

The Cobra line of quality products includes:

CB Radios • microTALK® Radios • Radar/Laser Detectors •
Safety Alert® Traffic Warning Systems • Handheld GPS Receivers •
Mobile GPS Navigation Systems • HighGear® Accessories •
CobraMarine™ VHF Radios • Marine Chartplotters •
Power Inverters • Accessories

Cobra®

microTALK®

Owner's Manual



For more information or to
order any of our products,
please visit our website:

www.cobra.com

TWO-WAY RADIO MODEL

PR 650 WX

Printed in the Philippines
Part No. 480-246-P
Version A

Nothing Comes Close to a Cobra®

English

Nothing Comes Close to a Cobra®

English

Introduction

Making Life Easier and Safer

Staying in touch with your family and friends is convenient and easy when using your microTALK® radio. Some of the many uses you will discover include: Communicating with others while hiking, biking, and working; keeping track of family and friends at a crowded public event; checking with travel companions in another car; talking with neighbors; arranging meeting spots with others while shopping at the mall.

Belt Clip

Secure your microTALK® radio while on the go.



Carrying your microTALK® radio with you is easy when using the belt clip or optional wrist strap.

Wrist Strap



The belt clip easily attaches to your belt, purse, or backpack. Simply squeeze the clip and place it where you prefer.

Customer Assistance



For Assistance in the U.S.A.

In this user's manual, you should find all the information you need to operate your microTALK® radio. If you require further assistance after reading this manual, Cobra Electronics offers the following customer assistance services:

Automated Help Desk

English only. 24 hours a day, 7 days a week 773-889-3087 (phone).

Customer Assistance Operators

English and Spanish. 8:00 a.m. to 6:00 p.m. Central Time, Monday through Friday (except holidays) 773-889-3087 (phone).

Questions

English and Spanish. Faxes can be received at 773-622-2269 (fax).

Technical Assistance

English only. www.cobra.com (on-line: Frequently Asked Questions). English and Spanish. productinfo@cobra.com (e-mail).

For Assistance Outside the U.S.A.

Contact Your Local Dealer

A1 English

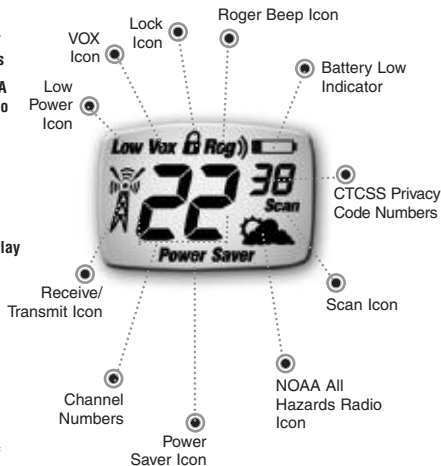
©2005 Cobra Electronics Corporation
6500 West Cortland Street
Chicago, Illinois 60707 USA
www.cobra.com



Features

- **22 Channels**
Seven shared with FRS/GMRS, seven FRS only, eight GMRS only.
- **38 Privacy Codes**
- **10 Channel NOAA All Hazards Radio**
- **Hands-Free Operation (VOX)**
- **Scan**
Channel, privacy code
- **Backlit LCD Display**
- **Call Alert**
Five selectable tones
- **Button Lock**
- **Speaker/Microphone/Charge Jack**
- **Roger Beep**
Selectable On/Off
- **Battery/Power Saver**
- **Keystroke Tones**
- **Auto Squelch**
- **Maximum Range Extender**
- **Belt Clip**

Backlit LCD Display



Important FCC Licensing Information

This radio operates on General Mobile Radio Service (GMRS) frequencies which require a Federal Communications Commission (FCC) license. See page 15 for licensing and other related information.



Maximum range may vary and is based on unobstructed line-of-sight communication under ideal conditions.

Limited One-Year Warranty on Radio(s) & Charger For Products Purchased in the U.S.A.

Cobra Electronics Corporation warrants that its Cobra microTALK® radios and charger, and the component parts thereof, will be free of defects in workmanship and materials for a period of one year from the date of first consumer purchase. This warranty may be enforced by the first consumer purchaser, provided that the product is utilized within the U.S.A.

