

Contents

Know Your Scope	1
How to Install the Scope	3
How to Sight-In	11
Making Precise Windage and Elevation Adjustments	15
What You Should Know About Variable Power Scopes	23
Using the Illuminated Reticle	32
Changing the Battery	34
AIM Means Minimal Maintenance	36
AIM Product Service	39
The Best Consumer Protection in the Business	41
Reticles	42

INSTALLING THE BASE, RINGS, AND SCOPE

Please refer to the instructions included with the base and rings for their proper installation on the firearm.

If necessary, it is safe to position the rear mount ring directly on the exposed threaded area near the eyepiece, but only after focusing the eyepiece. This allows a more forward placement of the scope.

NOTE: *The windage and elevation adjustments on new AIM scopes are centered as part of the assembly process. If you are mounting a scope that was previously mounted on another rifle, you should center the adjustments (please see "Centering Windage and Elevation Adjustments")*

NOTE: *Use care in mounting the Pistol/Scout riflescopes. It is necessary to place the back edge of the rearmost ring at least 3/4" forward of the ocular bell/tube juncture to avoid possible reticle damage. Because of the longer eye relief of this product, mounting the scope back slightly will not in any way impair its function or effectiveness.*

4

COMPLETING THE INSTALLATION

- Without disturbing the optimal eye relief position, rotate the scope until the elevation adjustment dial is at the top of the scope.
- From a firing position, check to be sure that the vertical hair of the reticle aligns with the vertical axis of the firearm. Misalignment will not affect accuracy at moderate distances but it can diminish long range accuracy.
- When you are satisfied, tighten the ring screws evenly and securely.

FOCUSING THE RETICLE

Secure the scope and firearm in a firm rest. Safely point the scope at a light colored background object. With the scope approximately four inches from your eye the reticle should appear sharp and crisp; if it does not, it is necessary to adjust the focus by means of the eyepiece.

Know Your Scope

Riflescopes have become far more sophisticated over the years, but the four most basic parts have remained the same. Workings from front to back are:

- The objective lens (or front lens) is critical to a superior sight picture.
- The internal erector lenses which rights the image.
- The reticle, often referred to as the crosshair, provides the aiming point.
- The ocular lens (or eyepiece lens) works with the other lenses to magnify the image, provide correct eye relief, and make diopter corrections.

HOW SCOPES WORK

As light passes through and beyond the objective lens, the resulting upside down image is sent to the internal lenses. Known as erector lenses, these internal lenses return the image to a right-side-up position. Finally, the ocular lens makes a final enlargement of that image and sends it on to your eye. Your AIM scope was designed, manufactured, and tested to ensure that, when properly mounted and sighted-in on your firearm, you will enjoy exceptional performance. A solid mount is critical to satisfactory performance of your scope. If you have problems or questions, please contact AIM Product Service (see page 40, or 43).

1

ESTABLISHING EYE RELIEF ON RIFLES AND SHOTGUNS

Due to the safety considerations associated with proper eye relief, AIM strongly recommends that you mount your scopes as far forward as possible.

Beyond that, follow these steps:

- With the scope as far forward in the mounts as possible, hold the rifle in your normal shooting position. (Variable power scopes should be set at the highest magnification for this process.)
- Slowly move the scope to the rear just until you can see a full field of view.
- Position your scope here for maximum eye relief.
- Proceed to COMPLETING THE INSTALLATION

NOTE: *To confirm that your scope is mounted in the best possible position, try assuming various positions: kneeling, seated, prone, and aiming both uphill and downhill. Remember that aiming uphill typically reduces eye relief. Wearing hunting/shooting specific clothing is recommended as this may alter eye relief considerations slightly.*

5

If your AIM scope is one of our models with an eyepiece that has a lock ring, follow these simple steps:

