

## <mark>บบบบ</mark>

# MD1 and MD2

RETICLES

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Specifications provided in this user manual are nominal values only. Tolerance ranges consistent with industry best practices apply.

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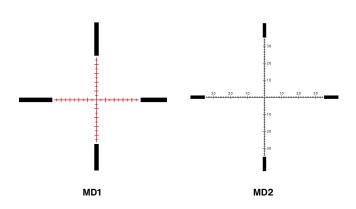
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#### MD1 and MD2 Reticles

Utilizing the popular MIL-DOT style pattern, the MD1 and MD2 were designed to be versatile medium- to long-range reticles. Combined with the resolution and accuracy of the Vudu First Focal Plane (FFP) riflescope, it will allow you to confidently engage targets in nearly any situation.



### First (Front) Focal Plane

First (or Front) Focal Plane riflescopes have the reticle installed at the front of the erector tube, forward of the magnification lens. When the magnification is increased, the reticle increases in proportion to the image you are viewing. As a result, the spacing between the actual reticle marks will always subtend the same distance at any magnification setting. This allows the shooter to quickly and accurately mil, hold over or hold off regardless of the magnification setting.

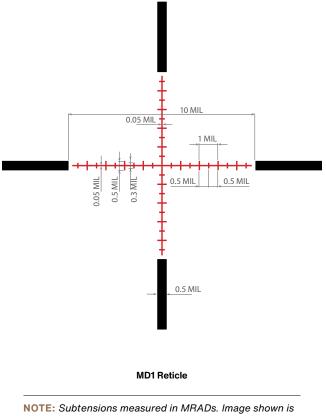
#### **MD1 MRAD Subtensions**

The MD1 reticle is based on the milliradian, or MRAD, angle of measurement. With a known target size, this system allows the shooter to use angle ratios to determine distance of target with reliable accuracy. One MRAD subtends 10cm at 100 meters (3.6" at 100 yards). The 3.5-18 riflescope with MD1 reticle uses 0.1 MRAD per click adjustments that subtend to 1cm at 100 meters (0.36" at 100 yards).

### **MRAD Ranging Formulas**

 $\frac{\text{Target Size (in.)} \times 27.8}{\text{MRAD Reading}} = \text{Range (Yards)}$ 

 $\frac{\text{Target Size (cm)} \times 10}{\text{MRAD Reading}} = \text{Range (Meters)}$ 



for representation only.

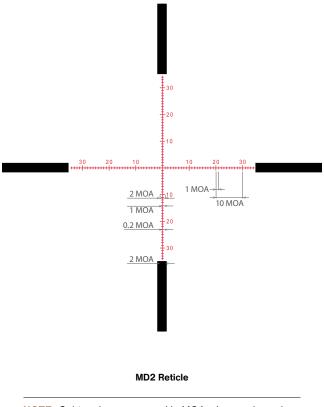
#### **MD2 MOA Subtensions**

The MD2 reticle is based on the Minute of Angle, or MOA, angle of measurement. With a known target size, this system allows the shooter to use angle ratios to determine distance of target with reliable accuracy. One MOA subtends 1 inch (1.047" exactly) at 100 yards. The Vudu 3.5-18 riflescope with MD2 reticle uses 0.25 MOA per click adjustments that subtend to .25" at 100 yards.

### **MOA Ranging Formulas**

Target Size (in.) × 95.5 MOA Reading = Range (Yards)

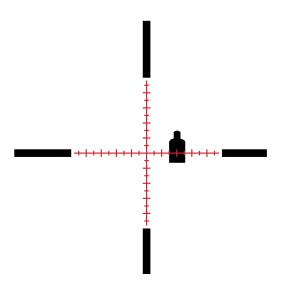
 $\frac{\text{Target Size (cm)} \times 34.83}{\text{MOA Reading}} = \text{Range (Meters)}$ 



**NOTE:** Subtensions measured in MOAs. Image shown is for representation only.

#### **Ranging Example**

You will first need to know the target size before using these formulas. Then, using either the horizontal or vertical crosshairs, place the reticle on target. Hold on the target long enough to make an accurate reading. The more accurate your reading, the better your range estimation will be. It is recommended to estimate to the nearest 0.1 MRAD if possible.



EXAMPLE Ranging an E-type silhouette target (40" tall × 19.5" wide)

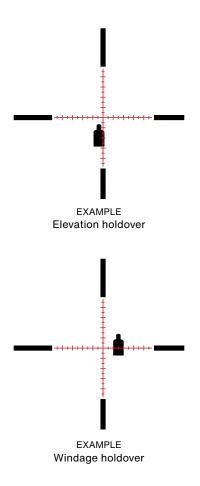
 $\frac{19.5 \text{ in.} \times 27.8}{1.2 \text{ MRAD's}} = 452 \text{ Yards}$ 

#### **Elevation Holdovers**

After the distance has been calculated using the reticle or laser rangefinder, the MD1 and MD2 reticles can be used for holdover to compensate for bullet drop. Note that it may be necessary to aim between hashmarks for the most accurate shot placement. EOTECH recommends shooters create and use a DOPE chart (Data On Previous Engagements) to quickly identify their bullet drop at a given range.

All drops are calculated with a 100 yard zero. EOTECH recommends that shooters create and use a DOPE chart (Data On Previous Engagements) for your specific rifle and ammunition choice to quickly identify bullet drop at a given range. Though several factors determine the exact flight path of the projectile, with ballistic data and practice, the BDC holds can be calibrated for any cartridge.

If the shooter prefers, the elevation dial can also be used to dial in your adjustment to compensate for bullet drop. When using the dial for elevation adjustment, always use the center of the inner dot.



### Service and Repair

- Visit the manufacturer's website at eotechinc.com.
- Navigate to the Help Center to complete the Return Authorization Request Form. EOTECH will provide detailed instructions on how to return your optic for repair.
- Contact EOTECH's Customer Service department by calling 888.EOTHOLO (888.368.4656) or submit a request online at **eotechinc.com**.

**PRO TIP:** Do not ship the sight(s) without a Return Authorization number — this will severely delay the turnaround time on repair or replacement.

### **Contact Information**

# For prompt, professional and friendly service contact EOTECH at:

888.EOTHOLO (888.368.4656) eotechinc.com

#### Shipping Address

EOTECH Warranty and Service Department 1201 E. Ellsworth Road Ann Arbor, Michigan, 48108 USA Reference RA#







Thank you for purchasing an EOTECH Vudu riflescope.

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VD1904 Rev B April 2021