F. ADJUSTING EYEPiece DIoPTER
(Eye Piece Adjustment)

Diopter adjustment provides additional focus adjustment to adapt the scope to your eyesight.

1. Diopter adjustment ring is located at the ocular end of the scope. Point the scope at an uncluttered and light colored background object, such as a white wall. Look through the scope and turn the dial ring clockwise or counterclockwise until the reticle looks the sharpest to you at first glance.

2. Note: Different individuals will have a different eye focus which will result in a different diopter setting. A person will use different diopter settings with or without eye glasses.

G. INSTALLING BATTERY
(For Reticle Intensified Models Only)

1. The battery is housed inside the Red/Green Illumination Rheostat.
2. With one hand, firmly hold the Rheostat’s housing in place while simultaneously unscrewing the battery cap with your other hand.
3. Place the battery within the Illumination Rheostat housing with the + side facing upward.
4. Screw the battery cap back on until tight using the same method in Step 2.

H. ADJUSTING RETICLE ILLUMINATION
(For Reticle Intensified Models Only)

1. For variable power scopes, there is a power ring in front of the eyepiece assembly. To change magnification, turn the ring to align the desired number on the ring with the index dot on the main tube.
2. The lower power provides wider field of view for quick aiming at close range. The higher power is for precise long-range aiming. When the numbers on the ring are not visible under low light condition, turn the ring left to increase the power, turn the ring right to decrease the power.
3. Note: Never loosen the screw in the power ring. Doing so will break the sealed state of the scope and destroy the fogproof feature. The power ring should not be disassembled. Do not try to lubricate it. Any such action will void the warranty.
J. ADJUSTING PARALLAX  
(For Models with Adjustable Objective Only)

| J-1. Front AO Adjustment | J-2. Side Wheel Adjustable Turret (SWAT AO) | J-3. SWAT AO Big Wheel (Optional) |

1. Find the proper type of dial from the images above.
2. Aim the scope at your target.
3. Dial the Parallax Adjustment Ring, Side Wheel or Big Wheel, depending on what is available on your model, to the desired distance setting until the target is in the sharpest focus and the center of the crosshair stays on the target while you examine the image by slightly moving your head.

K. ZEROING

The purpose of zeroing the scope is to ensure that the scope’s reticle is aligned with the point of impact of the rifle and cartridge. Before zeroing the scope, read the following adjustment instructions carefully.

Note: For crossbow scopes with PRO 5 or 4-STEP Reticle & handgun scopes with PDC reticle, please also refer to Section E for more reticle-specific zeroing details.

Note: Each click of adjustment for the windage or elevation knob moves the POI (Point of Impact) by the amount shown in the table below:

| Inches of Movement per Click @ 100 Yards in Windage/Elevation |
|-----------------------------|-----------------------------|-----------------------------|
| 1/2" Per Click | 1/4" Per Click | 1/8" Per Click |
| 25 yds | 1/8" | 1/16" | 1/32" |
| 35 yds | 7/40" | 7/80" | 7/160" |
| 50 yds | 1/4" | 1/8" | 1/16" |
| 100 yds | 1/2" | 1/4" | 1/8" |
| 200 yds | 1" | 1/2" | 1/4" |

Note: Since climatic conditions such as altitude, temperature, wind and rain can affect trajectory, you may experience some deviation in the exact settings during different shooting sessions.

★ K-1. Sniper W/E Operation

For Models with Premium Zero Lockable/Resettable Target Turrets:
1. Both the windage and elevation turrets are set to the locked position out-of-the-box.
2. To unlock the windage and elevation turrets rotate the zero locking rings at the base of the turrets counterclockwise 40-70 degrees until they stop.

Zeroing- Make sure the turrets are unlocked before performing this step if applicable.

