



RADARGOLF



OWNER'S MANUAL

## Contact and Regulatory Information

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RadarGolf, Inc.

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San Ramon, CA 94583 USA

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Customer Service

(888) RADAR-01

(888) 723-2701

[customerservice@radargolf.com](mailto:customerservice@radargolf.com)

**WARNING:**

DO NOT DISASSEMBLE THE HANDHELD.

DISPOSE OF BATTERIES PROPERLY, FOLLOWING LOCAL REGULATIONS. DO NOT INCINERATE BATTERIES.

THE USER IS CAUTIONED THAT MAKING CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY RADARGOLF IS AGAINST FCC REGULATIONS, AND COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

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 UNDESIRE OPERATION. RADARGOLF HANDHELD ASSEMBLED IN THE PHILIPPINES. RADARGOLF BALLS MADE IN CHINA. PATENTS PENDING.

THIS DEVICE COMPLIES WITH FCC RADIATION EXPOSURE LIMITS IN SECTION 1.1307 SET FORTH FOR AN UNCONTROLLED ENVIRONMENT, AND USERS MUST FOLLOW SPECIFIC OPERATING INSTRUCTIONS FOR SATISFYING RF EXPOSURE COMPLIANCE. TO COMPLY WITH RF RADIATION EXPOSURE REQUIREMENTS IN FCC'S RULES, THE RADARGOLF HANDHELD MUST BE OPERATED SO THAT THERE IS A SEPARATION DISTANCE OF AT LEAST 20 CM (8 IN) BETWEEN ALL PERSONS AND THE ANTENNA. THE INTENDED USE OF THE SYSTEM IS HOLDING THE DEVICE BY THE HAND, WITH THE ANTENNA POINTING AWAY FROM THE BODY.

Please do not remove the FCC label from the handheld.

The RadarGolf Handheld (Model BPS – X2) is approved for use in the United States and Canada only.

Please follow all golf course rules when searching. Do not search in restricted areas. Search in out-of-bounds areas at your own risk.

Model numbers: RGS (RadarGolf System), BPS – X2 (RadarGolf Handheld) and BPS – LS (RadarGolf Ball)

RADARGOLF, THE DOG, FIND IT. PLAY IT., BALL POSITIONING SYSTEM, BPS AND SHIELD-IT ARE TRADEMARKS OF RADARGOLF, INC.

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Thank you for purchasing the RadarGolf™ System. We believe this system will help you lower your score and reach a whole new level of enjoyment when you golf. Rather than being distracted and frustrated searching for golf balls, you can now stay focused on your swing and your game.

**Be sure to take a few minutes to watch the enclosed DVD.** There are several things you need to know in order to have the best experience when using our Ball Positioning System™ technology. We are confident that if you watch the DVD and fully understand the system, you will never play another round of golf without it.

Have fun.

A handwritten signature in black ink, appearing to read 'Chris Savarese'. The signature is fluid and cursive, with a large initial 'C'.

Chris Savarese  
Founder and President

## Important Usage Notes

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- The RadarGolf System is designed to be used outdoors on golf courses. It is not designed for use indoors or in areas surrounded by cars or buildings. Even on golf courses, some conditions may cause unintended detections. (See page 13 for important details).
- Keep unused RadarGolf Balls shielded from detection. The handheld will locate all RadarGolf Balls within detection range. You can shield RadarGolf Balls from detection by storing them in the following:



Shield-It pouches



Dozen ball packaging

- The handheld will not locate a ball that is under water.
- When searching for your ball, always follow the procedures described on pages 11 – 14.

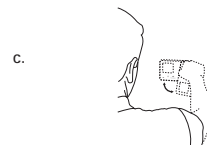
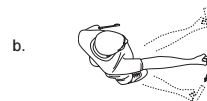
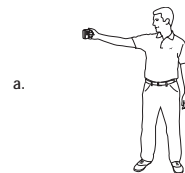
## Quick Start

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- 1 Install batteries in the handheld. (See page 8).
- 2 Remove one RadarGolf Ball from the packaging. Place all spare balls in the Shield-It™ pouch.
- 3 After you hit the ball, approach the area where you think it is located.
- 4 To start-up the handheld, hold it with one hand, and press and release (a). Adjust the volume to your preference.