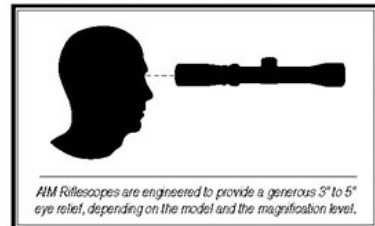
- Grasp the eyepiece with your hand and back it away from the lock ring. Once the lock ring is free from the eyepiece, turn it clockwise away from the eyepiece to keep it out of the way during the adjustment.
- If you tend to hold things away from yourself to see them clearly (you are farsighted) turn the eyepiece counterclockwise a couple of turns. If you hold things close to yourself to see them clearly (you are nearsighted) turn the eyepiece clockwise a couple of turns.
- Looking through the scope when pointed at the sky, take a few quick glances at the reticle. The focus of the reticle should be noticeably different from when you started. Continue this process until the reticle appears clear and sharp.
- When you are satisfied with the image of the reticle, turn the lock ring so that it is resting firmly against the eyepiece.

PART OF THE SCOPE



- | | |
|------------------------|-------------------|
| 1. Objective Lens | 5. Tube |
| 2. Parallax Adjustment | 6. Windage Turret |
| 3. Elevation Turret | 7. Power Ring |
| 4. Illumination Dial | 8. Ocular Lens |

2



WARNING

If a scope is mounted too far to the rear, the eyepiece can injure the shooter's brow. Shooting at an uphill angle also increases this hazard because it shortens the distance between the brow and the rear of the scope. For this reason, AIM scopes are engineered to provide generous eye relief. Therefore, when mounting your scope, we recommend positioning it as far forward in the mounts as possible to take full advantage of this generous eye relief.

6

Focusing your Scope

If your AIM scope is one of our models without an eyepiece lock ring, follow these simple steps:

- All fine focus adjustments are made with the eyepiece.
- Look through the scope with quick glances while focusing the reticle image. If you tend to hold things away from yourself to see them clearly (farsighted) turn the eyepiece ring counter clockwise until the reticle is clear and sharp. If you hold them close to yourself to see them clearly (nearsighted) turn the eyepiece ring clockwise until the reticle is sharp and clear.

If your eyesight changes, readjust the eyepiece. As we age, eyesight normally changes. You may want to check the sharpness of the reticle on your scope every few years to ensure it is still adjusted correctly for your eye.

NOTE: *To protect the integrity of the waterproof seal of every AIM scope, an internal mechanism, prevents the eyepiece from being removed.*

The primary function of a scope is to aim the firearm. Never use the scope as a substitute for binoculars. Never watch another person through the scope.

How to Sight-In

USING A LASER BORE SIGHTER

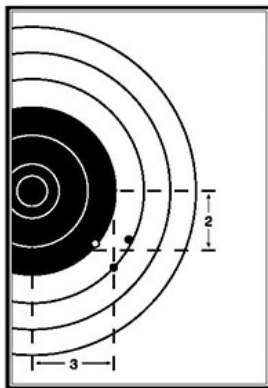
To save time and ammunition, start out in your shop or gun room with a laser bore sighter. Follow the directions included with the bore sighter for specific instructions on its proper use. Remember, when possible, it is better to make the initial windage adjustments to the mount base before using the scope's windage adjustment.

This tool fits any rifle, shotgun, or pistol, and helps you get "on the paper" fast. It works with any optical sight, and can even be used to recheck your zero, without firing a shot. See your AIM Dealer, or visit www.ainsportsinc.com for more information.

Note: Bore-sighting alone is not sufficient to sight-in a scope. You must make final adjustments by shooting the firearm using the same ammunition you use in the field.

11

On the sample target, the center of the group is two inches low and three inches right. Assuming you're sighting in at 100 yards. You should make a 2-MOA adjustment up, and a 3-MOA adjustment left. Your next three shot group should be very close to the center of the target. To learn about making final adjustments, proceed to the upcoming section on windage and elevation adjustments.



14

ADJUSTING WINDAGE AND ELEVATION ON TARGET AND TACTICAL SCOPES

AIM Target, Hunting, and Tactical scopes have micrometer-style windage and elevation adjustments.

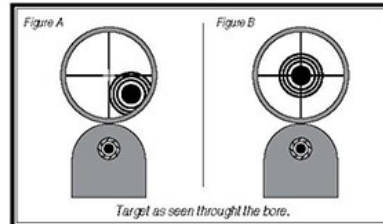


A click for each adjustment division can be both heard and felt so adjustments to the scope can be made without looking at the

TRADITIONAL BORE-SIGHTING (BOLT ACTIONS)

Preliminary sighting can also be accomplished by bore-sighting at the firing range using a target from 20 to 50 yards away.

