Bushnell®



ELITE
4500 4X

RIFLESCOPE OWNER'S GUIDE

Congratulations on your purchase of the Bushnell Elite 4500 4X Riflescope!

The Elite 4500 4X is a precision instrument is constructed from the finest materials and assembled by highly skilled craftsmen. This riflescope has fully multi-coated lenses with high light transmission for optimum clarity, and all exterior lens surfaces have our EXO Barrier™ coating as well. EXO Barrier, quite simply, is the best protective lens coating technology Bushnell has ever developed. Added at the end of the coating process, EXO Barrier molecularly bonds to the lens and fills the microscopic pores in the glass. The result is an ultra-slick coating that repels water, oil, fog, dust and debris - rain, snow, fingerprints and dirt will not stick. EXO Barrier is built to last: the bonded coating will not fade with the passage of time or normal wear and tear.





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

MOUNTING YOUR SCOPE

Your new scope, even with its technologically advanced design and features, will not perform at its best if not properly mounted. One of the most important contributing factors to the precision of your scope and rifle is the selection of the mount and the care with which mounting is done. Dependable mounts that attach your scope solidly to the rifle will reward you with dependability and precision. You should take as much care in selecting a mounting system as you did in selecting your scope.

Remember, not all scopes are compatible with all mounts on all rifles. If there is any doubt in your mind, you should seek the advice of your local retailer or gunsmith.



WARNING: A RIFLESCOPE 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.

PRELIMINARY SCOPE ADJUSTMENTS

Before installing the scope, we recommend you set the diopter adjustment (fast focus eyepiece) to fit your individual eyesight. Refocusing the diopter will result in a sharper reticle focus, an improved optical image, and will help to avoid eye fatigue when using the scope for prolonged periods of time. To refocus, hold the scope about 3 to 4 inches from your eye and point at a flatly lit area such as a monotone painted wall.

Look through the eyepiece and rotate the diopter quickly until a crisp reticle image appears. Then back off of that setting slightly, and look through the scope again. If the reticle appears blurry at first, but then seems sharper, the setting is close, but your eye is still compensating for minor focus error. Continue to make fine adjustments until the reticle appears crisp without delay at your first look. Unless your eyes undergo a significant change over the years, you will not have to make this adjustment again.

Bushnell Elite scopes already have the POA (point of aim) optical center closely aligned with the mechanical center right out of the box. To ensure a reasonable starting point for bore sighting, if you have made any adjustments to the turrets, they should be returned to their original position to make the initial sight-in process quicker and easier. Mounting hardware that affects the POA (for example, a 20 MOA canted base), should be taken into account though.

ATTACHING A MOUNT, RINGS AND SCOPE TO YOUR RIFLE



WARNING: BEFORE BEGINNING THE MOUNTING PROCEDURE, BE SURE THE ACTION IS OPEN, THE CLIP OR MAGAZINE IS REMOVED AND THE CHAMBER IS CLEAR. DO NOT ATTEMPT ANY WORK UNTIL YOUR FIREARM HAS BEEN CLEARED AND DETERMINED TO BE SAFE.



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

In mounting your scope, we recommend that you DO NOT take short cuts as it may lead to damage to either the mounting system or to the scope. Each mounting system will have its own instructions to follow, and it is best to read the instructions first to be sure you understand them and have the necessary tools on hand. If you don't feel 100% comfortable mounting the scope yourself, or don't have the experience or tools, please contact your gun shop or a local qualified pro or friend for help. The mounting process is easy once you've done it a few times, but it can also be easy to do it incorrectly.

We further recommend that you plan to go through the mounting procedure twice. The first time, to be sure everything fits together and functions properly. On the first run through, please keep the following in mind:

- Before attaching the base, clean the mounting holes in the receiver and the threads of the attaching screws with isopropyl alcohol (minimum 90% recommended) to free them of oil or grease.
- If the mount manufacturer has recommended the use of a thread adhesive, do not use it on the first mounting trial. Once adhesive has set, it is difficult to demount if anything needs correction.
- Be sure the mounting screws do not protrude into the receiver or the barrel.
- When using dovetail mounts, do not use the scope as a lever when installing the scope. The initial resistance to turning may cause damage to the scope, and is not covered by the warranty. We recommend using a wooden dowel or metal cylinder to seat the rings.
- Be sure the position of the scope does not interfere with the operation of the action.
- Be sure there is at least 0.3cm of clearance between the edges of the rings and any protruding surfaces such as the turret housing (saddle), power selecting ring, and the flare of the objective bell. Also be sure there is at least 0.3cm of clearance between the objective bell and the barrel.
- You should test position the scope for the proper eye relief. The scope rings should be left loose enough so that the scope will slide easily. Variable power scopes should be set at the highest magnification when performing this procedure. Mount the rifle and look through the scope in your normal shooting position.
- Test position the rifle for the proper cheek weld a number of times to ensure that your scope is positioned properly.
- When you are satisfied that everything is okay, note positions and consider marking with masking tape, demount and start again. This time, seat all screws firmly according to manufacturer reccomended torque values.

