Pulsar XP50

Pulsar Thermion 2 Pro Thermal Riflescope XP50 User Manual

Brand: Pulsar | Model: XP50

Introduction | Safety Information | Package Contents | Setup | Operating Instructions | Maintenance | Troubleshooting | Specifications | Warranty & Support

1. Introduction

The Pulsar Thermion 2 Pro Thermal Riflescope XP50 is an advanced optical device designed for enhanced observation and targeting in various conditions, including complete darkness. It integrates high-quality germanium optics with a sophisticated thermal imaging sensor to provide an unprecedented detection range. This manual provides essential information for the proper setup, operation, and maintenance of your device.



Figure 1: Pulsar Thermion 2 Pro Thermal Riflescope XP50.

2. Safety Information

IMPORTANT: This product is controlled for export and in-country transfers under the authority of the International Traffic in Arms Regulations (ITAR). Diversion contrary to U.S. law prohibited. Always handle the device responsibly and adhere to all local and national regulations regarding its use.

- Do not look directly at intense light sources through the device.
- Keep the device away from extreme temperatures and direct sunlight.
- Ensure the device is securely mounted before use.
- Use only approved accessories and power sources.
- Keep out of reach of children.

3. Package Contents

Upon opening the package, please verify that all listed items are present and in good condition:

- Pulsar Thermion 2 Pro Thermal Riflescope XP50
- Carrying Case
- Battery Pack (Internal and External)
- Charging Cable and Adapter
- Lens Cleaning Cloth

- User Manual (this document)
- Warranty Card
- Picatinny Mount (as indicated by specifications)

4. Setup

4.1. Mounting the Riflescope

The Thermion 2 Pro is designed for easy installation on standard Picatinny rails. Ensure the mount is securely fastened to your firearm, and the riflescope is aligned properly for optimal performance.



Figure 2: The Thermion 2 Pro Thermal Riflescope with its mounting points.

4.2. Battery Installation and Charging

The device utilizes a dual battery system for extended operation. Ensure both internal and external batteries are fully

charged before initial use. Connect the charging cable to the device and a power source. The charging indicator will show the status.

4.3. Initial Power On and Configuration

Press and hold the power button to turn on the device. Follow the on-screen prompts for initial setup, including language selection, date, and time settings. Refer to the on-screen menu for detailed navigation.

5. Operating Instructions

5.1. Basic Controls and Menu Navigation

The Thermion 2 Pro features intuitive controls for easy operation. Use the main control buttons (power, menu, zoom) to navigate through the device's functions and settings. A short press typically accesses menus or changes modes, while a long press activates specific features.



Figure 3: Close-up view of the control buttons on the riflescope.

5.2. Thermal Imaging Modes and Palettes

The device offers various thermal imaging modes and color palettes to optimize viewing for different environments and preferences. Experiment with modes like "White Hot," "Black Hot," and "Red Hot" to enhance target detection and identification. The HD thermal sensor provides incredibly detailed images.



Figure 4: Example of detailed thermal imagery provided by the HD sensor.

