

Accessory Order Form

The Cobra® line of quality products also includes:

- CB Radios
- microTALK® Radios
- Radar/Laser Detectors
- Safety Alert® Traffic Warning Systems
- Accessories
- GPS (Global Positioning System)
- HighGear™ Accessories
- Power Inverters
- VHF Marine Radios

Shipping & Handling*

Amount of Order	Shipping/Handling
\$10.00 or less	\$3.00
\$10.01-\$25.00	\$5.50
\$25.01-\$50.00	\$7.50
\$50.01-\$90.00	\$10.50
\$90.01-\$130.00	\$13.50
\$130.01-\$200.00	\$16.50
\$200.01 plus	10% of purchase

*For AK, HI and PR add additional \$26.95 for FedEx Next Day or \$10.95 for FedEx 2nd Day. Excludes weekend and holiday shipments.

Please allow 2-3 weeks for delivery in the U.S. Prices subject to change without notice.

Item #	Description	Cost Ea.	Qty.	Amount
251-199-9-001	Replacement Mounting Bracket			
634-081-9-001	Replacement Thumb Screws			
741-080-9-001	Replacement Microphone Bracket			
HG M84	4 Pin Premium Noise-Cancelling Microphone			
HG M84W	4 Pin Premium Noise-Cancelling Microphone Wood Grain			
HG M85	5 Pin Premium Noise-Cancelling Microphone			
HG M73	Replacement Dynamic Microphone			
HG M75	4 Pin Power Microphone			
HG M77	Noise Canceling Microphone			
HG S100	Dynamic External Speaker			
HG S300	Noise Canceling External Speaker			
HG S500	Noise Canceling With Talk Back External Speaker			

Tax Table	Subtotal _____
Ohio, Wisconsin residents add 5%	(Tax if applicable) _____
Indiana, Michigan residents add 6%	Shipping/handling _____
Illinois residents add 8.75%	Total _____
California residents add 7.25%	

Please print clearly
 Name _____
 Address (No P.O. Box) _____
 City _____ State _____
 Zip _____ Telephone (____) _____
 Credit Card No. _____ Exp. Date _____
 Customer Signature _____
 Circle One: Visa MasterCard Discover

Cobra® 20 XTR

Operating Instructions for your Cobra® 20 XTR Street Communicator

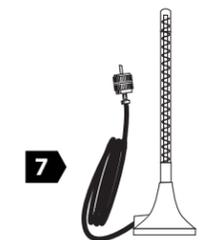
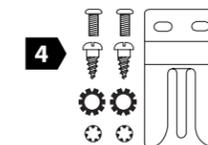
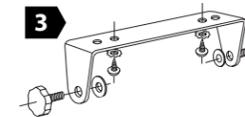
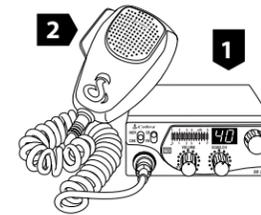


Nothing Comes Close To A Cobra®

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Cobra Electronics Corporation
 6500 West Cortland Street
 Chicago, IL 60707 USA

The Citizens Band Story FCC Information



The Citizens Band lies between the shortwave broadcast and 10-meter Amateur radio bands, and was established by law in 1949. The Class D two-way communications service was opened in 1959. (CB also includes a Class A citizens band and Class C remote control frequencies.)

FCC Regulations

FCC regulations permit only "transmissions" (one-party to another) rather than "broadcast" (to a wide audience). Thus, advertising is not allowed on CB channels because that is "broadcasting".

FCC Warnings

All transmitter adjustments other than those supplied by the manufacturer as front panel operating controls, must be made by, or under the supervision of, the holder of an FCC-issued general Radio-Telephone Operator's License.

Replacement or substitution of transistors, regular diodes or other parts of a unique nature, with parts other than those recommended by Cobra, may cause violation of the technical regulations of Part 95 of the FCC Rules, or violation of Type Acceptance requirements of Part 2 of the Rules.

You should read and understand Part 95 (included with this unit) of the FCC Rules and Regulations, before operating your Cobra radio, even though the FCC no longer requires you to obtain an operator's license.

