

NOCPIX
SLIM SERIES

Thermal Imaging Scope



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 1024x768 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 1.0x–4.0x
- Magnesium alloy housing
- Includes two rechargeable 18650 batteries
- Maximum detection range 1750 yards
- 1024x768 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 L35	SLIM H35
Sensor		
Resolution	384x288	640x512
Pixel Size	12 µm	
Frame Rate	50hz	
Sensor Sensitivity	≤18 mK	
Image Processing	Reality+	
Core	Nocpix 384	Nocpix 640
Optics		
Objective Lens	35 mm f/1.0	
Magnification	3.5x	2x
Digital Zoom	4x	
Field of View	7.5° × 5.7°	12.5° × 9.4°
Detection Range	1750 Yards	
Display Type	AMOLED	
Display Resolution	1024x768	
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	USB-C	
Power Supply	USB-C External, 18650 Batteries x2 (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/s ² (300 Win./7mm Mag)	

4. Accessories

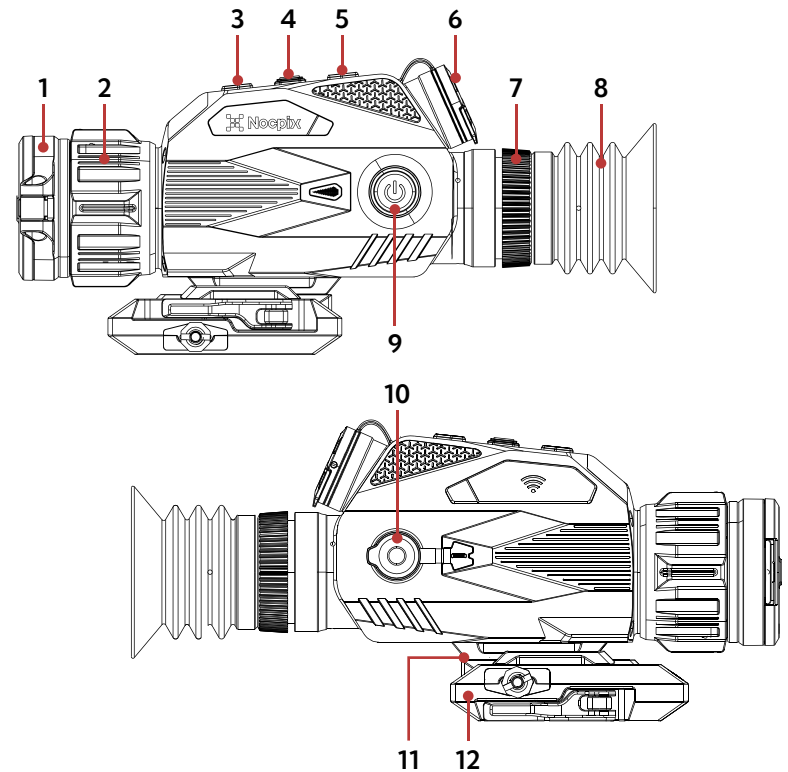
The SLIM Series rifle scope ships with everything you need to get out and hunt.

- 35mm 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 x2
- 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** (M) **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** (M) **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** (Δ) **Button** to adjust the digital zoom level to 1x, 2x, 3x, or 4x.
3. From the home screen, long press the **Up** (Δ) **Button** to turn on the PIP window.

Step 5: Set Up the Reticle and Zero the SLIM

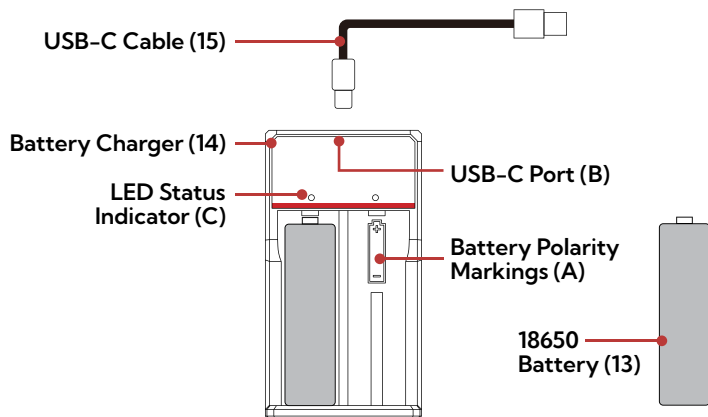
1. The reticle may be inactive when the SLIM is powered on for the first time. To activate the reticle, press and hold the **Menu** (M), and **Down** (▽) **Buttons** at the same time for 15 seconds from the home screen.
2. Adjust the reticle settings (see **Main Menu > Reticle** on page 27):
 - a. Set 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:

