Bushnell®

LASER RANGEFINDER OWNER'S GUIDE



PRIME 1500

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YOU ARE THE PROUD OWNER OF THE BUSHNELL[©] PRIME[™] 1500 LASER RANGEFINDER!

Your Bushnell[®] Prime[™] 1500 is an ultra-compact, premium laser rangefinder with the latest Digital Technology, providing precise range readings from 5-1500 yards/5-1646 meters. Measuring 1.3 x 4.2 x 2.9 inches, the 6-ounce laser rangefiner delivers high-speed target acquisition, with +/- 1 yard accuracy to the maximum range. The laser rangefinder features Bushnell's patented ARC[™] (Angle Range Compensation with Ballistics Intelligence), a new Ranging Engine for faster, more consistent response and readings and water-resistant (IPX4) construction along with EXO™ Barrier Coating on the optics.





*Note: You will get both longer and shorter maximum distances depending on the reflective properties of the particular target and the environmental conditions at the time the distance of an object is measured. The color, surface finish, size, and shape of the target all affect reflectivity and range. The brighter the color, the longer the range. White is highly reflective, for example, and allows longer ranges than the color black, which is the least reflective color. A shiny finish provides more range than a dull one. A small target is more difficult to range than a larger target. The angle to the target also affects. Shooting to a target at a 90-degree angle (where the target surface is perpendicular to the flight path of the emitted energy pulses) provides a good range. In contrast, a steep angle, on the other hand, provides limited ranging. Also, lighting conditions (e.g., the amount of sunlight) will affect the ranging capabilities of the unit-the less light (e.g., overcast skies), the farther the unit's maximum range. Conversely, very sunny days will decrease the unit's maximum range.

CLASS 3R LASER PRODUCT INVISIBLE LASER RADIATION AVOID DIRECT EYE EXPOSURE Complies with FDA performance standards for laser products except for conformance with IEC 60825-1 Ed. 3... s described in Laser Notice No. 56, dated May 8, 2019.

BATTERY ACTIVATION / BATTERY LIFE INDICATOR

Before first use: Remove the battery compartment cover by lifting the battery cover tab and then rotating the cover counter-clockwise. Remove and discard the red plastic disc covering the positive battery terminal, then replace the battery cover. NOTE: It is recommended that the CR2 3-volt lithium battery be replaced at least once every 12 months. Please insert the negative end of the battery into the compartment first.

Battery Level Indicator Icon (3):

Full charge

3/4 battery level remaining

1/2 battery level remaining

1/4 battery level remaining

Battery icon blinks - battery needs to be replaced, and the unit will not be operable.

BASIC OPERATION

- While looking through the laser rangefinder, press and release the Power/Fire button to activate the display.
- If the display appears blurry, rotate the monocular eyepiece in either direction until the display is sharp for your vision.
- Placing the aiming circle (located in the center of the display) on a target at least 5-6 yards away, depress and hold the Fire button down until the range reading displays below the aiming circle.
- Once a range is acquired, you can release the Fire button. The four "crosshairs" just outside the aiming circle will go out, indicating the laser is no longer transmitting. The display will remain on and display the last distance measurement for about 15 seconds until the display automatically switches off to extend battery life.
- You can press the Fire button again at any time to check the range to a new target. To re-fire, press the button again.
- To scan the laser across an area and get continuously updated range readings, continue to hold the Fire button down and sweep the rangefinder over multiple targets. The crosshairs outside the aiming circle will flash to indicate scan operation.

DISPLAY INDICATORS/ICONS

The Prime™ 1500 rangefinder's display incorporates the following illuminated indicators:

- Angle Range Compensation Modes
- Bow Mode (1)
- Rifle Mode (2)
- Battery Level Indicator (3)
- Aiming Circle/Dot (4)
- Active/Scan Laser Indicator (5)
- Targeting Modes
- BullsEye Mode (6)
- Brush Mode (7)
- Primary Numeric Display displays Line-of-sight Distance (8)
- Holdover / Bullet-drop Horizontal Distance indicators for Rifle Mode
- MOA holdover units selected (9)
- MIL (hol dover units selected (10)
- IN (inch) or CM (centimeter) holdover units selected (11)
- SD = Variable Sight-In Distance (12)
- Range (Distance) Units (13): Y=Yards, M=Meters
- Secondary Numeric Display (14)

(Holdover / bullet drop for Rifle mode, True Horizontal Distance for Bow Mode)

- SETUP Mode (15)
- Angle Indicator (16)





RETICLE SELECT

The Setup menu allows you to select your preferred reticle type for the center of the display (for all modes). Press and hold the Mode button to get into the Menu screen. Tap Mode while in Reticle Select and cycle through Circle, Dot, and Circle with Dot (this is the default) options. Press the Fire button to confirm the selection of the reticle you prefer, and exit the Setup menu.

