



The Ultimate Tracking and Recovery System

# SYSTEM MANUAL



Radio Frequency Transmitters  
Aluminum Transmitter Carriers  
Radio Frequency Receivers with LED Screen  
YAGI Antennas  
Practice Dummy Transmitters  
USB Transmitter Chargers

# **THANK YOU FOR YOUR PURCHASE!**

We at Pro-Tracker® want to thank you for selecting the Pro-Tracker® system to ensure the recovery of your wounded game. By reading this instruction manual you will become familiar with the Pro-Tracker® System, it's operation, and maintenance. When the Pro-Tracker® System is taken care of properly will last for a lifetime.

We want to first begin with writing down your Receiver model number and Transmitter numbers.

**Receiver Model      #**

**1st Transmitter      #**

**2nd Transmitter      #**

**3rd Transmitter      #**

**4th Transmitter      #**

**5th Transmitter      #**

**6th Transmitter      #**

**Transmitters are intended for Amateur Radio Service ( FCC parts 97 ) and must have Amateur Radio License to use these devices. For more information please see back cover of the manual.**

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# **1. OPERATING INSTRUCTIONS**

## **1.1 Parts of the Pro-Tracker® System**



Figure 1

The Pro-Tracker® system is comprised of the following equipment:

- a. Transmitter Carriers
- b. Radio Frequency Transmitter
- c. Dummy Transmitter
- d. Radio Frequency Receiver with LED Screen
- e. YAGI Antenna
- f. USB Transmitter Charger
- g. Custom Carrying Case
- h. Shear Pins and Secure Bands

This manual will help to familiarize you with the use of each of the items. Remember, the more comfortable you are using your Pro-Tracker® system the more successful you will become at recovering your trophy.

## **1.2 Aluminum Carriers**

The Aluminum Carriers are an integral part of the Pro-Tracker® System. They are what screws into your arrow and holds the Radio



Figure 2

Frequency Transmitter (section 1.3). The Carriers are made from a 7075 aluminum alloy that is typically used in aerospace programs. It is the strongest aluminum on the market and made to withstand high velocity impacts. The Carriers will fit on any arrows using a standard arrow insert.

# Remove 3 Inches from standard arrow shaft.

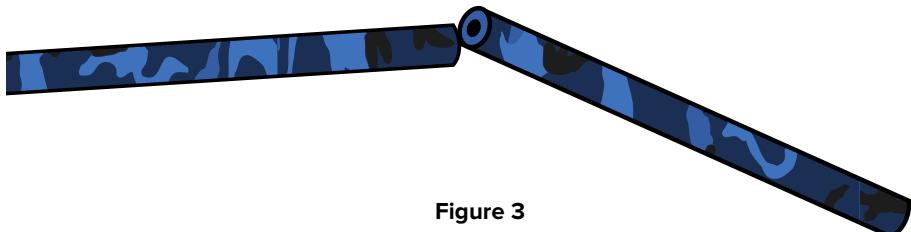


Figure 3

You must cut your existing arrow 3 inches shorter in order to be the most accurate and effective. The Carriers have a built-in threaded insert for the field tip or broadhead of your choice. Crossbows users need only remove inches from their bolts if the head is going to be far past the end of the flight groove/arrow track.

After you have shortened your arrow now screw the Carrier into your insert on the arrow. Your arrow is now the same length as before and able to hold the Pro-Tracker® Radio Frequency Transmitter (section 1.3).

The Carriers are aerodynamically designed to compensate for the weight and shape of the Transmitter. Meaning minimal adjustments to your equipment. Just make sure the opening of the Carrier is facing upward. To adjust the opening, use an O-ring to adjust the position.

## 1.3 RADIO FREQUENCY TRANSMITTER & ITS FUNCTIONS



Figure 4

The Pro-Tracker® Transmitter is a rechargeable, lightweight, water resistant transmitter that disengages from the arrow upon impact; not affecting penetration &

allowing for pass-throughs. The Transmitter hooks into the animal's hide and begins sending a unique radio frequency signal every 3 seconds for the duration of the battery life (10-12 hours), or until it is place back into an Aluminum Carrier. You will need the Pro-Tracker® Receiver (section 1.4) to read and track the signal (up to 2 miles away).

