

  
**ENDURA**  
3.5-25x56 FFP



## What's Included?

- Flip up lens covers x 1 set
- Sunshade x 1
- Lens cleaning cloth
- Driver tool for windage/elevation turret caps
- Throw lever tool to aid in quick adjustment of the magnification ring
- Zero-Stop (Pre-installed on elevation turret)

## Basics

1 - **Objective end.** Contains the objective lens assembly and objective lens hood. The larger flip up lens cover will push-fit here.

2 - **Ocular end.** This is threaded for adjustment, sometimes referred to diopter correction or 'European style fast focus eyepiece'. See 'Guidance For Use' for instructions on how to adjust this to your eye. The smaller flip up lens cover will push-fit here.

3 - **Eyepiece section.** Houses the ocular lens assembly

4 - **Magnification ring.** This rotates to adjust the magnification setting. The throw lever can be installed here as pictured (Right) after the small outer dust cap has been removed.

5 - **Side parallax adjustment turret.** Sometimes referred to as 'side focus' or 'SF'. This turret is used to remove parallax. It adjusts back and forth from a minimum parallax distance of around 13m out to infinity.

6 - **Elevation and Windage turrets.** These are used to adjust the position of the reticle and 'zero in'. Compensate for windage and adjust to engage targets at different ranges with these.

7 - **Saddle section.** This houses the elevation, windage and side parallax turrets. To the front and rear of the saddle section is the 34mm main tube.

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## Guidance For Use

### Fast Focus Ocular Lens / Diopter Adjustment

- It's important that the reticle appears sharp and is correctly set to your eye.
- Use the fast focus eyepiece to adjust the sharpness of the reticle to suit your eyesight, by pointing the scope at a featureless bright area such as a wall or open sky. Do not look at the sun!
- Turn the fast focus eyepiece clockwise and anticlockwise until the reticle appears as sharp and defined as possible.
- If the above is not carried out correctly then parallax error may become a problem. Do this first, before the scope is even mounted.
- Once the eyepiece is set then don't adjust it.

### Mounting the riflescope

- CAUTION : Make sure the firearm is not loaded when mounting the riflescope.
- ENDURA 3.5-25x56 is built around a 34mm tube/saddle section of one-piece construction.
- Always use good quality mount rings. Poor quality mount rings may damage your scope and will almost certainly hinder performance.
- Be careful not to crush the scope tube by over tightening the mount rings. Refer to literature supplied with the mount rings to ensure the correct torque settings are used on both the top screws and base screws. Each set of mount rings and supplied screws should be built to a specific tolerance that will determine the correct torque setting. Typically this will be quoted in inch/lbs.
- Equally, under-torqued mount rings can also be an issue, especially in combination with heavy recoil. If the mount ring manufacturer does not identify any torque settings for ring and rail screws then consider a different brand that does.

## **Windage / Elevation Turret Adjustment**

- ENDURA 3.5-25x56 have an adjustment value of 0.1MRAD per click or 0.25MOA per click

- Its important to remember that the MRAD based adjustment system matches the MRAD nature of the reticle on model code B252, no inch/cm conversion is required. 1.0MRAD as displayed by the reticle is equal to 10 clicks of adjustment, regardless of target distance. Whereas on B251 model code (The MOA Version) 1.0MOA as displayed by the reticle is equal to 4 clicks of adjustment.

- ENDURA 3.5-25x56 offers 100 clicks worth of adjustment per rotation, this equates to 10.0MRAD on B252, or 25.0MOA on B251.

- Each scope will be preset to mechanical centre (midway point of adjustment range) out of the box. Try and keep both the windage and elevation turrets as close to mechanical centre as possible when zeroing. Optical standard and adjustment consistency may suffer at the extremes of any scopes adjustment range.

- You will feel a positive resistance 'stop' once the scope reaches the extreme of its elevation or windage adjustment. Don't be tempted to force the turret any further as this will damage the mechanism.

- ENDURA 3.5-25x56 features elevation and windage turret caps that are secured using a single top mounted holding screw. The turret caps can be repositioned as required, normally to display '0'. To do this then slacken off the screw using the driver tool provided in the box. Then disengage the turret cap by easing it off the internal spline. A little force may be required to break the O-ring seal. Reposition the turret cap as desired, and then re-tighten the screw to secure.

## **Unrestricted Zero-Stop**

- ENDURA 3.5-25x56 has a zero stop mechanism built into its elevation turret. To set, then start by removing the elevation turret cap using the provided driver tool. Loosen and remove the slot head screw on top of the elevation turret cap. Then pull the cap upwards to remove.

- The disc shaped Zero-Stop collar should then be visible. This is secured using 3 horizontally mounted grub screws. Loosen each of these using a 1.5mm hex key. The collar will then drop into position.



