

Invisible Fence[®]

BRAND

ICT 700 Transmitter Operation and Installation Manual



Your dog safe @home[®]

Made in the USA

Thank you for choosing an Invisible Fence® Pet Containment System

We believe that you now own the highest quality electronic pet containment system made anywhere. We support this claim by backing Invisible Fence Brand products with a One-Year, Money-Back Performance Guarantee*, and Warranties which include lightning and surge damage. Refer to your warranty card or the back of your sales contract for complete details. All of this is backed up by our inter-

national network of local Invisible Fence professionals who offer you professional installation, Safe Dog® pet training, and prompt service.

You are the most important judge of our products and services. When you tell us that we have met or exceeded your expectations for Invisible Fence products, then we are achieving our goal: to continuously keep your pet safe at home.™

* Good only on professionally installed systems.

Important Safeguards

1. Read and Retain Manuals: Read all of the operating and training instructions before installing and/or using your new Invisible Fence Brand pet containment system.

2. Training: Train your pet according to the instructions in Invisible Fence training manuals. Complete all of the steps before allowing your pet to run free.

3. Obey all Cautions and Warnings: Adhere to all of the cautions and warnings contained in this manual and all other manuals pertaining to your Invisible Fence system, and all Invisible Fence system components.

4. Service and Repair: Other than repairing the signal field wire, do not attempt to service any Invisible Fence equipment yourself. Refer all service to an authorized Invisible Fence professional only.

5. For Animal Use Only: All Invisible Fence pet containment systems are designed for animal use only. Never attempt to use this product for any purpose not specifically described in this manual.

IMPORTANT: If, for any reason, your Invisible Fence system does not operate as described in this manual, or if you encounter any difficulty training your pet, call your Invisible Fence professional immediately.



Warning: The following precautions should always be taken.

1. Never attempt to install an Invisible Fence pet containment system unless you have first consulted your Invisible Fence professional and have Invisible Fence installation instructions.

2. Never install an Invisible Fence transmitter, LP3000, or any Invisible Fence system component other than signal field wire outdoors or where they could be exposed to the outdoor elements, doing so will void the manufacturer's warranties.

3. Check the transmitter periodically to make sure that it is operating properly and is producing a signal along the signal field wire.

4. Caution: Always take the Computer Collar® off your pet before making any adjustment to your Invisible Fence system.

5. If you have any questions about any aspect of your Invisible Fence system, please call your Invisible Fence professional immediately.



Warning: Never install, connect or service any Invisible Fence system component or equipment when there is a thunder or lightning storm in the area.



Caution: Before starting any work, unplug the transmitter's 12vAC transformer from the 110v outlet and the transmitter. Turn off the electric service at the circuit breaker panel.



Warning: If you have any reason to believe that your pet may pose a danger to others, or that it may harm itself if it is not kept from crossing the Invisible Boundary® signal wire, you should not rely solely on this product to contain your pet.

Invisible Fence® pet containment will not work unless:

1. The 12vAC transformer is plugged into the transmitter and is plugged into a 110vAC outlet.
2. The transmitter is on, connected to the signal field wire, and producing a signal along the wire.
3. The signal field wire is intact, continuous, and the transmitter's green LED is blinking on and off.
4. The Computer Collar® is correctly fitted and worn by your pet.

The Computer Collar is adjusted so that the receiver posts are touching your pet's skin.

5. The Power Cap® battery in the receiver is good and is correctly installed.
6. You train your pet as prescribed in Invisible Fence training manuals.

Do Not become overly confident that your pet has become conditioned to the Invisible Fence system sooner than expected. Complete all of the training steps before allowing your pet to run free.

If you have any questions about any aspect of your Invisible Fence system, please call your Invisible Fence professional immediately.

About Thunder or Electrical Storms

Even though your Invisible Fence system is equipped with lightning surge protection, it is still possible that it may be damaged during a thunder storm, or when an electrical storm is in the area where you live. For added peace of mind, you may want to take the Computer Collar off your pet before an electrical storm.

