LEUPOLD®

BX-4 RANGE HD™

TRUE BALLISTIC RANGE/WIND 10x42 RANGEFINDING BINOCULAR

Complete Operating Instructions

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A newer version of this manual may be available for download at Leupold.com.

Please take a few minutes to register your product at leupold.com/register.

BX-4 RANGE HD TRUE BALLISTIC RANGE/WIND (TBR/W) 10X42 RANGEFINDING BINOCULAR

This guide will help you set up your Leupold laser rangefinding binocular to match your vision requirements and rangefinding preferences.

FEATURES AT A GLANCE

- Elite Optical System
- True Ballistic Range/Wind (TBR/W) Technology
- DNA Engine
- Red OLED display
- Extra-low dispersion glass
- Twist-up eyecups
- Lightweight magnesium alloy body
- CR2 battery
- Right/Left programmable power button

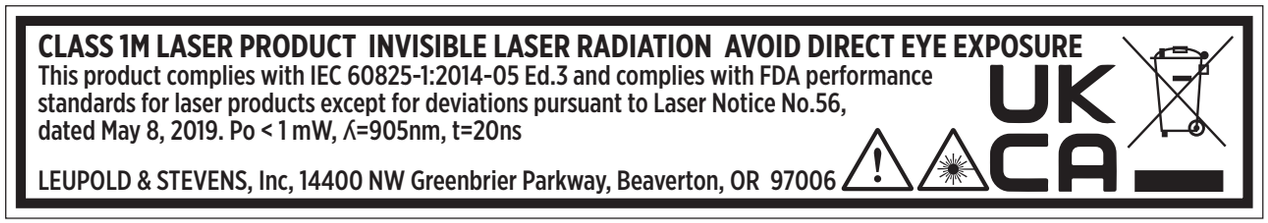
SAFETY AND OPERATION PRECAUTIONS

The Leupold BX-4 Range HD TBR/W 10x42 employs an eye-safe IEC Class 1M laser. There are a few precautions that are important to remember:

- Do not press the power button while aiming at a human eye.
- Do not look at the sun through the binocular. Eye damage may occur.
- Do not leave the BX-4 Range HD TBR/W within the reach of small children.
- Do not take this product apart. The electronics inside may cause an electric shock.
- Do not attempt to use any power source other than a CR2 battery — the BX-4 Range HD TBR/W is designed to prohibit accessing any other external power supply.
- Read this instruction manual in its entirety before using this rangefinding binocular. If the product is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

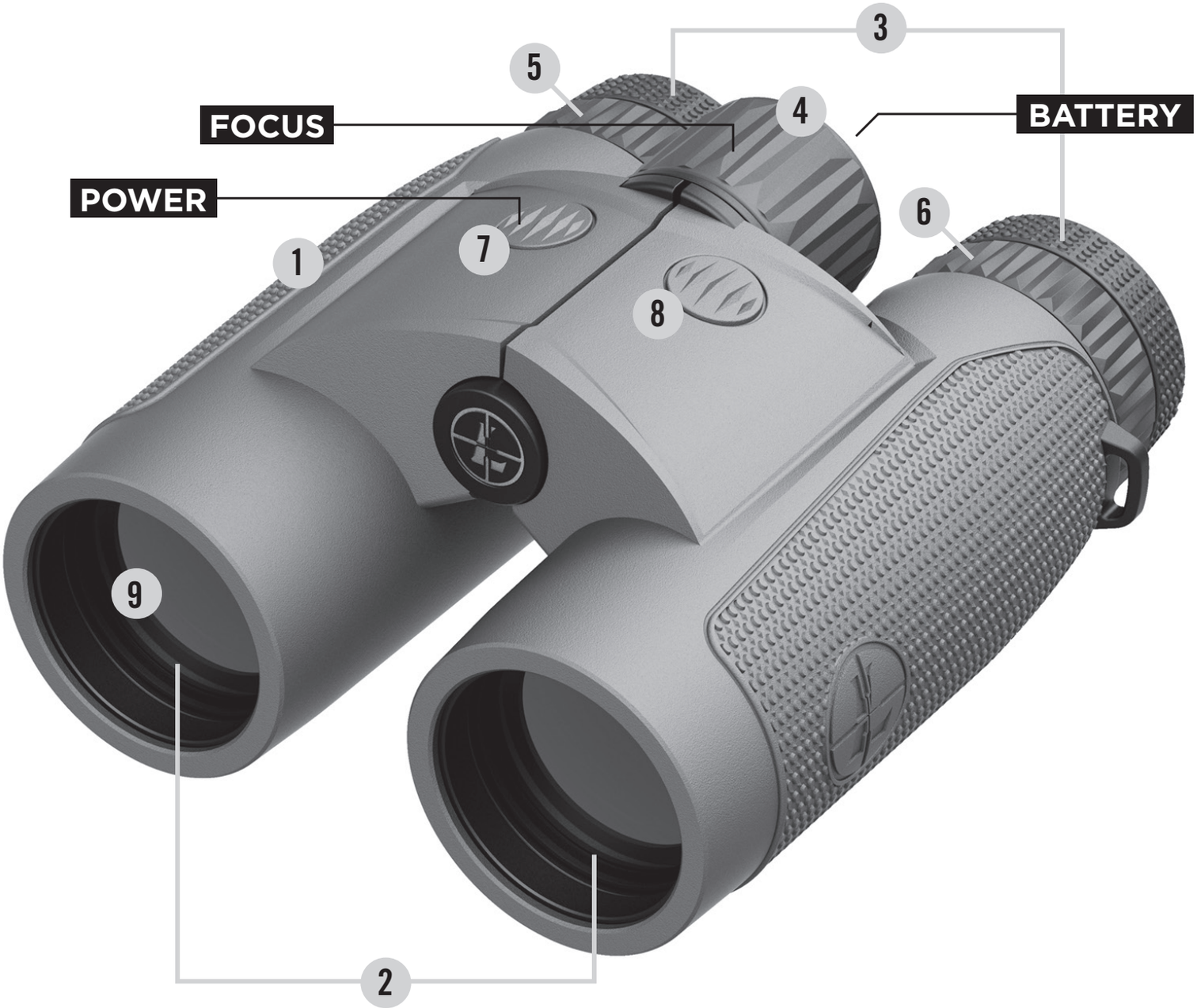
  CAUTION: *Use of product or adjustments of procedures other than those specified herein may result in hazardous laser exposure.*

- When you see the display through the eyepiece, please be aware that the product is active and emitting an invisible laser, and the laser aperture should not be pointed toward anyone.



BX-4 RANGE HD TBR/W

1. Rubber-armored magnesium alloy body
2. Objective lenses with extra-low dispersion glass
3. Twist-up eyecups
4. Center focus dial and CR2 battery compartment
5. Right barrel diopter (focuses the display)
6. Left barrel diopter
7. Right button—Power/ranging/toggle settings (reversible for left-handed users)
8. Left button—Mode/menu/navigation/selection
9. Laser transmitter (right objective)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HOW THE BX-4 RANGE HD TBR/W WORKS

The BX-4 Range HD TBR/W is a premium 10x42 rangefinding binocular that utilizes a state-of-the-art laser rangefinder capable of measuring the distance of a deer-sized animal from 7 yards to 1,100 yards, trees from 7 yards to 1,600 yards, and reflective targets from 7 yards to 2,600 yards. It emits a series of invisible infrared pulses that are then reflected off the selected target back to the BX-4 Range HD TBR/W. The DNA engine calculates the distance by measuring the time it takes for each pulse to travel from the BX-4 Range HD TBR/W to the object and back.