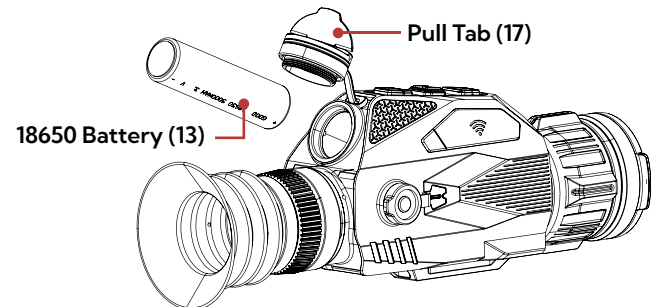
- a. A 5V–2A USB power adapter; OR
 - b. Any standard USB 3.0 port on a laptop or computer; OR
 - c. An external power supply, such as a USB power bank.
3. During charging, the battery status  icon in the status bar changes to the battery charging  icon.
 4. When fully charged, disconnect the charging 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.

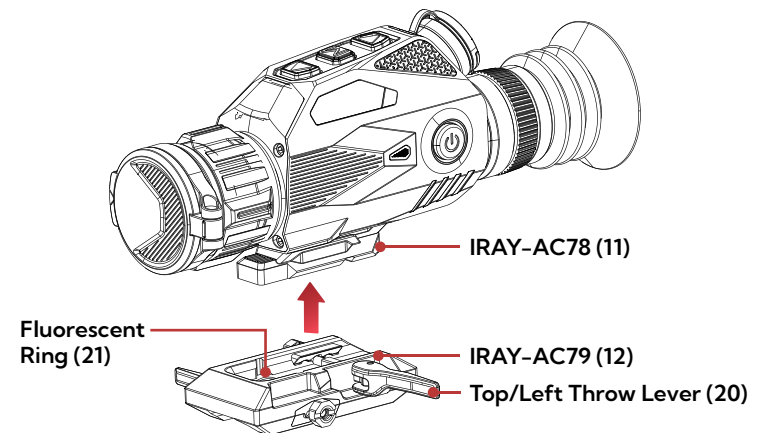
13. Mounting the SLIM

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.

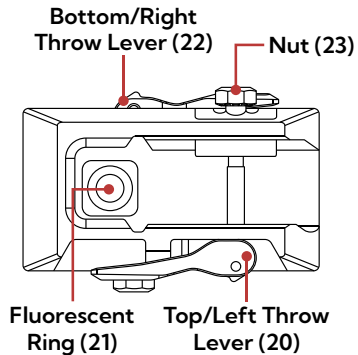


3. Pull the bottom/right throw lever (22) forward to open the bottom of the IRAY-AC79.
4. Install the IRAY-AC79 to the Picatinny rail, and press the throw lever closed to lock it in place.
5. The SLIM may be transitioned to handheld use at any time by opening the top/left throw lever to remove the rifle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

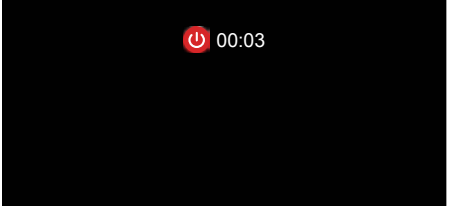
The SLIM is operated via four control buttons. The control buttons can be used to perform shortcut operations from the home screen, as well as in the menu and full-screen interfaces. See **Description of Control Buttons and Shortcuts** on page 6 for shortcut button details.

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**. The shutdown screen will open, showing a 3-second countdown. 
2. Continue holding the **Power** Ⓞ **Button** until the countdown completes.
3. "Data saving..." appears onscreen and the rifle scope will shut down after saving.

NOTE: Releasing the **Power** Ⓞ **Button** at any time during the 3-second countdown will stop the shutdown process and the rifle scope will 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 DIOPTRER/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.

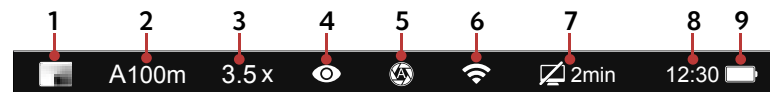
NOTE: Re-adjusting the focus will be necessary if the distance to the target changes.















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 (V)** 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  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 Wi-Fi status, on  or off .
- 7 **Standby:** Shows the 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.