• Check Your Pet's Safe Areas

After a storm has ended, check all of your pet's safe areas before you put the Computer Collar back on him. Use the following procedure to make sure that your system is continuing to work properly.

Hold the Computer Collar collar so that the receiver is at about the same height and on the same angle that it is when your pet is wearing it, and move throughout his safe areas. This should include all of the safe areas where your pet is allowed to go, in your yard and in your home.

If the receiver sounds a warning when it is in a safe area, DO NOT put the Computer Collar back on your pet. Immediately call your local Invisible Fence professional for service.

Use a leash or other means to contain your pet until after the service has been completed.

• At Least Once a Month, and After a Thunder Storm, Check the Width of Your Invisible Fence System's Signal Field

Always keep a note of the width of your system's signal field.

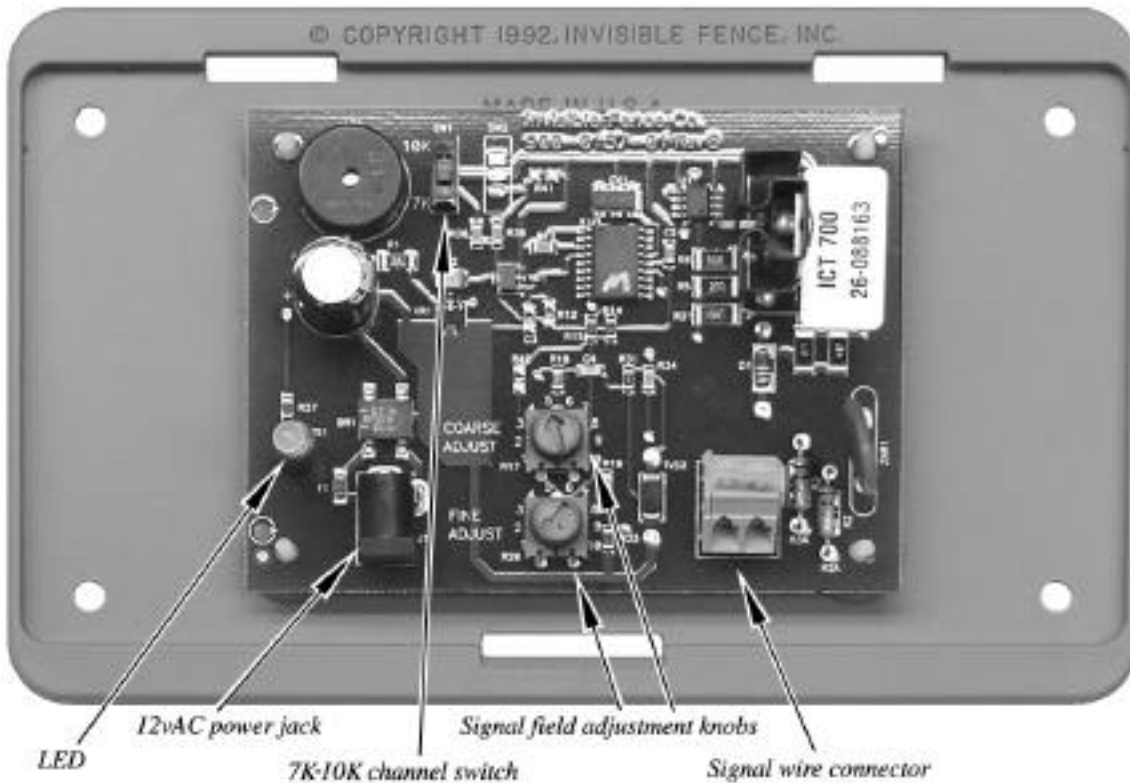
You only have to check the width of the signal field from one place on the signal field loop wire. Always check the signal field from the same place.

Take the Computer Collar off your pet. Follow the instructions for checking the width of the signal field on page 6.

If the receiver does not sound a warning where the edge of the signal is supposed to be, or if it only sounds a warning when it is closer to the wire than the setting of the signal field, immediately call your Invisible Fence professional for service.

Use a leash or other means to contain your pet until all necessary service has been completed.

