

# ACE

Thermal Imaging Scope



## User Manual

ACE S60R / ACE H50R / ACE H50 / ACE L35

V1.2

# IMPORTANT SAFETY INFORMATION

## Environmental influences

- Never point the lens of the device directly at intense heat sources such as the sun or laser equipment. The objective lens and eyepiece can function as a burning glass and damage the interior components.
- Avoid touching the metal surface (cooling fins) after exposure to sunlight or cold.

## Ergonomics notes

Take breaks after longer periods of use to avoid wrist pain.

## Risk of swallowing

Do not place this device in the hands of small 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 can damage the internal battery.
- Do not expose the device to fire or high temperatures.
- Install the batteries correctly according to the instruction on the device. Reverse connection is prohibited.
- 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 -20° to +50°. Otherwise, it will affect the service life of the product.
- Do not store the device for long periods at temperatures below -20°C or above 50°C, or it will permanently reduce the battery capacity.
- 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.

## Safety instructions for the power supply unit

- Check the power supply unit, cable and adapter 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.
- Only charge the device at temperatures ranging between 0°C and 50°C.
- Do not make any technical modifications.

### Disposal of batteries



Directive 2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. For battery details, refer to the documentation of the specific product. The battery is marked with this symbol, which may include Cd (indicating cadmium), Pb (indicating lead), or Hg (indicating mercury). For proper recycling, please return the battery to your supplier or send it to a designated collection point. For more information, visit [www.recyclethis.info](http://www.recyclethis.info).

### User information on the disposal of electrical and electronic devices (private households)



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](http://www.recyclethis.info).

### For business customers within the European Union

Please contact your dealer or supplier regarding the disposal of electrical and electronic devices. He will provide you with further information.

### Information on disposal in other countries outside of the European Union

This symbol is only applicable in the European Union. Please contact your local authority or dealer if you wish to dispose of this product and ask for a disposal option.

### Intended use

The device is intended for displaying heat signatures during nature

observation, remote hunting observations and for civil use. This device is not a toy for children.

Use the device only as described in this operating manual. The manufacturer and the dealer accept no liability for damages which arise due to non-intended or incorrect use.

### Function test

- Before use, please ensure that your device has no visible damage.
- Test to see if the device displays a clear, undisturbed image.

- Check that the settings for the thermal imaging monocular are correct. See the notes in the section **Power On and Image Settings**.

### Installing/Removing the battery

The ACE Thermal Imaging Scope is equipped with two power supply systems - one built-in battery pack and one replaceable 18650 battery.

The built-in battery pack cannot be removed.

# 1 Specifications

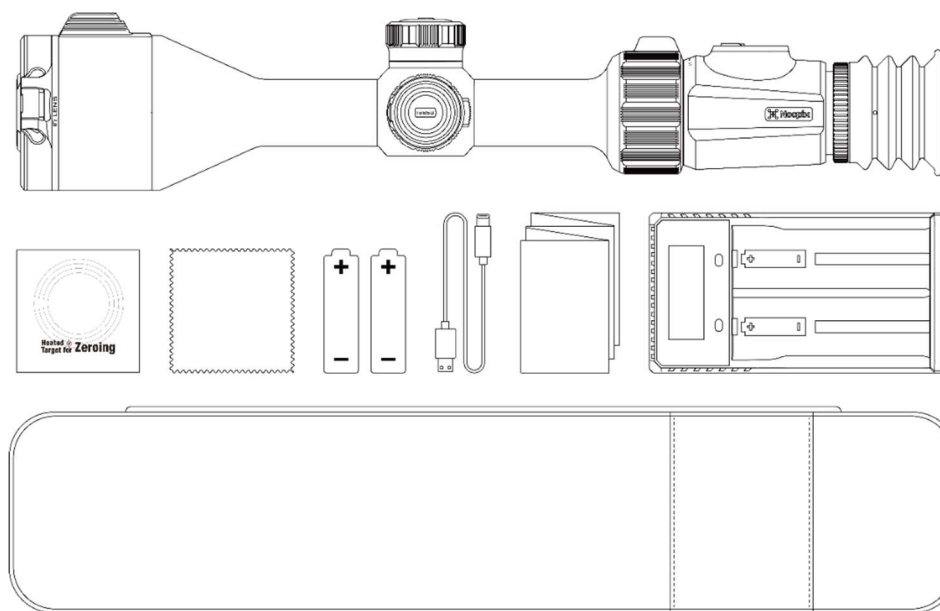
| Model                                                   | ACE L35          | ACE H50          | ACE H50R         | ACE S60R         |
|---------------------------------------------------------|------------------|------------------|------------------|------------------|
| <b>Detector Specifications</b>                          |                  |                  |                  |                  |
| Type                                                    | Vox              | Vox              | Vox              | Vox              |
| Resolution, Pixels                                      | 384×288          | 640×512          | 640×512          | 1280×1024        |
| Pixel Size, $\mu\text{m}$                               | 12 $\mu\text{m}$ | 12 $\mu\text{m}$ | 12 $\mu\text{m}$ | 12 $\mu\text{m}$ |
| NETD, mK                                                | $\leq 18$        | $\leq 15$        | $\leq 15$        | $\leq 15$        |
| Frame Rate, Hz                                          | 60               | 60               | 60               | 50               |
| <b>Optical Specifications</b>                           |                  |                  |                  |                  |
| Objective Lens, mm                                      | 35/F0.9          | 50/F0.9          | 50/F0.9          | 60/F1.0          |
| Field of View (H×V), °                                  | 7.5×5.7          | 8.8×7.0          | 8.8×7.0          | 14.7×11.7        |
| Linear Field of View (H×V), m @ 100m                    | 13.2×9.9         | 15.4×12.3        | 15.4×12.3        | 25.6×20.5        |
| Magnification, x                                        | 4~16             | 3~24             | 3~24             | 2~24             |
| Ocular zoom, x                                          | 1~3              | 1~3              | 1~3              | 1~3              |
| Eye Relief, mm                                          | 50               | 50               | 50               | 50               |
| Exit Pupil Diameter, mm                                 | 8                | 8                | 8                | 8                |
| Diopter, D                                              | -5~+5            | -5~5             | -5~+5            | -5~+5            |
| Detection Range, m(Target Size:<br>1.7m×0.5m, P(n)=99%) | 1800             | 2600             | 2600             | 3100             |
| <b>Display Specifications</b>                           |                  |                  |                  |                  |
| Type                                                    | AMOLED           | AMOLED           | AMOLED           | AMOLED           |

|                                                 |                                                      |             |             |             |
|-------------------------------------------------|------------------------------------------------------|-------------|-------------|-------------|
| Resolution                                      | 2560×2560                                            | 2560×2560   | 2560×2560   | 2560×2560   |
| <b>Battery Power Supply</b>                     |                                                      |             |             |             |
| Battery                                         | Built-in battery/4000mAh + Replaceable 18650 battery |             |             |             |
| Max. Operating Time (22°C), h*                  | 7                                                    | 7           | 7           | 6           |
| External Power Supply                           | 5V (Type C)                                          | 5V (Type C) | 5V (Type C) | 5V (Type C) |
| <b>Physical Specifications</b>                  |                                                      |             |             |             |
| Wi-Fi / APP                                     | Support                                              | Support     | Support     | Support     |
| Photo / Video Recorder                          | Support                                              | Support     | Support     | Support     |
| Recoil Activated Video                          | Support                                              | Support     | Support     | Support     |
| Gallery                                         | Support                                              | Support     | Support     | Support     |
| Memory Capacity                                 | 64GB                                                 | 64GB        | 64GB        | 64GB        |
| IP Rating                                       | IP67                                                 | IP67        | IP67        | IP67        |
| Operating Temperature, °C                       | -20 ~ +50                                            | -20 ~ +50   | -20 ~ +50   | -20 ~ +50   |
| Weight, g                                       | 1050                                                 | 1090        | 1120/1180   | 1300/1360   |
| Dimension, mm                                   | 350x90x62                                            | 365x90x68   | 365x90x68   | 390x90x71   |
| <b>Connections and Compatibilities</b>          |                                                      |             |             |             |
| Max. Recoil Power on Rifled Weapon (Eo), Joules | 6000                                                 | 6000        | 6000        | 6000        |
| Compatible Mount                                | 30mm                                                 | 30mm        | 30mm/RM     | 30mm/RM     |
| <b>Connections and Compatibilities</b>          |                                                      |             |             |             |
| Safety Class for Laser Rangefinder              | NA                                                   | NA          | Class 1     | Class 1     |
| Measuring Range, m                              | NA                                                   | NA          | 1200, ±1    | 1200, ±1    |
| Ballistic Calculation                           | Support                                              | Support     | Support     | Support     |

- ★ The actual battery life depends on the use frequency of functions like Wi-Fi, video recording, etc.
- Improvements may be made to the design and software of this product to enhance its features without prior notice.
- The newest user manual can be downloaded at our official website:  
[www.nocpix.com](http://www.nocpix.com).

