steps:

1. On the **viewing screen**, **press and hold the Down button for 3 seconds** to start recording.
 - The **recording icon** will flash on the screen.
 - The **recording timer** will appear, showing the elapsed time.
2. To **stop recording**, **press and hold the Down button** again for **3 seconds**.
 - The recording icon will disappear.
 - The video camera icon with a check mark will display briefly on screen.

Tip

Make sure you have enough storage space before recording long videos.

3.6.2 CAPTURING IMAGES

To take a still image:

1. Press the **Down button** once.
2. When the image is successfully saved, a **camera icon** will appear briefly on the screen.

Note

Images are automatically saved in the Gallery and can be viewed or exported later through the Type-C connection.

4. CONFIGURING THE RIFLESCOPE

4.1 QUICK MENU



The **Quick Menu** provides fast access to the most commonly used image settings, allowing you to adjust the display without entering the full system menu.

You can quickly modify **Brightness**, **Sharpness**, **SharpIR**, **Forest Mode**, **Reticle Type**, **Reticle Color**, **PIP**.

To access and use the Quick Menu:




1. Press the **Control Wheel** to open the **Quick Menu**.
2. Rotate the **Control Wheel** to highlight the parameter you wish to adjust.
3. Press the **Control Wheel** to confirm and modify the selected parameter.
4. Rotate the **Control Wheel** again to fine-tune the value.
5. Press and hold the **Control Wheel** to **exit and save** the configuration.

Tip

The Quick Menu is designed for rapid adjustments in the field—ideal when lighting or environmental conditions change suddenly.

Table 4.1 Quick Menu

Icon	Name	Description
	Brightness	Adjusts the overall screen brightness. Increasing brightness helps in daylight, while lowering it improves visibility at night.
	Sharpness	Controls the clarity of image edges. Higher sharpness enhances detail, while lower settings make the image smoother.
	SharpIR	Powered by ATN's proprietary SharpIR® technology , the device uses advanced AI-driven algorithms to enhance image sharpness and clarity in real time. This intelligent processing dynamically refines edge definition and contrast, making it easier to distinguish heat signatures in cluttered or low-visibility environments.
	Forest Mode	Optimizes the thermal image for environments with dense foliage, enhancing object visibility and fine detail in areas with heavy vegetation.

Icon	Name	Description
	Reticle Type	Allows you to select the reticle style that best suits your shooting or observation needs.
	Reticle Color	Changes the color of the reticle for better visibility against different backgrounds.
	PIP (Picture-in-Picture)	Enables a small magnified view of the central area on the screen, helping with precise aiming while maintaining full field awareness.

4.2 MAIN MENU

The **Main Menu** provides access to all advanced configuration options of the riflescope.

Press and hold the **Control Wheel** to open the Main Menu. Rotate the Control Wheel to navigate through the categories and press it to enter a selected item.

MAIN MENU STRUCTURE





1. Forest Mode
2. Thermal
3. Reticles
4. Zeroing Profile
5. Zeroing Setup
6. Ranging
7. Gallery
8. RAV
9. Functionalities
10. Settings



4.2.1 THERMAL

This section allows you to adjust key image parameters to achieve the best thermal performance under different environmental conditions.

Use it to fine-tune brightness, contrast, sharpness, and color palettes for optimal image clarity, detail, and target detection.

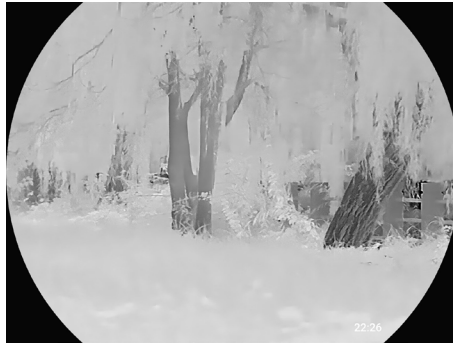
Table 4.2.1 Thermal menu

Icon	Name	Description
	Forest Mode	Optimizes the thermal image for environments with dense foliage, enhancing object visibility and fine detail in areas with heavy vegetation.
	Brightness	Adjusts the overall screen brightness. Increasing brightness helps in daylight, while lowering it improves visibility at night.
	Contrast	Adjusts the difference between warm and cold areas to enhance image depth and object separation.
	Sharpness	Controls the clarity of image edges. Higher sharpness enhances detail, while lower settings make the image smoother.