What's included with your CB Radio:

- | | |
|------------------------|------------------------------------|
| 1. CB Transceiver | 5. Operating Manual (not pictured) |
| 2. Microphone | 6. FCC Rules (not pictured) |
| 3. Transceiver Bracket | 7. Illuminated Antenna |
| 4. Microphone Bracket | |

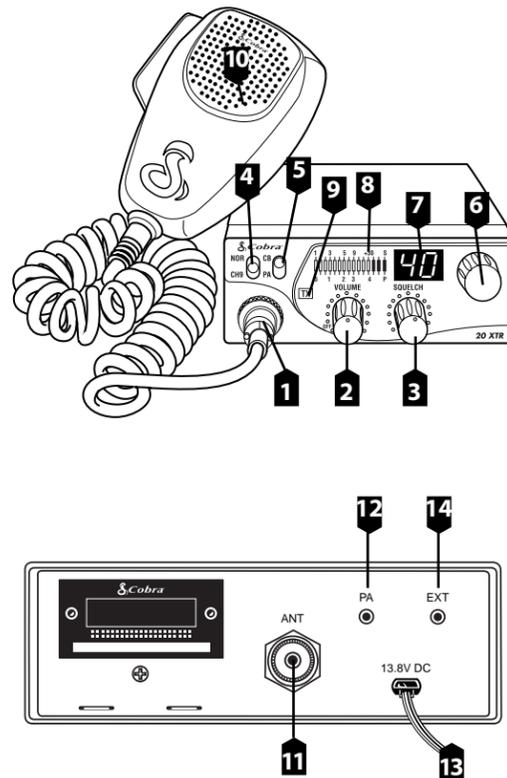
Controls and Indicators

Front Side

1. Microphone Connector.
2. Off/On/Volume.
3. Squelch.
4. Channel 9/NOR
5. CB/PA
6. Channel Selector Button.
7. LED Channel Display.
8. S/RF Power Meter.
9. TX Indicator LED.
10. Microphone

Back Side

11. Antenna Connector
12. Public Address
13. Power Cord
14. External Speaker Connector



Our Thanks to You Customer Assistance

Thank you for purchasing the Cobra 20 XTR Radio Transceiver. Properly used, this Cobra product will give you many years of reliable service.

Customer Assistance

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

For Assistance In the U.S.A.

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. CT,
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

Customer Assistance



Dynamic External Speaker
HG S100



Noise Canceling External Speaker
HG S300



Noise Canceling With Talk Back External Speaker
HG S500

Optional Accessories

You can find accessories at your local Cobra® dealer, or in the U.S.A. you can order directly from Cobra®.

Ordering From U.S.A.
Call 773-889-3087 for pricing or visit www.cobra.com.

For credit card orders
Complete and mail this order form to:
Cobra® Electronics
Attn: Accessories Department
6500 West Cortland Street
Chicago, IL 60707 USA.

Or fax the completed form to us at 773-622-2269.

You may also order by phone by calling 773-889-3087 (press 1 from the main menu) 8:00 a.m. to 6:00 p.m. CT, Monday through Friday.

To order online
please visit our website:
www.cobra.com

Table of Contents Features

Contents

The CB Story	A1
FCC Information/Included Accessories	A1
Controls and Indicators	A2
Customer Assistance	A3
Features	1
Installation/Connection	2
Mounting/Connections	2
CB Antenna	4
Operation	6
Turning on Your Radio	6
Microphone Connector	6
Squelch	7
Channel Selection	10
Channel 9/NOR	10
CB/PA	10
S/RF Power Meter	11
TX Indicator LED	11
Real Panel	12
Ignition Noise Interference	13
Temporary Mobile Operation	13
Operation to Receive/Transmit	14
Maintenance	15
Replacement Warning	16
Rules You Should Know	16
Channel 9 Emergency Messages	16
CB Distress Data	17
CB 10-Codes	18
Frequency Ranges	20
Specifications	21
Warranty	22
Product Service	23
Accessories	24
Order Form	26

Features of This Product

- *Antenna Included*
- *Antenna Illuminates When PTT Is Pressed*
- *40 CB Radio Channels*
- *Instant Channel 9/NOR*
- *PA System*
- *Compact Size*
- *Dynamic Microphone*
- *9 Foot Mic Cord*
- *Front Panel Microphone Connector*

Installation

Mounting and Connections

Note

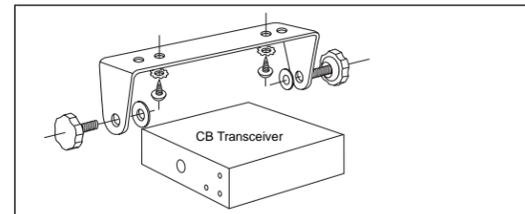
The transceiver is held in the universal mounting bracket by two thumb screws, permitting adjustment at the most convenient angle.

