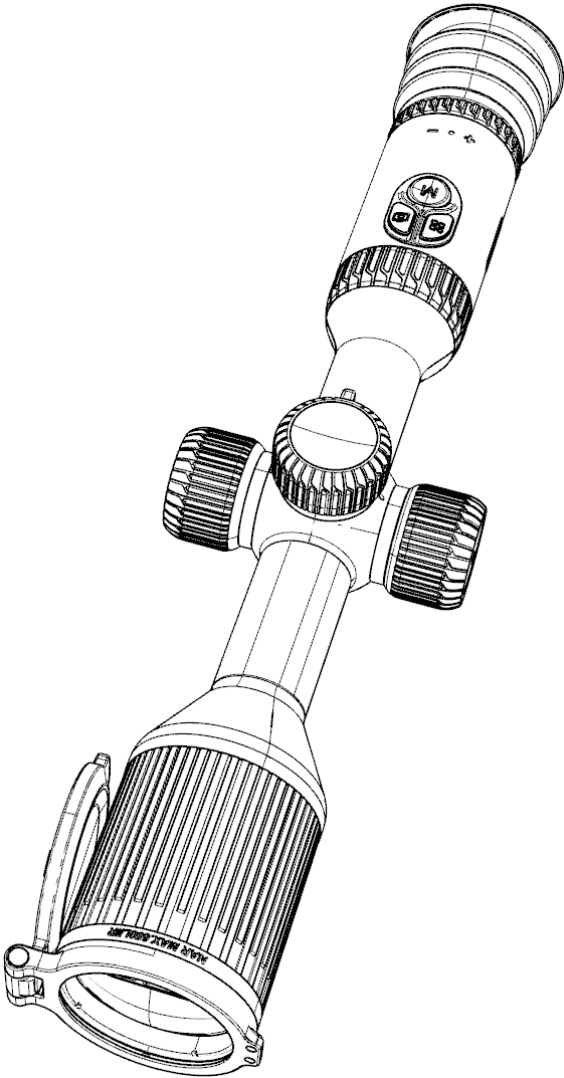


NIGHT ARROW MAX

Thermal Scope



Attention!

Export of **Night Arrow Max Series** models may have export restrictions depending on the laws in your region.

Content

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Proper usage of this device is essential for safe operation. Please read this manual carefully before use.



If the device has been in storage for an extended period, check its functionality before use.



Do not disassemble the device. Only an authorized repair center is allowed to do this.



Ensure the external optical surfaces remain clean. Avoid touching them with bare hands.



Sand and sea water can damage the optical coatings.



Never point the device directly at the sun.



Image quality may vary depending on environmental and atmospheric conditions. For instance, at sunset, temperature differences between objects can enhance contrast.



Remove batteries and store them in polyethylene bags to avoid contact with metal if the device will be stored for an extended period.



Use the protective lens cap during transportation or storage.



Condensation may fog the optical surfaces. This occurs when the device transitions between environments with differing temperatures or humidity levels. Once the temperature stabilizes, condensation will dissipate. Wipe away moisture with the towel.



Clean lenses with the Lens Cloth or napkin.

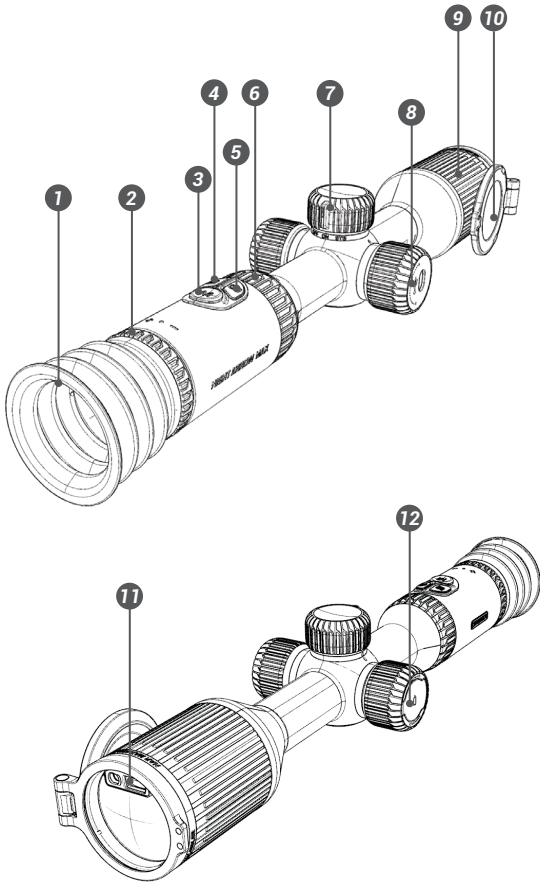


LEGAL NOTICE

Attaching this device to a weapon is the sole responsibility of the user. Check regional legal regulations before doing so.

Features

- LIIR Pro
- Highly sensitive thermal imaging sensor
- 7000J high shock resistance
- 2560×2560 OLED display
- User friendly silent controls
- Ballistic calculator
- Recoil-activated video
- 10 Hours operating time
- Quick-lock battery
- Quick charging
- Built-in audio & video recording
- Firmware update via APP

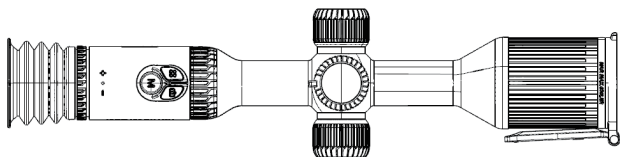











- 1 Eyepiece rubber
- 2 Diopter adjustment ring
- 3 Menu button
- 4 Laser rangefinder button
- 5 REC button
- 6 Rotating wheel
- 7 Three-position switch
- 8 USB-C
- 9 Focus ring
- 10 Lens cover
- 11 LIIR pro
- 12 Battery compartment