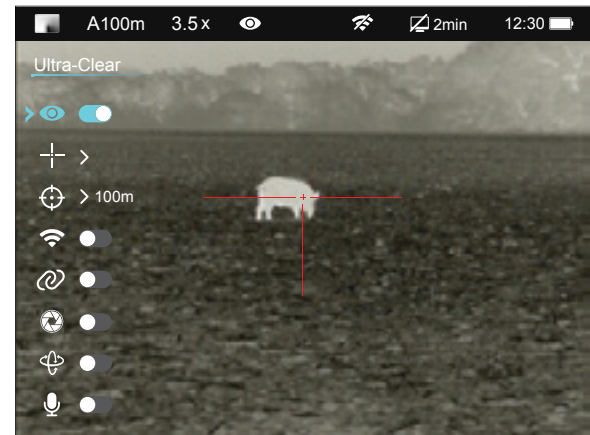
Using the Quick Menu


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 (M) 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 (M) Button** to set the color palette to white hot , black hot , red hot , rainbow , violet , crimson , or viridian .
 - **(Image Brightness):** Short press the **Menu (M) Button** to set the image brightness level, from 1–10.
 - **(Image Contrast):** Short press the **Menu (M) Button** to set the image contrast level, from 1–10.
 - **(Image Sharpness):** Short press the **Menu (M) Button** to set the image sharpness level, from 1–10.
 - **(Zero Distance):** Short press the **Menu (M) 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 (M) 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 (M) 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 (M) 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 (M) 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 28.
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 31.

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 36), 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 42. 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 37.
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 37 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.



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 35 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 44.

20. Digital Zoom

The SLIM will quickly increase the base magnification by enlarging the image from 1 to 4 times digitally.

To use digital zoom:

1. From the home screen, short press the **Up**  **Button** to toggle through the digital zoom levels, 1x, 2x, 3x, to 4x.
2. The total magnification is displayed in the status bar. The following table lists the real-time amplification corresponding to each digital zoom level.



MODEL	BASE MAGNIFICATION	DIGITAL ZOOM MAGNIFICATIONS			
		1x	2x	3x	4x
SLIM L35	3.5x	3.5	7	10.5	14
SLIM H35	2x	2	4	6	8

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 2x zoomed image, centered on the reticle, will appear at the top of the screen. Please note that the PIP image is 2x 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, Interconnection, Calibration, Motion Sensor, MIC, Recoil Activated Video, 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.
 - **Settings Menu:** Date, Time, Languages, Unit, Factory Reset, Info.

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

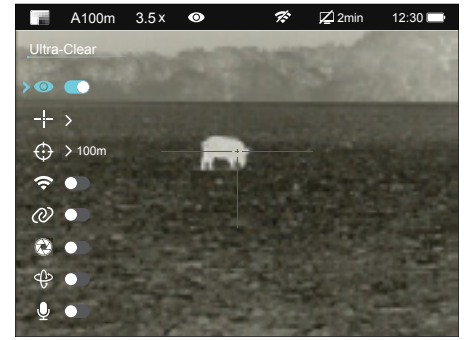
Ultra-Clear

Turn Ultra-Clear mode on / 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 / 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.

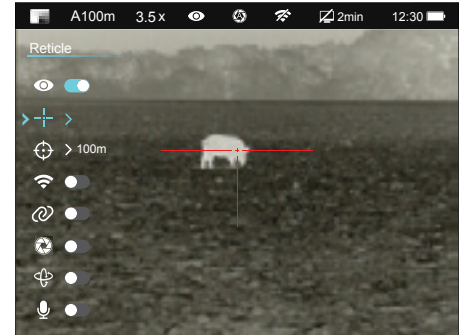
NOTE: When Ultra-Clear mode is turned on and off, the SLIM will automatically perform a shuttered non-uniformity correction.



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 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.



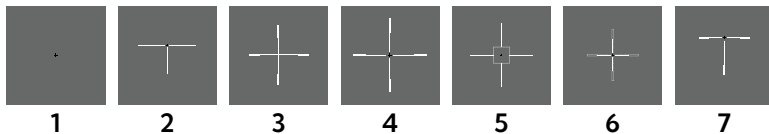
RETICLE MENU > RETICLE TYPE

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 NOCPX App.
4. Long press the **Menu**  **Button** to confirm the selection and return to the home screen.



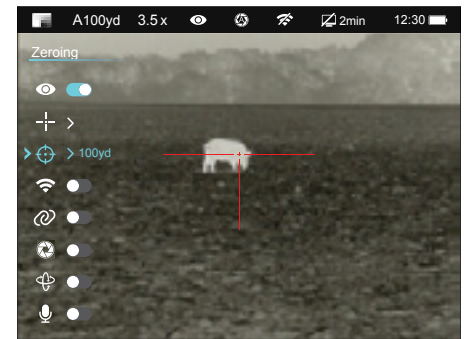
Reticle Types








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 28.

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 34.
 - c. Select the delete  icon to delete the selected zero distance. See **Zeroing Menu > Delete Distance** on page 34.