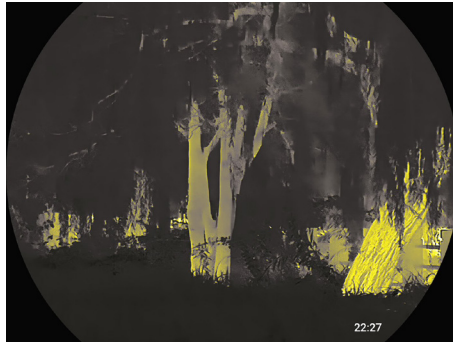
Icon	Name	Description
	SharpIR	Powered by ATN's proprietary SharpIR® technology , the device uses advanced AI-driven algorithms to enhance image sharpness and clarity in real time. This intelligent processing dynamically refines edge definition and contrast, making it easier to distinguish heat signatures in cluttered or low-visibility environments.
	Palette	Selects the thermal color scheme used to represent temperature variations on the display.

Available Color Palettes:

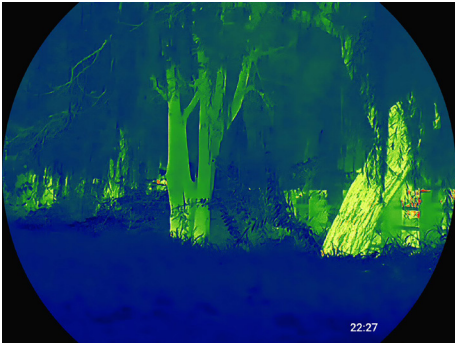
White Hot: Hotter objects appear white. The higher the temperature, the brighter the image.



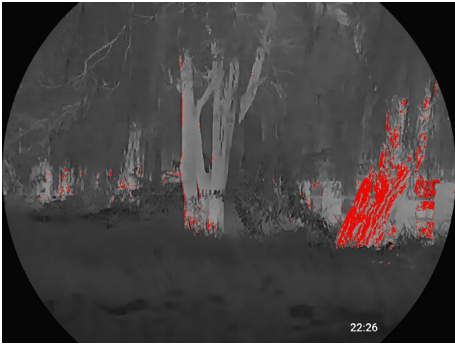
Sepia: Hotter objects appear amber. Higher temperatures produce brighter tones.



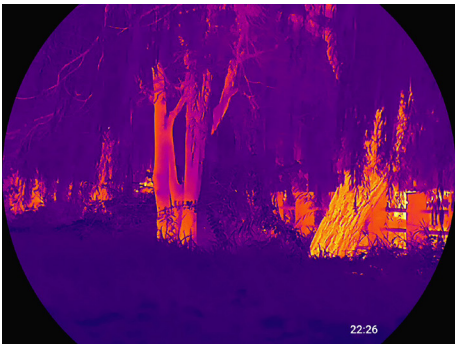
Green Hot: Hotter objects appear green. Brighter green indicates higher heat.



Alarm: Hot objects appear red for quick visual detection.



Iron Red: Hotter objects appear in red or orange tones.



Black Hot: Hotter objects appear darker; colder areas are lighter.



Tip

Choose the palette that provides the best contrast for your environment or preference.

4.2.2 RETICLES

This section allows you to customize the aiming reticle according to your shooting preferences and environmental conditions.

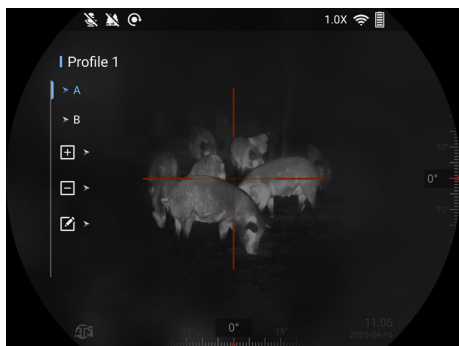
You can adjust the reticle type, color, and transparency to achieve the best visibility and precision under different lighting and background conditions.



