

The Brand Vets Recommend Most For Dog Safety and Freedom

# CF3000 Dealer Diagnostic Tool Instruction Manual



www.invisiblefence.com



## **Table of Contents:**

About the CF3000	3
Important Precautions	4
Components	5
Charging the CF3000	
Licensing the CF3000	8
Updating the Firmware	13
Entering Users	17
Customer Sessions	19
Add a Customer	19
Open a Session	22
Close a Session	24
Test-Head Functions	25
Accessing the Test-Head Functions	25
Configuring a Computer Collar®	25
Computer Collar History	28
Testing a Computer Collar®	29
Test All	29
Correction	30
Sensitivity	31
Power Consumption	32
Testing a Power Cap®	33
CF3000 Measurements	34
Accessing the Measurements Functions	34
Detect Field	35
Detect Interference	36
Standard View	36
Advanced View	37
Measurement Wire	38
Additional Information	40
CF3000 Status	40
Self Test	40
Unit Status	41
LCD Control	42
Date and Time	42



## **CF3000 Dealer Diagnostic Tool:**

The CF3000 Dealer Diagnostic Tool provides a holistic approach to Invisible Fence<sup>®</sup> Brand system diagnostics for everyone involved in the process, from service technicians to sales people. Factory level test functions combined with diagnostic tools and programming functions gives dealer personnel the confidence to undertake any service required.

#### The CF3000 Dealer Diagnostic Tool Features:

- Y 90-Day Licensing to prevent lost or stolen units from being used
- Y Online firmware updates to keep unit up to date with minimal downtime
- Y Test Functions
  - Computer Collar<sup>®</sup>
  - Transmitter Signal
  - Wire Integrity
  - o Power Cap®
- Y Computer Collar<sup>®</sup> Programming
- Y Computer Collar<sup>®</sup> History
- Y Interference Detection
- Y Invisible Fence® Brand Signal Detection
- Y Replaceable Test Hubs for minimal downtime





## **Important Precautions:**

To avoid damaging the CF3000 Dealer Diagnostic Tool, please observe the following precautions:

- Y Do not press on the LCD screen.
- Y Do not allow hard or sharp objects to rest on the LCD screen.
- Y Do not remove the Computer Collar® from the CF3000 until it has finished programming.
- Y Do not expose the CF3000 to water or excess humidity.
- Y Do not expose the CF3000 to direct sunlight.
- Y Do not operate in temperatures below 32°F (0°C) or above 150°F (66°C).



**Note:** In direct sunlight, automotive dashboards can exceed 180°F (82°C).



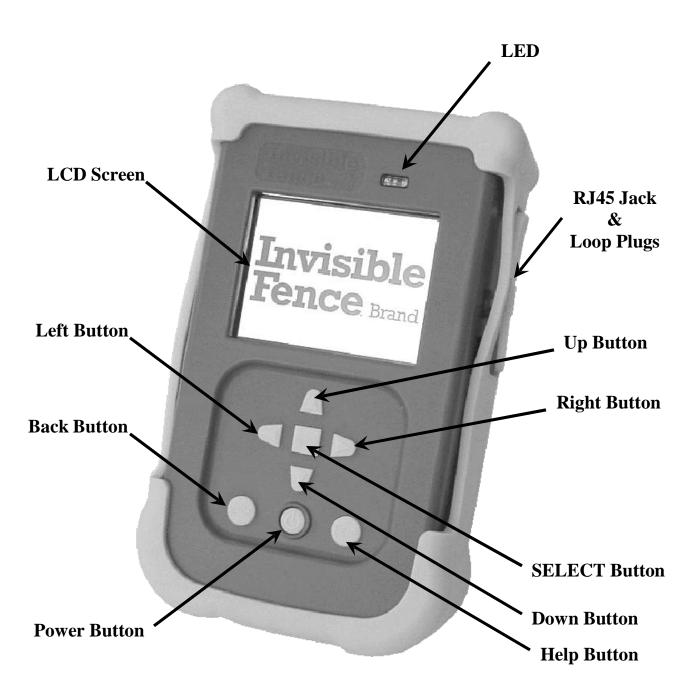


## **Components:**





## **Components:**





## Charging the CF3000 handheld device:

When you receive your new CF3000 Dealer Tool the battery pack will need charging. The battery pack will come disconnected from the dealer tool.

- 1. Remove the handheld device from the dealer tool case.
- 2. Remove the handheld device from the protective rubber cover.
- 3. Connect the battery pack to the handheld device.
  - a. Turn the unit over.
  - b. Locate the battery door.
  - c. Loosen the two Phillips head screws holding the battery door.
  - d. Remove the battery door.
  - e. Connect the 3.7VDC Li-ion battery pack wire harness to the circuit board connector.
  - f. Replace the battery door.
  - g. Tighten the two Phillips head screws.





- 4. Remove the 5V power adaptor from the dealer tool case.
- 5. Remove the belt clip from the handheld device.
  - a. Turn the unit over.
  - b. Locate the belt clip tab in the top center of the handheld device.
  - c. Push in and up to release the clip.
  - d. Pull the clip out from above.