## 2 Package Contents

- ACE Series Thermal Imaging Scope
- Heated target for zeroing
- Lens cloth
- 2\*18650 battery
- Type-C cable
- Quick start guide
- Battery charger
- Portable bag



## 3 Description

ACE series is an infrared scope for outdoor hunting. Designed based on infrared thermal imaging principles, it requires no external light sources during the day and at night, in all hard weather conditions (such as rain, snow, fog, and haze). It can be used without being affected by strong light and to observe even targets behind obstacles (such as branches, grass, and shrubs). ACE series has a variety of battery-powered solutions with long operating hours, and can be widely used for hunting, observation and positioning in low visibility conditions.

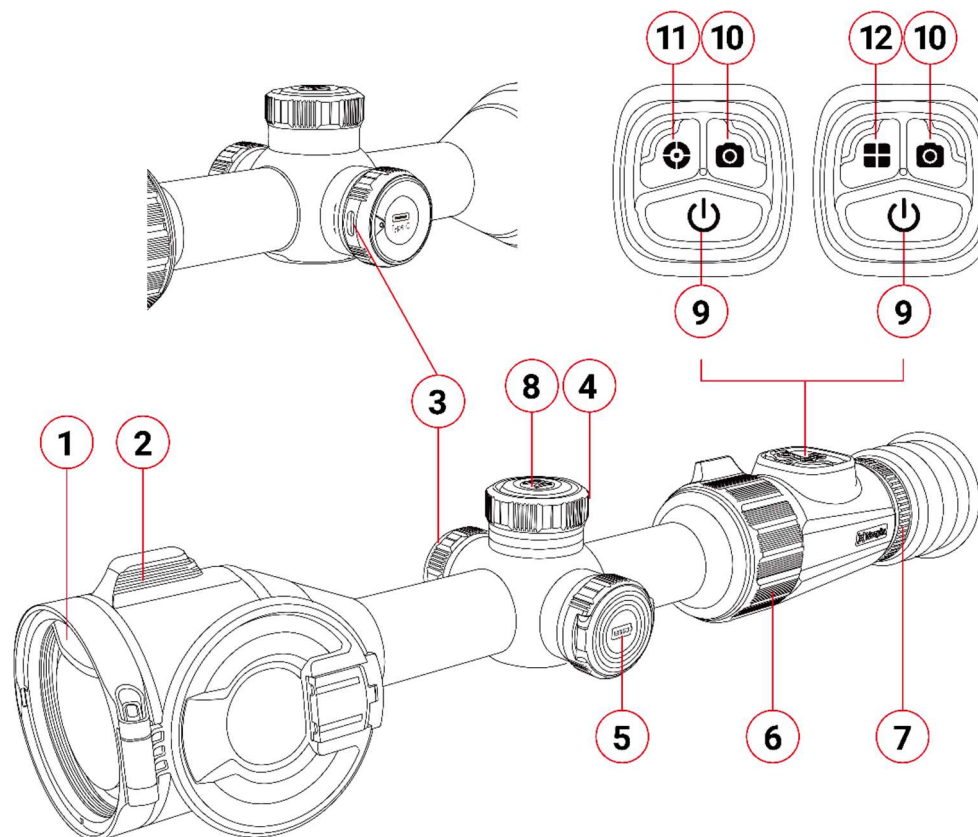
## 4 Features

- 15mK NETD
- Ocular zoom
- Built-in LRF (ACE H50R / ACE S60R)
- Ballistic Calculation (ACE H50R / ACE S60R)
- Recoil Activated Video function
- Gallery function
- Dual power supply system
- Built-in memory, supporting photographing, video recording
- Built-in Wi-Fi module, supporting APP connection
- Built-in compass and motion sensor
- PIP (picture-in-picture) function
- Shut less function
- Pixel defect correction
- Convenient operation interface



## 5 Components and Controls

1. LRF
2. Lens focus Ring
3. Type C
4. Controller
5. Battery cap
6. Ocular zoom ring
7. Eyepiece diopter adjustment ring
8. Menu button
9. Power button
10. Photo button
11. Rangefinder button
12. Image mode button



## 6 Button Operation

| Button                                                                                                                                          | Current Status               | Short Press                                                                | Long Press                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Power Button</b><br>                                        | Powered off                  | --                                                                         | Power on the device                                                                                                                                                                                                        |
|                                                                                                                                                 | Home screen                  | Image calibration                                                          | On the Home screen, a 3-2-1 countdown prompt appears.<br>➤ If the Power button is released during the countdown, the device enters into Standby mode.<br>➤ When the countdown completes, the device will power off.        |
|                                                                                                                                                 | Continuous ranging           | Exit continuous ranging                                                    |                                                                                                                                                                                                                            |
|                                                                                                                                                 | Shortcut/Main menu interface | Return to home screen /<br>Return to the previous interface without saving |                                                                                                                                                                                                                            |
| <b>Rangefinder Button</b><br><b>(ACE H50R / ACE S60R)</b><br> | Home screen                  | Perform a single ranging                                                   | ➤ When Continuous LRF is ON, press and hold the Rangefinder button to perform continuous ranging.<br>➤ When Continuous LRF is OFF, press and hold the Rangefinder button, and then release it to trigger a single ranging. |
| <b>Image Mode Button</b><br><b>(ACE L35 / ACE H50)</b><br>   | Home screen                  | Switch the image mode                                                      | ---                                                                                                                                                                                                                        |
| <b>Photo Button</b><br>                                      | Home screen                  | Take a photo                                                               | Start video recording                                                                                                                                                                                                      |
|                                                                                                                                                 | Video recording              | Take a photo                                                               | Stop and save the video recording                                                                                                                                                                                          |

|                                |                                          |                                                                                           |                                  |
|--------------------------------|------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------|
| <b>Menu Button</b><br><b>M</b> | Home screen                              | Enter the Shortcut Menu interface                                                         | Enter the Main Menu interface    |
|                                | Shortcut Menu interface                  | Adjust parameters                                                                         | Save and back to the Home screen |
|                                | Main Menu interface                      | Adjust parameters / Enter the submenu                                                     |                                  |
|                                | Zero/ Pixel defect calibration interface | Switch the movement direction                                                             |                                  |
| <b>Controller</b>              | Home screen                              | PIP is ON: rotate, electronic zoom PIP image<br>PIP is OFF: rotate, electronic zoom image |                                  |
|                                | Shortcut menu interface                  | Rotate, switch the Shortcut menu options                                                  |                                  |
|                                | Main menu interface                      | Rotate, switch the Main menu options                                                      |                                  |
|                                | Zero/ Pixel defect calibration interface | Rotate, move the reticle position                                                         |                                  |

7

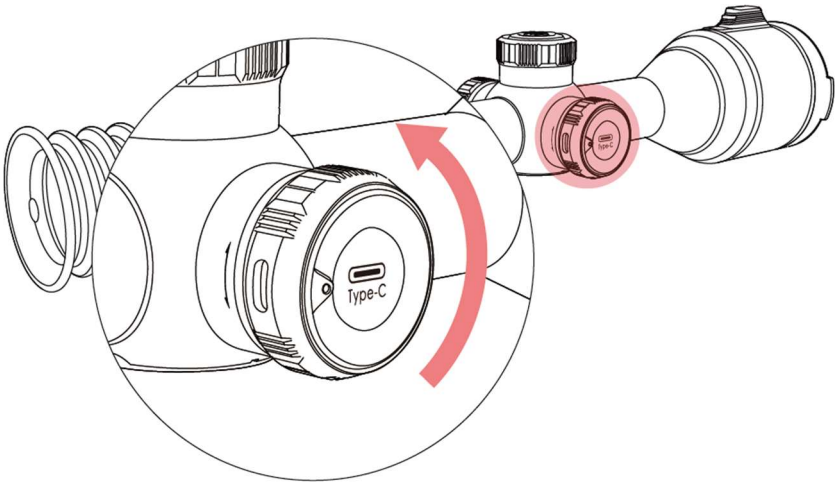
Power Supply

ACE series uses a dual power supply system: a built-in rechargeable lithium-ion battery pack and a replaceable 18650 battery, with dual battery power for up to 7 hours of normal operating time. The battery should be fully charged before the first use.

Charging the Built-in Battery

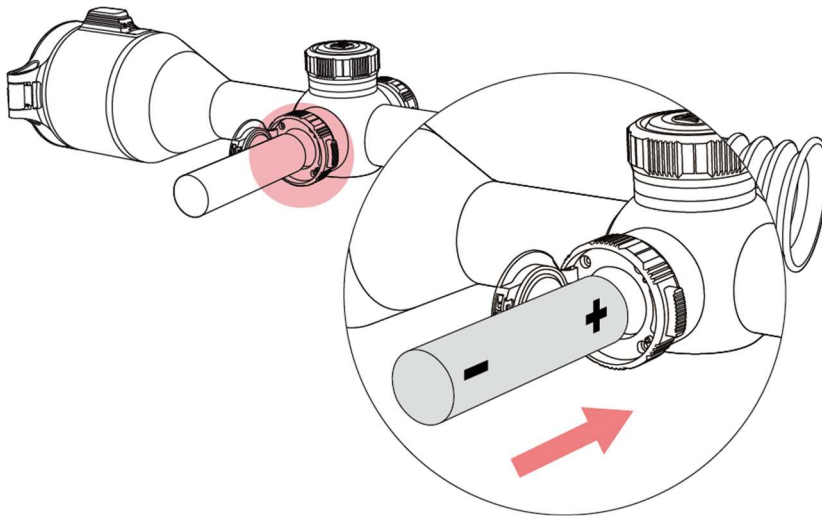
- Charge the built-in battery via the Type C interface.