The Radio Frequency Transmitter slips into the Aluminum Carrier (section 1.2) and is pushed all the way forward so that the holes in the side of the

**Carrier line up (see figure 5).** These holes are for the placement of the specially designed Shear Pin. Now push the Shear Pin into place going completely through the hole to the other side, leaving about  $\frac{1}{8}$  of an inch of the Shear Pin on the opposite side of the Carrier.

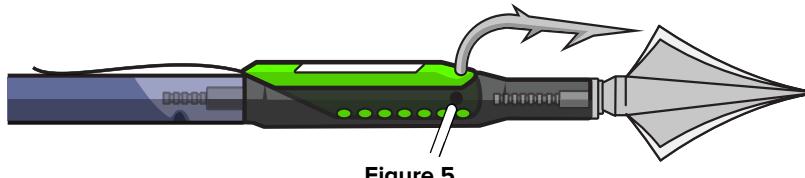


Figure 5



You should now have part of the Shear Pin showing on each side. Make sure the Shear Pin is snug. Take your pocket knife or nail clippers and cut the excess Shear Pin leaving about  $\frac{1}{8}$  of an inch on either side of the Aluminum Carrier. Pull backwards on your Transmitter to secure it in place. Be careful not to injure yourself on the hook. Now take a Secure Band and place it around one side of Shear Pin. Lift the other side of the band over the top of the Transmitter and secure it to the other side of the Shear Pin. Crossbow Secure Bands Tape the back of the Transmitter to the Carrier. The Transmitter is not sending a signal while it's in the Carrier.

**IMPORTANT:** You must make sure the hook is in the straight up position of the arrow. A hook tilted right or left may cause the arrow to drift and could cause injury to yourself or your equipment. Never place your finger in front of the arrow or Transmitter.

Now with your broadhead in place make sure that the hook is positioned between the blades as shown in figure 6. The Radio Frequency Transmitter is equipped with a rechargeable battery. When the Transmitter is fully charged it has a 10 to 12 hour life. This should be more than enough time to track your Transmitter and recover your game.

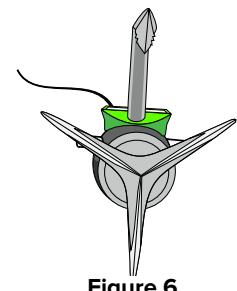


Figure 6

Remember that the Pro-Tracker® System is designed to help recover a mortally wounded animal. Radio Frequency Transmitters should never be used during target practice or to sight in your bow. Instead use the Practice Dummy Transmitter for target practicing and sighting your bow.

The specially engineered Aluminum Carrier (section 1.2) will help to compensate for most of the increased weight (80 grains) that has now been added to your arrow.



Figure 7

The attached Carrier should be pulled up on the rest just as it would if you didn't have the Carrier (shown in figure 7), and the increased diameter will compensate for the increased weight. Start out at 20 yards using your regular 20 yard pin. Shoot the arrow with the Practice Dummy Transmitter (c. of figure 1) to see if there is any drop and adjust your pins to compensate. Repeat this at 30 and 40 Yards.

### 1.3.1 CHARGING YOUR TRANSMITTERS



Figure 8

Your Pro-Tracker® System comes with a Charging Station. This station will charge two Transmitters at the same time. It includes both a USB and outlet adapter.

The outlet adapter allows you to charge your Transmitters at home, while the USB adapters allow you

to charge your Transmitters in your truck for extended hunting trips. If your truck does not have USB plugs, simply plug it into a USB to 12/24V DC (cigarette lighter) adapter (not included).

To charge the Transmitters, position them in the charging station the same as you do in the Carrier. Press the Transmitter all the way down until the **red light** comes on. This means it is now charging. When the Transmitter is fully charged the light on the charger will turn **green**.