#### **Mini USB**

- 6. Plug the 5V power adaptor into a working 100V 240V electrical outlet.
- 7. Plug the mini USB end of the power adaptor into the USB jack located on the top hand held device.
- 8. The LED on the face of the hand held device will light.
- 9. Allow the unit to charge until the LED light goes out.
- 10. Unplug the power adaptor from the hand held device.
- 11. Replace the belt clip.
- 12. Replace the protective rubber cover.



## Licensing the CF3000 handheld device:

In order for a CF3000 to operate it must have a valid license in its system memory. A license is downloaded into the tool from an online website and is valid for a set number of days. It will be required to download a valid license for all new tools and as the license time period runs out. When ten days remains in the current license, the CF3000 will begin displaying the number of days remaining until a new license is required. A license can be downloaded at any time. The following screen will be displayed when a new license is required.



Not all computers and operating systems are the same. The screen shots below and ways to navigate your system may not be the same. The goal is to save the license file in the "License" directory of the CF3000 drive.

- 1. Remove the handheld device from the dealer tool case.
- 2. Remove the handheld device from the protective rubber cover.
- 3. Remove the belt clip from the handheld device.
- 4. Remove the USB cable from the dealer tool case and plug the standard USB side into an internet accessible computer.
- 5. Plug the mini USB end of the power adaptor into the USB jack located on the top hand held device.
- 6. Power up the handheld device by pressing and holding the power button on the face of the unit until the display lights up.
  - a. The handheld will run through a power up sequence.



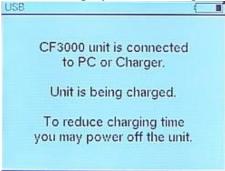




b. On some computers a USB message may display in the right hand bottom corner of the screen. This message can be closed.



c. The handheld device will display the following screen when powered up.



- 7. Open the CF3000 Online Tools webpage:
  - a. Click on the following link http://www.ifbcube.com/topdog/Dealer\_Tool/Licensing/
  - b. Copy and paste the link into your internet explore address bar.
  - c. Enter through the Top Dog Tools on the Invisible Fence® Brand Cube.
- 8. Select Request a New 90-Day License.



9. Enter the serial number located on the back of the handheld device into the box and click the submit button. Serial number is case sensitive.





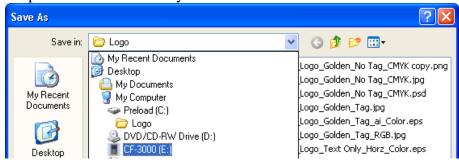
10. The CF3000 License validation page will display – Click the <u>here</u> hyperlink to download your license file.



11. The following message will display.

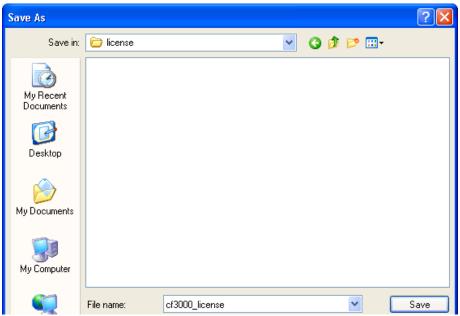


- 12. Select the Save button.
- 13. The "Save As" message will display.
- 14. Select the "Save in:" dropdown menu.
  - a. Double click on the CF3000 drive.
  - b. Open the license directory.

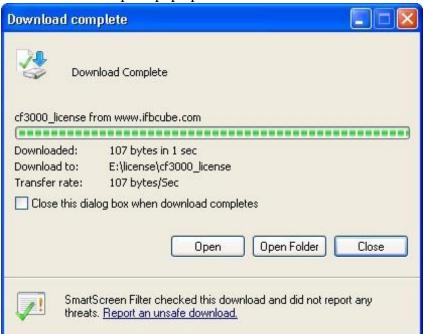




16. Click the Save button.



17. The Download Complete message will display. The Close button can be pressed to remove the Download complete pop up.



18. Licensing is complete. If a firmware update is required continue to step 8 of the **Updating the Firmware of the CF3000 Handheld Device** section of this instruction.



- 19. Power down and disconnect the CF3000 handheld device from the computer
  - a. Press and hold the power button located on the face of the device until the unit beeps and displays 'Shutting Down'.



- b. Unplug the USB cable from the handheld device and the computer and return to the dealer tool case.
- 20. Replace the belt clip.
- 21. Replace the protective rubber cover.



## Updating the Firmware of the CF3000 handheld device:

From time to time it will be necessary to update the firmware of the CF3000 handheld device. Updates will be releases each time features and/or functions are added or modified. The updates will be posted to the Invisible Fence® Brand Cube as they are released.

Not all computers and operating systems are the same. The screen shots below and ways to navigate your system may not be the same. The goal is to save the firmware file in the "Firmware" directory of the CF3000 drive.

- 1. Remove the handheld device from the dealer tool case.
- 2. Remove the handheld device from the protective rubber cover.
- 3. Remove the belt clip from the handheld device.
- 4. Remove the USB cable from the dealer tool case and plug the standard USB side into an internet accessible computer.
- 5. Plug the mini USB end of the power adaptor into the USB jack located on the top hand held device.
- 6. Power up the handheld device by pressing and holding the power button on the face of the unit until the display lights up.
  - a. The handheld will run through a power up sequence.