Cobra will, without charge, repair or replace, at its option, defective microTALK® radios, chargers, products or component parts upon delivery to the Cobra Factory Service department, accompanied by proof of the date of first consumer purchase, such as a duplicated copy of a sales receipt.

You must pay any initial shipping charges required to ship the product for warranty service, but the return charges will be at Cobra's expense, if the product is repaired or replaced under warranty. This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

Exclusions: This limited warranty does not apply: 1) To any product damaged by accident; 2) In the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs; 3) If the serial number has been altered, defaced, or removed; 4) If the owner of the product resides outside the U.S.A.

All implied warranties, including warranties of merchantability and fitness for a particular purpose are limited in duration to the length of this warranty. Cobra shall not be liable for any incidental, consequential or other damages; including, without limitation, damages resulting from loss of use or cost of installation.

Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

For Products Purchased Outside the U.S.A.

Please contact your local dealer for warranty information.

90-Day Warranty on GA-3ANC Rechargeable Batteries

For products purchased in the U.S.A. and Canada.

Trademark Acknowledgement

Cobra®, microTALK®, Nothing Comes Close to a Cobra®, VibrAlert® and the snake design are registered trademarks of Cobra Electronics Corporation, USA. Cobra Electronics Corporation™ is a trademark of Cobra Electronics Corporation, USA.

Caring for Your microTALK® Radio

Your microTALK® radio will give you years of trouble-free service if cared for properly. Handle the radio gently. Keep the radio away from dust. Never put the radio in water or in a damp place. Avoid exposure to extreme temperatures.

Remove Belt Clip



Pull Up Lock Latch



Insert Batteries



Rechargeable Batteries and Charger

To install or replace batteries:

1. Remove belt clip by releasing belt clip latch and sliding clip up.
2. Pull up on the battery door latch to remove the battery compartment cover.
3. Insert the supplied four (4) AAA rechargeable batteries (also works with non-rechargeable alkaline batteries). Position batteries according to polarity markings.
4. Replace battery compartment cover and belt clip.

Radio Charger Jack



To charge batteries in radio:

1. Check to see that the batteries have been inserted properly. See above for battery installation instructions.
2. Insert round connector of wall charger/adaptor into the charge jack located at the top of the radio. The wall charger/adaptor has two round connectors which enables you to charge either one or two radios at a time.
3. Plug the wall charger/adaptor into electrical outlet.

It normally takes 15 hours to fully recharge batteries. It is not recommended to recharge batteries more than 24 hours. Estimated operation time on a full charge is 8 hours.

Use only the supplied rechargeable batteries and wall charger/adaptor for recharging your Cobra microTALK® radio. Non-rechargeable alkaline batteries can also be used.



The Basics to Get You Started

Your microTALK® radio is easy to use. To get started, simply:

1. Press and hold the **Mode/Power** button to turn **on** your radio.
2. Press the **Channel Up** or **Channel Down** button to select a channel.



Both radios must be tuned to the same channel to communicate.

3. Press and hold the **Talk** button while speaking into the microphone.
4. When finished talking, release the **Talk** button and listen for a response.

Mode/Power Button



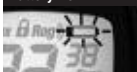
Turning on Your microTALK® Radio

To turn on your radio:

- Press and hold the **Mode/Power** button until you hear a series of audible tones indicating the radio is **on**.

Your microTALK® radio is now in **Standby** mode, ready to receive transmissions. The radio is always in **Standby** mode except when the **Talk**, **Call** or **Mode/Power** buttons are pressed.

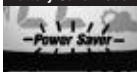
Battery Low



Battery Low

When battery power is low, the **Battery Low** icon will blink. Your batteries should be replaced or recharged, if using rechargeable batteries.

Battery Save Mode



Auto Battery Save

Your microTALK® radio has a unique circuit designed to extend battery life. If there are no transmissions within 10 seconds, the radio will automatically switch to **Battery Save** mode and the **Power Saver** icon will flash in the display. This will not affect the radio's ability to receive incoming transmissions.

Talk Button



Two Inches (five cm) from Mouth



Communicating with Another Person

To talk to another person:

1. Press and hold the **Talk** button.
2. With the microphone about two inches (five cm) from your mouth, speak in a normal voice.
3. Release the **Talk** button when you are finished talking and listen for a response.

You cannot receive incoming calls while pressing the **Talk** button.