TBR/W EXPLAINED

True Ballistic Range with Wind (TBR/W) combines an IR laser transmitter/receiver, positional sensors, and ballistics programming. The result is distance measurements accurate to less than half an MOA (at 600 yards), no matter the angle at which the laser is fired. Bullets travel in a ballistic arc, yet conventional rangefinders only provide a linear or horizontal distance to your target. TBR/W delivers the ballistic equivalent range to the target, accounting for the effects of inclines or declines on the path of your bullet. TBR eliminates any potentially significant error and provides a precise range for your

aiming calculations. TBR/W is matched to 25 different ballistics groups, allowing use with most firearms.

ADJUSTING INTERPUPILLARY DISTANCE

The interpupillary distance is the distance between the center of your eyes. To ensure a clear, single image, the binocular must be set so that the center of each eyepiece lens is the same distance apart as your pupils. To set the interpupillary distance:

1. Hold the binocular up to your eyes in the normal manner.
2. Look through the binocular with both eyes open.
3. Move the two barrels (halves) up or down until you see a single, circular image.

   NOTE: *Any misalignment of the interpupillary distance may result in incomplete display visibility.*

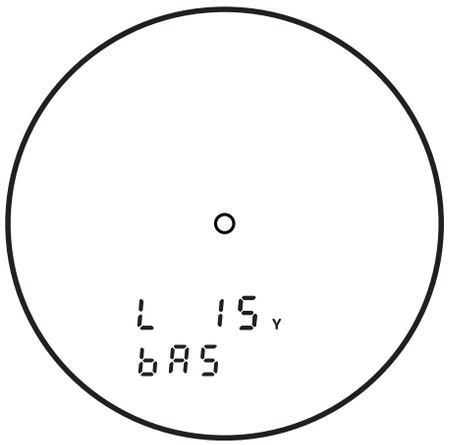
SETTING THE DIOPTER ADJUSTMENT

The diopter adjustment allows you to focus the binocular to your eyesight. This is important, as a properly focused binocular will prevent eye strain and provide you with a crisp, sharp image.

NOTE: *With the addition of a display in the BX-4 Range HD TBR/W, there are diopter adjustments on each barrel along with the center focus dial. The battery will need to be installed to properly focus the OLED display and set the diopters.*

TO SET THE DIOPTER ADJUSTMENT

1. View an object about 100 yards in the distance.
2. Cover the left objective lens with your hand or lens cover.
3. Press the right button to turn on the display. Adjust the right diopter adjustment until the OLED display is in focus.
4. With the left objective lens still covered, adjust the center focus dial until the right image is in focus.
5. Uncover the left objective lens and cover the right objective lens with your hand or lens cover.
6. Adjust the left diopter adjustment until the image is in focus. Your rangefinding binocular is now focused for your eyesight. To make any adjustments in the field, simply turn the center focus dial while viewing through both barrels.



DEFAULT DISPLAY AS SEEN THROUGH THE BX-4 RANGE HD TBR/W

The upper row indicates your load group. The lower row indicates the TBR output setting.

RANGING

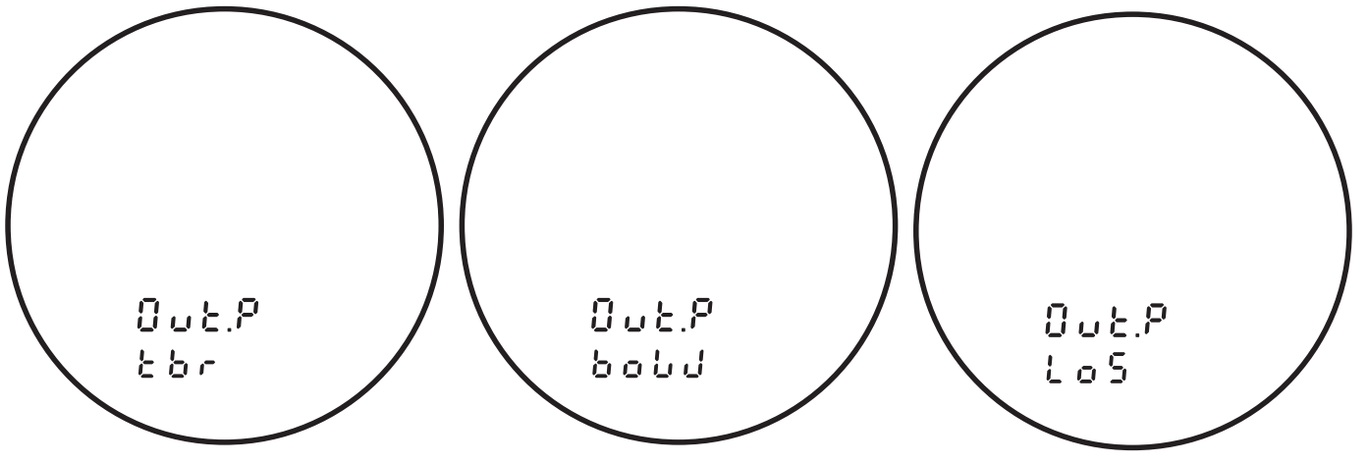
Press and release the right button to power on. While viewing an object, press and release the right button a second time to get a single measurement. The BX-4 Range HD TBR/W can also be operated in scan mode. Once the unit is powered on, press and hold the right button. The unit will continue to range until the button is released. For modes that have hold values, measurements will be displayed once the button is released. The BX-4 Range HD TBR/W comes with three different output modes, which are line-of-sight (LOS), True Ballistic Range (TBR), and bow (BOW) mode.

NAVIGATING THE MENU

To begin navigating through the menu options, first press and release the right button to turn on the rangefinder, then hold down the left button for about two seconds. “Out.P” (output) will be shown in the upper portion of the display. The lower portion of the display will show the selected output mode: TBR, BOW, or LOS.

FUNCTION 1: TBR, BOW, OR LOS

To activate TBR, BOW, or LOS, turn on the BX-4 Range HD TBR/W by pressing the right button, then press the left button and release it after about two seconds to enter the menu. While “Out.P” is shown in the display, press and release the right button to rotate through TBR, BOW, and LOS modes. Once the desired mode is displayed, press the left button to advance through the menu or press and hold to exit menu setup.

