User's Manual

NOCPIX

SLIM SERIES

Thermal Imaging Scope



Nocpix

WARNING!
ITAR REQUIREMENTS

These products may be subject to export and foreign trade control laws of the United States and may not be exported without prior approval of the U.S. Department of State. Learn more at irayusa.com/ITAR.

FCC Statement

FCC ID: 2BHFB-SLIM-00

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.

CAUTION: Changes or modifications not expressly approved by IRayUSA could void the user's authority to operate the equipment.

NOTE: This equipment 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 equipment 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 equipment 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.

This device was tested for typical body-supported operations and use. To comply with RF exposure requirements, a minimum separation distance of 0.5cm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.

WARNING: CHOKING HAZARD
Children under 3 years old can choke or suffocate on small parts of this product. This product is not a toy; keep out of reach of children.

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1. Overview

The all-new SLIM series from Nocpix provides the best value and features in a compact optic. These units can be used as both a handheld monocular and a weapon sight. With the included proprietary quick-detach mounting system a hunter can quickly scan and then re-attach the optic to the rifle while maintaining zero. A magnesium alloy body and quiet, soft-touch buttons provide excellent ergonomics in both handheld and weapon-mounted configurations. The included 18650 batteries ensure a longer time in the field, and the ability to charge through the optic using a magnetic cable keeps the process streamlined. Generous eye relief and a 1024×768 AMOLED display provide a comfortable and highly detailed viewing experience.

2. Features

- 12 µm high-performance thermal detector
- ≤18 mK sensitivity
- Quickly change optic from a handheld scanner to a weapon sight
- Digital zoom from 1.0×–4.0×/8.0×
- Magnesium alloy housing
- Includes two rechargeable 18650 batteries
- Maximum detection range 1750 yards
- Five ballistics profiles and a user-defined, multi-variable ballistics calculator
- 1024×768 AMOLED display
- High frame frequency: 50Hz
- Multiple reticle types and color options
- Supports multiple charging options, including a durable magnetic charging cable
- Recoil activated video
- Multiple zero profiles and ranges
- Built-in 32 GB storage to support image capture and video recording
- Built-in Wi-Fi module
- Mobile device App compatible
- Picture in Picture (PIP)
- User-friendly interface
- Pixel calibration functions

3. Tech Specs

SLIM	L25	L35	H35
Sensor			
Resolution	384×288		640×512
Pixel Size	12 µm		
Frame Rate	50hz		
Sensor Sensitivity	≤18 mK		
Image Processing	Reality+		
Core	Nocpix 384		Nocpix 640
Optics			
Objective Lens	25 mm f/0.9	35 mm f/1.0	
Magnification	2.5×	3.5×	2×
Digital Zoom	4×		8×
Field of View	10.5° ×7.9°	7.5° × 5.7°	12.6° × 9.4°
Detection Range	1400 Yards	1750 Yards	
Display Type	0.39-inch AMOLED		
Display Resolution	1024×768		
Color Palettes	White Hot, Black Hot, Red Hot, Rainbow, Violet, Crimson, Viridian		
Reticle Types	8 (1 Dynamic, 6 Static, 1 DIY)		
Reticle Colors	Black Red, Black Green, White Red, White Green, Black White, White Black, Crimson, Viridian		
Mounting System	Picatinny MIL-STD 1913 Rail		
P.I.P.	Yes		
Rangefinder	None		
Eye Relief	48 mm		
Diopter Range	-5 to +5		
Electronics			
Onboard Recording	Video, Recoil-Activated Video, and Image		
Onboard Storage	32 GB		
Wireless Connectivity	Image and Video via App.		
Data/Power Connector	Magnetic and USB-C		
Power Supply	USB-C External, 18650 Batteries ×2 (4+ Hours Each)		
Start Up Time	<10 Seconds, Instant from Standby		
Physical			
Size	8.50″ × 2.99″ × 1.81″		
Weight	18.70 Oz		
Environmental/Warranty			
Warranty	5 Years		
Housing Material	Magnesium Alloy		
Ingress Protection	IP67		
Operation Temperature	-4°F~122°F		
Max. Recoil	1000 g/s² (300 Win./7mm Mag)		

4. Accessories

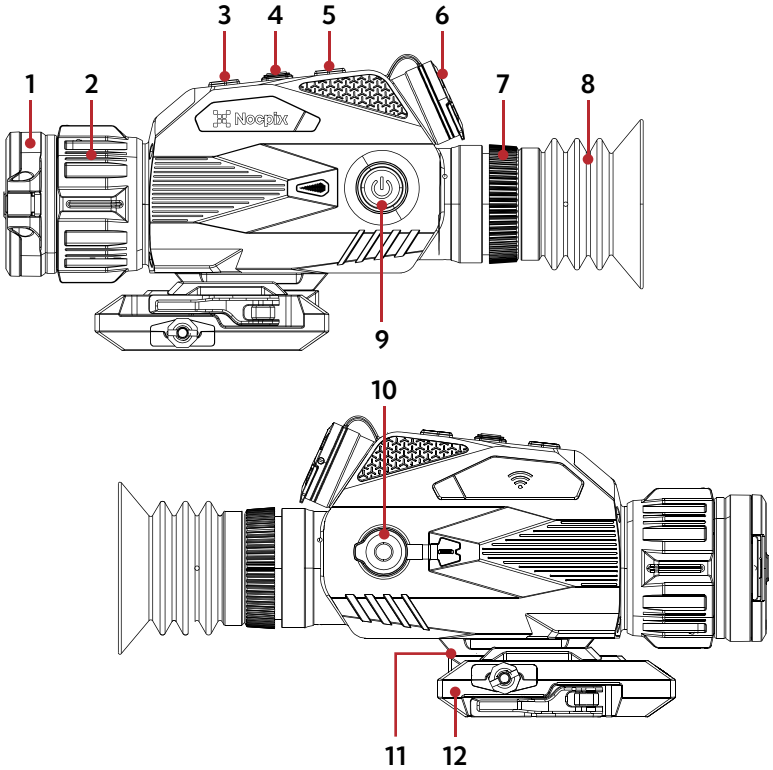
The SLIM Series rifle scope ships with everything you need to get out and hunt.

- Objective Lens Cap
- Standard Rubber Eyeguard
- IRAY-AC79 Dual-QD Mount Base for SLIM
- IRAY-AC78 Optic-side Mounting Rail for SLIM
- M5 Screws
- 3mm Hex Key and Spanner Tool
- 18650 Batteries ×2
- 18650 Battery Charger
- Magnetic Charging Cable
- USB-C Cable
- Soft Case
- Lens Cloth
- User Manual



Various replacement accessories, are available for purchase. Contact us at 800-769-7125 or irayusa.com/support.

5. Components and Controls



1 Objective Lens Cap
2 Objective Lens Focus Knob
3 Up Button
4 Menu Button
5 Down Button
6 Battery Compartment / Battery Cover
7 Eyepiece / Diopter Adjustment Ring
8 Eyeguard
9 Power Button
10 Magnetic Charging Port / USB-C Port
11 IRAY-AC78 Optic-side Mounting Rail for SLIM
12 IRAY-AC79 Dual-QD Mount Base for SLIM

6. Description of Control Buttons and Shortcuts

Power Button		
Current Screen, Menu, or Device Status	**Short Press**	**Long Press**
Device off	——	Power on the device
Home screen	Enter standby mode	Power off the device
Standby mode	Exit standby	——
Main menu	Return to the previous menu without saving changes	——

Up Button		
Current Screen / Menu	**Short Press**	**Long Press**
Home screen	Adjust the digital zoom level	Open/close the PIP window
Main menu / quick menu	Move the cursor up	——
Defect pixel correction & reticle zeroing interfaces	Move the cursor 1 pixel in the positive direction	Move the cursor 10 pixels in the positive direction

Up Button + Down Button		
Current Screen / Menu	**Short Press**	**Long Press**
Home screen	Manually perform a shuttered non-uniformity correction	Manually perform a shutterless non-uniformity correction

Menu Button		
Current Screen / Menu	**Short Press**	**Long Press**
Home screen	Enter the quick menu	Enter the main menu
Main menu	Change menu options; enter submenu; or confirm submenu changes and return	Save and return to the home screen
Quick menu	Toggle through the menu options	Exit the quick menu
Defective pixel correction interface	Select / deselect the axis of movement (X or Y)	Correct saved list of pixel(s) and return to previous
Reticle zeroing interface	Select / deselect the axis of movement (X or Y)	Save the new reticle position

Down Button		
Current Screen / Menu	**Short Press**	**Long Press**
Home screen	Take a photo	Start / stop recording video
Main menu / quick menu	Move the cursor down	——
Defect pixel correction & reticle zeroing interfaces	Move the cursor 1 pixel in the negative direction	Move the cursor 10 pixels in the negative direction

Menu Button + Down Button		
Current Screen / Menu	**Short Press**	**Long Press**
Home screen	——	Activate / deactivate reticle (Long press for 15 seconds)

7. Quick Start Guide

Step 1: Prepare to Use the SLIM

1. Compare the box contents to the accessories list and examine each for any shipping damage. See **Accessories** on page 4.
2. Check the lens to ensure there are no smudges or dirt present. Clean with the included lens cloth, if necessary.
3. Charge the batteries **(13)**. See **Charging the Batteries** on page 10.
4. Install the eyeguard **(8)**.
5. Mount the SLIM to the weapon. See **Mounting the SLIM** on page 13.

Step 2: Turn On the SLIM

1. Open the objective lens cap **(1)**.
2. Long press the **Power ⏻ Button** for 3 seconds to power on the SLIM.
3. Rotate the eyepiece diopter adjustment ring **(7)** until the interface icons are clear.

WARNING: Do not point the objective lens toward intense energy sources, such as the sun. This may render the electronic components inoperative. The warranty does not cover damage caused by improper operation.

Step 3: Adjust Settings in the Quick Menu

Short press the **Menu Ⓜ Button** to enter the quick menu to adjust the following settings (see **Using the Quick Menu** on page 18):

1. Set the color palette to white hot, black hot, red hot, rainbow, violet, crimson, or viridian.
2. Select an image brightness level, from 1–10.
3. Select an image contrast level, from 1–10.
4. Select an image sharpness level, from 1–10.
5. Select a zero distance.

Step 4: Adjust Device Settings

1. Long press the **Menu Ⓜ Button** to enter the main menu (see **Main Menu Options and Descriptions** on page 26 for detailed instructions) to:
   a. Turn on Ultra-Clear mode.
   b. Turn on automatic non-uniformity correction (NUC) mode.
   c. Turn on the motion sensor.
   d. Turn on the microphone.
   e. Turn on recoil activated video.
   f. Set the image hue to warm or cool.
   g. Set the date and time.
   h. Set the units of measure to yards or meters.
2. From the home screen, short press the **Up △ Button** to adjust the digital zoom level.
3. From the home screen, long press the **Up △ Button** to turn on the PIP window.