Table 4.2.2 Reticle menu

Icon	Name	Description
	Reticle Type	Choose from multiple reticle designs to match your shooting style and preferences. Different types provide better visibility and alignment for various distances and conditions.
	Reticle Color	Adjust the reticle color to ensure optimal contrast and visibility against different backgrounds and lighting environments. This helps maintain accuracy in diverse field conditions.
	Transparency	Control the reticle's opacity to achieve a comfortable balance between visibility and target clarity, ensuring that the reticle remains clear without obscuring the target image.

4.2.3 ZEROING PROFILE

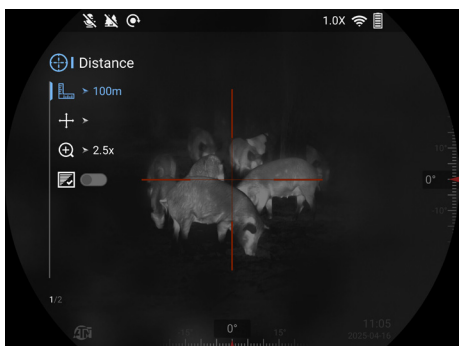


This menu displays all existing zeroing profiles and allows basic management functions. You can **create** new profiles, **rename** them, or **delete** unnecessary ones.

Table 4.2.3 Zeroing Profile menu

Name	Description
List of Profiles	Displays the list of available zeroing profiles stored in the device. Each profile can contain a unique zeroing configuration, allowing you to maintain different setups for various rifles.
Add Profile	Create a new zeroing profile. This allows you to store additional zeroing configurations without overwriting existing ones. Each newly added profile can later be customized and renamed for easier recognition.
Delete Profile	Delete the selected zeroing profile from the list. Use this function to remove outdated or unnecessary profiles and keep your list organized. A confirmation prompt will appear before deletion to prevent accidental data loss.
Rename Profile	Rename the selected profile to a custom label that reflects its use — for example, the rifle model or specific zeroing distance. Custom names make it easier to identify and switch between profiles in the field.

4.2.4 ZEROING SETUP






The Zeroing Setup section allows you to precisely align the riflescope's reticle with the point of impact for each saved profile.

From this menu, you can select the shooting distance, fine-tune reticle position, adjust zoom, and use the freeze-frame function for accurate one-shot zeroing.

Table 4.2.4 Zeroing Setup menu

Icon	Name	Description
	Distance	Select the target distance at which you are performing zeroing. Use the Control Wheel to choose a distance value according to your shooting setup.

Icon	Name	Description
	Position Adjustment	Adjust the position of the reticle along the X (horizontal) and Y (vertical) axes to align the point of aim with the actual point of impact. After firing a shot, rotate the Control Wheel to move the reticle to the bullet impact position. Press and hold the Control Wheel to confirm and save the adjustment.
	Zoom	Change the magnification level during the zeroing process for greater precision when aligning the reticle with the impact point. Rotate the Control Wheel to zoom in for fine adjustments or zoom out for a wider field of view.
	Freeze Frame	Capture a still frame of the current image to simplify zeroing. After firing, activate Freeze Frame to lock the display image, then adjust the reticle without worrying about target movement or heat dissipation.

4.2.5 OPTICAL RANGING MODE

This feature allows manual range estimation using the reticle's reference marks or on-screen scale.

The optical ranging mode estimates the distance to the target by adjusting two horizontal reference lines so that they align with the top and bottom of the target's silhouette.

The system then calculates and displays the approximate distance based on the selected target type and apparent size.



Steps

1. **Press and hold** the **Control Wheel** to open the **Main Menu**.
2. **Rotate** the Control Wheel to highlight **Ranging** and **press** to open it.
3. **Rotate** the Control Wheel to move the blue lines until they touch the top and bottom edges of the target.

Once aligned, the system will display the estimated distance between the target and the riflescope.

4.2.6 GALLERY

All photos and videos captured on the riflescope are automatically stored in the internal memory.

You can access and review them directly from the device through the **Gallery** menu.

