

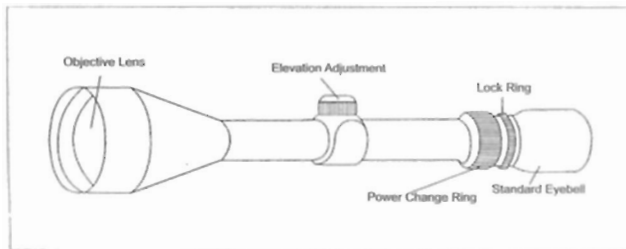


## Extreme Sports Optics

INSTRUCTIONS

Thank you for your purchase of a Mueller Extreme Sports Optics product. It is a pre-checked, multi-coated optical instrument that maintains accuracy and clarity under the most demanding conditions. To ensure the best performance, please read these instructions carefully.

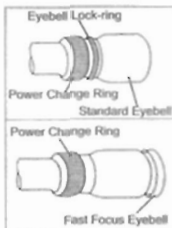
### HOW TO USE YOUR SCOPE



#### EYEPIECE FOCUSING

Hold the scope about three or four inches from your eye and look through the eyepiece at a featureless, flatly lit bright area such as a wall or open sky. If the reticle is not sharply defined instantly, loosen the eyebell lock-ring. Turn the eyepiece (either direction) a few turns. Quickly glance through the scope again. If the focus has improved, but is still not perfect, continue focusing. If the focus condition became worse, turn it the opposite way. When the reticle appears in sharp focus, retighten the lock-ring.

On models equipped with a fast focus eyebell, one only needs to turn the eyebell in or out for adjustment. There is no lock ring with which to be concerned.



**WARNING:** NEVER LOOK AT THE SUN WITH THIS PRODUCT OR EVEN THE NAKED EYE. IT MAY PERMANENTLY DAMAGE YOUR EYES.

#### MOUNTING

To achieve the best accuracy from your rifle, the scope must be mounted properly. Use a high-quality mount with bases designed to fit your particular rifle. The scope should be mounted as low as possible without touching either the barrel or the receiver. Before tightening the mount rings, look through the scope in your normal shooting position. Adjust the scope (either forward or backward) until you find the furthest point forward (to ensure maximum eye relief) that allows you to see a full field of view. Rotate the scope in the rings until the reticle pattern is perpendicular to the bore and the elevation adjustment is on top. Then tighten the mounting screws.

**WARNING:** AVOID OVER-TIGHTENING THE RINGS. THIS CAN DAMAGE THE SCOPE, AFFECTING PERFORMANCE OR RENDERING IT INOPERABLE. THERE SHOULD BE A SLIGHT EVEN GAP BETWEEN THE RINGS AND THE SCOPE. BE SURE THAT THE SCOPE IS MOUNTED FAR ENOUGH FORWARD. ITS REARWARD MOTION MAY INJURE THE SHOOTER WHEN THE RIFLE RECOILS. YOUR SCOPE IS NOT COVERED BY THE WARRANTY IF DAMAGE RESULTS FROM IMPROPER INSTALLATION.

#### **PRE-ZEROING:**

Pre-zero sighting can be done either manually or with a bore sighting collimator. To bore sight manually, open the action of the firearm. If your scope has an adjustable objective, rotate the parallax ring to the 50 yards position. Set variable-power scopes to mid power. With the firearm in a steady rest position, remove the caps from the windage and elevation screws. Adjust the windage and elevation screws to position the reticle on the center of the target. If a large amount of adjustment is required to align the reticle, make approximately one-half of the required windage correction, then approximately one-half of the required elevation correction. Finish by applying the balance of windage and elevation correction.

NOTE: When using windage-adjustable rings, make major windage correction with them. Final adjustment should be made with the scope's internal adjustment system.

#### **ZEROING**

Final sighting-in of your rifle should be done with live ammunition, based on your expected shooting distance.