Note: Some objects (i.e. electronics, golf carts, metal fences) may cause unintended detections at close range.

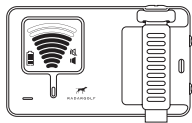
- 5 Raise your arm shoulder high and parallel to the ground (a). Sweep your arm back and forth while walking around to scan the area where you believe your ball landed (b). Rotate your wrist while searching to “lock on” to the strongest signal (c). (See page 11 and watch the DVD for details).
- 6 When you receive a signal, walk in that direction. You will receive stronger feedback as you get closer to the ball. **When all LCD bars are filled**, you are within a few feet.



## Contents of the Package

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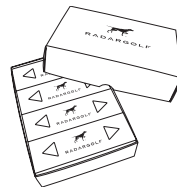
The RadarGolf System you purchased should contain:



RadarGolf Handheld



Handheld protective case



One dozen RadarGolf Balls



Two Shield-It pouches  
(one small and one large)



Instructional DVD



Six AAA batteries



## System Overview

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This section describes the three primary components of the RadarGolf System – the Shield-It pouches, the RadarGolf Handheld and the RadarGolf Balls.

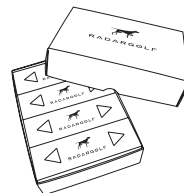
### Shield-It Pouches

The handheld will locate all RadarGolf Balls. If a RadarGolf Ball is elevated (for example, in your pocket, in your golf bag, or on a golf cart) the detection range increases significantly. Therefore, it is critical that you **keep all spare RadarGolf Balls shielded from detection.**

Shield your spare RadarGolf Balls in the Shield-It pouches. The pouches are made with a special metallic fabric that blocks the radio frequency (RF) signals and allows you to find only your “ball in play” when you are searching.

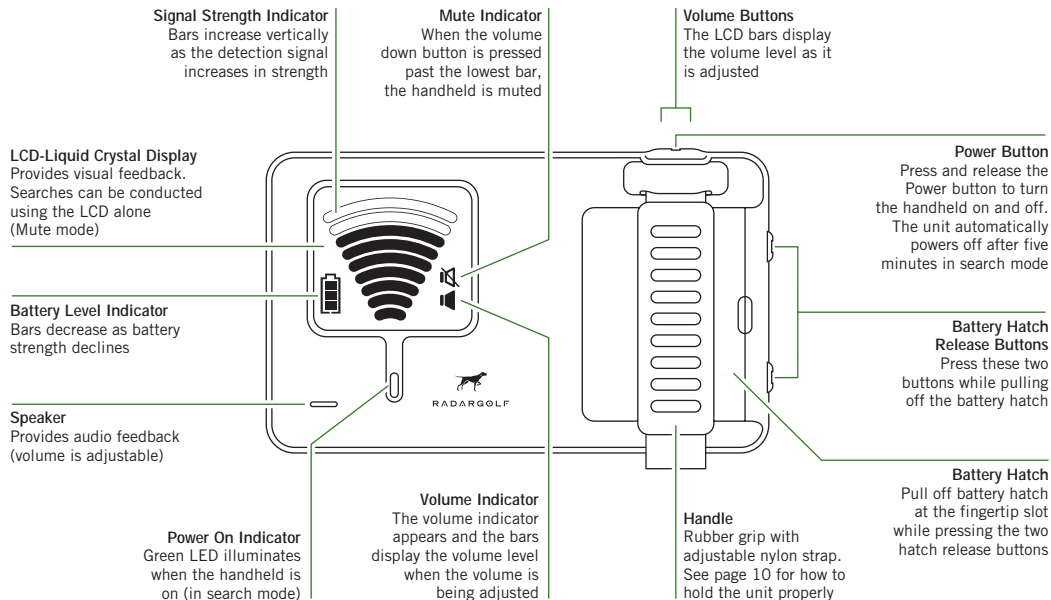
- Use the **large pouch** in your golf bag to store up to a dozen balls.
- Use the **small pouch** if you want to carry a ball in your pocket.
- Be sure to **close the pouches tightly.**
- Be sure to **keep the pouches dry.** The fabric may discolor and lose its shielding effectiveness if it gets wet.