Steps

1. **Press and hold** the **Control Wheel** to open the **Main Menu**.
2. **Rotate** the **Control Wheel** to select **Gallery**, then press to open it.
3. **Browse and view** content:
 - **Rotate** the Control Wheel to scroll through the list of saved images and videos.
 - **Press** the Control Wheel to open and play the selected file.

Tip

Long-press the Control Wheel to exit the Gallery and return to the Main Menu.

4.2.7 RAV (RECOIL ACTIVATED VIDEO)

The **RAV** function automatically starts video recording when the riflescope detects recoil from a shot.

This ensures you never miss a key moment without needing to manually press record.

Steps

1. **Press and hold** the **Control Wheel** to open the **Main Menu**.
2. **Rotate** the Control Wheel to select **RAV**.
3. **Press** the Control Wheel to toggle the feature:
 - **On** — The riflescope will automatically record when recoil is detected.
 - **Off** — Recording will only occur manually when the user presses the record button.

Tip

Ensure the device is securely mounted to detect recoil accurately.

Note




The RAV function may not trigger with low-recoil calibers or when using suppressors.




4.2.8 FUNCTIONALITIES

The Functionalities menu provides access to additional tools and features that enhance the operation and user experience of your riflescope.

These options allow you to customize interface elements, enable useful widgets, and optimize the device for different field conditions.

Table 4.2.8 Functionalities menu

Icon	Name	Description
	Zoom Step	Defines the increment used when changing digital zoom levels. Smaller steps allow for smoother, more precise adjustments, while larger steps enable faster zoom changes.
	Compass	When the compass feature is active, the current heading is displayed at the top of the screen. Compass calibration: To begin compass calibration, rotate the riflescope along all three axes within 20 seconds, ensuring each axis completes at least one full 360° rotation. Once the rotation phase is complete, the device will display a pop-up prompting you to point the riflescope north. After aligning the device and confirming the north direction, the calibration process will finalize, and the system will return to the Main Menu.
	Burning Warning	When the system detects a potential overheating risk for the sensor, a warning message will appear on the screen and the shutter will automatically close to prevent damage. Recommendation Avoid aiming at extremely hot objects for long durations.

Icon	Name	Description
	Pitch & Roll	Displays device tilt and inclination relative to the horizon. These indicators help maintain proper leveling of the riflescope, improving long-range shot consistency. Tip Use this feature to ensure accurate zeroing and stability when shooting from uneven terrain.
	PIP	Displays a magnified section of the thermal image in a small window while keeping the full scene visible. Enhances target precision without losing situational awareness. For more details, see “4.2.8.1 PIP (Picture-in-Picture) Mode”.
	Hot Point	Highlights the hottest object detected in the field of view with a small marker. Useful for quickly locating heat sources such as game, vehicles, or human presence. Note The marker dynamically updates as the scene changes. For more details, see “4.2.8.2 Hot Point Tracking”.

4.2.8.1 PIP (PICTURE-IN-PICTURE) MODE

The **PIP (Picture-in-Picture)** mode allows you to view a magnified portion of the thermal image in a smaller window while maintaining a wide field of view on the main screen.

This helps with precise aiming or observation without losing situational awareness.

Steps:

- 1. Press and hold the Control Wheel to open the Main Menu.**
- 2. Rotate** the Control Wheel to select Functionalities -> PIP.
- 3. Press** the Control Wheel to enable or disable PIP mode.

When enabled, a zoomed-in window of the image center will appear at the **top center of the screen**.

Tip

- **Use PIP mode for accurate long-distance aiming while maintaining visibility of your surroundings.**
- **PIP settings can also be quickly accessed through the Quick Menu.**



4.2.8.2 HOT POINT TRACKING



The **Hot Point** function automatically detects and marks the hottest object in the visible area, making it easier to identify heat sources in real time.

Steps:

1. **Press** and hold the **Control Wheel** to open the **Main Menu**.
2. **Rotate** the Control Wheel to select Functionalities -> Hot Point.
3. **Press** the Control Wheel to enable or disable the function.

When enabled, a small **hot point icon** will appear on the screen, continuously tracking the area with the highest temperature.