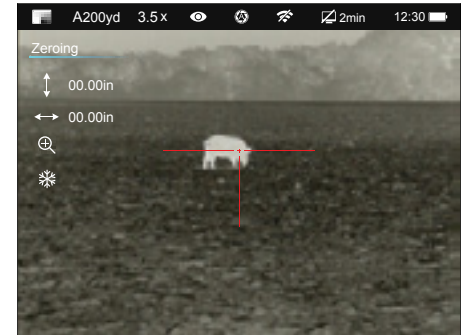
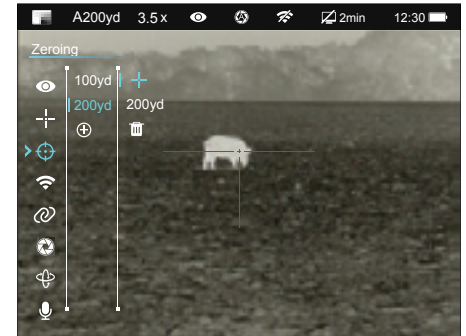


ZEROING MENU > ZERO DISTANCE SUBMENU > RETICLE ZEROING







Adjust the reticle position of the selected zero distance

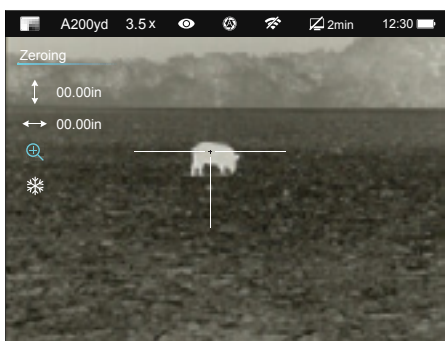
In the reticle zeroing interface, the X/Y position of the reticle may be adjusted to match the point of impact.

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:

- Short press the **Up**  or **Down**  **Button** to move to the zoom  icon.
- Short press the **Menu**  **Button** to select it.
- Short press the **Up**  or **Down**  **Button** to zoom in or out. The real-time amplification appears in the status bar.







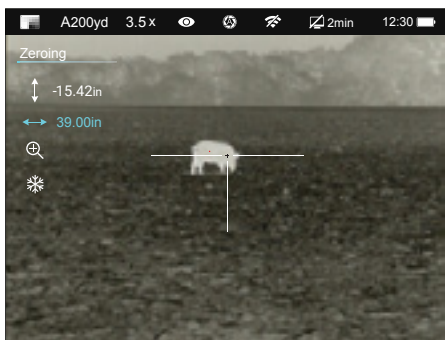
5. Select the axis (X or Y) along which to move the reticle:

- Short press the **Up**  or **Down**  **Button** to move between X and Y.
- 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.






- X (horizontal) is the windage and Y (vertical) is the elevation.
- Upon moving the reticle, a red dot appears onscreen, representing the original position of the reticle.
- Use the **Up**  **Button** to move in the positive direction: X= Right and Y= Up.
- Use the **Down**  **Button** to move in the negative direction: X= Left and Y= Down.
- Short press the **Up**  or **Down**  **Button** to move the reticle in the corresponding direction by 1 pixel; long press to move 10 pixels.

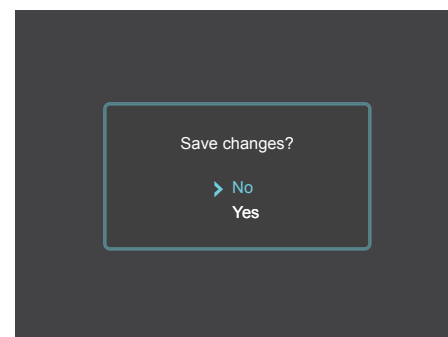


f. The reticle position is adjusted as follows:

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









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

- 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.
- Repeat steps 5–7 to adjust the reticle position along the second axis if needed.
- Long press the **Menu**  **Button**. A popup window shows "Save changes?" and two options, No and Yes. No is selected by default.
- Short press the **Menu**  **Button** to select **No** to return to the main menu without correcting any defective pixels; **OR**
- Short press the **Up**  or **Down**  **Button** to select **Yes** to correct the list of defective pixels and return to the home screen.
- "Saving" will appear at the bottom of the screen and the system will exit to the homepage.
- 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

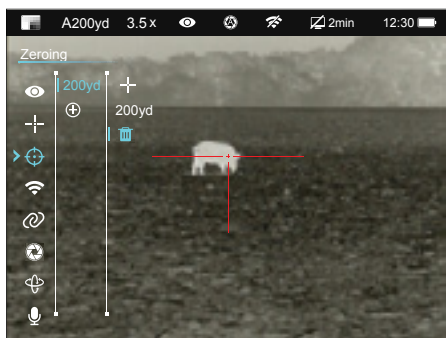
1. In the submenu for the selected zero distance, short press the **Up**  or **Down**  **Button** to move to the zero distance.
2. Short press the **Menu**  **Button** to edit the selected zero distance. A blue arrow will appear above and below the far-left digit to mark the cursor location.
3. Short 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.







