# USER MANUAL



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RANGE ESTIMATING SCOPE RETICLE INTENSIFIED SCOPE

in the following series



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5TH GEN TM



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#### Leadership Line

Top of the Line Capturing Global Trends Most Current Design Most Advanced Technology

#### Flagship Line

Most Solid, Versatile Features Complete Upgrade from Foundation Best Value for the Money Must-have for Hunting and Shooting

#### **Foundation Line**

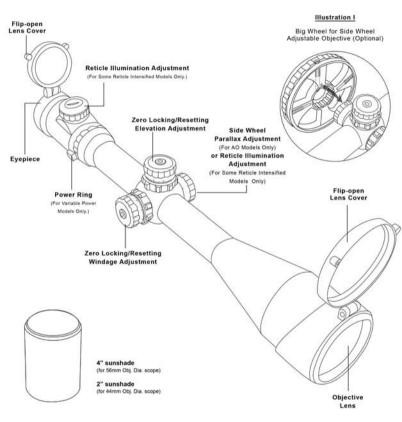
Most Rugged, Practical Mature and Field Proven Unique Features for Unique Requirements



TOTAL SOLUTION TO YOUR NEEDS

# **ACCUSHOT SWAT 30MM**

## RANGE ESTIMATING/ RETICLE INTENSIFIED/ ADJUSTABLE OBJECTIVE SCOPE



#### Major Features:

#### > 30mm Body Tube

- One piece full size body tube allows an extra 20% more light to be transmitted to the eye, making images clearer and better defined in even the dimmest light.
- Wide body allows extra windage and elevation adjustment.
- Precision machined to exact tolerances from aircraft-grade aluminum alloy.
- Completely sealed and nitrogen filled to stop moisture ingress.
- Perfect for all terrains and all weather conditions.

#### One Piece Internal Tube to Provide Solid Lens Element Housing

- Results in far greater rigidity to scope compared to common sectional designs.
- Provides strong and solid housing for lens, protecting and cushioning it to guarantee perfect ocular performance.

#### > SWAT System (Side Wheel Adjustable Turret for Parallax Adjustment - AO Models Only)

- Allows adjustment of parallax without stretching forward and disturbing the natural shooting position, resulting in more accurate shooting.
- Precise control of parallax due to smooth side wheel mechanism, easy to adjust even with gloves on.

#### SWAT System (Side Wheel Adjustable Turret for Illumination Adjustment - Some Reticle Intensified Models Only)

- User friendly third wheel easy-to-access illumination adjustment knob.
- Red / Green illuminated reticle with adjustable intensity provides optimum reticle clarity in variable light conditions, increasing accuracy in daylight and twilight environments.
- Dual Sealed Windage and Elevation Housing with Target Turrets
  - Windage and elevation housing features dual O-ring seals, to eliminate risk of water ingress and fogging, lesser quality scopes have single O-ring sealing.
  - Target Turrets are manufactured with easy to grip rings making adjustments simple even whilst wearing gloves.
- Positive and precise 1/4 or 1/8 (model dependent) MOA for accurate and consistent shooting.

#### Unique Zero Locking and Zero Resetting Features in Windage/Elevation Adjustment

- Creative design to offer most-desired user-friendly functions.
- Easy and repeatable Zero Locking / Resetting provide extra protection and convenience.

#### EBC095 Multi Layer Emerald Bright Coating for Optimum Light Transmission

- Unique EBC095 Emerald Bright Coating applied to all lens elements ensure 95% light transmission factor to optimise optical performance.
  - Multi layer coatings ensure maximum utilization of all ambient light to optimise resolution and clarity.

#### > Precision Tactical Range Estimating(TRE)Mil-Dot Reticle (For Range Estimating Models)

 The precise Tactical Mil-Dot reticle allows the shooter to estimate ranges and thereby enhance accuracy.

#### Quick Aiming Illuminated Duplex Reticle(IDR) (For Duplex Reticle Models)

Duplex reticle with illuminated thin cross-hair in the middle for instant target lock and greatly
enhances shooting accuracy.

#### A. Range Estimating (For Range Estimating Models Only):

Regular mil-dot reticle found on the market usually has 4 dots on each direction of the cross hair, giving you 9 different aiming points for either windage or elevation. If you count the 2 inner tips of the opposite duplex cross hairs, you get 11 aiming points. Our own 24 Mil-Dot Reticle (TRE) has 6 dots on each direction of the cross hair, giving you 13 aiming points or 15 including the inner tips of the duplex cross hairs.

Range estimating requires common knowledge/experience

about your target's actual width or height.

1 mil in a scope reticle is the distance from the center of one dot to the center of the next dot.

Set your scope at the proper power based on the mil-dot card instruction for your scope model.
 View the target through the scope. Place the center of the dot against one edge of the target

and measure to the opposite edge of the target.
 Once the target has been measured in mils, depending on the scope model, a formula is available to estimate the distance of the target. An example is provided below (check the mil-dot card instruction in the scope box for specific formula for your scope model);

Height or Width of Target in Meters x 1000 = Range in Meters (1M = 1.0936 Yards)

- For accurate range estimating the size of the target must be known.
- Each model comes with its own formula and a pre-calculated mil-dot table of most used distance estimates to aid the user.

#### B. Mounting the Scope:

CAUTION: Always ensure your rifle is UNLOADED, UNCOCKED and, where fitted, the safety catch is applied before fitting the scope. Practice safe handling procedures at all times.

- Ensure you have top quality rings from Leapers, buying cheap rings is a false economy
- and can result in poor performance from your combo.

