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Suite 1400
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Client: White Bear Technologies.
Model: RoamEO Pet Location System
FCC ID: UAX-RPV1
Standard: FCC Part 95
Report Number: 2006101

Appendix I: Manual

Please refer to the following pages.

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Handheld GPS Pet Locator
Instruction Guide

White Bear Technologies
900 Long Lake Rd.
New Brighton, MN 55112
651-636-5695
www.whitebeartech.com

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White Bear Technologies Mission Statement:

To produce the best self-contained GPS locater system available to the general public. One that is easy to use, reliable and affordable. To return exceptional value to our shareholders.

FCC Compliance
This device complies with Part 15 of the U.S. Federal Communications Commission (FCC) Rules. Operation is subject to the following conditions: 1) This device may not cause harmful interference.2) This device must accept any interference that may cause undesired operation.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

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 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. 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 means:

1 Rotate or relocate the receiving antenna.
2 Increase the separation between the equipment and receiver.
3Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4 Consult the manufacturer customer service department for help.

Under normal operating conditions, the antenna is designed to maintain a separation distance of 20 cm from all persons. The EUT is mobile and fixed.

Introduction to GPS and RF technology

In the year 1995, the defense department of the United States of America launched a series of complex satellites to constantly circle the earth twice daily at nearly 11,000 miles up.   Because 24 were sent in orbit, it allowed for the capacity to cover the earth so that at any time four satellites are in view of any point on earth. These Global Position system (GPS) satellites constantly broadcast a low power signal that identifies their position above the earth. By using a system of triangulation, three satellites can pinpoint every longitude and latitude on earth. This allows GPS systems to display your location in relation to the satellites and thereby display your location on the ground.

In 2000 the government improved the accuracy and allowed this technology for civilian use. All GPS units share the same satellites data. **It is not a perfect system. In order for all GPS units to function properly the receiving unit should be free of dense cover. The units need to detect the signals from three satellites, so most do not work in buildings and during heavy weather.** It is also helpful if the receiving GPS antennae in your units are horizontal. This allows capture of three or more satellites at once. If units are vertical they may only receive one or two signals and that is not enough for a triangulated fix. Sometimes it may take a minute or two for the unit to get all three satellite signals. Be patient. You are capturing signals sent from thousands of miles in space. Occasionally the remote receiver on RoamEO is covered by heavy brush or has only two signals and is looking for the third.

Radio frequency transmissions are used all the time in many technologies that you may already have. These include, but are not limited to, citizens band radios, walkie talkies, RFID tags, cell phones and many other tracking devices. These signals follow the terrain, over hills and through valleys. There are many frequencies or bands to transmit information. The federal government restricts the number and specific frequencies that are available to the general public to use for over the counter technologies like RoamEO. RoamEO does not use the frequencies that are use by walkie talkies; however, some electronic devices can sometimes interfere with the transmission of RoamEO signals. The engineers at White Bear Technologies are continually improving the technology to avert the problems caused by many users on the same frequency. In general, RoamEO will work best in the country. The closer the user gets to large cities, the more cross traffic they are likely to encounter.

RoamEO uses both technologies to pinpoint the base holder and display it in relation to the remote(s). This allows the user to locate the remote(s) up to a mile away (free of any obstruction) in any direction, without any other source. (cell phone towers or internet access) RoamEO does not have any map overlays and is not intended as a means to find your way home. Many hand held GPS units are not accurate to the foot and will say so in the operations manuals of these devices. RoamEO is intended as a tool to assist in locating your pet in relation to you, wherever you, or they, may roam.

Basic Functions

Figure 1

Base Unit (fig 1)

 1 Power on /off
 2 Recharging port
 3 Option button
 4 Screen button
 5 Alarm buttons
 6 Remote button
 7 Fence button
 8 LED indicator lights
 9 Zoom in /out
10 Radio antennae

Remote Collar (Fig 2)

1 Power on/ off
2 Synchronize button
3 LED indicator light
4 Radio Antennae
5 GPS Antennae
6 Connector
7 Adjustment strap
8 Recharging port

Figure 3

Charger Unit (Fig3)

1 Outlet Plug
2 Base insert plug
3 Remote plug

Starting Out

To use RoamEO immediately proceed with the following steps:

