

Minuteman 1-6x24FFP LPVO

USER MANUAL



Understanding the Controls



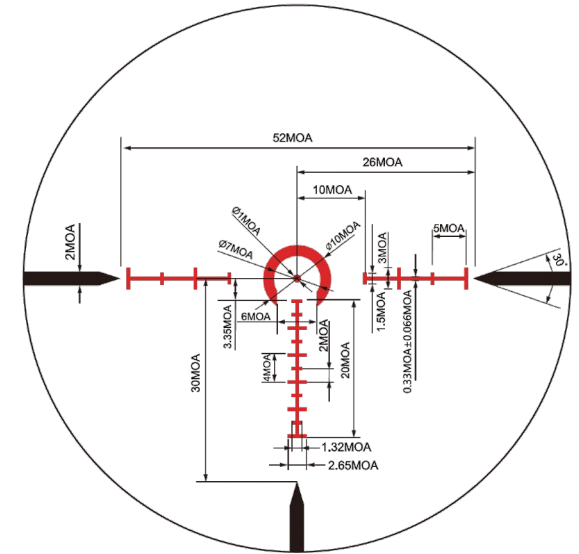
SPECIFICATIONS

Model	Minuteman - 1-6x24FFP
Magnification	1x-6x
Objective Lens Diameter	24mm
Ocular Lens Diameter	36mm
Monotube Diameter	30mm
Dioptr Compensation	- 2 to +2
Exit Pupil	3mm ~ 9mm
Coating	Fully Multi-Coated
Standard Click Value	1/2 MOA
Total Travel Elevation	120 MOA (≥ 35 MIL)
Total Travel Windage	120 MOA (≥ 35 MIL)
Illumination	6 Red Illumination
Waterproof	IP67
Fogproof	Yes
Parallax set	100 yds
Parallax Compensation	/
Field of view @100 Yards	109.2 ft- 18.2ft
Field of view @100 Meters	33.3m ~ 5.55m
Eye Relief	3.94 inches
Length	10.63 inches
Net Weight	18.70 ounces

INITIAL SETUP

Reticle Focal Plane

The Minuteman 1-6x24FFP LPVO scope features a first focal plane (FFP) reticle. FFP reticles are located within the riflescope near the windage and elevation turrets. This style of reticle will appear to grow and shrink as you change the magnification. The advantage of an FFP reticle is the reticle subtensions used for ranging, holdovers, and wind corrections will remain constant. The reticle size will appear larger at higher magnifications, and smaller at low magnification.



Ocular Focus

The ocular focus is typically a one-time adjustment used to focus the reticle for maximum sharpness and will be slightly different for every shooter. A clearly focused reticle is a critical component for accurate shooting. Therefore, when setting up the scope, this should be the first adjustment you make, and it should only need to be altered if your eyesight changes over time. It would also need to be adjusted to accommodate a different shooter.

Ocular Focus – Fast-Focus Eyepiece Adjustment

The Minuteman uses a Fast-Focus Eyepiece designed to easily adjust the focus on the scope's reticle.

Warning: Looking directly at the sun through a scope, or any optical instrument, can cause severe and permanent damage to your eyesight.

Adjusting the Reticle Focus to Your Eye:

1. Turn the magnification ring to the highest power. Looking through the optic, turn the Fast-Focus Eyepiece counterclockwise until the reticle is slightly blurry.
2. While looking at a white wall or clear blue sky, glance repeatedly through the optic and turn the Fast-Focus Eyepiece clockwise until the reticle is clear and crisp. This may take several attempts.

Note: You do not want your eye to focus to the reticle; rather, you want the reticle in focus to your eye instantly when looking through the optic. **Looking away and letting your eyes refocus is important to get the Fast-Focus Eyepiece to set correctly.**

Magnification Adjustment

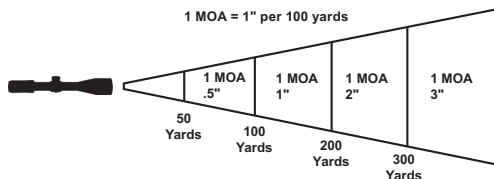
The Minuteman scope is a low power variable optic with a range between 1x-6x magnification. The Magnification Adjustment Ring is used to change the scope's power. To adjust the magnification level, rotate the Magnification Adjustment Ring clockwise or counterclockwise.

TURRETS

Turrets are used to adjust the bullet's point of impact and are marked in Minute of Angle (MOA). Your Minuteman scope incorporates precision, finger adjustable elevation, and windage turrets with audible and tactile clicks.

