Pulsar XM50

Pulsar Thermion Thermal Riflescope XM50 User Manual

Model: XM50
Brand: Pulsar

1. INTRODUCTION

The Pulsar Thermion Thermal Riflescope XM50 is an advanced thermal imaging device designed for precision and reliability. It integrates cutting-edge thermal technology into a traditional riflescope form factor, offering superior detection capabilities and user-friendly operation.

Key features include a remarkable 2,500-yard heat detection range, enabled by a high-resolution 320x240 sensor with a 12μm pixel pitch core. The device provides versatile 8x digital zoom with both continuous and stepped options, a variety of reticles, and one-shot zeroing with a freeze function for accurate shooting. It also supports advanced connectivity via the Stream Vision app and features built-in recording with recoil activation for documenting observations.

The Thermion XM50 is built to be robust and reliable, boasting an IPX7 waterproof rating, making it submersible in up to 3 feet of water for up to 30 minutes. It is also designed to withstand recoil from high-caliber rifles such as .375 H&H, 9.3x64, and 12GA.

2. SAFETY INFORMATION

WARNING: 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 is prohibited. Users are responsible for understanding and complying with all applicable export and import laws and regulations.

Always handle firearms and optical devices with extreme care. Ensure the firearm is unloaded and safe before mounting, adjusting, or performing any maintenance on the riflescope. Keep the lens caps on when not in use to protect the optics.

Avoid direct exposure of the thermal sensor to intense heat sources like direct sunlight, lasers, or high-power lights, as this may damage the sensor.

3. SETUP

3.1 Unpacking and Initial Inspection

Carefully remove the Thermion XM50 from its packaging. Inspect the riflescope for any signs of damage. The package should include the riflescope, an APS 2 battery pack, a battery pack charging kit, a USB cable, turret covers, a lens cleaning cloth, and a carrying case.

Figure 3.1: Product packaging for the Pulsar Thermion XM50, showing the white box with "THERMION" branding.

3.2 Battery Installation and Charging

The Thermion XM50 utilizes both an internal and an external APS 2 battery pack to provide extended operational time. Ensure both batteries are fully charged before initial use.

1. Connect the battery pack to the charging kit using the provided USB cable.
2. Plug the charging kit into a suitable power source.
3. Allow the battery to charge until the indicator shows full charge.
4. Install the charged APS 2 battery pack into the designated compartment on the riflescope.

3.3 Mounting the Riflescope

The Thermion XM50 is designed for easy mounting on standard 30mm rings, compatible with Weaver mounts. Ensure the rings are securely attached to your firearm's rail system.

1. Place the riflescope into the 30mm rings, ensuring proper eye relief and alignment with your shooting position.
2. Securely tighten the ring screws according to the manufacturer's recommendations for your specific rings and firearm.
3. Verify that the riflescope is firmly mounted and does not shift.

Figure 3.2: The Pulsar Thermion XM50 Thermal Riflescope, showcasing its traditional riflescope design suitable for standard 30mm rings.

4. OPERATING INSTRUCTIONS

4.1 Powering On and Off

To power on the Thermion XM50, press and hold the power button located on the top control panel. The device starts almost instantly, offering its full potential when needed. To power off, press and hold the power button again until the display shuts down.

Figure 4.1: Close-up view of the control panel on the Pulsar Thermion XM50, showing the power, record, and zoom buttons.

4.2 Adjusting Magnification and Focus

The XM50 features 8x digital zoom, which can be adjusted continuously or in stepped increments. Use the zoom controls on the device to adjust magnification. Rotate the objective lens ring to achieve sharp focus on your target.

Figure 4.2: Detail of the turrets and focus rings on the Pulsar Thermion XM50, used for adjustments and focusing.

4.3 Reticle Selection and Zeroing

The riflescope offers a variety of reticle options to suit different preferences and shooting scenarios. Refer to the on-screen menu for reticle selection. The one-shot zeroing function with freeze allows for quick and precise calibration of the reticle to your firearm.

Figure 4.3: Example of the thermal image display through the Pulsar Thermion XM50, showing a target with a reticle and Picture-in-Picture zoom.

4.4 Picture-in-Picture (PiP) Mode

The Picture-in-Picture mode displays a magnified image of the reticle area at the top of the screen, allowing for precise aiming while maintaining a wide field of view. This feature is particularly useful for target identification and shot placement.

4.5 Recording and Connectivity

The Thermion XM50 has built-in recording capabilities, including recoil-activated recording, to capture your observations. Recorded footage can be stored internally. For enhanced functionality, connect the riflescope to the Stream Vision app on your mobile device. This allows for remote control, live streaming, and file management.