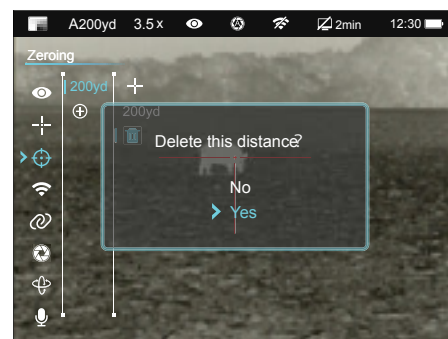
ZEROING MENU > ZERO DISTANCE SUBMENU > DELETE DISTANCE

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.

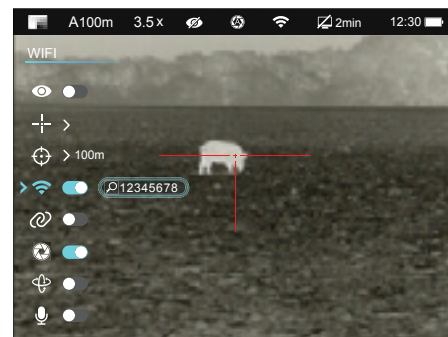


Wi-Fi

Turn Wi-Fi on / off

Turn on Wi-Fi to operate the SLIM via 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 toggle Wi-Fi on / off. The Wi-Fi status, on  or off , appears in the status bar.
4. Long press the **Menu**  **Button** to return to the home screen.

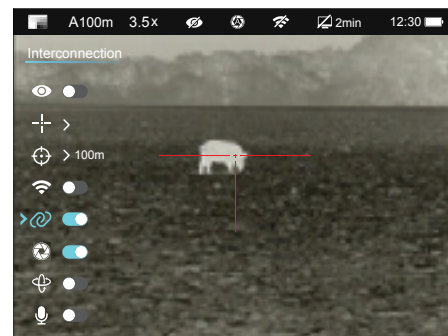


Interconnection

Turn interconnection feature on / off








Use your smartphone or tablet as a hotspot to connect the SLIM to the NOCPIX App (instead of Wi-Fi).

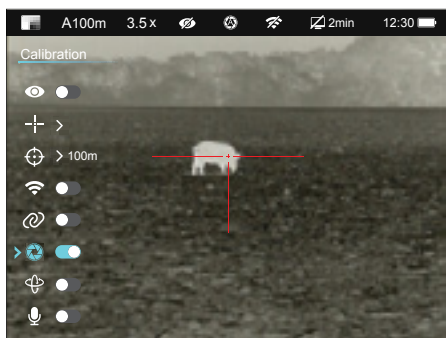
1. Long press the **Menu**  **Button** to enter the main menu.
2. Short press the **Up**  or **Down**  **Button** to select the interconnection  menu item.
3. Short press the **Menu**  **Button** to toggle interconnection on / off.
4. Long press the **Menu**  **Button** to return to the home screen.



Calibration







Turn automatic non-uniformity correction mode on / 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 / 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.

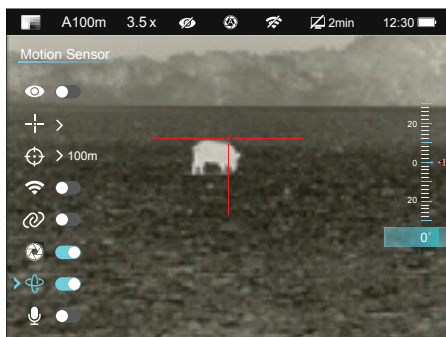


Motion Sensor

Turn the motion sensor on / 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 / 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.

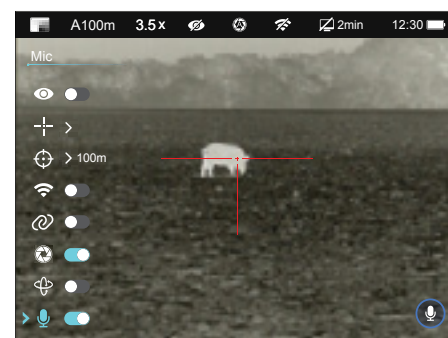
NOTE: The tilt angle is not shown in the figure because it is hidden by the menu.



MIC

Turn the microphone on / 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 / 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 / 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 / off.
4. Long press the **Menu**  **Button** to confirm the selection and return to the home screen.



