

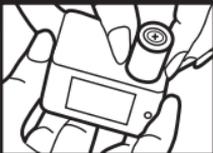
# Premium Tracking System

## Quick Start Guide

RD-400

### Step 1

#### Power Up



Collar Transmitter: Insert 3v lithium battery in the transmitter positive (+) side out. Replace battery cap.

Handheld Receiver: Insert 9v alkaline battery into the battery clip.

### Step 2

#### Turn components ON/OFF

Collar transmitter: Hold the keychain magnet against the red dot located on the antenna-side of the transmitter. The LED will illuminate green; remove the keychain magnet. The LED will glow GREEN for one second, then flash YELLOW for each channel count. The LED will return to flashing GREEN, indicating that the unit is transmitting a signal.

OFF: Hold the keychain magnet against the red dot. The LED will flash RED for one second, then shut down.

Handheld Receiver: Press the RED button on the upper left side of the meter to turn ON; press and hold the RED button for 2 seconds; the receiver will turn OFF.

### Step 3

#### Band and Channel Selection

When the receiver is turned ON, the LCD display shows the current channel setting. Press and release the RED button to change band setting; press and release the BLACK button to change channel selection. (The receiver will automatically return to the band and channel at which it was last set when turned OFF.) Channel setting on the collar transmitter must be the same as set on the receiver.

### Step 4

#### Adjust the collar



Proper Fit: The collar fit should be snug, yet loose enough to allow one finger to fit between the strap and the dog's neck. Fit is important because a loose collar may rotate round the neck, causing inconsistent performance. It's okay to trim any excess strap length.

# RD-400 Premium Tracking System

## Understanding the Collar Transmitter

The collar device sends a radio frequency signal to the receiver. The user can cast the receiver from right to left to determine direction of the transmitter. The transmitter features 16 channels across 4 radio frequency bands. The waterproof transmitter operates on a long-life 3-volt lithium battery.

## Programming Channels

1. Hold the magnet key to the red dot as if you are turning ON the transmitter, and continue to HOLD the keychain magnet after the LED glows green.
2. The LED turns YELLOW for 1 second, then OFF for 0.5 seconds. The LED will flash YELLOW once for each channel count, to a maximum of 16. Take away the keychain magnet when the desired count is reached.
3. After a few seconds, the LED will repeat/confirm the count with a series of YELLOW flashes.
4. The LED will then flash GREEN. The transmitter is now in operational mode.

**NOTE:** The transmitter will automatically return to the channel at which it was programmed when it was turned OFF.

**EXCEPTION:** When the battery is replaced, the transmitter will default to Channel 1 of the band manually selected (see next section).

## Programming Bands

Select 1 of 4 bands by positioning the switches inside the battery compartment. Switches must align as illustrated in this table:

Band	Switch 1	Switch 2
216 MHz	OFF	OFF
217 MHz	ON	OFF
219 MHz	OFF	ON
220 MHz	ON	ON

## Tree Indicator

The collar transmitter will produce a double-beep when the dog is looking straight up. Note the collar uses a ball-bearing switch, which may rattle when the collar is shaken. This rattle is normal.

## Low Battery

If the collar transmitter LED flashes RED instead of GREEN during normal operations (60 to 90F operating temperature), a low battery is

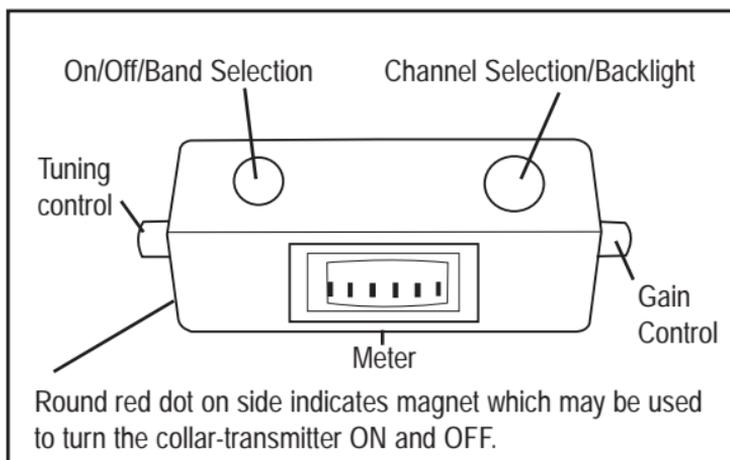
indicated and transmission strength is reduced. Replace the battery immediately.