Step 5: Set Up the Reticle and Zero the SLIM

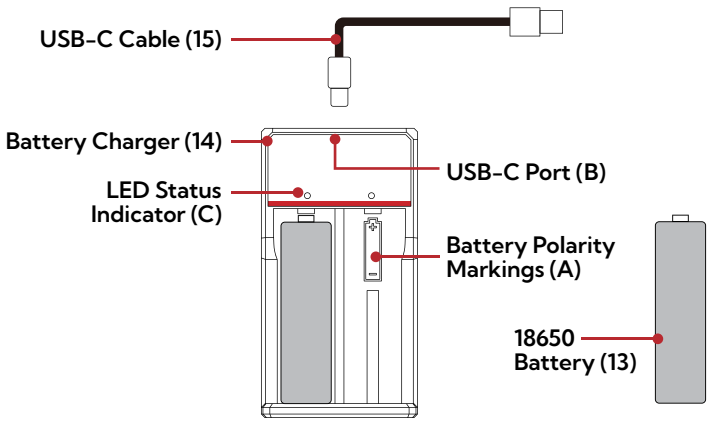
1. The reticle may be inactive when the SLIM is powered on for the first time. To activate the reticle, press and hold the **Menu Ⓜ, and Down ▽ Buttons** at the same time for 15 seconds from the home screen.
2. Adjust the reticle settings (see **Main Menu > Reticle** on page 27):
   a. Set the zeroing profile to A, B, C, D, E, or F.
   b. Set the reticle type to 1–7. A custom reticle is also available for purchase in the NOCPIX App.
   c. Set the reticle color to black red, black green, white red, white green, black white, white black, crimson, or viridian.
3. Zero the rifle scope. See **Zeroing the SLIM** on page 20.
   a. Select, or customize, a zero distance that matches the target distance.
   b. Zero the reticle.

8. Charging the Batteries

The SLIM rifle scope comes with two long-lasting rechargeable, lithium-ion 18650 batteries, which allow for 4 hours of operation each. Fully charge the batteries before using the SLIM for the first time.

Charging With the Battery Charger

1. Insert a 18650 battery **(13)** into the battery charger **(14)** following the polarity markings **(A)** inside the battery slot.
2. Connect the USB-C cable **(15)** to the USB-C port **(B)** on the battery charger.
3. Connect the standard USB end of the data cable to:
   a. A 5V–2A USB power adapter; **OR**
   b. Any standard USB 3.0 port on a laptop or computer.
4. During charging, the LED status indicator **(C)** on the battery charger will be solid red.



5. When the battery is fully charged, the LED status indicator will turn solid green. Remove the battery from the battery charger. Do not overcharge.

NOTE: When the LED status indicator flashes red, the battery charger is connected to a power source but no battery is installed.

WARNING: Never use the battery charger with a USB power adapter that is greater than 5V–2A.

Charging Via the Magnetic Charging Port

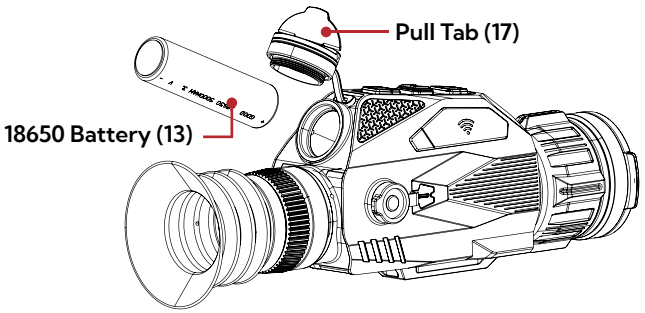
1. Place the magnetic charging cable **(16)** on the magnetic port **(10)** on the side of the rifle scope.
2. Connect the USB end of the magnetic charging cable to:
   a. A 5V–2A USB power adapter; **OR**
   b. Any standard USB 3.0 port on a laptop or computer; **OR**
   c. An external power supply, such as a USB power bank.
3. During charging, the battery status icon in the status bar changes to the battery charging icon.
4. When fully charged, disconnect the charging cable.

NOTES:

- You may charge and operate the SLIM at the same time.
- The battery status icon turns red when the battery is below 20%; charge right away to avoid over-discharge and a reduction in battery capacity or service life.

9. Installing a Battery

1. Lift the pull tab **(17)** on the battery cover, and use the pull tab to twist the battery cover counterclockwise to remove it.
2. Insert a 18650 battery **(13)** into the battery compartment **(6)** following the polarity markings inside the compartment. The positive **[+]** battery terminal faces in and the negative **[-]** terminal faces out.
3. Replace the battery cover. Use the pull tab to twist the battery cover clockwise to lock it.



WARNING: The SLIM can only be powered by an 18650 battery. Using any other battery type may cause irreparable damage to the rifle scope or cause a fire. Any damage from using an improper battery will not be covered by warranty.

10. Removing the Battery

To remove the battery from the SLIM:

1. Lift the pull tab on the battery cover. Use the pull tab to twist the battery cover counterclockwise to remove it.
2. Pull the battery out.

11. Battery Safety Warnings

WARNING: Only use the factory-supplied battery charger. The use of any other charger may irreparably damage the battery or the charger and may cause a fire. Any damage from using an improper battery charger will not be covered by warranty.

WARNINGS:

- Do not use a battery charger, power adapter, or USB cable that has been modified or damaged.
- Do not expose the batteries to high temperatures or open flame, and do not immerse it in water.
- Do not leave the batteries unattended while charging.
- Do not leave the batteries charging for long periods after full charge is reached. Charging time should not exceed 24 hours.
- Keep batteries out of the reach of children and pets.
- The batteries are equipped with short-circuit protection. However, any situation that may cause short-circuiting should be avoided.
- Do not disassemble, modify, hit, or drop the batteries.
- Do not connect the batteries to any external device with an electrical current that exceeds permitted levels.
- Do not connect an external device with a current supply that exceeds the 3.0 USB port.

To maintain optimal battery capacity and service life:

- Avoid storing a fully charged or discharged battery for long periods. Partial charging of the battery is necessary if the battery will be stored for an extended period.
- Do not charge an extremely cold battery. Allow the battery to warm up for about 45 minutes before charging.
- Charge the batteries at a temperature range from 32 °F to 113 °F; otherwise, the service life of the battery may be reduced.
- The recommended operating temperature range is -4 °F to 122 °F. Avoid using the batteries above the maximum or below the minimum recommended temperature range as this may decrease the battery capacity or service life.

12. External Power Supply

The SLIM supports the use of a 5V external power supply, such as a mobile power bank. To connect to an external power supply:

1. Connect the USB-C cable **(15)** to the USB-C port **(10)**.
2. Connect the other end of the USB-C cable to the external power supply.
3. The SLIM will switch to operation from the external power supply, and the battery will begin slowly charging.
4. In the status bar, the battery status icon will change to the battery charging icon.
5. If the SLIM is connected to an external power supply and no battery is installed, the battery status icon will change to the USB icon.
6. If the external power is disconnected, the SLIM will switch to the battery automatically, if installed, without powering off.

NOTE: Do not connect the SLIM to an external device with a power supply that exceeds the 3.0 USB cable.

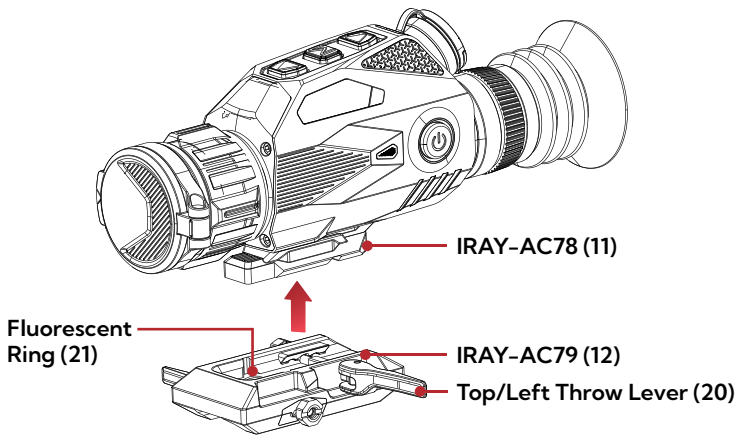
13. Mounting the SLIM

Installing the IRAY-AC79 Dual-QD Mount Base

Install the IRAY-AC79 Dual-QD Mount Base **(12)** to the IRAY-AC78 Optic-side Mounting Rail **(11)** on the base of the scope. Then install the rifle scope to the Picatinny rail of your rifle and adjust the position so that it produces a clear image and is comfortable for the shooter.

NOTE: Before each use and before fitting the mount base to the mounting rail, expose the fluorescent ring on the IRAY-AC79 to sunlight or indoor lighting for more than three minutes to activate it. Upon activation, the fluorescent ring will glow for 8 hours in dark environments.

1. Pull the top/left throw lever **(20)** to open the top of the IRAY-AC79 **(12)**.
2. Align the fluorescent ring **(21)** on the IRAY-AC79 with the corresponding ring on the IRAY-AC78 **(11)**, and fit the mount base to the mounting rail. Press the throw lever closed to lock the it in place.

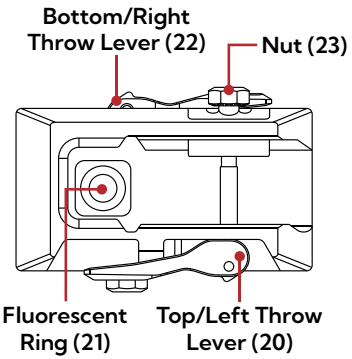


3. Pull the bottom/right throw lever **(22)** forward to open the bottom of the IRAY-AC79.
4. Install the IRAY-AC79 to the Picatinny rail, and press the throw lever closed to lock it in place.
5. The SLIM may be transitioned to handheld use at any time by opening the top/left throw lever to remove the rifle scope from the rifle while leaving the – in place.

The SLIM is now ready to be zeroed. See **Zeroing the SLIM** on page 20 for instructions.

Adjusting the Throw Lever Tension

If you cannot slide the IRAY-AC79 onto the mounting rail or the Picatinny rail because the throw levers are in the open position but the locking plates are not, or if the IRAY-AC79 is not tight to mounting rail or the rail after the throw levers are closed, you may loosen or tighten the tension of the throw levers by adjusting the nuts **(23)**.