FAST FOCUS EYEPIECE

The fast focus eyepiece collar is found on the ocular end of the Elite 4500 4X. Use this adjustment to focus the reticle to your eye. This adjustment will be unique for every individual's eyesight. Once set for your vision, you will not need to change the setting as you move up or down in magnification.

ELEVATION AND WINDAGE TURRETS

All Bushnell Elite riflescopes feature finger-adjustable (no tool needed), elevation and windage adjustments with audible clicks. Each "click" or increment on the adjustment knob or turret will change the bullet's point of impact by 1/4 Minute of Angle. 1-MOA represents 1.047 inch at 100 yards (metric: 29mm at 100 meters). For example, rotating the elevation adjustment by one click will shift the point of impact up or down (relative to the center of the reticle) by approximately 1/4" at 100 yards, 1/2" at 200 yards, 3/4" at 300 yards, etc. (for 1/8-MOA value models, each click=1/8" @ 100 yds, 1/4" @ 200 yds, etc.)

To adjust the windage or elevation on your Elite riflescope:

- 1. Unscrew the protective cap from the adjustment knob or turret.
- 2. On the elevation adjustment, the "UP" direction (counterclockwise) is indicated with an arrow (to move the reticle plane DOWN, turn it clockwise). On the windage adjustment, the "RIGHT" direction is indicated (turn clockwise for LEFT adjustment).

RESETTING THE ADJUSTMENT SCALE (REALIGN TO ZERO)

At your option, for easier reference, you may want to realign the zero mark on the adjustment dial(s) with the index dot or line once you have the scope zeroed in accurately.









ZERO RESET STEPS

Pull the adjustment dial away from the turret and rotate it so that "0" will be aligned with the vertical index line on the turret.

VARIABLE POWER ADJUSTMENTS

To change magnification, simply rotate the Power Selector 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.

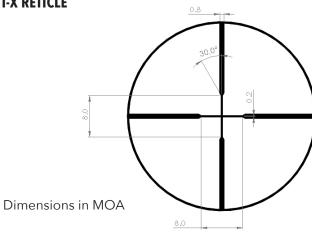
WARNING: A scope should never be used as a substitute for either a binocular or spotting scope. It may result in your inadvertently pointing the gun at another person.

SIDE FOCUS

You may have noticed that placing your eye at different positions behind the scope's eyepiece causes the reticle crosshairs to appear to move around to different points on your target. This is called "parallax error" (target and reticle are not in the same focal plane), and it becomes more noticeable (and more of a problem) at shorter distances and/or when the scope is set to higher powers.

This Elite 4500 4X riflescope (REL4165BS3) has an adjustment for parallax compensation, which works by moving an internal optical element until the target (based on its distance) appears in the same plane of focus as the reticle. To adjust the parallax setting of your scope, start by lining up the estimated distance (marked on the side focus knob) to your target with the index line on the body of the scope. If the target image is clear, your parallax is set. If the target image appears out of focus, turn the side focus knob in either direction until a clear image is achieved. After you've set the side focus, you can double check it by moving your head around from side to side behind the eyepiece-the point of aim should not shift if the side focus is accorrectly set.

MULTI-X RETICLE



EXO BARRIER

All exterior lens surfaces have our EXO BarrierTM coating (in addition to full multi-coatings). EXO Barrier, quite simply, is the best protective lens coating technology Bushnell has ever developed. Added at the end of the coating process, EXO Barrier molecularly bonds to the lens and fills the microscopic pores in the glass. The result is an ultra-slick coating that repels water, oil, fog, dust, and debris; rain, snow, fingerprints, and dirt will not stick. EXO Barrier is built to last: the bonded coating will not fade with the passage of time or normal wear and tear.



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

MAINTENANCE

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

- When cleaning the lenses, first blow away any dry dirt and dust, or use a soft lens brush. Fingerprints and lubricants can be wiped off with lens tissue, or a soft clean cloth, moistened with lens cleaning fluid.
- All moving parts of the scope are permanently lubricated. Do not try to lubricate them.
- Little to no maintenance is needed for the scope's outer surface. There are a couple of black-oxide carbon steel screws used to fasten the throw-lever. If the scope is exposed to water, consider applying a thin film of typical firearm oil to these screws during routine firearm maintenance to mitigate corrosion.
- Use lens covers whenever it is convenient.