Zeroing on a target

1. Using a bore sighter is recommended for initial zeroing
2. Place target at preferred zero distance.
3. Using a steadying device such as a bipod, shooting stand, bench rest, etc. turn on the scope, and if safe to do so, fire a test group at the center of the target.
4. If the POI(Point of Impact) of the test group is exactly in the center of the target then the POI is POA (Point of Aiming) and the scope is zeroed.
5. If the POI is not POA, further adjustments need to be made. Follow the POI directions found on each turret and make the necessary adjustments accordingly to achieve POI is POA and the scope is zeroed.

OPTIONAL: Zero Resetting (For Models with Zero Resettable Turrets)

Important Note: When turning the Zero Resetting Screw loose to disengage W/E. The Zero Locking Ring must be in the locked position. When tightening the Zero Resetting Screw to engage W/E, zero cannot be locked. Scope damage may occur if the steps are not followed.

1. If applicable, once the scope is zeroed and the Zero Locking Rings for both turrets are in the locked position, use the Allen wrench to turn the Zero Resetting Hex Screw 180-360 degrees counterclockwise. This will disengage the turrets.
2. Once the turrets are disengaged, rotating the turret will not produce any adjustment and will have no impact on your zero. Focusing on one turret at a time, reset the “0” markings found on the turrets by slightly pulling up on the turrets until they can freely rotate. Reposition the “0” markings back to the center position indicated by the white dot found on the side of each turret.
3. Once repositioned, unlock the Zero Locking Rings for both turrets and press the turrets down and back into their seated position.
4. Use the Allen Wrench to turn back the Zero Resetting Hex Screw 180-360 degrees clockwise until snug.

OPTIONAL: Zero Locking

1. (For models with Double/Single Lock Turrets)
2. If applicable, once the scope is zeroed, use the small Allen Wrench to lock the turrets back down by turning clockwise ¼ revolution until snug and the turrets can no longer make adjustments. Do not over torque the locking screws as this may damage the turrets. Screw the turret caps back on.
3. (For Models with Zero Lockable Turrets)
4. If applicable, once the scope is zeroed, rotate the Zero Locking Rings found on both turrets clockwise 40-70 degrees until finger tight.
Bubble Leveler Scope Turret Operation:

1. The windage and elevation High Tower Lockable/Resettable turrets use a coin or screw driver to unlock the zero resetting screw at the top of the turret for zero resetting.

2. There are horizontal and vertical hash marks beneath the elevation and windage turret that are easy to see and indicate how many rotations you have dialed in after making adjustments beyond your zero. The bottom edge of the turret will reveal a hash mark each time you have made ½ a rotation when moving up in elevation or to the right in windage and vice versa.

3. The purpose of the internal bubble leveler is to ensure a consistent orientation of the scope during each shot. When optimum accuracy and confidence is a must, you do not want the scope tilted to the left or right of center when taking that critical shot. The scope must have been installed correctly positioned and leveled with the specific application being used in the beginning.

ZEROING

Mount the scope on the application. Make sure the mounting system is tight and set properly, the scope cannot be tilted in any direction whatsoever on the application. Unlock the windage and elevation turrets to allow for adjustments. Unlock the windage and elevation turrets by rotating the Zero Locking Rings at the base of the turrets counterclockwise 40-70 degrees until they stop.

Zeroing on a target

1. Using a bore sighter is recommended for initial zeroing.

2. Place target at preferred zero distance

3. Use the built-in bubble leveler to ensure a consistent orientation of the scope with each shot. Sighting through the scope as though you were going to shoot, make adjustments to the turrets until the crosshair matches with the point of aim (POA) of the bore sighter.

4. Remove your bore sighter and confirm your zero with a live fire test group if safe to do so.

5. If the point of impact (POI) of the test group is exactly in the center of the target then the POI is POA and the scope is zeroed.

6. If the POI is not POA, further adjustments need to be made. Follow the POI directions found on each turret and make the necessary adjustments accordingly to achieve POI is POA and the scope is zeroed.

