

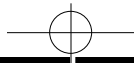
How to Use Your Cobra *microTALK*™ 2-Way Radio

Contents

Features	1
Family Radio Service	A1
FCC Warnings	
Included Accessories	
Controls & Indicators	A2
Our Thanks to You	A3
Customer Support	A3
Operating your microTALK	
Battery Installation.....	2
Turning On.....	3
Illuminating the Display	3
Auto Squelch.....	4
Maximum Range Extender/Auto Monitor.....	4
Select Channel.....	5
Calling Another Party	6
Talking To Another Party	7
Roger Beep Confirmation Tone.....	8
Listening For Another Party	8
microTALK Range.....	9
Making Life Easier And Safer.....	10
microTALKSNAP Removable Front.....	11
External Microphone/Speaker Jack.....	12
Caring for Your microTALK	14
Frequency Ranges	16
microTALK Specifications	16
Limited Two Year Warranty	18
Optional Accessories	19
Order Form	20
If You Think You Need Service	Back Cover

Features of This Product

- Two-way radio with up to a 2 mile range
- 14 channels
- Backlit LCD
- Roger beep confirmation tone
- Call feature
- SuperFlex™ antenna
- Speaker/Microphone jacks
- Belt clip
- Wrist strap



Operation

Operation

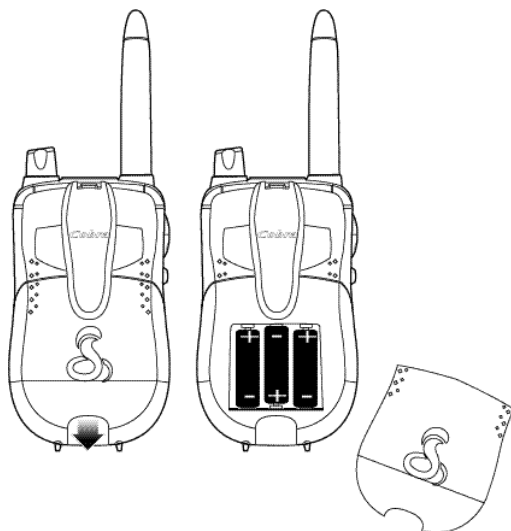
Battery Installation

Note
Batteries are not included with microTALK 2-way radio. Always use 3 high quality AA alkaline batteries or optional battery pack (sold separately).

Note
When batteries are low the indicator will blink.

Note
Visit Cobra Electronics (www.cobraelectronics.com) for information about optional battery pack and desktop charger accessories.

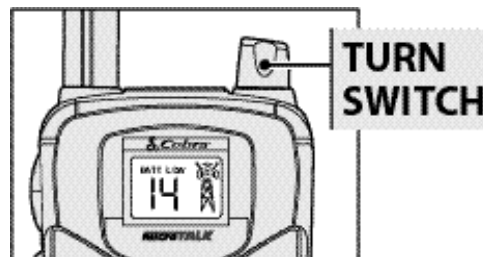
Install Batteries



- 1 Pull lock tab down to remove battery cover.
- 2 Insert three "AA" batteries. Position batteries according to polarity markings.

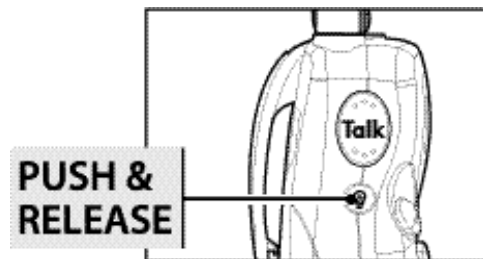
2

Turning On Your microTALK



- 1 Turn the On/Off/Volume switch. An audible "tone" will indicate the unit is on.

Illuminating the Display



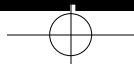
- 1 Push and release LIGHT/MAX RANGE button to illuminate display for ten seconds.

3

Turning On Your microTALK

Note
Whenever the unit is on you can receive communications.

Illuminating the Display



Operation

Auto Squelch

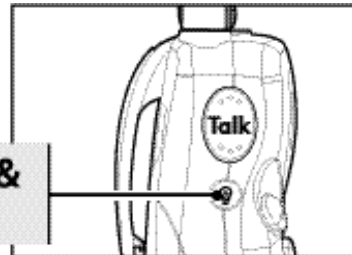
Auto Squelch


Your microTALK is equipped with Auto Squelch, which automatically shuts off weak transmissions and unwanted noise due to terrain conditions or if you have reached your range limit.