NOTE

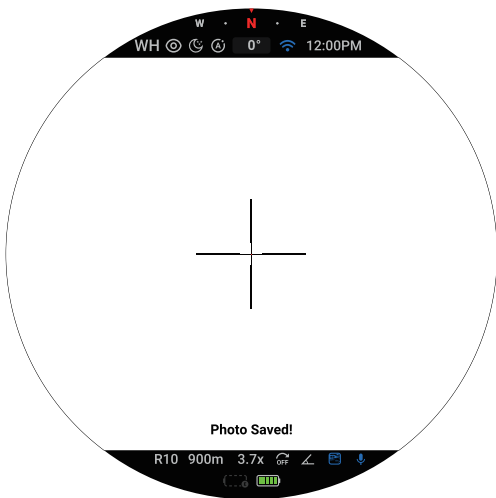
All images used in this instruction manual are for illustrative purpose only. Actual product may vary due to product enhancement. (V1.0)



	<p>Three-position switch</p>	<p>Mode ON/OFF/Standby</p>
	<p>REC Button</p>	<p>Short press: Take photos</p> <p>Long press: Start/Stop video recording</p>
	<p>Laser rangefinder button</p>	<p>Short press: Enter single measurement mode</p> <p>Long press: Enter continuous measurement mode/Exit measurement mode</p>
	<p>Menu Button</p>	<p>Short press: Enter quick menu</p> <p>Long press: Enter main menu/Exit menu</p>
	<p>Rotating wheel</p>	<p>Real-time image status:</p> <p> Zoom out</p> <p> Zoom in</p> <p>Menu activation status:</p> <p> Up switch</p> <p> Down switch</p>

Photography

Short press the  to capture a photo. A "Photo Saved" icon will appear on the screen.

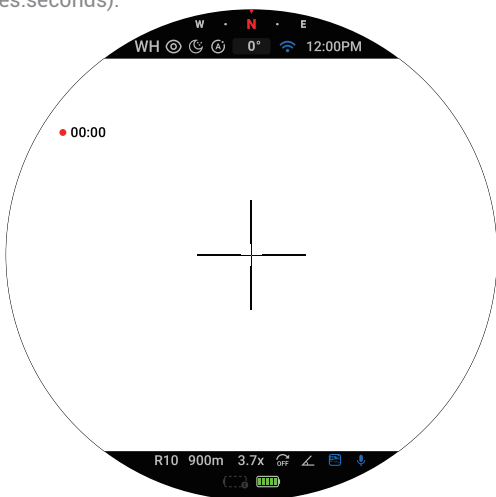



All photos are stored in the device's built-in 64GB memory. Users can download photos via the CONOTECH app or by connecting to a computer.

Video recording

Long press the  to start video recording.

The recording time is displayed on the screen in MM:SS format (minutes:seconds).

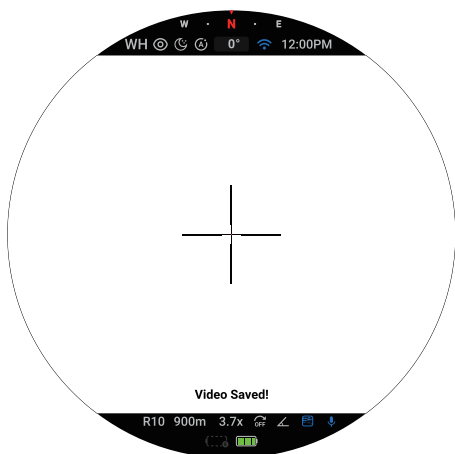


While recording, a short press of the  allows users to capture a photo.

Users can access the quick menu or main menu without interrupting the recording.

Long press the  again to stop and save the recording.

A "video saved" icon will be appear on the screen.



All videos are stored in the device's built-in 64GB memory. Users can download videos via the CONOTECH app or by connecting to a computer.



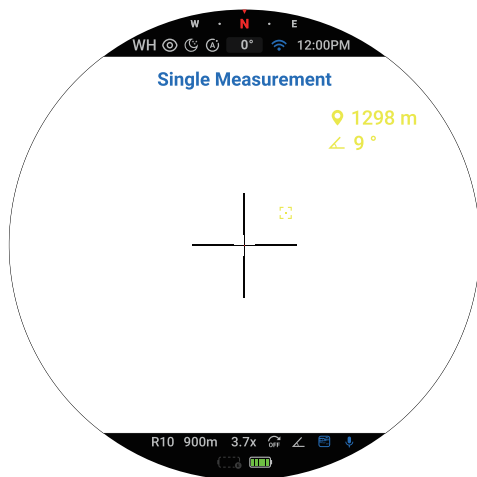
The number of files is limited by the device's internal memory capacity.




To ensure sufficient storage, regularly check the available space and transfer videos and photos to external media as needed.

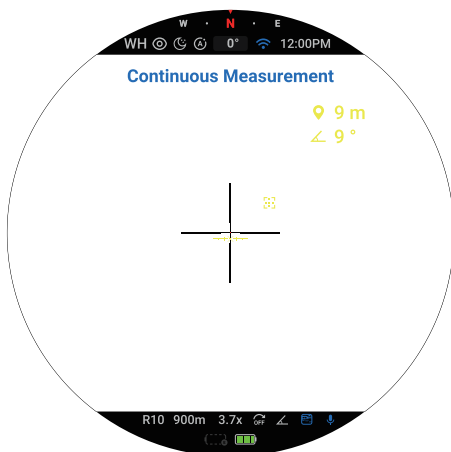
Laser rangefinder

(only available in LIIR series)

Short press the  to enter the single measurement.