TARGETING MODES

The Prime™ 1500 laser rangefinder operates in three targeting modes, with Standard mode as the default. To select a different targeting mode, press the Mode button briefly until the desired indicator (BullsEye or Brush) appears. To return to Standard mode, press Mode one more time after the Brush mode indicator is seen. The targeting modes are:

- range to be continuously updated as multiple objects are targeted. Crosshair lines flash while scanning.
- When more than one object is acquired, only the distance of the closest object will be displayed.

With the rangefinder in BullsEye mode, align the aiming circle onto the object (i.e., deer) that you want to find the distance. Next, press and hold the Fire button and move the Aiming Circle slowly over the deer. If the laser beam recognized more than one object (deer and background trees), the distance of the closer object (deer) is displayed in the LCD.

acquired, only the distance of the farthest object will is displayed on the LCD.

With the rangefinder in Brush mode, align the aiming circle onto the object that you want to find the distance. Next, press and hold the Fire button and move the Aiming Circle slowly over the object. If the laser beam recognized more than one object (closeup tree branch and a deer in the background), a further object (deer) would be displayed.

TIP: While pressing the Fire button, you can move the device slowly from object to object and intentionally force the laser to hit multiple objects to ensure that you are only displaying the furthest of the objects recognized by the laser. Once the device has shut off, the unit will always default back to the last targeting mode.

ANGLE RANGE COMPENSATION (ARC)

The Prime™ 1500 Laser Rangefinder with ARC™ is specially designed with hunters in mind. Your Prime™ 1500 rangefinder features a built-in inclinometer that solves a problem hunters have had for years. Bow and rifle hunters have struggled with extreme uphill and downhill angles because these angles alter true horizontal distance to your target. The ARC[™] solution: an integrated inclinometer provides angular data to a processor chip when targeting either uphill or downhill objects. This data is combined with internal algorithmic formulas. The user-selectable ARC modes allow you to adjust the performance parameters of the unit to suit your specific situation and environment.

Along with the standard "line of sight" distance, the Fire button will display the true horizontal distance in Bow Mode-see the ARC MODES section. In Rifle Mode, display bullet-drop/holdover near the bottom of the display (14), along with the angle of the incline in degrees (indicated at the left side of the display (16)). For example, a bowhunter in a tree stand may aim at a downhill deer at a -520 relative to his position. The line of sight distance is 32 yards, but he is likely to "overshoot" the target based on that. The THD distance (compensated for the angle) reads 23 yards. That is the distance the hunter should use to base his shot.

USING THE SETUP MENU

The Setup Menu is used to select various options, such as the ARC Mode (Bow, Rifle, etc.) and distance units (Yards or Meters) of your preference. After powering on the unit, enter the Setup Menu and by holding the Mode button down until "SETUP" appears in the display (15). You will remain in the Setup Menu until you change or confirm all possible settings (varies depending on selected ARC mode), and "SETUP" is no longer displayed. Once in the Setup Menu, press the Mode button to scroll through or toggle the available items. Press the Fire button to confirm and save the currently displayed option/setting.

The first item you can select from the Setup Menu is the ARC Mode. Press the Mode button until the icon for the mode you want is displayed. Press the Fire button to confirm and continue selecting other related options/settings. More details regarding the various ARC modes are in the next section.

• Standard Mode with Automatic SCAN (LCD Indicator - none) This setting allows most targets to range up to 1500 yards. They are used for moderately reflective targets that are typical of most distancing situations. The minimum distance in the standard model is 5 yards. To use the Automatic SCAN feature, press and hold the Fire button, then move the rangefinder from object to object while keeping the Fire button depressed. Automatic SCAN will allow the

• BullsEye™ Mode with Automatic SCAN (LCD Indicator (6) - -‡+) This advanced mode allows easy acquisition of small targets and game without inadvertently getting distances to background targets that have stronger signal strength.