- Rotate the cover to open or hide the type C interface



## Installing the replaceable 18650 battery

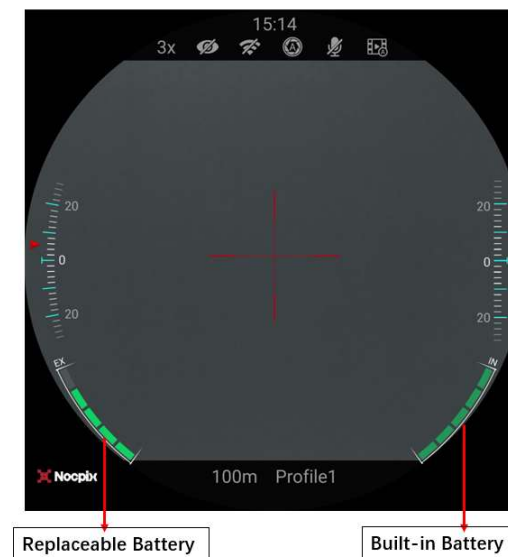
Please install the 18650 battery correctly according to the following polarity markings.



**Note:** The replaceable 18650 battery should be charged using a separate battery charger and cannot be charged via the ACE's Type C interface.

## Switching between two types of batteries

- The left power icon displays the power level of the replaceable 18650 battery.
  - The right power icon displays the power level of the built-in battery.
  - When both the replaceable 18650 battery and the built-in battery are present, the replaceable 18650 battery will be used firstly.
- Safety Precautions



## Safety precautions

- When charging, please use the 5V2A power adapter compatible with the device. Using any other type of adapter may cause irreversible damage to the battery or the adapter itself.
- If the device is not used for a long time, the battery should be partially charged, not fully charged or discharged.
- Do not charge the device immediately after it is moved to a warm environment from a cold environment. Wait for 30 to 40 minutes for preheating.
- Do not use the charger if it is modified or damaged.
- The device should be charged at a temperature of 0°C to +40°C. Otherwise, the battery life will be significantly reduced.
- When charging, please do not leave the battery unattended.
- Do not connect the battery to the power supply for more than 24 hours after it is already fully charged.
- It is not recommended to connect third-party devices that consume more energy than the allowed value.
- The device is equipped with a short circuit protection system, but conditions that may lead to a short circuit should be avoided.

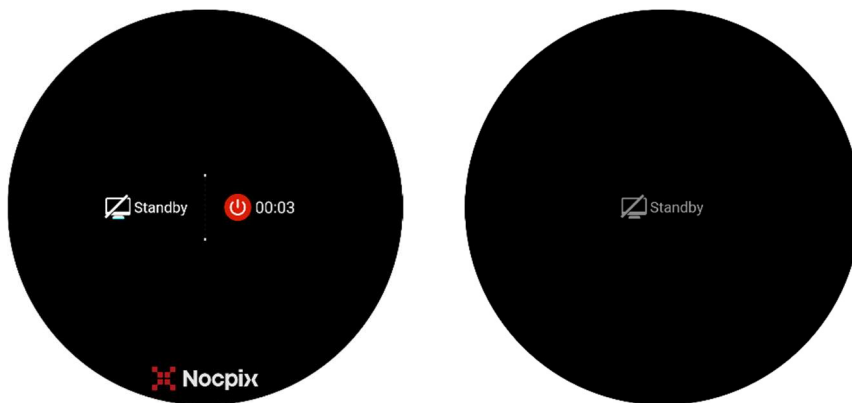
- Use the device at the recommended operating temperature from -20°C to +50°C. Do not use the device beyond this temperature range, or otherwise, the use may shorten the battery life.
- When the device is used under sub-zero temperature, the battery capacity drops. This is normal and does not indicate a defect.

## 8 Usage

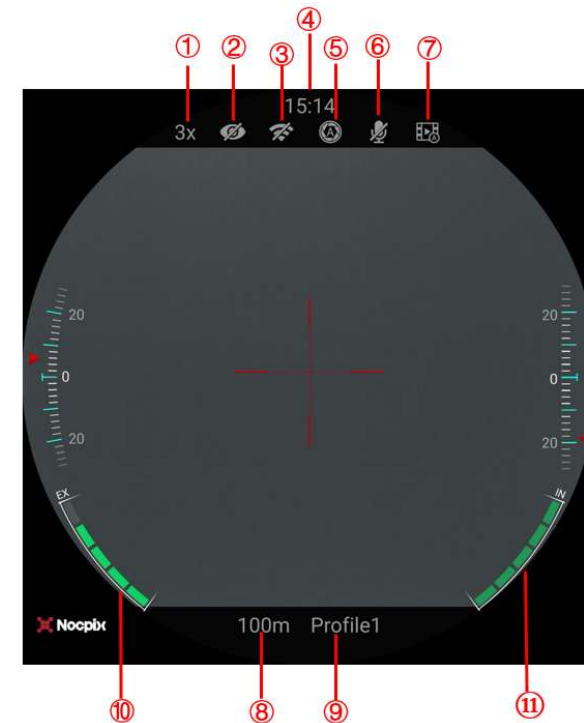
### Powering on and off

- Press and hold the **Power button** for 2s to start the device. Wait for 3s to complete the startup.
- Adjust the clarity of icons on the display by rotating the **eyepiece diopter adjustment ring**.
- Rotate the **Lens focus ring** to focus on the object to be observed.
- On the Home screen, short press the **Menu button** to enter the shortcut menu.
- Long press the **Menu button** to enter main menu.

- On the Home screen, press the **Power button** for image calibration. When performing background calibration, please cover the lens cap.
- Please set the calibration mode in main menu.
- On the Home screen, press and hold the **Power button** to initiate a 3-2-1 countdown prompt. When the countdown completes, the device will power off.
- If the **Power button** is released during the countdown, the device will enter Standby mode, indicated by a standby icon.
- On the standby screen, either short press or long press the **Power button** will wake up the device.



## 9 Status Bar Icons



1.Current magnification

2.Ultraclear mode status: (👁️ : The Ultraclear mode is off. 👁️ : The Ultraclear mode is on.)

3.WIFI status (📶 : Wi-Fi OFF. 📶 : Wi-Fi ON)

4. Time (Set it in the Main Menu or synchronize the time in the NOCPix APP)

5. Image calibration status (  : Auto Calibration.  : Manual Calibration.  : Background Calibration )

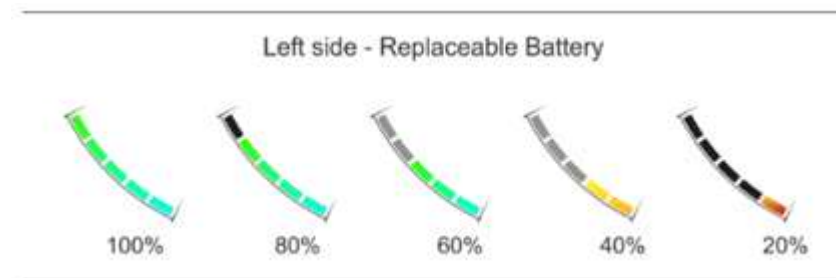
6. MIC status(  : MIC is OFF.  : MIC is ON)

7. RAV status(  : RAV is OFF.  : RAV is ON)

8. Zeroing Distance

9. Current rifle selected

10. Power status of the replaceable battery (18650 battery)

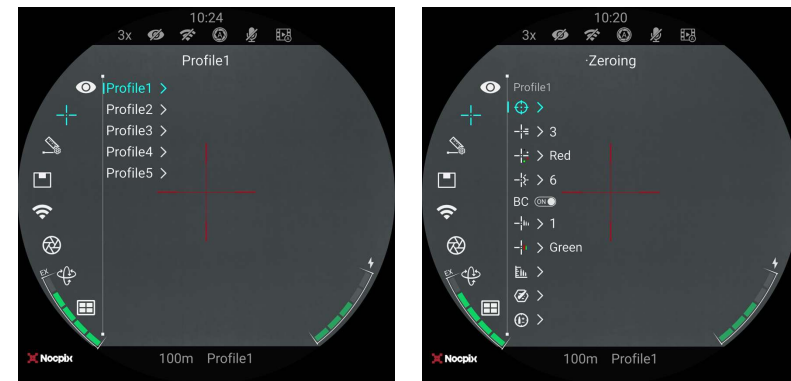


11. Power status of the built-in battery pack

## 10 Reticle&Zeroing

### Zeroing

- Rotate the Controller to set the zeroing profile to 1, 2, 3, 4, or 5 in "Reticle&Zeroing" option.



- Set a suitable target at the desired zero distance.
- Confirm that the rifle is empty, safe, and pointed in a safe direction, with no ammunition near the weapon.
- Based on the distance to the target you wish to zero, select or customize a zero distance to match.
- Ensure a stable platform and natural shooting position is achieved behind the rifle.

