

# SPECTRUM LRF 4K

DIGITAL DAY & NIGHT VISION RIFLE SCOPE WITH LASER RANGEFINDER

**USER MANUAL** 

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# FCC INFORMATION

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



This equipment complies with FCC/IC RSS-102 radiation exposure limits set forth for an uncontrolled environment.

FCC compliance: This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

#### FCC Conditions

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.

2. This device must accept any interference received, including interference that may cause undesired operation.

### EU CONFORMITY STATEMENT

CE

This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the RoHS Directive 2011/65/EU

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

2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info

#### INDUSTRY CANADA ICES-003 COMPLIANCE

This device meets the CAN ICES-3 (B)/NMB-3(B) standards requirements.

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# SAFETY SUMMARY

- · Read and follow all instructions
- Read all warnings
- Only use the attachments/accessories specified by the manufacturer
- · All service must be provided by the manufacturer

#### WARNING:

This product contains natural rubber latex, which may cause potentially fatal allergic reactions! If you are allergic to latex, it is important that you strictly avoid exposure to products that contain it.

#### WARNINGS AND CAUTIONS:

#### Transportation

- Keep the device in original or similar packaging while transporting it.
- Keep all wrappers after unpacking them for future use. In case of any failure occurred, you need to return the device to the factory with the original wrapper. Transportation without the original wrapper may result in damage on the device and the company shall not take any responsibilities.
- DO NOT drop the product or subject it to physical shock. Keep the device away from magnetic interference.

#### Battery

- Improper use or replacement of the battery may result in explosion hazard. The built-in battery type is 18650 with the protection board, and the battery size is 23×67 mm. The rated voltage and capacity are 3.6 VDC/3.35 Ah (12.18 Wh).
- For long-term storage of the device, make sure it is fully charged every half year to ensure the battery quality. Otherwise, damage may occur.
- Do not charge other battery types with the supplied charger. Confirm there is no flammable material within 2 m of the charger during charging.
- Make sure the device temperature is between 0°C to 45°C (32°F to 113°F) when charging.
- DO NOT place the device near heating or fire source. Avoid direct sunlight.
- · Please use the supplied charger to charge the battery.

#### Maintenance

- If the product does not work properly, please contact your dealer or the nearest service center. We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.
- Wipe the device gently with a clean cloth and a small quantity of ethanol, if necessary.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the device may be impaired.
- It is recommended to reboot the device every 2 hours when using it to ensure the device performance.

#### **Using Environment**

- Make sure the running environment meets the requirement of the device. The operating temperature shall be -30°C to 55°C (-22°F to 131°F), and humidity shall be 5% to 95%.
- DO NOT expose the device to high electromagnetic radiation or dusty environments.
- · DO NOT aim the lens at the sun or any other bright light.
- · Place the device in a dry and well-ventilated environment.

#### EMERGENCY:

If smoke, odor, or noise arises from the device, immediately turn off the power, unplug the power cable, and contact the service center.

#### LASER CAUTION:

When any laser equipment is in use, make sure that the device lens is not exposed to the laser beam, or it may burn out. The laser radiation emitted from the device can cause eye injuries, burning of skin or inflammable substances. Before enabling the light supplement function, make sure no human or inflammable substances are in front of the laser lens. Do not place the device where minors can fetch it.



\* LASER 1 IEC 60825-1: 2014 EN 60825-1: 2014 + A11: 2021

Complies with FDA performance standards for laser products except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.

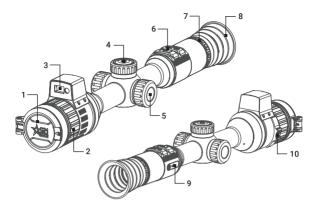
# I GENERAL INFORMATION

# 1.1 SYSTEM DESCRIPTION

The Spectrum LRF 4K digital day & night vision scope from AGM utilizes many of the features that shooters have come to know and love in the Spectrum LRF 4K, but with one big addition: a 1,000-meter integrated laser rangefinder (LRF). This feature helps alleviate a common issue many shooters find themselves experiencing when hunting with any sort of digital optic, and that is the lack of depth perception that is inherent in optics utilizing a digital screen. The Spectrum LRF 4K pairs that LRF functionality with an advanced high-resolution 3840x2160 detector, which works in conjunction with a high quality 1920x1080 OLED display.

The Spectrum LRF 4K is developed for 24 hours operation in all ambient light and providing full-color clarity in daytime and classic black & white viewing at night. The Spectrum LRF 4K can be mounted to the Picatinny/Weaver rail using standard 30mm scope rings. Ideal for professional hunters who prefer the familiar shape and function of common traditional scopes but seek technological superiority.

The scope is equipped with unique dual power system. The builtin battery type is rechargeable lithium-ion battery with one 18650 replaceable Lithium battery provide up to 11 hours of continuous operation. The device has 64GB EMMC storage for on-board video recording and image capture. Shot Activated Recording (SAR) function allows you not to worry about having to start recording manually each time. Wi-Fi module for live video streaming and video/images recording via application are also available.



#### FIGURE 1-1. MAIN PARTS

### TABLE 1-1. MAIN PARTS

| ITEM | DESCRIPTION              |  |  |
|------|--------------------------|--|--|
| 1    | Lens Cap                 |  |  |
| 2    | Focus Ring               |  |  |
| 3    | Laser Rangefinder        |  |  |
| 4    | Navigation Wheel         |  |  |
| 5    | Battery Cover            |  |  |
| 6    | Operating Buttons        |  |  |
| 7    | Diopter Adjustment Ring  |  |  |
| 8    | Eyepiece                 |  |  |
| 9    | USB Interface Cover      |  |  |
| 10   | Aperture Adjustment Ring |  |  |

# 1.2 STANDARD COMPONENTS

The standard components are shown in Figure 1-2 and listed in Table 1-2.

The ITEM column indicates the number used to identify items in Figure 1-2.

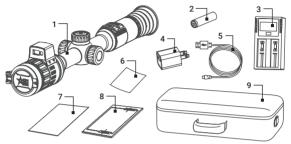


FIGURE 1-2. STANDARD COMPONENTS

| ITEM | DESCRIPTION                | QUANTITY |
|------|----------------------------|----------|
| 1    | Rifle Scope                | 1        |
| 2    | 18650 Rechargeable Battery | 1        |
| 3    | 18650 Battery Charger      | 1        |
| 4    | Power Adapter              | 1        |
| 5    | Type-C USB Cable           | 1        |
| 6    | Lens Cloth                 | 1        |
| 7    | Quick Start Guide          | 1        |
| 8    | User Manual                | 1        |
| 9    | Carrying Case              | 1        |

#### **TABLE 1-2. STANDARD COMPONENTS**

# 1.3 OPTIONAL EQUIPMENT

Optional equipment is shown in Figure 1-3 and listed in Table 1-3.



#### FIGURE 1-3. ADM QUICK RELEASE MOUNT

#### TABLE 1-3. OPTIONAL EQUIPMENT

| DESCRIPTION   | PART NO. |
|---|----------|
| AGM-2116 ADM Quick Release Mount. One-<br>piece 30mm quick release mount. 1.47" (37.3<br>mm) centerline height. | 63061161 |

# 1.4 KEY FEATURES

- F1.2-2.5 adjustable aperture provides incredible lowlight gathering capabilities
- · 3.5-28x incremental and step zoom capability
- 3840x2160 ultra-high-definition CMOS sensor
- · Built-in laser rangefinder
- · Supports Day/Night mode
- Detection range up to 1,000m (day)
- 1920×1080 resolution OLED display
- · Various reticle types and colors
- · Internal ballistic calculator
- · On-board video/audio recording and image capture
- Shot-Activated Recording (SAR)
- 64GB EMMC built-in storage
- · Wi-Fi data transmission
- · AGM Connect App compatibility
- Waterproof & Shockproof
- · Standby mode
- · Dual power system
- Up to 11 hours continuous operation
- · External power supply capability
- 3-year warranty

# **2 OPERATING INSTRUCTIONS**

# 2.1. BASIC OPERATIONS

### 2.1.1 UNPACKING

The following steps must be completed prior to each mission.