ZERO RESETTING

Once the scope is zeroed, tighten the locking rings to make sure they are fully locked before proceeding to resetting the zero marker on the windage and elevation turrets.

After zeroing in, the “0” marker may not be facing you at the original center position. You can use the following steps to the reset the “0” marker by rotating the “0” marker to the center position:

1. Use a one coin or screw driver to turn the Zero Resetting Screws on the top of the turrets counterclockwise 180-360 degrees to disengage the W/E turrets. Be sure not to overturn the Zero Resetting Screws. When a turret is “disengaged”, the top portion of the turret will freely spin without making any physical adjustments to your zero.

2. Reposition the “0” marker to the center position.

3. Use a coin or screw driver to gently tighten down the Zero Resetting Screws to complete Zero Resetting.

ZERO LOCKING

1. Both the windage and elevation turrets are set to the locked position out-of-the-box. They must be unlocked first before making any adjustments.

2. To unlock the windage and elevation turrets rotate the Zero Locking Rings at the base of the turrets counterclockwise 40-70 degrees until they stop.

3. After satisfied with your zero, simply rotate the Zero Locking Rings at the base of the turrets clockwise 40-70 degrees until they stop to lock your turrets. Do not over-tighten. When the Zero Locking Rings are tightened, the windage and elevation turrets will not be able to turn, preventing any accidental movement resulting in lose of zero.
1. The Windage and Elevation Adjustment Knobs have a unique 2-stage Tool-free design. The windage/elevation knobs are in the "locked" mode on a new scope out of the factory. Pulling the knobs upward allows for windage/elevation adjustment.

2. ZERO LOCKING (The windage/elevation knobs are in the LOCKED position for a new scope out of the factory.)

When the adjustment knob is pushed down, the knob is "locked" and cannot be rotated. This will prevent any accidental movement to lose zero.

Note: To lock an adjustment knob requires proper gear engagement internally. Before pressing the knob down to lock, use minor force to push to get the feel of resistance. If tough to push down, make very slight rotational adjustment (no clicking) to locate the right position to press down. DO NOT force the lock-down.

ZEROING

Pull up the windage and elevation adjustment knobs to allow for adjustment.

1. Zeroing with a Bore Sighter
   a. Follow the instructions that came with your bore sighter and install it in the muzzle of your rifle lining it up with the scope as close as possible.
   b. Pull the windage/elevation knob out for adjustment.
   c. Sighting through the scope as though you were going to shoot and dial the knobs to make adjustment for the windage or elevation until the crosshair matches the bore sighter.
   d. Push the windage or elevation knob down to lock the zero position.
   e. Remove the bore sighter from the muzzle. You are ready for zeroing the target.

2. Zeroing on the Target
   a. Place a target 100 yards away (35 yards for air gun).
   b. Ideally, use a steadying device such as a shooting stand or bipod, set the scope at highest magnification, aim at the center of the target, fire a test shot, if safe to do so.
   c. If the impact point of the test shot is exactly in the center of the target then the scope is zeroed. If not, you will need to adjust the reticle using the elevation and/or windage adjustment as follows:
   d. Vertical adjustment (Elevation) - Use your fingers to turn the adjusting knob as required. One click in either direction equals approximately 1/2, 1/4 or 1/8 inch at 100 yards depending the model.
   e. Horizontal adjustment (Windage) - Use your fingers to rotate the adjusting knob as required. One click in either direction equals approximately 1/2, 1/4 or 1/8 inch at 100 yards depending the model.
   f. Having adjusted the windage and elevation as required, fire, if safe to do so, another test shot. Keep adjusting and test firing until the test shot hit the target center.
   g. Now the scope should be zeroed. Make sure to lock both elevation and windage knobs.