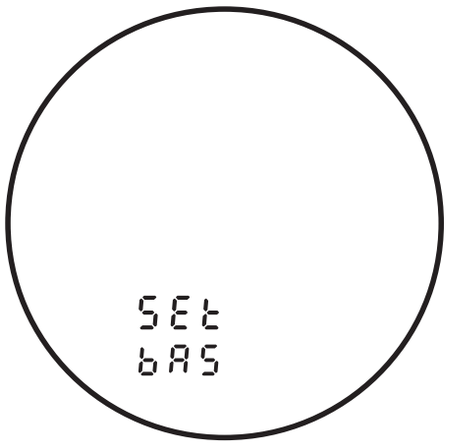


TBR Display BOW Display LOS Display

FUNCTION 2: TRUE BALLISTIC RANGE (TBR) FOR RIFLE USERS

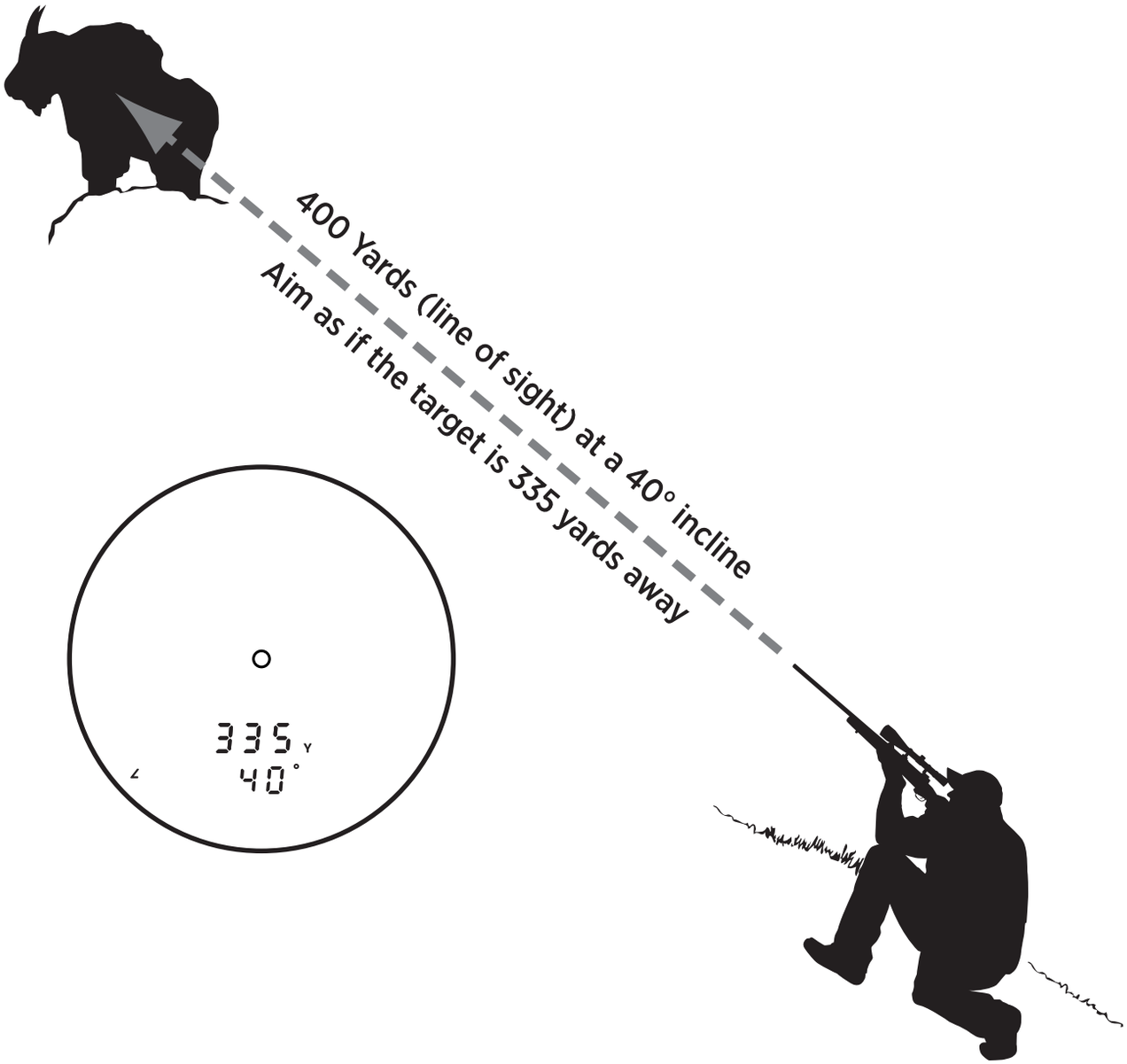
TBR calculates the equivalent horizontal range (level fire range) from which you can determine the correct aim for the conditions. For example, if you are shooting a .270 caliber 130-grain bullet at 3,050 feet per second up a 40° incline at 400 yards, direct line of sight, the TBR output will be 335 yards.

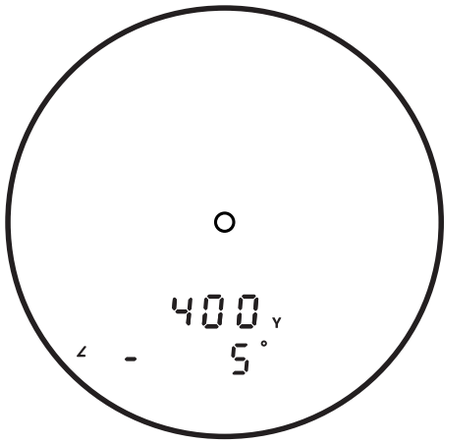
For rifle users, scope adjustment or holdover information can also be displayed. TBR mode is comprised of five functions: BAS, MIL, HOLD, MOA, and TRIG. One of these modes must be selected before choosing your ballistic group in Function 3. The available functions are described on pages 14-16. TBR is effective to 800 yards.



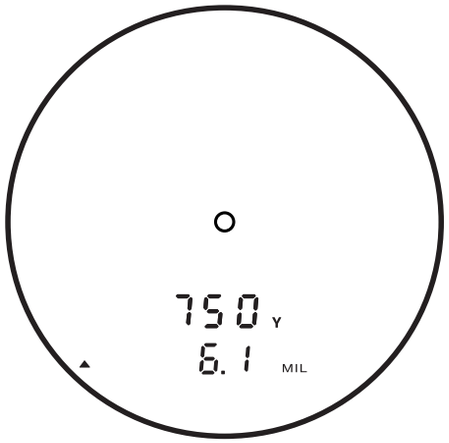
While the word “SEt” is shown in the upper row, pressing the right button repeatedly will scroll through BAS, MIL, HOLD, MOA, and TRIG, respectively; press the left button when the desired function is displayed. For information regarding BOW and LOS settings, please see page 17.

TBR (TRUE BALLISTIC RANGE)



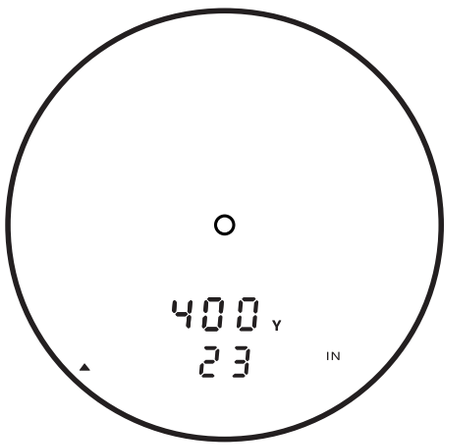


BAS displays the equivalent horizontal range, which is calculated using the distance ranged, the angle of your shot, and your selected ballistics group. This is the range you will want to use when shooting, rather than the line-of-sight distance, which may contain gross errors depending upon the shot angle. If the target is farther than 800 yards (731 meters), LOS will flash in the bottom row of characters and rotate between the angle measurement. The resulting distance will be the line-of-sight distance only.