NOTES:

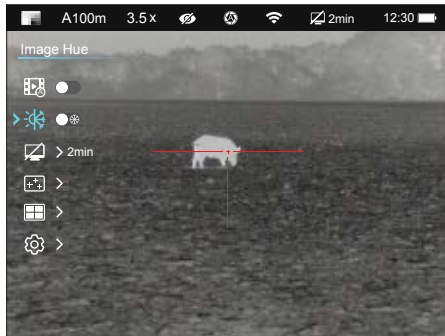
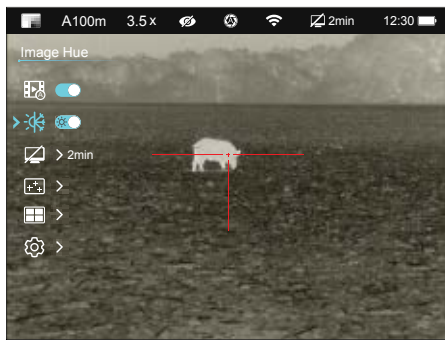
- The video recording timer, in HH:MM:SS (hour, minute, second) format, will appear in the upper-right corner of the screen when video is recording.
- When multiple shots are taken within the same 30-second period, only one video will be taken.
- When recoil activated video recording is turned on, standard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



Image Hue

Toggle between warm and cool image hue modes

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.

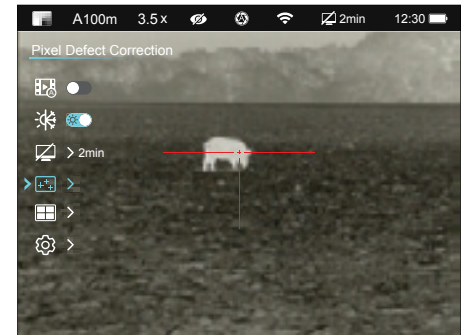
NOTES:






- 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.

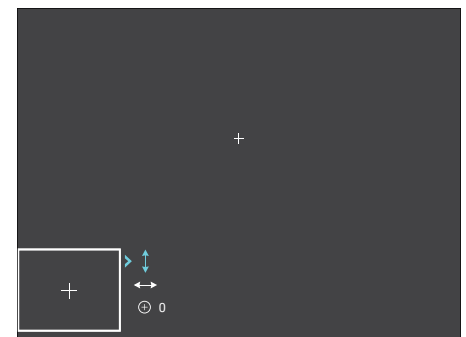
Pixel Defect Correction


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.



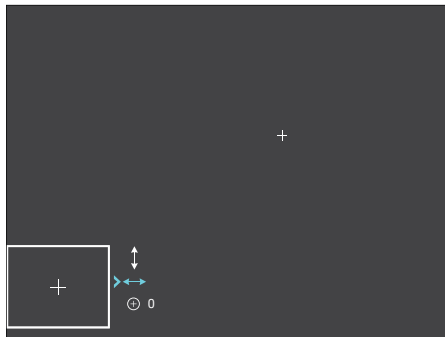
1. Long press the **Menu**  **Button** to enter the main menu.
2. Short press the **Up**  or **Down**  **Button** to select the pixel defect correction  menu item.
3. Short press the **Menu**  **Button** to enter the pixel correction interface.
4. The interface has the following features:



- 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 (M)** **Button** to select X or Y. The selected axis will change from white to blue.

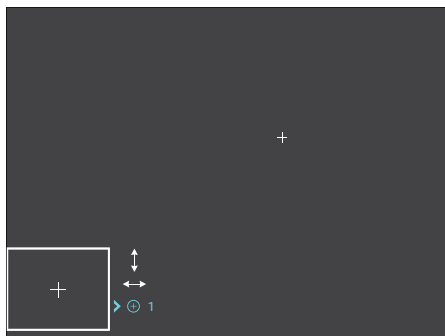
6. Move the cursor along the selected axis to the location of the defective pixel:



- 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 (M)** **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:

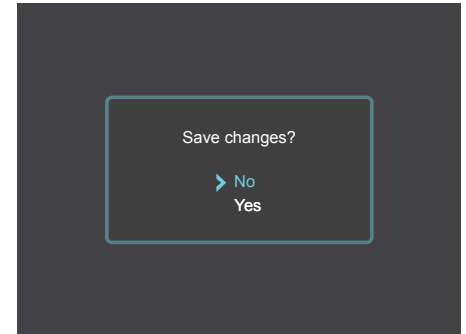


- a. With the cursor in position, short press the **Menu (M)** **Button** to deselect the axis of movement.
- b. Press the **Up ▲** or **Down ▼** **Button** to move to the add ⊕ icon.

- c. Short press the **Menu (M)** **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 (M)** **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 (M)** **Button**. A popup window shows “Save changes?” and two options, No and Yes. No is selected by default.