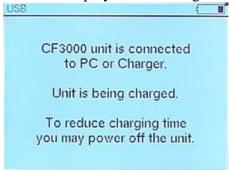


b. On some computers a USB message may display in the right hand bottom corner of the screen. This message can be closed.





c. The handheld device will display the following screen when powered up.



- 7. Open the CF3000 Online Tools webpage:
  - a. Click on the following link http://www.ifbcube.com/topdog/Dealer\_Tool/Licensing/
  - b. Copy and paste the link into your internet explore address bar.
  - c. Enter through the Top Dog Tools on the Invisible Fence® Brand Cube.
- 8. Select Download New Firmware Updates.



9. Click the "Download a new firmware version" hyperlink.



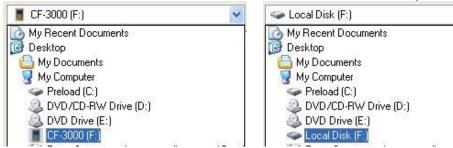
10. Click the Save button.



11. The Save As pop up will display.



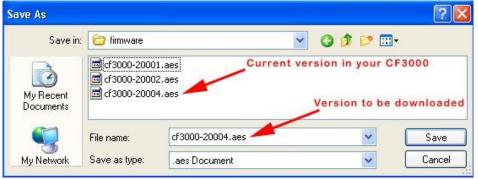
- 12. Select the "Save in:" dropdown menu.
  - a. Double click on the CF3000 drive. Your computer may or may not show an icon or label the drive CF3000. The drive letter could also be any letter.



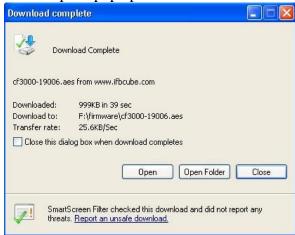
13. Double click on the firmware directory.



14. The firmware directory will hold all previous versions of firmware downloaded. Press Cancel if the version to be downloaded is already in the directory. Press Save if the version to be downloaded does not appear in the firmware directory.



15. The Download Complete message will display. The Close button can be pressed to remove the Download complete pop up.





- 16. Firmware update is complete.
- 17. Power down and disconnect the CF3000 handheld device from the computer
- 18. Press and hold the power button located on the face of the device until the unit beeps and displays 'Shutting Down'.



- 19. Unplug the USB cable from the handheld device and the computer and return to the dealer tool case.
- 20. Replace the belt clip.
- 21. Replace the protective rubber cover.



## **Entering Users into the CF3000 handheld device:**

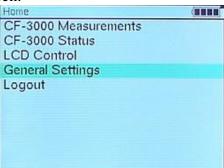
To operate the CF3000, it will be required to enter a User name and a 4 to 8 digit pin number. The handheld device can be set up with a User name and pin for each person using the device or with one User name and pin for everyone to share.

#### New units with no users entered:

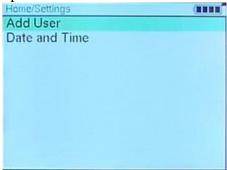
- 1. Power up the handheld device by pressing and holding the power button on the face of the unit until the display lights up.
  - a. The handheld will run through a power up sequence.
  - b. The Login screen will display with < Default User> highlighted.



- 2. Press and release the SELECT button on the keypad to display the Home screen.
- 3. Use the down arrow key to highlight General Settings and press the SELECT button to display the Settings screen.



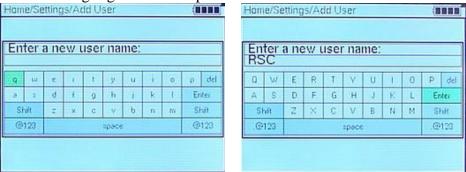
4. Highlight Add User and press SELECT to enter the Add User screen.



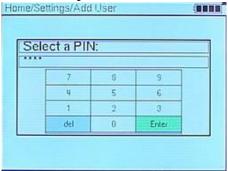


5. Enter a user name by highlighting each letter and pressing SELECT. The user name can be up to 32 digits long and made up of upper case letters, lower case letters and numbers.

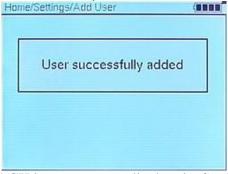
a. When done highlight Enter and press SELECT.



- 6. Enter a 4 to 8 digit pin number by highlighting the number and pressing SELECT.
  - a. When done highlight Enter and press SELECT.



7. Screen will display – User successfully added.



8. Press and release the BACK button once to display the Settings screen. Add another user if required or press and release the BACK button until the Home screen is displayed.

Units with users already enter: A current user will have to unlock the unit.

- 1. In the Login screen highlight a user name and press SELECT.
- 2. Enter the pin number for the user name selected by highlighting the number and pressing SELECT.
  - a. When done highlight Enter and press SELECT. The Home screen will display.
- 3. To add users, refer to steps 3 8 above.

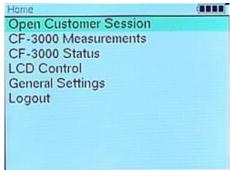


#### **Customer Sessions:**

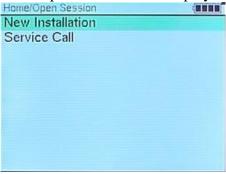
A Customer Session records test data for each customer. Test results are date and time stamped. An open Customer Session is required to gain access to the Test Head functions.

