



INSTRUCTION MANUAL ED2.5-20X50FFP



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**CAUTION: BE SURE THAT THE FIREARM IS NOT LOADED.
PRACTICE SAFE FIREARM HANDLING AT ALL TIMES.**

RETICLE FOCUS ADJUSTMENT

The purpose of eyepiece focusing is to adjust the scope so that the reticle (crosshairs) appears clear and sharp. All Osprey riflescopes are factory set for 20/20, or corrected to 20/20 vision. If the reticle does not appear sharp, you can adjust it as follows:

Point the scope at a bright, featureless surface any distance away (blank wall, sky, a sheet of white paper) and with your eye about three inches from the eyepiece, rotate the eyepiece adjustment knob clockwise or counterclockwise until the reticle becomes clear and sharp. It may help to look away and then back through the eyepiece to confirm the correct setting.

MOUNTING

To get the best performance from your Osprey scope, it must be mounted properly. If you are not familiar with mounting a riflescope, it is strongly recommended that you seek the assistance of a qualified gunsmith. If you decide to mount it yourself, proceed as follows:

1. Make sure you have an appropriate base for your firearm based on your firearms instructions.
2. Care should be taken when attaching to a weaver-style or picatinny base to ensure that the ring mount's cross bolt fits into the grooves provided. Tighten loose enough so that the scope can be slid forward and backward and rotated.
3. With the firearm held in a comfortable shooting position or on a gun vice, slide the scope forward and backward until a full field of view is achieved.

CAUTION: BE SURE THAT THE SCOPE IS MOUNTED A SUFFICIENT DISTANCE FROM YOUR EYE TO PREVENT CONTACT UNDER RECOIL.

Next, rotate the scope so that the elevation knob is on top, the windage on the right side and the vertical and horizontal portions of the crosshair are aligned with the vertical and horizontal axis of your firearm. You may also use a bubble level to ensure the riflescope and crosshairs are square.

4. Carefully tighten the screws and double check that you have enough distance between your eye and the scope to avoid contact under recoil. For additional security,

a drop of thread-locking fluid can be added to the screws before final tightening.

WINDAGE AND ELEVATION

Your Osprey scope has precise windage (left and right), elevation (up and down) adjustments, with audible and tactical clicks. The click value is 1/4 MOA. You can also find click value for your scope marked on the windage and elevation knobs. The following table will be useful when zeroing (described later in the manual) or adjusting in the field. Value of 1/4 MOA in inches:

- 25 yards one click equals 0.0625 inch or 1/16"
- 50 yards one click equals 0.125 inch or 1/8"
- 100 yards one click equals 0.25 inch or 1/4"
- 150 yards one click equals 0.375 inch or 3/8"
- 200 yards one click equals 0.5 inch or 1/2"
- 500 yards one click equals 1.25 inch.
- 1,000 yards one click equals 2.5 inches.

Your windage and elevation are pre-centered at the factory to provide a maximum range of adjustment in all directions from center. The knobs are marked "UP" or "RIGHT" and have an arrow indicating the direction of rotation necessary to move the point of impact. Your Osprey scope allows you to reset the windage and elevation knobs. After zeroing, they enable you to reset the zero mark on the windage or elevation turrets to the index mark on the scope. If you wish to do this, it can be done as follows:

After zeroing at the desired sight-in distance use the included wrench to loosen the small setscrew that secures the external turret to the hidden internal windage/elevation turret. When loose, spin the external turret until the zero mark corresponds to the index marker on the body tube or turret. Be careful not to rotate the internal turret (making clicks) when rotating the external turret or your zero setting will be changed.

ZOOM OR MAGNIFICATION

The zoom or magnification enables the shooter to accommodate a wide variety of shooting situations. To change magnification, simply rotate the power adjustment knob. When hunting, it is generally best to use the lowest magnification setting for the widest field of view and brightest image and save high magnification for stationary game at long range.

ZEROING

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Bore sighting should be done to achieve rough alignment of the scope to the firearm. This is best accomplished using an Osprey bore sight.

If a bore sight is not available, place the firearm on a sturdy rest and sight down the bore or along the barrel at a target about 50 yards away.

Adjust the windage and elevation turrets until the crosshair corresponds with the target viewed through the bore or alongside the barrel.

MAINTENANCE & CLEANING

Your Osprey scope is extremely durable. But it is a precision instrument and should be treated with reasonable care. When not in use, be sure to cover the objective and ocular lenses with the provided lens caps.

EXTRA-LOW DISPERSION (ED) GLASS

ED glass is extra-low dispersion glass designed to combat chromatic aberration. This can occur due to the unequal bending of different colors of light as they pass through a lens. Utilizing ED Glass results in images that boast unparalleled clarity, minimized color distortion, and remarkable resolution. This scope delivers images that are not only sharper but also infused with vibrant hues.