Both radios must be tuned to the same channel to communicate.

Channel Button



Channel Number



Channels

To select a channel:

- With the radio **on**, select any of the 22 channels by pressing the **Channel Up** or **Channel Down** button.



Both radios must be tuned to the same channel to communicate.

Channels 1 through 7 are shared with FRS/GMRS. Channels 8 through 14 are FRS only. Channels 15 through 22 are GMRS only.



See page 14 for FRS/GMRS frequency allocations and compatibility charts.

Listening

**Listening for a Response**

When you are finished talking:

- Release the **Talk** button to receive incoming transmissions. Your microTALK® radio is always in **Standby** mode while the **Talk** or **Call** buttons are not pressed.

Volume Button

**Volume**

To adjust the volume:

- Press the **Volume Up** or **Volume Down** button.

Volume Level



A double beep sound is used to indicate the minimum and maximum volume levels (1 through 8).

Call Button

**Call Button**

To alert another person that you are calling:

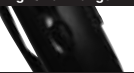
- Press and release the **Call** button.

The other person will hear a two second call tone. This tone is used only to establish voice communications.



See page 13 on how to select between five call tone settings.

Light/Max Range

**Display Illumination**

To illuminate your display:

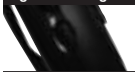
- Press and release the **Light/Max Range** button to illuminate the display for 10 seconds.

Auto Squelch/Maximum Range

Your microTALK® radio is equipped with **Auto Squelch**, which automatically shuts **off** weak transmissions and unwanted noise due to terrain, conditions or if you've reached your **Maximum Range** limit.

You can temporarily turn **off** auto squelch or turn **on** maximum range extender, allowing all signals to be received and extending the maximum range of your radio.

Light/Max Range



To temporarily turn off auto squelch:

- Press the **Light/Max Range** button for less than five seconds.

If you hear two beeps, you have turned the maximum range extender **on** (see below).

To turn maximum range extender on:

- Press and hold the **Light/Max Range** button for at least five seconds until you hear two beeps which indicates the maximum range extender is **on**.

To turn maximum range extender off:

- Press and release the **Light/Max Range** button or change channels.

Lock Function

The **Lock** function locks the **Channel Up**, **Channel Down** and **Mode/Power** buttons to prevent accidental operation.

Lock Button



To turn the lock on or off:

- Press and hold the **Lock** button for two seconds.

A double beep sound is used to confirm your lock **on** or **off** request. When in **Lock** mode, the **Lock** icon will be displayed.

Lock Icon



Speaker/Microphone/Charge Jack

Your microTALK® radio can be fitted with an external **Speaker/Microphone**, freeing your hands for other tasks. This same jack also serves as the connecting point for a wall charger/adaptor.

Speaker/Microphone/Charge Jack



To attach a speaker/microphone:

1. Open the speaker/microphone/charge tab on top of your microTALK® radio.
2. Insert the plug into the speaker/microphone/charge jack.

To connect a wall charger/adaptor:

1. Open the speaker/microphone/charge tab on top of your microTALK® radio.
2. Insert the wall charger/adaptor plug into the speaker/microphone/charge jack.



See Page 1 for batteries and charger instructions.

microTALK® Range

Your range will vary depending on terrain and conditions.



In flat, open country your radio will operate at maximum range.

Buildings and foliage in the path of the signal can reduce the range of the radio.

Dense foliage and hilly terrain will further reduce the range of the radio.

On FRS Channels 8 through 14, your radio automatically switches to low power, which will limit the range the radio can communicate.



Remember, you can achieve maximum range by using maximum range extender. See page 5 for details.

Scrolling Through the Mode Function

By scrolling through the **Mode** function, you will be able to select or turn **on** preferred features of your microTALK® radio. When scrolling through the **Mode** function, your radio features will be displayed in the same predetermined order:



- Set Privacy Code
- Set NOAA All Hazards Radio Channels
- Set Vox On/Off
- Set Vox Sensitivity
- Set Channel Scan
- Set Privacy Code Scan
- Set Call Tones
- ▼ Set Roger Beep on/off

CTCSS Privacy Codes

CTCSS (Continuous Tone Coded Squelch System) is an advanced tone coding system allowing you to select one of 38 privacy codes to reduce interference from other users on the channel.