**DANGER:** If a bore sighting collimator or any other bore obstructing device was used, it must be removed before proceeding. An obstruction can cause serious damage to the gun and possible personal injury to yourself and others nearby.

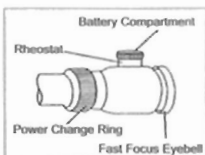
If most of your shots will be at short range, zero-in at 100 yards. But, for long-range shooting at big game, most experienced shooters zero-in about three inches high at 100 yards. Set parallax correctable models to the 100 yards position. Set variable-power scopes to highest power. From a steady rest position, fire three rounds at a target 100 yards away. Observe point of impact on the target and adjust windage and elevation screws as needed to correct aim. Repeat as necessary.

NOTE: Each click of adjustment changes bullet strike at a shooting distance of 100 yards by the amount indicated on the windage and elevation screw dial plates.

**WARNING:** ALL SHOOTING SHOULD BE DONE AT AN APPROVED RANGE OR OTHER SAFE AREA. EYE AND EAR PROTECTION IS RECOMMENDED.

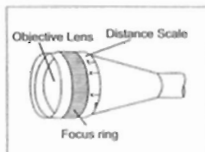
## SCOPES WITH ILLUMINATED RETICLES

If your scope has an illuminated reticle, there are degrees of illumination. The rheostat is located at the top of the eyepiece. The batteries (included with the scope) are coin style lithium batteries. When replacing the used battery, first remove the battery compartment cap on top of the rheostat adjustment turret, then insert a new one "+" side up in the battery housing. When needed, replace battery with a CR2032 or equivalent.



## PARALLAX CORRECTION

To be parallax free, the target must be located at the distance for which the scope is focused. Targets at any other distance will cause parallax, which manifests itself as apparent movement of the reticle against the stationary target. Riflescopes equipped with a focusable objective lens allow for parallax correction at various user-select ranges. To adjust the range setting of the scope, rotate the objective focus ring to the desired distance setting.



**NOTE:** The location of the parallax adjustment may vary between models. The adjustment may be located on the objective, in front of the eyepiece or in the saddle area of the scope.

## MAINTAINING YOUR RIFLESCOPE

Your scope, though amazingly tough, is a precision instrument that deserves reasonable cautious care. Do not attempt to disassemble or clean the scope internally. The external optical surfaces should occasionally be wiped clean with the lens cloth provided or an optical quality lens paper. Keep the protective lens covers in place when the scope is not in use. Remove any external dirt or sand with a soft brush so as to avoid scratching the finish. Wipe the scope with a damp cloth, following with a dry cloth. Then go over the metal portions of the scope with a silicone treated cloth in order to protect the scope against corrosion.

Store the scope in a moisture-free environment. Avoid storing the scope in hot places, such as the passenger compartments of vehicles on hot days. The high temperatures could adversely affect the lubricants and sealants. A vehicle's trunk, a gun cabinet or a closet is preferable. Never leave the scope where direct sunlight can enter either the objective or the eyepiece lens. Damage may result from the concentration (burning glass effect) of the sun's rays.

**WARNING:** UNNECESSARY RUBBING OR USE OF A COARSE CLOTH MAY CAUSE PERMANENT DAMAGE TO LENS COATINGS. DAMAGE RESULTING FROM IMPROPER CARE WILL NOT BE COVERED BY OUR WARRANTY.



Extreme Sports Optics

# How to use the Mueller Mil-Dot Reticle

The MIL in mil dot is a shortening of the term milliradian. We all know that there are 360 degrees in a circle. As the circle grows larger in circumference, the number of degrees does not change, but the distance between each degree along the circle does increase. Degrees are divided into smaller units called minutes. A degree is divided into 60 minutes. At 100 yards distance, the angle of one minute is approximately one inch. So if the centers of the two bullets farthest apart in a 100-yard group are about one inch apart, we call that a minute-of-angle group (or 1moa). One mil of angle is 3.6 inches long at 100 yards. In all Mueller mil dot scopes, the centers of the dots are one mil apart. If the scope is a variable power, this only holds true for the scope being set at 10x-power setting.