1 Turn Remote On (fig 2) #1 Button
2 Turn Base on (fig 1) #1 button
3 **Synchronize the units outside away from buildings and dense cover**
      A. Press the option and remote button together on base (fig 1 #3 then #6 button)
         The screen will change to the synchronize display
      B. Find the synchronize button on the collar (fig 2 #2 button)
      C. Press and hold the button for 2 seconds.
         The display screen will change to run mode (Fig 4)
      D. The synchronize LED lights will blink indicating that the base identifies the
         remote.
      E. Place collar outside with the base at least 30 feet away from each other.
         Allow a minute on initial power up for both units to find a GPS lock
      F. Observe the display to see that the color icon you chose is now displayed on
         The screen (Fig 4)
      G. Wait until the base displays both satellite icons (Fig 4A)
      H. Attach the collar to your pet and observe.
4 Repeat steps if the base unit does not display remote after two minutes.
5 For additional remotes follow the synchronize procedure and then press the zoom
   button to highlight another remote. Then press the new remote synchronize button.
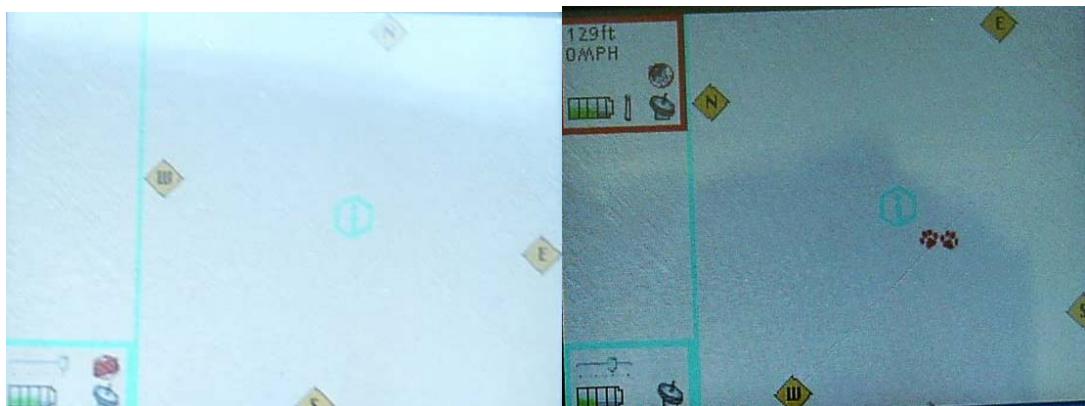
   Figure 4   Figure 4A

Notes on collar adjustment:
1. GPS antennae (Fig 2 #5) needs to point up to see the satellites, allow some slack in
   collar so the weight of the bottom pack will keep the collar in the proper position.
2. Adjust the strap(fig 2 #7) and remove collar with the connection.
3. Recharge the collar after it is removed from your pet.
4. Plan on charging the collar at night for optimum use. (charging instructions on page 9)
5. Don't allow your pet to chew on the collar as it may destroy the electronic connections
   and render the collar unusable.

Setting up your RoamEO Fence

To set up a RoamEO fence, a few moments of forethought is required. All GPS units are limited by dense cover, which includes clouds, foliage and buildings. It is recommended that the fence be set up on a clear day. Because the government allows only a relative amount of precision, plan on setting the fence at least five feet away from streets and other areas of concern. To set up a fence, follow these steps.

1. Start and stop near the same point.
2. Do not crisscross fence points.
3. Start your fence by pressing and holding the option button and then pressing the Fence button hold it for two seconds until you see the satellite on the screen (fig 5-A). When the satellite icon disappears a pair of feet icon and a dot will indicate the first post is set
4. Walk more than 10 feet to your next post and press the fence button again until you see the second post icon on the screen.
5. Continue on in your perimeter and press the fence button every 10 feet on a curve and Up to100 feet on a straight section of your perimeter. (Fig 5-B)
6. When you get within 10 feet of your starting point, press and hold the option and fence button for two seconds. (Fig 5-C)
7. It will take a few seconds for RoamEO to display your fence. If no fence is displayed After one minute, repeat steps 1-6.
8. Bring your pet out and observe how the fence beeps when it is breached by the remote
9. RoamEO will alarm if the remote breaches the fence and you can observe the display on the base and easily find your pet. The fence will be displayed and active when it is on, even if you are outside of the fence. (Fig 5-D)