A universal mounting bracket is supplied along with self tapping screws and star washers.

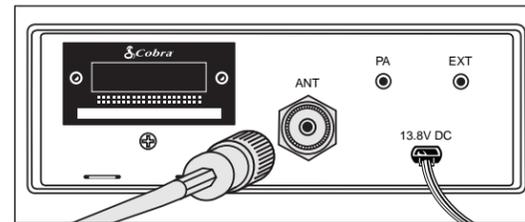
Mounting and Connections

Select a location for the transceiver and microphone bracket that is convenient for operation. In automobiles, the transceiver is usually mounted to the underneath of the dash panel, with the microphone bracket beside it.

- 1 Hold the radio with mounting bracket in the exact location desired. Remove the mounting bracket and use it as a template to mark the location for the mounting screws.



- 2 Drill necessary holes and secure mounting bracket in location.
- 3 Connect the antenna cable plug to the receptacle marked "ANT" on the back of the unit.



2

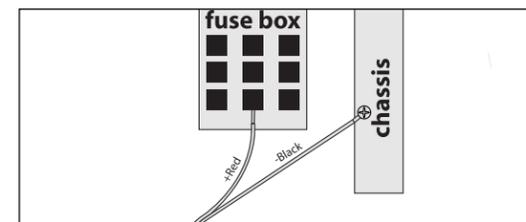
Installation

Mounting and Connections

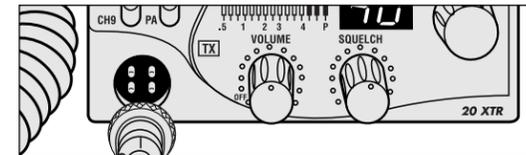
Note

Before installing the CB radio, visually check the vehicle battery connections to determine which battery terminal, positive or negative (positive is the larger of the two) is grounded to the engine block (or chassis).

- 4 Connect the red lead of DC power cord to an accessory 12 volt fuse.
- 5 Connect the black lead to the negative side of the automobile. This is usually the chassis. Any convenient location with good electrical contact (remove paint) may be used.



- 6 Mount the microphone bracket on right side of the transceiver or near it using two screws supplied. When mounting in an automobile, place the bracket under the dash so the microphone is readily accessible.
- 7 Attach the 4-pin microphone cable to receptacle on front of unit and install unit in bracket securely.



3

Installation

Installation

CB Antenna Installation

Note

Mobile installations (cars, trucks, boats, etc) should be made only with a non-directional antenna system.

A standard antenna connector (Type SO-239) is provided on the Connector Box for easy connection to a standard PL-259 cable termination.

CB Antenna

Do not remove foil covering from bottom of magnetic base. The foil protects the car finish.



Warning

Warning: This product is intended for off road use. Please check the laws and regulations in your state, county and/or municipality regarding installation and use of this product.

The manufacturer makes no claims as to the adequacy of use and assumes no liability for any improper use or installation. Installation and use are solely the responsibility of the purchaser.

Installation Instructions

- 1 This magnetic mount antenna has been tested to withstand normal high speed driving. The magnet will hold securely under the following conditions. Always make sure the antenna base is on a clean, flat, painted or unpainted surface. The magnetic base will not hold on non-metallic or aluminum surfaces. Periodically clean all parts of antenna to maintain maximum performance.
- 2 Clean dust and dirt away from area where antenna will be placed.
- 3 Place antenna on vehicle, roof, trunk lid, or any flat surface. For best results centrally locate.
- 4 Run coax cable thru to inside of vehicle routed in a manner where it will not interfere with the driver or controls and connect to the antenna connector of the radio.