- 1. Open the carrying case, remove the device, and verify that all components are included.
- Inspect the device for any obvious evidence of damage to the optical surfaces, body, eyecup, operation buttons, etc. Ensure that all optical surfaces are clean and ready for use. Clean all optical surfaces with a lens tissue.

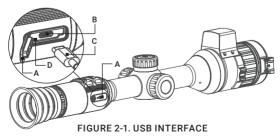
### 2.1.2 CHARGING THE BUILT-IN BATTERY

When the device is turned on, the battery indicator on the screen shows the built-in battery status. Icon I means the battery is fully charged, icon I means that the battery is low.

When the low power note shows, charge the battery.

#### NOTE:

Please charge the battery with the included USB cable and power adapter. The charging temperature should be  $0^{\circ}$ C to  $45^{\circ}$ C ( $32^{\circ}$ F to  $113^{\circ}$ F).



- 1. Open the USB interface cover (Figure 2-1, A).
- 2. Connect the power adapter to the scope's interface port (B) using the USB cable (C).
- 3. Plug in the power adapter and charge the built-in battery. Icon in the FOV of scope indicates the charging process. The green icon more means the battery is fully charged. The color LED (D) near USB port indicates the charging status. Charge the device for more than 6 hours before first use.

| INDICATOR            | FUNCTIONS                     |
|----------------------|-------------------------------|
| Flashing Red & Green | Error occurred.               |
| Solid Red            | Battery is properly charging. |
| Solid Green          | Battery is fully charged.     |
| Off                  | Battery is not charged.       |

TABLE 2-1. CHARGING STATUS INDICATION

#### 2.1.3 ADDITIONAL 18650 BATTERY INSTALLATION

- 1. Turn the battery cover (Figure 2-2, A) counterclockwise to open it.
- 2. Insert 18650 rechargeable battery (B) into the battery compartment (C) with the positive mark inward.
- 3. Turn the battery cover clockwise to tighten it.

The additional battery turns on automatically when the built-in battery runs out. In this case the vertical battery icon indicates the status of the additional battery. Charge the 18650 battery using the included battery charger.

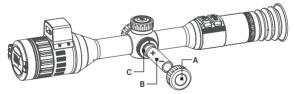


FIGURE 2-2. BATTERY INSTALLATION

#### NOTE:

Remove the additional battery from the battery compartment if the device is not used for a long time.

# 2.1.4 CONTROL BUTTONS

The Spectrum LRF 4K controls are shown in Figures 2-3 and are defined in Tables 2-2.

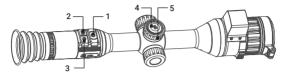


FIGURE 2-3. SPECTRUM LRF 4K CONTROLS

Each button is responsible for some functions selected by short press or long press (hold) the button. Pushing a button for 2+ second is considered "long press" (hold).

| ITEM | CONTROLS                       | FUNCTIONS   |
|------|--------------------------------|---|
| 1    | O POWER<br>BUTTON              | Press: Standby mode / Wake up<br>device<br>Hold: Power ON/OFF   |
| 2    | CAPTURE<br>BUTTON              | Press: Image capture<br>Hold: Start/Stop video recording  |
| 3    | ★ LRF BUTTON                   | Press: Turning on the laser /<br>Distance measurement<br>Double-press: Turning off the laser<br>Hold: Enable/Disable PIP (Picture-<br>in-Picture) |
| 4    | BUTTON                         | Hold: Enter menu<br><u>Menu Mode</u><br>Press: Confirm / Set parameters<br>Hold: Save and exit menu   |
| 5    | NAVIGATION WHEEL               | Rotate: Setting the magnification<br>Menu Mode<br>Rotate: Navigation menu   |
| 2+3  | CAPTURE BUTTON<br>+ LRF BUTTON | Press and hold simultaneously:<br>Lock/Unlock the navigation wheel  |

TABLE 2-2. SPECTRUM LRF 4K CONTROL FUNCTIONS

You can lock the navigation wheel to prevent accidental turning or pressing. If the wheel is locked, the icon  $\triangle$  will be displayed in the left side of the screen when MENU button pushed. When unlocked, the icon will change to  $\triangle$ .

# 2.1.5 POWER ON AND OFF

#### Power On

With the battery installed, press and hold the POWER button to turn on the device. The red LED power indicator in the POWER button will light up.

#### Power Off

When the device is turned on, hold the POWER BUTTON to power off the device.

#### Auto Power Off

In the "Auto Power Off" submenu of General Settings you can set the time for the automatic shutdown of the device as required (see 2.2.24 for details).

The Auto Power Off countdown will start again when the device exits standby mode, or the device is restarted.

# 2.1.6 AUTO SCREEN OFF

Auto Screen Off function darkens the screen to save energy and increase battery time. However, the device stays on and you can view the live view on AGM Connect app when connecting the device to the app. The integrated algorithm automatically detects scope's exact position and activates the Auto Screen Off function (see 2.2.17 for details).

# 2.1.7 STANDBY MODE

Standby mode is used to save battery power. In this mode, some power-consuming features such as the display, network hardware, or internal storage will be temporarily disabled.

In the view mode, press the POWER button 0. After a few seconds, the display will turn off. Press the POWER button 0 again to exit the Standby mode.

When the Auto Screen Off function is enabled, you can also tilt or rotate the device to wake it from standby mode.

# 2.1.8 OBSERVATION

- 1. Power on the device.
- Rotate the diopter adjustment ring until the on-screen display (OSD) text or image is clear. Once completed, diopter adjustment

will no longer be needed again until the device is used by a new user.

Point the device towards the target of the view. Bring the object into focus by rotate the objective focus ring.

### NOTE:

You must perform the focus adjustment before any further use of the rifle scope.

 Set day or night mode, brightness and contrast to display the best image effect.

# 2.1.9 ON-SCREEN DISPLAY (OSD)

On-screen interface displays the main setup menu items and device status indicators. When OSD is on, the information of Wi-Fi hotspot activation, magnification, storage memory status, battery status, time and date displays on the screen.

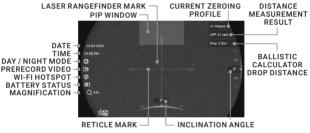


FIGURE 2-4. ON-SCREEN DISPLAY

# 2.1.10 DIGITAL ZOOM

In the live view mode, rotate the navigation wheel to switch the digital zoom of the device between 1x, 2x, 4x and 8x in the **Step Zoom** mode. The image magnification value is displayed on the screen: 3.5x, 7x, 14x, 28x. In the **Incremental Zoom** mode magnification will changed from 3.5x to 28x continuously.

# 2.1.11 DISTANCE MEASUREMENT

The device can detect the distance between the target and the observation position with built-in laser rangefinder.

Make the laser rangefinder settings in the menu (see details in part 2.2.12). Point the square mark of the rangefinder at the target and press the LRF button R to measure the distance to the target. The distance measurement result is displayed at the upper right of the image.

# 2.1.12 PICTURE IN PICTURE

The Picture-in-Picture (PIP) mode allows you to see simultaneously both a magnified image of the central part in a PIP window and the main image. The PIP window is displayed at the up-center of the live view. In the live view you can enable or disable the PIP function by holding LRF button **\***.