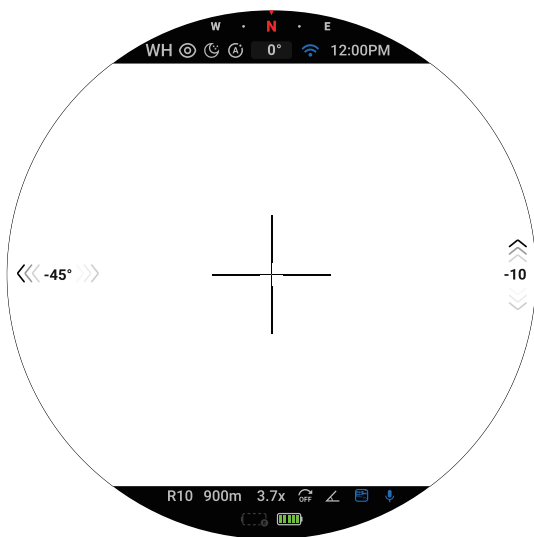


Long press the  to enter the continues measurement, aim  to the target, then the relevant distance will show up. Long press the  to exit the continues measurement.



Status Display

The status bar is on the top and bottom of the display and shows information on the actual operating status of the NIGHT ARROW MAX.



The top of the display shows information including:

- Location
- Calibration mode
- Color mode
- Wifi status
- Extreme mode
- Real time
- Image mode

The left and right sides of the display shows information including:


- Roll angle
- Pitch angle

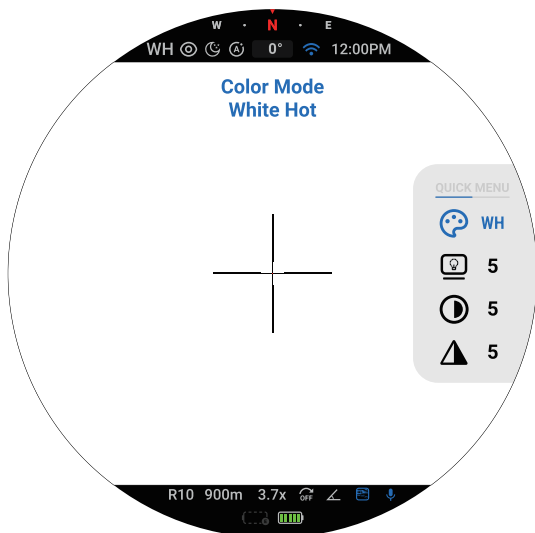
The Bottom of the display shows information including:

- Zeroing profile
- Ballistic calculator
- Magnification
- Microphone
- Auto standby
- External battery capacity
- Measurement settings
- Built-in battery capacity


Quick Menu

Short press **(M)** to enter quick menu. Long press **(M)** to exit.

When entering quick menu, rotate the  to select menu options, then short **(M)** press to enter the selected menu option. In the quick menu, if user makes no input within 5s, the device will automatically save all the changes and return to real image.




Color Mode


Rotate the  to change the color modes, and Short press **(M)** to confirm and exit.

WH-White Hot, BH-Black Hot, RB-Rainbow, RH-red hot.

Screen Brightness

Rotate the  to change the Brightness value from 1-10, and short press **(M)** to confirm and exit.

Contrast

Rotate the  to change the Contrast value from 1-10, and Short press **(M)** button to confirm and exit.

Sharpness





Rotate the  to change the Sharpness value from 1-10, and Short press  button to confirm and exit.

Image mode

Rotate the  to switch the image mode, and Short press  button to confirm and exit.

 Clear Night

 Foggy

 Rain

PIP

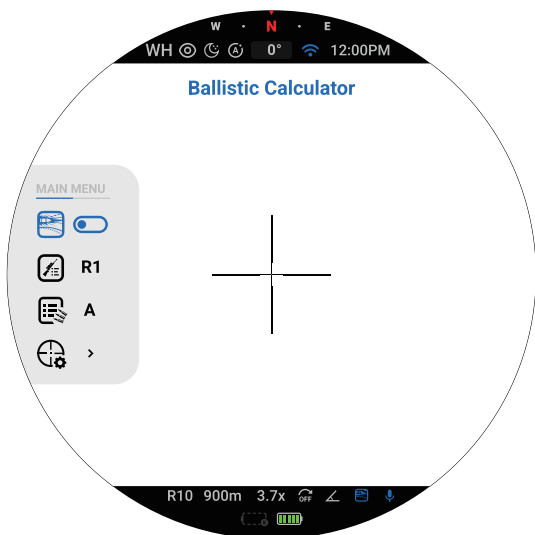
Short press  button to turn PIP On/Off.

WIFI

Short press  button to turn WIFI On/Off.

Hot tracking


Short press  button to turn Hot tracking on/off.