1. Open the throw lever to be adjusted. This will cause the adjustment nut **(23)** to protrude on the opposite side of the mount.
2. Use the prong-side of the included spanner tool to turn the adjustment nut clockwise to tighten, or counterclockwise to loosen, to achieve the correct amount of tension. You should not feel any tension on the locking lever when closing until it reaches a 45-degree angle. Do not overtighten.

14. Operating Instructions

WARNING!
Don't point the objective lens towards any intense energy sources, such as laser radiation or the sun. This may render the electronic components inoperative. The warranty does not cover damage caused by improper operation.

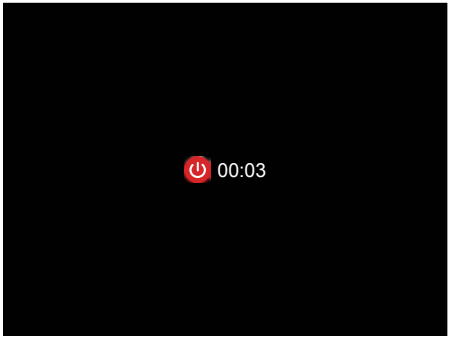
Using the Control Buttons

The SLIM is operated via four control buttons. The control buttons can be used to perform shortcut operations from the home screen, as well as in the menu and full-screen interfaces. See **Description of Control Buttons and Shortcuts** on page 6 for shortcut button details.

Powering On

1. Open the objective lens cap **(1)**.
2. Long press the **Power ⏻ Button** for 3 seconds to turn on the rifle scope. The Nocpix logo will appear.
3. To determine the current battery charge, check the battery status ▭ icon in the status bar.

Powering Off and Entering Standby



To power off the SLIM:

1. Long press the **Power ⏻ Button**.
2. The shutdown screen will open, showing a 3-second countdown.
3. After the countdown, "Data saving..." will appear and the rifle scope will turn off.

NOTE: Press any button during the 3-second countdown to stop the shutdown process and resume normal operation.

WARNING: If using an external power supply and no battery is installed, do not remove the power supply when saving data, as the data may not be saved.

STANDBY MODE

Manually Enter Standby Mode

1. To enter standby at any time from the home screen, short press the **Power ⏻ Button**.
2. Short press the **Power ⏻ Button** to exit standby.

Set the SLIM to Enter Standby Mode Automatically

The rifle scope may be set to automatically enter standby mode.

1. In the main menu, set the standby time to 2, 4, or 6 minutes. Once set, the system will automatically enter standby according to the set time.
2. Press any button to exit standby mode.

AUTO STANDBY NOTES:

- When **2min**, **4min**, or **6min** is selected:
  - The motion sensor must be turned on for auto standby to work.
  - After the set number of minutes of inactivity, the rifle scope will enter standby mode automatically when it is tilted up or down at an angle of more than 70° or left or right at an angle of more than 30°.

- The SLIM will not enter standby mode while it is in a level (horizontal) firing position.

- When **off** is selected, standby mode is turned off and the rifle scope will operate until the battery runs out.

Adjusting the Focus

ADJUSTING THE DIOPTER/EYEPIECE

1. Rotate the eyepiece diopter adjustment ring **(7)** at the rear of the rifle scope right or left until the user interface is clear.
2. Look closely to ensure all icons, the status bar, and the reticle appear sharp and in focus. No additional diopter adjustments are required unless the user wishes to make changes.

NOTES:

- After the initial adjustment, there is no need to rotate the eyepiece adjustment ring **(7)** for long distances or other conditions.
- If necessary during standard use, the objective lens focus knob **(2)** may be rotated to adjust fine focus on the target object being observed. See **Focusing the Objective Lens** below.

FOCUSING THE OBJECTIVE LENS

To adjust the focus on the target object:

1. Rotate the objective lens focus knob **(2)** left or right to adjust fine focus.

NOTE: Re-adjusting the focus will be necessary if the distance to the target changes.

Activating / Deactivating the Reticle

1. The reticle may be inactive when the SLIM is powered on for the first time. To activate the reticle, press and hold the **Menu (M) and Down (▽) Buttons** at the same time for 15 seconds from the home screen.

Status Bar Overview

The status bar at the top of the screen shows information on the operating status of the SLIM.



1 **Color Palette:** Shows the set color palette, white hot, black hot, red hot, rainbow, violet, crimson, or viridian.

2 **Zeroing Profile & Distance:** Shows the selected zero profile, A, B, C, D, E, or F, and zero distance.

3 **Total Magnification:** Shows the total magnification.

4 **Ultra-Clear Mode:** Shows the Ultra-Clear status, on or off.

5 **Automatic Non-Uniformity Correction (NUC) Mode:** The automatic non-uniformity correction (NUC) mode icon appears when turned on. A countdown icon will appear instead of the auto NUC mode icon when 5 seconds remain until an automatic NUC.

6 **Wi-Fi:** Shows the status, Wi-Fi on, Wi-Fi off, or N-Link on.

7 **Standby:** Shows standby icon and status, 2min, 4min, 6min, or off.

8 **Time:** Shows the current time in 24-hour format.

9 **Battery Status:** Shows the battery status.

BATTERY STATUS

The battery icon color and fill level indicate the current battery status. The battery icon is replaced by the charging battery icon when an external power supply is connected.

COLOR / ICON	BATTERY STATUS
White Battery	41% – 100%
Yellow Battery	20% – 40%
Red Battery	<20%; charge the battery right away.
Charging Battery	The battery is charging; an external power supply or computer is connected via the charging cable.
USB	No battery is installed; an external power supply or computer is connected via the charging cable.

Using the Quick Menu

In the quick menu, the color palette, image brightness, image contrast, image sharpness, and zero distance can be quickly adjusted.



- On the home screen, short press the **Menu** Ⓜ **Button** to enter the quick menu.
- Short press the **Up** △ or **Down** ▽ **Button** to move between the menu options below. The selected menu item is highlighted in the background.
  - **(Color Palette):** Short press the **Menu** Ⓜ **Button** to set the color palette to white hot, black hot, red hot, rainbow, violet, crimson, or viridian.
  - **(Image Brightness):** Short press the **Menu** Ⓜ **Button** to set the image brightness level, from 1–10.
  - **(Image Contrast):** Short press the **Menu** Ⓜ **Button** to set the image contrast level, from 1–10.
  - **(Image Sharpness):** Short press the **Menu** Ⓜ **Button** to set the image sharpness level, from 1–10.
  - **(Zero Distance):** Short press the **Menu** Ⓜ **Button** to select a zero distance within the selected zeroing profile. Only the zero distances in the selected profile will be available for selection. The selected zeroing profile and distance appear in the status bar.
- Long press the **Menu** Ⓜ **Button** to save any changes and return to the home screen.
- After 5 seconds of inactivity, the system will automatically save any changes and return to the home screen.

Navigating the Main Menu



- From the home screen, long press the **Menu** Ⓜ **Button** to enter the main menu.
- Short press the **Up** △ or **Down** ▽ **Button** to move through the menu options.
- A blue arrow › icon indicates the cursor position in the menu.
- Short press the **Menu** Ⓜ **Button** to:
  - Change the parameters for the selected menu option; **OR**
  - Enter the submenu; **OR**
  - Confirm submenu changes and return to the previous menu.
- Long press the **Menu** Ⓜ **Button** to confirm any changes and return to the home screen.
- Short press the **Power** ⏻ **Button** to return to the previous menu without saving.
- After 15 seconds of inactivity, the menu will automatically close and the interface will return to the home screen. Changes (except changes to toggle on / off menu items, such as Ultra-Clear and Wi-Fi) are not saved automatically.
- Upon exiting from the main menu the cursor location is stored for a single working session (until the SLIM is turned off). After restarting the SLIM and entering the menu, the cursor position will be at the first menu item.

15. Zeroing the SLIM

SLIM features a "freeze" zeroing method. To zero the SLIM:

1. Set a suitable target at the desired zero distance.
2. Confirm that the rifle is empty, safe, and pointed in a safe direction, with no ammunition near the weapon.
3. Adjust the image and device settings following the steps in the **Quick Start Guide** on page 8, if you have not done so already.
4. Set the zeroing profile to A, B, C, D, E, or F. See **Reticle Menu > Zeroing Profile** on page 27.
5. Based on the distance to the target you wish to zero, select or customize a zero distance to match.
6. Ensure a stable platform and natural shooting position is achieved behind the rifle.
7. Load ammunition, aim, and take one good shot at the target.
8. Make your rifle safe and observe the location of impact on the target.
9. 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.
10. In the submenu for the selected zero distance, center the reticle on the aiming point and freeze the image view.
    a. Short press the **Down ▽ Button** to move to the image freeze ❄ icon.
    b. Short press the **Menu Ⓜ Button** to freeze the image.
11. Select the axis (X or Y) along which to move the reticle.
    a. Short press the **Up △** or **Down ▽ Button** to move between **X** and **Y**.
    b. Short press the **Menu Ⓜ Button** to select the desired axis. The selected axis will change from white to blue.
12. Adjust the X/Y position of the reticle until the reticle matches the point of impact.
    a. Use the **Up △ Button** to move in the positive direction: X= Right and Y= Up.
    b. Use the **Down ▽ Button** to move in the negative direction: X= Left and Y= Down.
    c. Upon moving the reticle, a red dot appears on the screen, representing the original position of the reticle.
13. Long press the **Menu Ⓜ Button** to save the reticle position.
14. 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.

For detailed Zeroing instructions, please see **Zeroing Menu > Reticle Zeroing** on page 30.

16. Non-Uniformity Correction

A non-uniformity correction (NUC) allows a thermal imager's sensors to correct its pixels and eliminate any image defects caused by pixel drift. A NUC will be performed automatically each time the SLIM is powered on.

Automatic NUC Mode

When automatic NUC mode Ⓐ is turned on in the main menu (see **Main Menu > Calibration** on page 35), the SLIM will perform a shuttered NUC automatically according to the internal software algorithm. There is no need to close the objective lens cap **(1)** as the SLIM 's internal shutter covers the sensor. When automatic mode is turned on, a countdown timer icon will appear when 5 seconds remain until a NUC. The timer will appear only after the microbolometer temperature has stabilized—after approximately 10 minutes of continuous operation of the SLIM.

NOTE: A manual NUC (see below) may be performed at any time.

Performing a Manual NUC

The user independently determines the need to perform a shuttered or shutterless NUC based on the quality of the observed image. A manual NUC may be performed at any time from the home screen.

SHUTTERED NUC

It is not necessary to close the objective lens cap **(1)** during a shuttered NUC, as the internal shutter covers the sensor.