#### Add a Customer:

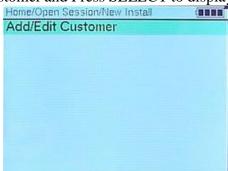
- 1. Power up the CF3000 handheld device and login.
- 2. From the Home screen, highlight Open Customer Session and press SELECT to display the Open Session screen.



3. Highlight New Installation and press SELECT to display the New Install screen.



4. Highlight Add/Edit Customer and Press SELECT to display the Client screen.



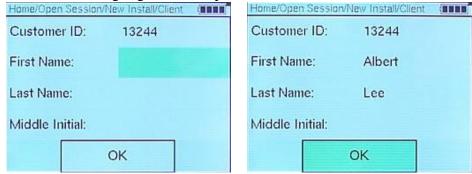
5. Enter a Customer ID by highlighting each letter or number and pressing SELECT. The Customer ID can be up to 20 digits long and made up of upper case letters, lower case letters and numbers.



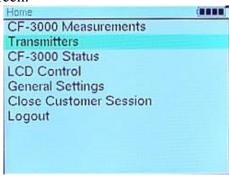
a. When done highlight Enter and press SELECT.



- 6. Enter the Customer's name.
  - a. The blank space after First Name: will be highlighted. Press SELECT.
  - b. Enter the customer's first name by highlighting each letter pressing SELECT. The Customer ID can be up to 20 digits long and made up of upper case letters and lower case letters.
  - c. When done highlight Enter and press SELECT.
  - d. Enter the customer's last name and middle initial by following steps a c above.
  - e. When done highlight OK and press SELECT.

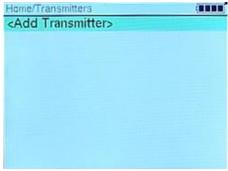


- 7. The Customer Session for customer just entered will now be open.
- 8. This is the time when the customer's transmitter serial number should be entered.
  - a. From the Home screen highlight Transmitters and press SELECT to display the Transmitters screen.



b. Highlight <Add Transmitter> and press SELECT.





c. Enter the 13 digit serial number. For older transmitters – Enter the serial number followed by asterisks to total 13 digits.



d. Highlight Enter and press SELECT. At this point you can enter addition transmitters or press the BACK button to return to the Home screen.

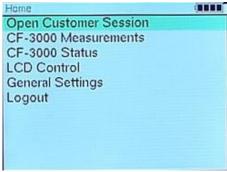


9. Test Head functions are now available for the entered customer.

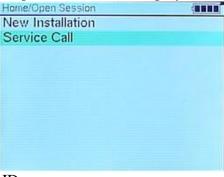


Open a Customer Session: (Gives access to Test Head functions)

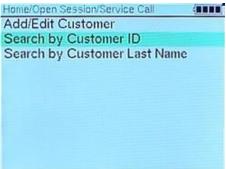
- 1. Power up the CF3000 handheld device and login.
- 2. From the Home screen, highlight Open Customer Session and press SELECT to display the Open Session screen.



3. Highlight Service Call and press SELECT to display the Service Call screen.

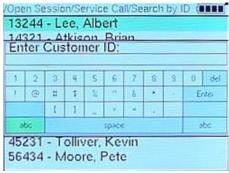


- 4. To Search by Customer ID.
  - a. Highlight Search by Customer ID and press SELECT to display the Search by ID screen.

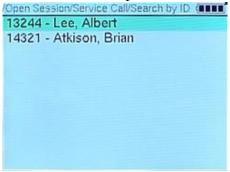




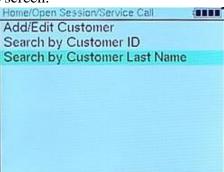
b. Begin entering the customer's ID. Customers will display with as few as one matching digit.



c. Highlight the customer desired and press SELECT to open a Customer Session.



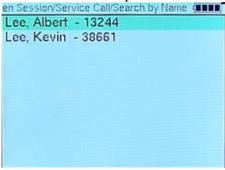
- 5. To Search by Customer Last Name.
  - a. Highlight Search by Customer Last Name and press SELECT to display the Search by Name screen.



b. Begin entering the customer's last name. Customers will display with as few as one matching digit.

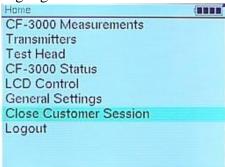






#### Close a Customer Session:

1. From the Home screen, highlight Close Customer Session and press SELECT.





#### **Test Head Functions:**

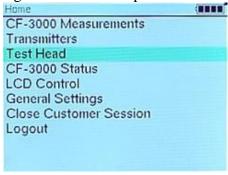
One of the functions of the CF3000 Dealer Tool is the ability to functionally test Computer Collar® in the field. The CF3000 can test for power consumption, sensitivity of all three antenna circuits and correction output. The CF3000 Dealer Tool is also used to configure Computer Collar®, as well as, read and reset Computer Collar® history.

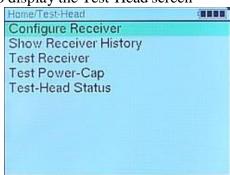
#### Accessing the Test Head Functions:

- 1. Power up the CF3000 handheld device, login and open a Customer Session.
- 2. Connect the yellow Cat5 from the RJ45 socket on the right hand side of the handheld device to the RJ45 socket on the back side of the test head. This can be done before or after the unit is powered up.