*Note: The packaging (dozen box) that your RadarGolf Balls came in will also shield the balls from detection. The ball packaging material is lined with a metallic layer that serves as an excellent shield. The 3-ball sleeve packaging provides limited shielding. We recommend using the Shield-It pouches for shielding balls outside the dozen box.*



## System Overview

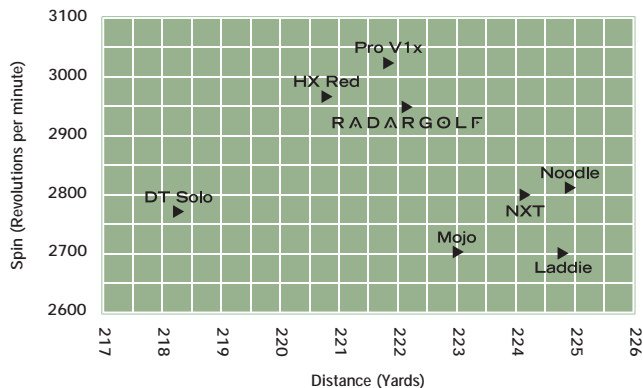
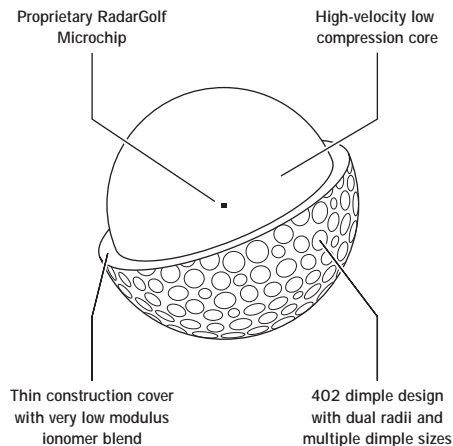
### The RadarGolf Handheld



## System Overview

### The RadarGolf Ball

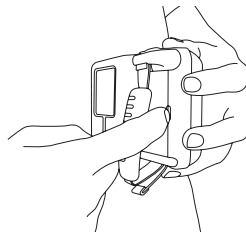
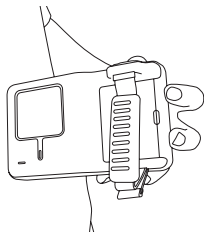
The USGA-conforming RadarGolf Ball is a high-quality golf ball that outperforms many premium brands. The embedded microchip is so small that it does not affect the performance of the ball in any way. The RadarGolf Ball meets all USGA specifications for size, weight, distance, initial velocity and symmetry. The ball has been thoroughly tested for durability and performance parameters including carry, distance, roll and dispersion accuracy. The chip in the ball is very durable and has no power source – it will last as long as the ball.



Testing performed by an independent lab. Distance test used a Callaway 10° Great Big Bertha II Driver with System 60 firm shaft at a 90 mph swing speed.

### Installing the Batteries

- 1 Hold the handheld against your body. Press and hold down the two release buttons on the side of the handheld. The battery hatch is designed to close tightly so be sure to press the center of the release buttons and press down **firmly**.
- 2 Using your other hand, insert a fingernail and pull up on the battery hatch (while continuing to firmly press the release buttons).
- 3 Remove the battery hatch.
- 4 Insert six AAA batteries. Be sure to match the + and – on the batteries to the diagram inside the battery compartment. Install batteries on top of the eject ribbon for easy removal. The batteries should fit tightly. Be sure to press securely into position – the batteries should snap into place when seated correctly. Fold the end of the ribbon over the installed batteries.
- 5 Replace the battery hatch by hooking the left side of the hatch and pressing the door firmly near the two latches. The door should make a snapping sound when closed.