### 1.3.2 TRANSMITTER DEACTIVATION

After charging your Transmitters leave them in the charger with the charger plugged in. The charger has a built-in cutoff when it is fully charged. It will recharge the Transmitter as it is discharged. If the Transmitter is not being used this will help to ensure that the Transmitter is fully charged when you need it. If the Transmitter is placed in the Aluminum Carrier or left uncharged for more than 30 days it will no longer accept a charge and will have to be replaced. Pro-Tracker® will not replace Transmitters neglected in this way.

### 1.4 RECEIVER AND ITS FUNCTIONS

The Pro-Tracker® Radio Frequency (RF) Receiver is a compact system with an easy to attach antenna. This state-of-the-art receiver can track up to 6 different Transmitter signals at the same time. Displaying signal strength, Transmitter number, current time, time spent tracking, and current battery life, all on a easy to read LED screen. The Receiver is designed to be water resistant and should be kept in a protected place.



On the back of the Receiver is the battery opening. Remove the cover and place 3 AAA batteries in the directions indicated. We suggest that you carry additional AAA batteries with you in the field while hunting. Make sure you are in a dry place before putting the batteries in the Receiver.

#### 1.4.1 SETTING THE CODE OF THE TRANSMITTER

##### *Action Mode Screen*

On the top of each Transmitter is a number indicating the code for each individual Transmitter giving it its own identity. The Receiver is already programmed to receive 6 different Transmitters. To set the code into

the Receiver, remove the Transmitter from the Carrier, this will activate the Transmitter. Place the Transmitter next to the Receiver and the code will automatically be paired in the Receiver. Continue this for up to 6 Transmitters. Now place the YAGI Antenna on the Receiver.



Figure 10

## Auto Transmitter Register Mode

To remove the code from the Receiver push the enter button and then the manual mode button. In the manual mode you will see all of the codes for each of the Transmitters you have in your Receiver. To remove a coded Transmitter simply scroll down to the Transmitter you wish to remove, now press and hold the register button for 4 to 6 seconds. The highlighted Transmitter should now be removed from the Receiver. The LCD screen on the Receiver will show a number when there is a active Transmitter. The LCD will show you which Transmitter it is as well as a number indicating the signal.



Figure 11

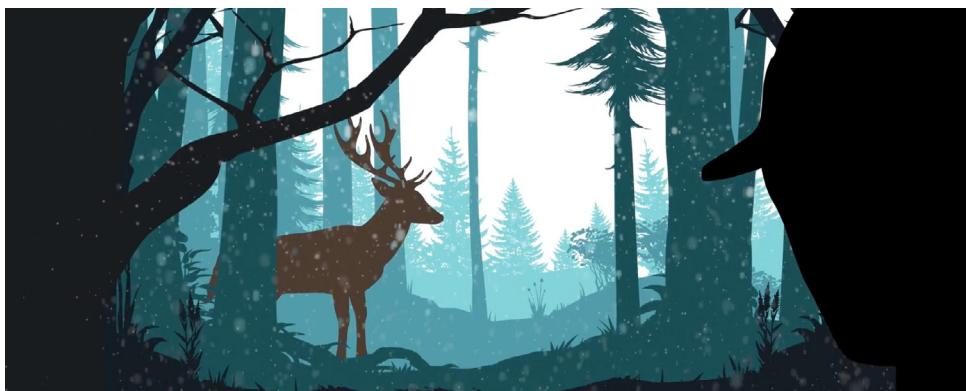
## 1.5 ANTENNA AND ITS FUNCTIONS

The specially designed Antenna is very sensitive to the signal being generated by the Transmitter. Place the BNC connectors together and push down turning 1/4 turn to lock in place. The Antenna is very directional, the more the Antenna is aimed at the Transmitter or target the higher the number on the Receiver. Once you have determined the highest number move the Receiver with the Antenna left and right to make sure that the highest number is indicated on the Receiver. Once you have determined the direction by the highest number on the Receiver take a reading 80 to 100 yards directly in front of the Antenna and then walk to that position. Again take another reading on the Receiver using the same procedure as before. You will soon arrive at your target.