If you are using a privacy code, both radios must be tuned to the same channel and privacy code to communicate. Each channel will remember the last privacy code you selected.



To select a privacy code:

1. After selecting a channel, press the **Mode/Power** button until the small numbers next to the channel number flash on the LCD.
2. Press the **Channel Up** or **Channel Down** button to select a privacy code. You can hold the **Channel Up** or **Channel Down** button for fast advance.
3. When your desired privacy code is displayed:
 - a. Press the **Mode/Power** button to enter the new setting and proceed to other functions.
 - b. Press the **Lock** button to enter the new setting and return to **Standby** mode.
 - c. Do not press any buttons for 15 seconds to enter the new setting and return to **Standby** mode.

NOAA* All Hazards Radio Channels

You can use your microTALK® radio to listen to **NOAA All Hazards Radio** channels transmitting in your area.

Mode/Power Button



Hazards Radio Icon



Channel Button



To listen to all hazards radio channels:

1. Press the **Mode** button until the All Hazards Radio icon and the currently selected All Hazards Radio channel is displayed.
 2. Use the **Channel Up** or **Channel Down** button to change All Hazards Radio channels.
- The All Hazards Radio icon will continue to be displayed when All Hazards Radio is **on**.
3. Choose one of the following:
 - a. Press the **Mode** button to proceed to other functions.
 - b. Press the **Lock** button to exit **All Hazards Radio** channels mode and return to **Standby** mode.

*National Oceanographic and Atmospheric Administration

Voice Activated Transmit (VOX)

In **VOX** mode, your microTALK® radio can be used “hands-free,” automatically transmitting when you speak. You can set the **VOX** sensitivity level to fit the volume of your voice and avoid transmissions triggered by background noise.

Mode/Power Button



VOX Icon



Channel Button



To turn VOX mode on or off:

1. Press the **Mode/Power** button until the **VOX** icon flashes on the display. The current **On** or **Off** setting is displayed.
2. Press the **Channel Up** or **Channel Down** button to turn **VOX On** or **Off**.
3. Choose one (1) of the following:
 - a. Press the **Mode/Power** button to enter the selected **On** or **Off** setting and proceed to other functions.
 - b. Press the **Lock** button to enter the selected **On** or **Off** setting and return to **Standby** mode.

Mode/Power Button



VOX Sensitivity Level



Channel Button



To Set VOX Sensitivity:

1. Press the **Mode/Power** button until the **VOX** icon flashes and the current sensitivity level is displayed.



The current VOX sensitivity level is displayed with letters “LE” and a Number 1 through 5, with Number 5 being the most sensitive level and Number 1 being the least sensitive level.

2. Press the **Channel Up** or **Channel Down** button to change the setting.
3. Choose one (1) of the following:
 - a. Press the **Mode/Power** button to enter the selected setting and proceed to other functions.
 - b. Press the **Lock** button to enter the selected setting and return to **Standby** mode.

Channel Scan

Your microTALK® radio can automatically scan channels.

Mode/Power Button



Scan Channels



Channel Button



To scan channels:

1. Press the **Mode/Power** button until the **Scan** icon and the channel numbers flash on the display.
2. Press the **Channel Up** or **Channel Down** button to begin scanning channels.



The radio ignores specific privacy codes while scanning channels.

The **Scan** icon will continue to be displayed when scan is **on**. Your radio will continue to scan all channels and stop if an incoming transmission is detected. Your radio will remain on that channel for 10 seconds.

While setting channel scan, if you do not press any buttons for 15 seconds your radio will automatically return to **Standby** mode on the channel or channel/privacy code displayed before you entered mode functions.

During scanning (while receiving an incoming transmission), you can choose from the following:

- Press and hold the **Talk** button to communicate on that channel. Your radio will remain on that channel and return to **Standby** mode.
- Press the **Channel Up** or **Channel Down** button to resume scanning channels.

If you press the **Talk** button while scanning and not within 10 seconds of receiving a transmission, you will transmit on the channel on which you last received a transmission. This will return the radio to **Standby** mode.

If you do not press any button within 10 seconds, your radio will automatically resume scanning channels.