1. From the home screen, short press the **Up △** and **Down ▽ Buttons** at the same time.
2. The internal shutter will cover the sensor and a shuttered non-uniformity correction (NUC) will be performed instantly.

SHUTTERLESS NUC

A shutterless NUC uses less power than a shuttered NUC because it does not use the imager shutter to cover the sensor; instead, the user must close the lens cap.

1. Close the objective lens cap **(1)**.
2. From the home screen, long press the **Up △** and **Down ▽ Buttons** at the same time.
3. A prompt to close the lens cap appears onscreen. The shutterless NUC starts after about 2 seconds.

NOTE: If the lens is not properly covered, a temporary "image burn" will remain in the image until the next non-uniformity correction. This "image burn" is temporary and is not a defect or sign of permanent damage.

17. Photography and Video Recording

The SLIM is equipped with video recording and image capture. All videos and photos are automatically saved to the built-in 32 GB memory storage.

NOTE: Photo and video files are named with the time and date; therefore, it is recommended to set the date and time before using the photo and video functions. See **Settings Menu > Date and Time** on page 44. Alternatively, the date and time may be synchronized in the NOCPIX App.

Photography



To take a photo:

1. From the home screen, short press the **Down ▽ Button**.
2. The image will freeze for 0.5 seconds and the camera icon will appear briefly in the upper-left corner of the screen to indicate a photo was taken.

NOTE: A red warning icon ⓘ appears next to the camera icon in the upper-left corner of the screen when insufficient memory storage is available. Transfer video and image files to other storage media to free up space on the memory card.

Video Recording



To record video:

1. Turn on the microphone in the main menu if desired. See **Main Menu > MIC** on page 36.
2. From the home screen, long press the **Down ▽ Button** to start a video recording.
3. When the video recording starts, the recording timer, in HH:MM:SS (hour, minute, second) format, appears in the upper-right corner of the screen.
4. When recording, short press the **Down ▽ Button** to take a photo.
5. Long press the **Down ▽ Button** to stop and save the video recording.

Recoil Activated Video Recording



When recoil activated video is turned on in the main menu, a video is automatically recorded when a shot is taken. The SLIM will record 15 seconds before the shot and 2 minutes and 45 seconds after the shot. The video recording timer, in HH:MM:SS (hour, minute, second) format, will appear in the upper-right corner of the screen when video is recording. See **Main Menu > Recoil Activated Video** on page 36 for instructions.

NOTES:

- When multiple shots are taken within the same 30-second period, only one video will be taken.
- When recoil activated video recording is turned on, standard video recording is unavailable.

Video and Photography Notes

- You may enter and navigate the menu during video recording.
- The user interface (the status bar, icons, and menu) is captured in recorded video or photo files.
- Recorded photos and videos are saved to the memory card.
  - Photos are saved as PIC_HHMMSS.jpg.
  - Videos are saved as HHMMSS.mp4.
  - RAV videos are saved as PRE_HHMMSS.mp4.
  - HHMMSS is hour, minute, second.
- The number of recorded files is limited only by the capacity of the internal memory.
- Regularly check the available memory storage space and move video footage and images to other storage media to free up space on the memory card.

18. Accessing the Internal Memory

When the SLIM is turned on and connected to a computer via the included data cable, it is recognized by the computer as a flash memory (USB) drive. This allows the user to access the saved multimedia files and copy or delete any desired files.

To access the internal memory:

1. Turn on the SLIM.
2. Connect the SLIM to your computer via the included magnetic charging cable **(16)** or the USB-C cable **(15)**.
3. Double-click **My Computer** on your computer desktop.
4. Double-click to open the device named **NOCPIX**.
5. Double-click to open the device named **SLIM** to access the built-in memory.
   a. Recorded photos and videos are separated into folders by date, YYYYDDMM.
6. Select the desired files or folders to copy or delete.

19. Using The NOCPIX App

The SLIM can be operated using the NOCPIX App when connected to a tablet or smartphone or via Wi-Fi.

Download on the App Store

GET IT ON Google Play

1. Download the App for free and install it on your device:
   a. Scan a QR code to download it from the App Store or Google Play; **OR**
   b. Download the App from any app store.
2. Connect the SLIM to Wi-Fi:
   a. Turn on the Wi-Fi. See **Main Menu > Wi-Fi** on page 34 for instructions.
   b. Open the App and click the **Connect Device button**. Then, click **Connect Phone WLAN**.
   c. On the mobile device, go to **Settings > Wi-Fi**.
   d. Select the SLIM from the list of Wi-Fi networks. It will appear in the list as "SLIM_XXXXX_YYYYYYYY," where YYYYYYYY is the device serial number.
   e. Enter the Wi-Fi password and tap the **Join button**. The default password is 12345678.
3. Operate the SLIM via the App:
   a. Take real-time photos and videos, with or without audio.
   b. View, share, download, and delete photos and videos taken via the App, which are saved to the mobile device.
   c. Change the Wi-Fi password and SSID.
   d. Synchronize the date and time from the mobile device.
   e. Update the SLIM firmware.

NOTE: When a factory reset is performed, the Wi-Fi SSID and password are reset to the defaults, SLIM_XXXXX_YYYYYYYY and 12345678. See **Settings Menu > Factory Reset** on page 46.

20. Digital Zoom

The SLIM will quickly increase the base magnification by enlarging the image digitally from 1 to 4 times (L25 and L35) or 1 to 8 times (H35).

To use digital zoom:

1. From the home screen, short press the **Up △ Button** to toggle through the digital zoom levels.
2. The total magnification is displayed in the status bar.

21. Picture in Picture

The Picture in Picture (PIP) function opens a small floating window with a magnified image view at the top of the screen. PIP allows for improved aiming while still being able to see the wide field of view in the main body of the screen.



To activate PIP mode:

1. From the home screen, long press the **Up △ Button**. A 2× zoomed image, centered on the reticle, will appear at the top of the screen. Please note that the PIP image is 2× that of the total magnification shown in the status bar.
2. To exit PIP mode, long press the **Up △ Button** again.

NOTE: When the image in the main body of the screen is magnified via digital zoom, the PIP image will enlarge accordingly.

22. Ultra-Clear Mode

Ultra-Clear mode improves the image quality in inclement weather conditions, such as rain, fog, high humidity, or high temperatures as these conditions all result in lower thermal contrast. Ultra-Clear mode enhances the NETD value of the thermal sensor and improves the sensor's response rate to these challenging environment conditions. See **Main Menu > Ultra-Clear** on the next page.

Ultra-Clear mode provides:

- Improved image quality and clarity; images are crisper and sharper.
- Increased image detail.
- Improved recognition of observed targets.

23. Main Menu Options and Descriptions

Menu and submenu options, from top to bottom are:

- **Main Menu:** Ultra-Clear, Reticle, Zeroing, Wi-Fi, Calibration, Motion Sensor, MIC, Recoil Activated Video, Ballistic Calculation, Image Hue, Standby, Pixel Defect Correction, Gallery, Settings.
  - **Reticle Menu:** Zeroing Profile, Reticle Type, Reticle Color.
  - **Zeroing Menu:** Reticle Zeroing, Customize Zero Distance, Delete Distance.
  - **Ballistic Menu:** Ballistic Calculation, Profile, UNITS, SPOA, Parameter Setting.
  - **Settings Menu:** Date, Time, Languages, Unit, Factory Reset, Info.

Menu option details, descriptions, and navigation instructions are listed in order on the following pages.

Ultra-Clear

Turn Ultra-Clear mode on or off



When Ultra-Clear mode is turned on, the image contrast is enhanced, which is suitable for rainy, foggy, or low-contrast conditions.

1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the Ultra-Clear 👁 menu item.
3. Short press the **Menu** Ⓜ **Button** to turn Ultra-Clear on or off.
4. The Ultra-Clear status, on 👁 or off 🚫👁, appears in the status bar.
5. Long press the **Menu** Ⓜ **Button** to return to the home screen.

NOTE: When Ultra-Clear mode is turned on and off, the SLIM will automatically perform a shuttered non-uniformity correction.

Reticle

Select the zeroing profile, reticle type, and reticle color



1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the reticle ⊹ menu item.
3. Short press the **Menu** Ⓜ **Button** to enter the reticle submenu.

RETICLE MENU > ZEROING PROFILE

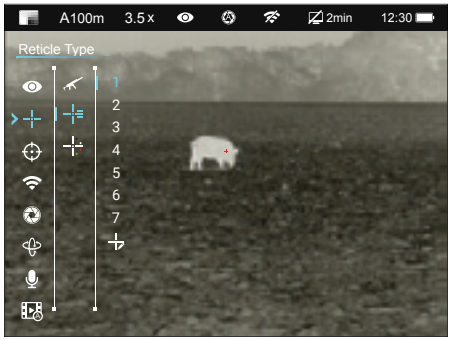
Select the zeroing profile



1. In the reticle submenu, the zeroing profile menu item is selected by default.
2. Short press the **Menu** Ⓜ **Button** to enter the zeroing profile submenu.
3. Short press the **Up** △ or **Down** ▽ **Button** to move through zeroing profile options, A, B, C, D, E, or F. The selected zeroing profile appears in the status bar.
4. Long press the **Menu** Ⓜ **Button** to confirm the selection and return to the home screen.

RETICLE MENU > RETICLE TYPE

Select the reticle type



1. In the reticle submenu, short press the **Up** △ or **Down** ▽ **Button** to select the reticle type menu item.
2. Short press the **Menu** Ⓜ **Button** to enter the submenu.
3. Short press the **Up** △ or **Down** ▽ **Button** to move through reticle type options, 1–7 (see below). The reticle changes as the cursor moves through the reticle types. A custom reticle is also available for purchase in the NOCPIX App.
4. Long press the **Menu** Ⓜ **Button** to confirm the selection and return to the home screen.