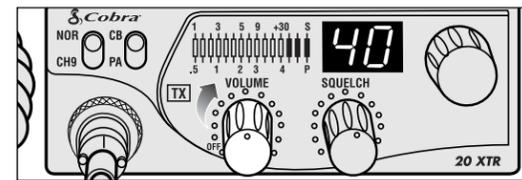


Operation

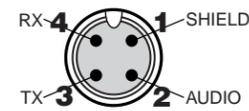
Turning on Your Radio

Turning on

Turn volume control clockwise to turn power on and set the desired listening volume.

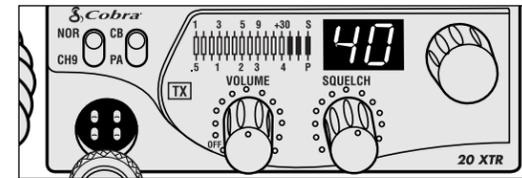


Microphone Connector



Microphone Connector

Allows for convenient removal of the microphone plug when storage is required. The microphone MUST be connected to the unit at all times when in use, for proper operation.

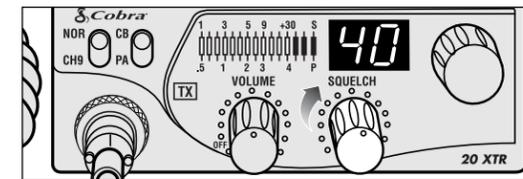


Operation

Squelch

Squelch

This control is used to cut off or eliminate receiver background noise in the absence of an incoming signal. Adjust until the receiver noise disappears. This will require the incoming signal to be slightly stronger than average receiver noise. Further clockwise rotation will increase the threshold level which a signal must overcome in order to be heard. Only strong signals will be heard at a maximum clockwise setting.

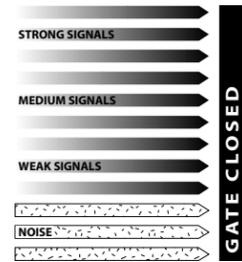


Operation

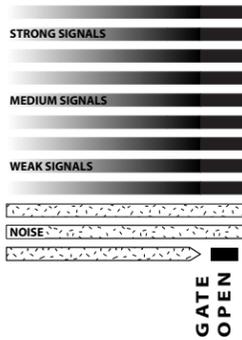
Operation

Setting Squelch

Gate closed



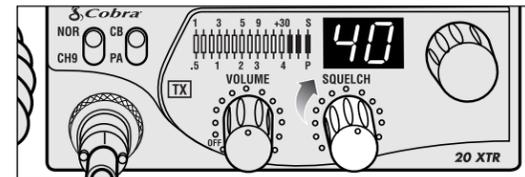
Gate open



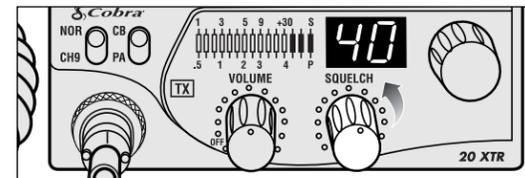
Setting Squelch

Squelch is the "control gate" for incoming signals.

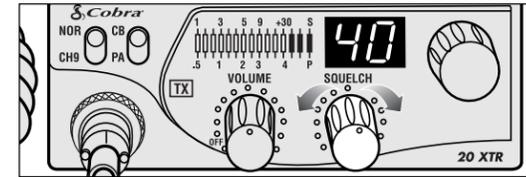
- 1 Full clockwise rotation closes the gate allowing only very strong signals to enter.



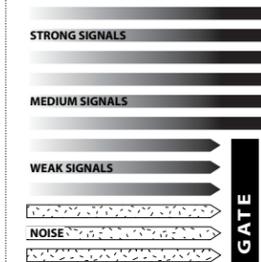
- 2 Full counterclockwise rotation opens the "gate" allowing all signals in.



- 3 To achieve the Desired Squelch Setting (DSS), turn the Squelch control counterclockwise until you hear noise. Now turn the control clockwise just until the noise stops. This is the DSS setting.



Gate set to Desired Squelch Setting (DSS)

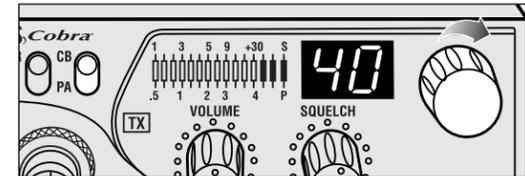


Operation

Channel Selection

Selecting a Channel

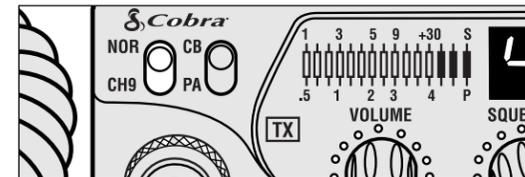
Rotate channel knob clockwise until desired channel is displayed.