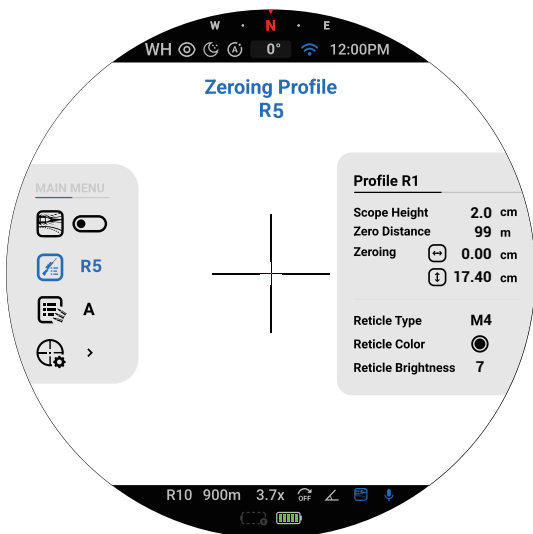


Ballistic calculator

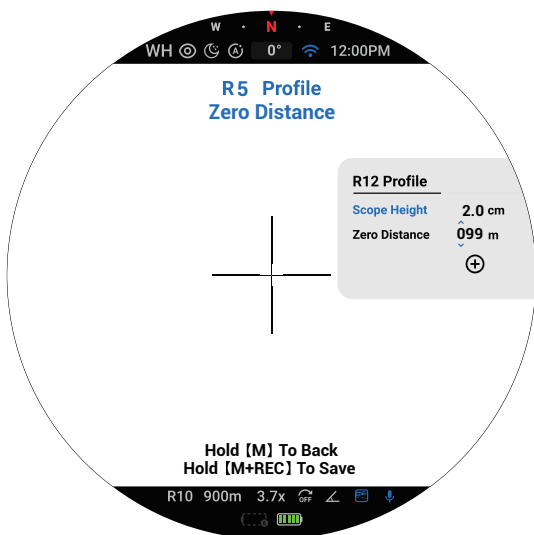
Short press the **(M)** button to turn on/off Ballistic calculator.

Zeroing profile

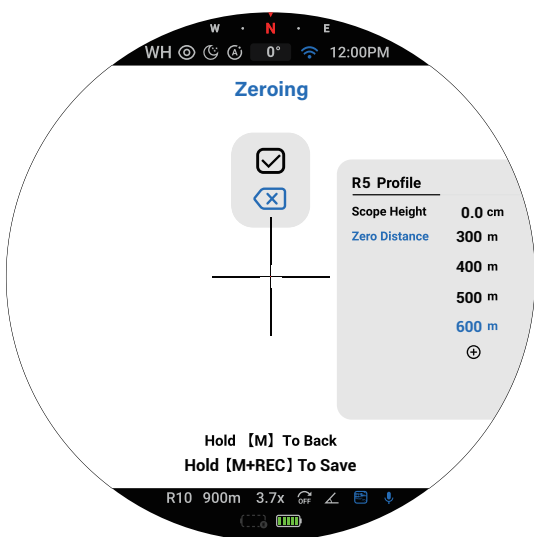
Short press **(M)** to enter Zeroing Profile, then rotate the  to select various zeroing profiles from R1-R12.






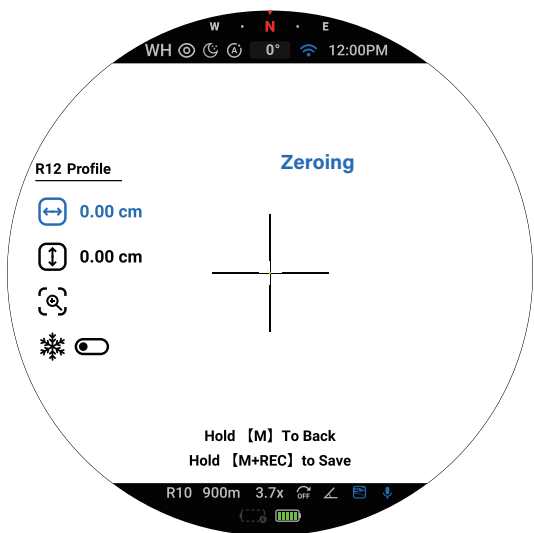
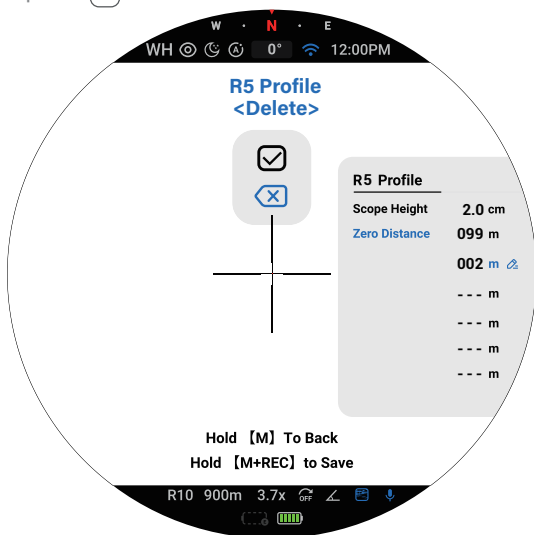
Hold the **[M]** + **[📷]** to edit the zeroing profile.






Short press **[M]** to select Scope Height or Zero Distance, then rotate the **[🌀]** to select the value and short press **[M]** to save. Rotating **[🌀]** to select **[+]**, new Zero distance can be added by short pressing **[M]**, then repeat the same process to set value.





Rotating  to select  to enter Zero Distance then press **(M)** to enter, rotate the  select or , then short press **(M)** to save.





XY value

Take a shot, adjust X and Y value separately based on short press  to edit, then rotate the  to select the value and short press  to save.









Magnification

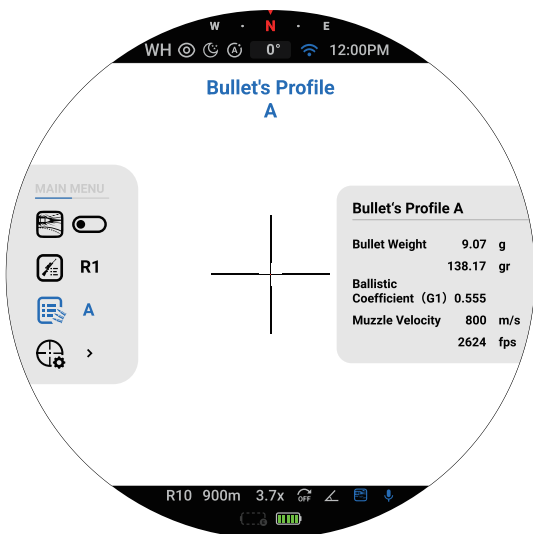
Magnification allows you to use a digital zoom of the riflescope when zeroing, which reduces the minute of angle click for zeroing accuracy improving. Rotate the  to select the Magnification, then short press  to confirm.