Figure 5-A   Figure 5-B
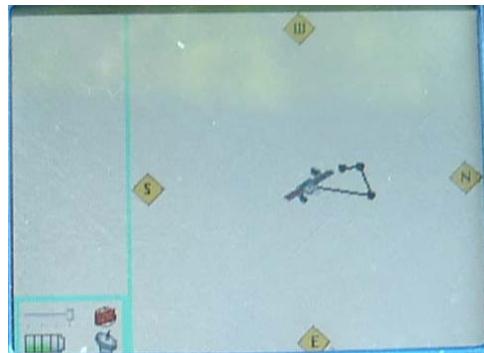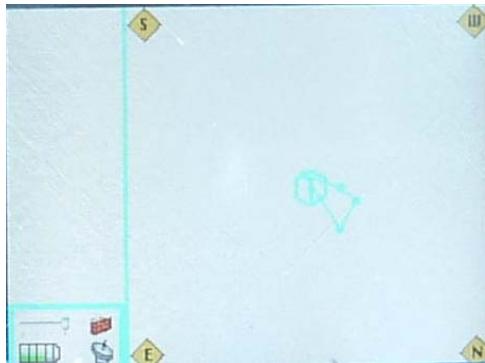
Figure 5-C   Figure 5-D
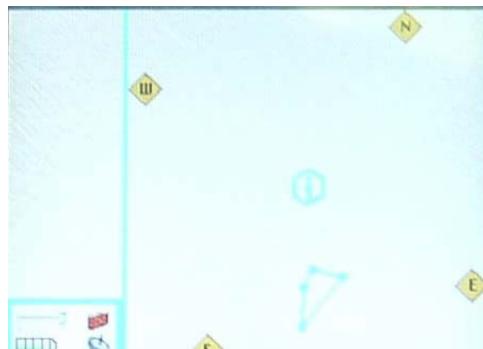
Notes on RoamEO fence
- Fence sounds alarm but does not contain pet.
- RoamEO base needs to be on with fence displayed for alarm to sound.
- RoamEO base should be next to a window if inside a building.
- RoamEO base does not need to be inside perimeter to work as designed.
- Keep base still when positioning the posts.
- Fence may not work in heavy cloud cover or dense foliage.

Recharging RoamEO

Both the RoamEO base and remote are designed with non-removable rechargeable Lithion Ion batteries. These batteries are similar to the ones used in cell phones. Unlike cell phones, RoamEO does not have massive towers to amplify the signals and therefore requires more energy to function. The base will display the battery level of the base and remote. You will be able to see how much battery is left and you will bewarned that a recharge is necessary.   Recharging only takes three hours and it is not harmful to leave the unit charging for up to 24 hours. To recharge the RoamEO units, follow these steps:

1. Turn the remote off
2. Remove the collar remote unit from your pet
3. Plug in the charger
4. Insert the charger cord into the base and or remote that needs to be charged.
5. Charge units for 3 hours
6. Turn units on and check the display to see that charge is complete.
7. Detach the charger and power up the unit.

Frequently Asked Questions

The chart below contains general instructions on solving common user errors with RoamEO. For further assistance call customer assistance at 651-636-5695 between 8 AM and 5 PM CDT Monday through Friday.

Problem	Cause / Solution
Base unit won't turn on	Battery level low plug in recharge adapter Power switch off reposition switch (fig1 #1) Allow 60 seconds for display to power up
Base unit does not display remote	Remote turned off Power on remote Remote not synchronized Page 4 #3 Remote battery not charged page 6 Remote off screen zoom out
Base unit does not charge	Check the connections at the outlet and the base. Check the circuit breaker for that outlet.
Remote won't turn on	Battery level low, plug in recharge adapter Check power switch Fig 2 #1
Remote unit won't charge	Check to see if the charger is connected properly. It is designed to be inserted only one way. Check to see if the pins are damaged.
Fence not displayed	Fence off Press fence button Inputs not accepted Reinstall fence P. 5
Fence alarm not sounding	Overcast or heavy foliage Alarm off Press option button
Compass headings not accurate	Compass is un calibrated Slowly turn around three times counter clockwise.

Warranty

White Bear Technologies 90 day Warranty
"We," "our", or "us" refers to White Bear Technologies, Inc the manufacturer of this product. "you" or "your" refers to the purchaser of this product as a consumer item for personal use.

White Bear Technologies warrant this product against defects or malfunctions in materials or workmanship for 365 days from the original date of purchase. The remedies in this warranty include repair, replacement or refund as determined by us depending on the condition of the returned item. This warranty does not apply if the product has been connected, installed, combined, altered, adjusted, or handled in a manner other than according to the instructions furnished with this product. Any damage resulting from accident, misuse, negligence, or carelessness as determined by us will void this warranty. White Bear Technologies will make its' best attempt to remedy with the customer as deemed reasonable to us, any legitimate problem with our product.

To file a claim the product must be returned to us with the original receipt including proof of purchase and location. Call customer service at 651-636-5695 to obtain a return authorization number so we may process your request.

We reserve the right to make changes or improvements in our products without notifying you.

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To obtain service, file a complaint or warranty request, or notify a software violation for a reward, please contact White Bear Technologies at 651-636-5695.

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