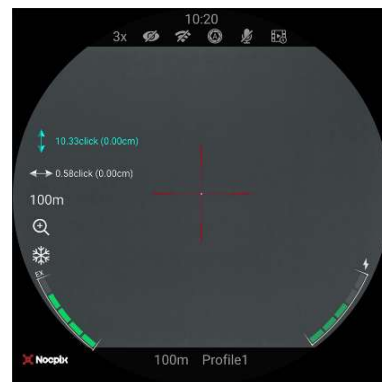
- Load ammunition, aim, and take one good shot at the target.
- Make your rifle safe and observe the location of impact on the target.
- If the point of impact does not match the point of aim (the center of the reticle), adjust the X/Y position of the reticle.
- In the submenu for the selected zero distance, center the reticle on the aiming point and freeze the image view.

- Rotate the controller to select the Image Freeze icon.
- Short press the **Menu** button to freeze the image.

- Adjust the X/Y position of the reticle until the reticle matches the point of impact.

- Short press the **Menu** button to select X or Y direction. The selected axis will turn from white to blue.

- Rotate the controller to move the reticle positive.
- Upon moving the reticle, a red cursor appears on the



screen, representing the original position of the reticle.

- Long press the **Menu** button to save the reticle position.

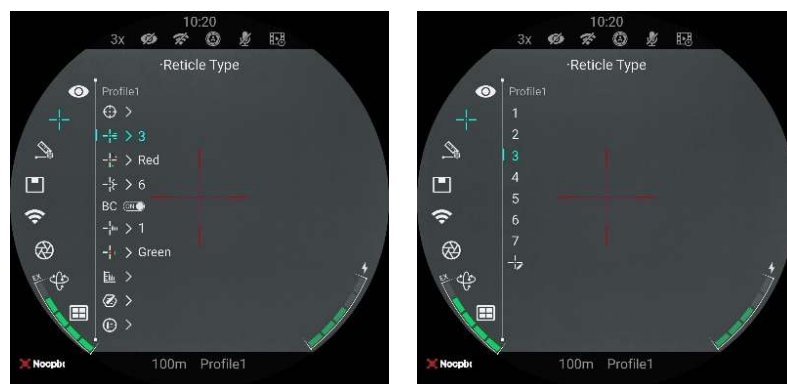
- Take a confirmation shot. The point of impact should now match the point of aim. If not, adjust the X/Y position of the reticle again.
- Click is the number of turns of the encoder, just like that used when zeroing a day scope.





## Reticle Type

- Within the Reticle Type options, you can select 7 reticle types in total, from 1 to 7.
- You can also customize a new Reticle type through the NOCPPIX APP.



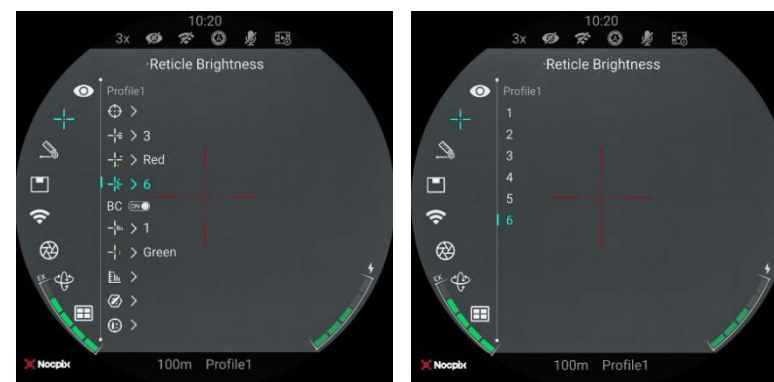
## Reticle Color

- Within the Reticle Color options, you can select 9 reticle colors.



## Reticle Brightness

- Within the Reticle Brightness options, you can select 6 types of Reticle Brightness.



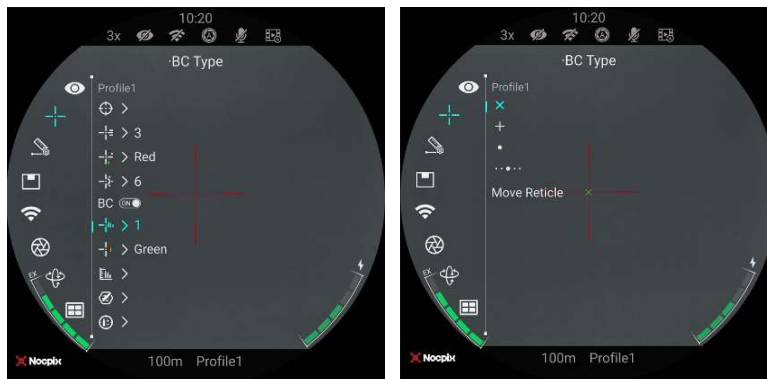
## BC ON/OFF

- Within the BC ON/OFF options, you can enable or disable the BC function;



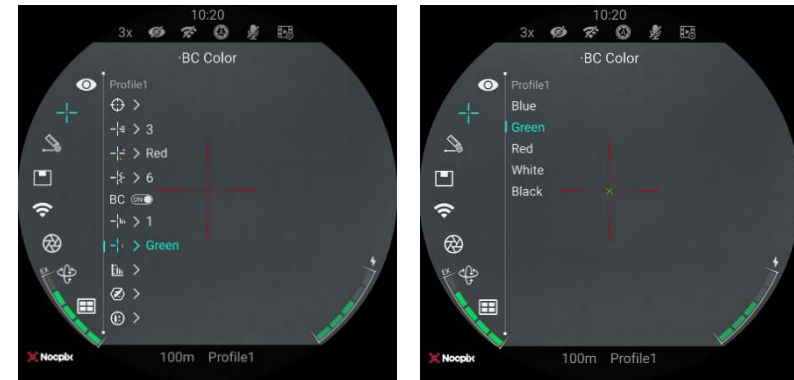
## BC Type

- Within the BC Type options, you can select 4 BC types.
- When SPOA is set to Move Reticle, the ACE will automatically move the original reticle to the Suggested Point of Aim.



## BC Color

- Within the BC Color options, you can select 5 BC colors.



## BC Units

- Within the BC Units options, you can set the BC units to MOA or mil, cm or inch.
- MOA and mil are mutually exclusive.
- Cm and inch are mutually exclusive.

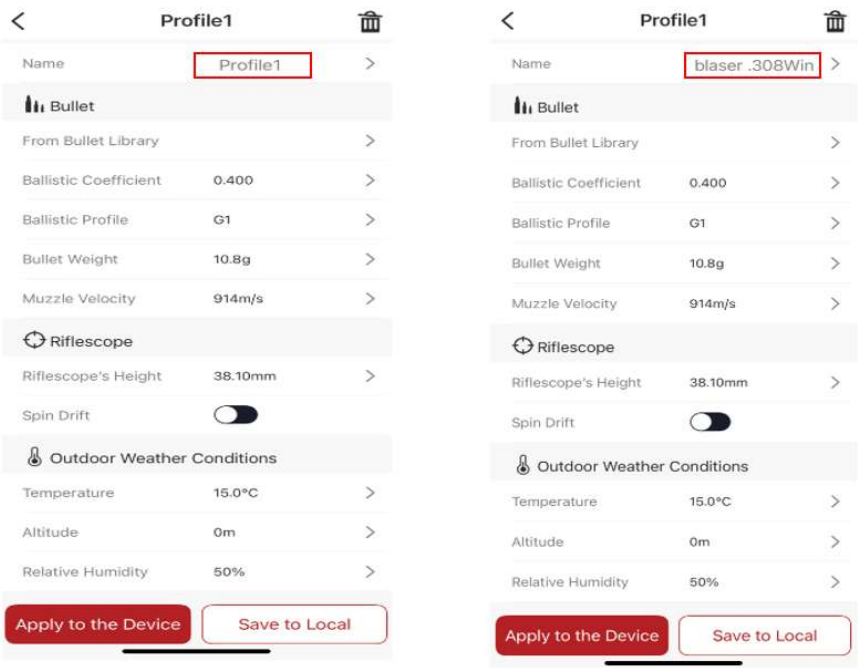


## BC Parameter

- Within the BC Parameter options, you can set the bullet parameters to use.
- You can also set the BC Parameters within the NOCPIX APP.



- Within the NOCPIX APP, you can also modify the name of profile for your distinction between different rifle and bullets, for example blaser .308Win.



## BC Distance

- Within the BC Distance options, you can pre-set the BC distance.
- For ACE H50 and ACE L35, as well as in extremely severe rainy and snowy weather conditions when the ranging performance is reduced, you can pre-set the BC distance within this option, and continue to use the BC function.
- The default distance options when delivery include 200m/225m/250m/275m/300m. Short press the Menu button to modify the distance value.
- The modified distance value will be synchronized to the Shortcut Menu options, and then you can quickly select and switch the distance values within the Shortcut Menu options

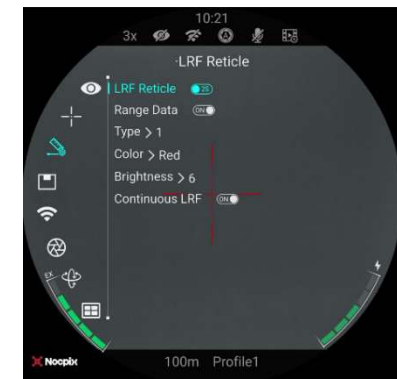


## 11 Laser Rangefinder (Only for ACE H50R / ACE S60R)

ACE H50R and ACE S60R support 1200m laser rangefinder and ballistic calculation functions.