Maximum Range Extender

Maximum Range Extender

Auto Squelch can be temporarily removed to allow all signals to enter (Maximum Range Extender).



- 1 Push and hold  LIGHT/MAX RANGE button to allow all signals to enter.

Note

To learn more about the range of your microTALK, see page 9.

Range is dependent on battery condition and geographic terrain.

Auto Monitor

Auto Monitor

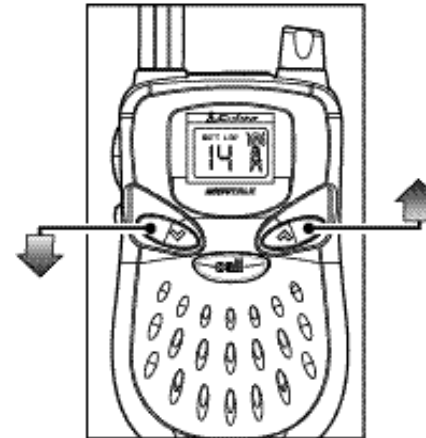
When the signal you want to hear is consistently weak, you may place the radio in Maximum Range mode without having to constantly hold the button: Press and hold the Maximum Range Extender button for five seconds. Two beeps confirm Auto Monitor is on. To return to normal operation, momentarily press the Maximum Range Extender button again or change channels.

4

Operation

Select Channel

- 1 Turn on the microTALK 2-Way Radio.



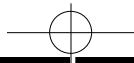
- 2 Select any of the 14 channels by pushing the channel up or down buttons.

Select Channel

Note

Units must be tuned to the same channel number in order to communicate.

5



Operation

Operation

Calling Another Party

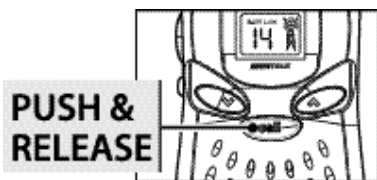
Note

Both units must be ON and tuned to the same channel.

Your incoming "Call" signal volume is dependent on the unit volume setting.

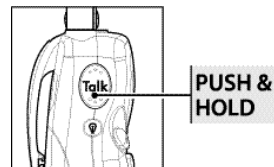
Calling Another Party

To alert another party that you wish to communicate:



- 1 Push and release CALL button. The unit you are calling will hear a two second ringing tone.

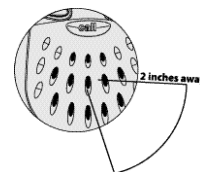
Talking To Another Party



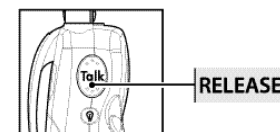
- 1 Push and hold TALK button.



- 2 The TX/RX indicator will be displayed.



- 3 Hold mic about 2 inches from mouth. Speak in a normal voice.

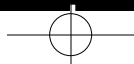


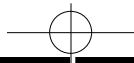
- 4 Release TALK button and listen for response.

Talking To Another Party

Note

While the TALK button is depressed you cannot receive incoming calls.






Operation

Operation

Roger Beep Confirmation Tone

Roger Beep Confirmation Tone

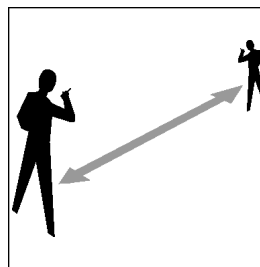


Your listener will hear an audible tone when you release the  TALK button.

This alerts the other party that you are finished talking and it's OK for them to begin talking.

microTALK Range

Your microTALK Radio has a range of up to 2 miles. This effective range can be shortened under some conditions.



1. Under flat, open conditions you will experience the microTALK's maximum range.



2. Range can be reduced by buildings and foliage in the path of the signal.



3. Range will be further reduced by dense foliage and hilly terrain.

microTALK Range

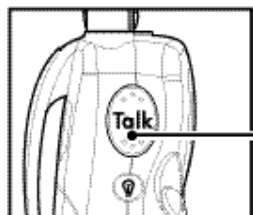
Note

To achieve maximum range the auto squelch can be overridden. Refer to Maximum Range Extender section on page 4.