Slacken grub screws and the collar will drop



- To accurately set then rotate the collar clock-wise until you feel a firm 'stop'.

- Re-secure the Zero-Stop collar using a 1.5mm hex key, making sure to evenly tighten the 3 grub screws so the collar is level and secure against the turret spline.

- Once the turret cap is re-installed then the Zero-Stop is set. The elevation turret will continue to operate freely within the remainder of its adjustment range. You will hear a firm 'click' once the Zero-Stop is hit, at the bottom of the remaining adjustment range.

## **Magnification Adjustment**

- To adjust the magnification simply rotate the ring by hand to the desired setting. Add the throw lever for extra leverage if you wish. There is an elevated ridge on the magnification ring, that is threaded to accept the throw lever. There is a small outer dust cover that will need to be removed before installing the throw lever. Never tamper with the inner screw that sits underneath.

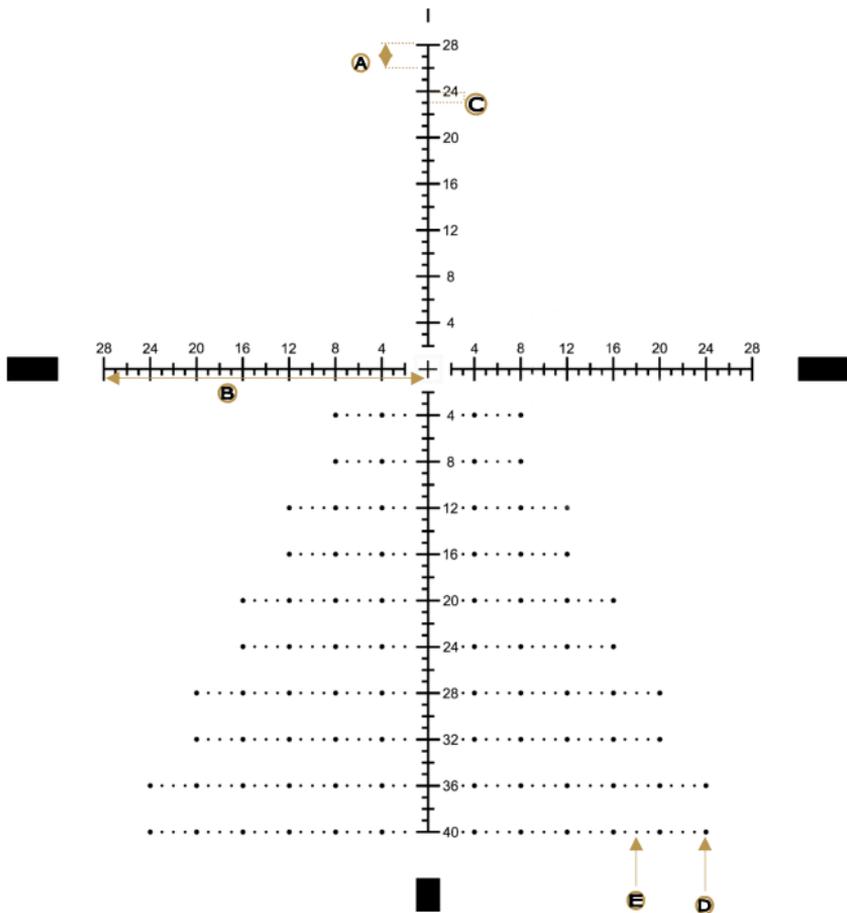
- The zeroed point of impact (POI) should remain unchanged across the entire magnification range.

## **Side Parallax Adjustment**

- 'The third turret' will appear to bring targets in and out of focus. It can sometimes be stiff and difficult to rotate straight out of the box, but it will free off with use.

- Use the turret to remove parallax, bringing both the target and the reticle into sharp focus.

- Generally speaking, the higher the magnification setting then the easier it will be to remove parallax as targets will appear either in, or out, of focus.