During scanning (while not receiving a transmission), you can choose from the following:

- Press and hold the **Talk** button to communicate on the channel or channel/privacy code that was displayed before you entered mode functions or the channel on which, during scanning, you last received a transmission. This will return the radio to **Standby** mode.
- Press the **Mode/Power** button to proceed to set privacy code scan on the channel that was either displayed before you entered mode functions or on which, during channel scanning, you last received a transmission (see page 11 for further details).
- Press the **Lock** button to return to **Standby** mode on the channel/privacy code that was displayed before you entered mode functions or the channel on which, during scanning, you last transmitted or received.

Privacy Code Scan

Your microTALK® radio can automatically scan the **Privacy Codes** (00 through 38) within one channel.

Select Channel



Mode/Power Button



Scan Privacy Codes



Channel Button



To scan privacy codes:

- While in **Standby** mode, press the **Channel Up** or **Channel Down** button to choose the channel on which you wish to scan privacy codes.
- Press the **Mode/Power** button until the **Scan** icon and the privacy code numbers flash on the display.
- Press the **Channel Up** or **Channel Down** button to begin scanning privacy codes within the channel you selected.

The **Scan** icon will continue to be displayed when privacy code scan is **on**. Your radio will continue to scan privacy codes and stop as an incoming transmission is detected. Your radio will remain on that channel/privacy code for 10 seconds.

While setting privacy code scan, if you do not press any buttons for 15 seconds your radio will automatically return to **Standby** mode on the channel/privacy code that was displayed before you entered mode functions.

During scanning (while receiving an incoming transmission), you can choose from the following:

- Press and hold the **Talk** button to communicate on that channel/privacy code. Your radio will remain on that channel/privacy code and return to **Standby** mode.
- Press the **Channel Up** or **Channel Down** button to resume scanning privacy codes.

If you press the **Talk** button while scanning and not within 10 seconds of receiving a transmission, you will transmit on the channel/privacy code on which you last received a transmission. This will return the radio to **Standby** mode.

If you do not press any button within 10 seconds, your radio will automatically resume scanning privacy codes.

During scanning (while not receiving a transmission), you can choose from the following:

- Press and hold the **Talk** button to communicate on the channel/privacy code that was displayed before you entered mode functions or the channel/privacy code on which, during scanning, you last received a transmission. This will return the radio to **Standby** mode.
- Press the **Mode/Power** button to proceed to other functions.
- Press the **Lock** button to return to **Standby** mode on the channel/privacy code that was displayed before you entered mode functions or the channel/privacy code on which, during scanning, you last transmitted or received.

Five Call Tone Settings

You can choose between five different **Call Tone Settings** to transmit a unique call alert.



To change a call tone setting:

- Press the **Mode/Power** button until the letter "C" and the current call tone number (01 through 05) is displayed. The current call tone will sound for one second.
- Press the **Channel Up** or **Channel Down** button to hear the other call tone settings.
- Choose one of the following:
 - Press the **Mode/Power** button to enter the new setting and proceed to other functions.
 - Press the **Lock** button to enter the new setting and return to **Standby** mode.

Roger Beep Confirmation Tone

Your listener will hear an audible tone when you release the **Talk** button. This alerts the other party that you are finished talking and it is OK for them to speak.



To turn roger beep on or off:

- Press the **Mode/Power** button until the **Roger Beep** icon flashes. The current **on** or **off** setting is displayed.
- Press the **Channel Up** or **Channel Down** button to select roger beep **on** or **off**.
- Choose one of the following:
 - Press the **Mode/Power** button to enter the new setting and return to **Standby** mode.
 - Press the **Lock** button to enter the new setting and return to **Standby** mode.



General Specifications

FRS/GMRS Frequency Allocation and Compatibility

Important: Please note that Cobra GMRS models with 15 Channels may designate different channel numbers for the same frequency. For example, a Cobra 15 Channel GMRS model would need to be tuned to Channel 11 in order to communicate with a 22 Channel GMRS tuned to Channel 15. Please refer to the chart below for channel/ frequency number compatibility.