Channel 9/NOR

Channel 9/NOR

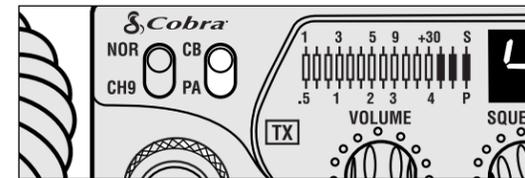
Set CH 9 to obtain instant access emergency channel. In NOR position, all 40 CB channels are selected by the channel button.



CB/PA

CB/PA

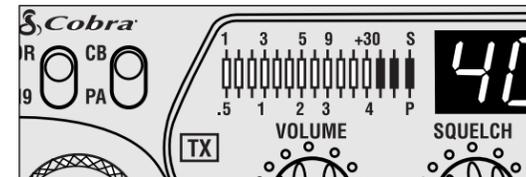
In the CB position, the PA function is disabled and the unit will transmit and receive on the selected channel. The PA function should not be used unless a PA speaker is connected.



Operation

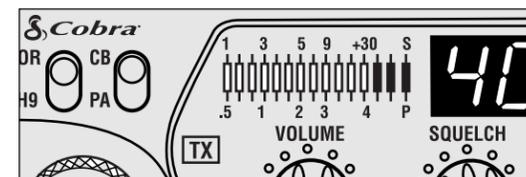
S/RF Power Meter

Shows relative transmitter RF output power and input signal strength when receiving. The LED (Light Emitting Diode) segments glow green to amber to red...this indicates receive or transmit activity.



TX Indicator LED

The indicator will light red when in the transmit mode.



S/RF Power Meter

TX Indicator LED

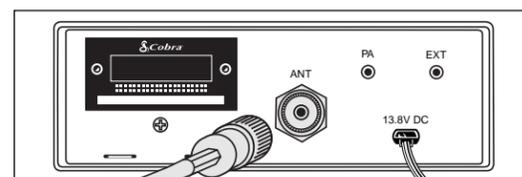
Operation

Rear Panel

Antenna Connector
External Speaker
Power
Public Address

Note
 Cobra external speakers are rated 15 watts

Rear Panel



Antenna Connector

This female connector permits connection of the transmission line cable male connector to the transceiver.

External Speaker

The External Speaker Jack is used for an external speaker. The external speaker should have 8-ohm impedance and be rated to handle at least 4.0 watts. When the external speaker is plugged in, the internal speaker is automatically disconnected.

Power

These wires supply power to the CB radio. This cable is permanently attached to the radio. If you wish to remove the radio after installation, disconnect at fuse holder and ground connector.

Public Address

An external PA speaker may be connected to the PA speaker jack when used as a public address system. The speaker should be directed away from the microphone to prevent acoustic feed-back. Physical separation or isolation of the microphone and speaker must be employed when operating the PA at high output levels.

12

Operation

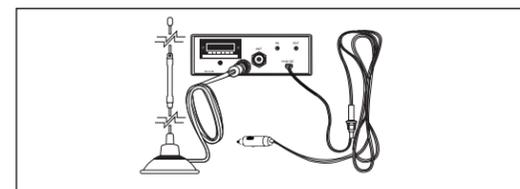
Ignition Noise Interference

Use of a mobile receiver at low signal levels is normally limited by the presence of electrical noise. Under most operating conditions, when signal level is adequate, the background noise does not present a serious problem. Also, when extremely low level signals are being received, the transceiver may be operated with vehicle engine turned off. The unit requires very little current and therefore will not significantly discharge the vehicle battery.

Even though this radio has an automatic noise limiter, in some installations ignition interference may be high enough to make good communications impossible. Consult your COBRA dealer or a 2-way radio technician for help in locating and correcting the source of severe noise.

Temporary Mobile Operation

For temporary mobile operation, you may want to purchase an additional cigarette lighter adapter from your COBRA dealer. This adapter and a magnetic mount antenna allow you to quickly "install" your transceiver for temporary use.