1. Position the firearm on the bench, using sandbags to steady the firearm.
2. Remove the bolt from the firearm.
3. Looking through the bore itself, move the firearm to center the bull's-eye of the target inside the barrel as shown in Figure A.
4. Hold the rifle steady. With the bull's eye centered when viewed through the bore, make windage and elevation adjustments to the scope until the very center of the reticle is aligned with the bull's eye of the target, as shown in Figure B.



12

Making Precise Windage And Elevation Adjustments

The style of elevation and windage adjustments on AIM rifle scopes varies with specific models. Each, however, is clearly marked in easy to read increments. If, for example, there are four hash marks from zero to (and including) the number one on an adjustment knob, then the value of each increment of adjustment on that knob is 1/4-MOA. It is the same with all AIM adjustment dials. One-MOA moves the point of impact at 100 yards by 1 inch. At 100 meters, it moves 29mm.

The letters found the windage and elevation dials refer to the direction that the point of impact of the bullet is moved when an adjustment is made.

15

BULLET DROP COMPENSATOR DIALS

Special bullet drop compensation (BDC) elevation dials are featured on selected scopes. These dials are calibrated to achieve adjustment to specific distances rapidly by distance indicators marked directly on the dials.

ZEROING THE WINDAGE AND ELEVATION DIALS AFTER SIGHTING IN

All AIM scopes feature adjustment dials that can be repositioned to align the marked zero of the dial with the position indicator without changing the adjustment setting of the scope. This allows the shooter to know the original zero of the rifle in the event that further adjustments are made in the field.

To reposition the dials, place a coin or screwdriver in the slot in the numbered dial and rotate it so that the zero aligns with the stamped line indicator mark on the top of the adjustment screw that is perpendicular to the coin slot.

THE FINAL STEP: THREE-SHOT GROUPS

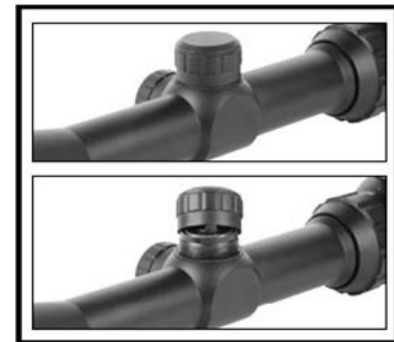
Whichever bore-sighting method you've used, the next steps are the same on the firing range. To ensure reliable results always fire from a rested position when performing these steps. (If you are using an adjustable objective or side focus model scope, perform any correction for parallax before continuing, as explained in "Understanding Parallax" on pages 27-31.)

1. Fire a shot or two.
2. If you are several inches off center, make an appropriate amount of adjustment to move the reticle to the center of the target.
3. Carefully fire a three-shot group.
4. Use the center of that group as a reference point for the final adjustments to windage and elevation.

13

ADJUSTING WINDAGE AND ELEVATION

The adjustment cover is integral to the adjustment mechanism. To make a correction, simply rotate the adjustment cover counterclockwise until it "pops up," fully revealing the adjustment indication markings, and make the appropriate correction. To secure the adjustment cover, push down while tightening the cover.



16



Certain scope models have the ability to manually set the windage and elevation adjustment turrets to "zero" once the shooter determines that they have sighted in the scope for that particular firearm. Scopes that have this capability will have a small mark engraved below the windage and elevation turrets facing the shooter, along with a range of numbers on the turrets themselves starting from the number '0'. To set the turrets to "zero," do the following:

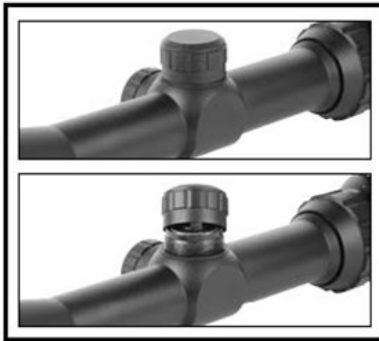
1. When firearm is "sighted in" at the desired distance, note the position of the number on the turret. The turrets should be set on number '0' from the factory.
2. Use a hex wrench to loosen the screw holding the turret cap in place.
3. Turn the cap so that the number '0' is now lined up with the

dials. Indicators on the micrometer portion of the dial show the number of complete 360 degree rotations that have been made.