ZERO RESETING

Once your scope is zeroed, push down both knobs and make sure they are fully locked. The "0" marking may not be facing you at the original center position now. Optionally, you can use the following steps to reset zero by rotating the "0" marking to the center positions:

1. Use the Allen wrench provided to turn both Zero Resetting Hex Screws on the side of the knob counterclockwise for 1 to 2 turns to dis-dial the W/E knobs. When a knob is "dis-engaged", the top cap of the knob can freely spin without reticle movement. (IMPORTANT: Be gentle with the screw movement. Do not over extend the rotation. Stop when the W/E knob is dis-engaged)
2. When the W/E knob is dis-engaged, rotating the knob will not produce any clicking sound and will not affect zero. You can re-position the "0" marking to the center position. (If you get clicks when rotating the W/E knob, the knob was not properly disengaged. You need to go back and re-start from zeroing your scope before you lock zero and do zero-reset again.)
3. Use the Allen wrench to gently tighten down the Zero Resetting Hex Screws to complete Zero Resetting. (If you get clicks while tightening the screw, you will need to go back and re-start from zeroing your scope before you lock zero and do zero-reset again.)


WINDAGE/ELEVATION DIALING INSTRUCTION

K-4. Use a flat head screwdriver to adjust the windage and elevation.
K-5. Apply gentle force on the rim and dial the knob.
K-6. Apply gentle force on the plastic tab and dial the knob.

ZEROING - Unscrew and remove the cap of the adjustment knob. Put the cap away in a safe place.

1. Zeroing with a Bore Sighter
   a. When the turret is ready for adjustment, you will able to dial and have a clear audible click.
   b. Follow the instruction of your bore sighter and install it in the muzzle of your rifle, lining it with the scope as closely as possible.
   c. If applicable, turn on the illumination and set it at your prefered color and brightness.
   d. Sighting through the scope as though you were going to shoot and dial the knobs to make adjustment for the elevation and/or windage until the crosshair matches the bore sighter.

2. Zeroing on a Target
   a. Place a target 100 yards away (35 yards for air gun).
   b. Use a steadying device such as a shooting stand or bipod, set the illumination to your prefer settings, aim at the center of the target and fire a test group shot, if safe to do so.
   c. If the impact point of the test shot is exactly in the center of the target then the scope is zeroed. If not, you will need to adjust the reticle using the elevation and/or windage adjustment as follows:
   d. Having adjusted the elevation and windage as required, fire, if safe to do so, another test group. Keep adjusting and test firing until the test shot hit the target center in an acceptable small grouping.

3. Now the scope should be zeroed. Make sure to replace both elevation and windage knob caps.
**K-7. Lockable W/E Operation**

The Windage and Elevation Adjustment Target Knobs have a unique Locking Screw design. An Allen Wrench is provided with the scope for adjustment.

**WARNING:**

DO NOT over-loosen the locking screws! It may cause the face cover to fall off if screws are backed out too far. If, by mistake, the face lid fell off when you were loosening the screws, please follow instructions below to replace the face cover.

A. Lock both screws down, making sure that they are flush with the surface.

B. Apply a little loctite or similar adhesive on the flat surface of the knob. Make sure that no adhesive gets into the screw holes or onto the screws.

C. Carefully place the face cover back on the knob and align with the locking holes properly. Firmly press the face cover to achieve full contact and wait a few seconds to let the cover adhere to the flat surface of the knob.

**ZERO LOCKING** (The windage/elevation knobs are in the LOCKED position for a new scope out of the factory.)

1. Unscrew and remove the cap of the adjustment knob. Put the cap away in a safe place. Gently dial the knob and test if it is locked. If not, you can skip section ii.

2. To Unlock: Locate the two locking screws as shown on the right. Use the included small Allen wrench to unlock both locking screws by turning them counterclockwise 1/4 revolution.

3. To Lock: Use the included small Allen wrench to fully lock down both screws by turning them clockwise. It is recommended that you gradually lock both screws alternately until they are fully and evenly locked.