Ignition Noise Interference

Note
 When using the unit with cigarette adapter, turn off when not in use to avoid draining the battery.

Temporary Mobile Operation

Note
 Red wire is connected to positive side of socket center tip. Black wire is connected to negative side contacts.

Note
 Radio resets to CH 9 when connected to cigarette lighter plug.

13

Operation

Operating Procedure to Receive

Operating Procedure to Receive

- 1 Be sure that power cord, antenna and microphone are connected to the proper connectors before proceeding further. The CB/PA switch should be in the "CB" position.
- 2 Turn the radio ON by rotating the VOLUME CONTROL clockwise.
- 3 Rotate SQUELCH CONTROL counterclockwise until incoming signal is heard.
- 4 Select the desired channel.
- 5 Set VOLUME CONTROL to a comfortable listening level.

Operating Procedure to Transmit

Operating Procedure to Transmit

- 1 Select the desired channel.
- 2 The receiver and transmitter are controlled by the press-to-talk switch on the microphone. Press the switch and the transmitter is activated; release switch to receive. When transmitting (on a clear channel), hold the microphone two inches from the mouth and speak clearly in a normal voice.

Be sure the antenna is properly connected to the radio before transmitting. Prolonged transmitting without an antenna, or a poorly matched antenna, could cause damage to the transmitter.

Maintenance

Maintenance/Adjustment

Maintenance and Adjustment

Your COBRA CB transceiver is specifically designed for the environment encountered in mobile installations. The use of all solid state circuitry and its light weight result in high reliability. Should a failure occur, however, review the following, then if necessary, replace parts only with identical parts. Do not substitute.

- 1 Check connections to the source of power and make sure it is the 13.8 VDC required to operate your radio.
- 2 Check the fuses in the DC power cord. The main power lead (red) has a 2 amp 3AG type fuse in its holder. Use only the above specified type and size fuse for maximum protection. Failure to do so will void the warranty.
- 3 **Make certain the microphone is properly plugged in.**
- 4 Make certain the antenna is properly assembled and connected.

If you are unable to correct the problem, refer to the SERVICE INSTRUCTIONS at the end of this manual for the correct procedure for warranty and post-warranty service from COBRA.

Warning & Rules

Replacement Warning

Replacement Warning

Replacement or substitution of certain parts with replacements other than those recommended by Cobra may be a violation of the technical regulations of Part 95 of the FCC rules, or of Type Acceptance requirements of Part 2 of said rules.

When making adjustments, be sure to re-read applicable portions of this instruction manual to make certain you are following correct procedure and that the radio was properly installed, etc.

A Few Rules You Should Know

A Few Rules That Should Be Obeyed

- ❶ You are not allowed to carry on a conversation with another station for more than five minutes at a time without taking a one-minute break to give others a chance to use the channel.
- ❷ You are not allowed to blast others off the air by overpowering them with illegally amplified transmitter power or illegally high antennas.
- ❸ You can't use CB to promote illegal activities.
- ❹ You are not allowed to use profanity.
- ❺ You may not play music in your CB.
- ❻ You may not use your CB to sell merchandise or professional service.

Set to channel 9 for emergencies

Be sure antenna is properly connected.

CB Distress Data

CB Distress Data

When transmitting an emergency, you should request a "REACT BASE" and provide the CB distress data (called **CLIP**):

- C** all Sign Identify yourself.
- L** ocation Be exact.
- I** njuries Number. Type. Trapped?
- P** roblem Give details and help needed.

Transmit **CLIP** repeatedly so any monitor can assist.

The FCC gives the following examples of permitted and prohibited types of communications for use on Channel 9. These are guidelines and are not intended to be all-inclusive.

The FCC gives these examples of permitted and prohibited messages for channel 9. These are only guidelines and not all-inclusive:

Permitted	Example Message
Yes	"Tornado sighted six miles north of town."
No	"Post number 10. No tornado sighted."
Yes	"Out of gas on I-95 at mile marker 211."
No	"Out of gas in my driveway."
Yes	"Four car accident on I-94 at Exit 11. Send police and ambulance."
No	"Traffic moving smoothly on I-94."