If digital zoom is enabled, only the PIP view zooms. The digital zoom of PIP view is 2×, 4×, and 8×.

#### NOTE:

- When the reticle is enabled, the PIP view displays a magnified area around the centre of the crosshair. When the reticle is not enabled, the PIP view displays a magnified central area of the image.
- If the PIP function is activated, the image will be enlarged by the zoom factor only in the PIP window.

#### 2.1.13 VIDEO RECORDING AND IMAGE CAPTURE

#### Video Recording

In the live view interface, hold the CAPTURE button O to start/stop video recording. Recording time information is displayed on the screen.

#### Image Capture

In the live view interface, press the CAPTURE button () to capture image.

#### NOTE:

When captured, the image freezes for 1 second and a prompt shows on the display.

For exporting captured videos and pictures, refer to Files Export.

#### 2.1.14 FILE EXPORT

1. Connect the scope to your PC with USB cable and open the detected disk.

- Go to the DCIM folder and find the folder named with the shooting date. For example, if you capture a picture or record a video on August 2024, go to DCIM -> 202408.
  - Select and copy the videos to PC and play the file with the player.
  - Select and copy the snapshots to PC and view the files.
- 3. Disconnect the device from your PC.

#### NOTE:

• The device displays image when you connect it to PC. But functions such as recording, capture and hot spot are disabled.

• When you connect the device to PC for the first time, it installs the drive program automatically.

You can also download files from the scope to your phone using the AGM Connect app (see section 2.3).

#### 2.1.15 INSTALLING THE SPECTRUM LRF 4K ON A PICATINNY/WEAVER RAIL WITH SCOPE RINGS

#### WARNING:

Always make sure your firearm is unloaded before you place the scope on the firearm. Reconfirm that the chamber is empty if you stop the procedure then resume later. Safe firearms handling rules should be followed at all times.

#### NOTE:

Mounts are not included and must be purchased separately.

The Spectrum LRF 4K scope be can mounted on a Picatinny/Weaver rail using pair of 30mm scope rings (Figure 2-5).

1. Remove every screw (A) along with the upper parts (B) of the scope rings.

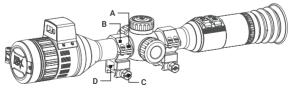


FIGURE 2-5. INSTALLATION WITH SCOPE RINGS

- 2. Loosen the fixing screws (C) of the lower parts (D) of the rings and install them on the rail.
- 3. Then, you can try to fit the scope before placing the upper rings. The scope rings need to be at a proper distance from the objective bell as well as the turrets so that the eye relief adjustment can be done.
- 4. You can insert a thread locker and tighten the fixing screws of the lower parts of the rings.
- 5. Place the upper rings and slightly fixing them with the screws only enough to allow the scope to rotate and move back and forth.
- 6. Adjust the eye relief. Position the scope far enough to keep your eye safe from recoil.
- 7. Turn on the power of the scope and activate the reticle.
- 8. With the rifle held level, rotate the scope until the reticle is precisely vertical and horizontal.
- 9. Check the position of the scope and tighten the ring screws. Ensure an even fit by alternately tightening the screws.

#### 2.1.16 INSTALLING THE SPECTRUM LRF 4K ON A PICATINNY/WEAVER RAIL WITH AGM QUICK RELEASE MOUNT

The Spectrum LRF 4K scope be can mounted on a Picatinny/Weaver rail using optional AGM quick release (QR) mount (Figure 2-6).

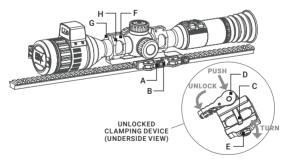


FIGURE 2-6. INSTALLATION WITH QUICK RELEASE MOUNT

- 1. Unlock the clamping devices of the QR mount by pushing down on the lever holders (A) and unlocking the levers (B).
- 2. Install the mount on the Picatinny/ Weaver rail so that the stops (C) slide into the transverse slots on the rail.
- 3. Affix the mount to the rail by locking the levers (B).
- Verify that the clamping devices are firmly holding the mount. If necessary, adjust each clamping device's lever-cam lock as detailed below:
  - 1) Remove the QR mount from the rail.
  - 2) With the clamping device unlocked, push the cam (D) towards the arrow, which will cause the nut (E) to slide out of its hole.
  - 3) To tighten/ loosen the clamping device, push down on the cam (D) and turn the nut (E) CW/ CCW respectively, in one-two increments (see note below). Much like when the cam (D) is released, backward-moving spring will cause the nut (E) to slide back into its hole.

#### NOTE:

The eight-sided nut of the mount lever-cam lock will only fit into their hole if turned in one of the discrete positions, using increments equal to  $360^{\circ}/8$ .

- 4) Verify that the adjusted lever-cams lock securely hold the mounting rail.
- 5. Remove all screws (F) along with the ring halves (G) and (H) (you can remove the QR mount from the rail for convenience).
- Place the scope between the halves of the rings and slightly fixing it with the screws (F) only enough to allow the scope to rotate and move back and forth.
- 7. Place the QR mount with the scope mounted on the rail and affix it by locking the levers. Adjust the eye relief. Position the scope far enough to keep your eye safe from recoil.
- 8. Turn on the power of the scope and activate the reticle.
- 9. With the rifle held level, rotate the scope until the reticle is precisely vertical and horizontal.
- 10. Check the position of the scope and tighten the ring screws. Ensure an even fit by alternately tightening the screws.

# 2.2 MAIN FUNCTIONS

# 2.2.1 MENU OPERATION

Rotate the navigation wheel to move between menu items. The active element is highlighted in red. Press the MENU button 📰 to select menu item or change an option. Hold the MENU button 🔝 to exit the menu.



#### FIGURE 2-7. MAIN MENU

| TABLE 2-3 | MENU FUNCTIONS |
|-----------|----------------|
|-----------|----------------|

| MENU ITEM            | SYMBOL | OPTION                      | FUNCTION                                    |
|----------------------|--------|-----------------------------|---|
| BRIGHTNESS           | 0      | 10 Levels of<br>Brightness  | Adjusts the image brightness.               |
| CONTRAST             | ♦      | 10 Levels of<br>Contrast    | Adjusts the image contrast.                 |
| DAY /NIGHT           | ₿      | Day / Night /<br>Auto       | Switch between the Day mode and Night mode. |
| ALBUMS               | *      | View/Delete the local files |   |
| ADVANCED<br>SETTINGS |        | Advanced Settings Menu      |   |

#### TABLE 2-4. ADVANCED SETTINGS MENU

| MENU ITEM                | SYMBOL | OPTION  | FUNCTION  |
|--------------------------|--------|---|---|
| ZEROING<br>PROFILES      | ŧ      | 5 Profiles<br>(A/B/C/D/E)   | Zeroing profile selection<br>with user saved zeroing<br>settings.   |
| ZEROING                  | •      | Ze  | eroing Menu:  |
| Zeroing                  | R      | OFF /<br>1 / 2 / 3 / 4 / 5  | Zeroing settings<br>selection or disable<br>reticle.  |
| Distance                 | Ł      | Distance  | Setting the distance to the target.   |
| Туре                     | Ł      | 10 Reticle Type   | Setting the reticle type.   |
| Color                    | ••     | 8 Reticle Colors  | Setting the reticle color.  |
| Zoom                     | Q      | 3.5×/ 7× /<br>14× / 28.0×   | Setting the<br>magnification with<br>Digital Zoom.  |
| Freeze Screen            | *      | OFF / ON  | Image freeze.   |
| X/Y Axis                 | ¢      | X / Y   | Setting the X-axis and<br>Y-axis corrections.   |
| BALLISTIC<br>CALCULATION | Ø      | Initial Velocity /<br>Zero Range /<br>Altitude /<br>Temperature /<br>Ballistic<br>Coefficient /<br>Sight Height | Enables or disables the<br>ballistic calculation.<br>Setting up 5 profiles.<br>Input the data to display<br>the recommended<br>aiming point and the<br>drop distance. |
| RETICLE MODE             | 0      | Fixed / Central   | Set Reticle Mode.   |
| ZOOM MODE                | Ð      | Step /<br>Incremental   | Set Zoom Mode.  |
| LASER<br>RANGING         | *      | Close / Once /<br>Continuous<br>(5s, 10s, 15s,<br>30s, 60s)   | Enables or disables<br>built-in laser rangefinder.<br>Distance measurement<br>mode settings.  |