5. MAINTENANCE

5.1 Cleaning the Optics

Use the provided lens cleaning cloth to gently wipe the objective and eyepiece lenses. For stubborn smudges, a small amount of lens cleaning solution designed for optics can be applied to the cloth, not directly to the lens. Avoid using abrasive materials or

harsh chemicals.

5.2 General Care and Storage

Store the riflescope in its carrying case when not in use to protect it from dust, moisture, and physical impact. Ensure the device is dry before storing. Periodically check all external components for wear or damage. Keep the battery contacts clean.

6. TROUBLESHOOTING

6.1 Common Issues and Solutions

Problem	Possible Cause	Solution
Device does not power on.	Low or depleted battery.	Charge the APS 2 battery pack. Ensure it is correctly installed.
Poor image quality or blurry display.	Improper focus; dirty lens; environmental factors.	Adjust the focus ring. Clean the objective lens. Allow the device to acclimate to ambient temperature.
"Dead" or defective pixels on display.	Sensor anomaly.	Utilize the built-in defective pixel correction tool (refer to the device's internal menu for instructions). If the issue persists or worsens, contact customer support.
Device freezes or becomes unresponsive.	Software glitch or temporary error.	Perform a soft reset by holding the power button until the device restarts. If necessary, remove and reinsert the battery.

7. SPECIFICATIONS

Feature	Detail
Brand	Pulsar
Model Name	Thermion
Color	XM50
Item Weight	31.7 Ounces
Magnification Maximum	22 x
Magnification Minimum	5.5 x
Objective Lens Diameter	50 Millimeters
Field Of View	4.4 Degrees
Compatible Devices	Handgun (Note: Primarily designed for rifles, but compatible with various mounts)
Mounting Type	Weaver Mount
Reticle Type	Electronic
Waterproof Rating	IPX7 (submersible in up to 3 feet of water for up to 30 minutes)
Recoil Rating	.375 H&H, 9.3x64, and 12GA

Feature	Detail
UPC	812495025761
Part Number	PL76526

8. WARRANTY AND SUPPORT

8.1 Warranty Information

The Pulsar Thermion Thermal Riflescope XM50 comes with a **3 Year Limited Warranty**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

8.2 Customer Support

For technical assistance, warranty service, or general inquiries, please contact Pulsar customer support. Contact information can typically be found on the official Pulsar website or within the product packaging. Pulsar is known for its responsive customer service, based out of Texas.

You can visit the official Pulsar Store for more information and resources: Pulsar Store on Amazon.

Related Documents - XM50

PULSAR THERMION Manual	[Pulsar Thermion XM30 Thermal Riflescope Manual](#) Comprehensive user manual for the Pulsar Thermion XM30 thermal imaging riflescope, covering specifications, features, operation, battery management, and troubleshooting.
PULSAR THERMION 2 Manual	[Pulsar Thermion 2 XG50 Thermal Imaging Riflescope User Manual](#) Comprehensive user manual for the Pulsar Thermion 2 XG50 thermal imaging riflescope, detailing specifications, features, operation, zeroing, maintenance, and troubleshooting for optimal performance in various conditions.
Thermion 2 Manual	[Pulsar Thermion 2 Thermal Riflescope User Manual](#) Comprehensive user manual for the Pulsar Thermion 2 series of thermal imaging riflescopes, including models XQ38, XQ50, and XP50. Learn about specifications, operation, features like stadiametric rangefinding and video recording, and troubleshooting for advanced night vision observation.

Thermion 2 LRF XQ50 Pro manual	**[Pulsar Thermion 2 LRF XQ50 Pro Thermal Imaging Riflescope User Manual](#)** Comprehensive user manual for the Pulsar Thermion 2 LRF XQ50 Pro thermal imaging riflescope, detailing features, specifications, operation, maintenance, and troubleshooting for hunting and shooting applications.
PULSAR THERMION Manual	**[Pulsar Thermion XQ38 Thermal Riflescope User Manual](#)** This manual provides comprehensive instructions for the Pulsar Thermion XQ38 thermal imaging riflescope, covering its advanced features, technical specifications, operation, zeroing procedures, and troubleshooting for optimal performance in hunting and observation.
Thermion 2 LRF XL60/XP60/XG60 Handbuch	**[Thermion 2 LRF XL60/XP60/XG60 Handbuch](#)** Das Handbuch für die Pulsar Thermion 2 LRF Wärmebild-Zielfernrohre (Modelle XL60, XP60, XG60) bietet detaillierte Informationen zu Spezifikationen, Funktionen, Montage, Energieversorgung, Bedienung und Fehlerbehebung für Jagd, Zielschießen und Freizeitanwendungen.