Note













The Hot Point feature is most effective in stable environments and may fluctuate in scenes with multiple strong heat sources.

4.2.9 SETTINGS

The Settings menu allows you to configure core system parameters, manage power options, and adjust device behavior to match your personal preferences and operational needs.

Table 4.2.9 Settings menu

Icon	Name	Description
	NUC	<p>Corrects temperature drift and sensor noise to maintain image quality.</p> <ul style="list-style-type: none"> • Auto: The system performs NUC automatically when needed. • Semi-Auto: NUC can be triggered manually or occurs occasionally. • Manual: The user can initiate NUC anytime from the menu or by pressing the assigned button. <p>For more details, see “4.2.9.1 Setting NUC”.</p>
	Pixel Correction	<p>Fixes defective (stuck or dead) pixels on the thermal sensor.</p> <ul style="list-style-type: none"> • Auto: The device automatically detects and corrects bad pixels after user confirmation. • Manual: Opens the manual correction menu where you can individually mark and correct defective pixels. • Restore: Restores the default pixel map. <p>For more details, see “4.2.9.2 Setting Pixel Correction”.</p>
	Sleep Mode	<p>Sets the period of inactivity after which the riflescope enters low-power standby mode. Options: Off, 1 min, 3 mins, 5 mins, 10 mins.</p> <p>Note <i>Press any button to wake the device from sleep.</i></p>

Icon	Name	Description
	Shutdown	Specifies the duration of inactivity before the riflescope powers off automatically. Options: Off, 5 mins, 10 mins, 30 mins, 60 mins. Use this feature to conserve battery power during extended downtime.
	Logo	When enabled, the logo appears in the lower-left corner of the screen.
	Record Audio	Press the Control Wheel to enable or disable audio recording. <ul style="list-style-type: none"> • On: Videos are recorded with sound. • Off: Videos are recorded without sound.
	Status Bar	Press the Control Wheel to show or hide the status bar at the top of the screen. For more details, see “3.5.3 Status Bar Display”
	Wi-Fi	<ul style="list-style-type: none"> • Wi-Fi: Turns the wireless connection On/Off for mobile app pairing or file transfer. • Wi-Fi Band: Choose between 5 GHz (faster, shorter range) or 2.4 GHz (slower, longer range). • Wi-Fi Password: Displays the SSID and current password in an information window. For more details, see “4.2.9.3 Wi-Fi Connection Setup”
	USB Mode	<ul style="list-style-type: none"> • ON: The riflescope will function as a storage device for file transfer. • OFF: The USB port can be used only as a power supply.
	Language	Select your preferred interface language.
	Units	Switch between Metric and Imperial measurement systems.
	Time Settings	<ul style="list-style-type: none"> • Time Display: Enable or disable on-screen time display. • Time Format: Choose the preferred date/time format. • Date & Time: Manually set the current date and time using the Control Wheel to adjust each value.
	Device Info	Device Information page, displaying firmware version, serial number, and other system data.
	Restore Default	Resets all menu parameters and user configurations to their factory defaults.
	Format	Deletes all images and videos stored in the device memory.

4.2.9.1 SETTING NUC (NON-UNIFORMITY CORRECTION)

NUC (Non-Uniformity Correction), is used to optimize the thermal image by compensating for small temperature variations across the sensor. This process ensures uniformity and helps detect even subtle temperature changes more accurately.

Procedure

1. Press and hold the **Control Wheel** to open the **Main Menu**.
2. Rotate the Control Wheel to select **Settings** → **NUC**.
3. Press the Control Wheel to access the **NUC configuration screen**.

Modes

- **Auto:**

The riflescope performs automatic flat-field calibration at regular intervals. This helps maintain consistent image quality during long observation periods.

- **Semi-Auto:**

Press the **Power button** on the viewing screen to manually trigger calibration at any time. Recommended when the image appears slightly uneven or blurry.

- **Manual:**

Close the lens cap, then press the **Power button** to manually perform calibration. This is useful for precise control or when environmental conditions (e.g., rapid temperature changes) affect image stability.