### LRF Reticle

- Within the LRF Reticle options, you can set the display time of LRF Reticle.
- When the LRF Reticle is set to ON, LRF Reticle will be always displayed.
- When the LRF Reticle is set to 2s, LRF Reticle will automatically disappear after being displayed for 2s, so that the hunter can focus more on aiming.

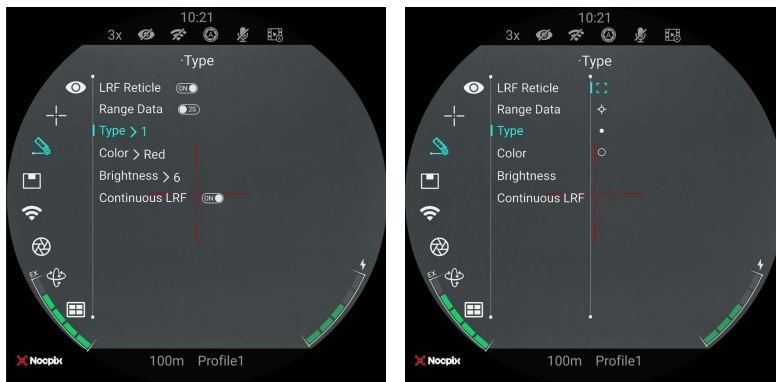


## Range Data

- Within the Range Data options, you can set the display time of Range Data.
- When the Range Data is set to ON, Range Data will be always displayed.
- When the Range Data is set to 2s, Range Data will automatically disappear after being displayed for 2s, so that the hunter can focus more on aiming.

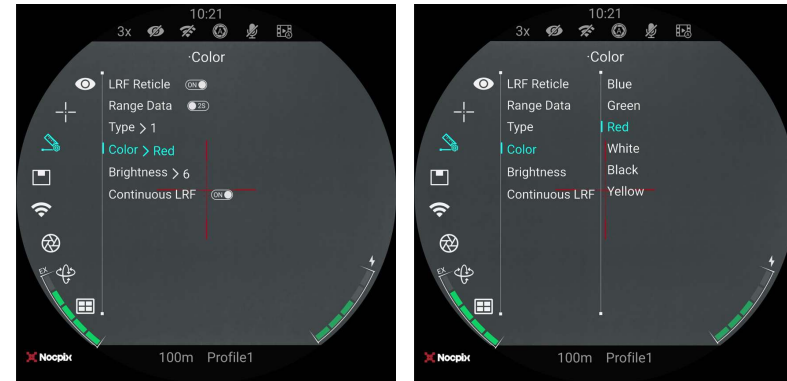
## Type

- Within the Type options, you can select 4 LRF Reticle types.



## Color

- Within the Color options, you can select 6 LRF Reticle colors.



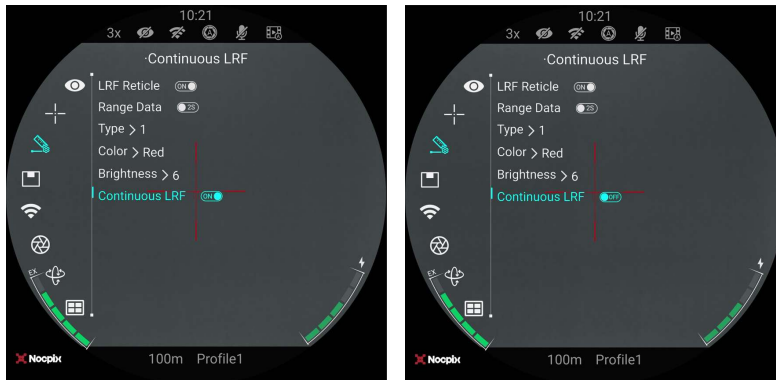
## Color

- Within the Brightness options, you can select 6 types of LRF Reticle Brightness.



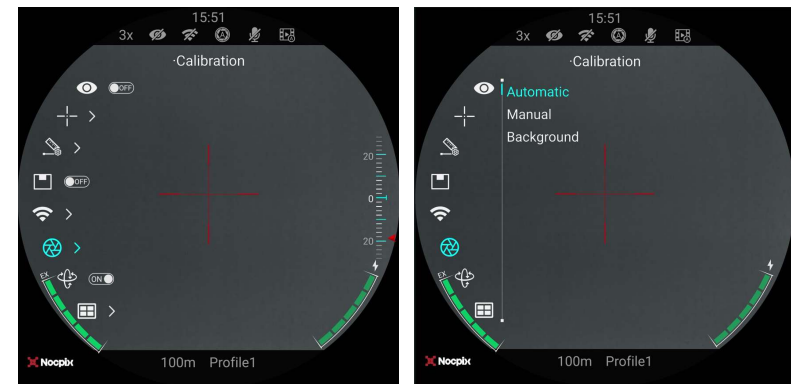
## Continuous LRF

- When the Continuous LRF is set to ON, short press the Rangefinder button to perform a single ranging.  
Press and hold the Rangefinder button to perform continuous ranging.
- When the Continuous LRF is set to OFF, short press the Rangefinder button to perform a single ranging.  
Press and hold the Rangefinder button, and then release it to perform a single ranging.



## 12 Calibration

When the image is degraded or uneven, it can be improved by calibration. Calibration can equalize the background temperature of the detector and eliminate the image defects (such as vertical bars, phantom images, etc.).

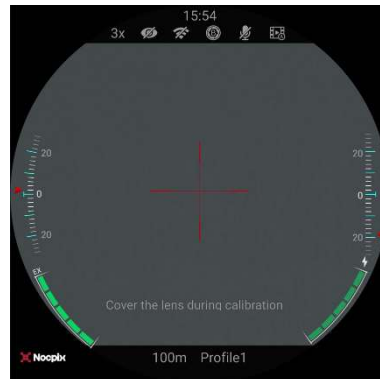


There are three calibration modes: Auto Calibration (A), Manual Calibration (M) and Background Calibration (B).

- Select the required calibration mode in the Main Menu.
- **Auto Calibration (A):** Device will calibrate automatically according to the software algorithm. There is no need to close the lens cover (the internal shutter covers the sensor). Before automatic calibration, there will be a 5 second countdown prompt behind the

shutter icon on the status bar, that can be used to cancel this calibration during countdown with a short press of the **Power button**. In this mode, user can also finish the calibration manually with a short press of the **Power button**.

- **Manual Calibration (M):** On the Home screen, press the **Power button** briefly for manual shutter calibration without closing the lens cover.
- **Background Calibration (B):** On the Home screen, press the **Power button**, then a prompt appears on the display as "cover lens during calibration". Cover the lens cap and background calibration will be done after 2s. After calibration, remove the lens cover.



## 13 Digital Zoom

**The ACE series supports digital zoom using the Controller.**

**When PIP is OFF, digital zoom applies to the main screen.**

**The main screen digital zoom ratio for the ACE series is as follows:**

- ACE L35: 4x, 5x, 6x, 7x, 8x, 9x, 10x, 12x, 14x, 16x
- ACE H50: 3x, 4x, 5x, 6x, 7x, 8x, 9x, 10x, 12x, 14x, 16x, 18x, 20x, 22x, 24x
- ACE H50R: 3x, 4x, 5x, 6x, 7x, 8x, 9x, 10x, 12x, 14x, 16x, 18x, 20x, 22x, 24x
- ACE S60R: 2x, 3x, 4x, 5x, 6x, 7x, 8x, 9x, 10x, 12x, 14x, 16x, 18x, 20x, 22x, 24x

**When PIP is ON, digital zoom applies only to the PIP screen.**

**The PIP digital zoom ratio for the ACE series is as follows:**

- ACE L35: 8x, 10x, 12x, 14x, 16x, 18x, 20x, 24x, 28x, 32x
- ACE H50: 6x, 8x, 10x, 12x, 14x, 16x, 18x, 20x, 24x, 28x, 32x, 36x, 40x, 44x, 48x

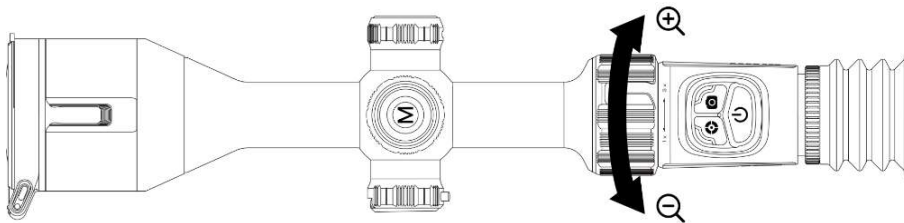
ACE H50R: 6x, 8x, 10x, 12x, 14x, 16x, 18x, 20x, 24x, 28x, 32x, 36x, 40x, 44x, 48x

ACE S60: 4x, 6x, 8x, 10x, 12x, 14x, 16x, 18x, 20x, 24x, 28x, 32x, 36x, 40x, 44x, 48x

## 14 Ocular Zoom

The ACE series supports Ocular zoom, achieved by rotating the **Ocular zoom ring**. The Ocular zoom range is 1×~3×;

The Ocular zoom ratio is not displayed on the screen.