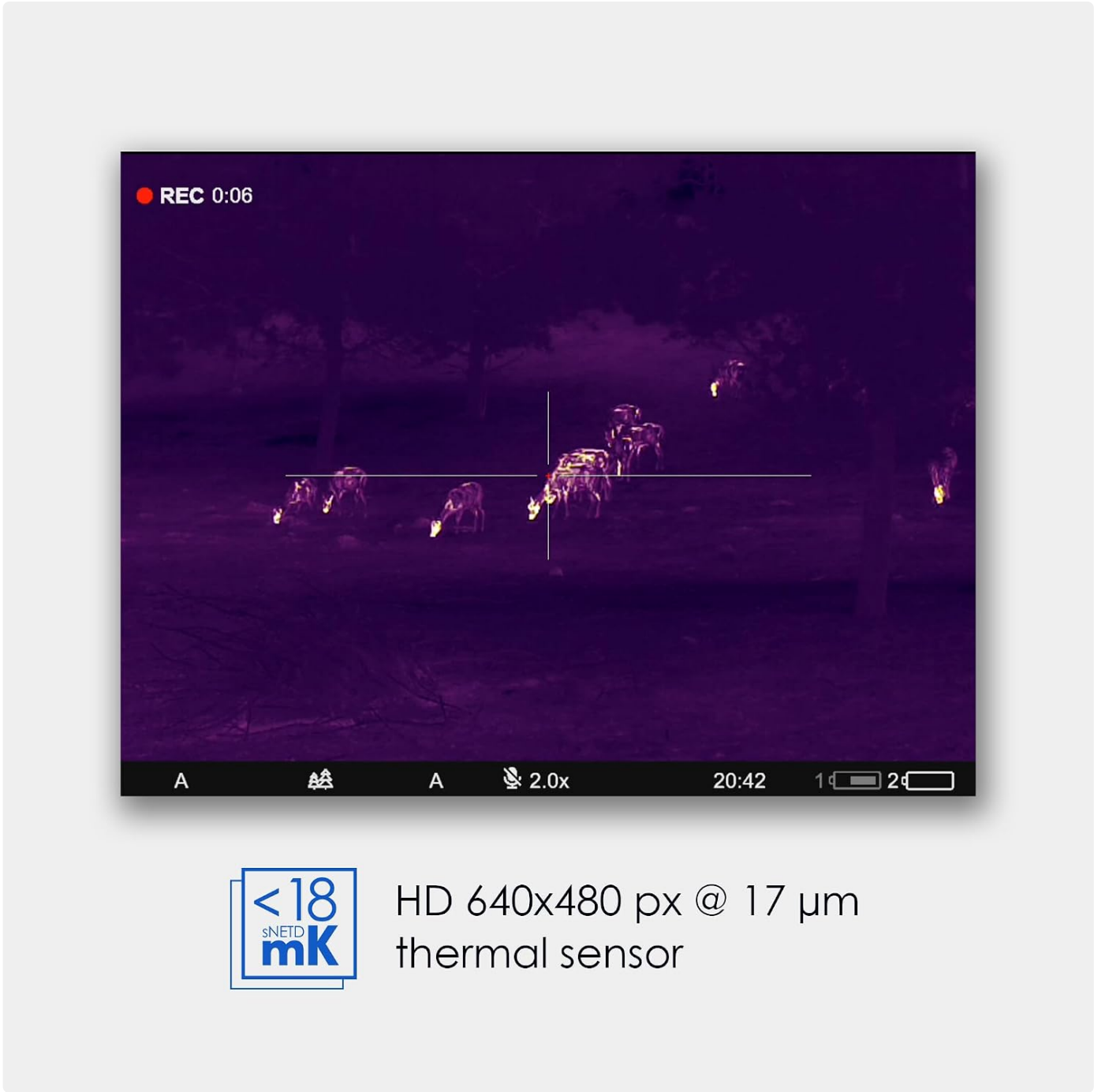


Figure 5: The HD 640x480px thermal sensor captures fine details.

5.3. Magnification and Field of View

The Thermion 2 Pro XP50 offers a variable magnification range from 2x to 16x, allowing for precise targeting at various distances. Its wide 12.4° field of view enhances situational awareness, making it easier to scan and locate targets.



Figure 6: A wide 12.4° field of view provides excellent situational awareness.



Figure 7: The objective lens allows for a magnification range of 2-16x for accurate shooting.

5.4. Picture-in-Picture Mode

Activate Picture-in-Picture mode to display a high-precision zeroing frame that occupies only 10% of the total display area. This feature magnifies the target and reticle, providing a close-up view of the aiming area while simultaneously maintaining visual control of the entire field of view.

5.5. Rangefinding and Ballistic Calculations

Utilize the integrated rangefinder to accurately determine distances to targets. The Stream Vision 2 app can display ballistic calculations directly on the scope's screen, assisting with precise shot placement. The device has an extreme detection range of up to 2,000 yards (1800 meters).



Figure 8: Stream Vision Ballistics displays calculations directly on the scope's screen.



Figure 9: The Thermion 2 Pro can detect heat signatures up to 1800m.

5.6. Zeroing Profiles

The Thermion 2 Pro allows you to store up to 5 zeroing profiles, each with 10 distance coordinates. This feature is highly beneficial for users who operate with multiple firearms or frequently change ammunition types, ensuring quick and accurate adjustments.



Figure 10: Store up to 5 zeroing profiles with 10 distance coordinates each.

5.7. Stream Vision 2 App Connectivity

The built-in Wi-Fi connects the device to Android/iOS smartphones via the Stream Vision 2 app. This connectivity enables various functionalities, including updating device software, transferring real-time images to mobile screens, and remotely controlling digital functions. This enhances the user experience and allows for seamless integration with your mobile devices.

6. Maintenance

6.1. Cleaning the Optics and Device Body

Regularly clean the objective lens and eyepiece with the provided lens cleaning cloth. For the device body, use a soft, damp cloth. Avoid abrasive materials or harsh chemicals that could damage the surface or coatings.

6.2. Battery Care and Storage

To prolong battery life, store the device with partially charged batteries if not in use for extended periods. Avoid fully discharging batteries. When storing, ensure the device is in a cool, dry place, ideally within its protective carrying case.

6.3. Waterproofing (IPX7)

The Thermion 2 Pro riflescopes boast an IPX7 waterproof rating, meaning they are designed to work reliably in conditions of high humidity and heavy rain. They can withstand immersion in water up to 1 meter deep for 30 minutes. Always ensure all caps and covers are securely closed before exposing the device to water.

7. Troubleshooting

Problem	Possible Cause	Solution
Device does not power on.	Low or depleted battery.	Charge batteries fully. Ensure proper battery installation.
Poor image quality.	Lens dirty; improper focus; environmental factors.	Clean lens. Adjust focus. Allow device to acclimate to ambient temperature.
Wi-Fi connectivity issues.	App not updated; device Wi-Fi off; interference.	Ensure Stream Vision 2 app is updated. Check device Wi-Fi settings. Move closer to the device.
Device freezes or becomes unresponsive.	Software glitch; extreme conditions.	Perform a soft reset (refer to specific button combination in advanced manual). Ensure firmware is up to date.

For more complex issues, please refer to the full online manual or contact Pulsar customer support.

8. Specifications

Feature	Detail
Brand	Pulsar
Model Name	Thermion 2
Color	XP50
Style	Thermal, Classic
Sport	Hunting
Magnification Maximum	16 x
Objective Lens Diameter	50 Millimeters
Magnification Minimum	2 x
Compatible Devices	Handgun (Note: Primarily designed for rifles, but compatible with handguns)
Mounting Type	Picatinny Mount
Night Vision	No (Thermal imaging is distinct from traditional night vision)
Manufacturer	Sellmark Corporation

Feature	Detail
UPC	812495029608
Item Package Dimensions L x W x H	18.5 x 18 x 16.5 inches
Package Weight	6.55 Kilograms
Waterproof Rating	IPX7
Detection Range	Up to 2,000 yards (1800 meters)
Microbolometer Resolution	640x480

9. Warranty & Support

Pulsar products are known for their quality and durability. For specific warranty details, please refer to the warranty card included in your product packaging or visit the official Pulsar website. For technical support, service, or any inquiries, please contact Pulsar customer service through their official channels. Keep your purchase receipt as proof of purchase for warranty claims.
Visit the **Pulsar Store** for more information and product registration.

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Name

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Email

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question