| MENU ITEM            | SYMBOL     | OPTION                  | FUNCTION  |
|----------------------|------------|-------------------------|---|
| NETWORK              | (•)        | Close / Hotspot         | Enables or disables the<br>Wi-Fi hotspot.   |
| PRERECORD            | F.         | OFF /<br>7s / 10s / 15s | Setting the recording time before and after the recoil activation.                              |
| AUDIO                | Ţ          | OFF / ON                | Enable or disable audio<br>recording.   |
| SMART IR             | ۲          | OFF / ON                | Function helps to adjust the overexposed image.   |
| AUTO SCREEN<br>OFF   | Ð          | OFF / ON                | Function darkens the<br>screen to save energy.  |
| FUNCTION<br>SETTINGS | ŧ          | Functio                 | on Settings Menu:   |
| OSD                  | OSD        | OSD / Time /<br>Date    | Enables or disables<br>OSD, time, date.   |
| Pitch Scale          | 6          | OFF / ON                | Enables or disables<br>Pitch Scale to view the<br>device inclination angle<br>in the live view. |
| Brand Logo           | 1          | OFF / ON                | Enables or disables<br>Brand Logo on the<br>screen.   |
| GENERAL<br>SETTINGS  | Ø          | Genera                  | al Settings Menu:   |
| Language             | ۲          | 22 Languages            | Choice of interface<br>language.  |
| Time                 | ٢          | 12 / 24 hour            | Time setting.   |
| Date                 | Ë          | Month / Day /<br>Year   | Date setting.   |
| Unit                 | ۲ <u>۳</u> | yard / m                | Sets the distance unit.   |
| Auto Power<br>Off    | ٢          |                         | Setting the automatic shutdown time.  |

| MENU ITEM | SYMBOL | OPTION                | FUNCTION                               |
|-----------|--------|-----------------------|--|
| Restore   | \$     |                       | Restoring the default device settings. |
| Format    |        | Current free<br>space | Format the internal storage.           |
| Version   | ١      |                       | Firmware version and serial number.    |

# 2.2.2 BRIGHTNESS ADJUSTMENT

- 1. Hold the MENU button 🔚 to bring up the menu.
- Rotate the wheel to select D Brightness menu item and press the MENU button III to confirm.
- 3. Rotate the wheel to adjust the brightness. You can select one of ten levels of the brightness to adjust the image lighter or darker.
- 4. Press the MENU button 🔳 to confirm.

# 2.2.3 CONTRAST ADJUSTMENT

- 1. Hold the MENU button 🔚 to bring up the menu.
- 2.Rotate the wheel to select ♦ Contrast menu item and press the MENU button 🔚 to confirm.
- 3. Rotate the wheel to adjust the image contrast. You can select one of ten levels of the contrast.
- 4. Press the MENU button 🔳 to confirm.

# 2.2.4 DAY AND NIGHT MODES

You can select the proper scene mode according to the lighting conditions to improve the display effect.

- 1. Hold the MENU button 🔳 to bring up the menu.
- Rotate the wheel to select Scene Mode menu item and press the MENU button I to confirm.
- 3. Rotate the MENU button 🔳 to switch scene mode:

Day: This mode can be used at daytime and in bright light.

Night: This mode can be used at dusk and at night.

Auto: The day mode and night mode switch automatically according to the ambient brightness.

4. Press the MENU button 📰 to confirm.

# 2.2.5 ALBUMS

Captured images and recorded videos are automatically stored in the device, and you can view the files in local albums.

- 1. Hold the MENU button 🔳 to bring up the menu.
- Rotate the wheel to select R Albums menu item and press the MENU button III to confirm.

#### NOTE:

The albums are automatically created and named by year + month. The local pictures and videos of a certain month are stored in the corresponding album. For example, the pictures and videos of August in 2024 are saved in the album named "202408".

- Rotate the wheel to select the album, and press the MENU button
   image to enter the selected album.
- 4. Rotate the wheel to select a file to view.
- 5. Press the wheel 📰 to view the selected file and relevant information.

#### NOTE:

Files are arranged in chronological order, with the most recent at the top. If you fails to find the most recently taken snapshots or videos, please check the time and date settings of your device. When you are viewing files, you can switch to other files by rotating the wheel.

When you are viewing videos, you can press the MENU button  $\fbox$  to play or stop the video.

For deleting an album or a file, you can press O + K to call the dialogue box, and delete the album or file according to the prompt.

# 2.2.6 ZEROING PROFILES

The user can customize and save five profiles with different reticle settings. In each profile, you can configure up to five types of reticle, firing distances and reticle corrections.

- 1. Hold the MENU button 🔳 to bring up the menu.
- 2. Rotate the wheel to select ■▲ Advanced Settings item and press the MENU button III to confirm.
- 3. Rotate the wheel to select **Ceroing Profiles** and press the MENU button **E** to confirm.
- 4. Rotate the wheel to switch the zeroing profile (A, B, C, D, E).

5. Press the MENU button 🔳 to confirm.

The right top of the image displays the current zeroing profile information. For example, "A1-50m" means you are using the Zeroing setting 1 in the Profile A, and the set range is 50 m.

#### NOTE:

There are 5 zeroing profiles in total, and you can configure 5 reticles, zeroing distances and corrections in each zeroing profile.

# 2.2.7 ZEROING

You can select a reticle in the current zeroing profile, and set parameters such as reticle type, color, and boresight correction (coordinates) for a set distance.

Select a zeroing profile initially (refer to 2.2.6).

- 1. Hold the MENU button 🔳 to bring up the menu.
- 2. Rotate the wheel to select Advanced Settings, and press the MENU button 🗐 to confirm
- 3. Rotate the wheel to select **EXECTION** The and press the MENU button **EXECUTION** to enter the zeroing setting interface. Rotate the wheel to move between submenu and options.
- 4. Select Zeroing and set the sequence number from 1 to 5. You can also select OFF to disable the reticle.
- Set reticle type (for parameters of all built-in reticles, see part 5.2).
  - In the zeroing setting interface rotate the wheel to select Type submenu and press the MENU button is to confirm.
  - Rotate the wheel to select a reticle pattern and press the MENU button I to confirm.

#### NOTE:

The scale intervals of Reticle 4 and 7 change synchronously under the current digital zoom.

- 6. Set reticle color.
  - In the zeroing setting interface rotate the wheel to select Color submenu and press the MENU button III to confirm.
  - Rotate the wheel to select one of eight colors and press the MENU button is to confirm.
- 7. (Optional) Repeat 4 to 6 to set type and color for other reticles in this profile.

# 2.2.8 BORESIGHTING

Like any daytime rifle scope or red dot, sighting in is both similar, and simplified. The Spectrum LRF 4K comes with a one-shot zeroing system, which makes initial sighting in quick and painless.

Set the target to the selected zeroing distance. We recommend 50-100 yards initially. Select a zeroing profile (refer to 2.2.6). You can use different zeroing profiles if you want to use the optic on a different rifles.

