# Bushnell® ENGAGE®

## RIFLESCOPE INSTRUCTION MANUAL

For Models with Capped Adjustments
REN2736DW/ REN3940DW/ REN3950DW/ REN41240DW/ REN61850DW



Congratulations on your choice of a Bushnell Engage riflescope. It is a precision instrument constructed of the finest materials and assembled by highly skilled craftsmen for a lifetime of trouble-free use under the most demanding conditions.

This booklet will help you achieve optimum performance by explaining how to use its various features and how to care for it. Read the instructions carefully before mounting and using your scope.

The photo on the left is a guide to the nomenclature and location of the riflescope parts mentioned throughout this text.

### EYEPIECE FOCUSING

This adjusts the focus so that the reticle (cross hairs) appears sharp to your eyes. All Bushnell riflescopes are focused at the factory for 20/20 or corrected vision. If the reticle appears sharp, no adjustment is needed. If the reticle appears unsharp, adjust as follows.

### **FAST FOCUS EYEPIECE DESIGN**

The eyepiece is designed to provide a precise fast focus. Simply look at a distant object for several seconds without using your scope. Then, shift your vision quickly, looking though the scope at a plain background. Turn the fast-focus eyepiece clockwise or counter clockwise until the reticle pattern is sharp and clear.



WARNING: NEVER LOOK AT THE SUN THROUGH THE RIFLESCOPE (OR ANY OTHER OPTICAL INSTRUMENT). IT MAY PERMANENTLY DAMAGE YOUR EYES.

### **CENTERING THE RETICLE**

The reticle was carefully set at the optical center of your riflescope at our factory. This setting provides you with the ideal adjustment range from the center position. The riflescope's adjustments are used to zero-in the riflescope.

It is wise to check the center of the optical axis before mounting. Do this by placing the scope in a solid V-block (cardboard box with two slots). While looking through the scope in a normal viewing position, carefully rotate the scope. If the target moves in a circle larger than 1" from center (at 25 yards) in relation to intersection of crosshairs, reset windage and elevation adjustments. Remove adjustment caps. Set each adjustment to midpoint and recheck for centering. If reticle still rotates, use adjustments to correct.

### MOUNTING

To achieve the best accuracy from your rifle, your Bushnell scope must be mounted properly. (We strongly recommend that those unfamiliar with proper procedures have the scope mounted by a qualified gunsmith).

Should you decide to mount it yourself:

- 1. 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.
- 2. Carefully follow the instructions packed with the scope mounts you have selected.
- 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.
- 4. Rotate the scope in the rings until the reticle pattern is perpendicular to the bore and the elevation adjustment is on top.

5. Tighten the mounting screws.



WARNING: IF THE SCOPE IS NOT MOUNTED FAR ENOUGH FORWARD, ITS REARWARD MOTION MAY INJURE THE SHOOTER WHEN THE RIFLE RECOILS.

### **BORE SIGHTING**

Bore sighting is a preliminary procedure to achieve proper alignment of the scope with the rifle's bore. It is best done using a Bushnell® Bore Sighter. If a bore sighter is not available, it can be done as follows: Remove the bolt and sight through the gun barrel at a 100 yard target. Then sight through the scope and bring the cross hairs to the same point on the target. Certain mounts have integral windage adjustments and, when bore sighting, these should be used instead of the scope's internal adjustments. If major elevation adjustments are needed, they should be accomplished by shimming the mount base.

## **ZEROING**

Final sighting-in of your rifle should be done with live ammunition, based on your expected shooting distance. 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. Three-shot groups are useful for averaging the point of impact.

### **ELEVATION AND WINDAGE ADJUSTMENT**

Bushnell Engage scopes feature finger-adjustable audible-click elevation and windage adjustments.

- 1. Remove the covers from the Elevation and Windage Adjustments.
- 2. Grasp the Adjustment Bar and turn it in the appropriate "UP" (and/or "L") direction indicated by the arrows. Each "click" or increment on the Adjustment Scale Ring will change bullet impact by 1/4" Minute of Angle. 1/4" MOA corresponds to 1/4 inch at 100 yards, 1/2 inch at 200 yards, 3/4 inch at 300 yards and so on (1/12" at 50 feet for air rifles).

### RESETTING THE ADJUSTMENT SCALE RING

This step is not necessary, but, for future reference, you may want to realign the zero marks on the Adjustment Scale Rings with the index dots.



ELEVATION ADJUSTMENT DIAL

WINDAGE ADJUSTMENT DIAL



- Using a jeweler's screwdriver, loosen the Phillips screw on the Adjustment Scale about 1/2 turn. Take care not to disturb your zero by "losing" a click or two when loosening the screws.
- 2. Rotate the Adjustment Scale Ring (which should now turn freely) to align the "O" with the Index Dot.
- 3. Retighten the screw in the Adjustment Scale and reinstall the Elevation and Windage Adjustment Knobs.

### VARIABLE POWER ADJUSTMENTS

To change magnification, simply rotate the Power Change Ring to align the desired number on the power scale with the index dot.

When still-hunting or stalking game, a variable scope should be set to the lowest power. You then have the widest field of view for quick shots at close range. Higher powers should be reserved for precise long-range shots.



WARNING: A SCOPE SHOULD NEVER BE USED AS A SUBSTITUTE FOR EITHER A BINOCULAR OR SPOTTING SCOPE. IT MAY RESULT IN YOU INADVERTENTLY POINTING THE GUN AT ANOTHER PERSON.

### SIDE FOCUS (PARALLAX ADJUSTMENT)

This feature (on selected high power models only) permits precise focusing, while simultaneously readjusting the parallax-free distance, for any range from 15 yards to infinity. To change range focus, turn the Side Focus Knob and align the estimated distance to the target with the index dot on the scope. An alternative method is to look through the scope and turn the Side Focus Knob until the target, at whatever range, is sharply focused.