Tip

Regularly performing NUC ensures the best image uniformity and helps eliminate fixed-pattern noise, especially after large temperature fluctuations.

4.2.9.2 SETTING PIXEL CORRECTION

The **Pixel Correction** function allows you to fix defective (hot, dead, or stuck) pixels on the thermal sensor to maintain a clean, high-quality image.

Procedure

1. Press and hold the **Control Wheel** to open the **Main Menu**.
2. Rotate the **Control Wheel** to select **Settings** → **Pixel Correction**.
3. Press the **Control Wheel** to open the Pixel Correction configuration screen.

Modes

- **Auto:**

The riflescope automatically detects and corrects defective pixels.

1. Select **Auto**.

2. Follow on-screen instructions to **close the lens cap**.

3. Rotate the Control Wheel to select **Confirm**, then press the Control Wheel to begin correction.

- **Manual:**

Allows you to manually locate and correct defective pixels.

1. Press the Control Wheel to select **X-axis** and **Y-axis**.

2. Rotate the Control Wheel to move the cursor over the defective pixel.

3. Double-press the Control Wheel to save the correction. The center of the cursor marks the corrected pixel.

- **Restore:**

Restores the pixel correction map to its **factory default state**.

A confirmation message appears once the reset is complete.

Tip

Run Pixel Correction if you notice fixed bright or dark points that do not move with the image — this will recalibrate your thermal sensor for optimal image quality.

4.2.9.3 WI-FI CONNECTION SETUP

After enabling Wi-Fi, the riflescope creates its own wireless hotspot, allowing you to connect a smartphone or tablet and access live view, media files, or control features through the ATN mobile app.



Connection Procedure

1. On your smartphone, open the App Store (iOS) or Google Play (Android) and search for “**ATN Connect 6**” to download and install the application.
2. Press and hold the **Control Wheel** to open the **Main Menu**.
3. Rotate the Control Wheel to select **Setting>WiFi**, then press the Control Wheel to enter.
4. Enable **Wi-Fi**. The device will broadcast its hotspot with the following credentials:
 - **Wi-Fi Name (SSID):** You can find it on the label attached to the lens cap, or by navigating to **Main Menu** → **Settings** → **Wi-Fi Password**.
 - **Password:** The password you created during the initial setup. If you skipped that step, the default password is **12345678**. (See “3.4 Initial Setup” for details.)
5. Then launch the **ATN Connect 6**, choose the device, and follow the on-screen prompts.

Note

The Wi-Fi password can also be changed directly through the ATN Connect 6 mobile app in the Settings section.

Switching Wi-Fi Band

In the **Wi-Fi Settings** menu, select **Wi-Fi Band** and rotate the **Control Wheel** to choose between:

- 2.4 GHz: Longer range, more stable connection in open areas.
- 5 GHz: Faster data transfer speed and lower latency for close-range use.

5. SYSTEM UPDATE

You can update the riflescope firmware **manually** using a USB connection.

Note

Always ensure the device battery level is above 30% before starting the update.

If the charge is below this level, the update will be blocked and a notification will appear prompting you to recharge the device.

5.1 MANUAL FIRMWARE UPDATE

Follow these steps to update the firmware manually:

1. **Download** the latest firmware file from the official ATN website.
2. **Copy** the firmware file (.bin) to the **root directory** of the riflescope’s internal storage.

3. **Disconnect** the device safely from the computer.
4. **Reboot** the device.
5. When a new firmware version is detected, a message will appear:
“*Confirm to upgrade*”
6. **Select** “Confirm” using the Control Wheel.
7. The update process will begin automatically.

Note

During Update: Do not power off or disconnect the device. The process may take several minutes.

If the battery charge is insufficient, the message will state:

“*Low battery. Please charge before updating.*”

After a successful update, the riflescope will automatically restart.

5.2 FIRMWARE UPDATE VIA MOBILE APP

When the mobile app detects a new firmware version available for your riflescope, it will display a notification on your screen.

1. **Open the app** and connect to your device via Wi-Fi.
2. When prompted, tap **Push-message** to begin the update process.
3. The firmware will download and install automatically.
4. Once the installation is complete, the riflescope will **restart** to finalize the update.