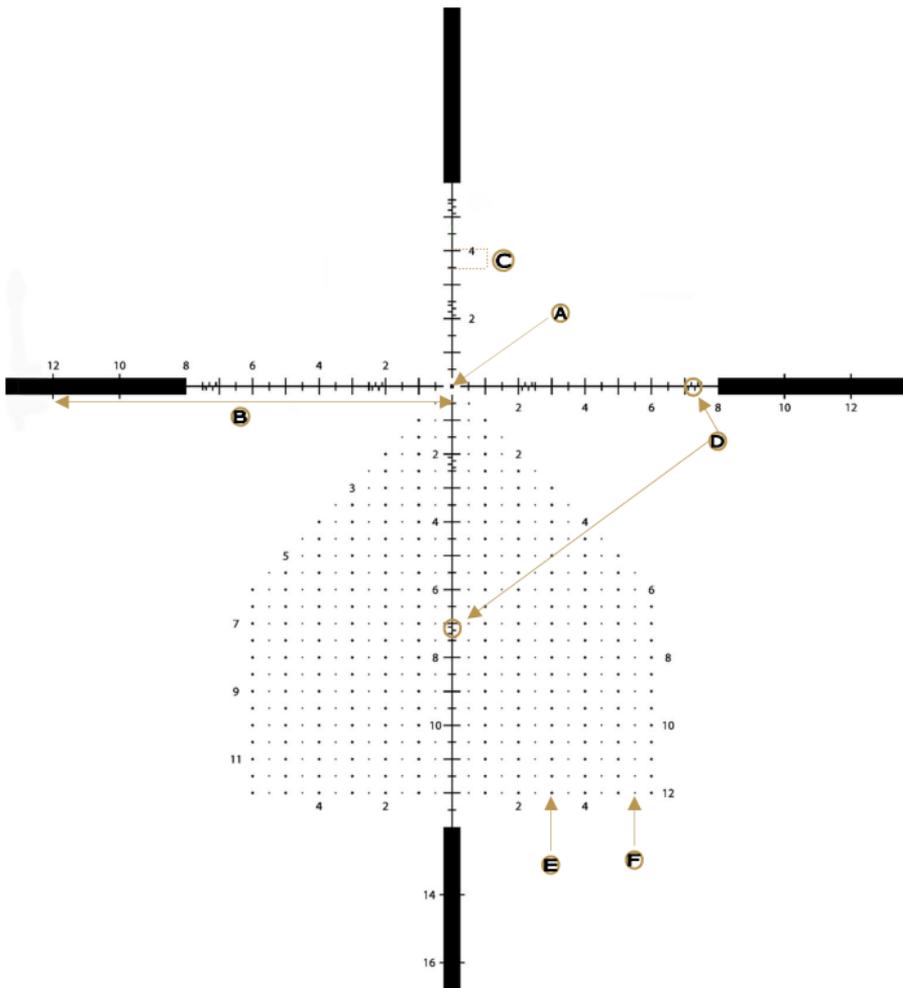


- M40 Plus-Dot Reticle (**M4PD**) installed in the first focal plane, calibrated for MOA accuracy at any given magnification setting.

- **A** = 2.0MOA
- **B** = 28.0MOA
- **C** = 1.0MOA
- **D** = 0.4MOA Large Dot Indicator
- **E** = 0.2MOA Small Dot Indicator
- Reticle line thickness = 0.12MOA

### FFP Reticle Install

- Additional aim points that may be used for holdover/under and windage will also remain unchanged across the entire magnification range. This is because the reticle is installed in the first focal plane (FFP).
- The size of the reticle and size of the target will shrink and grow in unison as you adjust the magnification setting.
- Generally speaking the reticle will appear finer at lower magnification and heavier at higher magnification but in reality the reticle thickness does not alter in relation to the target, it is not dependent on magnification. Reticle thickness in terms of target coverage is exactly the same at 3.5x, as it is a 25x for example.



- B28 Grid-Dot Reticle (**B2GD**) installed in the first focal plane, calibrated for Milliradian accuracy at any magnification.

- A = 0.12MRAD Floating Dot
- B = 12.0MRAD
- C = 0.5MRAD
- D = 0.1MRAD Indicator Lines
- E = 0.08MRAD Large Dot Indicator
- F = 0.04MRAD Small Dot Indicator
- Reticle line thickness = 0.03MRAD

- For reticle diagrams in greater detail please visit [www.falconoptics.com/resources.php](http://www.falconoptics.com/resources.php) where higher resolution pdf versions can be downloaded.

## Care and Maintenance

- With the exception of repositioning the turret caps along with adding/removing throw lever then do not attempt to disassemble the scope.
- Do not tamper with the holding screw on the magnification ring, the coil spring cover underneath the side parallax turret, nor the nitrogen port screw on the base of the saddle.
- Do not attempt to 're-parallax' the scope by adjusting the position of the front lens assembly. In doing so you run the risk nitrogen loss and moisture ingress over time.
- You will feel a positive stop at the end of the travel ranges for the windage and elevation turrets, focus eyepiece and side parallax adjustment turret. Don't be tempted to apply more force once you reach the stop.
- When mounting the scope always be sure to check the torque settings for the mounts/rings that you plan to use.
- The external lens surfaces can be wiped clean with the lens cloth provided. Remove any noticeable particles of dirt or sand in advance using a lens blower or a very soft brush. Take care in doing this to ensure the outer lens coatings do not get scratched.
- Store the scope in a moisture free environment. Don't leave the scope in direct sunlight whereby the sun's rays can enter either the objective or ocular ends.
- Avoid storing the scope in areas that will reach very high temperatures for long periods of time.
- CAUTION : Never use the scope to look at the sun

## Troubleshooting

### **Can't zero the scope, running out of windage and/or elevation adjustment**

- Rule out common alignment issues such as: barrel alignment and shift, barrel threaded at an angle, rail/receiver install, rail alignment, mount/rings install and alignment.