If your bullseye is 3.6 inches in diameter and 100 yards away, it will touch the centers of any two dots next to each other. If it appears only half that size through the scope (from the center of one dot to half the distance to the next center) your target must be about 200 yards away. If the same bullseye spans the distance between the centers of three dots (two with an extra dot between them), your target is about 50 yards away.

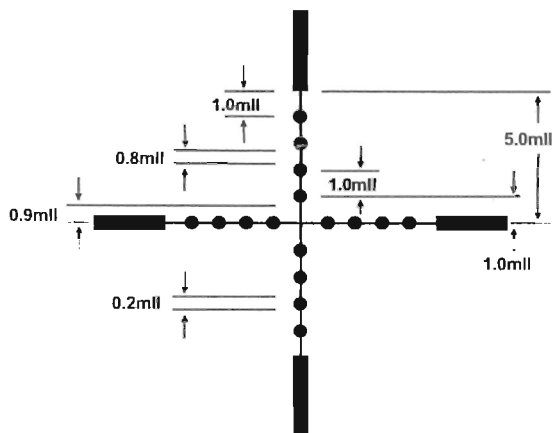
Mil dots are on both the horizontal and vertical crosshairs so height can be measured as well as width through the scopes. Here is one example of how a sniper can determine the distance. A six-foot tall man is also 72 inches tall. At 100 yards, he would appear to be just over 20 mils tall. At 1000 yards, he would be close to 2 mils tall.

Another very practical use of the Mil-Dot reticle is to use the lower dots on the vertical reticle as aiming points for extended yardage. By knowing the distance to the target, a shooter can use the lower dots as reference points to hold over to allow for the falling trajectory of the bullet.

If you are shooting in a crosswind, you can also use the dots as additional aim points to compensate for wind drift. Notice the point of impact in relation to the dots, you can aim off to one side by placing a dot along the

horizontal reticle over the target instead of the crosshairs. By choosing the correct dot, you can easily adjust for how much the point of impact will drift in the wind.

Mueller Mil-dot reticles can only be accurately used for rangefinding when the riflescope magnification is set at 10x.



# Mueller Limited Lifetime Warranty

If at any time during the warranty period a Mueller scope is found to have a defect in material or workmanship, Mueller will, at our discretion, repair or replace it free of charge. The warranty is void if damage results from unauthorized repair, alteration, or misuse. The warranty is transferable and we do not require a registration card to be completed, we only require a copy of the original receipt, which must be from an authorized Mueller Optics dealer. Please be sure when transferring the Scope to another user that a copy of the receipt is also transferred. Mueller reserves the right to replace any product, which has been discontinued from its product line with a new product of comparable value and function. This warranty shall be void if and no force of effect if an Mueller warranty inspector has determined the Mueller product has been abused, misused, mishandled or tampered with in anyway whatsoever. No implied warranty of this product is extended. Some states do not allow limitations of implied warranty so this limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which may vary from state to state. Warranty service products should be returned postage pre-paid to Mueller Optics LLC. When returning products for warranty service include a note explaining the problem, a copy of the purchase receipt and a return shipping address. Return with a check or money order in the amount of \$12.00 to cover handling and return postage and insurance charges. As defined by federal law, this is a limited Warranty.

\*This warranty only applies in the continental United States

\*Should a buyer provide Mueller Optics with a delivery address that is incorrect, the buyer will be held responsible for the item(s).

\*Once an item(s) has been purchased, the item(s) becomes the property of the buyer and Mueller Optics will not give an exchange for that item(s). Even if the item(s) have not been opened.

For warranty service the consumer should send the Mueller Product to the warranty dept of Mueller Optics LLC.

Mueller Optics LLC

Warranty Dept.

P.O. Box 457

Johannesburg, MI 49751



**Extreme Sports Optics**

**THIS WARRANTY IS ONLY VALID FOR THE ENCLOSED PRODUCT.**