## Battery

The transmitter uses a 3-volt lithium battery. It can produce a life of up to 70 hours. Battery life will be less during use at lower temperatures.

## Understanding the Receiver

The handheld receiver monitors for up to 16 signals. The receiver is water-resistant and should not be immersed in water.



### Controls:

1. ON/OFF/Band Selection: Press the RED button on the upper left of the control panel.
2. LCD: Indicates the status of the receiver
3. Channel Selection/Backlight: Press the BLACK button on the upper right side of the control panel to select a channel. For easier nighttime viewing, press and HOLD the BLACK button until the backlight comes on. Press and HOLD again to turn it off (Using the backlight feature will reduce the receiver's battery life).
4. Tuning Control: Turn the knob marked with RED on the unit's left side. This control provides fine-tuning of the received signal. Rotate dial to tune out static; the goal is to get a clear tone with high pitch. The knob pointer will usually point straight UP to get the channel tuned.
5. Gain Control: Turn the knob marked with WHITE on the unit's right side. It controls meter deflection and the volume of the received signal.
6. Meter: Indicates signal strength

7. Headphone jack: Located on the right side of the receiver. The internal speaker is muted when a headphone is plugged in.

8. RF connector: The RF connector is a female 50-ohm BNC jack. Any 50-ohm compatible antenna and cable can be used, providing the antenna is directional (not omni-directional).

### Using the Receiver

Open the carry case, grab the handle, and withdraw the receiver straight UP. As you withdraw the unit, the antenna elements will pop into place. Turn the unit horizontally, pointing to the horizon; the handle will automatically position itself. Be sure the handle snaps into the locked position.

Normally, the best reception occurs with the antenna elements parallel with the ground. You may elect to rotate the shaft of the antenna one-quarter turn clockwise, turning the elements from horizontal to vertical, while leaving the receiver in its original position, where the display is easy to read.

### About Gain Control

The gain control knob on the right side of the receiver controls meter deflection and the volume of the received signal.

#### Close Range Operation (within 1 mile)

At close ranges, back down the gain control until the meter needle no longer pegs at the maximum, but rather settles around the mid-meter mark. Use the tuning knob to increase the deflection. If the tuning causes the meter to "peg" (swings all the way to the right side of the meter), back down the gain further and repeat the process until maximum meter deflection occurs without pegging the meter.

#### Long-Range Operation

At longer ranges, there may be very little meter deflection. It's important to tune the receiver for maximum audible signal. Direction finding is very precise, because you will only hear the signal tone when the antenna is pointed right at the transmitted signal. This is different from close range, where you may hear the signal no matter which way the antenna is pointed; but you will rely on the meter reading to tell you the peak signal direction.

**Note:** The direction-finder ability of this system is based on signal strength. If the meter is pegging (maxing out), you will not be able to discern a change in signal strength as you turn the antenna.

### Storage

To store the receiver, position the carrying case vertically. The antenna elements should be horizontal, that is, parallel with the ground. As you push the unit into the case, the antenna elements will fold back. Pull the handle down, and then fold it for storage. To prevent potential dam-

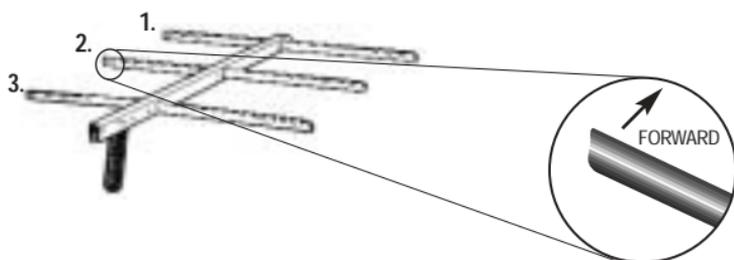
age to the antenna elements, always insert the antenna shaft into the case as centered as possible.

### Replacing Receiver Antenna Elements

Your Premium Tracking System comes with a spare set of antenna blades (3 for the receiver; 1 for the collar transmitter). Before replacing an antenna blade, first remove the protective latex coating, which covers the end to be inserted. You may scratch/peel this coating off with your fingers or a dull instrument to expose the bare blade. Removing this coating is necessary to maintain the system's performance.