Listening For Another Party

Listening For Another Party

When finished talking:



RELEASE

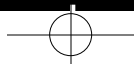
1 Release  TALK button to receive incoming transmissions.

Your microTALK is always in listening mode when the  TALK button is not pressed.

2 Adjust volume by *turning* the On/Off Volume Switch

Note

While the  TALK button is depressed you cannot receive incoming calls.





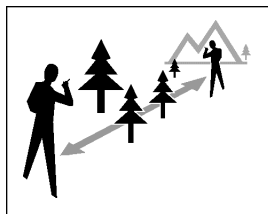
Making Life Easier and Safer

microTALK 2-Way Radio Can Make Life Easier and Safer

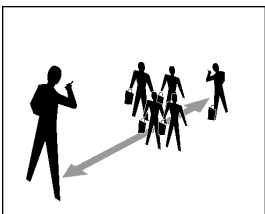
microTALK 2-Way Radio Can Make Life Easier and Safer

As you become familiar with your microTALK Radio you will find many of your own uses for the unit.

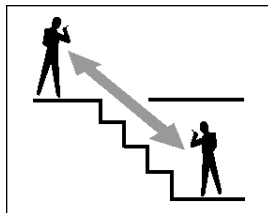
Some suggestions include:



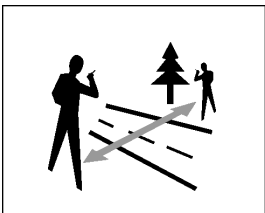
1. Talking with fellow hikers.



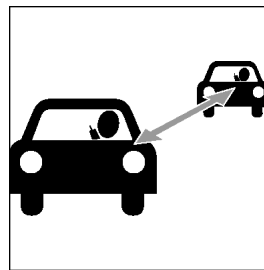
2. Keeping track of the kids in a shopping mall.



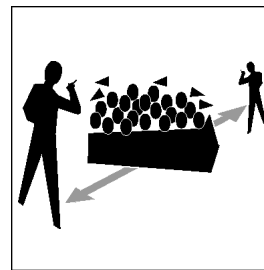
3. Communicating between basement and first, second or third floor.



4. Talking to a neighbor or a friend.



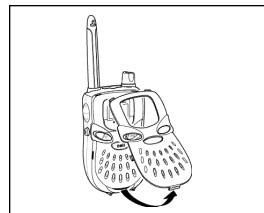
5. Checking on traveling companions in another car.



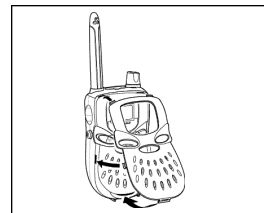
6. Agree on a meeting spot after an event.

microTALK SNAP Removable Front

Your microTALK Radio comes with the new microTALK SNAP removable front.

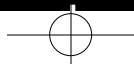


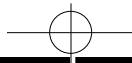
TO REMOVE: Use the slight indentation between the SNAP front and bottom front to lift it off.



TO ATTACH: First engage the tabs into the top of the unit. Next snap in the middle tabs. Finally snap in the bottom tab.

microTALK SNAP Removable Front





External Microphone/ Speaker Jack

External Microphone/ Speaker Jack

External Microphone/ Speaker Jack

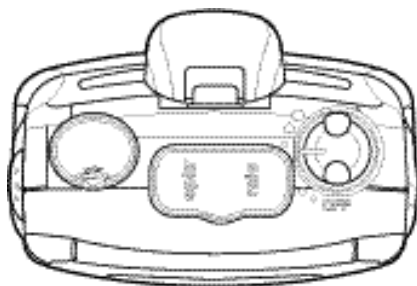
External Microphone/Speaker Jack

Your microTALK 2-Way Radio can be fitted with an external microphone/speaker, (not included) freeing your hands for other tasks.

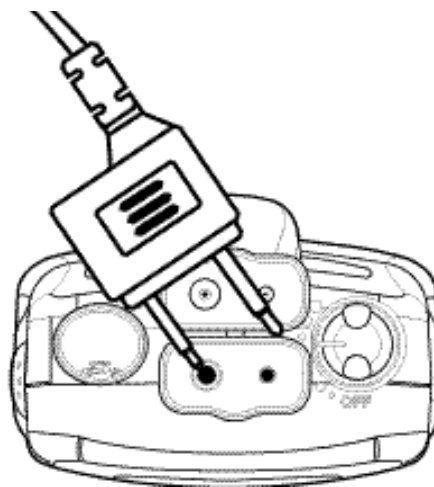
To attach the external microphone/speaker:

Note

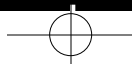
*External microphone/
speaker is not included with
the unit. See page 19 for
optional accessories.*

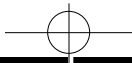


❶ Open Spkr/Mic tab on top of unit.