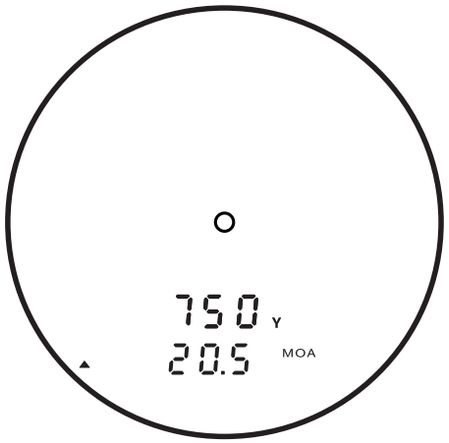
MIL will display the appropriate amount of holdover in milliradians to use, which is calculated using the distance ranged, the angle of your shot, and your selected ballistics group. The upper characters show the line-of-sight distance to the target. The lower characters show the appropriate number of MILs to hold over or under. In the example, the line-of-sight distance is 750 yards, and the lower characters indicate that you should hold 6.1 MILs above your intended point of impact. Holdover values will be displayed in MILs for both yards and meters

modes. If the target is farther than 800 yards (731 meters), LOS will flash in the bottom row of characters and rotate between the angle measurement. The resulting distance will be the line-of-sight distance only.



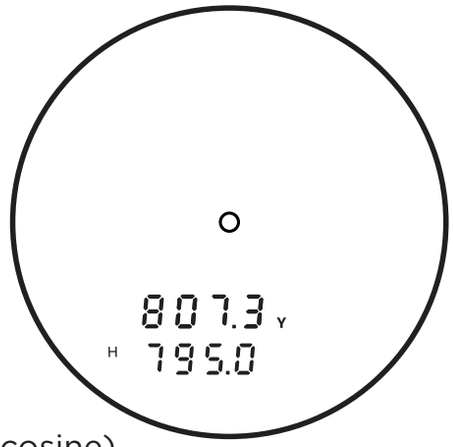
HOLD indicates the appropriate amount of inches/centimeters holdover to use, which is calculated using the distance ranged, the angle of your shot, and your selected ballistics group. The upper characters show the line-of-sight distance to the target. In the example, the line-of-sight distance is 400 yards, and the lower characters suggest that you should hold 23 inches above your intended point of impact. If the BX-4 Range HD TBR/W is set to range in meters, the appropriate holdover would be shown in centimeters. If the target is farther than 800 yards (731 meters), LOS will flash in the bottom row of characters and rotate between the angle measurement. The resulting distance will be the line-of-sight distance only.

MOA mode will show the minute-of-angle adjustment for your target, which is calculated using the distance ranged, the angle of your shot, and your selected ballistics group. The upper characters show the line-of-sight distance to the target. The

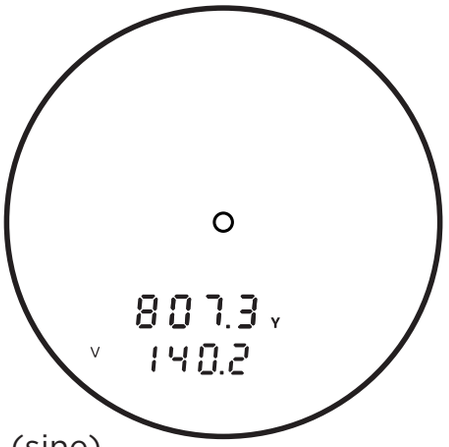


lower characters show the appropriate number of MOA to adjust over or under your target. In the example, the line-of-sight distance is 750 yards, and the lower characters indicate that you should dial the scope up 20.5 MOA to account for bullet drop. Scope corrections will be displayed in MOA for both yards and meters modes. If the target is farther than 800 yards (731 meters), LOS will flash in the bottom row of characters and rotate between the angle measurement. The resulting distance will be the line-of-sight distance only.

TRIG, a function that is included to support tradesmen and sportsmen, displays the true horizontal range and true vertical range, which is based upon trigonometry using angle and line-of-sight distance. Line-of-sight distance (LOS) readings will be displayed in the upper row of the display. The lower row will briefly show the true horizontal distance (cosine) then the absolute value of the true vertical distance (sine). Have you ever wondered if that leaning tree would hit your home or tent if it fell? Measure the height by obtaining the true vertical distance and then measure the distance from your house or tent to the tree.



(cosine)



(sine)