ICT 700 Installation



coarse and a fine signal field adjustment knob, and a switch that changes the channel of operation between 7K, the DOWN position, and 10K, the UP position.

Removing the ICT 700 Cover

To take the cover off the transmitter, hold the base of the transmitter in one hand and, using the thumb and index finger of your other hand, gently compress the top and bottom of the cover plate and remove it.

To put the cover back on, align the two tabs on the top of the cover plate

with the two slots, on the top of the base, and slide the tabs into the slots. Lock the cover in place by sliding the bottom tab of the cover plate into the bottom slot in the base.

Features and Functions

The ICT 700 transmitter is microprocessor controlled and designed to work with an Invisible Fence® Computer Collar® to contain your pet within the areas you select, or to teach your pet to avoid specific areas such as flower beds, gardens, or a pool.

The ICT 700 pet containment system is designed for up to 3,000 feet(915m) of loop wire and up to 150 feet(45.75m) of twisted pair wire. There is no hazard in touching or exposing the wire because the wire carries only low voltage electricity.

To operate the ICT 700 plug transformer into the transmitter's 12vAC power jack, and then plug the transformer into a grounded 110vAC outlet. *Users with other electric sources should ask their Invisible Fence professional for an appropriate adapter*

The ICT 700 transmitter has a green LED to indicate that the power is on, and there is no break in the signal field wire. During normal operation the green LED is ON for one second, then OFF for four seconds.

The ICT 700 has both an audible and visual BreakAlert® wire break warning. If there is a break in the signal field wire, the green LED will remain on and the BreakAlert will sound an alarm until the break is repaired or the transmitter is turned OFF; disconnected from the transformer. The ICT 700 also has a



The Signal Field

Invisible Fence transmitters produce a coded, low power radio signal which travels from the transmitter, along the signal field wire and back to the transmitter to produce a Invisible Barrier® wall. This signal is what activates your pet's Computer Collar receiver.

The ICT 700 system functions only when the sig-

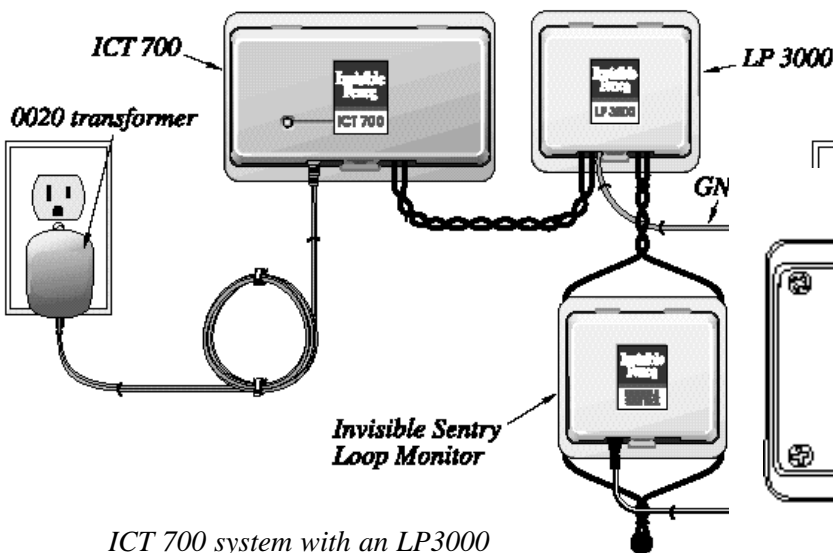
nal field wire forms one continuous circuit. The signal field is created where two sides of the wire are separated and is cancelled where two sides are kept close together. If there is a break in the signal field wire, the signal field will be lost and the system will cease to function.



Caution: *Never install a system or any equipment, or service any equipment, during a thunder or electrical storm, or when a thunder storm is near your area.*

Planning the Installation

Install the transmitter in a dry indoor location, near a grounded 110vAC electric outlet that offers easy access to the outside. A garage or basement is usually the best location. If you are not sure whether your outlets are grounded or not, contact your electrician. To fasten the transmitter on a wall, use 3/4 inch(19mm), #8 or #10 pan-head sheet metal screws through the four round holes in the base of the transmitter case.



