# BUSHNA VELOCIA



Congratulations on the purchase of your Bushnell® Velocity™. The Velocity is a precision speed radar instrument designed to provide many years of enjoyment. These instructions will help you achieve optimum performance by explaining the adjustments and features as well as how to care for this precise speed measuring instrument. To ensure optimal performance and longevity, please read these instructions before using your Bushnell Velocity.

# INTRODUCTION

Your Bushnell Velocity uses digital technology to provide instantaneous speed measurements to +/- One-Mile per Hour (MPH) accuracy (+/- 2 KPH). The Bushnell Velocity is a simple, point and shoot radar gun for all kinds of sports enthusiasts. The Bushnell Velocity measures the speed of a baseball at 10-110 MPH from 90 feet away from the ball (16-177 KPH @ 27m), and the speed of a race car from 10-200 MPH at 1,500 feet away (16-322 KPH @ 457m).

## **BATTERY INSTALLATION**

Your Bushnell Velocity operates on two "C" size alkaline batteries. To install, remove the battery cover by rotating the battery cap counterclockwise. Insert both batteries positive end first and replace cap by depressing and rotating clockwise.

# **HOW TO USE**

- 1. Turn the Velocity "ON" by pressing the button underneath the LCD
- Aim the Velocity at the target and depress the TRIGGER. As a quick reference to accuracy, remember to keep your target's direction of travel in a direct line with you and not perpendicular to you.
- Turn the Velocity "OFF" by pressing the button underneath the LCD Display for 3 seconds or until display shuts off.

NOTE: The Velocity contains an automatic battery saving shut-off feature. After 10 minutes of non-use, the Bushnell Velocity will automatically shut off. If a battery symbol appears on the lower right hand corner of the display, the battery voltage is beginning to deteriorate, meaning new batteries should be inserted. Remove batteries if storing long-term.

## SWITCHING FROM MPH TO KPH / KPH TO MPH

To change the display readout from MPH (miles per hour) to KPH (kilometers per hour), the Velocity should be powered on first. While holding down the TRIGGER, press the power button underneath the LCD display. To switch back to MPH, repeat this procedure.

# TARGET SPEED ACQUISITION

A target can be anything that is moving faster than 10 MPH (16 KPH). To acquire the speed of a target, with the Velocity powered on, aim the Velocity at the target and depress the TRIGGER. A radar icon "●)) " will appear in the upper right corner of the LCD display. This indicates the Doppler Radar is functioning. The radar will continue to be active searching for speed until the trigger is released. Upon release of the trigger, the fastest speed captured within that series will automatically be displayed. The speed of the target will appear on the LCD display in MPH. There are certain mathematical properties of Doppler Radar that affect the accuracy of your Bushnell Velocity. Please read "COSINE AFFECT ON TARGET VELOCITY" below. As a quick reference to accuracy, remember to keep your targets direction of travel in a direct line with you, and not perpendicular.

## **COSINE EFFECT ON TARGET VELOCITY**

The Velocity will measure the relative speed of a target as it approaches the Velocity. If the target is in a direct line (collision course) with the Velocity the measured speed will be exact. As the angle of incidence increases, if you move either right or left of this direct line, the accuracy will decrease. The measured speed will decrease as you move off this centerline. This phenomenon is called the Cosine Effect. It is called this because the measured speed is directly related to the cosine of the angle between the Velocity and the target's direction of travel.

#### **SPECIFICATIONS**

Speed Performance:

Ball: 10-110 MPH at 90 Feet (16-177 KPH @ 27 meters) Car: 10-200 MPH at 1500 Feet (16-322 KPH @ 457 meters)

Accuracy: +/- One MPH Battery Type: C (2)

Operating Time: Up to 20 hours

Operating Temperature Range: 32-104 F / 0-40 C

#### **TWO-Year LIMITED WARRANTY**

Your Bushnell® product is warranted to be free of defects in materials and workmanship for two years after the date of purchase. In the event of a defect under this warranty, we will, at our option, repair or replace the product, provided that you return the product postage prepaid. This warranty does not cover damages caused by misuse, improper handling, installation, or maintenance provided by someone other than a Bushnell Authorized Service Department.

Any return made under this warranty must be accompanied by the items listed below:

- 1. A check/money order in the amount of \$10.00 to cover the cost of postage and handling
- 2. Name and address for product return
- 3. An explanation of the defect4. Proof of Date Purchased
- 5. Product should be well packed in a sturdy outside shipping carton, to prevent damage in transit, with return postage prepaid to the address listed below:

IN U.S.A. Send To: Bushnell Outdoor Products Attn.: Repairs 9200 Cody Overland Park, Kansas 66214 IN CANADA Send To: Bushnell Outdoor Products Attn.: Repairs 25A East Pearce Street, Unit 1 Richmond Hill, Ontario L4B 2M9

For products purchased outside the United States or Canada please contact your local dealer for applicable warranty information. In Europe you may also contact Bushnell at:

**Bushnell Germany GmbH** European Service Centre Mathias-Brüggen-Str. 80 D-50827 Köln **GERMANY** 

Tél: +49 221 995568-0 Fax: +49 221 995568-20

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## INFORMATION TO THE USER

Changes or modifications to the Bushnell Velocity™ Speed Gun, instruction manual or printed materials, not expressly approved by Bushnell for compliance could void the user's authority to operate the equipment.

FCC NOTE: This equipment has been tested and found to comply with the limits for a Class B digital  $device, pursuant to part 15 of the FCC \, Rules. These \, limits \, are \, designed \, to \, provide \, reasonable \, protection \, device, \, pursuant \, to \, part \, 15 \, of \, the \, FCC \, Rules. \, These \, limits \, are \, designed \, to \, provide \, reasonable \, protection \, device, \, pursuant \, to \, part \, 15 \, of \, the \, FCC \, Rules. \, These \, limits \, are \, designed \, to \, provide \, reasonable \, protection \, device, \, pursuant \, to \, part \, 15 \, of \, the \, FCC \, Rules. \, These \, limits \, are \, designed \, to \, provide \, reasonable \, protection \, device, \, pursuant \, to \, part \, 15 \, of \, the \, FCC \, Rules. \, These \, limits \, are \, designed \, to \, provide \, reasonable \, protection \, device, \, pursuant \, to \, part \, 15 \, of \, the \, FCC \, Rules. \, The \, part \, 15 \, of \, the \, PCC \, Rules \, are \, the \, part \, 15 \, of \, the \, PCC \, Rules \, are \, the \, part \, 15 \, of \, the \, PCC \, Rules \, are \, the \, part \, 15 \, of \, the \, PCC \, Rules \, are \, the \, part \, 15 \, of \, the \, PCC \, Rules \, are \, the \, part \, 15 \, of \, the \, PCC \, Rules \, are \, the \, part \, 15 \, of \, the \, PCC \, Rules \, are \, the \, part \, 15 \, of \, the \, part \, 15$ 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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