Minute of Angle (MOA) Adjustment

Minute of Angle is an angular unit of measurement commonly found in scopes. It is used to measure bullet drop, wind holdovers, and for measuring targets. Both the reticle and turrets are displayed in specific MOA values. 1 MOA equates to .5" at 100 yards, 1" at 100 yards, 2" at 200 yards, etc. As angular units of measurement, the values of 1 MOA will increase/decrease proportionally as you increase/decrease the distance you are shooting. For this reason, think about your adjustments in MOA, rather than a linear unit such as inches. If your turret, reticle, and drop chart are all laid out in MOA, adjusting your scope for bullet drop or windage corrections is extremely easy.



Windage and Elevation Adjustment

Use turrets to adjust the bullet's point of impact. The Minuteman scope uses .5 MOA turret adjustments on both the Windage and Elevation Turrets. Each click moves the bullet's point of impact roughly .5" at 100 yards MOA. The turret on the top of the scope is the Elevation Turret, which is used to adjust the bullet's point of impact up and down. The turret on the right-hand side of the scope is the Windage Turret and is used to adjust the bullet's point of impact left and right.

Exposed Windage and Elevation Turrets

The Minuteman scope comes equipped with an exposed Locking Windage and Elevation Turret. This allows the shooter to quickly dial in their elevation and windage adjustments.

Adjusting Exposed Elevation Turrets

1. Pull up on the turret so that it is no longer in the locked position.
2. Following the directional arrows, turn the dial in the direction you wish the bullet's point of impact to change. For example, if you hit high, dial down. If you hit low, dial up. If you hit right, dial left. If you hit left, dial right.
3. When finished adjusting, push down to lock the turret in place.

SCOPE MOUNTING

To get the best performance from your Minuteman scope, proper mounting is essential. Although not difficult, the correct steps must be followed. If you are unsure of your abilities, use the services of a qualified gunsmith. Please pay careful attention to the instructions that follow.

Scope Mounting Checklist

- Gun vise or a solid platform for your rifle
- Scope rings
- Torque wrench
- Reticle leveling tool(s)



Rings and Bases

The Minuteman features a 30mm main tube. Be sure to select a base and matching rings appropriate for your rifle and mount according to the manufacturer's instructions.

Tip: Selecting the proper ring height to provide appropriate clearance between the scope and any part of the rifle is paramount. The proper height will also allow for a comfortable head position and aid in establishing a solid and consistent shooting position. The height of a ring won't have an adverse impact on accuracy, overall range, or performance.

Eye Relief and Reticle Alignment

After installing the bottom ring halves on the mounting base, place the scope on the bottom ring halves and loosely install the upper ring halves. Before tightening the scope ring screws, adjust for maximum eye relief to avoid injury.

1. Set the scope to its highest magnification.
2. Move the scope fore and aft in the rings until you achieve a full, unobstructed sight picture.
3. Without disturbing the fore-aft placement, rotate the scope until the reticle is level. Use a leveling tool(s) to aid in this process.
4. After leveling the reticle, tighten and torque the ring screws down per manufacturer's instructions. Use caution and do not over-tighten ring screws.

Note: We typically suggest 14-18 in-lbs of torque on the ring screws. For base clamp screws on the rings/mounts, reference the ring manufacturer's specifications. Use of liquid thread-locking compound on the ring screws is not recommended.

Bore Sighting

Initial bore sighting of the scope will save time and money at the range. This can be done by using a mechanical or laser bore sight according to the manufacturer's instructions, or by removing the bolt and sighting through the barrel on some rifles.

To visually bore sight a rifle:

1. Place the rifle solidly on a rest and remove the bolt.
2. Sight through the bore using target approximately 100 yards away.
3. Move the rifle and rest until the target is visually centered inside the barrel.
4. With the target centered in the bore, make windage and elevation adjustments until the reticle crosshair is also centered over the target.

Final Range Sight-In

After the scope has been bore sighted, final sight-in should be done at the range using the exact ammunition you expect to use while hunting or shooting competitively. Sight-in and zero the scope. 50 or 100 yards are the most common zero distances for this optic.

1. Following all safe shooting practices, fire a three-shot group as precisely as possible to determine an average point of impact from which to correct.
 2. Adjust the turrets to correct for any offset in your point of impact.
 3. Fire another three-shot group to establish another average point of impact. This procedure may be repeated as many times as necessary until your point of impact and your point of aim are in the same place, and you have achieved a perfect zero.
- Note:** We do not recommend the use of a weighted gun vise, as it can put extreme stress on the gun, stock, scope, and mounts. It is best practice to use a combination of sandbags or a bipod and sandbags. Letting your weapon recoil naturally also provides consistency from shot to shot.