Loosen the blade retaining screw with an Allen wrench and pull the antenna element out. Insert the tab end of the new element into the slot so the tab is fully seated. Tighten the remaining screw with an Allen wrench. Do not over tighten. **IMPORTANT:** Never completely remove the retaining screw.

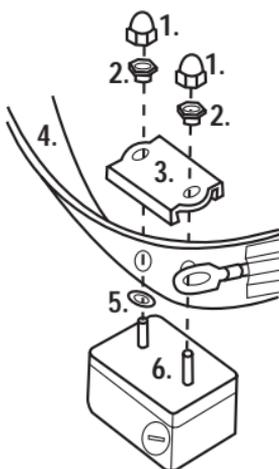


Note:

1. Shortest element goes in the position farthest from the handle.
  2. Mid-length element goes in the middle position.
  3. Longest element goes in the position closest to the handle.
- The convex (curved out) side of each element faces forward.

### Replacing Collar Transmitter Antenna Element

Follow illustration below:



#### Collar Transmitter Antenna Replacement

1. Remove plastic cap screws
2. Remove hex nuts with 1/2" socket head screwdriver
3. Remove cover plate
4. Remove collar
5. Remove washer
6. Remove antenna
7. Reverse the above steps to reassemble

## Replacement batteries

Your RD-400 collar transmitter uses a 3 volt lithium battery, and the receiver uses a 9-volt alkaline battery. These are commonly available where you bought your training system, or where batteries are sold.

## Compliance with U.S. Telecommunications Regulations

This Innotek Premium Remote Tracking System is designed to meet requirements set forth by United States country telecommunications authorities. Note that in some countries, use may be limited due to national frequency planning requirements. The user is responsible for respecting those rules.

## Appendix – Frequencies

The Premium Remote Tracking System operates on 4 bands, and 16 channels.

Bands	Frequency	Channels		
		1	xxx.005	
	216.xxx MHz	2	xxx.055	
	217.xxx MHz	3	xxx.105	
	219.xxx MHz	4	xxx.155	
	220.xxx MHz	5	xxx.195	
		6	xxx.255	
		7	xxx.295	
		8	xxx.365	
		9	xxx.405	
		10	xxx.455	
		11	xxx.505	
		12	xxx.555	
		13	xxx.605	
		14	xxx.655	
		15	xxx.705	
		16	xxx.755	

## Register Your Product:

Your product can be registered on our website at [www.innotek.net](http://www.innotek.net)

## IMPORTANT ADVICE

1. Read the complete instructions and follow all directions. If you have any questions, please call 1-800-826-5527.
2. This device is intended for use only on dogs. Never attempt to use it for any purpose not described in this manual.
3. Never perform set-up procedures while the collar is on your dog.

4. Any collar worn for extended periods can cause a condition similar to bedsores, known as Pressure Necrosis. To reduce the possibility, you must do the following:

- Never leave the collar on the dog for more than 12 hours a day.
- Examine the dog's neck daily for any signs of a rash or a sore.
- Supervise your dog during the first 2 days of training.
- Check the fit to prevent excessive pressure; you should be able to insert one finger between the collar strap and your dog's skin.
- Wash the dog's neck area and the probes of the collar weekly with a wash cloth and mild hand soap.
- If the condition persists beyond 24 hours, see your veterinarian.

5. Do not attempt to dismantle or repair any components of this system; doing so will void the warranty in full. The computerized circuitry should be serviced only by an authorized expert.

## **WE CARE. CALL US FIRST. 1-800-826-5527**

### **LIMITED LIFETIME WARRANTY**

Invisible Technologies, Inc., warrants to the original retail purchaser, that Innotek brand products will be free from defects in material and workmanship, under normal use, for a period of one year from the date of the original retail purchase. This Limited Warranty excludes: accidental damage due to dog chews; lightning damage where an INNOTEK lightning protection component is not in use (in-ground pet fencing systems); or neglect, alteration and misuse.

Invisible Technologies offers several product exchange options during the warranty period. If service is required, call 1-800-826-5527 to discuss the service plan that best serves your needs. Costs are dependent on the processing time and the desired shipping options. Please do not return this product to your retailer.

After one year from date of original retail purchase, we will repair, replace or upgrade your product at a fixed rate based on the component.

Invisible Technologies, Inc., shall not be liable or responsible for any incidental or consequential damages resulting from the use of the product or caused by any defect, failure or malfunction of the product, whether a claim is based upon warranty, contract, negligence or otherwise.

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