ICT 700 system with an LP3000 and an Invisible Sentry system.

Grounding the System

All outdoor Invisible Fence pet containment systems are equipped with lightning surge protection, which is designed to prevent damage to the transmitter in the event of an electrical surge.

If the system is properly installed and grounded, and is equipped with an Invisible Fence lightning pro-

tection device, Invisible Fence will repair or replace, at our option, any transmitter, transmitter circuit board, transformer, or lightning protector damaged by an electrical surge for as long as the original owner owns the system.

Before you connect the signal field wire, or connect the transformer to the transmitter, you must ground the system.

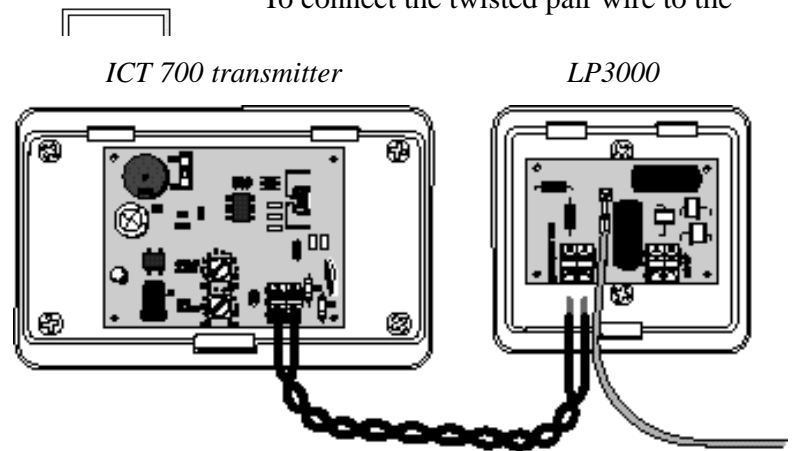
Refer to the instructions for “*Grounding Outdoor Invisible Fence® Pet Containment Systems with an LP3000 Lightning Arrestor*”, in the “*LP3000 Lightning Arrestor Installation & Grounding Instructions Manual*”.

IMPORTANT: During the grounding process, make sure that the screw and the threads in the outlet are clean. All foreign matter such as paint, corrosion, grease, and dirt must be removed. There must be metal to metal contact of the mating threads. Also, the underside of the screw head and ring terminal must be clean. If the surfaces appear corroded, scrape, wire brush, or sand each thoroughly, or replace them.

Connecting the Signal Field Wire

First connect the ICT 700 to the LP3000 with a short length of twisted pair wire.

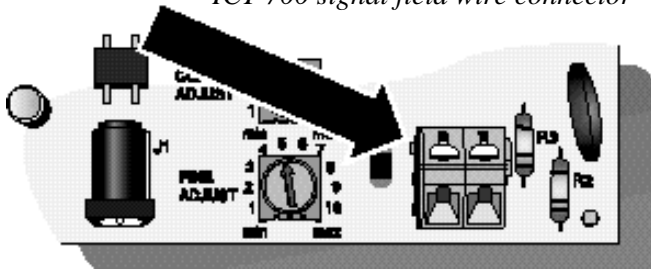
To connect the twisted pair wire to the



ICT 700, strip about 1/4 inch(6.3mm) of insulation off each of the four ends of the twisted wire. Twist the exposed wire strands on each end of the wires together to hold the strands together. You want to make sure that a loose strand on one end of the wire does not touch the other end of the wire, or the other opening in the wire connector, or any other component on the transmitter’s circuit board.

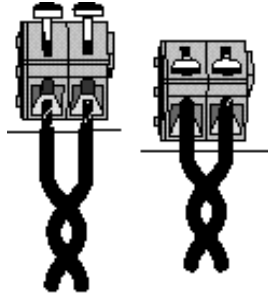
Connect one end of the twisted pair wires to the

ICT 700 signal field wire connector



ICT 700 signal field wire connector.