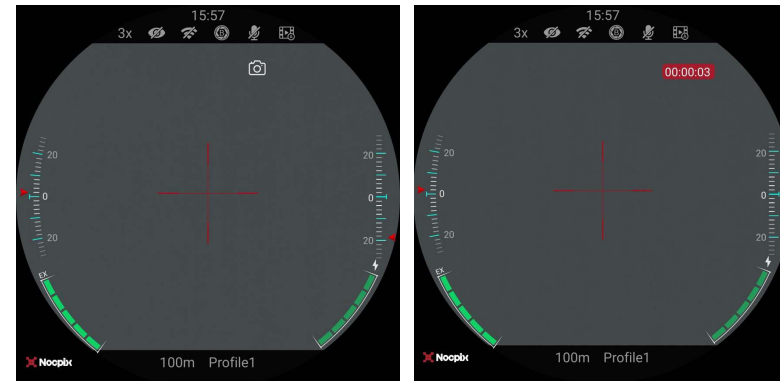
## 15 Photo and Video Recording

The ACE series supports photo and video recording. Press the **Photo button** to take a picture, press and hold the **Photo button** to record a video.

Each time a photo is taken, the camera icon on the display will flash once.

Each time a video is recorded, a camcorder icon will appear on the display, along with the recording time.

When the device's memory space is less than 50MB, an exclamation mark icon will appear, indicating insufficient memory space. Please clear the memory space promptly.



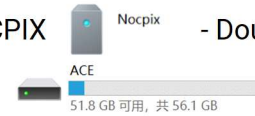


## Memory access

When the device is powered on and connected to a computer, it will be recognized by the computer as a flash memory card. Then, you can access the memory of the device and copy images and videos.

- Connect the device to a computer through the USB cable.
- Power on the device.

- Double-click My Computer - Double-click to open the device named NOCPIX - Double-click to open the device name ACE to access the memory.
- There are different folders named by date in the format of xxxx (year) xx (month) xx (day) in the memory.
- Recorded photos and videos in that day are saved in the folders.
- Select desired files or folders to copy or delete..



## 16 Shortcut Menu

On the main menu screen, press the Menu button to enter the Shortcut Menu options.

On the Shortcut Menu, rotate the Controller to switch between different Shortcut Menu options, and press the Menu button to adjust the parameters of the Shortcut Menu.

If there is no operation for 7 seconds, the Shortcut Menu will exit automatically.

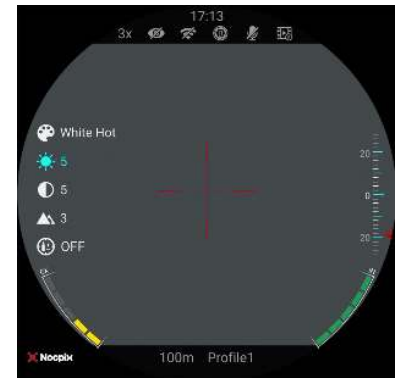
You can also exit the Shortcut Menu screen by pressing and holding the Menu button or pressing the Power button.

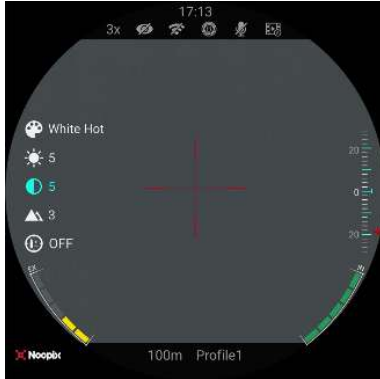
**Color Mode**

- Short press the Menu button to enter the shortcut Menu options;
- Within the Color Mode options, short press the Menu button to switch between different color modes.
- The color modes include: White Hot, Black Hot, Red Hot, Rainbow, Violet, Crimson, and Viridian.
- Note: Only the ACE H50R/ ACE S60R models have the Color Mode option in Shortcut Menu.

**Screen Brightness**

- Short press the Menu button to enter the shortcut Menu options;
- Rotate the controller to switch to Screen Brightness options;
- Within the Screen Brightness options, short press the Menu button to switch between different screen brightness levels.
- Screen brightness has 10 levels to choose from, we recommend a screen brightness of 5.



|                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                |                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <div>Image Contrast</div> <div></div>        | <ul style="list-style-type: none"><li>● Short press the Menu button to enter to the Image Contrast options;</li><li>● Rotate the controller to switch to Image Contrast options</li><li>● Within the Image Contrast options, short press the Menu button to switch between different Image Contrast levels.</li><li>● Image Contrast has 10 levels to choose from, we recommend a contrast level of 5.</li></ul>                                                                                                                                                                                                                                | <div></div> |                                                                                                |
| <div>Image Sharpness</div> <div></div>       | <ul style="list-style-type: none"><li>● Short press the Menu button to enter to the Image Sharpness options;</li><li>● Rotate the controller to switch to Image Sharpness options</li><li>● Within the Image Sharpness options, short press the Menu button to switch between different sharpness levels.</li><li>● Image Sharpness has 10 levels to choose from, we recommend a sharpness level of 5.</li></ul>                                                                                                                                                                                                                                |                                                                                                | <div></div> |
| <div>Pre-set BC Distance</div> <div></div> | <p>For ACE H50 and ACE L35, as well as in extremely severe rainy and snowy weather conditions for ACE S60R and ACE H50R when the ranging performance is reduced, you can pre-set the BC distance within this option, and continue to use the BC function.</p> <ul style="list-style-type: none"><li>● Short press the Menu button to enter the shortcut menu options;</li><li>● Rotate the controller to switch to Pre-set BC Distance options;</li><li>● Within the Pre-set BC Distance options, short press the Menu button to switch between different BC distances.</li></ul> <p>Default values include OFF/200m/225m/250m/275m/300m/+.</p> |                                                                                                |                                                                                                |

- When OFF is selected, the Pre-set BC Distance function is OFF.

When 200m/225m/250m/275m/300m is selected, Ballistic Calculate will be performed according to the selected distance. The distance can be modified within Reticle&Zeroing – Profile – BC Distance.

When "+" is selected, press and hold the Menu button to add a new BC Distance.



## 17 Main Menu

Press and hold the **Menu** button to open the **Main Menu**;

Within the **Main Menu** options, rotate the controller to switch between different main menu options. Icons change from white to blue when a Main Menu option is selected.

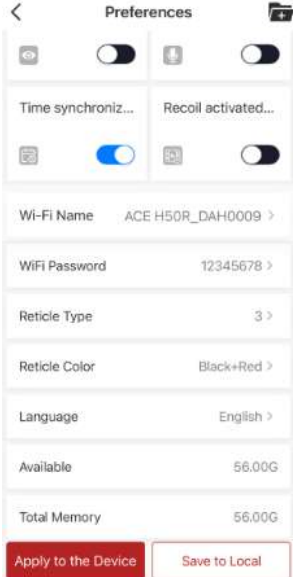
Press the **Menu** button to adjust the parameter settings of the **Main Menu**;

If there is no operation for 7 seconds, the **Main Menu** will exit automatically. You can also exit the **Main Menu** screen by pressing and holding the **Menu** button or pressing the **Power** button.

Within the **Main Menu** options, you can perform the following settings:

|                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <div>Ultra Clear</div> <div></div>           | <ul style="list-style-type: none"><li>● Press and hold the Controller to enter the Main Menu interface.</li><li>● Rotate the Controller to switch to the Ultra Clear option;</li><li>● Within the Ultra Clear option, press the Menu button to enable or disable the Ultra Clear mode.</li></ul> <p><b>Note:</b> We recommend to enable Ultra Clear mode on cloudy and rainy days to effectively enhance image quality.</p> |   |
| <div>Reticle&amp;Zeroing</div> <div></div> | <ul style="list-style-type: none"><li>● Press and hold the Controller to enter the Main Menu interface.</li><li>● Rotate the Controller to switch to the Reticle&amp;Zeroing option.</li><li>● For detailed operating instructions, please refer to Chapter 10 <b>Reticle &amp; Zeroing</b>.</li></ul>                                                                                                                      |  |

|                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                      |
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| <p><b>Laser<br/>Rangefinder</b></p>  | <ul style="list-style-type: none"> <li>● Press and hold the Controller to enter the Main Menu interface.</li> <li>● Rotate the Controller to switch to the Laser Rangefinder option.</li> <li>● For detailed operating instructions, please refer to Chapter 11 <b>Laser Rangefinder</b>.</li> </ul>                                                                                                                                                                                                  |   |
| <p><b>PIP</b></p>                    | <ul style="list-style-type: none"> <li>● Press and hold the Controller to enter the Main Menu interface.</li> <li>● Rotate the Controller to switch to the PIP option.</li> <li>● Within the PIP option, press the Menu button to enable or disable PIP mode.</li> </ul>                                                                                                                                                                                                                              |   |
| <p><b>WIFI</b></p>                 | <ul style="list-style-type: none"> <li>● Press and hold the Controller to enter the Main Menu interface.</li> <li>● Rotate the Controller to switch to the WIFI option.</li> <li>● Within the WIFI option, press the Menu button to enable or disable WIFI.</li> <li>● After the Wi-Fi function is on, search for the Wi-Fi signal with the name "ACE H50R_XXXXXXX" on the mobile device.</li> <li>● Select the Wi-Fi and enter the password to connect. The initial password is 12345678.</li> </ul> |  |