3. Highlight Test Head and press SELECT to display the Test-Head screen





## Configuring a Computer Collar®:

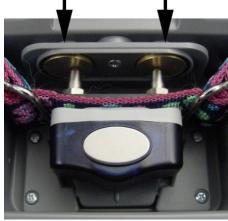
- 1. Ensure the test head is connected to the handheld device.
- 2. Load a Computer Collar<sup>®</sup> into the test head.
  - a. Insert a test hub into the battery chamber the same way you would insert a Power Cap<sup>®</sup>. The narrow side of the test hub should be away from the correction posts.





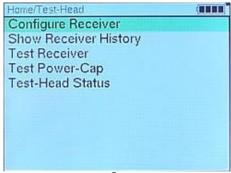
- b. Place the Computer Collar® and test hub into the test head.
  - i. Pull back the correction post contact plate.
  - ii. Align the Computer Collar® with test hub in the test head.
  - iii. Press down and back to lock the test hub into the test head.



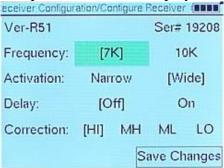


iv. Release the correction post contact plate.

3. From the Test-Head screen, highlight Configure Receiver and press SELECT to display the Configure Receiver screen.

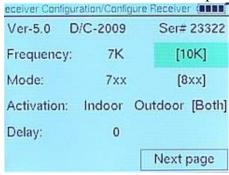


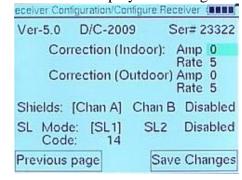
a. 700 Series only Computer Collar® will display one configuration screen.



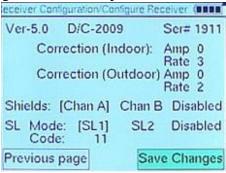


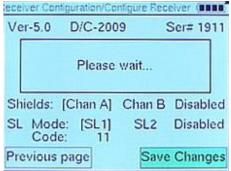
b. 800 Series and 700/800 Computer Collar<sup>®</sup> will display two configuration screens.



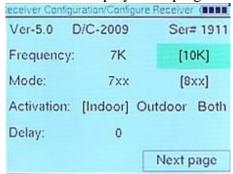


- 4. Use the arrow keys to change settings
- 5. Highlight Next Page and press SELECT to move the next page.
- 6. When complete, highlight Save Changes and press SELECT. The CF3000 will load the changes into the Computer Collar®.





7. The Configure Receiver screen will display when programming is complete.



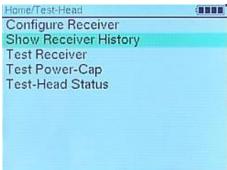
8. Press the BACK button once to display the Test-Head screen.





Viewing and Clearing the Computer Collar® History:

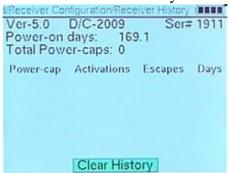
- 1. Follow steps 1 & 2 under *Configuring a Computer Collar*® to load a Computer Collar® into the test head.
- 2. From the Test-Head screen highlight Show Receiver History to display the Receiver History screen.



3. The Receiver History screen displays the total days the receiver has been powered on, the total number of Power Cap® units the receiver has had inserted and the history of the last 6 Power Cap® units inserted.



4. Press the SELECT button to clear the history of the last 6 Power Cap<sup>®</sup> units. The Power-on days will remain in the receiver's history.

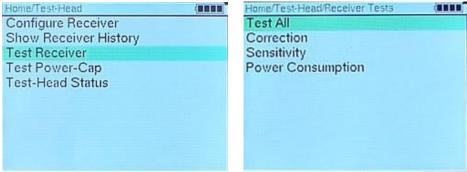


5. Press and release the BACK button to return to the desired screen.



### Testing a Computer Collar®:

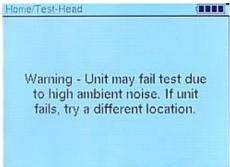
- 1. Connect the test head to the handheld device and insert a Computer Collar<sup>®</sup> into the test head. Follow steps 1 and 2 under Configuring a Computer Collar<sup>®</sup>.
- 2. From the Test-Head screen, highlight Test Receiver and press SELECT to display the Receiver Tests screen. The CF3000 will scan the area for magnetic noise that may affect the test results.



a. If excessive noise is detected, the following screen will display and the CF3000 will not continue to the Receiver Tests screen.



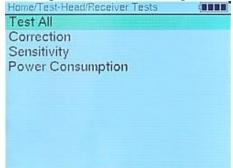
b. If moderate noise is detected, the following screen will display warning the test may fail. Press the SELECT button to continue to the Receiver Tests screen.



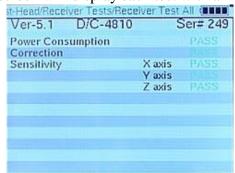
3. **Test All**: Tests the power consumption, correction output and the activation point for each of the three axes of the receiver.



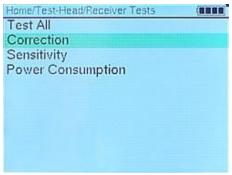
a. Highlight Test All and press SELECT to begin the test.