Freeze

The feature of the freeze function is that there is no need to constantly keep the riflescope at the point of aiming. After shooting, the user needs to align the dividing center point with the center of the cross target, and then short press  to freeze the infrared image of the current frame, as shown in the following figure. When freezing the image, rotate the  adjust other options in the zero calibration.

Bullet's profile

Short press  to enter Bullet's Profile, then rotate the  to select various zeroing profiles from A-E. Hold the  +  to enter editing page. Short press  to select Bullet weight, Ballistic Coefficient, and Muzzle Velocity, then rotate the  to select the value and hold the  +  to save.

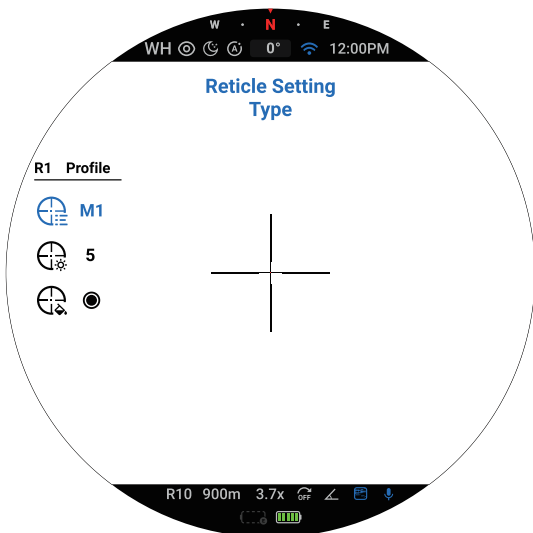



NOTE

Bullet weight, Ballistic Coefficient, and Muzzle Velocity on the bullet package or ask the bullet supplier.



Reticle setting



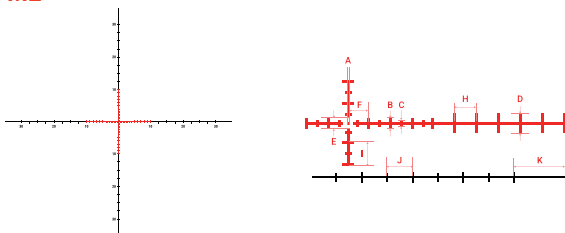
Short press **M** to enter Reticle Setting, then rotate the  to select various Reticle Setting Type from M1-M5. Same process to select Reticle Setting Brightness from 1-10, and select the Reticle Setting Color.

M1



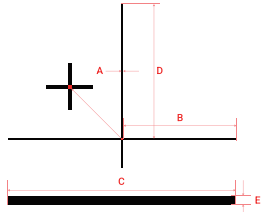
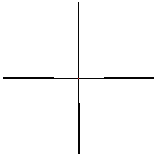
Section	635		650	
	MOA	cm@100m	MOA	cm@100m
Section A	0.57	1.66 (0.16 MIL)	0.40	1.16 (0.12 MIL)
Section B	1.72	4.99 (0.49 MIL)	1.20	3.48 (0.36 MIL)
Section C	9.17	26.59 (2.64 MIL)	8.80	25.52 (2.64 MIL)
Section D	18.34	53.17 (5.16 MIL)	17.20	49.88 (5.16 MIL)
Section E	35.53	103.03 (10.08MIL)	33.60	97.44 (10.08 MIL)

M2



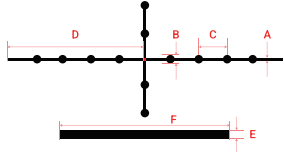
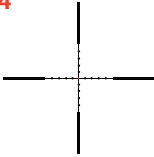
Section	635		650	
	MOA	cm@100m	MOA	cm@100m
Section A	0.57	1.66 (0.16 MIL)	0.40	1.16 (0.12 MIL)
Section B	2.87	8.31 (0.82 MIL)	2.00	5.80 (0.60 MIL)
Section C	1.72	4.99 (0.49 MIL)	1.20	3.48 (0.36 MIL)
Section D	3.44	9.97 (1 MIL)	3.60	10.44 (1 MIL)
Section E	2.87	8.31 (0.82 MIL)	2.00	5.80 (0.60 MIL)
Section F	3.44	9.97 (1 MIL)	3.60	10.44 (1 MIL)
Section H	3.44	9.97 (1 MIL)	3.60	10.44 (1 MIL)
Section I	3.44	9.97 (1 MIL)	3.60	10.44 (1 MIL)
Section J	8.6	24.93 (2.5 MIL)	8.80	25.52 (2.5 MIL)
Section K	17.76	51.51 (5 MIL)	17.60	51.04 (5 MIL)

M3



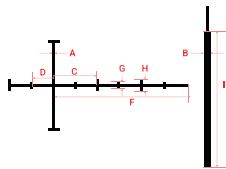
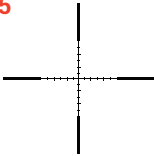
Section	635		650	
	MOA	cm@100m	MOA	cm@100m
Section A	0.57	1.66 (0.16 MIL)	0.40	1.16 (0.12 MIL)
Section B	21.77	63.14 (6.24 MIL)	20.80	60.32 (6.24 MIL)
Section C	42.40	122.97 (12.12 MIL)	40.40	117.16 (12.12 MIL)
Section D	64.18	186.11 (18.36 MIL)	61.20	177.48 (18.36 MIL)
Section E	1.72	4.99 (0.49 MIL)	1.20	3.48 (0.36 MIL)