|                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                      |
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|                                                                                                            | <ul style="list-style-type: none"><li>● When Wi-Fi is successfully connected, it supports to control the scope via the NOCPIX APP downloaded in the mobile device.</li><li>● Setting Wi-Fi name and password</li><li>● The name and password of the Wi-Fi in ACE series can be reset on the Nocpix app.</li><li>● After the scope is connected to a mobile device, locate and click the ‘Settings’ icon on the Nocpix image screen to enter the WiFi setting interface</li><li>● In the text box, enter and submit the new Wi-Fi name (SSID) and password.</li><li>● It needs to reboot the device to take the new name and password effect.</li></ul> <p><b>Note:</b> If the device is reset to the factory settings, the name and password of the Wi-Fi will also be restored to the default settings.</p> |   |
| <div>Calibration</div>  | <ul style="list-style-type: none"><li>● Press and hold the Controller to enter the Main Menu interface.</li><li>● Rotate the Controller to switch to the Calibration option.</li><li>● Within the Calibration option, you can select 3 calibration types, including:<br/>Auto Calibration (A)   Manual Calibration (M)   Background Calibration (B)</li><li>● Please refer to the Calibration section for detailed guidance for zeroing.</li></ul>                                                                                                                                                                                                                                                                                                                                                           |  |

|                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                               |
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| <div data-bbox="230 323 423 352" data-label="Section-Header"><p>Motion Sensor</p></div> <div data-bbox="286 371 367 451" data-label="Image"></div> | <ul style="list-style-type: none"><li>● Press and hold the Controller to enter the Main Menu interface.</li><li>● Rotate the Controller to switch to the Motion Sensor option.</li><li>● Within the Motion Sensor option, press the Menu button to enable or disable the Motion Sensor.</li><li>● When the motion sensor is on, the horizontal scale representing the tilt angle is displayed on the left side, the vertical scale representing the pitch angle is displayed on the right side.</li></ul> |                                                                                                                               |
| <div data-bbox="280 874 374 903" data-label="Section-Header"><p>Gallery</p></div> <div data-bbox="286 930 362 994" data-label="Image"></div>       | <ul style="list-style-type: none"><li>● Press and hold the Controller to enter the Main Menu interface.</li><li>● Rotate the Controller to switch to the Gallery option.</li><li>● Within the Gallery, video and photo files are arranged in folders by date.</li><li>● After entering a folder, select a video file, and press the M button to play the video file.</li></ul>                                                                                                                            | <div data-bbox="521 839 898 1222"></div> <div data-bbox="920 839 1299 1222"></div> <div data-bbox="1321 839 1706 1222"></div> |



|                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                |
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| <div>Image Hue</div> <div></div> | <div><ul style="list-style-type: none"><li>● Press and hold the Controller to enter the Main Menu interface.</li><li>● Rotate the Controller to switch to the Image Hue option.</li><li>● Within the Image Huge option, press Menu button to choose Warm Hue (  ) or Cool Hue (  ).</li><li>● Cold hue mode Image will be more contrast, more hierarchy, and more obvious targets.</li><li>● Warm hue mode Image will be softer. It can reduce the visual fatigue of the observer, and long time observation is not dazzling.</li></ul></div> <div><p><b>Notes:</b> The default setting is Cool Hue.</p></div> | <div></div> |
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## Recoil



- Press and hold the Controller to enter the Main Menu interface.
- Rotate the Controller to switch to the Recoil option.
- Within the Recoil options, you can set RAV to ON or OFF.

When RAV is ON, a 30s video will be automatically generated after shooting.

At the same time, an additional video whose name is with the suffix "\_Slow" will be generated, and it is a 30 times slow-motion video of the moment of shooting. You can view the produced RAV video files within the Gallery.

- Within the Recoil options, you can set E-zoom After Recoil to different gears.

When it is set to original, the current E-zoom magnification will remain unchanged after shooting.

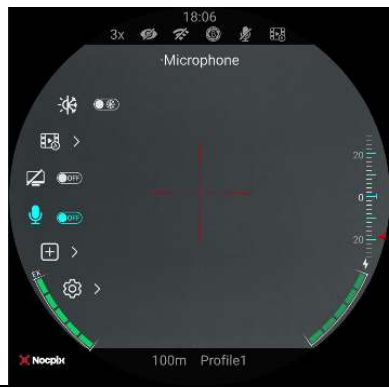
When it is set as 3x/6x/9x, it will automatically adjust to this E-zoom magnification after shooting;

- Within the Recoil options, you can set the Recoil sensitivity from 1 to 6.

A smaller value is corresponding to a smaller bullet energy, which will make it easier to trigger RAV.

A larger value is corresponding to a greater bullet energy, which will it more difficult to trigger RAV.



|                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                      |
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| <p><b>Standby</b></p>                    | <ul style="list-style-type: none"> <li>● Press and hold the Controller to enter the Main Menu interface.</li> <li>● Rotate the Controller to switch to the Standby option.</li> <li>● Within the Standby option, press the Menu button to enable or disable the standby function.</li> <li>● When Standby is enabled, the device automatically enters Standby mode to save power when the vertical tilt angle exceeds 70° or the horizontal tilt angle exceeds 30°.</li> </ul> |   |
| <p><b>Microphone</b></p>                 | <ul style="list-style-type: none"> <li>● Press and hold the Controller to enter the Main Menu interface.</li> <li>● Rotate the Controller to switch to the Microphone option.</li> <li>● Within the Microphone option, press the Menu button to enable or disable the Microphone function.</li> <li>● The Microphone icon is displayed on the status bar.</li> <li>●</li> </ul>                                                                                                |   |
| <p><b>Pixel Defect Correction</b></p>  | <p>When using the scope, you may see pixel defects, such as visible light spots or dark spots with stable brightness. To address this problem, use the Pixel Defect Correction function to remove the pixel defects.</p> <ul style="list-style-type: none"> <li>● Press the Controller to enter the Pixel Defect Correction interface.</li> <li>● The PIP function is automatically turned on, and display on</li> </ul>                                                       |  |

the top of the screen by default. The moving directions (X-axis and Y-axis) and the numbers of corrected pixels are shown on the left side of the screen.

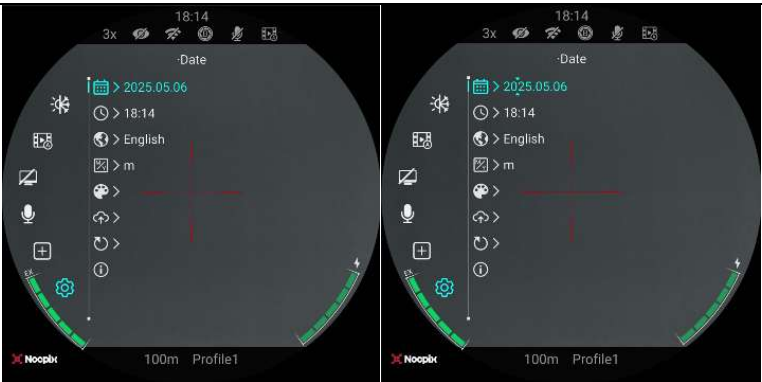
- In the Pixel Defect Correction interface, the reticle is instead by a small cross cursor.
- Rotate the Controller to move along the direction selected, rotate it clockwise to move leftward or downward, and rotate anticlockwise to move rightward or upward. When the X or Y direction is selected, the icon will flash continuously.
- Press the Menu button to save moving data and select the  icon to add and correct it. The value of  will be changed from "0" to "1". At the same position, press the Menu button again to revoke the defect pixel correction and the value will be changed from "1" to "0".
- Rotate the Controller to select 'Yes' to save and exit, or select 'No' to cancel saving and exit.
- Press the Controller briefly to confirm the selection.

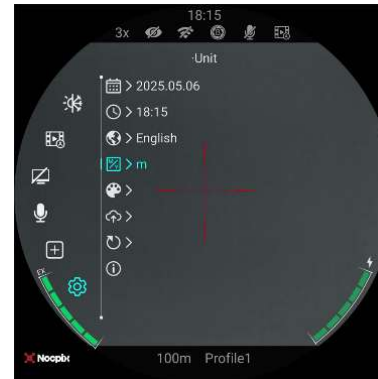
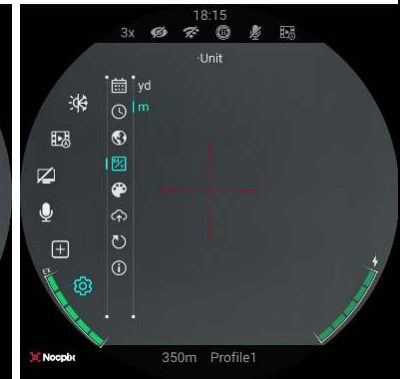
You can also choose the automatic defective pixel calibration function by short press icon. 