## Using the System

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### Replacing the Batteries

The battery icon on the LCD is divided into three segments. The battery strength indicator bars decrease as battery power declines.



Three bars = Full battery strength



Two bars = Medium battery strength



One bar = Low battery strength



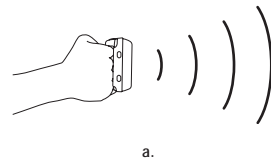
One bar (blinking) = Time to replace batteries

## Using the System

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### Starting Up the Handheld

- 1 Pay attention to where you hit your ball and approach the area where you think it landed. The detection range is approximately 30 – 100 feet.
- 2 Hold the handheld with one hand as shown (a). **Do not hold it with two hands, especially during start-up.**
- 3 The handheld transmits through the front face. Keep the front face clear during use. Fingers, hands, or other objects in front of the handheld may cause false detections.
- 4 Press and release the power button. Adjust the volume to your preference.



You do not need to continue holding the power button. **The handheld will automatically stay on for five minutes** unless you press the power button again to turn the handheld off.

*Note: Five minutes is the allowable time to search for a golf ball, according to the USGA Rules of Golf.*

## Using the System

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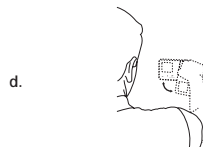
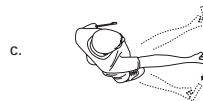
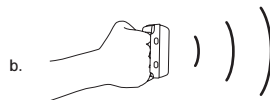
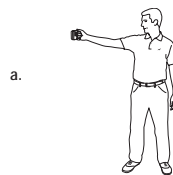
### Searching For Your Ball

After starting the handheld, begin the search:

- 1 Raise your arm shoulder high** and parallel to the ground (a). The front face of the handheld should be broadside to the target. The signal beam is transmitted as shown (b).
- 2 Sweep your arm left and right horizontally**, pointing in the direction where you think your ball may have landed (c). Be sure to walk around while you are searching. This will help you find the initial detection signal.
- 3 While you make the sweeping motion, rotate your wrist** so the handheld makes continual quarter turns (d). This action will find the optimum antenna orientation and help “lock on” to the strongest detection signal. Once the strongest signal is found, keep the handheld in the same orientation as you continue toward the signal.

Please follow all golf course rules when searching. Do not search in restricted areas.

*Note: If your ball is in plain view, you may see it before the handheld detects it.*



## Using the System

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### Detecting Your Ball

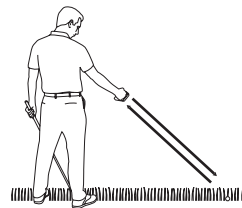
When the handheld detects a signal, you will hear a beeping sound and see the signal strength bars fill in on the LCD.

- 1 Continue to sweep the area, rotating your wrist, until you begin to receive a stronger signal.
- 2 Move in the direction of the strongest signal. Once you “lock on” to a signal, you no longer need to rotate your wrist.
- 3 The audio tone will continue to quicken, and additional bars will fill in as you walk in the direction of the signal.
- 4 As you approach the ball, sweeping your arms left and right will help guide you to your ball.
- 5 **When the final (top) signal strength bar is filled, you are within a few feet of your ball (a).**
- 6 When you are this close, the angle of your arm will naturally be pointing to the ground (b). Continuing to sweep your arm left and right at close range while carefully watching the signal strength bars helps you pinpoint the location of the ball.

*Note: The handheld will find ALL RadarGolf Balls within detection range. Therefore, you should mark your ball in play.*



a. When all signal strength bars are filled, you are very close to your ball.



b.