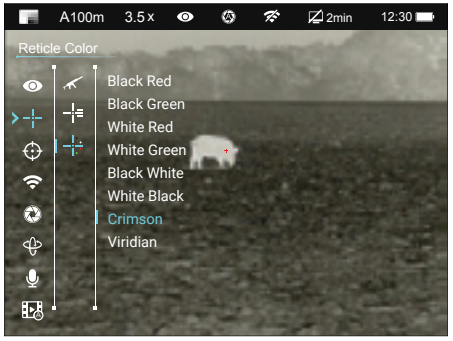
Reticle Types



1 2 3 4 5 6 7

RETICLE MENU > RETICLE COLOR

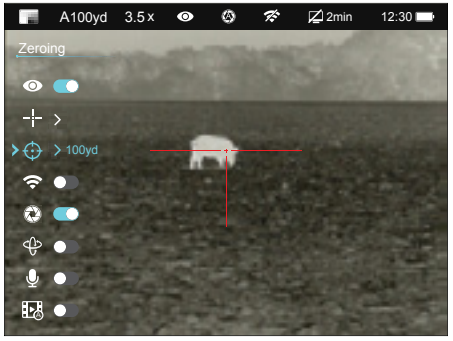
Select the reticle color



1. In the reticle submenu, short press the **Up** △ or **Down** ▽ **Button** to select the reticle color menu item.
2. Short press the **Menu** Ⓜ **Button** to enter the submenu.
3. Short press the **Up** △ or **Down** ▽ **Button** to move through reticle color options, black red, black green, white red, white green, black white, white black, crimson, or viridian. The reticle color changes as the cursor moves through the color options.
4. Long press the **Menu** Ⓜ **Button** to confirm the selection and return to the home screen.

Zeroing

Select or customize a zero distance



In the zeroing menu, you can add a new zero distance or select a zero distance in the list to edit it, delete it, or adjust the reticle position. The SLIM supports up to 10 zero distances of 1 to 999 yards or 1 to 999 meters.

NOTE: Before selecting or adding a new zero distance, you must select a zeroing profile, A, B, C, D, E, or F. See **Reticle Menu > Zeroing Profile** on page 27.

1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the zeroing menu item.
3. Short press the **Menu** Ⓜ **Button** to enter the zeroing submenu.

ZEROING MENU > ZERO DISTANCE SUBMENU

Add or select a zero distance





To add a new zero distance:

1. In the zeroing menu, short press the **Up** △ or **Down** ▽ **Button** to move to the add ⊕ icon.
2. Short press the **Menu** Ⓜ **Button** to add a new zero distance. A blue arrow will appear above and below the far-left digit of the new zero distance to mark the cursor location.
3. Short press the **Up** △ or **Down** ▽ **Button** to increase or decrease the value of the selected digit from 0–9.

4. Short press the **Menu Ⓜ Button** to switch between the three digits. The two blue arrows move to indicate the selected digit.
5. Short press the **Power ⏻ Button** to return to the previous menu without saving changes; **OR**
6. Long press the **Menu Ⓜ Button** to save the new zero distance and return to the home screen.

To select a zero distance:

1. In the zeroing menu, short press the **Up △** or **Down ▽ Button** to select a zero distance.
2. Short press the **Menu Ⓜ Button** to enter the submenu for the selected zero distance. In this submenu, you may:
   a. Select the reticle zeroing ⊹ menu item to adjust the X/Y position of the reticle at the selected zero distance. See **Reticle Zeroing** on the next page.
   b. Select the zero distance to edit it. See **Zeroing Menu > Customize Zero Distance** on page 33.
   c. Select the delete 🗑 icon to delete the selected zero distance. See **Zeroing Menu > Delete Distance** on page 34.

ZEROING MENU > ZERO DISTANCE SUBMENU > RETICLE ZEROING ⊹

Adjust the reticle position of the selected zero distance

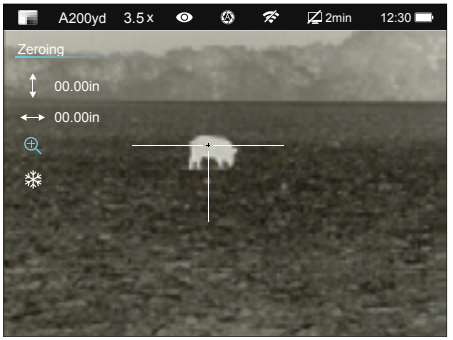


In the reticle zeroing interface, the X/Y position of the reticle may be adjusted to match the point of impact.

1. In the submenu for the selected zero distance, the reticle zeroing ⊹ menu item is selected by default. Short press the **Menu Ⓜ Button** to select it and enter the reticle zeroing interface.
2. The reticle zeroing interface has the following features:



   1 Y-Axis ↕ Icon: Select to move the reticle along the Y-Axis. Shows the vertical point of impact change, in inches or centimeters.
   2 X-Axis ↔ Icon: Select to move the reticle along the X-Axis. Shows the horizontal point of impact change, in inches or centimeters.
   3 Zoom ⊕ Icon: Select to change the zoom level.
   4 Freeze ❄ Icon: Select to freeze the image.
   5 Reticle: Shows the new reticle position.
   6 Red Dot: Indicates the center of the original reticle position.
3. In the submenu for the selected zero distance, center the reticle on the aiming point and freeze the image view.
   a. Short press the **Down ▽ Button** to move to the image freeze ❄ icon.
   b. Short press the **Menu Ⓜ Button** to freeze the image.
4. Adjust the zoom level, as needed:



   a. Short press the **Up △** or **Down ▽ Button** to move to the zoom ⊕ icon.
   b. Short press the **Menu Ⓜ Button** to select it.
   c. Short press the **Up △** or **Down ▽ Button** to zoom in or out. The real-time amplification appears in the status bar.
5. Select the axis (X or Y) along which to move the reticle:
   a. Short press the **Up △** or **Down ▽ Button** to move between **X** and **Y**.

b. Short press the **Menu** Ⓜ **Button** to select the desired axis. The selected axis will change from white to blue.

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



   a. **X** (horizontal) is the windage and **Y** (vertical) is the elevation.

   b. Upon moving the reticle, a red dot appears onscreen, representing the original position of the reticle.



   c. Use the **Up** △ **Button** to move in the positive direction: X= Right and Y= Up.

   d. Use the **Down** ▽ **Button** to move in the negative direction: X= Left and Y= Down.

   e. Short press the **Up** △ or **Down** ▽ **Button** to move the reticle in the corresponding direction by 1 pixel; long press to move 10 pixels.

   f. The reticle position is adjusted as follows:

MODEL	DISTANCE (YARDS)	SHORT PRESS (INCHES)	LONG PRESS (INCHES)
SLIM L25	50	0.23	2.29
	100	0.46	4.59
	200	0.92	9.17
SLIM L35	50	0.23	2.29
	100	0.46	4.59
	200	0.92	9.17
SLIM H35	50	0.38	3.82
	100	0.76	7.64
	200	1.53	15.28

   g. The distance of your X/Y adjustments will update automatically if you change your zero distance, for example from 100 to 200 yards.

7. Short press the **Menu** Ⓜ **Button** to save the position for the selected axis and deselect it. When deselected, the axis will change from blue to white.

8. Repeat steps 5–7 to adjust the reticle position along the second axis if needed.

9. Long press the **Menu** Ⓜ **Button**. A popup window shows "Save changes?" and two options, No and Yes. No is selected by default.



10. Short press the **Menu** Ⓜ **Button** to select **No** to return to the main menu without correcting any defective pixels; **OR**

11. Short press the **Up** △ or **Down** ▽ **Button** to select **Yes** to correct the list of defective pixels and return to the home screen.

12. "Saving" will appear at the bottom of the screen and the system will exit to the homepage.

13. 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.

ZEROING MENU > ZERO DISTANCE SUBMENU > CUSTOMIZE ZERO DISTANCE

Edit the selected zero distance



1. In the submenu for the selected zero distance, short press the **Up** △ or **Down** ▽ **Button** to move to the zero distance.

2. Short press the **Menu** Ⓜ **Button** to edit the selected zero distance. A blue arrow will appear above and below the far-left digit to mark the cursor location.

3. Short press the **Up** △ or **Down** ▽ **Button** to increase or decrease the value of the selected digit from 0–9.

4. Short press the **Menu** Ⓜ **Button** to switch between the three digits. The two blue arrows move to indicate the selected digit.

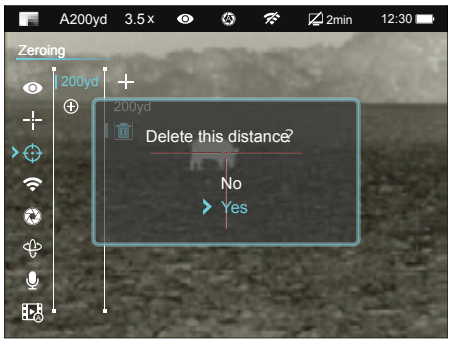
5. Short press the **Power** ⏻ **Button** to return to the previous menu without saving changes; **OR**
6. Long press the **Menu** Ⓜ **Button** to save the edited zero distance and return to the previous menu.

ZEROING MENU > ZERO DISTANCE SUBMENU > DELETE DISTANCE

Delete the selected zero distance



1. In the submenu for the selected zero distance, short press the **Up** △ or **Down** ▽ **Button** to move to the delete 🗑 icon.
2. Short press the **Menu** Ⓜ **Button** to delete the selected distance.
3. A popup window shows the message "Delete this distance?" and two options, No and Yes. No is selected by default.



4. Short press the **Menu** Ⓜ **Button** to select **No** to return to the previous menu without deleting the zero distance; **OR**
5. Short press the **Up** △ or **Down** ▽ **Button** to select **Yes** and short press the **Menu** Ⓜ **Button** to delete the zero distance and return to the previous menu.

Wi-Fi

Turn Wi-Fi on or off



Turn on Wi-Fi to operate the SLIM via the NOCPIX App. Turn on N-Link to pair the SLIM with another NOCPIX device to share rangefinding data. Turn on hotspot to use your smartphone or tablet as a hotspot to connect the SLIM to the NOCPIX App.

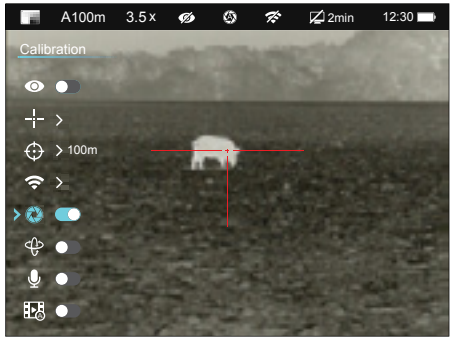
1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the Wi-Fi menu item.
3. Short press the **Menu** Ⓜ **Button** to enter the submenu.



4. Short press the **Up** △ or **Down** ▽ **Button** to move through the three settings,Wi-Fi, N-Link, and Hotspot-link.
5. Short press the **Menu** Ⓜ **Button** to turn the selected setting on or off. The status, Wi-Fi on ,Wi-Fi off ,or N-Link on appears in the status bar.
6. Long press the **Menu** Ⓜ **Button** to return to the home screen.