CB Distress Data

CB 10-Codes

CB 10-Codes

CB 10-Codes

Citizen Bands have adopted the "10-CODES" for standard questions and answers. These codes provide quick and easy communication, especially in noisy areas. Following are some of the more common codes and meanings:

Code	Meaning
10-1	Receiving poorly
10-2	Receiving well
10-3	Stop transmitting
10-4	OK, message received
10-5	Relay message
10-6	Busy, stand by
10-7	Out of service, leaving
10-8	In service, subject to call
10-9	Repeat message
10-10	Transmission completed standing by
10-11	Talking too rapidly
10-12	Visitors present
10-13	Advise weather/roads
10-16	Make pick up at
10-17	Urgent business
10-18	Anything for us?
10-19	Return to base
10-20	My location is
10-21	Call by phone
10-22	Report in person to
10-23	Stand by
10-24	Completed last assignment
10-25	Can you contact
10-26	Disregard last info
10-27	Moving to channel

CB 10-Codes

10-28	Identify your station
10-29	Time is up for contact
10-30	Does not conform to FCC rules
10-33	Emergency traffic
10-34	Trouble at this station
10-35	Confidential information
10-36	Correct time is
10-37	Wrecker needed at
10-38	Ambulance needed
10-39	Message delivered
10-41	Turn to channel
10-42	Traffic accident at
10-43	Traffic tie up at
10-44	Have a message for
10-45	All units within range please report
10-50	Break channel
10-60	What is next message number?
10-62	Unable to copy. Use phone
10-63	Net directed to
10-64	Net clear
10-65	Awaiting your next message/assignment
10-67	All units comply
10-70	Fire at
10-71	Proceed, transmission in sequence
10-77	Negative contact
10-81	Reserve hotel room for
10-82	Reserve room for
10-85	My address is
10-91	Talk closer to mic
10-93	Check my frequency on this channel
10-94	Give me a long count
10-99	Mission completed, all units secure
10-200	Police needed at

Limited One Year Warranty



Cobra Electronics Corporation
6500 West Cortland Street
Chicago, Illinois 60707 USA

Limited One Year Warranty

COBRA ELECTRONICS CORPORATION warrants that its COBRA CB Transceiver, and the component parts thereof, will be free of defects in material and workmanship for a period of one (1) year from the date of 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, a defective CB Transceiver upon delivery to the COBRA factory Service Department, accompanied by proof of the date of first consumer purchase, such a duplicated sales receipt.

You must pay 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 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.

Product Service

Product Service

If you think you need service call 773.889.3087

If your product should require factory service please call Cobra first before sending in your unit. This will ensure the fastest turn-around time on your repair.

You may be asked to send your unit to the Cobra factory. It will be necessary to furnish the following in order 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 unit. Include a typed or clearly print name and address of where the unit is to be returned.
- 4 Pack unit 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 First Class Mail to avoid loss in transit to: Cobra Factory Service, Cobra Electronics Corporation, 6500 West Cortland Street, Chicago, IL 60707 USA.
- 6 If the unit is in warranty, upon receipt of your unit it will either be repaired or exchanged depending on the model. Please allow approximately 3 to 4 weeks before contacting us for status. If the unit 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.

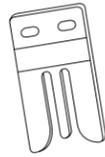
Product Service

For technical assistance, please call our Automated Help Desk at (773) 889-3087 24 hours a day, 7 days a week. This can assist you by answering the most frequently asked questions about Cobra products.

A Consumer Service Representative can be reached at (773) 889-3087 8:00 am - 6:00 pm, Monday through Friday, CT.

Technical assistance is also available on-line in the Frequently Asked Questions (FAQ) section at www.cobra.com or by e-mail to productinfo@cobra.com

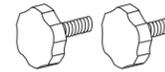
Accessories



Replacement Microphone Bracket
741-080-9-001



Replacement Mounting Bracket
251-199-9-001



Replacement Thumb Screws
634-081-9-001



4 Pin Premium Noise-Cancelling Microphone
HG M84



4 Pin Premium Noise-Cancelling Microphone
Wood Grain
HG M84W



5 Pin Premium Noise-Cancelling Microphone
HG M85



4 Pin Replacement Dynamic Microphone
HG M73



4 Pin Noise Canceling Microphone
HG M77



4 Pin Power Microphone
HG M75