Align the reticle with the center of the target and shoot. If the point of impact does not coincide with the aiming point, correct the reticle.

- 1. Hold the MENU button 🔳 to bring up the menu.
- Go to Advanced Settings, rotate the wheel to select Zeroing menu item and press the MENU button is to enter the zeroing setting interface.

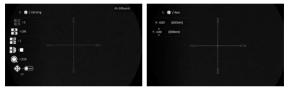


FIGURE 2-8. BORESIGHTING

- Rotate the wheel to select Zeroing number you want to correct and press the MENU button III to confirm.
- 4. Set the distance to the target:
  - In the zeroing setting interface rotate the wheel to select Distance and press the MENU button is to confirm.
  - Press the MENU button to select the digit you want to change (color of selected digit will changed to the red).
  - Rotate the wheel to change the number and press the MENU button ill to confirm.
- (Optional) Rotate the wheel to select Q Zoom option and press the MENU button II to confirm. Rotate the wheel to enlarge the image until the target positions is clear enough. Press the MENU button III to confirm.

#### NOTE:

We'd suggest zeroing in at 1x digital zoom, or your true optical base magnification, or 2x zoom (double your optical magnification) as these options are less pixelated and should provide for easier adjustments.

 (Optional) Rotate the wheel to select \* Freeze Screen option, and press the MENU button to enable the Freeze Screen function.

#### NOTE:

When enabling the Freeze Screen function, you can adjust the position of the cursor on a frozen image. This feature helps prevent image flutter and eliminates the need to hold the rifle scope steady in order to make your windage and elevation adjustments on screen.

7. Select TX/Y Axis and press the MENU button 🔳 to confirm.

Two crosshairs are displayed on the screen. The big one is reticle crosshair, and the small one is reference crosshair. Reference crosshair will appear in the centre of the display. Initially, the centers of both crosshairs are aligned. Zero the scope by moving the reticle on the screen:

- 1) Aim the reticle at the center of target.
- 2) Press the MENU button 🔝 to select X or Y axis.
- Rotate the wheel to move reticle left and right (if X axis is selected) or to move reticle up and down (if Y axis is selected).

Holding the reference small crosshair at the aiming point (center of the target) and move the reticle until it is aligned with the point of impact. The coordinates show the current position of the reticle. It also displays the distance by which the point of impact will move, taking into account the set distance to the target.

| ADJUSTMENT<br>VALUE | RETICLE<br>OFFSET | BORESIGHT INCREMENT  |
|---------------------|-------------------|--|
| 1 click             | 1 pixel           | 0.08 mil / 0.275 MOA /<br>0.8 cm at 100 m distance /<br>0.28 in at 100 yd distance |

TABLE 2-5. BORESIGHT CORRECTIONS

 (Optional) Repeat 3 to 7 to set the position for other reticles in this profile. You can place up to five zeroes at different distances within the same profile (useful for certain calibers with highly fluctuating trajectories between 50 and 250 yards).

- Hold the MENU button is to exit a menu. The window "Save the parameters?" will appear.
  - OK: Save the settings and exit.
  - CANCEL: Exit without saving the settings.

# 2.2.9 BALLISTIC CALCULATION

The ballistic calculation helps you have a better experience in various conditions. Multiple parameters are required in calculation to ensure precision and flexibility of use.

#### NOTE:

Make sure the reticle is enabled and you have finished zeroing.

- 1. Hold the MENU button 🔳 to bring up the menu.
- Go to Advanced Settings, and rotate the wheel to select Ballistic Calculation. Press the MENU button is to enter the setting interface.
- Select Ballistic Profile and press the MENU button is to on/off this function.
- Rotate the wheel to select Ballistic Profile and press the wheel to switch the profile (1 to 5). You can configure and save different settings for each of the 5 profiles.
- Rotate the wheel to select the following parameters, and press the wheel to input the data.

Initial Velocity: Input the muzzle velocity of your projectile.

#### NOTE:

Velocity varies depending on different conditions, barrel length, etc. Muzzle velocity can be obtained by using an accurate ballistic chronograph and/or by following ammo manufacturer specifications.

Zero Range: Set the distance you have zeroed the device at.

Altitude: Set current local altitude.

Temperature: Set the ambient temperature.

Ballistic Coefficient (B.C.): The measure of its ability to overcome air resistance.

Sight Height: The distance between the bore and the center of the lens.

5. Press the MENU button 🔚 to switch digit, and rotate the wheel to change the number.

- 7. Aim the LRF mark at the target and press LRF button <u>★</u> to measure the distance. The screen will display the recommended aiming point × and the drop distance in the upper right corner of the interface.
- 8. (Optional) To adjust distance, repeat the step 7.

### NOTE:

- 5 ballistic profiles can be saved.
- The more parameters you specify, the more accurate the recommended aiming point will be.
- The drop distance is related to the input parameters. Please refer to the actual situation.

# 2.2.10 RETICLE MODE

You can select a reticle mode according to your preference and different situations.

- 1. Hold the MENU button 🔳 to bring up the menu.
- 2. Go to Advanced Settings, rotate the wheel to select . Reticle Mode and press the MENU button . to confirm.
- Rotate the wheel to select a reticle mode and press the MENU button III to confirm.

**Central Reticle:** This mode centers around the image when switching the digital zoom ratio, with the reticle position unchanged.

Fixed Reticle: This mode centers around the reticle when switching the digital zoom ratio.

#### NOTE:

- The digital zoom ratio returns to 1× when switching the reticle mode.
- If you select fixed reticle, the continuous zoom ratio can be set from 1.0× to 8.0×.
- If you select central reticle, the continuous zoom ratio can be set from 2.0× to 8.0×.

#### 2.2.11 ZOOM MODE

You can set the magnification to step or continuous when using the digital zoom.

1. Hold the MENU button 🔳 to bring up the menu.

- 2. Go to **Advanced Settings**, rotate the wheel to select **O** Zoom Mode and press the MENU button **E** to confirm.
- Rotate the wheel to select a zoom mode and press the MENU button III to confirm.

Step: The digital zoom ratio can be set to 1x, 2x, 4x, and 8x.

Incremental: The digital zoom ratio can be set from 1.0× to 8.0× continuously.

4. In the live view interface, rotate the wheel to set the magnification of the device from 3.5x to 28x.

# 2.2.12 SET LASER RANGING

The device can detect the distance between the target and the observation position with built-in laser rangefinder.

- 1. Hold the MENU button 🔚 to bring up the menu.
- 2. Go to Advanced Settings, rotate the wheel to select X Laser Ranging and press the MENU button 📰 to confirm.
- Rotate the wheel to select the laser ranging mode between Close (rangefinder disabled), Once and Continuous (5s), Continuous (10s), Continuous (15s), Continuous (30s), Continuous (60s). Press the MENU button II to confirm the selection.
- 4. Hold the MENU button 🔳 to return to the live view interface.
- 5. When the **Once** mode is selected, point the square mark of the rangefinder at the target and press the LRF button **\*** to measure the distance to the target.
- You can scan the surroundings under Continuous mode. Continuous distance scanning will occur for a set time of 5, 10, 15, 30 or 60 seconds after pressing the LRF button ★.

The distance measurement result is displayed at the upper right of the screen.

# 2.2.13 NETWORK CONFIGURATION

Connect your phone to the Wi-Fi hotspot of the rifle scope, you can configure the parameters and realize functions of the device.

- 1. Hold the MENU button 🔳 to bring up the menu.
- Go to Advanced Settings, rotate the wheel to select (•) Network menu item and press the MENU button I to confirm.
- 3. Rotate the wheel to select **Close** (Hotspot off) or **Hotspot** and press the MENU button 🔚 to confirm.