Calibration

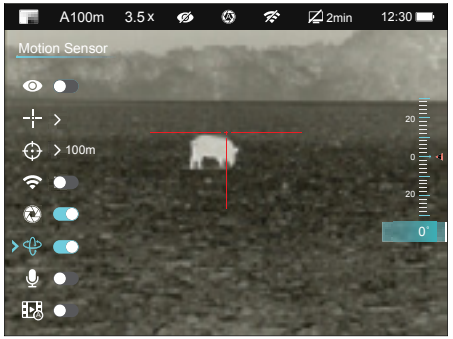
Turn automatic non-uniformity correction mode on or off



1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the calibration menu item.
3. Short press the **Menu** Ⓜ **Button** to toggle automatic non-uniformity correction (NUC) mode on or off. When on, the automatic NUC mode icon appears in the status bar.
4. Long press the **Menu** Ⓜ **Button** to return to the home screen.

Motion Sensor

Turn the motion sensor on or off

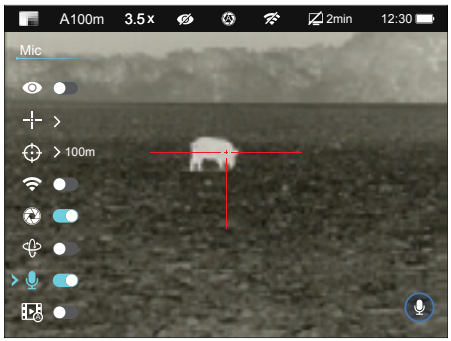


1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the motion sensor menu item.

3. Short press the **Menu** Ⓜ **Button** to toggle the motion sensor on or off. When on, the tilt angle appears on the left side of the screen and the pitch angle appears on the right side of the screen.
4. Long press the **Menu** Ⓜ **Button** to return to the home screen.

NOTE: The tilt angle is not shown in the figure because it is hidden by the menu.

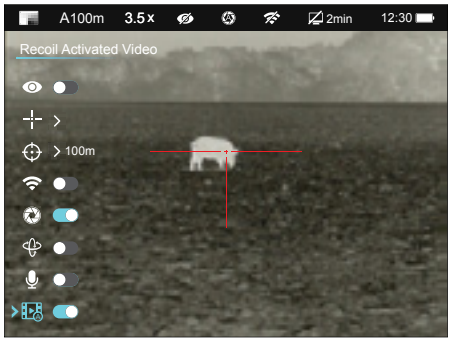
MIC



Turn the microphone on or off

1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the MIC menu item.
3. Short press the **Menu** Ⓜ **Button** to turn the microphone on or off. When on, the microphone icon appears in the lower-right corner of the screen.
4. Long press the **Menu** Ⓜ **Button** to return to the home screen.

Recoil Activated Video



Turn recoil activated video on or off

When recoil activated video is turned on, the rifle scope will record 15 seconds before the shot and 2 minutes and 45 seconds after the shot.

1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the recoil activated video menu item.
3. Short press the **Menu** Ⓜ **Button** to toggle recoil activated video on or off.
4. Long press the **Menu** Ⓜ **Button** to confirm the selection and return to the home screen.

NOTES:

- The video recording timer, in HH:MM:SS (hour, minute, second) format, will appear in the upper-right corner of the screen when video is recording.
- When multiple shots are taken within the same 30-second period, only one video will be taken.
- When recoil activated video recording is turned on, standard video recording is unavailable.

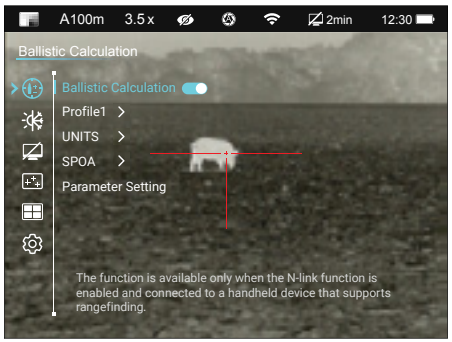
Ballistic Calculation

Adjust the ballistic calculation settings

1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the ballistic calculation menu item.
3. Short press the **Menu** Ⓜ **Button** to enter the submenu.

NOTE: Ballistic calculation is only available when another NOCPIX device with rangefinding capability is connected to the SLIM via N-Link. See **Main Menu > Wi-Fi** on page 34.

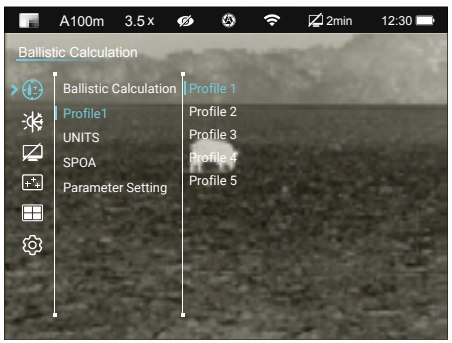
BALLISTIC MENU > BALLISTIC CALCULATION



Turn ballistic calculation on or off

1. In the submenu, short press the **Up** △ or **Down** ▽ **Button** to select the ballistic calculation menu item.
2. Short press the **Menu** Ⓜ **Button** to turn ballistic calculation on or off.
3. Long press the **Menu** Ⓜ **Button** to confirm the selection and return to the home screen.

BALLISTIC MENU > PROFILE



Select a ballistic profile

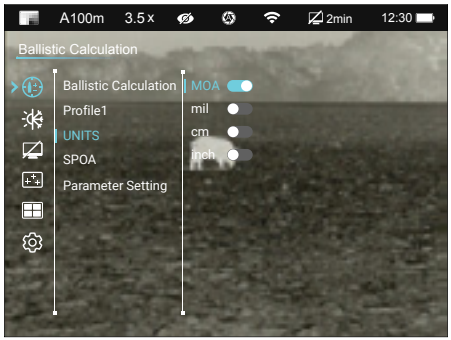
1. In the ballistic submenu, short press the **Up** △ or **Down** ▽ **Button** to select the profile menu item.
2. Short press the **Menu** Ⓜ **Button** to enter the submenu.

3. Short press the **Up** △ or **Down** ▽ **Button** to move through profile options, 1–5.
4. Long press the **Menu** Ⓜ **Button** to confirm the selection and return to the home screen.

NOTE: The ballistic profile name can be customized in the NOCPIX App.

BALLISTIC MENU > UNITS

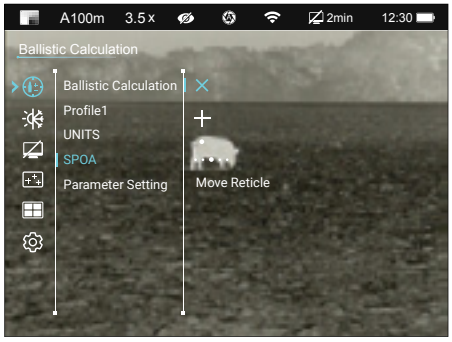
Set the units of measurement for ballistic calculation



1. In the ballistic submenu, short press the **Up** △ or **Down** ▽ **Button** to select the UNITS menu item.
2. Short press the **Menu** Ⓜ **Button** to enter the submenu.
3. Short press the **Up** △ or **Down** ▽ **Button** to set the angular units to MOA or mil, and the linear units to cm or inches.
4. Short press the **Menu** Ⓜ **Button** to toggle the selected units on or off.
5. Long press the **Menu** Ⓜ **Button** to confirm the selection and return to the home screen.

BALLISTIC MENU > SPOA

Set the suggested point of aim (SPOA)

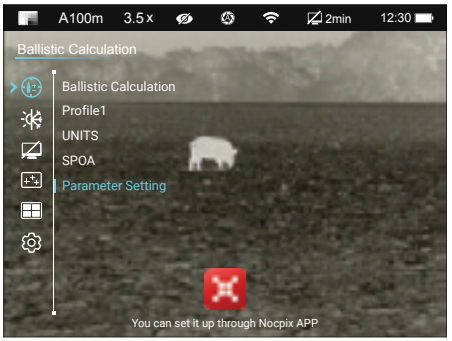


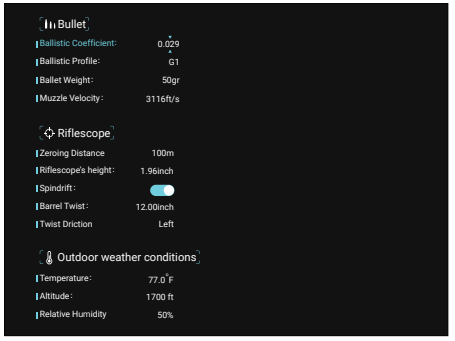
1. In the ballistic submenu, short press the **Up** △ or **Down** ▽ **Button** to select the SPOA menu item.
2. Short press the **Menu** Ⓜ **Button** to enter the submenu.
3. Short press the **Up** △ or **Down** ▽ **Button** to move through the options, "×", "+", "✱" , "• •●• •", and Move Reticle.
4. Long press the **Menu** Ⓜ **Button** to confirm the selection and return to the home screen.

NOTE: When SPOA is set to Move Reticle, the SLIM will move the original reticle to the suggested point of aim automatically.

BALLISTIC MENU > PARAMETER SETTING

Set ballistic parameters





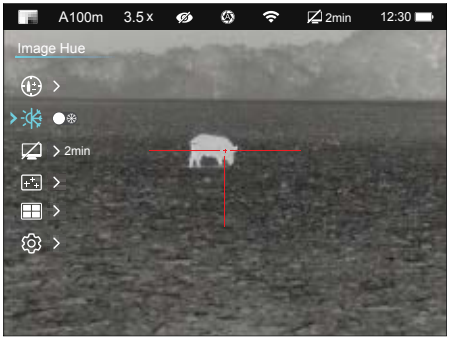
1. In the ballistic submenu, short press the **Up** △ or **Down** ▽ **Button** to select the parameter setting menu item.
2. Short press the **Menu** Ⓜ **Button** to enter the submenu.
3. Short press the **Up** △ or **Down** ▽ **Button** to move through the parameters and short press the **Menu** Ⓜ **Button** to begin editing a parameter.
4. Short press the **Up** △ or **Down** ▽ **Button** to move through the parameter options.
5. Long press the **Menu** Ⓜ **Button** to confirm the selection and return to the home screen.

NOTES: Parameters can be adjusted in the NOCPIX App.

Image Hue ❄

Toggle between warm and cool image hue





1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the image hue ❄ menu item.
3. Short press the **Menu** Ⓜ **Button** to toggle between warm ☼ mode (toggle is on) and cool ❄ mode (toggle is off).

4. Long press the **Menu** Ⓜ **Button** to return to the home screen.

NOTES:

- Cool mode provides a brighter image and warm mode provides a softer image and reduces eye strain.
- Image hue is available when using the white hot or black hot color palette.

Standby

Set the automatic standby status and time



To conserve battery, the rifle scope may be set to automatically enter standby mode.