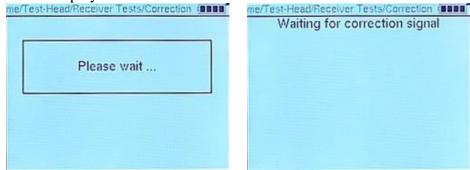
b. The following screen will display each test with a PASS or FAIL result.



- c. Press the BACK button to return to the Receiver Tests screen.
- 4. **Correction**: Tests the output of the Computer Collar<sup>®</sup>. Correction posts on the Computer Collar<sup>®</sup> are required.
  - a. Highlight Correction and press SELECT to test the correction output circuit of the Computer Collar®.

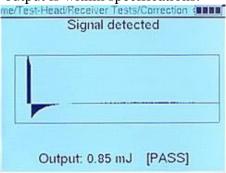


b. The display will show.

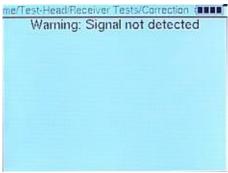




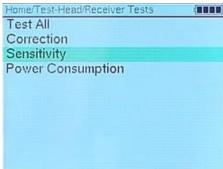
c. The handheld device will display the correction output, in millijoules (mJ), with a pass result if the output is within specifications.

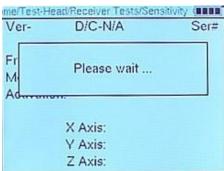


d. The handheld device will display **Warning: Signal not detected** if the Computer Collar® has no output or the correction posts are not touching the test head contact pads. Ensure correction posts are touching the contact pads and retest the Computer Collar®.



- e. Press the BACK button to return to the Receiver Tests screen.
- 5. **Sensitivity:** Tests the activation point for each of the three axes.
  - a. Highlight Sensitivity and press SELECT to test the sensitivity of all three antenna circuits.



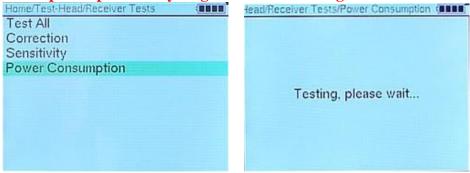




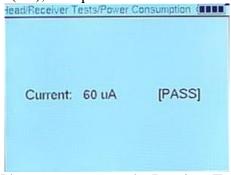
b. The handheld device will display each axis with a pass or fail result. The test will stop if a failure occurs.



- c. Press the BACK button to return to the Receiver Tests screen.
- 6. **Power Consumption:** Tests the power used by the Computer Collar<sup>®</sup> when not processing signal or correcting.
  - a. Highlight Power Consumption and press SELECT to test the energy consumption of the Computer Collar<sup>®</sup>. This test will fail if completed in a magnetically noisy area. In order to communicate with the CF3000 the Computer Collar<sup>®</sup> will except and process any magnetic noise resulting in a false failure.



b. The handheld device will display the energy consumption of the Computer Collar<sup>®</sup>, in microamperes (uA), with pass or fail result.

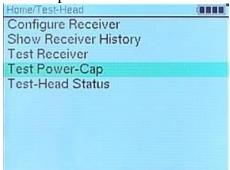


c. Press the BACK button to return to the Receiver Tests screen.

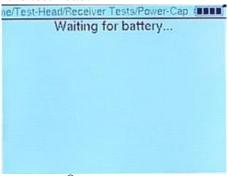


Testing a Power Cap<sup>®</sup>: Test the energy remaining in a Power Cap<sup>®</sup>.

1. From the Test-Head screen highlight Test Power Cap® and press SELECT to test the remaining energy of a Power Cap®.



d. The Power Cap® screen will display *Waiting for battery*...prompting you to insert a Power Cap® into the test head.

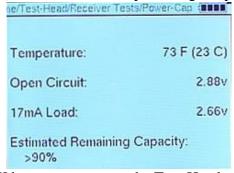


- i. Insert a Power Cap<sup>®</sup> into the test head.
- ii. Press the Power Cap® straight down and hold down.
- iii. Release when results are displayed.





c. The handheld device will display the open circuit voltage and the voltage under load, in volts (V), and the estimated percentage of power remaining.



d. Press the BACK button to return to the Test-Head screen.

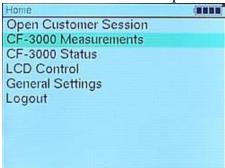


#### **CF-3000 Measurements Function:**

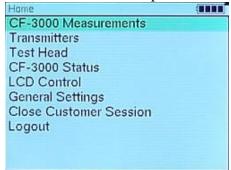
The CF3000 is equipped with tools to allow the user to diagnose various situations that may cause a system to operate improperly. The ability to search for Invisible Fence<sup>®</sup> Brand signal will aid in detecting and resolving random activations due to stray signals and signal bleeds. Detecting frequencies between 1.0 kHz and 15.5 kHz will help a technician determine, prior to installation, if a neighboring system exists, the best frequency to use or if there are areas around the home or property that may cause issues. The wire measurement tool will help in evaluating the integrity of the loop.