- Press and hold the Controller to enter the Main Menu interface.
- Rotate the Controller to select the Setting option.
- Press the Controller briefly to enter the submenu.
- This menu item allows you to configure the following settings.



|                                                                                                     |                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                     |                                                                                                    | <ul style="list-style-type: none"> <li>● Press and hold the Controller to enter the Main Menu interface.</li> <li>● Rotate the Controller to select the Setting option.</li> <li>● Press the Controller briefly to enter the submenu.</li> <li>● This menu item allows you to configure the following settings.</li> </ul>                                     |
| <b>Setting</b><br> | <b>Date</b><br>   | <b>Set system date</b> <ul style="list-style-type: none"> <li>● Within the Date option, short press the Menu button to switch the Year / Month / Day option;</li> <li>● Rotate the controller to adjust the value of Year / Month / Day.</li> <li>● After the adjustment is completed, press and hold the Menu button to save and exit Date option.</li> </ul> |
|                                                                                                     | <b>Time</b><br> | <b>Set system time</b> <ul style="list-style-type: none"> <li>● Within the Time option, short press the Menu button to switch the Hour / Minute option;</li> <li>● Rotate the controller to adjust the value of Hour / Minute.</li> <li>● After the adjustment is completed,</li> </ul>                                                                        |



|                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                           |
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|                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                   | press and hold the Menu button to save and exit Time option.                                                                                                              |
| <b>Languages</b><br> | <b>Set system languages</b> <ul style="list-style-type: none"> <li>Within the Languages option, rotate the controller to switch different languages.</li> <li>Languages available for the ACE series include English, German, Spanish, Italian, French, Swedish, Norwegian, Polish, Czech, Slovak, Hungarian, and Dutch.</li> <li>After the adjustment is completed, press and hold the Menu button to save and exit Languages option.</li> </ul> |     |
| <b>Unit</b><br>    | <b>Set system unit</b> <ul style="list-style-type: none"> <li>Within the Unit option, rotate the controller to switch the unit of Meter or Yard.</li> <li>Press Menu button to select Meter / Yard.</li> <li>After the adjustment is completed, press and hold the Menu button to save and exit Unit option.</li> </ul>                                                                                                                           |   |

|  |                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <div data-bbox="465 379 672 408" data-label="Section-Header"><p>Custom palettes</p></div> <div data-bbox="526 424 607 504" data-label="Image"></div>   | <div data-bbox="701 201 1249 667" data-label="List-Group"><ul style="list-style-type: none"><li>● Press Menu button to select Custom palettes.</li><li>● Within the Custom palettes options, you can customize the color according to your preferences.</li></ul><p>You can set your frequently used colors to ON, and set the infrequently used colors to OFF.</p></div> <div data-bbox="1272 233 2033 616" data-label="Image"></div>                                                                                                                                                                                                                                                          |
|  | <div data-bbox="506 884 627 970" data-label="Section-Header"><p>Firmware Update</p></div> <div data-bbox="526 1002 607 1062" data-label="Image"></div> | <div data-bbox="701 702 1249 1107" data-label="List-Group"><p><b>Firmware Update</b></p><ul style="list-style-type: none"><li>● Within the Firmware Update option,</li><li>● you can use the manufacturer-provided specific file to update the system firmware. Of course, you can also upgrade the system through the NOCPIX APP.</li></ul></div> <div data-bbox="1272 702 2033 1085" data-label="Image"></div> <div data-bbox="701 1142 2016 1235" data-label="Text"><p><b>Notes:</b> When using the firmware update function, please strictly follow the manufacturer's instructions. Please refer to the "FW Updates and APP" section for detailed guidance for FW update by APP.</p></div> |

|  |                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                   |
|--|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <div>Factory Reset</div> <div></div> | <div>Factory reset</div> <div><ul style="list-style-type: none"><li>Within the Factory Reset option, you can use Menu button ant Controller to set ACE to factory default settings.</li></ul></div> <div></div> <div></div> |
|  | <div>Info</div> <div></div>          | <div>System information</div> <div><ul style="list-style-type: none"><li>Within in the Info option, you can press the Menu button to enter the Info interface to View the device information.</li></ul></div> <div></div>                                                                                      |



## 18 FW Updates and APP

The ACE series Thermal Imaging Scope allows you to transmit images to a smartphone or tablet via Wi-Fi in real time mode.

Continuous improvements will be made to improve the user experience. The latest programs can be automatically detected and updated via the Nocpix APP.

Also, it is feasible to download and update from the official website:

[www.nocpix.com](http://www.nocpix.com).

### About Nocpix

You can download and install the Nocpix APP on the official website ([www.nocpix.com](http://www.nocpix.com)) or the app store. Alternatively, you can scan the QR code below to download it for free.

- Open the Nocpix APP after installation.
- If your device has been connected to a mobile device, please turn on the mobile data of the mobile device. After connection, an update prompt will be displayed automatically on the App.
- Nocpix automatically registers the last connected device.

Therefore, once you have connected with Nocpix before, it will automatically detect the update even when the scope is not connected to the mobile device.

- If an update is available and the mobile device accesses the Internet, you can download the update first. Then when the device is connected with the mobile device, it will be updated automatically.
- After the update is installed, the device will restart automatically.



## 19 Maintenance

The maintenance should be carried out at least twice a year and

includes the following steps:

- Wipe the surface of metal and plastic parts to clear off dust and dirt by using a cotton cloth. Silicone grease may be used for the cleaning process.
- Clean the electric contacts and battery slots on the device using a non-greasy organic solvent.
- Check the glass surface of the eyepiece and lens. If necessary, clear off the dust and sand on the lens (it is perfect to use a non-contact method). Use a specialized wiping tool and solvent to clean the optical surfaces.

## 20 Troubleshooting

The following table lists all problems that are likely to occur during device operation. Check and address problems by referring to this table. If faults not included in this table occur or you cannot fix the fault, return the device to its vendor or supplier for troubleshooting.

| Fault                                                                          | Possible Causes                                                   | Solution                                                                                                                                   |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| The scope cannot be started.                                                   | The battery is out of charge.                                     | Charge the battery.                                                                                                                        |
| The device cannot be powered by using an external power supply.                | The USB cable is damaged.                                         | Replace the USB cable.                                                                                                                     |
|                                                                                | The external power supply is insufficient.                        | If necessary, check the external power supply.                                                                                             |
| Images are unclear, vertical lines are present, or the background is not even. | Calibration is required.                                          | Calibrate the images as instructed in this User Manual.                                                                                    |
| The image is too dark.                                                         | The screen is not bright enough.                                  | Adjust the display brightness.                                                                                                             |
| The icons are clear but the image is blurry.                                   | The lens is not focused.                                          | Rotate the lens focus ring to adjust the focus.                                                                                            |
|                                                                                | The inner or outer optical surface of the lens is dusted or iced. | Wipe the outer optical surface by using a soft cotton cloth or leave the scope to dry in a warm and dry environment for more than 4 hours. |

|                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The scope cannot focus.                                                                                        | Wrong settings.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p>Set the scope according to the contents of section <b>Power-on and Settings</b> in this user manual.</p> <p>Check the outer surface of the objective lens and eyepiece, and if necessary, wipe off any dust and frost on it.</p> <p>In cold weather, a special antifogging coating can be applied (such as those used on eyeglasses or car rearview mirrors).</p> |
| The device cannot connect to the mobile device.                                                                | The Wi-Fi password is incorrect.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Enter the correct password.                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                                | Too many Wi-Fi networks around the device.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Move the device to an area with no or fewer Wi-Fi signals.                                                                                                                                                                                                                                                                                                           |
| Wi-Fi signals are lost or interrupted.                                                                         | <p>The device is beyond Wi-Fi coverage.</p> <p>There is blocking (such as concrete walls) between the device and the receiver.</p>                                                                                                                                                                                                                                                                                                                                                                           | Move the device to a place where you can receive Wi-Fi signals.                                                                                                                                                                                                                                                                                                      |
| The observed target disappears.                                                                                | Observation through glass.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Observe the target directly without the presence of glass.                                                                                                                                                                                                                                                                                                           |
| The image quality is poor or the detection range is shortened.                                                 | These problems are likely to occur when you use the device in harsh weather (such as snow, rain, and fog).                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                      |
| When the device is used at a low temperature, the imaging quality is poorer than that at a normal temperature. | <p>At temperatures above 0°C, the temperature rise varies with the observed objects (environment and background) due to different heat conductivity coefficients. As a result, high-temperature contrast occurs and the image quality is better.</p> <p>At low temperatures, the observed targets (background) usually cool down to a similar temperature because of reduced temperature contrast. Therefore, the image quality (details) is poor, which is a characteristic of thermal imaging devices.</p> |                                                                                                                                                                                                                                                                                                                                                                      |

## 21 Legal and Regulatory Information

Wireless transmitter module frequency range:

**WLAN: 2.412-2.472 GHz**

Wireless transmitter module power < 20 dBm



We Inlumen Technologies Co., Ltd. hereby declares that the radio equipment types ACE is in compliance with the Directives 2014/53/EU and 2011/65/EU

### FCC Statement

**FCC ID: 2BHFB-ACE-00**

#### Labeling requirements

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### Information to the user

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### EMC: Class A

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

To comply with RF exposure requirements, a minimum separation distance of 0.00 cm must be maintained between the user's body and the handset, including the antenna.



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