- It might be that a tapered (inclined) rail is necessary in order to gain the desired elevation adjustment.

**I'm seeing a dark shadow around the image edges, it seems to disappear at higher magnification but return at lower magnification**

- Windage and/or elevation turrets are dialled to far from mechanical centre. Return them closer to mechanical centre and the shadow will ease.

- If you're having to dial in that much windage/elevation in order to zero then we would recommend the use of a tapered rail.

**My group size has opened up after shooting well in the past / Shift in point of impact**

- Change to focus eyepiece setting?

- Does the scope appear to be shifting in the mount/rings? Have ring/base screws worked loose?

- Play/movement between the rings/rail/receiver?

- Recent change of ammunition?

- Silencer/moderator alignment?

- Inconsistent head position?

- Parallax being dialled out correctly?

- Windage and/or elevation turrets are dialled to far from mechanical centre? Loss of tension on erector spring. Return closer to mechanical centre.

**Side parallax turret difficult to turn after mounting the scope or suddenly develops stiffness / Difficulty in removing parallax**

- Mount/ring could just be out of tolerance, applying uneven force to the tube and putting strain on the side parallax mechanism

- Torque setting on the mount/ring screws could be too high. Drop the level of torque applied with particular concern to the front mount/ring.

- Position the front mount ring as close to the objective end of the scope as possible. This will help prevent any hindering of the side parallax mechanism.

### **Optical standard suddenly seems noticeably poorer**

- Recent changes to zero and elevation/windage setting? Optical standard may suffer at the extremes of any scopes adjustment range.

- Check for changes to focus eyepiece setting and that parallax is being correctly dialled out.

- Head alignment consistent?

- Shooting in low sun? Use the sunshade.

- Check for any obstructions on exterior lens surfaces such as dust, dirt and condensation. See care and maintenance section.

### **ENDURA 34mm High Rings - Picatinny Fitting**

- Sold Separately

- Ring Screws (Top) @ 16inch/lbs torque

- Rail Screws (Bottom) @ 25inch/lbs torque



## ENDURA Warranty & Service Commitment

**If ENDURA 3.5-25x56 doesn't perform, then we will either repair it, or give you a brand new unit. No charge.**

Key Points:

- To request service then contact us directly at [service@enduraoptics.com](mailto:service@enduraoptics.com)
- If the scope performs outside of tolerance then we will **repair** or **replace** it. **No charge. No time limit.**
- Additional service commitment if your ENDURA 3.5-25x56 is damaged through normal use.
- Covers the original owner of the scope. Proof of purchase may be required.
- Additional service commitment for future owners of the scope.
- Excludes loss, theft, deliberate damage, abuse and misuse. Also excludes cosmetic damage that doesn't hinder the performance of the scope.

## Export Notice

This Rifle Scope may be classified as a Strategic Military Item depending on your location.

Consult with your Export Control Authority before taking/sending the scope abroad to determine if an export license is required.

<b>MAGNIFICATION RANGE</b>	3.5-25x
<b>FIELD OF VIEW @ 100M</b>	9.05m - 1.46m
<b>EYE RELIEF</b>	100mm - 90mm
<b>MAX ELEVATION ADJUSTMENT</b>	>100.0MOA or
<b>MAX ELEVATION ADJUSTMENT</b>	Unrestricted >100.0MOA
<b>ADJUSTMENT VALUE PER CLICK</b>	0.25MOA or 0.1MRAD
<b>ADJUSTMENT PER TURN</b>	25.0MOA or 10.0MRAD
<b>MINIMUM PARALLAX DISTANCE</b>	13.7m
<b>RETICLE CHOICES</b>	M4PD (MOA) or B2GD
<b>RETICLE INSTALL</b>	First Focal
<b>TOTAL LENGTH</b>	775mm
<b>WEIGHT</b>	995g
<b>TUBE DIAMETER</b>	34mm
<b>CONSTRUCTION</b>	1 Piece Tube/Saddle
<b>OBJECTIVE LENS DIAMETER</b>	56mm
<b>OUTER OBJECTIVE DIAMETER</b>	64.5mm
<b>OUTER OCULAR DIAMETER</b>	44mm
<b>ADDITIONAL SUNSHADES</b>	1 Supplied
<b>FLIP UP LENS COVERS</b>	Yes, Supplied
<b>CONFIGURATIONS AND ORDER CODES</b>	B251 (MOA) OR B252 (MRAD)