Figure 12

## 2. USING THE PRO-TRACKER SYSTEM IN THE FIELD



### 2.1 LEARN HOW TO USE THE PRO-TRACKER® SYSTEM

With your friends and family play a game of hide and seek. One person takes a Transmitters programmed into the Receiver and goes hide where ever he wants. Give him a few minutes to get in place. Now see if you can find him. The more you do this the easier it is to become familiar with the

system and how it works. Once you have used the Pro-Tracker® system for a few games of hide and seek it is time to use the Pro-Tracker® system to aid in finding your target you have hit with an arrow.

## 2.2 ON YOUR HUNT

The Pro-Tracker® system was designed to aid in finding your wounded animal. The Pro-Tracker® system will not replace your tracking skills. In fact you will still need to follow all signs of the wounded animal, including blood trails or other means. The Pro-Tracker® System will take over when all other options are gone-in case of rain, no blood, heavy down fall or brush. This is when the Pro-Tracker® system is most valuable.

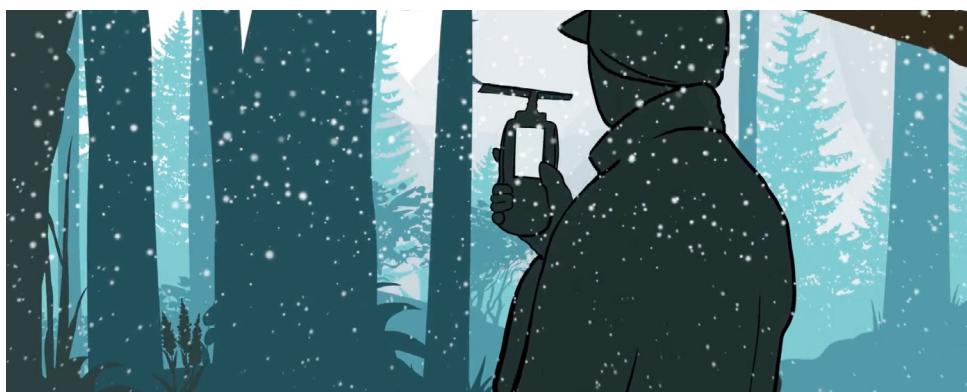


Figure 14

By turning on the Receiver and pointing it in the last direction you saw the animal go, look for a signal. Continue to turn your body in 5 degree increments until the signal is found.

Then take the highest reading and head in that direction to your way point 80 to 100 yards away and take another reading. By watching your Receiver you can determine if the animal is moving or is stationary. If the animal is still moving stay a distance away until the animal stops and lies down. This may take up to 30 to 45 minutes after the shot is taken.

## 2.3 ANIMAL LAYING ON THE TRANSMITTER

If a signal is not detected the animal may be laying directly on the Transmitter. If this happens you may only get a signal 100 to 200 yards away. Use your tracking skills until you pick up the signal.

Another suggestion is to move to higher ground. Being above the Transmitter will allow the signal to travel further. As you get closer to the Transmitter the signal should increase. The highest the number on your Receiver screen is the direction you want to go. Also, the higher the number on your LCD screen helps indicate how close the animal is.

## 2.4 INPUTTING A TRANSMITTER CODE MANUALLY

If a Transmitter is not registered and you want to help track that Transmitter, simply go to the register mode and manually input the code of the Transmitter you want to track. You may be required to remove one of the six Transmitters you already have in the Receiver (see 1.4.1) as your Receiver will only hold a total of 6 Transmitters. This is another very important reason to write down each Transmitter number and keep it with you.

