

*Cabela's*<sup>®</sup>  
**VLR** by **Bushnell**

Instruction Manual

**Model #: 20-3031 and 20-3131**

**Literature #: 98-0919/02-07**



Your CABELA'S VLR by BUSHNELL® is a precision instrument designed to provide many years of enjoyment. This booklet will help you achieve optimum performance by explaining its adjustments and features as well as how to care for this precise laser rangefinding instrument. To ensure optimal performance and longevity, please read these instructions before using your Cabela's VLR.

## **INTRODUCTION**

Your CABELA'S VLR is a very compact advanced laser rangefinder. Using Digital Technology and measuring a mere 1.5x4x2.75 inches and weighing 6.8 ounces, the CABELA'S VLR delivers superb and accurate range performance to +/- one yard. Range to a deer as far as 300 yards out or to a tree at 570 yards away for a reference point. The unique shape and palm size allows outdoor enthusiasts to easily grip the rangefinder with a single hand and drop it into a pocket when not in use.

The rugged and weather resistant CABELA'S VLR features popular "Scan" and ">150" modes and includes a carrying case. Scan mode provides continuous distance measurements as multiple targets in the field of view are scanned. The ">150" mode only captures distance measurements of objects greater than 150 yards away, enabling distance measurement through foreground clutter like brush and branches.

The CABELA'S VLR emits invisible, eye-safe, infrared energy pulses. Sophisticated digital technology and a high-speed clock are used to instantaneously calculate distances, by measuring the time it takes for each pulse to travel from the rangefinder, to the target, and back.

The ranging accuracy of the CABELA'S VLR is plus or minus one yard / meter under most circumstances. The maximum range of the instrument depends on the reflectivity of the target. The maximum distance for most objects is 570 yards / 521 meters while for highly reflective objects the maximum is 700 yards / 640 meters. 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 object is being distanced to.

The color, surface finish, size and shape of the target all affect reflectivity and range. The brighter the color, the longer the range. Red 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 has an effect. 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 good range while a steep angle on the other hand, provides limited ranging. In addition, 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 will be. Conversely, very sunny days will decrease the unit's maximum range.

## **OPERATIONAL SUMMARY**

While looking through the monocular, depress the power button once to activate the in-view display system (LCD). Aim the CABELA'S VLR at a target at least 10 yards away, depress and hold the power button down until range reading is displayed. Release the power button. Your CABELA'S VLR features an adjustable eyepiece. Simply rotate the monocular until the reticle and object distanced to are in focus to your eye. Note: Once activated, the LCD will remain active and display the last distance measurement for 6 seconds. You can depress the power button again at any time to distance to a new target. As with any laser device, it is not recommended to directly view the emissions for long periods of time with magnified lenses.

## **FEATURES**

The CABELA'S VLR's sophisticated digital technology allows you to select between various units of measure and targeting modes. In addition, your CABELA'S VLR's LCD incorporates illuminated indicators that advise you when the laser is active and when the battery charge is low. A summary of these features is presented below:

### **UNIT OF MEASURE OPTIONS**

The CABELA'S VLR can be used to measure distances in yards or meters. The unit of measure indicators are located in the upper right portion of the LCD. To select between yards and meters, look through the monocular, depress the "mode" button (left side of the unit underneath the Cabela's VLR by Bushnell logo) and hold it down for approximately 2 seconds. If you are changing from yards to meters, a change in unit of measure will be indicated by the illumination of the letter M for METER indicator while the YD for YARD indicator is turned off. If you are changing from meters to yards, the opposite will occur. Note: The CABELA'S VLR will return to the last setting used, each time the unit is turned on.

### **TARGETING MODES**

The CABELA'S VLR incorporates exclusive targeting modes that allow you to adjust the performance parameters of the unit to suit your specific situation and environment. The different targeting modes available are listed below:

Standard (LCD Indicator - none): This setting allows most targets to be distanced up to 570 yards. Used for moderately reflective targets that are typical of most distancing situations. The minimum distance in the standard mode is 10 yards.

SCAN (LCD Indicator - "SCAN"): When the Power button is held down longer than 3 seconds, the unit transitions to SCAN mode. This mode allows the range to be continuously updated as long as the Power button remains depressed. The word "SCAN" will blink and appear in the left side of the LCD once this mode is activated.

>150 (LCD Indicator - ">150"): This mode can be used to ignore energy pulses reflecting off objects less than 150 - 165 yards / meters away. It would typically be used when distancing through brush to an object further than 150 yards / meters away. Note: In this mode, the system will not measure to targets less than 150 yards / meters.

To select >150 Mode, while looking through the monocular, depress and release the mode button. Note: The CABELA'S VLR will return to the last setting used, each time the unit is turned-on.

## **ILLUMINATING INDICATORS**

Low Battery Charge (LCD Indicator - ): When both dashes inside the battery symbol are displayed, the battery is fully charged. When the dashes start to fade away, it means the battery charge is getting low and the 3-volt lithium battery should be replaced.

## **ROLL DOWN EYECUP**

The CABELA'S VLR's monocular is equipped with a rubber eyecup designed for your comfort and to exclude extraneous external light. If you wear sun / eyeglasses, roll down the eyecup. This will bring your eye closer to the ocular lens, thus providing improved field of view.

## **SPECIFICATIONS**

### **OPTICAL DESIGN**

The CABELA'S VLR features a Perma Focus® monocular optical system for viewing your target. A liquid crystal display (LCD) is mounted within the optical system and when activated, displays a reticle for targeting, yard / meter and mode designations, and low battery indicators. Inherent in the manufacturing process are small black spots that appear in the optical system. These are a natural characteristic of the LCD, cannot be fully eliminated in the manufacturing process and do not affect the distancing performance of the unit.

Dimensions: Pocket Size, measuring 1.5x4x2.75 inches

Weight: 6.8 oz.

Accuracy: +/- 1 yard

Magnification: 6x

Display: LCD (even and odd numbers)

Power Source: 3- volt lithium battery included

FOV: 320 ft. @ 1000 yards

Total Eye Relief: 20mm

Exit Pupil: 4 mm

Water resistant

Modes: Standard, Scan, and >150

10-yard minimum, 700 yards to a reflective target, 300 yards to a deer, 570 yards to a tree

Includes case and strap

## **CLEANING**

Gently blow away any dust or debris on the lenses (or use a soft lens brush). To remove dirt or fingerprints, clean with a soft cotton cloth, rubbing in a circular motion. Use of a coarse cloth or unnecessary rubbing may scratch the lens surface and eventually cause permanent damage. 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.

## **Trouble Shooting Table**

If unit does not turn on - LCD does not illuminate:

- Depress power button.
- Check and if necessary, replace 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 good quality lithium battery.

There is no reset button to clear last range reading before ranging another target.

- The last range reading does not need to be cleared before ranging another target. Simply aim at the new target using the LCD's reticle, depress the power button and hold until new range reading is displayed.

If target range cannot be obtained:

- Make sure LCD is illuminated.
- Make sure that the power button is being depressed (as opposed to mode button).
- Make sure that nothing, such as your hand or finger, is blocking the objective lenses (lenses closest to the target) that emit and receive the laser pulses.
- Make sure unit is held steady while depressing power button.
- Make sure that the targeting mode selected is the appropriate mode for that specific situation or environment. SCAN and >150 modes have different minimum distance and sensitivity to a specific target's reflectivity levels.

## FCC NOTE

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.





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Sidney, NE 69160

1-800-237-4444

[www.cabelas.com](http://www.cabelas.com)