

Trijicon TA02-D-100391

Trijicon ACOG 4x32mm LED Illuminated Rifle Scope

Model: TA02-D-100391

Brand: Trijicon

1. INTRODUCTION AND OVERVIEW

The Trijicon ACOG 4x32mm LED Illuminated Rifle Scope (Model TA02-D-100391) is a fixed magnification optic designed for rapid target acquisition and precision. This model features a 4x magnification, a 32mm objective lens, and an LED-illuminated .223 Chevron reticle. It is powered by a single AA battery, offering extended battery life and user-controlled brightness settings. The robust forged aluminum housing ensures durability in various environments.

Key features include:

- 4x magnification with a 32mm objective lens.
- LED illumination source for the reticle.
- Green Chevron BDC reticle calibrated for .223 flattop rifles.
- Powered by one AA battery for over 12,000 hours of operation on setting #4.
- Forged aluminum housing for enhanced durability.
- Night vision device compatible.



Figure 1.1: The Trijicon ACOG 4x32mm LED Illuminated Rifle Scope, showing its compact design and primary features.

2. SAFETY INFORMATION

Always handle firearms and optics with extreme care. Adhere to all local, state, and federal laws regarding firearm ownership and use. Before handling your Trijicon ACOG, ensure the firearm is unloaded and pointed in a safe direction. Always wear appropriate eye and ear protection when operating firearms.

- Do not look directly at the sun or any intense light source through the scope, as this can cause permanent eye damage.
- Keep the scope and its components out of reach of children.
- Ensure the scope is securely mounted to prevent injury from recoil.
- Dispose of batteries responsibly according to local regulations.

3. PACKAGE CONTENTS

Verify that all items listed below are present in your package:

- Trijicon ACOG 4x32mm LED Illuminated Rifle Scope
- TA51 Thumbscrew Flattop Adapter Mount
- 1 AA Battery (Alkaline)
- Lens Pen
- Lanyard Assembly for Adjuster Caps
- Lanyard Assembly for Battery Cap
- Trijicon Logo Sticker
- Instruction Manual (this document)
- Warranty Card

4. SETUP

4.1 Battery Installation

The ACOG TA02 is powered by a single AA battery. To install or replace the battery:

1. Locate the battery cap on the side of the ACOG housing.
2. Unscrew the battery cap counter-clockwise. A lanyard assembly is provided to prevent loss of the cap.
3. Insert one AA battery (lithium or alkaline) with the positive (+) terminal facing inwards towards the scope body.
4. Carefully screw the battery cap back on clockwise until it is finger-tight. Do not overtighten.



Figure 4.1: Side view of the ACOG, indicating the location of the battery compartment and brightness adjustment dial.

4.2 Mounting the ACOG

The TA02 ACOG comes with a TA51 Thumbscrew Flattop Adapter Mount, designed for Picatinny rails. Ensure your rifle has a compatible rail system.

1. Identify the desired mounting position on your rifle's Picatinny rail. Ensure proper eye relief (approximately 1.5 inches) for comfortable viewing.
2. Loosen the thumbscrews on the TA51 mount.
3. Place the ACOG onto the Picatinny rail, aligning the cross-slots on the mount with the rail slots.
4. Push the ACOG forward in the rail slots to ensure consistent seating against the recoil lugs.
5. Tighten the thumbscrews securely by hand. For optimal retention, a torque wrench can be used, but avoid overtightening.



Figure 4.2: Detail of the mounting screws on the ACOG base, designed for secure attachment to Picatinny rails.



Figure 4.3: The Trijicon ACOG securely mounted on a rifle, demonstrating proper positioning.

4.3 Zeroing the Optic

Zeroing the ACOG is crucial for accurate shooting. This process involves adjusting the reticle to align with the bullet's point of impact at a specific distance.

1. Set up a target at your desired zeroing distance (e.g., 100 yards).
2. Fire a group of shots (e.g., 3-5 rounds) to determine the point of impact relative to your aim point.
3. Use the windage (side) and elevation (top) adjustment caps to move the point of impact. Each click adjusts the impact by 0.2 MIL or 0.2 inches at 100 yards.
4. To adjust elevation, turn the top cap. Turning clockwise moves the impact **down**; counter-clockwise moves it **up**.
5. To adjust windage, turn the side cap. Turning clockwise moves the impact **right**; counter-clockwise moves it **left**.
6. Repeat firing and adjusting until your shots consistently hit the desired aim point.

Note: The ACOG's reticle is a Bullet Drop Compensator (BDC) for .223 caliber. Once zeroed at a specific distance, the chevron and hash marks below it provide aiming points for extended ranges.

5. OPERATING THE ACOG

5.1 Brightness Adjustment

The TA02 ACOG features an LED-illuminated reticle with a user-controlled brightness dial. This allows for optimal visibility in various lighting conditions, from bright daylight to low-light environments.

