# Swift**Premier** Mil Dot Riflescope

Your new Swift**Premier** Riflescope contains a Mil Dot reticle. This type of reticle is ideal as a range finding device as well as for hold-overs or leads on moving targets.

**INSTRUCTIONS:** To use the Swift Mil Dot reticle as a rangefinder, the magnification adjustment ring must be set to the "M" marking. At this setting, the distance between the dots on the reticle is one mil. At a thousand yards, one mil is equal to 36 inches. At one hundred yards, one mil is one tenth of a yard or 3.6 inches.

Reticle Specification at 100 yards

| | |
|---|---|
| Dot Size | 0.9 inches |
| Space between dots | 3.6 inches |
| Thin Line width | 0.3 inches |
| Thick Line width | 1.6 inches |
| Space between Posts | 4.5 inches |

With the magnification set to "M," look at an object 100 yards away. The dots will be spaced 3.6 inches apart on your target. If you are looking at an object 200 yards away, the dots will be spaced 7.2 inches apart on your target.

Distance vs. the subtending arc at one mil

at 100 yards, one mil covers 3.6 inches
at 200 yards, one mil covers 7.2 inches
at 300 yards, one mil covers 10.8 inches
at 400 yards, one mil covers 14.4 inches
at 500 yards, one mil covers 18.0 inches

To apply this in the field, look through your Swift scope at an object with a known dimension. Measure the known dimension of the object in mils on your Swift Mil Dot reticle. Us the following formula to determine the distance to the object:

$$\frac{\text{Known Dimension in Yards X 1000}}{\text{Known Dimension in Mils (looking through the scope)}} = \text{Distance in Yards to Target}$$

**EXAMPLE:** Looking through the scope, you see a fence post you figure to be 6 feet high (2 yards.) The height of the post on the reticle is 3 mils. Multiply the height of the post in yards by 1000. The result is 2000. Divide the result (2000) by 3 mils. The quotient is the distance of 667 yards to the fence post (target.)

$$\frac{\text{2 Yards X 1000}}{\text{3 Mils}} = \text{667 Yards to Target}$$

# Swift**Premier** Mil Dot Formulas

## Distance in Yards

$$\frac{\text{Known Dimension in Yards}}{\text{\# of mils}} \times 1000 = \text{Yards to Target}$$

$$\frac{\left[\frac{\text{Object size in Inches}}{27.7}\right]}{\text{\# of mils}} \times 1000 = \text{Yards to Target}$$

## Distance in Meters

$$\frac{\text{Known Dimension in Meters}}{\text{\# of mils}} \times 1000 = \text{Meters to Target}$$

$$\frac{\left[\frac{\text{Object size in Inches}}{25.4}\right]}{\text{\# of mils}} \times 1000 = \text{Meters to Target}$$

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