Use your thumb to push back and down hard on the white tabs located on top of the signal field wire connector. While holding down the tabs, put one stripped end of the twisted wire into each of the openings in the connector. Either end of the wire may be put into either opening. Hold the ends of the wires in the openings and release the tabs. The ends of the wires will automatically be crimped into the wire connector.



Note: You will have to



apply pressure to push down the white tabs on the wire connector; the connector will not break, so do not be concerned about pushing too hard.

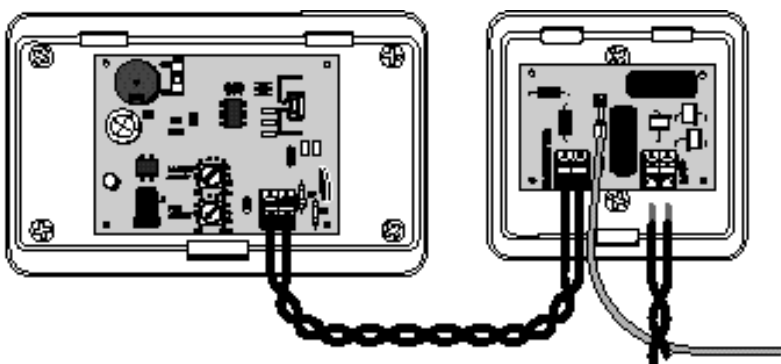
To remove a wire from the wire connector, push back and down on the tabs on the connector and pull the ends of the wire out.

Connect the other ends of the short length of twisted wire to the connector on the LP3000 circuit board marked TRANSMITTER.

After you have connected the twisted wire between the ICT 700 and the LP3000, connect the

ICT 700 transmitter

LP 3000



ends of the twisted pair wire coming in from the signal field wire to the wire connector on the lower right side of the LP3000 circuit board marked LOOP.

ICT 700, 12vAC Transformer, Model 100-0020-01

To operate the ICT 700 system, plug the transformer into the power jack, J1, on the transmitter's circuit board. Then plug the transformer into a 110vAC electric outlet. *Any customer with another electric power source should ask their Invisible Fence® professional for an appropriate adapter.*

Only use the model 100-0020-01, 12vAC transformer provided with the ICT 700. This transformer will supply the output necessary to power the ICT 700. Specifications:

INPUT: 120vAC 60 Hz 15W

OUTPUT: 12vAC 750mA

UL/CSA CLASS 2 Transformer

UL listed/CSA certified



Warning: The model 100-0020-01 is the only transformer authorized by Invisible Technologies, Inc. to be used to supply the power to an ICT 700. The use of any other transformer may result in a malfunction of the transmitter and the ICT 700 system.

Emergency battery backup power is not available for the ICT 700.

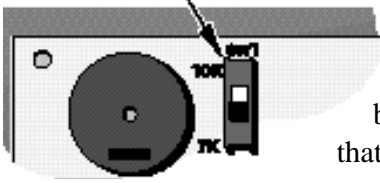
Setting and Checking the Width of the Signal Field

The signal field is what activates your pet's Computer Collar® receiver. The signal field can be set to various distances from the signal field loop wire depending on the layout and size of your property. The distance from the loop wire to the edge of the signal field is the width of the signal field. The average setting of the signal field is 6 to 10 feet(1.8 to 3.7m) wide.



Caution: Always take the Computer Collar off your pet first, before setting the signal field, and then remove the transmitter's cover.

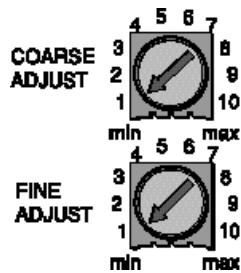
10k(up)-7k(down) switch



A 10K-7K channel switch is located on the left side of the top of the ICT 700 circuit board. Check to be sure that the switch is set to the same operating frequency as the

Computer Collar® receiver. Both must be set to the same setting, either 10K or 7K.