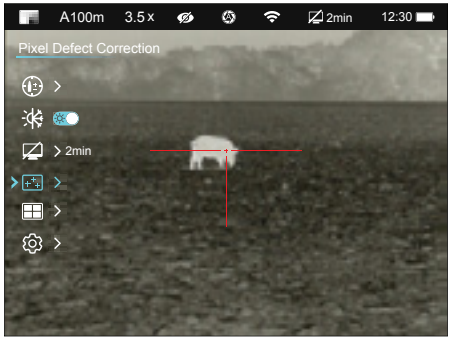
1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the standby menu item.
3. Short press the **Menu** Ⓜ **Button** to enter the standby submenu.
4. Short press the **Up** △ or **Down** ▽ **Button** to move through the standby status options, 2min, 4min, 6min, or off. The standby icon and status appear in the status bar.
5. Long press the **Menu** Ⓜ **Button** to confirm the selection and return to the home screen.

NOTES:

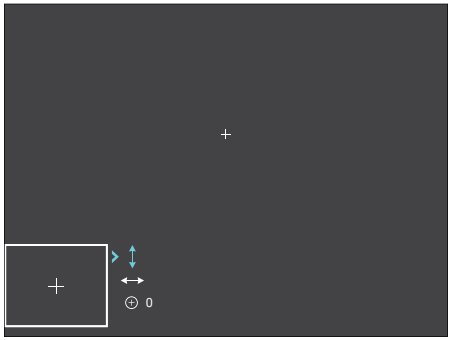
- When **2min**, **4min**, or **6min** is selected:
  - The motion sensor must be turned on for automatic standby to work.
  - After the set number of minutes of inactivity, the rifle scope will enter standby mode automatically when it is tilted up or down at an angle of more than 70° or left or right at an angle of more than 30°.
  - The SLIM will not enter standby mode while it is in a level (horizontal) firing position.
- When **off** is selected, standby mode is turned off and the rifle scope will operate until the battery runs out.

Pixel Defect Correction

Correct defective pixels

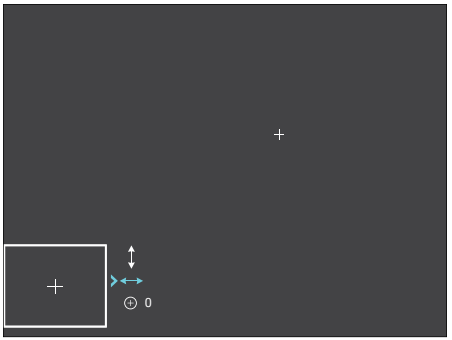


Defective pixels are pixels that do not change correctly compared to the other image pixels—they are either brighter or darker than surrounding pixels. The SLIM has a tool that corrects defective pixels on the sensor using its internal software.



1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the pixel defect correction menu item.
3. Short press the **Menu** Ⓜ **Button** to enter the pixel correction interface.
4. The interface has the following features:
   1. **Pixel Cursor** ┼**:** Appears in the center of the screen in place of the reticle. Move the cursor to the position of the defective pixel.
   2. **PIP Window:** Appears in the lower-left corner.
   3. **Y-Axis** ↕ **Icon:** Select to move the pixel cursor vertically.
   4. **X-Axis** ↔ **Icon:** Select to move the pixel cursor horizontally.
   5. **Add** ⊕ **Icon:** Select to add a defective pixel to the "to be corrected" list. The number of pixels in the list is shown to the right of the icon.
5. Select the axis (X or Y) along which to move the cursor:
   a. Short press the **Up** △ or **Down** ▽ **Button** to move between **X** and **Y.** The cursor position is indicated by a blue arrow icon.
   b. Short press the **Menu** Ⓜ **Button** to select X or Y. The selected axis will change from white to blue.

6. Move the cursor along the selected axis to the location of the defective pixel:



   a. Use the **Up** △ **Button** to move in the positive direction: X= Right and Y= Up.
   b. Use the **Down** ▽ **Button** to move in the negative direction: X= Left and Y= Down.
   c. Short press the **Up** △ or **Down** ▽ **Button** to move the cursor in the corresponding direction by 1 pixel; long press to move 10 pixels.
7. Short press the **Menu** Ⓜ **Button** to save the position for the selected axis and deselect it. When deselected, the axis will change from blue to white.
8. Move to and select the second axis and adjust the cursor position, as needed.
9. Add the pixel to the "to be corrected" list:

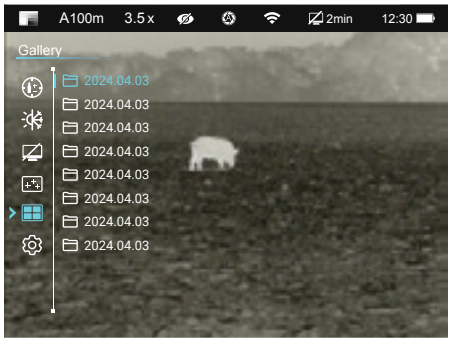


   a. With the cursor in position, short press the **Menu** Ⓜ **Button** to deselect the axis of movement.
   b. Press the **Up** △ or **Down** ▽ **Button** to move to the add ⊕ icon.
   c. Short press the **Menu** Ⓜ **Button** to add the pixel. The number of pixels to the right of the add icon will increase to indicate that one pixel has been added to the list.
   d. If the defective pixel has been added in error, short press the **Menu** Ⓜ **Button** a second time from the same X/Y coordinates (do not move the cursor) to remove the pixel from the "to be corrected" list. The number of pixels shown to the right of the add icon will decrease to indicate the pixel has been removed.
10. Repeat steps 5–9 to add additional defective pixels as needed.
11. When all defective pixels have been added to the list, long press the **Menu** Ⓜ **Button**. A popup window shows "Save changes?" and two options, No and Yes.
12. Short press the **Menu** Ⓜ **Button** to select **No** to return to the main menu without correcting any defective pixels; **OR**
13. Short press the **Up** △ or **Down** ▽ **Button** to select **Yes** to correct the saved list of pixels and return to the home screen.

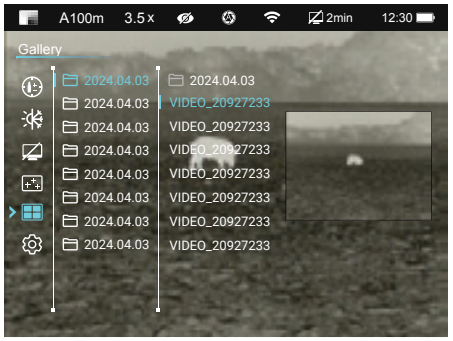
NOTES: The PIP window and interface controls move to the upper-left corner when the cursor moves into the lower-left corner.

Gallery ▦

View photos and videos saved to the device



1. Long press the **Menu** Ⓜ **Button** to enter the main menu.
2. Short press the **Up** △ or **Down** ▽ **Button** to select the gallery ▦ menu item.



3. Short press the **Menu** Ⓜ **Button** to enter the submenu.
4. Short press the **Up** △ or **Down** ▽ **Button** to move through multimedia folders. Folders are named by date in YYYYMMDD format.
5. Short press the **Menu** Ⓜ **Button** to select a folder, then use the **Up** △ and **Down** ▽ **Buttons** to navigate through the image and video files. A thumbnail of the selected file appears on the right side of the screen.



6. Short press the **Menu** Ⓜ **Button** to view an image or video file in full screen. When viewing video files, short press the **Menu** Ⓜ **Button** to play and pause the video.
7. Long press the **Menu** Ⓜ **Button** to return to the list of files.
8. Short press the **Power** ⏻ **Button** to return to the home screen.

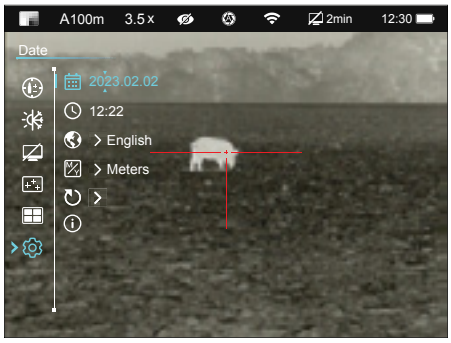
Settings Menu

Adjust the general settings

1. Long press the **Menu** (M) **Button** to enter the main menu.
2. Short press the **Up** (△) or **Down** (▽) **Button** to select the settings menu item.
3. Short press the **Menu** (M) **Button** to enter the settings submenu.

SETTINGS MENU > DATE

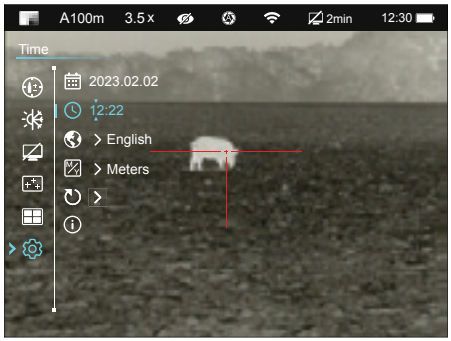
Set the date



1. In the settings submenu, short press the **Up** (△) or **Down** (▽) **Button** to select the date menu item.
2. Short press the **Menu** (M) **Button** to edit the date. A blue arrow will appear above and below the year digit. The date is displayed in YYYY.MM.DD format.
3. Short press the **Up** (△) or **Down** (▽) **Button** to select the correct value for each digit (year, month, and day).
4. Short press the **Menu** (M) **Button** to switch between digits. The two arrows move to indicate the selected digit.
5. Long press the **Menu** (M) **Button** to save the date and return to the home screen.

SETTINGS MENU > TIME

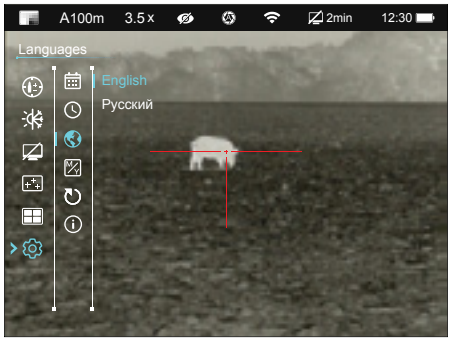
Set the time



1. In the settings submenu, short press the **Up** (△) or **Down** (▽) **Button** to select the time menu item.
2. Short press the **Menu** (M) **Button** to edit the time. A blue arrow will appear above and below the hour digit. The time is displayed in HH.MM, in 24-hour format.
3. Short press the **Up** (△) or **Down** (▽) **Button** to select the correct value for each digit (hour and minute).
4. Short press the **Menu** (M) **Button** to switch between digits. The two arrows move to indicate the selected digit.
5. Long press the **Menu** (M) **Button** to save the time and return to the home screen. The set time appears in the status bar.