17

To reposition the dials on scopes:

1. Unscrew the adjustment cover until it "pops up," fully revealing the adjustment indication markings and set screws.
2. Loosen the set screws that surround the top of the dial portion.
3. Move the cylinder dial by hand to align the zero.
4. Secure the set screws.



20

What You Should Know About Variable Power Scope

AIM variable power scopes allow you to select from a range of magnifications to suit your particular rifle, cartridge, and shooting needs.

Warning: Do not loosen the screw in the power selector ring. Doing so will release the internal gas that keeps the scope fog free. Loosening the screw will also disconnect a pin that controls the internal operations, causing other problems that would require factory repairs. Do not lubricate the power selector ring; doing so is unnecessary.

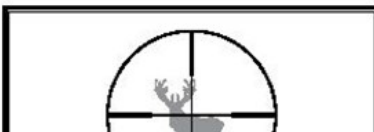
All variable power scopes have a power selector ring in front of the eyepiece assembly. Turn the ring to align the number indicating the desired magnification with the indicator on the body scope.

23

On scopes with this feature, the numbers facing forward show the scope's magnification settings. The numbers facing the back are for ranging and show the distance in yards.

To estimate range, follow these steps:

1. View the target through the scope.
2. When targeting an animal with a body that is 16 inches from backbone to brisket, adjust the power selector until that area of the animal's body fits between the center of the crosshair and the top of the lower heavy post.
3. Read the number on the power selector ring to determine the approximate distance in yards.



To reposition the dials on Target and Tactical models:

1. Loosen the set screws that surround the top of the knob until the cylinder turn freely.
2. Move the cylinder dial by hand to align the zero with the white perpendicular mark at the base of the cylinder.
3. Tighten the set screws until the cylinder is secure.



Target-style dials can be adjusted to the new zero position by loosening the set screws, rotating the dial, and tightening the set screws.

21

Scopes that are equipped with reticles such as the Rangefinder reticle or a BDC (Bullet Drop Compensator) turret allow the shooter to manually set a reference point of impact based on the current trajectory of the bullet. However, it is important to note that scopes that have the rapid ranging reticles or a BDC may require fine tuning to achieve maximum precision. Factors that the shooter must take into consideration when using these features are bullet weight, powder load, ammunition manufacturer, and general shooting conditions.



24

UNDERSTANDING PARALLAX

Parallax is the apparent movement of the target relative to the reticle when you move your eye away from the center point of the eyepiece. It occurs when the image of the target does not fall on the same optical plane as the reticle. This can cause a small shift in the point of aim.

Maximum parallax occurs when your eye is at the very edge of the exit pupil. (Even in this unlikely event, our 4x hunting scope focused for 150 yards has a maximum error of only 8/10ths of an inch at 500 yards.)

At short distance, the parallax effect does not affect accuracy. (Using the same 4x scope at 100 yards, the maximum error is less than 2/10ths of an inch.) It is also good to remember that, as long as you are sighting straight through the middle of the scope, or close to it, parallax will have virtually no effect on accuracy in a hunting situation.

ABOUT FIXED PARALLAX DISTANCE SCOPES

Any fixed focus optical system can be adjusted to be parallax

free. An engraved marker below the turret, as this process for both the windage and elevation turrets.

4. Re-tighten the hex screw on the turret cap to lock it into place. Your scope is now "zeroed" for that firearm.

19

CENTERING WINDAGE AND ELEVATION ADJUSTMENTS TO ACHIEVE OPTIMUM ADJUSTMENT TRAVEL

Making windage and elevation adjustments moves the entire erector system horizontally and vertically inside the scope. If the erector system is off to one side – as a result of having been mounted on a non-adjustable mount – the adjustments won't provide equal travel in all directions. To regain full balanced travel, you must recenter the adjustment as follows:

1. Turn the windage adjustment to the point that it stops moving.
2. Counting the clicks or hash marks, turn it all the way in the other direction.
3. Turn the dial back half the amount of clicks or hash marks counted.
4. Repeat this process for the elevation adjustment.