Open the AGM Connect App and connect your phone with the device (refer to Section 2.3). You can view the interface of rifle scope on your phone and take a picture or record video.

### NOTE:

When the power is less than 15%, the Wi-Fi hotspot function will be turned off automatically.

# 2.2.14 PRERECORD VIDEO

After enabling the Shot Activated Recording (SAR) function, the device will automatically start recording 7, 10, or 15 seconds before and after the recoil-activation.

- 1. Hold the MENU button 🔳 to bring up the menu.
- Go to Advanced Settings, rotate the wheel to select Reverse and press the MENU button and press the MENU button.
- 3. Rotate the wheel to select OFF (SAR function disabled) or 7s, 10s, or 15s recording time and press the MENU button 🖃 to confirm the selection and exit.

#### NOTE:

For exporting recorded files, refer to Export Files (part 2.1.14).

# 2.2.15 AUDIO RECORDING

The Audio function allows you to record sound along with video. If there is too much noise when recording, this function can be disabled.

- 1. Hold the MENU button 🔚 to bring up the menu.
- 2. Go to Advanced Settings and rotate the wheel to select Audio
- 3. Press the MENU button 🔚 to enable or disable Audio function.

# 2.2.16 SMART IR

It the environment is too bright, the image may be overexposed. The smart IR function helps correct overexposed images by controlling the intensity of infrared light to improve the image in night mode and dark environment.

- 1. Hold the MENU button 🔚 to bring up the menu.
- Go to Advanced Settings and rotate the wheel to select Smart IR.
- 3. Press the MENU button 🖃 to enable or disable the Smart IR function.

# 2.2.17 AUTO SCREEN OFF

Auto Screen Off function darkens the screen to save energy and increase battery time. However, the device stays on and you can view the live view on AGM Connect app when connecting the device to the app.

- 1. Hold the MENU button 🔳 to bring up the menu.
- 2. Go to Advanced Settings and rotate the wheel to select Auto Screen Off.
- 3. Press the MENU button 🖃 to enable or disable the Auto Screen Off function.

You can do one of the following methods to enter the standby mode when the display is turned on:

- Tilt the device downwards more than 70°.
- · Rotate the device horizontally more than 75°.
- · Keep the device still and do not move it for 5 minutes.

You can do one of the following methods to wake up the device when the display is turned off:

- Tilt the device downwards from 0° to 60° or upwards .
- Rotate the device horizontally from 0° to 75°.
- $\cdot$  Press (1) to wake up the device.

# 2.2.18 ON-SCREEN DISPLAY (OSD)

You can choose which information to display in the live view user interface. OSD options include Day/Night mode, Wi-Fi Hotspot, Battery Status, and Current Magnification indicators. You can also enable or disable the display of time and date on the screen. These will appear at the left side of the display when activated.

- 1. Hold the MENU button 🔳 to bring up the menu.
- 2. Go to Advanced Settings and rotate the wheel to select European Settings and press the MENU button E to confirm.
- 3. Rotate the wheel to select **ISD** OSD submenu and press the MENU button **IED** to enter.
- Rotate the wheel to select the OSD, Time, or Date. Press the MENU button is to display or hide the necessary information.
- 5. Hold the MENU button 🔳 to exit a menu.

# 2.2.19 SET PITCH SCALE

You can enable pitch scale to view the device inclination angle in the live view.

- 1. Hold the MENU button 🔳 to bring up the menu.
- 2. Go to Advanced Settings, rotate the wheel to select European Settings and press the MENU button 🔳 to confirm.
- Rotate the wheel to select Pitch Scale and press the wheel to enable or disable the pitch scale.
- 4. Hold the MENU button 🔳 to exit the menu.

# 2.2.20 LANGUAGE SETTING

You can select different languages of user interface.

- 1. Hold the MENU button 📰 to bring up the menu.
- Go to Advanced Settings, rotate the wheel to select General Settings and press the MENU button (I) to confirm.
- Rotate the wheel to select Language submenu and press the MENU button to enter.

# 2.2.21 TIME SETTING

- 1. Hold the MENU button  $\blacksquare$  to bring up the menu.
- Go to Advanced Settings, rotate the wheel to select General Settings and press the MENU button (I) to confirm.
- Rotate the wheel to select O Time and press the MENU button
   to enter the configuration interface.
- Press the MENU button images to select the time format (12/24), hours or minutes to sync and rotate the wheel to change the number.
- 5. Hold the MENU button 🔳 to exit the menu.

# 2.2.22 DATE SETTING

- 1. Hold the MENU button 🔚 to bring up the menu.
- Go to Advanced Settings, rotate the wheel to select General Settings and press the MENU button (I) to confirm.

- Rotate the wheel to select Date submenu and press the MENU button III to enter the configuration interface.
- Press the MENU button is to select the month, day or year to be synchronized and rotate the wheel to change the number.
- 5. Hold the MENU button 🔳 to exit the menu.

# 2.2.23 UNIT SETTING

You can set the unit of measurement (yards or meters) for the distance.

- 1. Hold the MENU button 🔳 to bring up the menu.
- Go to Advanced Settings, rotate the wheel to select General Settings and press the MENU button is to confirm.
- Rotate the wheel to select W Unit and press the MENU button III to enter the configuration interface.

# 2.2.24 AUTO POWER OFF

You can set the time for the automatic shutdown of the device as required.

- 1. Hold the MENU button 🔳 to bring up the menu.
- Go to Advanced Settings, rotate the wheel to select General Settings and press the MENU button (I) to confirm.
- 3. Rotate the wheel to select **O** Auto Power Off and press the MENU button **I** to enter the configuration interface.
- Rotate the wheel to select OFF, 15 min, 30 min or 45 min and press the MENU button I≡ to confirm.

The Auto Power Off countdown will start again when the device exits standby mode, or the device is restarted.

# 2.2.25 RESTORE DEVICE

You can reset the settings of device to defaults.

- Hold the MENU button 📰 to bring up the menu.
- Go to Advanced Settings, rotate the wheel to select General Settings and press the MENU button is to confirm.

- 3. Rotate the wheel to select **B Restore** and press the MENU button **III**. The window **"Initialize**?" will appear.
  - OK: Restore the device to defaults.
  - CANCEL: Exit without changing the settings.

## 2.2.26 FORMAT

You can see free space of built-in storage and format the storage for delete all recorded files.

- 1. Hold the MENU button 📰 to bring up the menu.
- Go to Advanced Settings, rotate the wheel to select General Settings and press the MENU button I to confirm.
- 3. Rotate the wheel to select **Format** and press the MENU button [III]. The window "Initialize?" will appear.
- Select OK and press the MENU button is to format the storage. A prompt will pop up when the formatting is completed.
- Select CANCEL and press the MENU button is to exit without changes.

### 2.2.27 VERSION

You can view the device information such as firmware version and serial number.

- 1. Hold the MENU button 📰 to bring up the menu.
- Go to Advanced Settings, rotate the wheel to select General Settings and press the MENU button (I) to confirm.
- Rotate the wheel to select Version and press the MENU button
   Image: The firmware version and serial number will be displayed.
- 4. Hold the MENU button 🔳 to exit the menu.

# 2.3 CLIENT SOFTWARE INTRODUCTION

Search the AGM Connect software in App Store (iOS System) or Google Play<sup>™</sup> (Android System) and install the application on your mobile phone. Turn on the Wi-Fi hotspot on the Spectrum LRF 4K and then connect your phone to the hotspot.

- Hotspot Name: Wlan-<Serial No.>
- Hotspot Password: Last 9 digits of Serial Number of your scope.