• Brush™ Mode with Automatic SCAN (LCD Indicator (7) - 💭): This advanced mode allows objects such as brush and tree branches to be ignored so that distance only to background objects are displayed. When more than one object is

ARC (ANGLE RANGE COMPENSATION) MODES

- **REGULAR Mode** (): This mode does not provide any degree of elevation or compensated distance information (no secondary display (14), only the line of sight distance (8). Select this mode (press the Fire button with "rE9" displayed while in Setup) for general purpose use or not use the rangefinder for bow or rifle hunting applications. After confirming your selection of Regular mode, the only other item in the Setup Menu is the Unit of Measure option (13). Pressing the Mode button will toggle the Units from the default "Y" (yards) to "M" (meters). Press the Fire button to confirm your selection (leave units set to Yards or change it to Meters) and exit the Setup Menu, returning to normal operation. 🗡
- BOW Mode (): Calculates and displays the degree of incline, and the resulting true horizontal distance in yards or meters, in addition to the line of sight distance. Select this mode (press the Fire button with the bow icon (1) displayed while in Setup) for bowhunting or other use if you don't need bullet-drop/holdover information. After confirming your selection of Bow mode, the only other item in the Setup Menu is the Unit of Measure option (13). Pressing the Mode button will toggle the Units from the default "Y" (yards) to "M" (meters). Press the Fire button to confirm your selection (leave units set to Yards or change it to metric) and exit the Setup Menu, returning to normal operation.

Bow Mode Example

The true horizontal distance is shown near the bottom of the display (14), alternating with the tilt angle in degrees. For example, a bowhunter in a tree stand may aim at a downhill deer at a -520 angle relative to his position. The line of sight distance is 32 yards, but he is likely to "overshoot" the target based on that. The THD distance (compensated for the angle) reads 23 yards. That is the distance the hunter should use to base his shot.

The line of sight is 32 yards, the angle is -52 degrees, and the Angle Range Compensated distance is 23 yards. Instead of shooting as 32 yards, shoot as 23 yards. If you were to shoot as if 32 yards, you would shoot over the top of the deer because of the severe angle.

If in BOW mode, the line of sight distance will display in the primary numeric display, and the inclination and horizontal distance will display in the secondary numeric displays. Bushnell® determined through extensive testing and interviews with highprofile bow hunting experts that multiple bow ballistic groups were not necessary. Bow-hunters want to know true horizontal distance because that is how they practice shooting. Once they confidently know that, they can make any necessary adjustments-giving the bow-hunter anything else other than horizontal distance creates additional confusion and uncertainty.

Many people mistakenly believe that uphill shots perform differently from downhill shots because of gravity. However, it is not due to gravity but more of an aberration of the sighting system used on bows. The sighting pin on a bow resides several inches

above the mechanical axis of the arrow. For example, when aiming 23 degrees up an incline, the arrow is at a different angle.

• RIFLE Mode(s) (): Calculates and displays the amount of bullet drop at the target in inches, centimeters, Mils, or MOA. The amount of bullet drop is determined by the line of sight distance to the target, degree of elevation, along the specific ballistic characteristics of the caliber and ammunition load. When you range your target, the line of sight, degree of elevation, and bullet-drop/holdover in inches, centimeters, Mils, or MOA will be displayed from 100 to 800 yards/meters with a maximum inclination of +/- 70°.

One of eight ballistic groups (identified as A, B, C, D, E, F, G, and H) for centerfire rifles and two ballistic groups (Identified as I and J) for Black Powder / Muzzleloaders can be selected by the user, with each formula representing a given combination of caliber and loads. The user selects the ballistic groups via the Setup menu. After entering the Setup menu (by holding the Mode button for a few seconds), briefly press the Mode button until you see the blinking Rifle icon (2), along with the letter for the ballistic group for your preferred ammo (or load).

After you have confirmed your selection of Rifle mode with the ballistic group you need (by pressing the Fire button while it appears in the display), the next item is the Unit of Measure option (13). Pressing the Mode button will toggle the Units from the default "Y" (yards) to "M" (meters). Press the Fire button to confirm your selection (leave units set to Yards or change it to metric).

Next, you will see "SD," meaning Sight-In Distance. Briefly pressing the Mode button will cycle through a choice of 100, 150, 200, or 300 yards. Press the Fire button to confirm and save the setting when your preferred sight-in distance



is displayed.

Lastly, you will have a choice of formats for the bullet drop/holdover data that will appear in the secondary numeric display (14): IN (inches)*, ML (Mils), or MOA (moa). Briefly press the Mode switch to cycle through the three options, pressing the Fire button to confirm and save the setting when your preferred bullet drop format is displayed. *Note: if the unit of measure is set to Meters (M), the bullet drop is calculated and displayed in CM (centimeters) rather than inches.