22

RANGE ESTIMATING SCOPE

Selected AIM scopes have a built in range estimator. This system uses the Duplex portion of the reticle in combination with an additional set of numbers on the power selector ring. (Also see the AIM Range Estimating Reticle Instructions for other reticle types.) In scopes with this feature the space between the top of the thicker post of the Duplex reticle and the center of the reticle covers 16 inches at 200 yards (the size of a White tail buck from backbone to brisket).

NOTE: The Duplex reticle was designed to estimate ranges based on the backbone to brisket dimension of a White tail buck. The distance of other game with a body dimension that is known to be 16 inches (or 32 inches if the measure ment is taken from post to post instead of post to crosshair) may certainly be estimate. It is necessary to know the approximate physical size of your target whenever you estimate range.



25

However, there are exceptions:

1. AIM compact scopes are set to be parallax free at 60 yards.
2. AIM full size scopes are set to be parallax free at 75 yards.
3. AIM Handgun and Tactical 2.5x scopes are set to be parallax free at 100 yards.



Side Parallax Adjustment

THE ADVANTAGE OF ADJUSTABLE



26

The parallax adjustment can be located either at the objective end of the scope or on the side of the adjustment turret housing. The adjustment moves a lens within the scope causing the target image and the reticle to fall on the same optical plane. This ensures optimal accuracy at the distance of the target.

To eliminate parallax in adjustable objective and long range (side focus) scopes, follow these steps:

1. The reticle should be clear (focused) before adjusting the parallax. If it is not, follow the instructions under "Focusing the Reticle." See page 8.
2. With the firearm in a stable position, look through the scope, concentrating on the center aiming point of the reticle.
3. Move your head slightly up and down while turning side parallax or adjustable objective ring until the reticle does not move in relation to the target. Using the numbers on the adjustable objective ring, you can get your parallax adjustments close to the proper setting before assuming a shooting position.

NOTE: Settings may vary slightly per individual preference, air temperature, and atmospheric conditions.

29

Using the Illuminated Reticle

All AIM Illuminated Reticle scopes may be used in either the standard or the illuminated state. When not illuminated, the reticle performs the same as the reticle in a standard AIM scope. Illuminating the reticle allows a better distinction to be made in poorly lighted conditions between the target and the precise position of the aiming point.



The control dial for the AIM Illuminated Reticle is located above the eyepiece.

32

This can be done in two ways:

- a. Grasp the edges of the battery between the thumb and forefinger and lift it free of the dial.
- OR
- b. Turn the scope so that the illumination dial faces downward and gently tap the eyepiece against the edge of your palm.
 3. Insert the new battery, positive (+) side up.
 4. Replace the battery cover on the illumination dial and turn it clockwise until it is secure while holding the sides of the illumination dial to keep the entire dial from turning.

Replacement 3-volt lithium batteries:

Duracell.....D11/3N
Eveready.....2L76
Kodak.....K58L

tree at only one distance. Most AIM scopes are adjusted at the factory to be parallax free at 150 yards.

27

NOTE: The side parallax adjustment knob is not to be used to focus the target image. If the reticle is first focused and the parallax is properly set, the image should be clear.



To adjust the parallax distance, turn the focus ring.

30

To illuminate the reticle:

1. Grasp the illumination dial located at the top of the eyepiece shell.
2. Turn the dial clockwise from the OFF position to the first number indicated on the dial.
3. View the target through the scope to determine if the reticle is bright enough to stand out clearly against the target.

To preserve the life of the battery, always remember to turn the illumination dial to the OFF position when the scope is not in use. For prolonged storage, remove the battery.

If the reticle fails to illuminate or appears dim even on the highest illumination setting, it is necessary to change the battery.

WARNING: Always check to ensure that the firearm is unloaded before changing the battery in the scope.