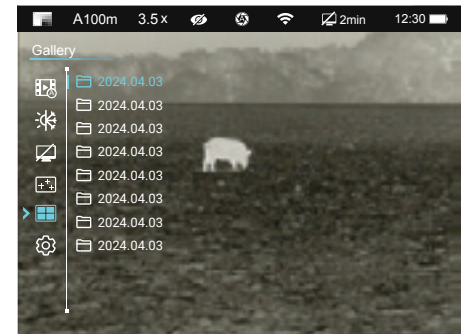
12. Short press the **Menu (M)** **Button** to select **No** to return to the main menu without correcting any defective pixels; **OR**
13. Short press the **Up ▲** or **Down ▼** **Button** to select **Yes** to correct the saved list of pixels and return to the home screen.




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

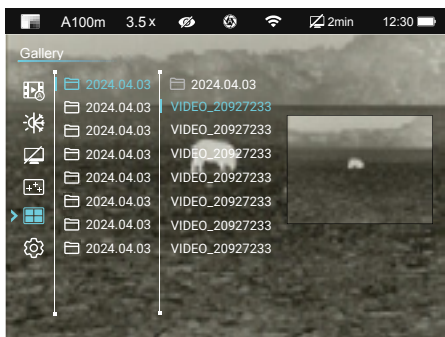
Gallery

View photos and videos saved to the device

1. Long press the **Menu (M)** **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 (M)** **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.





- 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.



- 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.








- Long press the **Menu**  **Button** to return to the list of files.

- Short press the **Power**  **Button** to return to the home screen.





Settings Menu

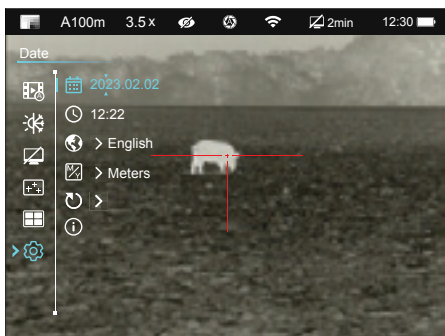
Adjust the general settings





- Long press the **Menu**  **Button** to enter the main menu.
- Short press the **Up**  or **Down**  **Button** to select the settings  menu item.
- Short press the **Menu**  **Button** to enter the settings submenu.

SETTINGS MENU > DATE

Set the date









- In the settings submenu, short press the **Up**  or **Down**  **Button** to select the date  menu item.
- Short press the **Menu**  **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.

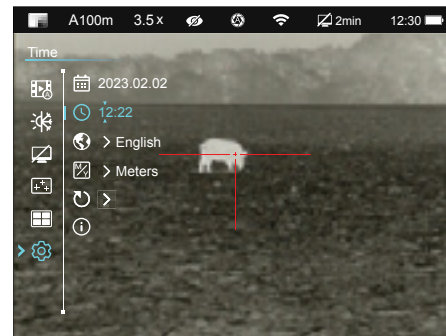


- Short press the **Up**  or **Down**  **Button** to select the correct value for each digit (year, month, and day).
- Short press the **Menu**  **Button** to switch between digits. The two arrows move to indicate the selected digit.
- Long press the **Menu**  **Button** to save the date and return to the home screen.

SETTINGS MENU > TIME








Set the time

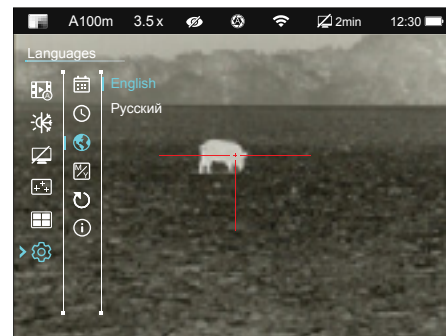
- In the settings submenu, short press the **Up**  or **Down**  **Button** to select the time  menu item.
- Short press the **Menu**  **Button** to edit the time. A blue arrow will appear above and below the hour digit. The time is displayed in HH.MM, in 24-hour format.
- Short press the **Up**  or **Down**  **Button** to select the correct value for each digit (hour and minute).
- Short press the **Menu**  **Button** to switch between digits. The two arrows move to indicate the selected digit.
- Long press the **Menu**  **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

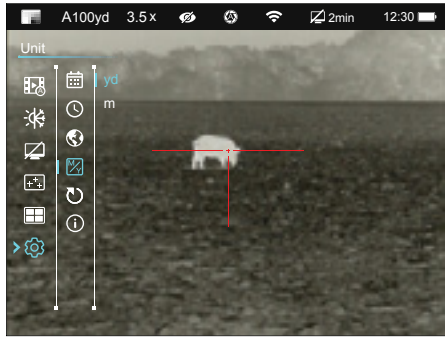
- In the settings submenu, short press the **Up**  or **Down**  **Button** to select the languages  menu item.
- Short press the **Menu**  **Button** to enter the submenu.
- Short press the **Up**  or **Down**  **Button** to move through the language options.
- Long press the **Menu**  **Button** to confirm the selection and return to the home screen.