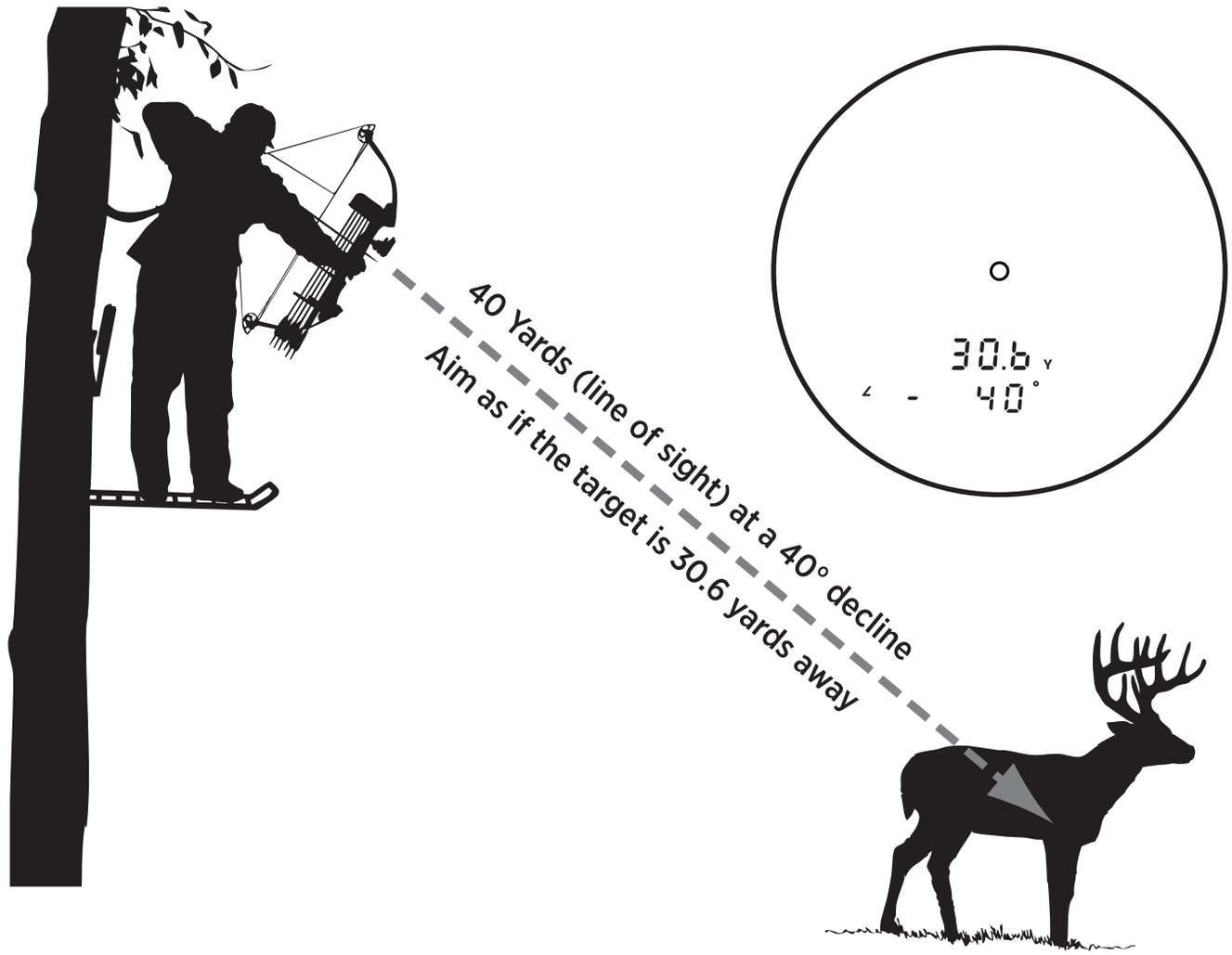
BOW

This mode, when activated, generates the equivalent horizontal range (level fire range) for arrows. The displayed range represents the ballistically equivalent horizontal distance to the target. For archery shots more than 70 yards with moderate angles, trig (cosine) solutions may not generate distances accurate enough for successful shots, and a ballistic solution should be considered.

LINE-OF-SIGHT

This mode, when activated, provides the straight-line distance to the target without accounting for shot angle or specific ballistics. The angle of the measurement is also displayed in LOS mode.

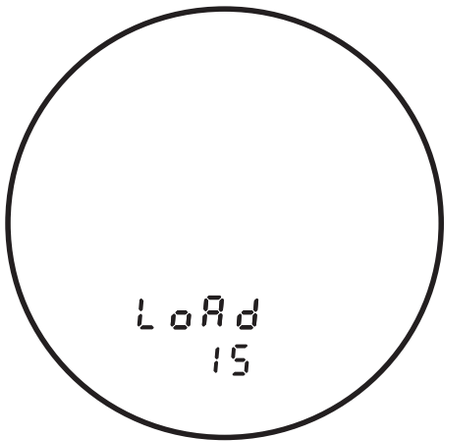
BOW (TRIG SOLUTION)



FUNCTION 3: 25 RIFLE BALLISTICS GROUPS

TBR includes ballistics settings for 25 cartridge groups, which are displayed as 1 through 25 and specifically formulated for the four functions of TBR. For example, if your load is in Group 3, the displayed reading will account for the shot angle and provide the proper distance for holdover purposes (see the following tables). You must choose one of the twenty-five groups based on your load and ballistics information. The load table shows a common assortment of factory loads organized in their TBR performance groups. If you are shooting a similar bullet weight and muzzle velocity that falls into the provided selections, you can use that load group with full confidence. For hand loads or any other unique loads not shown in the tables on pages 21-23, the table on the next page provides a guideline for selecting the appropriate TBR performance group. Check the ballistic performance of your bullet by consulting your reloading manual, ballistics software, or by referring to literature or websites provided by your cartridge manufacturer. You may also visit the Leupold website at leupold.com for more assistance selecting your group. If you have your ballistics performance data, select your performance group from the table on the next page based on the bullet path at 600 yards. Be sure not to confuse bullet path with sight-in distance. Bullet-path height is the typical

output of a ballistic calculator at the referenced 600 yards, while sight-in distance is your zero range. To activate the appropriate ballistics group, TBR must be activated, and you must choose between BAS, MIL, HOLD, MOA, and TRIG. Once this has been done, pressing the left button will allow you to select the appropriate ballistics group. “Load” will be shown in the upper row, and the current ballistics group will be shown in the lower row. Press and release the right button repeatedly to scroll through the available ballistics groups.



REMEMBER: *Knowing your theoretical bullet path at long ranges does not provide a license to take shots beyond ranges at which you have practiced, particularly at game animals or where stray shots could hit unintended targets. It is your responsibility to have intimate familiarity with the performance of your firearm and take full responsibility for the projectile.*

The BX-4 Range HD TBR/W rangefinding binocular may serve best as a tool for learning performance during practice at a secure range, so you are ready for that critical shot.

TBR/W PERFORMANCE GROUPS: LOAD TABLE			
Load Name (Muzzle Velocity-fps)		Load Name (Muzzle Velocity-fps)	
300 Yard Zero	Group	300 Yard Zero	Group
26 Nosler 142 gr. AccuBond (3300)	17	300 Wby. Mag. 180 gr. Nosler Partition (3190)	19
6.5 Creedmoor 129 gr. SST (2950)	20	300 Wby. Mag 180 gr. Trophy Bonded Bear Claw (3040)	23
6.5 Creedmoor 140 gr. A-MAX (2710)	22	300 Win. Mag. 150 gr. Core-Lokt PSP (3290)	21
6.5-284 130 gr. AccuBond (2900)	20	300 Win. Mag. 150 gr. Core-Lokt Ultra Bonded (3290)	21
6.5-284 140 gr. Accubond (2800)	22	300 Win. Mag. 150 gr. Federal Fusion (3200)	19
222 Rem. 55 gr. FMJBT American Eagle (3240)	23	300 Win. Mag. 165 gr. Federal Fusion (3200)	19
22-250 Rem. 55 gr. Power-Lokt HP	21	300 Win. Mag. 165 gr. Nosler Partition (3050)	20
25-06 Rem. 110 gr. Nosler AccuBond (3100)	20	300 Win. Mag. 178 gr. Hornady A-Max (3000)	20
25-06 Rem 117 gr. Sierra SBT GameKing (2990)	23	300 Win. 180 gr. AccuBond CT (2950)	20
257 Wby. 100 gr. Barnes TSX (3570)	17	300 Win. Mag. 180 gr. Core-Lokt Ultra Bonded (2960)	23
257 Wby. 110 gr. Nosler AccuBond (3460)	18	300 Win. 180 gr. Federal Fusion (2960)	20
260 Rem. 120 gr. Nosler Ballistic Tip (2950)	22	300 Win. Mag. 180 gr. Nosler AccuBond (2960)	20
264 Win. Mag. 120 gr. Core-Lokt PSP (3210)	21	300 Win. Mag. 180 gr. Nosler Partition (2960)	23
270 Wby. 150 gr. Nosler Partition (3245)	19	300 WSM 150 gr. Power Point (3270)	21
270 Win. 130 gr. Core-Lokt sp (3060)	23	300 WSM 165 gr. Nosler Partition (3130)	20
7mm 140 gr. SP AccuBond (3000)	20	30-06 150 gr. Core-Lokt Ultra Bond (2910)	25
7mm Rem. Mag. 140 gr. AccuBond CT (3180)	19	30-06 165 gr. Nosler Partition (2830)	23
7mm Rem. Mag. 150 gr. Power Point (3090)	21	30-06 180 gr. Nosler Accubond (2700)	24
7mm Rem. Mag. 175 gr. Federal Fusion (2760)	22	30-378 Wby. 165 gr. Nosler Ballistic Tip (3500)	17
7mm-08 140 gr. Ballistic Silvertip (2770)	24	30-378 Wby. 180 gr. Nosler AccuBond (3400)	18
7mm Rem. Mag. 175 gr. SP American Eagle (2860)	22	308 Win. 150 gr. Federal Fusion (2820)	25
7mm WSM 150 gr. Power Point (3200)	21	338 Win. Mag. 180 gr. Nosler AccuBond (3120)	21
7mm-08 140 gr. Ballistic Silvertip (2770)	24	338 Win. Mag. 200 gr. Power Point (2960)	25
7-08 Rem. 140 gr. Nosler Partition (2800)	24	338 Win. Mag. 210 gr. Nosler Partition (2830)	25
280 Rem. 150 gr. Nosler Partition (2890)	22	338 Win. Mag. 225 gr. Core-Lokt Ultra Bonded (2780)	22
280 Rem. 160 gr. Nosler AccuBond (2800)	22	338 Win. Mag. 225 gr. Nosler Accubond (2800)	22
300 RSAUM 165 gr. Core-Lokt PSP (3075)	23	50 BMG 750 gr. BoreRider (2700)	20
300 RUM 180 gr. Core-Lokt Ultra Bonded (3250)	19	50 BMG 800 gr. BoreRider (2650)	20
300 Wby. 150 gr. Nosler Partition (3540)	18	50 Cal 750 gr. A-Max (2650)	20
300 Wby. 165 gr. Nosler Ballistic Tip (3350)	18	Lapua Mag. 300 gr. Trophy Gold OTM (2762)	20
300 Win. Mag. 150 gr. Power Point (3290)	21		