33

AIM Means Minimal Maintenance

AIM scope lenses are coated to reduce light reflections and light scattering, thus increasing light transmission through the scope. They should be cleaned as carefully as you would a camera lens. Begin by using a lens brush to remove dust and then pure alcohol, high-grade glass cleaner or pure water on a cotton swab.

WINDAGE/ELEVATION ADJUSTMENTS

These adjustments are permanently lubricated. There is no need to lubricate them. Keep the turret caps on, except when adjusting, to keep out dust and dirt. (It's worth noting that, unlike competitive brands, AIM scopes are waterproof even without the caps in place.)

EYEPIECE ADJUSTMENT

This adjustment is permanently lubricated. There is no need to lubricate it. The eyepiece can be rotated as far as it will go in

THE ADVANTAGE OF ADJUSTABLE PARALLAX SETTING SCOPES

Target shooting and varmint hunting demand extreme accuracy. You must have a scope with a parallax adjust dial for precise shooting at various ranges.

28

1. Turn the focus ring counterclockwise (when viewing through the eyepiece) until it stops.
2. Turn the focus ring clockwise until the "10m" mark aligns with the indicator mark on the bell of the scope.
3. From this point, all reading of the focus ring is in numerical order when the ring is turned clockwise from the shooting position.
4. Adjust the ring as you would a standard adjustable objective model.

INSTALLING A LENS ATTACHMENT

Many AIM scopes offer threaded objective and eyepiece rings to allow for the attachment of lens covers and a variety of accessories. These attachments thread directly into the objective or eyepiece rings. Turns until finger tight do not over tighten.

31

Changing the Battery

All AIM Illuminated Reticle scopes use a 3-volt lithium photo battery. See page 32.

To change the battery:

1. Remove the battery cover by grasping its edge (located around the top of the illumination dial) and twisting the cover counter clockwise while holding the sides of the illumination dial to keep the entire dial from turning.
2. Remove the old battery from its position in the center of the dial.



The battery for the AIM Illuminated Reticle is located inside the control dial and can be changed without tools.

34

SEALS

AIM scopes are sealed from within by several methods, including O-rings. All seals are permanent and require no maintenance.

SCOPE EXTERIOR

AIM scopes are made of rugged 6061-T6 aircraft aluminum alloy. No maintenance of any kind is required; simply wipe off any dirt or fingerprints that accumulate with a clean, dry cloth.

POWER SELECTOR RING (ON VARIABLE POWER SCOPE)

No Lubrication is ever required on the power selector ring. Do NOT LOOSEN OR REMOVE THE HEX-HEAD SCREW IN THE POWER SELECTOR RING.

ADJUSTABLE OBJECTIVE/SIDE PARALLAX DIAL

Varta.....CR13N
Sanyo.....CR13N

There may be other lithium batteries that are acceptable with your AIM Illuminated Reticle scope. Check with your local retailer for other options.

35

TROUBLE SHOOTING TIPS

Before you ship a scope back to the factory for service or repair, please check the following items.

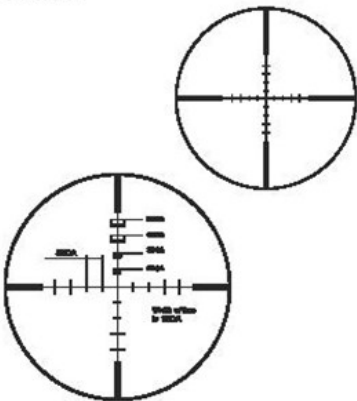
1. Check the mount. Make sure the scope is mounted securely to the rifle. Try, with bare hands only, to gently twist the scope in the rings or see if anything moves when you jiggle it. If there is any movement, re-tighten the mounting system according to mounting instructions.
2. Make sure the action of your rifle is properly bedded in the stock, and that all receiver screws are tight and have been tightened in the sequence recommended by the manufacturer. A loosely fitted stock can cause changes to the point-of-impact.
3. When test firing a rifle to check the point-of-impact relative to windage and elevation adjustments, be sure to fire from a solid bench with sandbags supporting the forearm and buttstock.
4. Be sure to use factory-loaded ammunition of the same bullet type, weight, and preferably, lot number. If one type of ammunition does not shoot well, try another brand or bullet weight.
5. Be certain that both the barrel and chamber are clean. Heavy factory grease or copper fouling in a barrel can diminish the accuracy of the firearm.