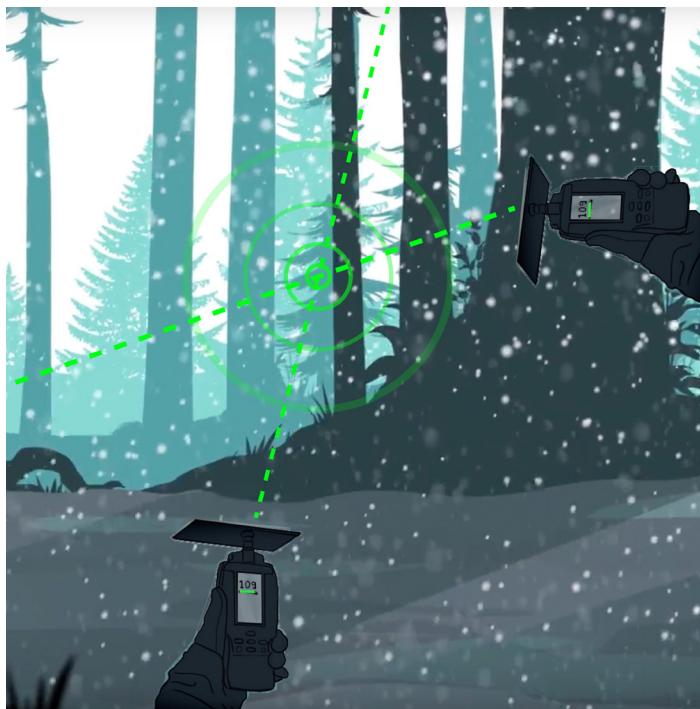


Figure 15

## 2.5 RECOVERING A LOST TRANSMITTER OR ARROW

A Transmitter that is ejected from an arrow because of a missed Shot, branch, or a premature ejection can be located with some work. Take a

reading from your Receiver and mark an imaginary line in that direction. Next move the Receiver to another point at about 90 degrees from the first and take another reading. The spot where the two lines intersect should be the area where you will find the Transmitter or arrow.

### **3. TROUBLE SHOOTING GUIDE**

**Problem:** I am getting a similar signal in the opposite direction.

**Solution:** You should be able to get a signal in the opposite direction, only the signal will be stronger when the Receiver is pointed at the Transmitter. The higher the number on the Receiver is the direction to go. You can also try placing the Receiver lower on your body and use your body as a shield. This will also help to isolate the location of the Transmitter.

**Problem:** I cannot pick up a signal on the Receiver.

**Solution:** Make sure the power switch is turned on. Wait 20 seconds for the signal to indicate. If you still don't receive a signal check to make sure Antenna is in place properly. Don't be in a hurry, take your time and move in the direction you last saw the animal going. The animal may be down and laying on the Transmitter. You will pick up the signal when you are in range of the transmission from the Transmitter. Moving to higher ground may also be an option.

**Problem:** Sporadic or inconsistent number on my Receiver.

**Solution:** Batteries are low-replace them immediately.

**Problem:** Signal strength is weak or intermittent.

**Solution:** Transmitter needs to be recharged or you are slightly out of range. Try moving in the direction of the last transmission and the signal should get stronger.

# **TRANSMITTER WARRANTY & DISCLAIMER**

Pro-Tracker® warrants that for a period of 1 year from the date of purchase the transmitter(s) which number(s) are recorded below to be free of defects of material and the electronics.

## **Transmitter Serial Number(s)**

#	#	#	#
#	#	#	#

Pro-Tracker® does not warrant the transmitter for misuse or abuse and will only be warranted under normal use conditions. Pro-Tracker® may at the company's discretion either replace or repair the transmitter.

Purchaser agrees to leave transmitters in charger when the transmitters are not in use. Transmitters that are unable to be recharged are not covered under this warranty. Misuse, normal wear and tear, or accidents involving the transmitter are not covered under this warranty. Pro-Tracker® only warrants the transmitter to the value of replacement or the value paid by you the purchaser.

Pro-Tracker® only warrants the transmitters to the value of replacement or the value paid by you the purchaser and at Pro-Tracker's option will replace or refund the product described.

Purchaser acknowledges he has read the operation manual and the dangers involved if directions are not followed. Purchaser agrees that Pro-Tracker® shall not be liable for any accidents involving the transmitter, the bow, attachments or arrow attached to the transmitter.