TBR/W PERFORMANCE GROUPS: LOAD TABLE			
Load Name (Muzzle Velocity-fps)		Load Name (Muzzle Velocity-fps)	
200 Yard Zero	Group	200 Yard Zero	Group
22-250 Rem. 50 gr. Ballistic Silvertip (3810)	5	270 Win. 150 gr. Power Point (2850)	13
22-250 Rem. 55 gr. Nolser Ballistic Tip (3680)	3	270 WSM 130 gr. Core-Lokt (3285)	5
22-250 Rem 55 gr. Power-Lokt HP (3680)	7	7mm Rem. Mag. 140 gr. Nosler AccuBond (3110)	4
22-250 Rem 55 gr. SP American Eagle (3680)	7	7mm Rem. 150 gr. Core-Lokt PSP (3110)	9
223 Rem 62 gr. FMJBT American Eagle (3020)	11	7mm Rem. Mag. 150 gr. Federal Fusion (3100)	4
223 Rem 69 gr. Sierra HPBT Match (2950)	13	7mm Rem. Mag. 150 gr. Nosler Ballistic Tip (3025)	6
223 Rem 77 gr. Sierra HPBT Match (2750)	15	7mm Rem. Mag. 150 gr. SP American Eagle (3110)	7
243 Win. 100 gr. Core-Lokt PSP (2960)	11	7mm WSM 160 gr. Nosler Partition (3160)	4
243 Win. 100 gr. Core-Lokt UltraBond (2960)	9	7mm WSM 150 gr. SP American Eagle (3100)	7
25-06 Rem. 100 gr. Core-Lokt PSP (3230)	9	7mm-08 140 gr. Power Point (2800)	13
25-06 Rem. 120 gr. Federal Fusion (2980)	9	7mm-08 139 gr. SP Interlock (2840)	13
25-06 Rem. 85 gr. Ballistic Silvertip (3470)	3	7mm-08 139 gr. SST Interlock (2800)	10
6.5 Creedmoor 129 gr. SST (2950)	6	7mm 175 gr. SP Interlock (2800)	10
6.5 Creedmoor 140 gr. ELD-M (2710)	8	7-08 Rem. 140 gr. Nosler AccuBond (2800)	10
6.5 Creedmoor 143 gr. ELD-X (2700)	8	7-08 Rem. 140 gr. Nosler Patition (2800)	10
6.5 Creedmoor 140 gr. A-MAX (2710)	10	28 Nosler 175 gr. AccuBond (3125)	2
6.5 Creedmoor 140 gr. Custom Competition (2550)	14	300 RUM 150 gr. Swift Scirocco Bonded (3450)	1
6.5-284 130 gr. AccuBond (2900)	8	300 RUM 180 gr. Core-Lokt Ultra Bonded (3250)	4
6.5-284 140 gr. AccuBond (2800)	8	300 Wby. 180 gr. Nosler Partition (3240)	2
6mm Rem. 100 gr. Core-Lokt PSP (3100)	9	300 Wby. Mag. 180 gr. Barnes Triple Shock (3110)	4
6mm Rem. 100 gr. SP American Eagle (3100)	9	300 Win Mag 150 gr. Core-Lokt PSP (3290)	7
6mm Rem. 80 gr. SP American Eagle (3470)	2	300 Win. Mag. 165 gr. Federal Fusion (3200)	4
26 Nolser 142 gr. AccuBond (3300)	1	300 Win. Mag. 180 gr. Core-Lokt Ultra Bonded (2960)	9
270 Win. 130 gr. Core-Lokt SP (3060)	9	300 Win. Mag. 180 gr. Federal Fusion (2960)	6
270 Win. 130 gr. Nosler Ballistic Tip (3060)	6	300 Win. Mag. 180 gr. Nosler AccuBond (2960)	6
270 Win. 130 gr. SP American Eagle (3060)	9	300 Win. Mag. 180 gr. Nosler Partition (2960)	11
270 Win. 140 gr. Core-Lokt Ultra Bonded (2925)	11	300 Win. Mag. 200 gr. Hornady ELD-X (2850)	6
270 Win. 150 gr. Federal Fusion (2850)	8	300 Win. Mag. 212 gr. Hornady ELD-X (2860)	4

