

Bushnell BT6245F

Bushnell BT6245F Tactical Riflescope User Manual

Model: BT6245F | Brand: Bushnell

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1. OVERVIEW

The Bushnell BT6245F Tactical Riflescope is a high-performance optical instrument designed for precision aiming. It features a 6-24x magnification range and a 50mm objective lens, providing clear and bright images. The 30mm main tube ensures robust construction, while the illuminated Mil-Dot reticle enhances visibility in various lighting conditions. This riflescope is built with Bushnell's premier protective lens coating, which repels water, oil, fog, dust, and debris, ensuring durability and consistent performance. Multiple layers of anti-reflective coating contribute to superior light transmission.



Figure 1: Bushnell BT6245F Tactical Riflescope, showcasing its main body, turrets, and objective lens.

Key Features:

- Bushnell premier protective lens coating repels water, oil, fog, dust, and debris.
- Multiple layers of anti-reflective coating for superior light transmission and bright images.
- Side Parallax adjustments for precise focusing at various distances.
- Argon Purged for fog-proof performance.
- Waterproof construction ensures reliability in challenging environments.
- Illuminated Mil-Dot reticle for enhanced targeting.

2. SETUP

2.1 Unpacking

Carefully remove the riflescope and all accessories from the packaging. Inspect all components for any signs of damage. Retain the original packaging for future storage or transport.

2.2 Mounting the Riflescope

Mounting the riflescope correctly is crucial for accuracy and performance. Use appropriate 30mm scope rings and a stable mounting system compatible with your rifle. Ensure the scope is level and positioned for optimal eye relief (approximately 3.40 inches at maximum power) before tightening the rings according to the ring manufacturer's specifications. Avoid over-tightening, which can damage the scope tube.

2.3 Battery Installation (for Illuminated Reticle)

The illuminated reticle requires one Lithium Metal battery (included). Locate the battery compartment, typically on the side parallax turret or a dedicated illumination knob. Unscrew the cap, insert the battery with the correct polarity (+/-), and securely replace the cap. Refer to the illumination section for operation details.

3. OPERATION

3.1 Magnification Adjustment

The magnification ring is located near the eyepiece. Rotate this ring to adjust the magnification from 6x to 24x. The numbers on the ring indicate the current magnification setting. Adjust to your desired level for target acquisition or precision shooting.

3.2 Focus Adjustment (Diopter)

To ensure a sharp reticle image, adjust the diopter. Point the scope at a plain, bright background (like the sky) and quickly glance through the eyepiece. Rotate the diopter ring (located on the eyepiece) until the reticle appears crisp and sharp. Avoid staring through the scope while adjusting, as your eye will compensate for blurriness.

3.3 Parallax Adjustment

The BT6245F features side parallax adjustment. This knob, typically on the left side of the main tube, is used to eliminate parallax error, which occurs when the target and reticle are not on the same focal plane. Rotate the parallax knob until the target appears sharp and clear, and the reticle does not appear to move relative to the target when you slightly move your head.

3.4 Windage and Elevation Adjustments

The windage (horizontal) and elevation (vertical) adjustments are made using the turrets located on top and right side of the main tube. These turrets allow for precise point-of-impact adjustments. Each click of the turret corresponds to a specific change in point of impact (e.g., MOA or MIL). The BT6245F has an elevation travel of 80 MOA and windage travel of 80 MOA, with 5 MIL travel per revolution. Always refer to your specific shooting discipline's guidelines for zeroing your rifle.

3.5 Illuminated Reticle

To activate the illuminated Mil-Dot reticle, rotate the illumination control knob (often integrated with the side parallax knob or a separate knob). This knob typically has multiple brightness settings. Select the appropriate brightness level for ambient light conditions. Turn the illumination off when not in use to conserve battery life.

4. MAINTENANCE

4.1 Cleaning Lenses

To clean the lenses, first use a soft brush or compressed air to remove any loose dust or debris. Then, use a clean microfiber lens cloth and a small amount of lens cleaning solution. Gently wipe the lenses in a circular motion, starting from the center and working outwards. Avoid using harsh chemicals or abrasive materials, as they can damage the lens coatings.

4.2 Storage

When not in use, store the riflescope in a cool, dry place, preferably in its original packaging or a protective case. Ensure lens caps are in place to protect the objective and eyepiece lenses from dust and scratches. If storing for extended periods, remove the battery from the illuminated reticle compartment to prevent leakage.

4.3 Waterproofing

The Bushnell BT6245F is designed with waterproof construction and is Argon Purged to prevent internal

fogging. While it is built to withstand exposure to moisture, avoid submerging the riflescope in water. If the scope gets wet, wipe it dry with a clean cloth as soon as possible.

5. TROUBLESHOOTING

Problem	Possible Cause	Solution
Blurred image or reticle	Improper diopter or parallax adjustment; dirty lenses.	Adjust diopter and parallax. Clean lenses as per maintenance instructions.
Reticle illumination not working	Dead battery; incorrect battery polarity; illumination knob off.	Replace battery. Check battery orientation. Turn illumination knob to an 'ON' setting.
Inconsistent point of impact	Loose mounting rings; damaged scope; improper shooting technique.	Check and tighten mounting rings. If problem persists, contact Bushnell support. Review shooting fundamentals.
Internal fogging	Extreme temperature changes (rare due to Argon Purge).	Allow scope to acclimate to ambient temperature. If persistent, contact Bushnell support.

6. SPECIFICATIONS

Feature	Detail
Model Number	BT6245F
Magnification	6-24x
Objective Lens Diameter	50mm
Main Tube Size	30mm
Reticle	Illuminated Mil-Dot
Focal Plane	First
Elevation Travel	80 MOA
Windage Travel	80 MOA
Travel Per Revolution	5 MIL
Eye Relief (Max Power)	3.40"
Field of View at 100 yards	6x: 17' 24x: 4.5'
Length	13.80" (approx. 35.05 cm)
Weight	27 oz (approx. 765 g)
Color	Black
Material	Aluminum or Durable Polymer

Feature	Detail
Batteries Required	1 Lithium Metal (included)
Waterproof	Yes
Argon Purged	Yes

7. WARRANTY AND SUPPORT

Bushnell products are manufactured to the highest standards and are designed to provide reliable performance. For specific warranty details, please refer to the warranty card included with your product or visit the official Bushnell website. Keep your proof of purchase for any warranty claims.

For technical assistance, troubleshooting beyond this manual, or to inquire about repairs, please contact Bushnell Customer Service. Contact information can typically be found on the Bushnell website or on the product packaging.

Bushnell Official Website: www.bushnell.com