For the warranty to be valid a copy of the original purchase receipt must be sent to the Home Office of Pro-Tracker®. Only the transmitters listed above will be covered under this warranty. Pro-Tracker® will replace the defective product described free of charge within 1 year of purchase. Extended warranty transmitters listed above will also be covered under this warranty.

\*Pro-Tracker Transmitters comply 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 undesired operation. Any changes or modifications to this device will void the user's authority to operate the equipment.

**Extended 2 Year Warranty Purchased?:**  Yes  No

Purchaser			
Address & Phone Number			
Signature		Purchase Date	

# **RECEIVER WARRANTY & DISCLAIMER**

Pro-Tracker® warrants that for a period of 1 year from the date of purchase the digital receiver to be free of defects of material and the electronics.

Pro-Tracker® does not warrant the receiver for misuse or abuse or to be completely water proof and will only be warranted under normal use conditions.

Pro-Tracker® may at the company's discretion either replace or repair the receiver. The warranty only applies to normal use conditions. Misuse, normal wear and tear, water, or accidents involving the receiver are not covered under this warranty.

Pro-Tracker® only warrants the receiver to the value of replacement or the value paid by you the purchaser and at Pro-Tracker's option will replace or refund the product described.

Purchaser acknowledges he has read the operation manual and the dangers involved if directions are not followed. Purchaser agrees that Pro-Tracker® shall not be liable for any accidents involving the receiver, the bow, attachments or arrow.

For the warranty to be valid a copy of the original purchase receipt must be sent to the Home Office of Pro-Tracker®. Only the receiver listed below will be covered under this warranty. Pro-Tracker® does not warrant that the product will perform error free. Shipping and handling not included.

**Receiver Model REV 1 Extended warranty receivers will also be covered under this warranty.**

\*Pro-Tracker Transmitters comply 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 undesired operation. Any changes or modifications to this device will void the user's authority to operate the equipment.

**Extended 2 Year Warranty Purchased?:**  Yes  No

Model Number	#		
Purchaser			
Address & Phone Number			
Signature		Purchase Date	

**Customer Service: 801-608-0190 or 208-356-0657 Fax: 208-356-9732**

## **AMATEUR RADIO LICENSING ( 47 CFR FCC part 97 )**

Our low powered Pro-Tracker transmitters shipped to addresses within the USA, operate only on Amateur Radio frequencies. According to FCC regulations, they require licensing for legal operation. There are no restrictions on their sale or possession, however Pro-Tracker urges users to become familiar with and observe all laws and regulations governing Amateur Radio licensing and operation of the transmitters. Please note that Amateur Radio is not for commercial use. If you want to learn more about ham radio or to be licensed as a Technician Class ham radio operator please visit:

[www.arrl.org](http://www.arrl.org) or [www.gordonwestradioschool.com](http://www.gordonwestradioschool.com)

## **CUSTOMER SERVICE**

**Gary: 801-608-0190**

**Office: 208-356-0657**

**Fax: 208-356-9732**

**Email: info@pro-tracker.com**

## **RETURNS OF THE PRO-TRACKER SYSTEM**

If you are not entirely satisfied with your purchase, we're here to help.

### **Returns:**

You have 30 calendar days to return an item from the date of purchase. To be eligible for a return, your item must be unused and in the same condition that you received it. Your item must be in the original packaging and have a receipt or proof of purchase. Items received not in original condition or packaging will be charged a 25% restocking fee as well as costs to repair or replace items.

### **Refunds:**

Once we receive your item, we will inspect it and notify you that we have received your returned item. We will immediately notify you on the status of your refund after inspecting the item.

If your return is approved, we will initiate a refund to your credit card.

You will receive the credit within a time depending upon your card issuer's policies. If you receive a refund, the cost of return shipping and repairing/replacing items will be deducted from your refund.

### **Shipping:**

You will be responsible for your own shipping costs for returning your item. Shipping costs are nonrefundable.

### **Mail to:**

Pro-Tracker LLC

P.O. Box 413

Rexburg, Idaho 83440