Note

Keep your phone close to the device and ensure a stable Wi-Fi connection throughout the process. Interrupting the update may cause firmware corruption or incomplete installation.

6. EXPORTING FILES

You can transfer recorded videos and captured images from the riflescope to a computer via a **USB Type-C** connection for viewing, editing, or storage.

Steps

1. Connect to a Computer

- Use a **Type-C data** cable to connect the riflescope to your computer.
- The driver will install automatically during the first connection.

Important

Connect the cable before powering on the riflescope. Avoid hot-swapping the Type-C port while the device is running.

2. Enable USB Mode

- Go to Settings > USB Mode > On.

3. Access Files on the Computer

- On your desktop, open **This PC (My Computer)** → locate and open the **riflescope drive** under **Removable Storage**.
- Browse to find your photo and video files.
- **Copy** the desired files to your computer.

4. Playback

- To view exported videos, use a compatible **media player** for optimal performance.

5. Disconnect Safely

- When finished, safely eject the drive and disconnect the Type-C cable.

Tip

Keep the device powered and stable during file transfer to avoid data corruption.

7. IMPORTANT SAFETY INFORMATION

This section provides essential information on the **safe handling and operation** of the device.

Please read this section carefully before use to **avoid personal injury, prevent equipment damage, and ensure reliable performance.**

Follow all safety instructions and warnings strictly during operation, transportation, and maintenance of the device.

Transportation Requirements

- Transport the device only within the **recommended temperature and humidity limits.**
- Avoid **drops, impacts, excessive vibration, or liquid exposure** during transport. Handle the device gently to prevent internal damage or loose cable connections.
- Always use the **original packaging** or equivalent protective materials. Transporting the device without proper packaging may result in damage.

Storage Requirements

- Store the device within the **allowed temperature and humidity range.**
- Keep it away from **humid, dusty, extremely hot or cold environments,** and areas with **strong electromagnetic radiation or unstable lighting.**
- Avoid squeezing, vibration, or mechanical shock during storage.
- Store the device in a **well-ventilated, dry area** free from electromagnetic interference.
- If storing for long periods, **fully recharge the battery every six months** to maintain performance and prevent damage.

Operation Requirements

- Prevent liquids from entering the device to avoid internal damage.
- Do not insert foreign objects into any openings — this may cause a short circuit or injury.
- Avoid high-dust or high-radiation environments.
- Never aim the lens at the **sun or intense light sources,** as this can permanently damage the sensor.
- Improper battery use or replacement may cause an **explosion hazard.**
- Use only the **provided charger** and ensure no flammable materials are within **2 meters** during charging.
- Ensure the power plug is securely connected to the socket.
- Do not connect multiple devices to one power adapter to avoid **overheating or fire hazards.**
- If **smoke, odor, or abnormal noise** occurs, immediately power off the device, unplug it, and contact customer service.
- Do not disassemble the device. Repairs must be performed by **qualified professionals** only. Unauthorized disassembly may cause water ingress or image quality degradation.
- **Operating temperature:** -22°F to +121°F; **humidity:** ≤95% RH.

Maintenance and Repair Requirements

- Prevent liquids from entering the device. If liquid intrusion occurs, **power off immediately**, disconnect all cables, and contact customer service.
- Use only **manufacturer-approved accessories**. Maintenance should be performed by qualified technicians.
- Disconnect power before cleaning to prevent electric shock.
- Clean the device using a **soft, dry cloth**. For stubborn dirt, lightly dampen the cloth with neutral detergent and wipe gently, then dry completely.
- **Do not use** alcohol, benzene, thinner, or abrasive cleaners — they can damage the coating and impair performance.
- Retain the **original packaging**. If service is required, pack the device securely in its factory packaging before shipping.

Laser Safety Requirements

Warning



The integrated laser can cause permanent eye injury.