#### Accessing the CF3000 Measurements Functions:

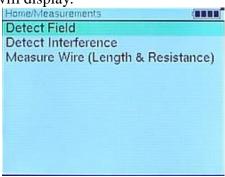
- 1. Power up the CF3000 handheld device and complete the login process.
- 2. From the Home screen, highlight CF-3000 Measurements and press SELECT.
  - a. Home screen without a Customer session open.



b. Home screen with a customer session open.



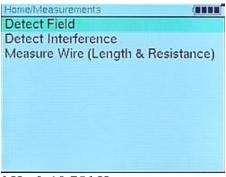
3. Measurements screen will display.



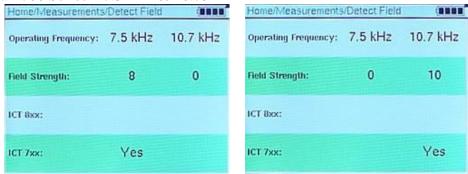


Detect Field: Detects all 700 and 800 Series signal types and displays the strength of the magnetic field. Can be used to determine if the transmitter is working properly, search for nulls in the field and search for stray signal or signal bleeds. The Detect Field mode will also display the exact set up of a neighboring Invisible Fence® Brand system.

1. From the Measurements screen highlight Detect Field and press SELECT to enter the Detect Field mode.



a. 700 Series – 7.5 kHz & 10.75 kHz



b. 800 Series – Wall transmitter signal types

Home/Measurements	/Detect Field	(8888)	Home/Measurements	/Detect Field	(0000
Operating Frequency:	7.5 kHz	10.7 kHz	Operating Frequency:	7.5 kHz	10.7 kHz
Field Strength:	8	0	Field Strength;	8	0
ICT 8xx:	ladoor		ICT 8xx;	Outdoor	
ICT 7xx:			ICT 7xx:		

c. 800 Series – Shields® signal types

Home/Measurements	Detect Field	(8888)	Home/Measurements	/Detect Field	(0000	Home/Measurem
Operating Frequency:	7.5 kHz	10.7 kHz	Operating Frequency:	7.5 kHz	10.7 kHz	Operating Frequenc
Field Strength:	0	8	Field Strength:	0	8	Field Strength:
ICT 8xx:		Shields - A	ICT Box:		Shields - B	ICT 8xx:
ICT 7xx;			ICT 7xx:			ICT 7xx:

cy: 7.5 kHz 10.7 kHz

8

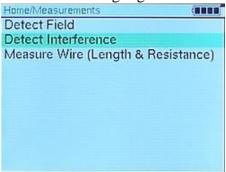
Shields - C



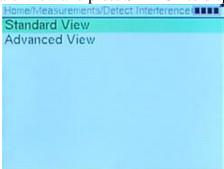
2. Press the BACK button when complete to return to the Measurements screen.

Detect Interference: Detects all magnetic noise between 1.0 kHz and 15.5 kHz. This mode can be used to detect a neighboring system as well as the possible brand of the system. This mode can also be used to determine which frequency to set a system at or areas a Computer Collar® may be interfered with. A choice of Standard and Advanced Views are available for use depending on preference.

- 1. **Standard View:** Displays frequency detected and the strength of the magnetic noise. Frequencies that are within limits of a pet containment system, Invisible Fence<sup>®</sup> Brand or competitor, will display the initials of the manufacturer or brand to alert of a possible neighboring system. Initials next to a frequency do not mean a neighboring system exists, only the possibility. In almost all cases it is only displaying noise in that frequency. The up and down arrows are used to set the frequency strength threshold which sets the strength of frequencies to be displayed. The higher the threshold is the fewer number of lines will be displayed.
  - a. From the Measurements screen highlight Detect Interference and press SELECT.

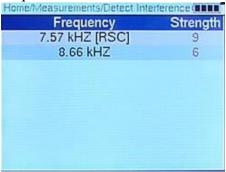


b. Highlight Standard View and press SELECT to display the standard view.

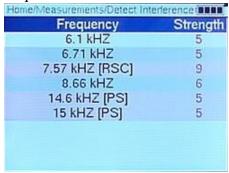




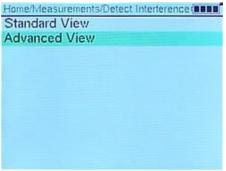
c. Adjusting the threshold – Displays all frequencies above the threshold line. i. Pressing the up arrow raises the threshold displaying only the higher strength frequencies.



ii. Pressing the down arrow lowers the threshold displaying additional lower strength frequencies.



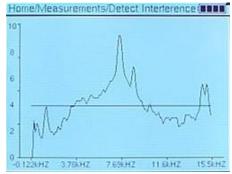
- d. Press the BACK button to return to the Detect Interference screen.
- 2. **Advanced View:** Displays the same information as the Standard View except in a graphical format. The threshold line for the Standard View screen is visible in the screen.
  - a. From the Detect Interference screen highlight Advanced View and press SELECT to display the advanced view.





b. The frequency is displayed across the X axis while the frequency strength is displayed along the Y axis.





c. Press and release the BACK button twice to return to the Measurements screen.

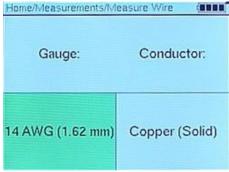
Measure Wire (Length & Resistance): Enter the wire gauge and wire type and the CF3000 displays the loops resistance and assigns a wire length, in feet, to the measurement. A new install will measure accurately. As the loop wire ages, the resistance increases and the displayed length of wire will increase. Knowing the length of wire installed, the age of the wire and some history of repairs done and an assessment of the integrity of the loop can be made.

