# THE SHARPER IMAGE

# Laser Ball

**PS115 Instructions** 

Read and save these instructions.



# Warnings

- This Laser Ball contains extremely delicate electronic components. Please use it and store it properly.
- This ball is not intended for batting practice. Do not under any circumstances hit the Laser Ball with a bat or throw it against a wall! This will damage the ball and make it inoperable.
- Do not store the ball in an excessively humid place for an extended period of time. Keep the ball dry, as water will damage the circuitry inside.
- The Laser Ball is a baseball used for pitching practice. It has the standard size, shape and weight of a regular baseball. What makes it special is its abil-

## Introduction

ity to sense and display the speed of the baseball. This new ball has also incorporated new state-of the-art hand-sensing technology (patent pending for U.S., patented in Taiwan, Japan and China).

With this new and ingenuous hand-sensing design technology, the Laser Ball can sense when it is being held in a hand. Pitchers can hold the ball any way they like. Once the ball detects the pitcher's hand has left the ball, the speed calculation starts.

The Laser Ball contains a detection circuit inside the ball. On the outside, a START button is used to activate the circuit and/or to set the pitching distance. An LCD shows the status, distance setting or the speed value. It also

### Introduction

provides measurement in feet for distance and miles per hour (mph) for speed.

The pitching distance can be set to one of eight different distances: 20', 30', 40', 46', 50', 60', 70' or 80'.

Note: Due to limited display digits, the display of 60' is actually for 60.5'.

### **LCD** Format

Display	Reading	Blinking	Status
- x x -	Distance	No	Current pitching distance, where xx is dis- tance in feet.
- x x -	Distance	Yes	Setting mode to select pitching distance.
	Ready	No	Unit is on and ready to calculate pitching speed.
x x x	Speed	No	Last pitch speed, where xxx is speed in miles per hour (mph).

### **LCD Format**

Display	Reading	Blinking	Status
L	Speed	No	Last pitch speed is too low to display (less than 10 mph).
100 - 119	Speed	No	Last pitch speed is between 100 mph - 119 mph. (This may also appear when pitch is thrown shorter than the selected pitching distance.)
120	Speed	Yes	Last pitch speed is greater than 120 mph. (This may also appear when pitch is thrown shorter than the selected pitching distance.)

#### Setting the Pitching Distance

- 1. To turn on the Laser Ball, press and release the **START** button. The current pitching distance will be shown on the LCD as "- x x -." If you wish to pitch at this distance, press and release the **START** button. LCD shows "- - -." Now you are ready to pitch. (See the following section for more information on pitching.)
- 2. To change the pitching distance, press and hold the **START** button while LCD shows either distance (as "- x x -") or speed (as "x x"). After 2 seconds, the LCD blinks through all possible distance settings one by one. The possible distances are: 20, 30, 40, 46, 50, 60\*, 70 or 80 feet. \*Due

to limited display digits, the display of 60' is actually for 60.5' (official Major League Baseball pitching distance).

Note: The longer the distance you select, the more accurate the speed reading.

- 3. Once the desired distance appears on the LCD, release the **START** button. The new distance setting appears on the LCD without blinking.
- 4. To pitch at this distance, press and release the **START** button. LCD shows "- - -." Now you are ready to pitch. (See the following section for more information on pitching.)

**Note:** When "- - - -" appears on the LCD, you cannot change the pitching distance.

### Pitching

The hand-sensing technology of the Laser Ball works by detecting the changes of the static-electric field between your hand and the surface of the ball. This field exists in and between two objects consisting of different substances. Experiments have revealed that environmental factors can affect the strength of the static-electric field. This field varies depending on who is holding the ball and how he/she is holding it. However, the sophisticated circuits inside the Laser Ball can sense the differences. The Laser Ball contains two sensitive circuits: a start circuit that detects that the ball has been thrown; and a stop circuit that detects that the ball has been caught.

To pitch:

- 1. Place the ball in your pitching hand and press the **START** button.
- 2. When the ball is in your hand, "- - -" appears on the LCD.
- 3. Pitch the ball to the catcher. When the ball leaves your hand, "- - -" disappears.
- 4. When the ball is caught, the pitch speed appears on the display.
- 5. To pitch again, place the ball in your hand again and press the **START** button.

**For best results:** In order to achieve more accurate speed readings, use the included measuring string to mark the exact distance between the pitcher and catcher. Make sure that this distance is the one you have programmed into the Laser Ball.

### Troubleshooting

- Occasionally the LCD fails to read "- - -" for several seconds after you press and release the START button while holding the ball. This indicates that the ball has not yet sensed the static-electric changes; it does not mean that the ball has malfunctioned. Ninety percent of the time, the circuit inside the Laser Ball activates if you move your fingers or turn the ball in another direction. For best results before pitching, hold the ball several different ways to find out which way the LCD shows "- - - -," indicating that the circuit inside is in READY mode.
- If the ball is thrown too lightly, the LCD will read "- - -" or " L." To pitch again, press the **START** button and pitch the ball.

### WARRANTY

#### What Is Covered

This warranty covers any defects in materials or workmanship, with the exceptions stated below.

#### How Long Coverage Lasts

This warranty runs for 90 days from the date of original purchase.

#### What Is Not Covered

This warranty does not cover damage caused by misuse or use other than as intended and described in the product instruction manual, or loss or damage to batteries or removable parts.

#### What The Sharper Image Will Do

The Sharper Image will repair any defects in materials or workmanship. In the event repair is not possible, The Sharper Image will either replace this product with one of similar features and price, or refund the full purchase price of the product, whichever you prefer.

#### WARRANTY

#### How to Obtain Service

Return the product and receipt, along with a brief explanation of the problem, to:

#### T.S.I. - Returns Department 2901-A West 60th Street Little Rock, AR 72209

If you have questions please feel free to contact our customer service representatives at 1-800-344-5555 or by email at care@sharperimage.com.

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

Sharper Image Corporation 650 Davis St., San Francisco, CA 94111 (415) 445-6000

#### Shop online: www.sharperimage.com

Due to continuing improvements, actual product may differ slightly from the product described herein. v1 11/02