❷ Insert plug into the Spkr/Mic jack.





Caring for Your *microTALK*™ Radio

Caring for Your *microTALK* Radio

Note

Modifying or tampering with the radio's internal components can cause malfunction and will invalidate the warranty. If your radio is not performing as it should, please call Cobra at 773.889.3087. Do not return the unit to the retailer.

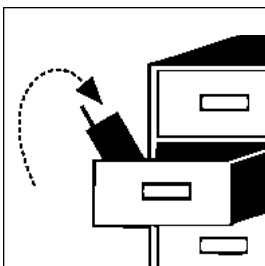
Caring for Your *microTALK* Radio

The *microTALK* 2-Way Radio will give you years of service if cared for properly.

Here are some suggestions:



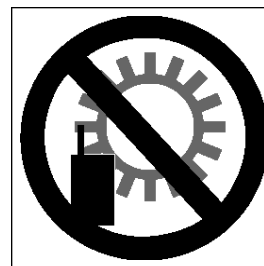
1. Handle unit gently.



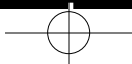
2. Keep away from dust.



3. Never place the unit in water or in a moist place.



4. Avoid exposure to extreme temperatures.





microTALK™ Specifications

microTALK™ Specifications

I. GENERAL SPECIFICATIONS

A. FREQUENCIES

CHANNEL ASSIGNMENT

CH 1: 462.5625MHz	CH 8: 467.5625MHz
CH 2: 462.5875MHz	CH 9: 467.5875MHz
CH 3: 462.6125MHz	CH 10: 467.6125MHz
CH 4: 462.6375MHz	CH 11: 467.6375MHz
CH 5: 462.6625MHz	CH 12: 467.6625MHz
CH 6: 462.6875MHz	CH 13: 467.6875MHz
CH 7: 462.7125MHz	CH 14: 467.7125MHz

B. RECEIVER

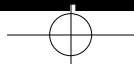
	UNIT	NOMINAL
1. SENSITIVITY		
FOR 12 DB SINAD	dBm	-119
FOR CALL SIG.DETECTION	dBm	-121
2. MAX. AUDIO OUTPUT @10% THD	mW	150
3. MAX.S/N RATIO @ 1mV RF INPUT	dB	45
4. SQUELCH		
a) SENSITIVITY	dB m	-121
b) ATTACK TIME	mS	150
c) CLOSING TIME	mS	200
5. AUDIO FREQUENCY RESP.		
@ 300 HZ	dB	-3
@ 2500 HZ	dB	-10
6. SIGNAL DISPLACEMENT BW	+/-KHZ	5
7. ADJACENT CH.REJECTION	dB	55
8. INTERMODULATION REJECTION	dB	55
9. SPURIOUS RESPONSE REJECTION	dB	65

C. TRANSMITTER

	UNIT	NOMINAL
1. EFFECTIVE RADIATED POWER	mW	500
2. CARRIER FREQ.STABILITY	±Hz	500
3. MODULATION LIMITING	KHz	2.5
4. CARRIER ATTACK TIME	mS	30
5. AUDIO FREQUENCY RESPONSE		
@ 300 HZ	dB	-10
@ 2500 HZ	dB	4
6. AUDIO DISTORTION	%	3
7. HUM NOISE	dB	38
8. TRANSIENT FREQ.BEHAVIOR		
a) TX ON	mS	30
b) TX OFF	mS	5

D. POWER SUPPLY

1. BATTERY LIFE (1:1:18 RATIO)	HR	24
2. BATTERY OPERATING RANGE	V	3.2 - 4.5



Limited Two Year Warranty

Optional Accessories



Cobra Electronics Corporation
 6500 West Cortland Street
 Chicago, Illinois 60707

COBRA ELECTRONICS CORPORATION warrants that its COBRA FRS Radios, and the component parts thereof, will be free of defects in workmanship and materials for period of two (2) years 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 FRS radios, 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 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.