Rifle Mode Example

The line of sight is 376 yards, the angle is -33 degrees, and the bullet-drop/holdover is 28 inches. ARC takes into account ballistic data based on your caliber and load from distances of 100-800 yards and compensates for any uphill and downhill angle



Holdover/Bulletdrop=28 Inches

Knowing Which Ballistic Group To Select

Bushnell engineers have researched currently available ballistic data and grouped many of the most popular calibers and loads into eight ballistic groups (A, B, C, D, E, F, G, H). Once you know what caliber and load you are shooting, look through the chart to determine which one of the eight ballistic groups matches your particular load and caliber. For Muzzleloaders, we have worked with PowerBelt Bullets to incorporate ballistic data into two ballistic groups (I and J). Below are a few of the most popular caliber/ load combinations. A complete list of 2000 caliber and load combinations is on Bushnell's website (www.bushnell.com).

Popular Caliber & Load Combinations

Federal Cartridge.224 dia. 22-250 Rem, 55 gr. Bear Claw at 3600 fps	G
Federal Cartridge.224 dia. 22-250 Rem, 60 gr. Partition at 3500 fps	F
Remington Arms .224 dia. 22-250 Remington Arms , 50 gr. V-Max at 3725 FPS	Н
Remington Arms .224 dia. 22-250 Remington Arms , 55 gr. PSP at 3680 FPS	G
Winchester .224 dia. 22-250 Rem, 55 gr. Ballistic Silvertip at 3680 FPS	Н
Winchester .224 dia. 22-250 Rem, 55 gr. PSP at 3680 FPS	G
Federal Cartridge .277 dia. 270 Win, 150 gr. Ballistic Tip at 3060 fps	F
Federal Cartridge .277 dia. 270 Win, 150 gr. Partition at 3000 fps	F
Remington Arms .277 dia. 270 Win, 140 gr. PSPCL Ultra at 2925 FPS	Е
Remington Arms .277 dia. 270 Win, 150 gr. SPCL at 2850 FPS	D
Winchester .277 dia. 270 Win, 150 gr. Partition Gold at 2930 FPS	Е
Winchester .277 dia. 270 Win, 150 gr. PP-Plus at 2950 FPS	Е

After you have determined which ballistic group corresponds to your caliber and load, select this ballistic group letter along with Rifle mode. The internal formula will determine the amount of bullet drop/holdover in inches or centimeters based on your caliber and load's distance, angle, and ballistics.

What if my caliber/load is not listed?

While we have taken great care to include as many calibers and brand names in our ballistics tables, new loads are always developing. Also, some shooters load their ammunition with unique ballistic characteristics. If you cannot find your load in our ballistic tables, you can still use the laser rangefinder bullet drop feature. As above, sight in your rifle at 100 yds. Then shoot the rifle, without adjusting the riflescope, at 300 yds. Measure the bullet drop from the point of aim. Using this drop, select the ballistic group from below. If you are shooting long distances, you may want to check the bullet drop at 500 yds. Because there is enormous variation in rifle barrels, chambers, and hand loads, you should thoroughly test the ballistic setting before actual hunting. You may need to move up or down one group depending upon your tests.

Federal Cartridge .308 dia. 30-06 Spring, 180 gr. AccuBond at 2700 FPS	D
Federal Cartridge .308 dia. 30-06 Spring, 180 gr. Bear Claw at 2700 FPS	D
Remington Arms .308 dia. 30-06 Springfield, 180 gr. A-Frame at 2700 FPS	D
Remington Arms .308 dia. 30-06 Springfield, 180 gr. BRPT at 2700 FPS	D
Winchester .308 dia. 30-06 Sprg, 180 gr. FailSafe at 2700 FPS	D
Winchester .308 dia. 30-06 Sprg, 180 gr. Partition Gold at 2750 FPS	D
Federal Cartridge.308 dia. 300 WSM, 180 gr. AccuBond at 2960 fps	F
Federal Cartridge.308 dia. 300 WSM, 180 gr. Bear Claw at 3025 fps	F
Winchester .308 dia. 300 WSM, 180 gr. Ballistic Silver Tip at 3010 FPS	F
Winchester .308 dia. 300 WSM, 180 gr. Fail Safe at 2970 FPS	F
Remington Arms .308 dia. 300 R.S.A.U.M., 180 gr. PSPCL Ultra at 2960 FPS	Е
Remington Arms .308 dia. 300 Wby Mag, 180 gr. PSPCL at 3120 FPS	F

CLEANING AND GENERAL CARE

The lenses of your Bushnell Prime™ 1500 laser rangefinder are fully multi-coated for the highest light transmission. As with any multi-coated optics, take special care in cleaning the lenses. Follow these tips for proper lens cleaning:

- Blow away any dust or debris on the lens (or use a soft lens brush).
- To remove dirt or fingerprints, clean with the supplied microfiber cloth rubbing in a circular motion. Use of coarse cloth or unnecessary rubbing may scratch the lens surface and eventually cause permanent damage. The included washable microfiber cleaning cloth is ideal for the routine cleaning of your optics. Breathe lightly on the lens to provide a slight amount of moisture, then gently rub the lens with the microfiber cloth.
- For a more thorough cleaning, photographic lens tissue and photographic-type lens cleaning fluid or isopropyl alcohol may be used. Always apply the fluid to the cleaning cloth - never directly on the lens.

All exterior lens surfaces have our new EXO Barrier[™] coating (in addition to full multi-coating). EXO Barrier, guite 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.

The rangefinder is manufactured and tested to withstand water exposure up to IPX4 standards. It is water-resistant but should not be submerged.

TROUBLESHOOTING

Never disassemble your laser rangefinder. Irreparable damage can result from unauthorized service attempts, which also void the warranty.

If the unit does not turn on, the display does not illuminate:

- Depress Power/Fire button.
- Check and, if necessary, replace the battery. If the unit does not respond to button presses, replace the battery with a good quality CR2 3-volt Lithium battery.

If unit powers down (display goes blank when attempting to power the laser):

The battery is either weak or low quality. Replace the battery with a new 3 -volt lithium battery (CR2).

If the target range cannot be obtained:

- Make sure the display is illuminated.
- Make sure that the Power/Fire button is being depressed.
- Ensure nothing, such as your hand or finger, blocks the lenses at the front of the rangefinder that emits and receives the laser pulses.
- Make sure the unit is steady while depressing the Power/Fire button.

NOTE: The last range reading does not need to be cleared before ranging another target. Aim at the new target using the display reticle, depress the power button, and hold until new range reading is displayed.

TECHNICAL SPECIFICATIONS

SKU	Mag x Obj Lens Diam.	Max Range (Y/M) (Reflective Target)	Range to Tree (Y/M)	Range to Deer (Y/M)	Ranging Accuracy	Optical Coatings	Length (in/mm)	Weight (oz /g)
LP1500BL	6x 25mm	1,500/1,372	900/823	600/549	+/-1 yd to 1000 yds, +/-0.25% after	Fully-multi coated, EXO Barrier™	4.3/110	6.3/180

WARNING: This product uses a Lithium based battery. Lithium batteries can overheat and cause damage if physically abused. Do not use batteries that are damaged or show signs of physical wear.

GLOSSARY OF COMMON LASER RANGEFINDER TERMS

 $\mbox{Accuracy}$ - The data that tells how accurately in many meters/yards the device will measure the distance to the object and what kind of deviation can occur (in the same units).

Inclinometer - Inclinometer is an integrated instrument for determining angles of inclination or slope. It measures the equivalent horizontal distance to the target. This feature is very handy at golf or long-range inclined shooting because shooters need the equivalent horizontal distance and not the actual distance. The gravity of the earthworks on the flying object only this equivalent horizontal distance that is traveling to the hole or the target. If the shooter doesn't take this into account, the bullet travels higher.

Maximal Rangefinder Range - Maximal rangefinder range is the maximum distance to which the laser rangefinding device correctly performs the measurement and determines the distance to the observed obiect.

It shoud be noted, the given maximum rangefinding distance is only at perfect environmental conditions. This means, the rangefinder with a maximum rangefinding distance till 1000 meters will measure this distance only in cloudy weather, or when the sun goes down. In a bright, sunny or a rainy day, the maximum rangefinding distance shortens.

Measurement Increment - Measurement increment is the unit of measurement. It can be measured in meters or yards. This function can be easily switched on the device itself.

Measurement Time - Measurement time is the shortest time in which the device measures the distance to the observed object.

FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cable must be used with the equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules. Specifications and designs are subject to change without any notice or obligation on the part of the manufacturer.

Important Note: Radiation Exposure Statement

- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 0cm between the radiator and your body.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.



CLICK TO WATCH MICHAEL WADDELL AND BUSHNELL PRIME 1300 & 1700 LASER RANGEFINDERS



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CLICK TO WATCH MICHAEL WADDELL ON ARC TECHNOLOGY







Caution: There are no user controls, adjustments or procedures. Performance of procedures other than those specified herein may result in access to invisible laser light

> Click to read Bushnell Warranty information for this product.



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