A = Channel No. for 22 Channel FRS/GMRS Models

B = Channel No. for 15 Channel GMRS Models

C = Type of Radio Service

D = Frequency in MHz

E = Power Output

A	B	C	D	E
1	1	FRS/GMRS	462.5625	High
2	2	FRS/GMRS	462.5875	High
3	3	FRS/GMRS	462.6125	High
4	4	FRS/GMRS	462.6375	High
5	5	FRS/GMRS	462.6625	High
6	6	FRS/GMRS	462.6875	High
7	7	FRS/GMRS	462.7125	High
8		FRS	467.5625	Low
9		FRS	467.5875	Low
10		FRS	467.6125	Low
11		FRS	467.6375	Low
12		FRS	467.6625	Low
13		FRS	467.6875	Low
14		FRS	467.7125	Low
15	11	GMRS	462.5500	High
16	8	GMRS	462.5750	High
17	12	GMRS	462.6000	High
18	9	GMRS	462.6250	High
19	13	GMRS	462.6500	High
20	10	GMRS	462.6750	High
21	14	GMRS	462.7000	High
22	15	GMRS	462.7250	High

IMPORTANT NOTICE: FCC LICENSE REQUIRED

This two-way radio operates on GMRS (General Mobile Radio Service) frequencies which require an FCC (Federal Communications Commission) license. A user must be licensed prior to operating on Channels 1 through 7 or 15 through 22, which comprise the GMRS channels of this radio. Serious penalties could result for unlicensed use of GMRS channels, in violation of FCC rules. Operation of this radio is subject to additional rules specified in 47 C.F.R. Part 95.

Licensed users will be issued a call sign by the FCC, which should be used for station identification when operating this radio. GMRS users should also cooperate by engaging in permissible transmissions only, avoiding channel interference with other GMRS users, and being prudent with the length of their transmission time.

For licensing information and application forms, please call the FCC Hotline at 800-418-FORM. Request form #159 and form #605. Questions regarding the license application should be directed to the FCC at 888-CALL-FCC. Additional information is available on the FCC's website at www.fcc.gov.

Safety Information for microTALK® Radios

Your wireless handheld portable transceiver contains a low power transmitter. When the talk button is pushed, it sends out radio frequency (RF) signals. The device is authorized to operate at a duty factor not to exceed 50%. In August 1996, the Federal Communications Commission (FCC) adopted RF exposure guidelines with safety levels for handheld wireless devices.

Important:

FCC RF Exposure Requirements: For body-worn operation, this radio has been tested and meets the FCC RF exposure guidelines when used with Cobra accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines. Use only the supplied antenna. Unauthorized antennas, modifications, or attachments could damage the transmitter and may violate FCC regulations.

Normal Position:

Hold the transmitter approximately two inches from your face and speak in a normal voice, with the antenna pointed up and away.

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 undesired operation.



FCC Warnings: Replacement or substitution of transistors, regular diodes or other parts of a unique nature, with parts other than those recommended by Cobra may cause a violation of the technical regulations of part 95 of the FCC rules, or violation of type acceptance requirements of part 2 of the rules.



Product Service Questions

If you have any questions about operation or installing your new Cobra product, or if you are missing parts...

Please call Cobra first! DO NOT RETURN THIS PRODUCT TO THE STORE! See customer assistance on page A1.

For Products Purchased in the U.S.A.

If your product should require factory service, please call Cobra first before sending your radio. This will ensure the fastest turn-around time on your repair. You may be asked to send your radio to the Cobra factory. It will be necessary to furnish the following to have the product serviced and returned.

- 1) For warranty repair include some form of proof-of-purchase, such as a mechanical reproduction or carbon of a sales receipt. If you send the original receipt, it cannot be returned.
- 2) Send the entire product.
- 3) Enclose a description of what is happening with the radio. Include a typed or clearly printed name and address of where the radio is to be returned.
- 4) Pack radio securely to prevent damage in transit. If possible, use the original packing material.
- 5) Ship prepaid and insured by way of a traceable carrier such as United Parcel Service (UPS) or Priority Mail to avoid loss in transit to Cobra Factory Service, Cobra Electronics Corporation, 6500 West Cortland Street, Chicago, Illinois 60707 U.S.A.
- 6) If the radio is in warranty, upon receipt of your radio it will either be repaired or exchanged depending on the model.

Please allow approximately three to four weeks before contacting Cobra for status. If the radio is out of warranty, a letter will automatically be sent informing you of the repair charge or replacement charge. If you have any questions, please call 773-889-3087 for assistance.

For Products Purchased Outside the U.S.A.

Please contact your local dealer for product service information.