SETTINGS MENU > UNIT









Set the units of measurement

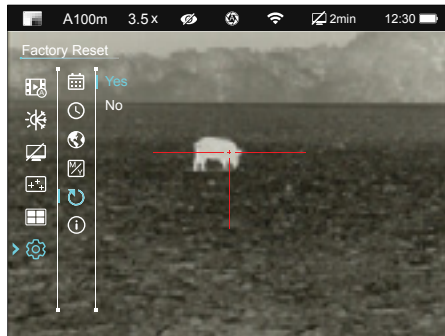
1. In the settings submenu, short press the **Up**  or **Down**  **Button** to select the unit  menu item.
2. Short press the **Menu**  **Button** to enter the submenu.
3. Short press the **Up**  or **Down**  **Button** to move through the options, yards and meters. The selected unit of measure, yd (yards)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








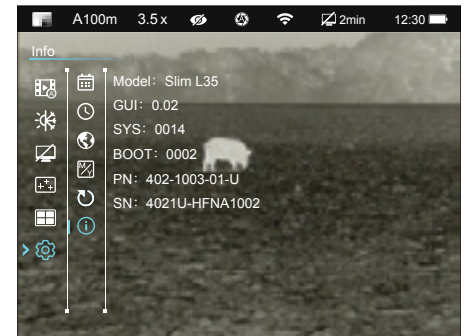
FACTORY RESET NOTES:

- 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
 - Zeroing Profile: A
 - Image Brightness: 5
 - Reticle Type: 1
 - Image Contrast: 5
 - Reticle Color: Black Red
 - Image Sharpness: 5
 - Microphone: Off
 - Digital Zoom: 1x
 - Standby: Off
 - Ultra-Clear mode: Off
 - Language: English
 - Wi-Fi: Off
 - Unit: Meters
 - Interconnection: Off
 - Wi-Fi Password: 12345678
 - Auto Calibration: On
 - Wi-Fi SSID: SLIM_XXXXX_YYYYYYYY
 - Motion Sensor: Off

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. 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.

25. 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.

26. 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.

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
The SLIM will not turn on.	The 18650 battery is very low or has completely discharged.
The SLIM can not connect to a computer or external power supply.	External power supply has completely discharged.
	Computer is turned off.
	USB-C or magnetic charging cable is damaged.
The SLIM can not connect to the mobile device (smartphone or tablet).	Wi-Fi is not turned on.
	Wrong Wi-Fi password entered.
	Too many Wi-Fi signals nearby, which may cause interference.
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.
The image is blurry, the background is uneven, or vertical lines or artifacts are present.	Non-uniformity correction is required.
The image is too dark.	Image brightness level is too low.
The GUI is clear, but the image is blurry.	The lens is not focused.
	There is dust or ice on the interior or exterior optical surfaces of the lens.
	There is condensation on the interior or exterior optical surfaces of the lens.
The aiming reticle shifts after firing rounds.	The SLIM is not mounted securely or the mount is not secured on the SLIM.
Observed target disappears.	Observing the target through glass.
The SLIM will not focus.	Image settings are not optimal for the current environmental conditions or the object being observed.
Image quality is low or the detection range is reduced.	Environmental conditions, such as snow, rain, humidity, and fog.
When the SLIM is used in low-temperature conditions, the image quality of the surroundings is worse than in warm-temperature conditions.	Environmental conditions.

TROUBLESHOOTING STEPS
Charge the battery.
Check the external power supply and charge it if necessary.
Power on the computer.
Replace the cable.
Turn on the Wi-Fi in the main menu. See Main Menu > Wi-Fi on page 35.
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 35.
Move the SLIM and mobile device to an area with no or fewer Wi-Fi signals.
<ul style="list-style-type: none"> Try again when the Wi-Fi signal is stable. Move the SLIM closer to the Wi-Fi signal.
Perform a non-uniformity correction. See Non-uniformity Correction on page 21 and Using the Quick Menu on page 18.
Adjust the image brightness in the quick menu. See Using the Quick Menu on page 18.
<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> Wipe the external optical surface with the included microfiber lens cloth.
<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> 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.
Remove any glass windows from the field of view.
<ul style="list-style-type: none"> 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 27.
Turn on Ultra-Clear mode. See Main Menu > Ultra-Clear on page 27.
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.



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