#### NOTE:

The device password is set by user at first activation. If the password was lost or forgotten, it can be reset. To make a reset, provide the following action:

- 1. Hold the MENU button 🔚 to show the menu of device.
- Move the cursor to menu item and press the MENU button is to restore all parameters to default settings.
- 1. Run the app and connect the phone or tablet with the device.
- If the device is inactivated, set the password and activate it. If the device is activated, enter the password to add it to the app.
- 3. When the device is added, the live view can be seen. You can view the interface of the rifle scope on the software. User can change such image parameters as brightness, contrast, zoom, palettes directly via phone or tablet as well as record video on phone/ tablet memory.

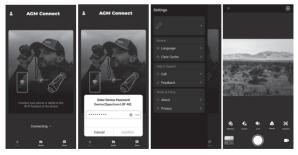


FIGURE 2-9. AGM CONNECT APP

MAINTENANCE

# **3.1 MAINTENANCE**

3

#### 3.1.1 CLEANING PROCEDURES

- 1. Gently brush off any dirt from the body of the device using a clean, soft cloth.
- 2. Moisten the cloth with fresh water and gently wipe down the external surfaces (except lenses).
- 3. Dry any wet surfaces (except lenses) using another dry, clean, soft cloth.
- 4. Using a lens brush, carefully remove all loose dirt from the lenses.
- 5. Dampen a cotton swab with ethanol and slowly, gently wipe down the lenses. Clean the glass surfaces using circular movements, starting from the center of the lens and moving out towards the edge, without touching the lens holder. Change the cotton swab after each circular stroke. Repeat this step until the glass surfaces are clean.
- 6. Clean the accessories with a soft brush (or cloth) dampened with soap and water.

#### 3.1.2 PREPARING FOR EXTENDED STORAGE

#### CAUTION:

Thoroughly dry each item before placing them into the storage case.

To prepare the rifle scope for extended storage:

- 1. Clean the rifle scope and accessories.
- 2. Place all items into the storage case.

#### 3.1.3 UPDATING THE DEVICE FIRMWARE

1. Visit *www.agmglobalvision.com/firmware* website. Select your product, download the firmware update package to your PC and unzip it. Follow the detailed instructions on the website.

2. Connect the device to your PC with USB cable.

3. Turn on the device. Make sure the Wi-Fi hotspot function is disabled.

4. Open the detected disk (USB drive) in file manager program. Copy the unzipped digicap.dav file and paste it to the root directory of the device.

5. Turn off the device completely, then power it back on. After awhile, the firmware update process will start automatically. During the update, the screen will display the inscription "Upgrading...". The update process will be completed when the inscription "Upgrading..." goes out.

6. Turn off the device and disconnect it from your PC.

You can also enjoy automatic update function in AGM Connect App (see section 2.3 for details).

1. Start the AGM Connect App and tap the Settings icon in the left top corner.

 $\ensuremath{\mathbf{2}}$  . Tap your device in the device list. The information about your device will shown.

3. Tap **Checking for Upgrade** to detect and download the latest FW version.

## 3.2 TROUBLESHOOTING

Table 3-1 lists the most common malfunctions that may occur with your equipment. Perform the tests, inspections, and corrective actions in the order they appear in the table.

This table does not list all the malfunctions that may occur with your device, or all of the tests, inspections, and corrective actions that may be necessary to fix them. If the equipment malfunction is not corrected by the suggested actions, or a problem occurs that is not listed in this table, please contact AGM Global Vision's Customer Support center or your retailer.

#### TABLE 3-1. TROUBLESHOOTING

| MALFUNCTION                                   | CORRECTIVE ACTION  |
|---|--|
| The rifle scope fails to activate.            | Charge the inner battery of the scope<br>or install the charged additional 18650<br>battery.                     |
| The image of the rifle scope is not clear.    | Perform the rifle scope adjustment referring to section 2.1.   |
| Wi-Fi is not found.                           | Examine whether the Wi-Fi function is<br>turned on. If not, go to menu and turn on<br>Wi-Fi Hotspot.             |
|   | Examine the items below:   |
| Capturing or recording fails.                 | <ol> <li>Whether the device is connected to<br/>your PC and disabled the capturing and<br/>recording.</li> </ol> |
|   | 2. Whether the storage space is full.  |
|   | 3. Whether the device is low-battery.  |
|   | Examine the items below:   |
| The PC cannot<br>identify the rifle<br>scope. | 1. Whether the device is connected to your PC with standard USB cable.   |
|   | 2. If you use other USB cables, make sure the cable length is no longer than 1 m.                                |

# WARRANTY INFORMATION

## 4.1 WARRANTY INFORMATION AND REGISTRATION

The below description of AGM Global Vision warranty terms and conditions refer specifically to AGM branded products purchased within the United States. Customers purchasing AGM products outside the United States can obtain specific information about their product's warranty term on the www.agmglobalvision.eu website.

#### 4.1.1 WARRANTY INFORMATION

This product is guaranteed to be free from manufacturing defects in material and workmanship under normal use for a period of three (3) years from the date of purchase. In the event that a defect covered by the warranty below occurs during the applicable period stated above, AGM Global Vision, at its discretion, will either repair or replace the product; such action on the part of AGM Global Vision shall be the full extent of AGM Global Vision's liability, and the Customer's sole and exclusive reparation. This warranty does not cover a product if it has been (a) used in ways other than its normal and customary manner; (b) subjected to misuse; (c) subjected to alterations, modifications or repairs by the Customer or by any party other than AGM Global Vision without prior written consent of AGM Global Vision; (d) is the result of a special order or categorized as "close-out" merchandise or merchandise sold "as-is" by either AGM Global Vision or the AGM Global Vision dealer: or (e) merchandise that has been discontinued by the manufacturer and either parts or replacement units are not available due to reasons beyond the control of AGM Global Vision. AGM Global Vision shall not be responsible for any defects or damage that in AGM Global Vision's view are a result from the mishandling, abuse, misuse, improper storage or improper operation of the device, including use in conjunction with equipment that is electrically or mechanically incompatible with, or of inferior guality to, the product, as well

as failure to maintain the environmental conditions specified by the manufacturer. This warranty is extended only to the original purchaser. Any breach of this warranty shall be enforced unless the customer notifies AGM Global Vision at the address noted below within the applicable warranty period.

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

## 4.1.2 LIMITATION OF LIABILITY

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

## 4.1.3 PRODUCT REGISTRATION

In order to validate the warranty on your product, the customer must complete and submit AGM Global Vision PRODUCT REGISTRATION FORM on our website (www.agmglobalvision.com/ customer-support).

## 4.1.4 OBTAINING WARRANTY SERVICE

To obtain warranty service on your unit, the End-user (Customer) must notify the AGM Global Vision service department via e-mail.

Send any requests to support@agmglobalvision.com to receive a Return Merchandise Authorization number (RMA). When returning any device, please take the product to your retailer, or send the product. postage paid and with a copy of your sales receipt, to AGM Global Vision's service center at the address listed above. All merchandise must be fully insured with the correct postage: AGM Global Vision will not be responsible for improper postage or merchandise that becomes lost or damaged during shipment. When sending product back, please clearly write the RMA# on the outside of the shipping box. Please include a letter that indicates your RMA#, the Customer's Name, a Return Address, reason for the return, contact information (valid telephone numbers and/or an e-mail address), and proof of purchase that will help us to establish the valid start date of the warranty. Product merchandise returns that do not have an RMA# listed may be refused, or a significant delay in processing may occur. Estimated Warranty service time is 10-20 business days. The End-user/Customer is responsible for postage to AGM Global Vision for warranty service. AGM Global Vision will cover return postage/shipping after warranty repair to the End-user/Customer only if the product is covered by the aforementioned warranty. AGM Global Vision will return the product after warranty service by domestic UPS Ground service and/or domestic mail. Should any other requested, required, or international shipping methods be necessary, the postage/shipping fee will be the responsibility of the End-user/Customer.