continued on next page

TBR PERFORMANCE GROUPS: LOAD TABLE			
Load Name (Muzzle Velocity-fps)		Load Name (Muzzle Velocity-fps)	
200 Yard Zero	Group	200 Yard Zero	Group
300 Win. Mag. 180 gr. Power Point (2960)	8	30-06 180 gr. Nosler Partition (2700)	12
300 WSM 180 gr. SP American Eagle (2970)	9	30-06 180 gr. Silvertip (2700)	15
300 WSM 180 gr. Ballistic Silvertip (3010)	6	30-06 180 gr. SP American Eagle (2700)	15
300 WSM 180 gr. SP American Eagle (2970)	9	30-06 180 gr. Trophy Bonded Bear Claw (2650)	16
30-06 150 gr. Ballistic Silvertip (2900)	8	30-06 180 gr. Core-Lokt Ultra Bond (2700)	15
30-06 150 gr. Core-Lokt PSP (2910)	13	308 Win. 150 gr. Nosler Ballistic Tip (2820)	10
30-06 150 gr. Federal Fusion (2900)	9	308 Win. 150 gr. Power Point (2820)	16
30-06 150 gr. Power Point (2920)	15	308 Win. 165 gr. Barnes Triple Shock (2650)	16
30-06 150 gr. Silvertip (2910)	13	308 Win. 165 gr. Nosler AccuBond (2730)	12
30-06 165 gr. Core-Lokt PSP (2800)	15	308 Win. 165 gr. Nosler Ballistic Tip (2650)	12
30-06 165 gr. Federal Fusion (2790)	10	308 Win. 165 gr. Sierra SBT GameKing (2700)	15
30-06 165 gr. Nosler Ballistic Tip (2800)	10	308 Win. 168 gr. Hornady Match HP (2650)	15
30-06 165 gr. Pointed Soft Point (2800)	15	308 Win. 168 gr. Hornady ELD-M (2700)	8
30-06 165 gr. Sierra SBT GameKing (2800)	13	308 Win. 180 gr. Core-Lokt Ultra Bonded (2620)	16
30-06 168 gr. Ballistic Silvertip (2790)	10	308 Win. 180 gr. Nosler AccuBond (2750)	10
30-06 180 gr. Ballistic Silvertip (2750)	10	308 Win. 180 gr. Nolser Partition (2620)	14
30-06 180 gr. Core-Lokt PSP (2700)	15	308 Win. 180 gr. Silvertip (2620)	16
30-06 180 gr. Federal Fusion (2700)	10	338 Lapua 250 gr. Sierra HPBT Match (2950)	6

For a list of all available loads, please visit leupold.com.

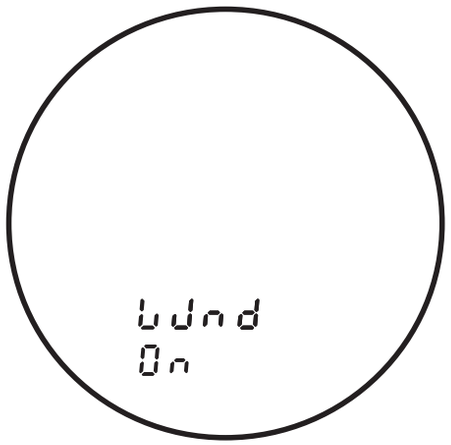
TBR/W LOAD GROUP SELECTION TABLE: FOR BEST FIT UP TO 600 YARDS			
Load Group	Bullet Path Height @ 600 Yds.	10 MPH Crosswind Deflection @ 600 Yds	Sight-in Range
1	-42 to 48 inches*	10 to 28 inches	200 Yards
2	-48 to -54 inches	10 to 28 inches	200 Yards
3	-48 to -54 inches	28 to 46 inches	200 Yards
4	-54 to -60 inches	10 to 28 inches	200 Yards
5	-54 to -60 inches	28 to 46 inches	200 Yards
6	-60 to -66 inches	10 to 28 inches	200 Yards
7	-60 to -66 inches	28 to 46 inches	200 Yards
8	-66 to -72 inches	10 to 28 inches	200 Yards
9	-66 to -72 inches	28 to 46 inches	200 Yards
10	-72 TO -78 inches	10 to 28 inches	200 Yards
11	-72 to -78 inches	28 to 46 inches	200 Yards
12	-78 to -84 inches	10 to 28 inches	200 Yards
13	-78 to -84 inches	28 to 46 inches	200 Yards
14	-84 to -90 inches	10 to 28 inches	200 Yards
15	-84 to -90 inches	28 to 46 inches	200 Yards
16	-90 to -96 inches**	28 to 46 inches	200 Yards
17	-30 to -36 inches**	10 to 28 inches	300 Yards
18	-36 to -42 inches	10 to 28 inches	300 Yards
19	-42 to -48 inches	10 to 28 inches	300 Yards
20	-48 to -54 inches	10 to 28 inches	300 Yards
21	-48 to -54 inches	28 to 46 inches	300 Yards
22	-54 to -60 inches	10 to 28 inches	300 Yards
23	-54 to -60 inches	28 to 46 inches	300 Yards
24	-60 to -66 inches**	10 to 28 inches	300 Yards
25	-60 to -66 inches**	28 to 46 inches	300 Yards

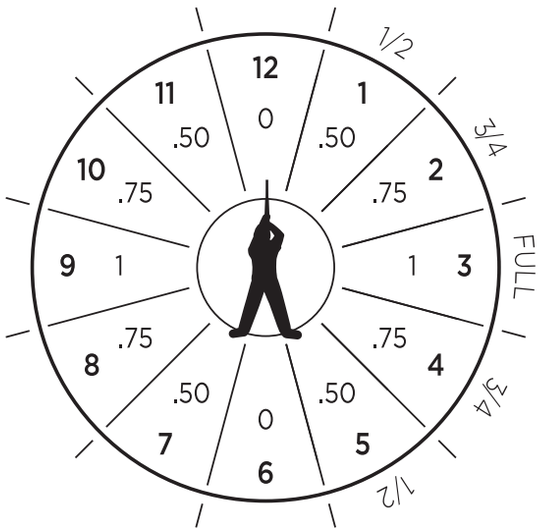
* If your bullet height path is less than -42 inches at 600 yards with a 200 yard sight-in, consider sighting-in at 300 yards and selecting load group 17 or 18. Alternately, you can use group 1 with a 200 yard sight-in, but the TBR/W will be less accurate.

** If your bullet height at 600 yards is greater than -96 inches with a 200 yard sight-in or less than -30 or greater than -66 inches with a 300 yard sight-in, the TBR/W will be less accurate.

FUNCTION 4: WIND

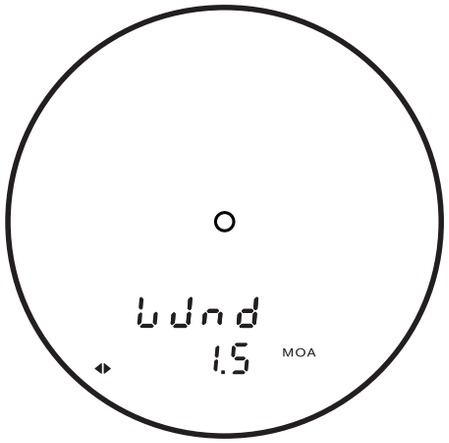
Pressing the left button after your ballistic group has been selected will allow you to activate or deactivate the wind hold feature. When activated, the rangefinder will first display the distance to the target and then show the appropriate wind hold for the selected output. **If the selected output is TBR (in TRIG mode), BOW, or LOS, wind cannot be activated.**