Reindexing the Elevation and Windage Turrets

After the scope has been zeroed in, the elevation and windage dials should be reindexed to their zero indicators. This enables accurate tracking of elevation or windage corrections dialed on the turrets in the field and to easily return to an original zero-point setting.

To Reindex the Turrets

1. Remove the central screw on top of dial while holding the elevation/windage turret cap firmly between thumb and forefinger to prevent any rotation.
2. Gently pull the turret dial straight up and off the turret post, being careful not to rotate the post.
3. Reinstall the turret dial, lining up the "0" mark with indexing mark on the scope body and replace the central screw on top of dial.

MAINTENANCE

Cleaning

Your Minuteman scope requires very little routine maintenance other than periodically cleaning the exterior lenses. The scope's exterior may be cleaned by wiping with a soft cloth. When cleaning the lenses, be sure to use products that are specifically designed for use on coated optical lenses.

- Be sure to blow away any dust or grit on the lenses prior to wiping the surfaces.
- Using your breath, or a very small amount of water or pure alcohol, can help remove stubborn dried water spots.

Lubrication

All components of the scope are permanently lubricated, so no additional lubricant should be applied.

Note: Other than removing the turret indicators and battery cap, do not attempt to disassemble any components of the scope. Disassembling the scope will void warranty.

Storage

If possible, avoid storing your scope in direct sunlight or any very hot location for long periods of time.

TROUBLESHOOTING

Please consult the following list prior to returning a scope for service. Many times, a problem thought to be with the scope is a mounting issue. Be sure the correct rings and bases are being used and they are properly torqued to the rifle. Ensure there is no free play in the scope, base, or rings.

Common Issues

Point of Impact is Inconsistent or Changes Drastically After Turret Adjustment

- Verify the ring screws are not over-torqued. Ring screws should only be torqued according to the manufacturer's recommendations, and no thread-locking compound or lubricants should be applied. Over-torquing ring screws will cause excess pressure on the tube, which may cause problems when making turret adjustments.
- Remove the scope from the rings and visually check the scope tube for slide marks, and/or indentations from over-torqued, or out-of-spec rings.
- Ensure the rifle's action screws are tightened to the rifle manufacturer's specification.
- Be sure the base is tightened to the top of the rifle's receiver using thread-locking compound according to manufacturer's specs.
- If using the scope on an AR-style rifle, ensure the cantilever mount/rings are mounted only to the top of the receiver. The cantilever mount/rings need to be mounted to a single, solid surface. Make sure the forward connection of the cantilever mount, or ring, is not mounted to the fore-end of the rifle.
- Be sure the rifle barrel and action are clean and free of excessive oil or copper and powder fouling.
- Some rifles and ammunition types do not work well together. Try different ammunition to see if accuracy improves.

Insufficient Windage & Elevation Adjustment Range

- Be sure you have the proper base and rings for your rifle. If you need assistance, contact a local gunsmith.
- Once you have verified you have the correct base and mounts, and that you have been properly fitted for your gun, make sure you have followed the correct mounting procedure. See scope mounting section on pages 7-9 for this procedure.
- Insufficient windage or elevation adjustment range usually indicates problems with the mounting, base mount holes drilled in the rifle's receiver, or barrel/receiver misalignment.

Reticle is Blurry/Cannot Focus on the Reticle and Target Simultaneously

- Check and reset the ocular focus for the shooter's eye. See "Ocular Focus" section.

Reticle is Upside Down

- Your scope is likely backwards. Confirm that you are looking through the ocular lens.

Reticle is Moving the Wrong Direction

- The reticle will always move opposite of the turrets. Markings on the turrets indicate point of impact change. If you dial down on the turret, the reticle will move upward, forcing you to move the gun down, to change your point of impact in the downward direction.

5-YEAR WARRANTY

- 🔍 If this product has a performance failure that is not caused by man-made damage, you are eligible for the free repair, replacement, or return of the optic.
- 🔧 One free accidental damage repair service includes accidental water damage and drop damage.
- 📦 Products that comply with the warranty policy service enjoy free return and free shipping to you after repair.
- 🛡️ If the product is damaged due to *force majeure* (such as fire, flood, earthquake, lightning strike, etc.), we will provide free maintenance services.

Products that meet any of the following conditions are ineligible for the warranty service policy:

1. Exceeding the product warranty period.
2. Damage caused by failure to use, maintain, or store in accordance with the requirements of the product manual.
3. Damage caused by dismantling the product.
4. Damage caused by excessive wear and tear beyond normal everyday use, such as torture tests.