M4



Section	635		650	
	MOA	cm@100m	MOA	cm@100m
Section A	0.57	1.66 (0.16 MIL)	0.40	1.16 (0.12 MIL)
Section B	1.72	4.99 (0.49 MIL)	1.20	3.48 (0.36 MIL)
Section C	3.44	9.97 (1 MIL)	3.60	10.44 (1 MIL)
Section D	17.76	51.51 (5 MIL)	17.60	51.04 (5 MIL)
Section E	1.72	4.99 (0.49 MIL)	1.20	3.48 (0.36 MIL)
Section F	21.20	61.48 (6 MIL)	20.80	60.32 (6 MIL)

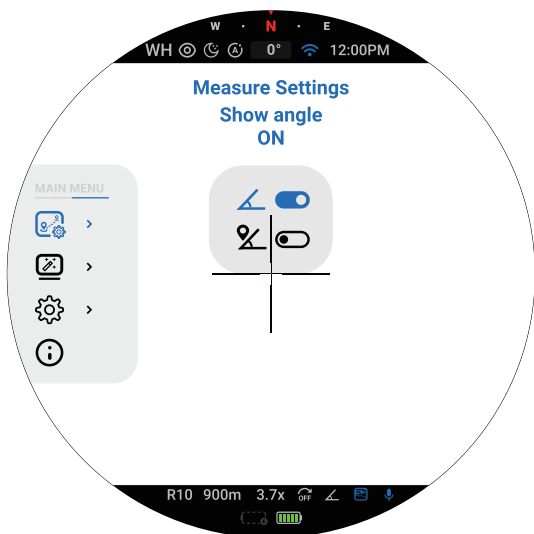
M5




Section	635		650	
	MOA	cm@100m	MOA	cm@100m
Section A	0.57	1.66 (0.16 MIL)	0.40	1.16 (0.12 MIL)
Section B	1.72	4.99 (0.49 MIL)	1.20	3.48 (0.36 MIL)
Section C	6.88	19.94 (2 MIL)	6.80	19.72 (2 MIL)
Section D	3.44	9.97 (1 MIL)	3.60	10.44 (1 MIL)
Section F	21.20	61.48 (6 MIL)	20.80	60.32 (6 MIL)
Section G	1.72	4.99 (0.49 MIL)	1.20	3.48 (0.36 MIL)
Section H	2.87	8.31 (0.82 MIL)	2.00	5.80 (0.60 MIL)
Section I	21.20	61.48 (6 MIL)	20.80	60.32 (6 MIL)



Measurement settings



Short press **(M)** to enter Measurement settings, rotating the  to upper and down the selection. Long press the **(M)** to exit.

Show Angle

Short press the **(M)** to turn on/off.

Show Horizontal Distance

Short press **(M)** to turn on/off.




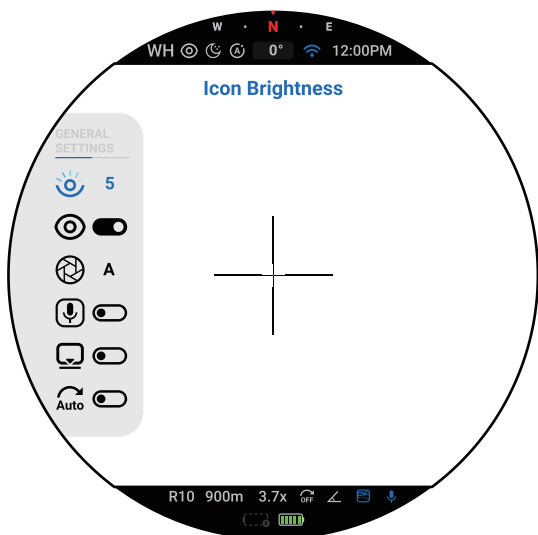
Defective Pixel repair

Cover objective lens then short press **(M)** to perform defective pixel repair. A three-second countdown will appear on the screen, and the calibration will be started.



General setting

Short press the **(M)** to enter the General setting, rotating the  to upper and down the selection, long press the **(M)** to exit.




OSD Brightness

Short press the **(M)** to enter the OSD Brightness setting and rotating the  to select from 1-10.

Extreme mode

Short press the **(M)** to turn Extreme mode On/Off.

Calibration mode

Short press the **(M)** to enter the calibration mode setting and rotating the  to select. Short press the **(M)** to save and exit.

(A) Automatic


(M) Manual

(S) Silent (Please close lens cap when calibrating)


Microphone

Short press the **(M)** to turn on/off the microphone.




Pure mode

Short press  to turn Pure Mode On/Off. The icons of submenu will be hidden automatically.



Auto standby


Short press the  to turn Auto standby On/off. When this function is open, the device will automatically enter sleep mode once it is placed upright.

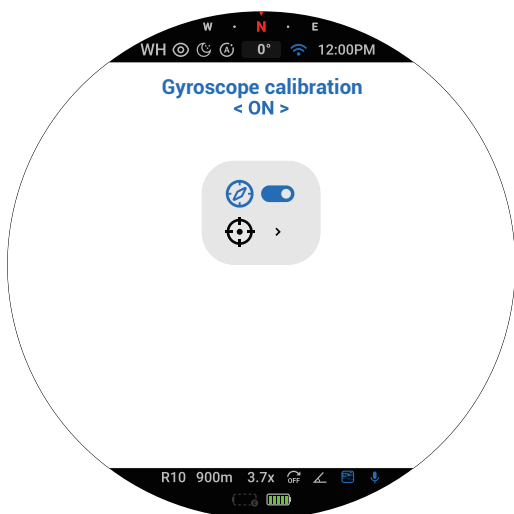
Unit setting

Short press the  to enter the Unit setting and rotating the  to select from Meter and Yard, short press the  to save and exit.