1. Plug the supplied test leads into the right-hand side of the CF3000 handheld device and clip to the loop wire. NOTE: Measurements through an LP device will add resistance to the loop.

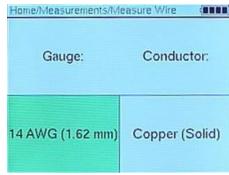




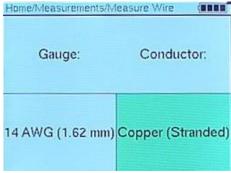
2. From the Measurements screen highlight Measure Wire (Length & Resistance) and press SELECT to enter the Measure Wire screen.



3. Highlight the wire gauge box and use the up or down arrow to select the gauge of wire use in the install.



4. Press the right arrow to highlight the conductor type box and use the up or down arrow to select the type of conductor used in the install.



5. Press the SELECT button. The CF3000 will begin measuring then displays the results.



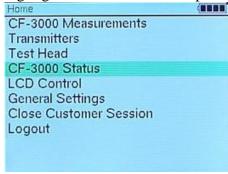
6. Press and release the BACK button to return to the desired screen.



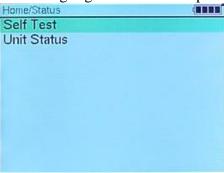
#### **Additional Information:**

CF-3000 Status: Displays important information about the CF3000 handheld device.

1. From the Home Screen highlight CF-3000 Status and press SELECT.



- 2. **Self Test:** Completes a self diagnostic of the handheld device. Plug the test head into the right-hand side to the CF3000 handheld device.
  - a. From the Status screen highlight Self Test and press SELECT.

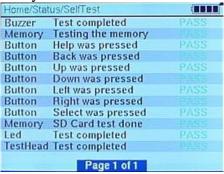


b. The handheld will begin the self diagnostic. Use the arrow and SELECT buttons and follow instructions as displayed.





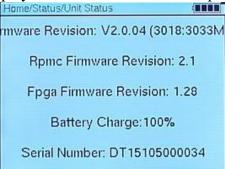
c. The handheld will display a PASS or FAIL result for test completed. The LED will flash red with any failed result.



- d. Press the BACK button to return to the Status screen.
- 3. **Unit Status:** Displays firmware revisions, percentage of battery charge remaining and device serial number.
  - a. From the Status screen highlight Unit Status and press SELECT to view the device information.



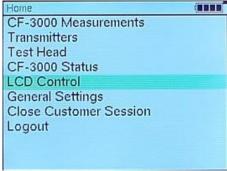
b. The first line displays the firmware that will be updated via computer download.



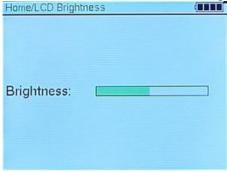
c. Press and release the BACK button to return to the Home screen.



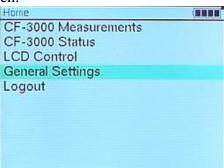
- 4. **LCD Control:** Allows brightness adjustment of the LCD backlight.
  - a. From the Home screen highlight LCD Control and press SELECT.



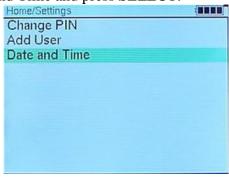
b. Use the right and left arrows to select the LCD brightness.



- c. Press the BACK button to set the brightness and return to the Home screen.
- 5. **Date and Time:** Displays the current time and date. Time zone and daylight savings is chosen in this section.
  - a. From the Home screen highlight General Settings and press SELECT to display the Settings screen.

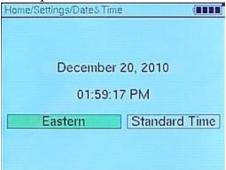


b. Highlight Date and Time and press SELECT.





c. Press and release the up or down arrow to scroll through time zones.



d. Press the right arrow to highlight the daylight savings box. Press and release the up or down button to toggle between Standard Time and Daylight Savings Time.



e. Press and release the BACK button twice to set the time zone and daylight savings and return to the Home screen.



# Battery Disposal:

Separate collection of spent batteries is required in many regions: check the regulations in your area before discarding spent batteries. Please see page 7 of this manual for instructions on how to gain access to the battery pack for separate disposal. The CF3000 Handheld Device operates on one 3.7 Volt Lithium Ion rechargeable battery. Replace only with an equivalent battery that can be obtained from your Invisible Fence® Brand distributor.

## **Perchlorate Battery:**

Perchlorate Material – Special handling may apply. See www.dtsc.ca.gov/hazardous waste/perchlorate.



## **Important Recycling Advice:**

Please respect the Waste Electrical and Electronics Equipment regulations in your country. This equipment must be recycled. If you no longer require this equipment, do not place in the normal municipal waste system. Please return it to where it was purchased in order that it can be placed in our recycling system. Please contact your Invisible Fence® Brand distributor for instruction on returning this equipment.



Notes:

800-578-DOGS (USA) (865) 777-5404 (International) ©2010 Radio Systems® Corporation All Rights Reserved.

Protected by Patents: U.S.: #5,533,469