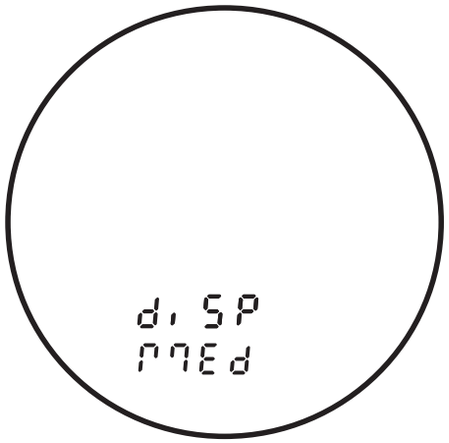




WIND will provide a fixed 10 mph full wind value, meaning it assumes the wind is at 90 degrees to the muzzle. We chose 10 mph as a way for the user to easily calculate corrections on the fly. If the wind is 5 mph, from the three o'clock or nine o'clock position, the shooter would halve the hold value. If the wind is 20 mph, the shooter would double the wind hold value. If the wind isn't blowing at 90 degrees to the muzzle, the shooter needs to adjust the hold value per the diagram shown. For example, if the wind is at 45 degrees to the muzzle, adjust the wind hold value by 75%. Because wind values change so

quickly, we have found that this method of generating correction values for speed and direction will help you get on target easier and faster. Wind hold values will be displayed in the same output format as elevation: either minute-of-angle (MOA), milliradians (MIL), or inches/cm hold values. TBR/W provides .5 MOA accuracy on elevation and 1.5 MOA accuracy on wind values at 600 yards for cartridges expected to reach that distance. As with TBR, the maximum distance is 800 yards. If wind output is on, once the elevation hold values are displayed, the rangefinder will update and show the wind hold values. Here is an example of how wind holds are displayed in the BAS and MOA functions. The upper row shows wind and the lower row represents a 1.5 MOA wind hold.





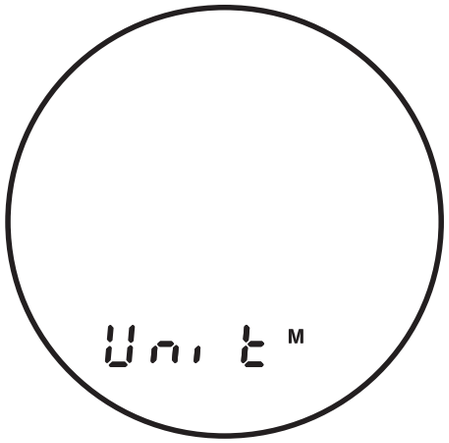
FUNCTION 5: DISPLAY INTENSITY

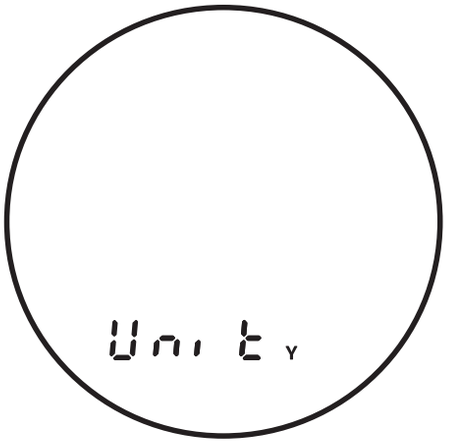
This mode is used to adjust the brightness of the display, allowing you to match the intensity to current conditions. Your BX-4 Range HD TBR/W has three display intensity settings: low, medium, and high.

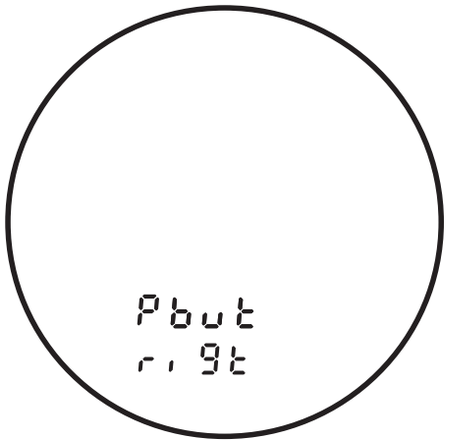
Navigate through the Quick Set Menu by pressing and releasing the left button until “diSp” is shown in the upper row. Press and release the right button to toggle between high, medium, and low. Press the left button to save the selection.

FUNCTION 6: UNIT OUTPUT

To choose between yards and meters, navigate through the Quick Set Menu by pressing the left button until “Unit” is shown on the display. Press and release the right button to alternate between yards and meters.







FUNCTION 7: POWER BUTTON

The mode button will always be the opposite of the power button. When “rigt” is shown on the display, the power button is operated with the right button. When “LEFt” is shown on the display, the power button is operated with the left button. Navigate through the Quick Set Menu by pressing and releasing the left button until “Pbut” is shown in the upper row. Press and release the right button to toggle between right and left. Press the left button to save the selection.

CLEANING/MAINTENANCE

Blow away dust or debris on lenses or use a soft lens brush (such as the one found on the Leupold LensPen). To remove fingerprints, water spots, or tougher dirt, use a soft cotton cloth or the cleaning end of the Leupold LensPen. A lens tissue with lens cleaning fluid may be used for more stubborn dirt. Always apply cleaning fluid to the cleaning cloth, never directly to the lens.

To insert a new battery, remove the battery cover (see the diagram on page 6) and remove the exhausted battery. Insert a new CR-2 battery, positive side first, into the battery compartment. Close the battery cover.

HELPFUL HINTS FOR USING THE BX-4 RANGE HD TBR/W

To focus the rangefinding binocular, turn the eyepiece left or right until crisp display focus is achieved. See To Set The Diopter on Page 9.

BX-4 Range HD TBR/W is waterproof.

BX-4 Range HD TBR/W includes a harness, lens covers and a lens cleaning cloth. An instructional supplement is supplied in the inside pocket of the included case.

How do I activate True Ballistic Range (TBR/W)?

See Function 1 on page 11. Be sure to select the proper group for rifles on pages 21-24.

How do I activate line-of-sight (LOS) mode?

Follow "Navigating The Menu" on page 10.

When I shoot based on the True Ballistic Range readout provided by the rangefinder, the projectile is not hitting the target.

Be certain that if you're shooting a bow that "BOW" is turned on. Be certain that if you're shooting a rifle that "TBR" is turned on.

Be certain you selected the correct ballistics groups (see pages 21-24 for rifles). It is imperative that a rifle be sighted in at the recommended range. The ballistics performance of firearms and ammunition may vary from manufacturers' published information.

Rangefinder does not provide a range.

Make sure that the right button is being depressed (as opposed to the left button). Unless power button has been reconfigured in the setup menu.

Make sure that nothing, such as your hand or finger, is blocking the lenses as this could interfere with the emission and reception of the laser pulses.

Make sure to hold the unit steady while depressing the correct button.

When using BOW mode, it is important to note that bow solutions are limited to 175 yards. Returns greater than 175 yards will be displayed as LOS and the LOS icon will flash.

Make sure the target is at least 7 yards away.

WARRANTY/REPAIR

The Leupold Electronics Warranty covers any defects in materials and workmanship in the electronic components of RX, GX, and PinCaddie Rangefinders, BX-4 Range HD TBR/W Rangefinding Binoculars and other electronic products. This warranty lasts for two years from the date of purchase. For complete warranty details visit leupold.com/warranty.

In the event of a need for service or repair, please visit leupold.com/rma/warranty/create/ and follow the instructions there to start the warranty process. When shipping the product, include the packing slip that will be provided.

By Parcel Service:

Leupold Product Service
14400 NW Greenbrier Parkway
Beaverton, OR 97006-5790 U.S.A

By Postal Service:

Leupold Product Service
P.O. Box 688.
Beaverton, OR 97075-0688 U.S.A.

For product questions, consult the Leupold website: leupold.com or call (800) LEUPOLD (538-7653).

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