

Built to handle the roughest conditions, this compact tactical optic is designed to provide field surveillance and range estimation in a quick handling, lightweight package. The Recon scope offers brilliant optical performance using Vortex's premium XD glass and XR lens coatings.

Using a unique modular design with Picatinny rails, the Recon scope permits almost unlimited options in accessory attachment and hand placement. The attachment clip allows rapid deployment and can be positioned in one of three locations.





### Accessories

#### Included with the Recon Scope

Rain/dust hood

Uni-Daptor tripod adapter

Tripod

Flip cap objective lens caps

Picatinny rail

#### Other accessories available from Vortex Optics

2x Doubler

Low light polarizing filter

killFLASH® ARD

Extra Picatinny rail

Lens cleaning kit

Extra Uni-Daptor base

## Basic Operation

### Adjusting the Image Focus

Use the main focus wheel on the eyepiece to obtain crisp, sharp images of objects at varying distances. Designed for quick single-handed operation, simply place the thumb and forefinger on the focus wheel and turn to move lens forward or backward until the image is as sharp as possible.



*Rotate to focus image*

### Adjusting the Reticle Focus

The reticle focus, located on the eyepiece next to the eyecup, adjusts the sharpness of the reticle. While looking at a blank wall or blue sky, turn the wheel until reticle is as sharp as possible. Once set for a particular user, that user will not need to adjust the reticle focus again.



*Rotate to focus image*

## Adjusting the Eyecup

The heavy duty folding flared rubber eyecup on the Recon is designed to accommodate both eyeglass wearers and non-eyeglass wearers.



- The Recon features a winged eyecup that blocks stray light when fully extended.



- Fold the eyecup down when viewing with eyeglasses.

## Carrying with the Clip

Depending on user preference, the clip can be positioned in several locations. This versatile carrying option allows quick attachment of the Recon to MOLLE webbing, pocket edges, equipment or other field locations.



## Recon Tripod

The Recon comes with an ultra-compact field tripod which may be used to steady the Recon while



observing or ranging small objects. Thread the Recon directly onto the tripod—the flexible legs adapt to a wide range of surfaces.



For added height and a quick-release option, attach the Recon to the tripod with the quick-release Uni-Daptor.

1. Attach the base unit of the Uni-Daptor to the tripod mounting plate.



2. Attach the post unit to the Recon by threading the 1/4x20 stud into tripod socket on the scope.



When not using the tripod, fold the post of the Uni-Daptor alongside the length of the Recon and continue viewing.

## **Accessories**

### **Hand Strap**

The padded handstrap can be positioned on the left or right side of the Recon scope according to the user's preference.



### **Lanyard**

Thread the lanyard on one of the built-in loops of the Recon scope. The lanyard can be worn around the neck, or used as a safety cord when carrying the Recon with its clip.



### **Picatinny Rail**

This allows quick attachment of any accessory using the standard Picatinny rail clamp—attach the rail on either side of the Recon scope.



### **Rain/Dust Hood**

The easy slip-fit design helps keep ocular lenses free of moisture and dust. To attach or detach, simply slide attachment slit over end of clip. The hood can then be pulled off and on over the eyepiece.

### **Case**

The Recon comes with a soft case which may be attached to articles of gear or clothing using MOLLE straps or the built-in belt loop.

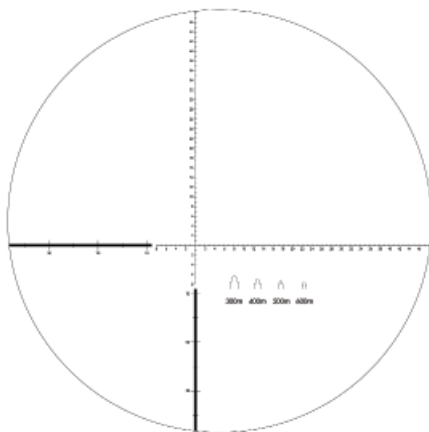
### **Flip Cap Objective Lens Cover**

This objective lens cap adds extra protection with fast flip action.

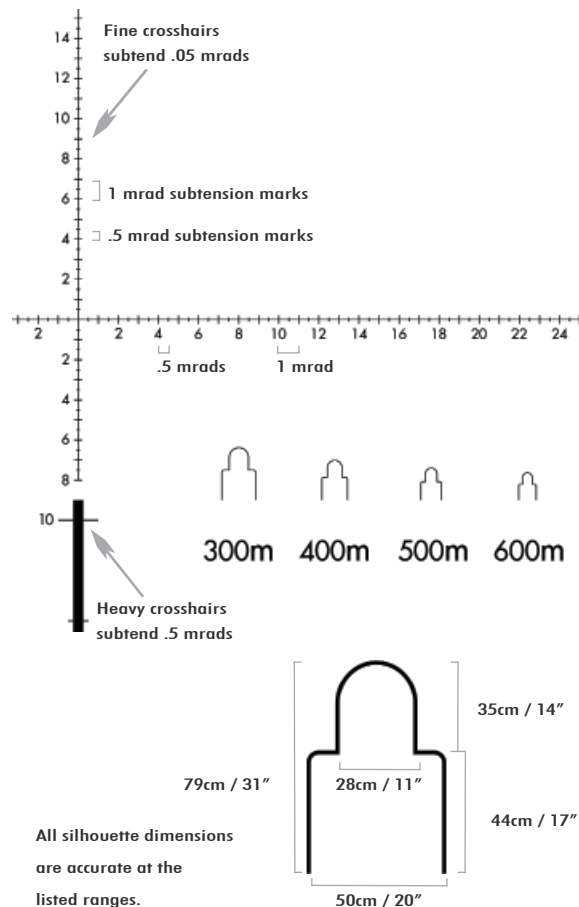


## Using the Recon R/T Reticle

The Recon reticle is based on a form of angular measurement called the milliradian (mrad for short). These angular measurements allow a user to calculate ranges when comparing the reticle to objects of known dimension. The key to effective ranging using this reticle is knowing common objects in your vicinity and their measurements.