LENSES

Should the lenses become dirty, blow loose materials off the lenses before cleaning. Use lens cleaning fluid and a soft cloth to dab at the surface and remove any abrasive bits of dust and dirt before applying more pressure. Be patient and clean in steps. Be careful not to grind abrasive dust or dirt into the lens. The optical coatings are hard and will last indefinitely with proper care.

EXTERIOR

The body of the scope should be wiped down occasionally to remove fingerprints or dust. Do not use oil or solvent as these may be harmful if inadvertently rubbed onto the

optical coatings.

MECHANICAL & STORAGE

Mechanical parts have been lubricated at the factory with special hermetic grease and need no further attention. This grease is temperature-stable from -50 to +175 degrees Fahrenheit. Do not store at temperatures outside this range (for example a car trunk on a very hot day).

FEATURES OF OSPREY SCOPE

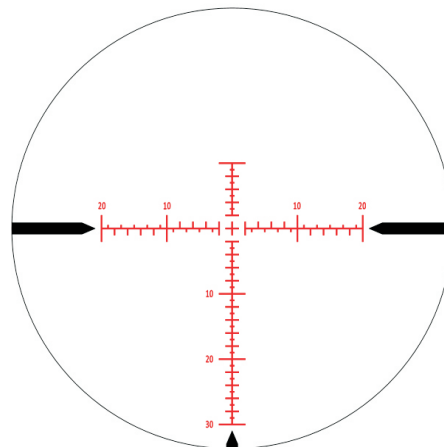
- The Osprey scope model is entirely unique, and custom made to Osprey
- Assembled in the United States
- U.S. made 3m or Loctite epoxy used in all bonding applications
- Hermetic grease is used for superior waterproof and fog-proof performance
- Waterproof tested at 25 cm/40 degree C for three minutes
- Fog-proof tested at 20 degrees C for thirty minutes and removed to ambient (each scope must completely clear in 2 minutes)
- Each scope is spin-centered for balance before leaving the factory
- No-nonsense lifetime warranty/three business day repair or replacement
- Optical lenses from Hoya of Japan
- 100% of all units are inspected to ensure quality
- Each scope is all glass, with all air-to-glass surfaces fully multi-coated.
- Inside of each body tube is specially treated with anti-reflective paint and light stops to reduce internal reflections.

SPECIFICATION

Power	2.5x-20x	Lens Coating	Multi Coated
Objective	50mm	Illuminated Color	RED, GREEN, BLUE
Focal Plane	First	Recoil	1000G/100times
Tube Diameter	34mm	W/E Clicks	0.25MOA 120 Clicks per turn
Reticle Type	Glass Etched Reticle	Weight	32.69 oz
Eye Relief	@ LX 6.5"	Length	12"
	@ HX 3.7"	Elevation Adjustment	100
FOV	@ LX(ft.@100yds)42.7"	Range(MOA)	80
	@ HX(ft.@100yds)5.39"	Windage Adjustment	
Exit Pupil	@ LX 0.386"	Range(MOA)	80
	@ HX 0.098"	Parallax Setting	

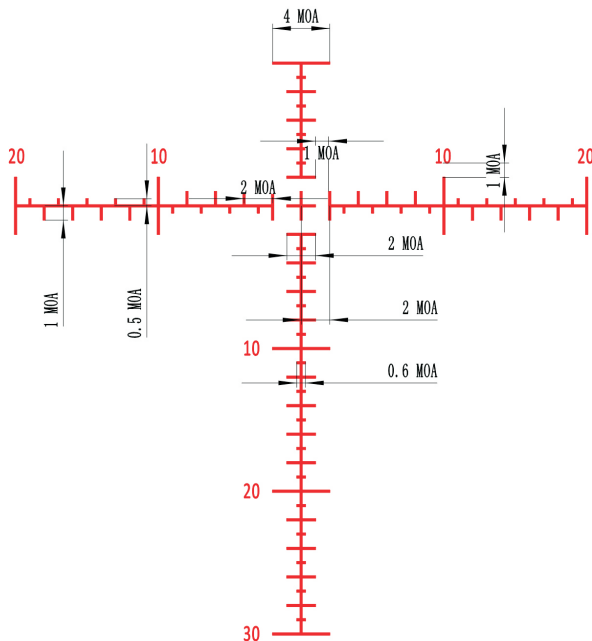
MOA LINE RETICLE OVERVIEW(LMOA)

First Focal Plane (FFP) reticles are located within the riflescope near the windage and elevation turrets in front of the image-erecting and magnifying lenses. The primary advantage of this is that the reticle and the scope zoom in simultaneously. Ultimately, this means that a given distance measured between two hash marks will stay the same no matter the magnification, which allows for quick and accurate long-range shooting regardless of the conditions.