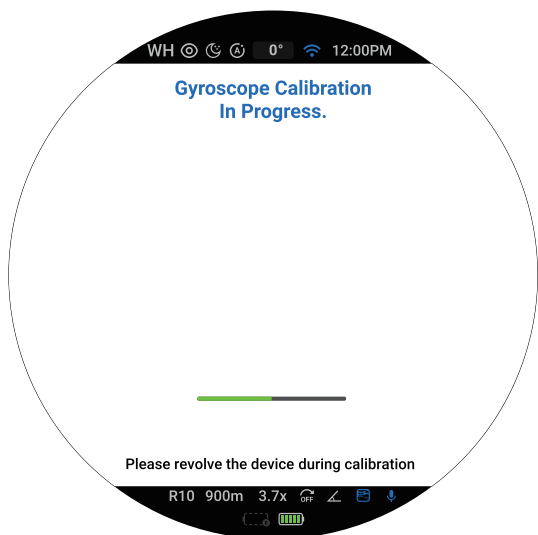
Gyroscope calibration

Short press the  to enter the Gyroscope calibration and rotating the  to select menu.

Short press the  to turn the Gyroscope calibration on/off.

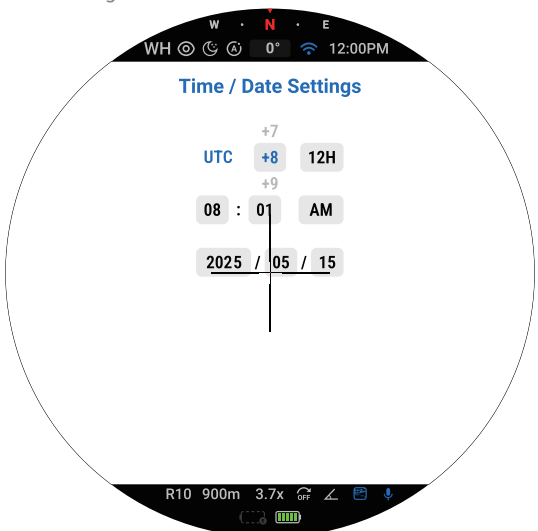


Short press the **(M)** to calibration the Gyroscope, during this time, please revolve the device until the calibration finished.




Time/Date settings


Short press **(M)** to enter Date/Time, rotating the wheel to change the number and short press the **(M)** to save the selected the number and switch the next number, long press **(M)** to exit Date/Time setting.

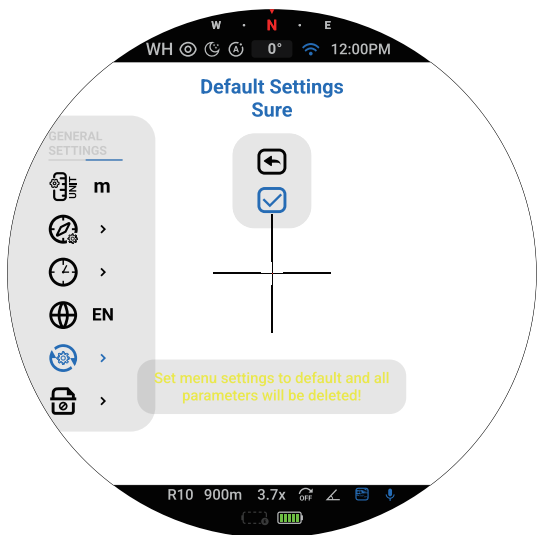


Language setting

Short press the **(M)** to enter the Language setting and Rotate the  to select the language, short press the **(M)** to save and exit.

Default settings

Short press the **(M)** to enter the Default Settings and rotating the  to change the selection, short press the **(M)** again to confirm back to menu or sure. Once confirmed, the menu will be set to default and all parameters will be deleted!



Internal storage

Show memory usage.

Device info

Contain Model, S/N, software version and hardware version.

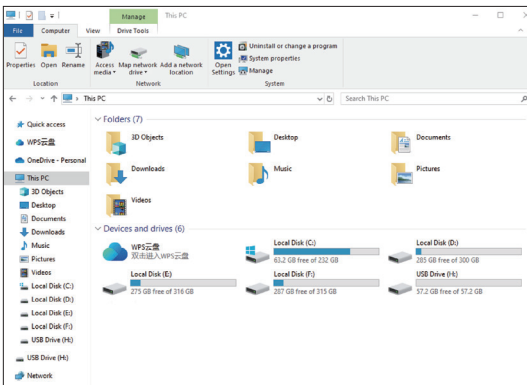
Firmware update via APP

Easily keep your device at the forefront of technology with firmware updates directly through our dedicated app.

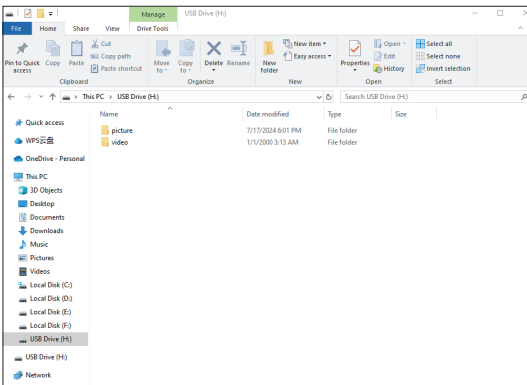


How to replay on PC

Connect the USB-C cable to the PC



Turn on WIFI and wait 10s.



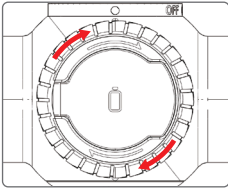
Removable battery

The batteries should be charged before first use.

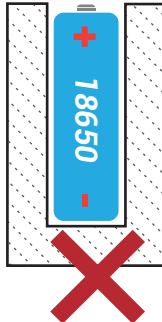
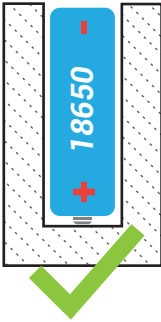
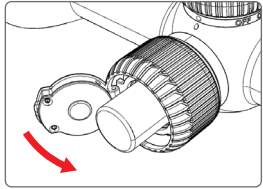
Rotate the battery compartment knob clockwise to open the compartment.