The Recon reticle also uses a secondary system of quick ranging based on a human silhouette. See the section on *Quick Ranging with Silhouettes*.



## Precision Ranging with mrad

Mrad measurements are very effective for ranging using simple formulas. Knowing the size of the target or a nearby object is essential to using these formulas.

$$\frac{\text{Target Size (Yards)} \times 1000}{\text{Measured mrad}} = \text{Range (Yards)}$$

$$\frac{\text{Target Size (Inches)} \times 27.8}{\text{Measured mrad}} = \text{Range (Yards)}$$

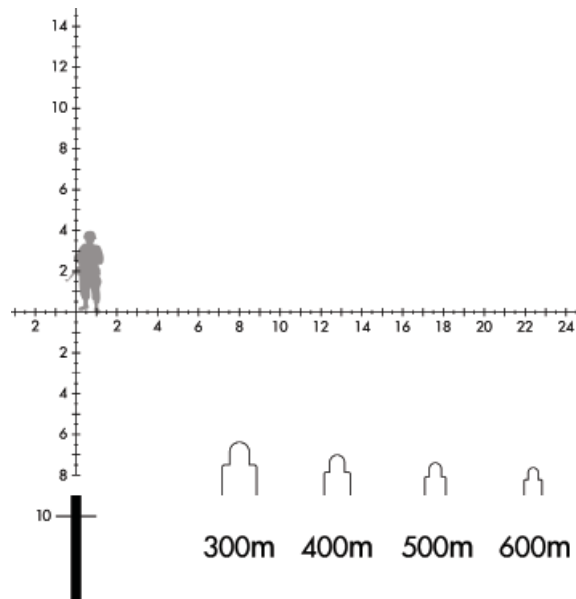
$$\frac{\text{Target Size (Meters)} \times 1000}{\text{Measured mrad}} = \text{Range (Meters)}$$

Be sure reticle is in focus before ranging. Using either the vertical or horizontal mrad scale, place the reticle on the target of known dimension and read the number of mrad spanned. Obtain maximum accuracy in ranging by calculating exact mrad measurements—try to estimate mrad measurement in 1/10s if possible.

The Recon reticle uses both 1 and .5 mrad graduations on the crosshair to help calculate fractions of mrad.

Fine crosshairs subtend .05 mrad.

Accurate measuring will depend on a very steady hold. Be sure to solidly brace the arms when measuring or use a tripod mount for maximum accuracy. Once you have an accurate mrad reading, use one of the formulas to calculate the distance.



*Ranging a 6-foot man (2 yards) at 4 mrad yields 500 yards.*

$$\frac{2 \times 1000}{4 \text{ mrad}} = 500 \text{ Yards}$$

## Quick Ranging with Silhouettes

The human silhouettes used in the Recon reticle are based on an average 20-inch shoulder width and 11-inch head width. To use, simply match the person being ranged to the closest silhouette in shape and read the indicated yardage. As before, best accuracy will be obtained by bracing the arms or using a tripod mount.



Other dimensions of the silhouettes may be used to compare to objects of known dimension to obtain range estimation. In this example, a deer is ranged using the silhouettes. Using a deer's typical back-to-brisket dimension of 17 inches, the 17-inch shoulder height of the silhouettes can be used for quick range estimation.



## Maintenance

### Protect Lenses

The neoprene hood protects the ocular lens from rain and dust when not actively viewing through the Recon. The Recon carry case provides extra protection for the scope.

*If the optics are exposed to moisture, keep the caps off and allow the optics to dry out completely before putting them in the case for storage.*

### Keep Lenses Clean

When cleaning lenses, be sure to use products, like those in Vortex lens cleaning kits, that are specifically designed for 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 things like dried water spots.

### Other cleaning options

*Cleaning fluid and optical paper can also be used. However, you should never use facial tissue, heavy cotton, or flannel clothing on lenses—these materials can scratch the lens surfaces.*



## **Vortex Service and Repair Policy**

### **Unconditional Lifetime Warranty**

Vortex Optics wants you to use your Recon R/T Tactical scope under any conditions with complete confidence—that's why our warranty is straightforward and simple:

- Fully transferable
- No warranty card needed
- No receipt needed



### **Unconditional Lifetime Warranty**

Rest assured, if this scope should ever require repair, all you need to do is contact Vortex for absolutely free service. Call 800-426-0048 or e-mail [service@vortexoptics.com](mailto:service@vortexoptics.com).

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*Patent Pending*

Visit Vortex Optics at [vortexoptics.com](http://vortexoptics.com).