ALTITUDE AND TEMPERATURE

Ballistic charts published by ammunition manufacturers are based upon standard sea level conditions. When sighting in, it is well to keep in mind that altitude and temperature affect trajectory. It is best to sight-in under the same conditions in which you will be hunting.

CARING FOR YOUR RIFLESCOPE

Your scope needs very little maintenance. Exterior metal surfaces should be kept clean. A light dusting with a slightly dampened soft cloth is enough in most cases.

Your new scope features windage and elevation turrets that are completely sealed against water intrusion. However, we recommend that you keep the windage and elevation caps on the turrets, except when making adjustments, to prevent dust and dirt from collecting in the turret area.

We also recommend that lens covers be kept in place when the scope is not being used. Lenses should be inspected regularly and kept clean at all times. Dust, dirt, and fingerprints that collect on the lens surfaces will severely degrade image quality, and if left unclean for long periods, the anti-reflection coating could be damaged. Although lens cleaning is not difficult, it does require care and some patience.

- Start with a lens brush or a small, soft bristle paintbrush. Gently whisk away loose dirt particles.
- Next, use an ear syringe or bulb aspirator (available in most drug stores) to blow remaining dirt or dust from lens surfaces.
- If further cleaning is needed, use a dry, soft lint-free cloth. Very gently wipe the lens, starting at the center using a circular motion, then working outward to the edge.
- If this has not corrected the problem repeat the process using condensation from your breath.

STORAGE

Avoid storing the scope in hot places, such as the passenger compartment of a vehicle on a hot day. The high temperature 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.

DO YOU NEED TO SEND YOUR SCOPE TO US?

Before returning your scope for service, you should check the following points to make sure the problem is with the scope:

- Check the mounting system and rings for looseness or misalignment.
- Check to be sure the barrel and action are properly bedded and all receiver screws are tight.
- Check to be sure the mounting system allows sufficient clearance between the objective bell and the barrel.
- Check to be sure you are using the same type and weight ammunition that you used for sighting-in.

Technical Specifications

SKU	Mag x Obj. Diam.	Reticle	Turrets	Elev. Travel (MOA)	Travel per Rev (MOA)	Tube Diameter (mm)	Min. Parallax (Yards)	Eye Relief, Max Mag.	Field of View @ 100 Yds (Ft)	Length (in)	Weight (oz)
REL1424BS3	1-4x24	Multi-X	Exposed, Capped	120/120	15	30	50	4.4"	88'@1X - 26'@4X	9.5	15.5
REL2104BS3	2.5-10x40	Multi-X	Exposed, Capped	80/80	15	30	50	4.3"	38'@2.5X - 10'@10X	13.1	19.7
REL4165BS3	4-16x50	Multi-X	Exposed, Capped	70/70	15	30	50	4.3"	25'@4X - 6.2'@16X	14.1	20





COVERAGE YOU CAN COUNT ON

All Bushnell products are engineered to deliver to your expectation and manufactured to withstand the rigors of the outdoors for the lifetime of the product. In the event that our product fails you, we will stand behind it and repair it at no cost to you. If we can't repair it then we will replace it with a product of equal or better value. No receipt required and fully transferable.

All Bushnell® products carry a product lifetime warranty against defects in workmanship or materials. Product lifetime is defined as 30 years for riflescopes, 20 years for binoculars and spotting scopes, 5 years for electro-optics (laser rangefinders, red dot sights, reflex sights, speed gun radars, night vision, GPS) and electronic components (illuminated reticles) and 2 years for trail cams. Coverage period start date is determined by proof of purchase or manufacturing date of the product. This warranty does not cover 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, misuses, or abuse. This Warranty will be void if the date stamp or other serialization codes have been removed from the Product. We may replace your product with a product of equal or better physical condition.

To view the full warranty and download the details of the warranty, click this link: https://www.bushnell.com/bu-warranty.html
To submit a repair request or check the status of a repair ticket: https://service.bushnell.com/s/

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:
Bushnell Holdings, Inc.
Attn.: Repairs
9200 Cody
Overland Park, Kansas 66214

IN CANADA Send To: Bushnell Holdings, Inc. Attn.: Repairs 140 Great Gulf Drive, Unit B Vaughan, Ontario L4K 5W1 Canada

For products purchased outside the United States or Canada, please contact your local dealer for applicable warranty information.

This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

We warrant that during the warranty period, with proper use and care, the product will be free from defects in materials and workmanship and will meet represented performance standards as defined by the warrantor in its sole discretion.

The remedies described herein are your sole and exclusive remedies and our entire liability for any breach of this warranty. Our liability shall under no circumstances exceed the actual amount paid by you for the defective product, nor shall we under any circumstances be liable for any consequential, incidental, special or punitive damages or losses, whether direct or indirect.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Our responsibility for defective goods is limited to repair or replacement as described in this warranty statement.

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