There are two signal field adjustment knobs on the ICT 700: the top knob is for coarse adjustment, and is numbered 1 to 10, the bottom knob is a fine tune adjustment, which is also numbered 1 to 10. Turning these knobs clockwise increases the signal field. By first setting the coarse adjustment and then using the fine tune adjustment, you can set the the signal field to the exact width you want. For example, if the coarse adjustment setting is producing a 9 foot(2.7m) signal field, the fine tune adjustment can then be used to make the signal field slightly narrower or wider by a few inches



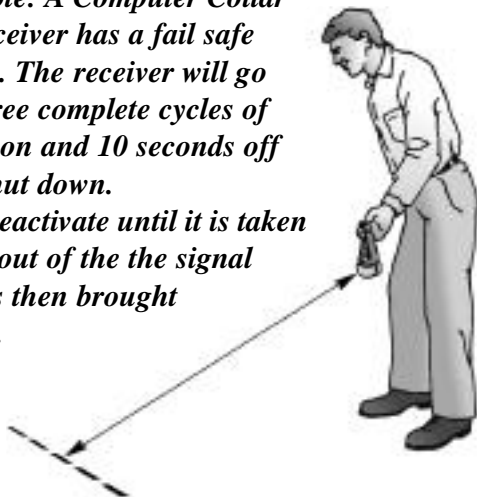
These adjustments do not change the correction level of the receiver, they only change the width of the signal field from the signal field loop wire.

You can check the width of the signal field by holding a Computer Collar so that the receiver is parallel to the loop wire. Hold the collar so that the receiver is at about the same height and on the same angle that it will be when your pet is wearing it and walk slowly toward the signal field loop wire. The receiver will sound a warning when it is at the edge of the signal field.



Note: A Computer Collar receiver has a fail safe mechanism. The receiver will go through three complete cycles of 10 seconds on and 10 seconds off and then shut down.

It will not reactivate until it is taken completely out of the the signal field, and is then brought back into it.



Computer Collar® Receivers

CAUTION AND CARE

An Invisible Fence® Computer Collar will not work unless:

1. You train your pet as prescribed in the *"Invisible Fence SafeDog® Training Manual"*.
2. The Computer Collar is worn snugly on your pet's neck under the lower jaw.
3. The Computer Collar is adjusted so that the receiver's posts are touching your pet's skin.
4. The Power Cap® battery in the Computer Collar receiver is good and is correctly installed, see *"Changing the Computer Collar Receiver's Power Cap Battery"*, on page 7.
5. The transmitter is on, connected to the signal field wire, and producing a signal field along the entire signal field wire.
6. The signal field wire is intact and making a complete circuit.

The following precautions should also be taken:

1. **Always take the Computer Collar off your pet before you make any adjustment to your Invisible Fence system.**
2. **Gradually allow your pet to become accustomed to its new Computer Collar.** Take off the collar every night during the first month and periodically thereafter. This will ensure proper fit and avoid the possibility of any irritation that the posts may cause to your pet's skin.
3. **Check the Computer Collar** near your television set(s). Although the receiver has a decoding circuit, some televisions may produce a coded signal similar to the Invisible Fence signal and may cause the receiver to activate when it is close to a television.
4. **DO NOT** secure the correction posts in the receiver with any kind of glue or adhesive. **ALWAYS** use the post tightening tool to tighten the receiver posts.
5. **Check the transmitter** periodically to make sure that it is operating properly and producing a signal field.



6. **NEVER**, under any circumstances, use this product for any purpose other than that stated in this manual. Invisible Fence® systems are designed for animal use only.

Features and Functions

Computer Collar receivers are water resistant, microprocessor controlled units powered by a special 3v lithium Power Cap® battery.

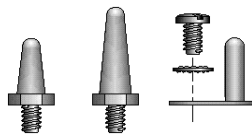
An R series Computer Collar can be used with all ICT700 series, Invisible Gate®, and IFA 12 transmitters.

Computer Collar receivers are available with Short, Long, or Short-Space receiver posts to fit different size dogs and work well with any type of coat.

Computer Collar receivers can be fitted with shunts to reduce the correction level of the receiver for small pets who are shy or timid.