Please install the battery based on the positive and negative signs. Otherwise, NIGHT ARROW will not start.

Open



Close



Built-in battery


1.If there are built-in battery and removable battery in the device, two battery icons are displayed in the status bar. The removable battery capacity shows on the left bottom of the status bar, and the built-in battery capacity shows on the right bottom.

2.When both type of batteries are fully charged, the device is powered by the removable battery. If there is low removable battery level, the device will switch to the built-in battery.

3.It is possible to replace removable battery while NIGHT ARROW is on when it is powered by built-in battery (the device will continue to work properly).

External power supply

External power can be supplied from an external source, such as a power bank.

1. Connect the external power supply to the USB-C cable.
2. NIGHT ARROW takes to external power source while the built-in battery will gradually be recharged.
3. A rechargeable battery icon indicating a percentage of the battery life will appear in the status bar  .
4. When you turn off external power source, NIGHT ARROW takes power from removable battery without turning off. When there is no removable battery or low power level the device takes power from the built-in battery.

NOTE

The batteries should be charged before first us.

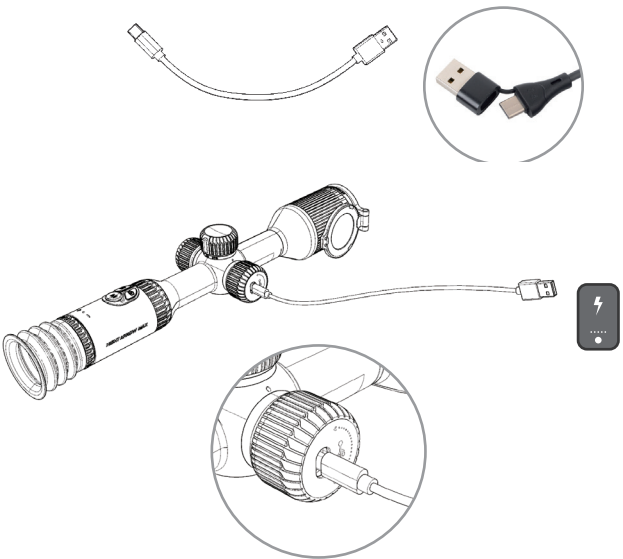
When installing a removable battery with a sufficient charge level, NIGHT ARROW will automatically switch to it.

Zeroing information will be saved when NIGHT ARROW is shut down because of empty battery.

If NIGHT ARROW is shut down by opening battery cover without proper power off, zeroing information will not be saved.

Cable connection

1. Power supply/Firmware update/Charge built-in battery

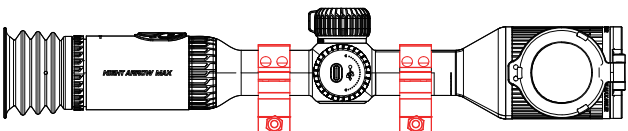


Attach to rifle

To ensure accurate shooting NIGHT ARROW should be properly mounted on the rifle.

Mount NIGHT ARROW with 30mm scope rings. Use only high-quality mounts and rings compatible with your rifle. Follow the mount manufacturer's installation instructions and use the proper tools.

When mounting NIGHT ARROW, adjust the position of the scope on the rifle to achieve optimal, comfortable eye relief. Failure to comply with this recommendation may result in injury to the shooter.



Storage and Transportation

- Clean the device thoroughly before storage, ensuring it is free of moisture and dust.
- Make sure that the batteries are removed and that the battery compartment is empty.
- It is possible for the device to be stored for short periods in a suitable soft pack, bag, or cartridge box.
- Store the device in a dry, enclosed, unheated, and ventilated space for long-term storage.
- Avoid exposing the product to aggressive environments, temperatures below -50°C or above $+60^{\circ}\text{C}$, relative humidity over 80%, or prolonged periods of direct sunlight.
- Before transportation, neatly pack the product in its original packaging (transport bag), ensuring all items and accessories are carefully placed in the bag. Then, securely place the bag in the transport suitcase.
- The device can be shipped via various transport methods, up to an altitude of 12.000 m.

Specification

Night Arrow Max Specification			
Model	NAR MAX 635	NAR MAX 650	NAR MAX 650LIIR
Main Characteristics			
Detector type	Uncooled Vox		
Resolution	640×512		
Frame rate	50Hz		
Pixel	12μm		
Spectral range	8-14μm		
NETD	<15mk		
Optical Characteristics			
Objective lens	35mm	50mm	50mm
Magnification	2.6×	3.7×	3.7×
FOV(HxV), m@100m	21.9×10.1	15.4×12.3	15.4×12.3
Functions			
Zoom	1×/2×/4×/8×		
Palettes	4		
Firmware update via APP	Yes		
Display			
Type	AMOLED		
Resolution	2560×2560		
External video	WIFI		
Built-in memory	64GB		
Power Supply			
Battery	1×18650 (Internal battery) +1×18650 (External battery)		
External power supply	5V USB-C		
Operating time (at t=22°C)	10h		

Night Arrow Max Specification

Model	NAR MAX 635	NAR MAX 650	NAR MAX 650LIIR
Physical Characteristics			
Weight	900g	950g	990g
Dimension, mm	75×99×365	75×99×371	75×99×371
Environmental Compatibility			
Ingress protection rating	IP67		
Operating temperature	-20°C-+50°C		
Storage temperature	-40°C-+70°C		
Shock resistance	7000J		
Laser Rangefinder			
Safety class for laser equipment according to IEC 60825-1:2014	/		1
Measuring range	/		5-1200m
Measurement accuracy	/		± 1m



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