  2. Fit the ring bases to the mount rail of the rifle.
- Remove the top piece of the ring and place the scope on the exposed fitted ring bases. Replace the top piece of the ring and finger tighten.
- Put the rifle to your shoulder in your natural shooting position and adjust the scopes eye relief until you achieve a full field of view.
- When you have found the ideal eye relief rotate the scope so the reticle cross hairs are vertical and perpendicular to the rifle.
- Tighten the screws on the ring to ensure a firm grip on the scope.WARNING: Do not over tighten the screws as you could cause damage to the scope body.
- 7. The scope is now ready to be zeroed.

#### C. Zeroing the Scope:

- The purpose of zeroing the scope is to ensure that the scope is aligned with the impact
  point of the pellet or bullet from the rifle. Before zeroing the scope, read the following
  adjustment knob instructions carefully.
- The Windage and Elevation Adjustment Target Knobs have a unique Resetting Screw design. Allen wrench is provided with the scope for adjustment.

#### 3. ZERO LOCKING

IMPORTANT NOTE: W/E Locking Rings are set at "locked position" for a new scope.

Tighten the Zero Locking Ring by rotating clockwise by 40 - 70 degrees. Do not over-tighten. When the Zero Locking Ring is tightened, the windage or elevation adjustment knob is "locked". The knob will not rotate, preventing any acidental movement to lose zero.

#### 4. ZEROING

Un-lock the adjustment knobs by turning the Zero Locking Ring counter clockwise by 40 - 70 degrees.

Now, Windage/Elevation adjustment knobs can be rotated.

- Place a target 100 yards away. (35 yards for airgun scopes)
- Ideally use a steadying device such as a bipod or shooting
  - stand, set the scope at the highest magnification, aim at the center of the target and fire a test shot, if safe to do so.
- 3) If the impact point of the pellet or bullet is exactly in the center of the target then the scope is zeroed. If it is not, you will need to adjust the reticle using the elevation and/or windage adjusters as follows:
  - a. Vertical Adjustment (Elevation) Use your fingers to turn the adjusting knob as required.
     One click in either direction equals approximately 1/4 or 1/8 inch at 100 yards (check the W/E marking on your scope).
  - b. Horizontal Adjustment (Windage) Use your fingers to rotate the adjusting knob as required. One click in either direction equals approximately 1/4 or 1/8 inch at 100 yards (check the W/E marking on your scope).
- 4) 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 impacts on the center of the target when the reticle is on the center of the target. This is vital for accurate shooting.

Note: Each click of adjustment moves the impact point by the amount shown in the table below:



Zero Resetting - Hex Screw	6	1	
Zero Locking Ring			Elevation/Windage Adjustment Knobs
44			7

of Movement per Click in Windage/Elevation				Inches of Movement per Click in Windage/Elevation						
dels with 1/4 in. Per Click @ 100 Yards				Models with 1/8 in. Per Click @ 100 Yards						
35	yds	50yds	100yds	200yds	25yds	35yds	50yds	1D0yds	200yds	
	1/16	7/80	1/8	1/4	1/2	1/32	7/160	1/16	1/8	1/4

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

#### 5 ZERO RESETTING

Once your scope is zeroed, rotate the Zero Locking Ring to lock zero. 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) Ensure zero is "locked".
- Use the Allen wrench to turn the Zero Resetting Hex Screw by 180-360 degrees to disengage the W/E knobs. (IMPORTANT: Be gentle with the screw movement. Do not over extend the rotation. Stop when met with resistance.)
- 3) 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 dis-engaged. You need to go back and re-start from zeroing your scope.)
- Before tightening the Zero Resetting Hex Screw, turn the Zero Locking Ring counterclockwise by 40-70 degrees to un-lock zero.
- 5) Be careful to keep the W/E knob still now that it is un-locked. Use the Allen wrench to gently tightening down the Zero Resetting Hex Screw to complete Zero Resetting. (If you get clicks while tightening the screw, you will need to go back and re-start from zeroing you scope.)
- 6) IMPORTANT: Rotate the Locking Ring clockwise to lock zero immediately.

IMPORTANT NOTE: When turning the Zero Resetting Screw loose to dis-engage W/E, zero has to be "locked". When tightening the Zero Resetting Screw to engage W/E, zero cannot be locked. Scope damage may occur if the steps are not followed.

#### D. Adjusting Parallax and Focus: (For AO Models Only)

- Aim the scope at your target. Adjust the eyepiece until both the crosshair and the target are in sharpest focus.
- Rotate the Side AO Turret 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.

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

#### E. Installing Sunshade:

Screw on a proper sunshade to the front of the objective.

#### F. Adjusting Reticle Illumination: (For Reticle Intensified Models Only)

Turn the illumination adjustment control to adjust the intensity of illumination. The battery (included with the scope) is a coin style lithium battery. When replacing battery, insert it with the positive (+) side up in the battery compartment.



#### G. 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.
- 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 clean lenses.
- Store the scope in a cool dry place when not in use. Be careful to avoid contact with acid, alkaline or corrosive chemicals.
- 6. Do not attempt to lubricate any part of the scope.
- Do not disassemble the scope. Do not loosen or remove screws or parts. Any such or similar actions will void the warranty.
- 8. Viewing the sun can cause serious eye injury. Never look directly into the sun with any scope.

#### H. Limited Lifetime Manufacturer's Warranty

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

- · Scope was purchased new. Evidence of purchase is required for warranty service.
- Scope was not disassembled, parts / screws not removed or loosened, and the scope was not tampered with in any way. Any evidence of such interference 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.

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