**ZEROING** - Unlock the adjustment knob to allow for adjustment.

1. Zeroing with a Bore Sighter
   a. When the turret is ready for adjustment, you will able to dial and have a clear audible click.
   b. Follow the instruction of your bore sighter and install it in the muzzle of your rifle, lining it with the scope as closely as possible.
   c. If applicable, turn on the illumination and set it at your preferred color and brightness.
   d. Sighting through the scope as though you were going to shoot and dial the knobs to make adjustment for the elevation and/or windage until the crosshair matches the bore sighter.

2. Zeroing on a Target
   a. Place a target 100 yards away (35 yards for air gun).
   b. Use a steadying device such as a shooting stand or bipod, set the illumination to your prefer settings, aim at the center of the target and fire a test group shot, if safe to do so.
   c. If the impact point of the test shot is exactly in the center of the target then the scope is zeroed. If not, you will need to adjust the reticle using the elevation and/or windage adjustment. Follow the Point of Impact (POI) direction on the turret to dial the knob accordingly.
   d. Having adjusted the elevation and windage as required, fire, if safe to do so, another test group. Keep adjusting and test firing until the test shot hit the target center in an acceptable small grouping.
   e. Now the scope should be zeroed. Make sure to lock both elevation and windage knobs and replace the knob caps.

**L. REMOVING AND INSTALLING LENS CAPS**

(For Models with Detachable Lens Caps Only)

Lens caps are designed with grooved inner surface to tightly fit over the scope objective and eyepiece.

1. To remove, grab the lens cap firmly and pull it off the scope. Wiggle the cap gently if necessary to help slide it off.

2. To install, align grooves in the cap with the scope surface and gradually push the cap toward the scope until it is completely seated.

**M. INSTALLING SUNSHADE**

(For Models with Detachable Sunshade Only)

1. Remove the lens cap from the objective lens.

2. Unscrew the objective lens thread protector by unscrewing it counterclockwise. (Not all models have a thread protector. Skip this step if not applicable)

3. Screw on the correctly compatible sunshade to the front of the objective lens by threading the sunshade clockwise until tightened and fully secured.

4. Screw the objective lens’s thread protector onto the front of the now installed sunshade. (Skip this step if not applicable)

**N. CARE AND MAINTENANCE**

1. Take care not to drop or knock the scope once it is zeroed.

2. Keep the protective lens covers in place when the scope is not being used.

3. Maintain the metal surface of the scope by removing any dirt or sand with a soft brush so as to avoid scratching the finish.

4. Wipe the lens with a clean flannel cloth to keep it clean and dry. In order to avoid scratching the glass, ensure both the lens and cloth are clean. Do not use finger or finger nail to touch/clean lenses.

5. Store the scope in a cool dry place when not in use. Be careful to avoid contact with acid, alkaline or corrosive chemicals. Remove battery if the scope is being stored away for an extended period of time.

6. Do not attempt to lubricate any part of the scope.

7. Do not disassemble the scope. Any such action will void the warranty.

**CAUTION:** Viewing the sun can cause serious eye injury. Never look directly into the sun with this or any scope.

**O. LIMITED LIFETIME MANUFACTURER’S WARRANTY**

Warranty against material or workmanship defects applies based on the following conditions -

- Product is a firsthand purchase. Evidence in the form of a purchase receipt, invoice, etc. is required for warranty service. Warranty is not transferable.

- Product is not disassembled and the product is not tampered with in any way. Any evidence of such will void the warranty.

- Scope has not been abused, maliciously damaged or treated in a manner not in keeping with the purpose it was designed for.

For warranty service, please contact the scope distributor and provide a written problem description to obtain a Return Authorization Number before returning the product for repair or replacement.
Leapers, Inc., headquartered in Michigan, U.S.A., has been in the business of supplying shooting, hunting and outdoor gear since 1992. We set un-compromised high standards for all of our business operations. Our goal is to provide a total solution for any line of products we offer. We pay close attention to industry trends and customer feedback, with a focus on making the best-in-class niche products available for hunting, shooting and outdoor enthusiasts like you.

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