- **Never look directly into the laser beam or through optical instruments while the laser is active.**
- **Always ensure the laser is used in compliance with local safety regulations.**

8. WARRANTY AND SUPPORT INFORMATION

5-YEAR LIMITED PRODUCT WARRANTY

This product is guaranteed to be free from manufacturing defects in material and workmanship under normal use for a period of 5 (five) years from the date of purchase. In the event a defect that is covered by the foregoing warranty occurs during the applicable period stated above, ATN, at its option, will either repair or replace the product, and such action on the part of ATN shall be the full extent of ATN's liability, and the Customer's sole and exclusive remedy. This warranty does not cover a product (a) used in other than its normal and customary manner; (b) subjected to misuse; (c) subjected to alterations, modifications or repairs by the Customer or by any party other than ATN without prior written consent of ATN; (d) special order or "close-out" merchandise or merchandise sold "as-is" by either ATN or the ATN dealer; or (e) merchandise that has been discontinued by the manufacturer and either parts or replacement units are not available due to reasons beyond the control of ATN. ATN shall not be responsible for any defects or damage that in ATN's opinion is a result from the mishandling, abuse, misuse, improper storage or improper operation, including use in conjunction with equipment which is electrically or mechanically incompatible with or of inferior quality to the product, as well as failure to maintain the environmental conditions specified by the manufacturer. This warranty is extended only to the original purchaser. Any breach of this warranty shall be waived unless the customer notifies ATN at the address noted below within the applicable warranty period.

The customer understands and agrees that except for the foregoing warranty, no other warranties written or oral, statutory, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose, shall apply to the product. All such implied warranties are hereby and expressly disclaimed.

LIMITATION OF LIABILITY

ATN will not be liable for any claims, actions, suits, proceedings, costs, expenses, damages or liabilities arising out of the use of this product. Operation and use of the product are the sole responsibility of the Customer. ATN's sole undertaking is limited to providing the products and services outlined herein in accordance with the terms and conditions of this Agreement. The provision of products sold and services performed by ATN to the Customer shall not be interpreted, construed, or regarded, either expressly or implied, as being for the benefit of or creating any obligation toward any third party of legal entity outside ATN and the Customer; ATN's obligations under this Agreement extend solely to the Customer. ATN's liability hereunder for damages, regardless of the form or action, shall not exceed the fees or other charges paid to ATN by the customer or customer's dealer. ATN shall not, in any event, be liable for special, indirect, incidental, or consequential damages, including, but not limited to, lost income, lost revenue, or lost profit, whether such damages were foreseeable or not at the time of purchase, and whether or not such damages arise out of a breach of warranty, a breach of agreement, negligence, strict liability or any other theory of liability.

PRODUCT WARRANTY REGISTRATION

In order to validate the warranty on your product, ATN must receive a completed Product Warranty Registration Card for each unit or complete warranty registration on our website at www.atneu.com. Please complete the included form and immediately mail it to our Service Center: ATN Europe LTD 1588 Sofia Bulgaria ul. "Okolovrasten pat" 456B Inter Logistic Park.


OBTAINING WARRANTY SERVICE


To obtain warranty service on your unit, End-user must notify ATN service department by calling +359 32570140 or via e-mail support@atneu.com to receive a Return Merchandise Authorization number (RMA).


The return of the device is organized by an ATN employee. A service RMA form must be printed and attached in the box. Product merchandise returns that do not have an RMA listed may be refused or a significant delay in processing may occur.

Estimated Warranty service time is 10-20 business days. End-user/customer is responsible for postage to ATN for warranty service. ATN will cover return postage/shipping to end-users/customers after warranty repair only if product is covered by aforementioned warranty. ATN will return product after warranty service by domestic UPS ground and/or domestic mail. Any other requested, required or international shipping method the postage/shipping fee will be the responsibility of the end-ser/customer.

9. EU CONFORMITY STATEMENT

 This product and - if applicable - the supplied accessories are also “CE” marked and no longer comply with the applicable harmonized European standards set out in Directive 2014/53/EU (RED), Directive 2014/30/EU (EMCD), Directive 2014 /35/EU (LVD), Directive 2011/65/EU (ROHS).

 Directive 2012/19/EU (WEEE Directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.

 Directive 2006/66/EC and its amendment 2013/56/EU (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.

Scan the QR code below to access the EU Declaration of Conformity for this product.





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