## Important Tips

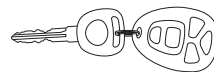
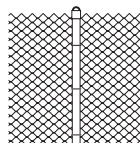
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### Unintended Detections

As previously mentioned, it is important for you and your party to keep all spare RadarGolf Balls shielded from detection in Shield-It pouches. Unintended detections are most often caused by unshielded RadarGolf Balls.

Additional sources of unintended detections can include:

- **Obstructing the front face of the handheld.** Keep your fingers, your free hand, and any objects away from the unit (especially the front face) during use.
- **Other electronic components and metallic objects.** These items can include phones, keys, and other electronics that people may be carrying. Some items that can be found on or near golf courses can also cause unintended detections. These items include metal fences, sprinkler control stations, electric transformers, automobiles, and household electronics. In most cases, the detection range of other electronic components will be limited to a few feet.
- **Transmitted RF signals.** In very rare cases, there may be RF transmitting devices that transmit RF signals in the same frequency as the reflected ball signal.



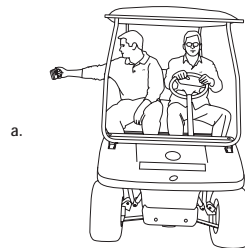
These items can cause unintended detections at close range.

## Important Tips

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### Searching From Your Golf Cart

Only attempt this search if someone else is driving the cart (slowly). To search from your golf cart, hold your arm shoulder high and parallel to the ground **out the side of the golf cart** (a). Do not attempt to search by sticking your arm out the front of the golf cart because the electronics and wiring toward the center of the cart generally cause unintended detections at close range.

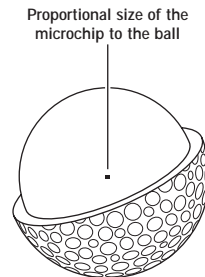
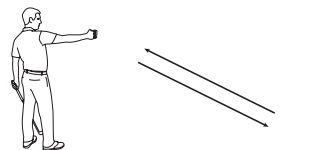


### Overview

The RadarGolf System uses Ball Positioning System™ technology to locate your ball. BPS™ technology uses advanced electronics to enable the RadarGolf Handheld to transmit a specific radio frequency (RF) signal. When this signal reaches a RadarGolf Ball, the ball returns a separate specific RF signal. The handheld receiver is tuned to “listen” for the signal returned from the ball.

Central to this technology is a microchip that is embedded in the core of the ball during the manufacturing process. The microchip in the ball acts like an antenna that receives and returns the signal back to the handheld.

The microchip in the ball has optimum orientations with the handheld that produce maximum detection range. Because the ball will always land differently, rotating your wrist while searching is important. The rotation of the handheld will help find the optimum orientation between the handheld and the ball. The detection range will vary depending on how the ball and handheld are aligned.



### Detection Range

Detection range can vary depending on the terrain on which the ball lies. It also depends on the orientation of the ball relative to the handheld. Moisture on the ground can also negatively impact detection range.

RF signals travel best through the air. They do not travel as well through the ground. So, the more air there is between the handheld and the ball, the greater the detection range. If the ball is on the other side of a valley (even a slight valley), the detection range may increase significantly. On the other hand, if the ball is on the other side of a hill, the detection range may decrease significantly.

Detection range = 30 to 100 feet (approximately)



A ball on the other side of a hill will register in the lowest end of the detection range.



A ball on flat terrain will register in the lower end of the detection range.



A ball that is on the other side of a valley will register in the middle to high end of the detection range.

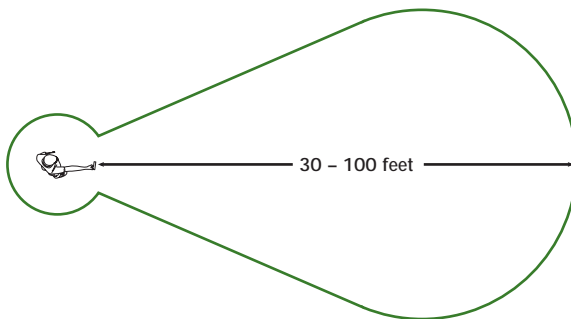
*Note: It is possible to have less than 30 feet detection range in some instances.*

### Detecting Through Objects

The RadarGolf System will detect balls behind trees, bushes, grass, rocks, and so on. The RF signals can actually go through some objects, depending on their size and material makeup. The level of detection also depends on the size and material makeup of the object.