For service, repair or replacement, please contact:

#### AGM Global Vision, LLC

173 West Main Street PO Box 962 Springerville, AZ 85938 Tel. 928.333.4300 support@agmglobalvision.com www.agmglobalvision.com

## **5.1 SPECIFICATIONS**

| MAIN                             |   |
|----------------------------------|---|
| Sensor Type                      | CMOS  |
| Max. Resolution                  | 3840 × 2160   |
| Frame Rate                       | 50 Hz   |
| Magnification                    | 3.5×-28×  |
| Lens Focal Length                | 50 mm   |
| Apperture                        | F1.2 to F2.5, Adjustable                              |
| Field of View                    | 8.8° × 5.0° (15.3m × 8.6m @ 100m)                     |
| Minimal Focusing<br>Distance     | 10 m  |
| Display                          | 0.49" OLED display, 1920×1080,<br>50 FPS              |
| Exit Pupil                       | 6 mm  |
| Eye Relief                       | 55 mm   |
| Diopter Adjustment               | -5 to +5  |
| SYSTEM                           |   |
| Image Mode                       | Day, Night, Auto                                      |
| Digital Zoom                     | 1×, 2×, 4×, 8× discretely or<br>1× to 8× continuously |
| Picture-in-Picture<br>Mode (PIP) | Yes   |
| Reticle                          | 10 reticle patterns, 8 colors                         |
| Ballistic Calculator             | Yes   |
| Video Recording                  | Yes (1920x1080)                                       |

| Audio Recording             | Yes  |  |  |  |
|-----------------------------|--|--|--|--|
| Shot-Activated<br>Recording | Yes  |  |  |  |
| Image Capture               | Yes (1920x1080)  |  |  |  |
| Storage                     | 64 GB Built-in EMMC  |  |  |  |
| Standby Mode                | Yes  |  |  |  |
| Freeze Zeroing              | Yes  |  |  |  |
| Wi-Fi Hotspot               | Yes  |  |  |  |
| LASER RANGEFINDER           |  |  |  |  |
| Safety Class for Laser      | Class1   |  |  |  |
| Wavelength                  | 905 nm   |  |  |  |
| Max. Measuring Range        | 1,000 m  |  |  |  |
| Min. Measuring Range        | 10 m   |  |  |  |
| Measurement Accuracy        | ±1 m   |  |  |  |
| POWER SUPPLY                |  |  |  |  |
| Battery Type                | Built-in rechargeable Lithium<br>batteries and one additional 18650<br>replaceable Lithium battery (3.6 V;<br>3200 mAh; 19×70 mm size) |  |  |  |
| Battery Life                | Up to 11 hours of continuous operation (25°C, WI-FI OFF)   |  |  |  |
| External Power Supply       | 5 V DC/3 A, 9 V DC/2A, 12 V DC/1.5A,<br>USB Type-C interface (supports<br>QC3.0)   |  |  |  |
| GENERAL                     |  |  |  |  |
| Working Temperature         | -30°C to 55°C (-22°F to 131°F)   |  |  |  |
| Max. Recoil                 | 1000 g / 0.4 ms  |  |  |  |
| Dimensions                  | 440 × 89 × 84 mm / 17.3 × 3.5 × 3.3 in<br>(without mount)  |  |  |  |
| Weight                      | 1.18 kg / 2.6 lb (without mount,<br>eyepiece and 18650 battery)  |  |  |  |
| Protection Level            | IP67   |  |  |  |

\*All data subject to change without notice.

# 5.2 RETICLE PARAMETERS

| IMAGE     | ITEM | MOA  | CM @<br>100M | IN @<br>100YD |
|-----------|------|------|--------------|---------------|
| RETICLE 1 |      |      |              |               |
|           | A    | 82.0 | 239.2        | 85.9          |
|           | В    | 16.5 | 48.0         | 17.3          |
|           | С    | 4.7  | 13.6         | 4.9           |
|           | D    | 6.9  | 20.0         | 7.2           |
| RETICLE 2 |      |      |              |               |
|           | Α    | 98.7 | 287.2        | 103.3         |
|           | В    | 92.1 | 268.0        | 96.4          |
|           | С    | 6.9  | 20.0         | 7.2           |
| RETICLE 3 |      |      |              |               |
|           | A    | 98.7 | 287.2        | 103.3         |
|           | В    | 93   | 270.4        | 97.4          |
|           | с    | 6.9  | 20.0         | 7.2           |

| IMAGE  | ITEM | MOA  | CM @<br>100M | IN @<br>100YD |
|--|------|------|--------------|---------------|
| RETICLE 4  |      |      |              |               |
|  | Α    | 77.3 | 224.8        | 80.9          |
|  | В    | 70.1 | 204.0        | 73.4          |
|  | С    | 18.4 | 53.6         | 19.3          |
|  | D    | 3.6  | 10.4         | 3.8           |
|  | E    | 22.8 | 66.4         | 23.9          |
|  | F    | 1.9  | 5.6          | 2.0           |
|  | G    | 3.4  | 9.8          | 3.6           |
|  | н    | 3.4  | 9.8          | 3.6           |
|  | I    | 6.9  | 20.0         | 7.2           |
|  | J    | 3.3  | 9.6          | 3.5           |
|  | к    | 2.2  | 6.4          | 2.3           |
| RETICLE 5  |      |      |              |               |
| $\begin{array}{c} A \stackrel{A}{\longrightarrow} \stackrel{B}{\underset{d}{\longrightarrow}} \stackrel{B}{\underset{d}{\longrightarrow}} C \\ B \stackrel{d}{} \stackrel{B}{\underset{d}{\longrightarrow}} \stackrel{B}{\underset{d}{\longrightarrow}} C \end{array}$ | Α    | 2.5  | 7.2          | 2.6           |
|  | В    | 3.0  | 8.8          | 3.1           |
|  | С    | 0.8  | 2.4          | 0.8           |
| RETICLE 6  |      |      |              |               |
| A<br>A B<br>B  | Α    | 5.0  | 14.4         | 5.2           |
|  | В    | 1.4  | 4.0          | 1.5           |

| IMAGE      | ITEM | MOA  | CM @<br>100M | IN @<br>100YD |
|------------|------|------|--------------|---------------|
| RETICLE 7  |      |      |              |               |
|            | Α    | 95.2 | 276.8        | 99.7          |
|            | В    | 76.5 | 222.4        | 80.1          |
| †          | С    | 19.0 | 55.2         | 19.9          |
| A          | D    | 2.5  | 7.2          | 2.6           |
|            | E    | 6.9  | 20.0         | 7.2           |
| B          | F    | 2.2  | 6.4          | 2.3           |
| ct III F   | G    | 3.3  | 9.6          | 3.5           |
| D // G     | Н    | 3.4  | 10.0         | 3.6           |
|            | I    | 5.3  | 15.3         | 5.5           |
|            | J    | 8.0  | 23.3         | 8.4           |
| RETICLE 8  |      |      |              |               |
|            | Α    | 87.5 | 254.4        | 91.6          |
|            | В    | 23.1 | 67.2         | 24.2          |
|            | С    | 4.7  | 13.6         | 4.9           |
| RETICLE 9  |      |      |              |               |
| A A B      | Α    | 2.2  | 6.4          | 2.3           |
|            | В    | 23.1 | 67.2         | 24.2          |
|            | С    | 4.7  | 13.6         | 4.9           |
| RETICLE 10 |      |      |              |               |
| A          | А    | 4.1  | 12.0         | 4.3           |

\* All reticle parameters are indicated for 1x magnification.

# NOTES



#### AGM Global Vision, LLC

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