### MAINTENANCE

Your Bushnell riflescope, though amazingly tough, is a precision instrument that deserves reasonable cautious care.

 When cleaning the lenses, first blow away any dirt and dust, or use a soft lens brush.
 Fingerprints and lubricants can be wiped off with lens tissue, or a soft clean cotton cloth,
 moistened with lens cleaning fluid.



WARNING: UNNECESSARY RUBBING OR USE OF A COARSE CLOTH MAY CAUSE PERMANENT DAMAGE TO LENS COATINGS.

- 2. All moving parts of the scope are permanently lubricated. Do not try to lubricate them.
- No maintenance is needed on the scope's outer surface, except to occasionally wipe off dirt or fingerprints with a soft cloth.
- 4. Use lens covers whenever convenient.

### **STORAGE**

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.

### THE BUSHNELL DEPLOY™ MOA RETICLE

The Bushnell® Deploy™ MOA reticle is designed for versatility. It has value for hunters, target shooters, devotees of multiple calibers – anyone who is looking for flexibility in an optic. The 0.18 MOA thick crosshairs are easy to see without obstructing the target picture. There are hashmarks at every 1 MOA for accurate elevation holdover. The hashmarks below zero are 2 MOA wide, to aid

in accurate windage holds. With accurate ballistic calculations, the Deploy MOA reticle delivers accurate shots, every time.

### SIGHTING IN / AIMING POINTS

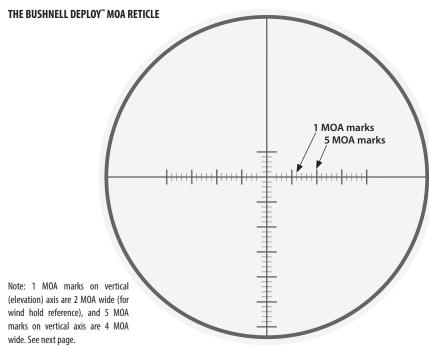
The Deploy reticle is intended to be sighted in at 100 yards, and is calibrated in MOA (minutes of arc). The reticle has wider markings every 5 MOA. The user can sight-in at 100 yds on any magnification setting, but for the Deploy reticle feature (range and windage marks) to function properly, the scope's magnification must be set to the highest power. The correct settings for the different Engage models that include the Deploy reticle are shown in the chart on the right:

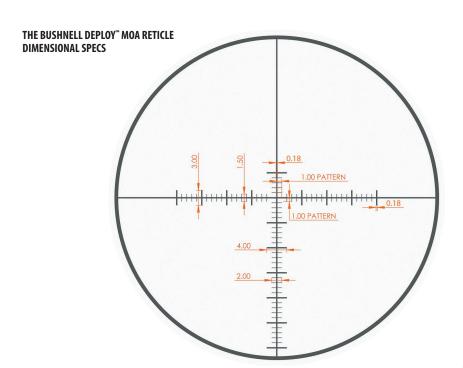
Model	Set to:	
2-7x 36mm	7x	
3-9x 40mm	9x	
3-9x 50mm	9x	
4-12x 40mm	12x	
6-18x 50mm	18x	

### COMPENSATING FOR THE EFFECTS OF WIND / AIMING POINTS

The Deploy MOA reticle also incorporates windage hold points on the horizontal axis in the reticle to aid in compensation for the wind's effect on bullet trajectory. Windage hold marks are spaced at 1 MOA intervals, with heavier marks every 5 MOA. the first few 1 MOA marks on the vertical (elevation) axis are also useful for windage purposes, as each mark is 2 MOA in width. To use the windage hold marks, first determine a range to the target using a Bushnell laser rangefinder. Once the range to target is available, an estimate of wind velocity must be made. The reticle can then be elevated to the correct yardage mark and then moved horizontally into the wind direction using the MOA wind marks on the Deploy reticle in order to compensate for bullet drop and wind drift. Illustrations of the reticle markings are shown on the following pages.

The Deploy reticle is designed to be used with any caliber, bullet weight and velocity. Simply run the ballistics with a known velocity, BC, zero distance and environmental data to get your MOA drop points at various distances.





### BUSHNELL IRONCLAD WARRANTY

Products manufactured on or after April 2017 are covered by the Bushnell Ironclad Warranty. The Ironclad Warranty is a full lifetime warranty that covers the lifetime of this Product. Each Product has a defined lifetime; lifetimes can range from 1 to 30 years. This Product's lifetime can be found at the website listed below and/or on the Bushnell webpage specific to this Product.

We warrant that this Product is free from defects in materials and workmanship and will meet all represented performance standards for the lifetime of this Product. If this Product isn't working properly due to a covered defect, we will, at our option, either repair or replace it and ship it back to you at no charge. This warranty is fully transferrable and does not require a receipt, warranty card, or product registration. This warranty does not cover the following: electronic components; batteries; cosmetic damage; damage caused by failing to properly maintain the product; loss; theft; damage as a result of unauthorized repair, modification, or disassembly; intentional damage, misuse, or abuse; and ordinary wear and tear. This Warranty will be void if the date stamp or other serialization codes have been removed from the Product.

To view the full warranty and find details on how to request service under the warranty, go to our website at www.bushnell. com/warranty. Alternatively, you can request a copy of the warranty by calling us at 1-800-423-3537 or writing to us at one of the following addresses:

IN U.S.A. Send To:IN CANADA Send To:Bushnell Holdings, Inc.Bushnell Holdings, Inc.

Attn.: Repairs Attn.: Repairs

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# Bushnell<sup>®</sup> ENGAGE<sup>™</sup>

For further questions or additional information please contact:

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