SETTINGS MENU > LANGUAGES

Select the language



1. In the settings submenu, short press the **Up** (△) or **Down** (▽) **Button** to select the languages menu item.
2. Short press the **Menu** (M) **Button** to enter the submenu.
3. Short press the **Up** (△) or **Down** (▽) **Button** to move through the language options.
4. Long press the **Menu** (M) **Button** to confirm the selection and return to the home screen.

SETTINGS MENU > UNIT

Set the units of measurement



1. In the settings submenu, short press the **Up** (△) or **Down** (▽) **Button** to select the unit menu item.
2. Short press the **Menu** (M) **Button** to enter the submenu.
3. Short press the **Up** (△) or **Down** (▽) **Button** to move through the options, yards and meters. The selected unit of measure, yd (yards) or m (meters), displays along with the selected zero profile and distance in the status bar.
4. Long press the **Menu** (M) **Button** to confirm the selection and return to the home screen.

SETTINGS MENU > FACTORY RESET

Restore factory default settings



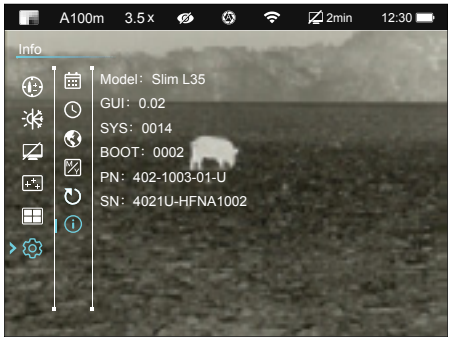
1. In the settings submenu, short press the **Up** or **Down** **Button** to select the factory reset menu item.
2. Short press the **Menu** **Button** to enter the factory reset submenu.
3. Two options, Yes and No, appear; Yes will restore factory settings and No will cancel the operation. No is selected by default.
4. Short press the **Menu** **Button** to select **Yes** to confirm the factory reset. Factory settings will be restored and the SLIM will reboot automatically; **OR**
5. Short press the **Up** or **Down** **Button** to select **No** and short press the **Menu** **Button** to confirm cancellation of the factory reset and return to the submenu.

FACTORY RESET NOTES:

- The screen will go dark and the factory restart will begin after a pause of about 10 seconds.
- A factory reset cannot be undone.
- The settings listed below will be reset to the factory defaults:
  - Color Palette: White Hot
  - Image Brightness: 5
  - Image Contrast: 5
  - Image Sharpness: 5
  - Digital Zoom: 1×
  - Ultra-Clear mode: Off
  - Wi-Fi: Off
  - Interconnection: Off
  - Auto Calibration: On
  - Motion Sensor: Off
  - Zeroing Profile: A
  - Reticle Type: 1
  - Reticle Color: Black Red
  - Microphone: Off
  - Standby: Off
  - Language: English
  - Unit: Meters
  - Wi-Fi Password: 12345678
  - Wi-Fi SSID: SLIM_XXXXX_YYYYYYYY

SETTINGS MENU > INFO

Show device information



1. In the settings submenu, short press the **Up** or **Down** **Button** to select the info menu item.
2. Short press the **Menu** **Button** to enter the submenu.
3. The info submenu will display the following information about the SLIM: the model number, the GUI, SYS, and boot versions, and the part and serial numbers.
4. Long press the **Menu** **Button** to save and return to the home screen.

24. Basic Inspection

It is recommended to carry out a technical inspection before each use. Please check the following:

- The rifle scope appearance: there should be no cracks in the body or visible damage.
- The condition of the objective lens and eyepiece: there should be no cracks, greasy spots, dirt, or other deposits on the lens.
- The rechargeable battery should be fully charged.
- The control buttons should be in working order.

25. Basic Maintenance

Always replace the objective lens cap **(1)** after use to avoid damaging or scratching the lens. Never touch the lens directly; oil from your skin can damage the lens coating and surface.

Basic maintenance should be carried out at least twice a year and includes the following steps:

- Wipe the surface of the external metal and plastic components with a clean, dry cotton cloth. Do not use chemical, corrosive, or abrasive cleaners. Canned air may also be used to clean the external components.
- Clean the electric contacts and battery slots on the rifle scope using a non-greasy organic solvent.
- Check the lens and eyepiece. If necessary, remove any dirt or sand from the optics; a non-contact cleaning method is preferred.
- Cleaning the exterior of the lens should only be done with the included microfiber lens cloth or a similar product. Only clean the lens when it is visibly soiled. Frequent wiping or cleaning can degrade the anti-reflective lens coating.

26. Warranty

At iRayUSA we're first and foremost hunters and users of our products and we understand that failure isn't an option. We also understand that having to wait extended periods for repair isn't something that a customer should have to put up with when something does go wrong. During your published warranty period, iRayUSA will repair or replace, at its discretion, any optic that becomes defective during normal use. Additionally, if we cannot fix your optic in less than one week, we will offer to replace it with a replacement product in like or better condition. If you would rather wait for your specific optic to be repaired, we can handle that too.

We know you've never seen this from a thermal manufacturer and neither have we; that's why we started iRayUSA.

Our warranty follows the product and is not tied to the original owner. The warranty period is tied to the date of sale to the dealer. This warranty only covers normal use and does not cover cosmetic damage, normal wear, intentional damage, theft, loss, any act of God, or a condition caused by use other than intended. Any product that is modified, opened, or tampered with will void any warranty coverage. Any serial number damage or alteration on the product will be considered a modification. Be sure to register your SLIM rifle scope at irayusa.com/register.

To return a product for repair:

1. Go to irayusa.com/warranty and click the **Request an RMA button** to request an RMA number. Returns will not be accepted without an RMA.
2. The customer is responsible for shipping the product to iRayUSA, per the instructions included with the RMA. iRayUSA will return the product at no cost.

WARRANTY NOTES:

- The one-week timeline starts from the time of receipt of the product at iRayUSA.
- iRayUSA is not liable for any damages or loss incurred when shipping to iRayUSA.
- This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Please give us a call at **800-769-7125**, visit irayusa.com/warranty, or email info@irayusa.com with any questions.

27. General Troubleshooting

The troubleshooting table on the next page lists issues that may occur when operating the SLIM. Carry out the recommended troubleshooting steps in the order shown in the table. Please contact iRayUSA at 800-769-7125 or irayusa.com/support or an authorized vendor for assistance before attempting to perform any modifications or repairs beyond the scope of the troubleshooting procedures in this manual. Unauthorized repairs or modifications will void your warranty.

ISSUE	POSSIBLE CAUSES	TROUBLESHOOTING STEPS
The SLIM will not turn on.	The 18650 battery is very low or has completely discharged.	Charge the battery.
The SLIM can not connect to a computer or external power supply.	External power supply has completely discharged.	Check the external power supply and charge it if necessary.
	Computer is turned off.	Power on the computer.
	USB-C or magnetic charging cable is damaged.	Replace the cable.
The SLIM can not connect to the mobile device (smartphone or tablet).	Wi-Fi is not turned on.	Turn on the Wi-Fi in the main menu. See **Main Menu > Wi-Fi** on page 34.
	Wrong Wi-Fi password entered.	On the mobile device, go to **Settings > Wi-Fi** and enter the correct password. The default password is 12345678. See **Main Menu > Wi-Fi** on page 34.
	Too many Wi-Fi signals nearby, which may cause interference.	Move the SLIM and mobile device to an area with no or fewer Wi-Fi signals.
Wi-Fi signal is lost or interrupted.	The device is out of range of a strong Wi-Fi signal, or there are obstacles (such as concrete walls) between the device and the signal.	• Try again when the Wi-Fi signal is stable. • Move the SLIM closer to the Wi-Fi signal.
The image is blurry, the background is uneven, or vertical lines or artifacts are present.	Non-uniformity correction is required.	Perform a non-uniformity correction. See **Non-uniformity Correction** on page 21 and **Using the Quick Menu** on page 18.
The image is too dark.	Image brightness level is too low.	Adjust the image brightness in the quick menu. See **Using the Quick Menu** on page 18.
The GUI is clear, but the image is blurry.	The lens is not focused.	• Adjust the focus on the target by rotating the objective focus knob **(2)**. • Adjust the image sharpness in the quick menu. See **Using the Quick Menu** on page 18.
	There is dust or ice on the interior or exterior optical surfaces of the lens.	• Wipe the external optical surface with the included microfiber lens cloth.
	There is condensation on the interior or exterior optical surfaces of the lens.	• Wipe the external optical surface with the included microfiber lens cloth. • Allow the SLIM to dry by leaving it in a warm, dry environment for at least 4 hours.
The aiming reticle shifts after firing rounds.	The SLIM is not mounted securely or the mount is not secured on the SLIM.	• Check that the SLIM has been securely mounted. • Make sure you are using the same brand, type, and weight of the bullets as when the SLIM and weapon were initially zeroed. • If the SLIM was zeroed in different environmental conditions, a slight shift of the zero is possible.
Observed target disappears.	Observing the target through glass.	Remove any glass windows from the field of view.
The SLIM will not focus.	Image settings are not optimal for the current environmental conditions or the object being observed.	• Check the external surface of the objective lens and eyepiece and, where necessary, wipe away any dust, condensation, frost, etc. • In cold weather, you can use special anti-fogging coatings, such as those made for corrective glasses. • Adjust the focus on the target by rotating the objective focus knob **(2)**. • Adjust the image sharpness in the quick menu. See **Using the Quick Menu** on page 18. • Adjust the image and device settings. See **Quick Start Guide** on page 8. • Turn on Ultra-Clear mode. See **Main Menu > Ultra-Clear** on page 26.
Image quality is low or the detection range is reduced.	Environmental conditions, such as snow, rain, humidity, and fog.	Turn on Ultra-Clear mode. See **Main Menu > Ultra-Clear** on page 26.
When the SLIM is used in low-temperature conditions, the image quality of the surroundings is worse than in warm-temperature conditions.	Environmental conditions.	In warm-temperature conditions, objects being observed (surroundings and background) heat up differently because of thermal conductivity, thereby generating a high-temperature contrast. Accordingly, image quality produced by the rifle scope will be higher. In low-temperature conditions, the background will cool down to roughly the same temperature, and thus the temperature contrast is substantially reduced and image detail can go down as there is less contrast in the scene. This is a normal function of a thermal imager and is no indicator of actual detector performance.

28. Notes



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A25H4CT

Specifications are subject to change without notice. For the most up-to-date specs, go to irayusa.com. Not responsible for typographical errors. Ver 1.0.