1. Locate the brightness adjustment dial on the side of the ACOG, opposite the battery cap.
2. Rotate the dial to increase or decrease the reticle's illumination intensity. Settings range from 1 (lowest) to 6 (highest).
3. Select a brightness level that provides clear reticle visibility without causing excessive glare or washout.



Figure 5.1: The brightness adjustment dial, allowing precise control over reticle illumination.

5.2 Reticle Usage (Chevron BDC)

The .223 Chevron BDC (Bullet Drop Compensator) reticle is designed for quick target acquisition and accurate ranging. The tip of the chevron is typically used for close-range engagements, while the base and subsequent hash marks provide aiming points for longer distances, assuming a standard .223 ballistic trajectory.

- **Chevron Tip:** Aiming point for your primary zero distance (e.g., 100 yards).
- **Chevron Base:** Provides an aiming point for a slightly longer range.
- **Horizontal Hash Marks:** Subsequent marks below the chevron correspond to specific longer ranges (e.g., 200, 300, 400 yards), allowing for holdovers without adjusting elevation.

Familiarize yourself with the specific ballistic performance of your ammunition and rifle to effectively utilize the BDC reticle at various ranges.

5.3 Night Vision Compatibility

The TA02 ACOG is fully compatible with night vision devices. When using night vision, set the brightness dial to the lowest settings (1 or 2) to prevent blooming or washout of the reticle when viewed through a night vision device.



Figure 5.2: An operator demonstrating the use of the Trijicon ACOG in a tactical setting, highlighting its practical application.

6. MAINTENANCE

6.1 Cleaning the Lenses

To maintain optimal optical clarity, keep the lenses clean. Use the provided lens pen or a soft, lint-free cloth specifically designed for optics.

1. Gently brush away any loose dust or debris from the lens surface using the brush end of the lens pen or a soft brush.
2. Use the cleaning tip of the lens pen or a clean, dry microfiber cloth to wipe the lens in a circular motion, starting from the center and moving outwards.
3. For stubborn smudges, a small amount of lens cleaning solution designed for optics can be applied to the cloth (not directly to the lens).
4. Avoid using harsh chemicals, abrasive materials, or excessive force, as this can damage the lens coatings.



Figure 6.1: The objective lens of the ACOG, which requires regular cleaning for clear vision.

6.2 General Care and Storage

- Wipe down the exterior of the ACOG with a damp cloth to remove dirt or grime.
- Store the ACOG in a cool, dry place, away from direct sunlight and extreme temperatures.
- When not in use for extended periods, remove the AA battery to prevent potential leakage and damage to the electronics.
- Ensure all caps (adjuster and battery) are securely fastened to prevent moisture and dust ingress.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Reticle not illuminating or dim	Dead or low battery; incorrect battery orientation; loose battery cap; brightness setting too low.	Replace battery; ensure correct polarity (+ terminal inwards); tighten battery cap; increase brightness setting.
Battery drains quickly	Battery left on high setting; faulty battery; internal electronic issue.	Turn off or lower brightness when not in use; try a new, reputable brand battery; contact Trijicon support if issue persists.
Inaccurate shots / Cannot zero	Loose mount; damaged optic; incorrect zeroing procedure; ammunition inconsistency.	Ensure mount is securely tightened; re-verify zeroing procedure; try different ammunition; if optic is damaged, contact Trijicon for repair.

Problem	Possible Cause	Solution
Fogging inside optic	Seal compromise; rapid temperature change.	Allow optic to acclimate to temperature; if persistent, contact Trijicon for service as internal fogging indicates a seal breach.

8. SPECIFICATIONS

Feature	Detail
Magnification	4x
Objective Size	32mm
Illumination Source	LED
Reticle Pattern	Chevron BDC
Day Reticle Color	Green
Night Reticle Color	Green
Calibration	.223
Eye Relief	1.5 inches (38.1 mm)
Exit Pupil	8mm
Field of View (Degrees)	7 degrees
Field of View at 100 yards	36.8 ft
Adjustment at 100 yards (clicks/in)	2 clicks/inch
Mount Included	TA51 Thumbscrew Flattop Adapter
Housing Material	Forged Aluminum
Batteries	Single AA Lithium or Alkaline
Battery Life	Over 12,000 hours on setting #4 (with supplied alkaline battery at 21°C/70°F)
Length	6.0 inches
Weight (with TA51 mount & battery)	18.1 oz
Night Vision Compatible	Yes
Model Name	TA02-D-100391
UPC	719307308190

9. WARRANTY AND SUPPORT

The Trijicon ACOG TA02-D-100391 comes with a warranty. Please refer to the included warranty card for

specific terms, conditions, and registration information. Trijicon stands behind its products with a commitment to quality and customer satisfaction.

For technical assistance, service, or warranty claims, please contact Trijicon customer support directly. Keep your proof of purchase and the product's serial number readily available when contacting support.

You can find contact information and additional resources on the official Trijicon website: www.trijicon.com

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