Short, Long, and Short-Space Receiver Posts



R21 v3 Series Receivers

The R21 v3 Computer Collar receivers have an added feature. The v3 will beep once when a Power Cap battery is installed. The beep indicates that the microprocessor in the



receiver is working and that the Power Cap battery has enough voltage to power the receiver.

The three small circular indentations, equidistantly spaced around the outer edge of the base that supports the center battery contact in the receiver, indicate that the receiver is an R21 v3 series Computer Collar.

Make sure that the Computer Collar is snug enough for the posts to touch your pet's skin. Be sure that you can still work a fingertip between the skin and the post.

Computer Collar
Slip or Woodhouse Collar, is only used during training



Fitting the Computer Collar

To work properly, the correction posts on the Computer Collar receiver must touch your pet's skin. Posts are available in three different sizes to ensure a proper fit for every pet: short, 1/2 inch (12.7mm); long, 3/4 inch (19mm); and short-spaced posts.

The receiver should be positioned underneath your pet's neck with the posts pointing up and the top of the receiver pointing forward, toward your pet's nose. Adjust the collar so it's snug enough to slide one finger between a post and your pet's neck. Periodic adjustment of the Computer Collar may be necessary as your pet's coat, weight and age change.

Changing the Computer Collar Receiver's Power Cap Battery

The Power Cap battery is a replaceable 3v lithium battery with a unique plastic screw cap. It is very important for proper operation that the receiver always has a good Power Cap® battery installed. On average, the battery should be changed every 3 to 4 months.



But battery life can be reduced by several variables, including lower temperatures, the number of times a pet challenges the system boundary, and the fit of the collar on the pet's neck. In cold weather, for example, it may be necessary to replace the battery more often. Your Invisible Fence® professional should recommend a schedule for regularly changing a receiver's battery. We recommend that you ask your Dealer about a battery replacement plan.



Note: *Invisible Technologies, Inc. recommends that a customer subscribe to a battery replacement plan where fresh Power Cap batteries are mailed directly to them on a regular schedule. Your Invisible Fence professional can determine the best schedule for you.*



Warning: *The use of any battery other than a battery authorized by Invisible Technologies, Inc. can cause a receiver to operate erratically. Failure of the receiver due to the use of an unauthorized battery, may result in denial of a warranty claim.*

Invisible Fence® receivers are water resistant, they are not waterproof. In particularly humid climates or when a dog has access to creeks, pools, etc., water may get trapped in the battery compartment. A small rubber O-ring around the battery cap will minimize water invasion, but if you think that the battery compartment is getting wet, take the battery out of the Computer Collar receiver when your dog is not wearing the collar. This will allow the battery and the compartment to dry.

To remove an old Power Cap battery from a Computer Collar receiver, use a small, thin coin in the slot on top of the battery and turn it counter clockwise. The battery will rotate up and out of the battery chamber. Never use a screwdriver to remove or tighten the battery because you may strip the plastic head on top of the battery.



Note: *Remember, before you put in a new Power Cap battery, you must wait*

for a full five minutes so that the Computer Collar receiver's microprocessor has enough time to recycle after the old battery has been removed.

To install a new battery, line up the two lugs on the bottom of the Power Cap with the two grooves in the sides of the battery chamber. Gently put the Power Cap into the chamber while turning it clockwise with your fingers. Finally, use a small, thin coin in the slot on the top of the battery to turn the battery clockwise until the slot on the top of the battery is lined up with the two small raised tabs on the bottom of the receiver.



When the new Power Cap is in, wait 10 seconds before taking the receiver into the signal field to give the receiver time to recycle.

Failure to follow these directions exactly, may result in the Computer Collar receiver not activating properly. To maintain optimum performance, we recommend that you periodically test the battery.



Warning: *The Power Cap battery case is made of soft, protective material. The use of unnecessary force may damage the case and render the battery inoperable.*



Warning: *NEVER open a Power Cap, dispose of it in fire, recharge it, heat it above 212°F(100°C), or expose its contents to water. Doing so can cause leakage or explosion and may lead to personal injury.*

Power Cap Battery Tester

We strongly recommend that each customer obtain a Power Cap battery tester. At least once a month, check the receiver battery with the Power Cap battery tester to be sure that your pet will stay out of areas that it is supposed to, and remain safely within your Invisible Fence system.