38

P4 Sniper Reticle

The P4 Sniper Reticle is designed specifically to enhance a shooter's long range accuracy and ranging capabilities under a variety of field conditions.

1 MOA is equal to one inch at 100 yards, 2 MOA = two inches at 100 yards.



41

WARNING: THE OBJECTIVE LENS SHOULD BE COVERED AT ALL TIMES TO PREVENT DAMAGE TO THE LENS. IT WILL NOT DETACH FROM THE SCOPE AS THERE IS AN INTERNAL LOCK RING.

No lubrication is required.

36

Product or Warranty Service

AIM Product Service

If your AIM scope fails to perform in any way, you may return it directly to the factory for replacement.

CONTACT OUR CUSTOMER SERVICE DEPARTMENT:

Toll Free 1-855-ASK-4AIM
1-855-275-4246

CONTACT OUR CUSTOMER SERVICE DEPARTMENT VIA THE INTERNET:

customerservice@aimsportsinc.com

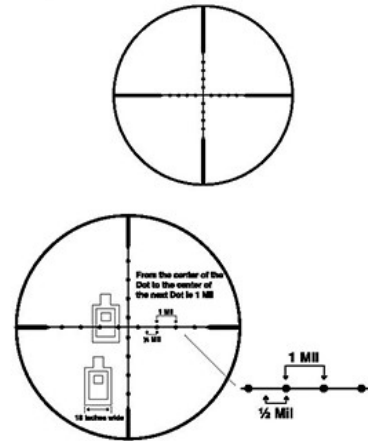
www.aimsportsinc.com

39

37

Mil-dot Reticle

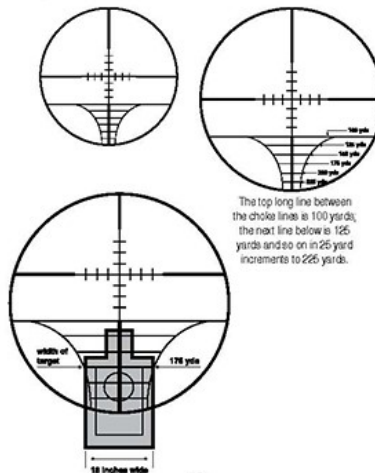
The Mil-dot Reticle is designed specifically to enhance a shooter's long range accuracy and ranging capabilities under a variety of field conditions.



40

Rangefinder Reticle

The Rangefinder Reticle is designed specifically to enhance a shooter's long range accuracy and ranging capabilities under a variety of field conditions.



42

AIM SPORTS INC. WARRANTY

The Aim Sports Inc. Limited Lifetime Warranty covers against defects in materials and workmanship. Aim Sports Inc. will replace or repair defective product(s) upon inspection by our technical staff. Defects or damage from abnormal use, improper storage, unauthorized modifications, unauthorized repair, misuse, neglect, abuse, alteration or improper installation will void the product(s) warranty and eligibility. Limited Lifetime Warranty covers item(s) purchased from an authorized dealer, within the first 90 days of ownership, with proof of receipt purchase (duplications only). Aim Sports Inc. will waive the \$10.00 shipping and handling fee for returned product(s). Returned items over 90 days of ownership or no proof of receipt purchase prior to 90 days, a \$10.00 fee will apply to cover shipping and handling charges. Make checks or money orders payable to: Aim Sports Inc.

RETURNING ITEMS

Before shipping item(s) back to Aim Sports Inc. a Return Authorization Number (RA#) must be obtained by calling Technical Assistance. All return item(s) must be received with RA#. There will be a delay in processing for all item(s) received without RA#.

FOR TECHNICAL ASSISTANCE CONTACT US AT:

Telephone: (866) ASK-4AIM
E-mail: RMA@aimsportsinc.com

WE WILL REPLACE, OR REPAIR ANY DEFECTIVE ITEM THAT IS PURCHASED OR MANUFACTURED BY AIM SPORTS INC.

43