The L-MOA reticle is a simplistic reticle that allows to do holdovers with ease. Each hash is equal to 1 MOA. A hash with the number 5 is equal to 5 MOA's. A MOA is a unit of angular measurement, like degrees or minutes of angle. A MOA is equal to 1 inch at 100 yards (at any zoom). On the next page you will find a more detailed overview of the reticle.

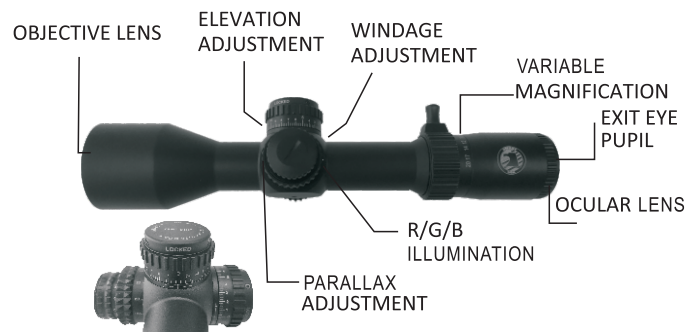
Either the vertical or horizontal Moa scale can be used to range for your target. Try to read Moa as accurately as possible. Reading .25moa accuracy will provide a more accurate range to the target; therefore, using the end of either the horizontal or vertical scale will yield measurements in 1 moa increments.



$$\frac{\text{Target Size (yards)} \times 3600}{\text{MOA Read}} = \text{Range (yards)}$$

$$\frac{\text{Target Size (inches)} \times 100}{\text{MOA Read}} = \text{Range (yards)}$$

FEATURES



OBJECTIVE LENS

Front lens denoted by the last number in the scope description
(i.e. 2.5-20x50 means the diameter of the front lens is 50 mm)

VARIABLE MAGNIFICATION

The “power” of the scope denoted by the first series of numbers in the scope description. The power will bring an object in closer
(i.e. 2.5-20x50 means the scope has a “variable” power from 2.5 to 20)

WINDAGE ADJUSTMENT

The turret on this side of the scope will adjust the reticle from left and right allowing for wind conditions.

R/G/B ILLUMINATION

The 3 colors illumination will be used for more shooting scenes.

ELEVATION ADJUSTMENT

The turret on top of the scope will adjust the reticle up and down allowing for bullet drop .

OCULAR LENS

The viewing lens of the scope closest to the eye. The ring of the ocular lens adjusts the clarity of the reticle.

EXIT EYE PUPIL

The larger the exit pupil the brighter the image.

PARALLAX ADJUSTMENT

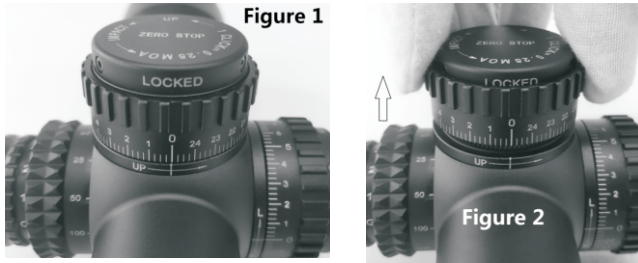
To eliminate parallax, rotate the Parallax Adjustment Turret. Proper adjustment will eliminate all reticle movement within the eye box.

Setting Your Zero Stop

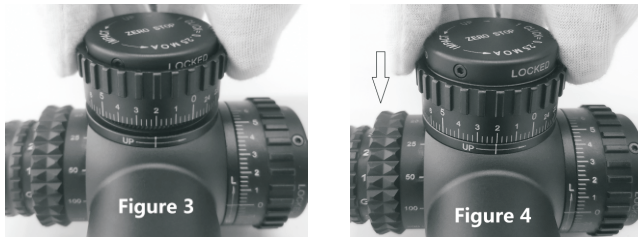
A zero stop is a mechanical or optical reference point that allows the shooter to return the scope to the same point of aim. This is done after making adjustments on the elevation turret to the desired shooting distance.

Example: Shooter wants to sight his AR-15 at 100 yards using an OSPREY BORESIGHT. After the scope has been zeroed at that distance, remove the top plate on the elevation turret. Once this is done simply lift the turret up then set back down aligning the zero mark with the straight line on the bottom ring of the plate.

1. ES2.5-20x50FFP default elevation turret with zero stop. (See Figure 1)
2. If it is not at zero now, you first need to pull out the elevation turret. (See Figure 2)



3. Move to the correct zero position. (See Figure 3)
4. Press down the elevation turret. (See Figure 4)



5. Loosen three hex socket screws counterclockwise. (See Figure 5)
6. Remove the elevation turret. (See Figure 6)



7. Align with the zero position and press down the elevation turret. (See Figure 7)
8. Tighten three hex socket screws clockwise. (See Figure 8)