The Power Cap® battery tester measures the internal resistance of a Power Cap battery and shows how much life is left in the battery.

To test a receiver battery with the Power Cap battery tester, remove the battery from the receiver and

put it into the Power Cap battery tester the same way that you would put it into a receiver. If the battery is good, the green and red LEDs on the tester will both light. If neither LED on the tester lights, or just the red LED lights dimly, the battery needs to be replaced.



Signal Field Wire Specifications

Signal field wire is solid or stranded copper, insulated wire, which carries a harmless radio signal. There is no hazard in touching or exposing the wire because the wire carries only low voltage electricity.

Some installations are unique. The following measurements are guidelines for typical Invisible Barrier® signal field wire installations.

ICT 700		
Protected Area	0 to 8 acres	8 to 12 acres
Feet of Loop Wire	400 to 2500	2500 to 3000
Feet of Twisted Pair	up to 150	up to 150
Wire Size	AWG 14	AWG 12
Jacket	PE .045" (1.14mm)	

Service Diagnostic Questions

SYMPTOM	CAUSE
Pet getting out	<ul style="list-style-type: none"> • Dead or weak Power Cap® receiver battery • Computer Collar® not adjusted properly • Break in signal field wire • Signal field is too narrow • Power not supplied to transmitter or 110v power is out • Pet needs additional training
LED not blinking, beeping sound	<ul style="list-style-type: none"> • Break in signal field wire • Signal field wire not connected to transmitter or LP 3000
LED not blinking, no beeping sound	<ul style="list-style-type: none"> • Power surge to transmitter
Green LED out	<ul style="list-style-type: none"> • No power from 110v outlet • Transformer plug is loose or disconnected • Power surge to transmitter
Computer Collar Receiver not working	<ul style="list-style-type: none"> • Dead Power Cap® receiver battery • Signal field wire is disconnected • Signal field is too narrow • 7K-10K channel switch on transmitter is not set to the same frequency as the receiver

If, for any reason, your Invisible Fence® system does not operate as described in this manual, or if you encounter any difficulty training your pet, please call your Invisible Fence professional immediately.

Important Warnings



1. WARNING: *Occasionally an animal cannot be trained to avoid crossing the Invisible Boundary®. Sometimes even a properly trained animal may cross the boundary. Therefore, Invisible Technologies, Inc., Invisible Fence Distributors and Dealers cannot guarantee that the system will, in all cases, keep Customer's animal within the established boundary. Accordingly, if Customer has reason to believe that his or her animal may pose a danger to others or harm itself if it is not kept from crossing the boundaries, Customer should not rely solely upon the system to keep the animal from crossing the boundary.*



2. WARNING: *The control panel component of the system includes visual and audio signals to warn of a system malfunction, and is therefore intended to be installed in a place where such signals may be easily seen and heard. If the control panel is installed in an enclosed box or in a place not readily accessible to Customer, Customer will forfeit the benefits of the system's warning functions for which Invisible Technologies, Inc., Invisible Fence Distributors and Dealers assume no responsibility.*



3. WARNING: *Some persons claim that the shock from an electronic receiver collar can provoke an animal to become aggressive, and possibly to attack or bite. Customer is hereby warned to be alert for growling, snarling, biting, or other aggressive behavior by any animal using the system, especially during training. If any such behavior is observed, particularly if it appears to be associated in any way with the system, Customer should immediately stop using the system, unplug the transmitter, and contact your local Invisible Fence professional or Invisible Technologies, Inc.*

Reported incidents have typically involved:

1) dogs with pre-existing aggressive tendencies; and

2) other provocation at the time of the incident.

Reports to Invisible Technologies, Inc. alleging such incidents are rare, less than one in 10,000, or 0.01% of the time.



FCCID# KZ3ICT150 “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 undesirable operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.”

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Questions or comments? Please call 1-800-538-DOGS or visit www.invisiblefence.com.