### Detection Pattern

The handheld transmits the signal to the ball within a directional detection pattern (beam width). The beam width moves with the handheld as you sweep your extended arm. Keep in mind there is a small backward beam which will detect things in the immediate vicinity of the handheld. (This is why you need to shield any ball that you carry in your pocket).



*Note: Be sure to walk around while you are searching so the detection beam moves with you to quickly receive the first detection signal.*

## Other Information

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### Conformance with the USGA Rules of Golf

The USGA allows the use of the RadarGolf System for posting USGA (GHIN) handicaps. The RadarGolf Ball is listed on the USGA-conforming list of golf balls and can be used at all levels. The use of the RadarGolf System is not allowed for USGA-sanctioned tournament play at this time.

### Care for the Handheld

- Keep the handheld in its protective case when not in use.
- Keep the Shield-It pouches dry. The pouches will discolor if they get wet and will eventually lose their shielding effectiveness.
- Replacement protective cases and pouches can be purchased at [www.radargolf.com](http://www.radargolf.com)
- While it is okay to use the handheld in the rain, do not expose it to large amounts of water. If it does get wet, wipe it with a soft, dry towel.
- Do not expose the handheld to large amounts of sand or dust.
- Do not use liquid cleaners or aerosol cleaners on the Handheld.
- Do not expose the LCD screen to direct sunlight for extended periods of time.
- Do not press hard on the LCD screen.
- Do not drop the handheld on the ground.

### Specifications

#### General

- System frequency: 914.22 MHz – signal from handheld to ball
- System frequency: 1,828.44 MHz – signal from ball back to handheld
- Range of detection: approximately 30 – 100 feet
- Battery life: 3 - 4 hours continual running time at maximum power output

#### Handheld

- Dimensions: 6.29" x 3.78" x 1.91"
- Weight: 14.5 ounces (without batteries)

#### Ball

- Dimensions: 1.68" diameter
- Weight: 45.25 grams

## Warranty

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### Limited Warranty

If your product does not work properly because of a defect in materials or workmanship, RadarGolf, Inc. (referred to as “the warrantor”) will, for the length of the period indicated below, which starts with the date of original purchase (“warranty period”), at its option either: (a) repair your product with new or refurbished parts, or (b) replace it with a new or refurbished product. The decision to repair or replace will be made by the warrantor. A \$25 re-stocking fee will be charged for each return.

Parts – Six (6) Months

Labor – Six (6) Months

During the “Labor” warranty period there will be no charge for labor. During the “Parts” warranty period there will be no charge for parts. You must mail in your product during the warranty period. This Limited Warranty excludes both parts and labor for batteries. This warranty is extended only to the original purchaser of a new product.

**To process a return please contact RadarGolf at 888-723-2701 for return instructions and to obtain a Return Merchandise Authorization (RMA) number.  
A valid RMA number is required for all returns.**

IF REPAIR IS NEEDED DURING THE WARRANTY PERIOD THE PURCHASER WILL BE REQUIRED TO FURNISH A SALES RECEIPT/PROOF OF PURCHASE INDICATING DATE OF PURCHASE, AMOUNT PAID, AND PLACE OF PURCHASE. CUSTOMER WILL BE CHARGED FOR THE REPAIR OF ANY UNIT RECEIVED WITHOUT PROOF OF PURCHASE.

### Limited Warranty Limits and Exclusions

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, improper maintenance, introduction of sand, humidity or liquids, or service by anyone other than a RadarGolf Service Center or other Authorized Servicer, or damage attributable to acts of God.

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Find it. Play it.™



[WWW.RADARGOLF.COM](http://WWW.RADARGOLF.COM)