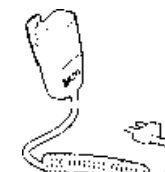
Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.



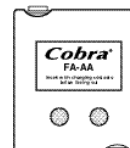
Vox Headset Mic
 VOX (Voice Operated Transmitter) headset and microphone allows hands-free operation.
 MA-VOX \$49.95



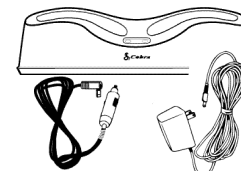
Ear Bud Mic with PTT
 Compact earbud and microphone with Push-to-Talk switch.
 MA-EBM \$29.95



Lapel Speaker/Microphone
 Remote microphone/speaker with Push-to-Talk switch.
 MA-SM \$24.95



NiMH Rechargeable Battery Pack
 High performance Nickel Metal Hydride battery pack for multiple charging.
 FA-AA \$19.95



2 Port Desktop Charger
 Charges two NiMH battery packs. Battery pack must be removed from FRS120 for recharging. (Note: appearance may vary)
 FA-CS \$19.95



Replacement Belt Clip
 FA-BC2 \$4.95

You Can Find These Fine Accessories At Your Local Cobra Dealer
 If you wish, you can order directly from Cobra.
Order by phone
 Call 1.773.889.3087 (Press 1 from the main menu) 8 a.m.-6 p.m. M-F CST.)
Order by mail or fax
 Please fill out order form on next page, and mail/fax directly to Cobra.
Order over the Web
www.cobraelectronics.com

Accessory Order Form

Item #	Description	Cost Ea.	Qty.	Amount
MA-VOX	Vox Headset Mic	\$49.95		
MA-EBM	Ear Bud Mic with PTT	\$29.95		
MA-SM	Lapel Speaker/ Microphone	\$24.95		
FA-AA	Battery	\$19.95		
FA-CS	Charger	\$19.95		
FA-BC2	Replacement Belt Clip	\$4.95		

Shipping & Handling

Amount of Order	Shipping/ Handling
\$25.00 and under	\$4.75
\$25.01 - \$40.00	\$6.95
\$40.01 - \$80.00	\$9.25
\$80.01 - \$120.00	\$10.25
\$120.01 - \$160.00	\$11.75
\$160.01 and up	\$14.50

Prices subject to change without notice.

Tax Table
 Illinois residents add 7%
 Cook Co. residents add .75% (7.75% total)
 Chicago residents add 1% (8.75% total)
 Indiana residents add 5%
 Michigan residents add 4%
 Ohio residents add 6%
 Wisconsin residents add 5%

Subtotal _____
 (Tax if applicable) _____
 Shipping/handling _____
Total _____

For AK, HI and PR please add an additional \$15.00 for UPS shipments.

For credit card orders fill out order form and fax to: 1.773.622.2269 or call 1.773.889.3087 (Press 1 from the main menu) 8:00 am - 6:00 pm, M-F, CST.

Make check or money order (no stamps) payable to: Cobra Electronics Attn: Accessories Dept. 6500 West Cortland St. Chicago, IL 60707

Please print clearly

Name _____

Address (No P.O. Box) _____

City _____ State _____

Zip _____ Telephone (____) _____

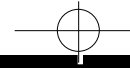
Credit Card No. _____

Exp. Date _____

Customer Signature _____

Circle One: Visa MasterCard Discover

Allow 2-3 weeks for delivery. Offer valid in Continental U.S. only.



Cobra Electronics Corporation
6500 West Cortland Street
Chicago, IL 60707

If You Think You Need Service

For technical assistance, please call our Automated Help Desk which can assist you by answering the most frequently asked questions about Cobra products.

(773) 889-3087

24 hours a day, 7 days a week.

A Consumer Service Representative can be reached through this same number 8:00 am - 6:00 pm, Monday through Friday, CST.

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

If you think you need service call 1.773.889.3087

"If your product should require factory service please call Cobra first before sending your unit in. 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 printed 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 W. Cortland St., Chicago, IL 60707.
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 1.773.889.3087 for assistance.

Cobra Electronics Corp. © 2000
Printed in Thailand.

Part No. 480-370-P-001

Operating Instructions for your

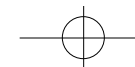


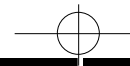
2-Way Radio

FRS 120



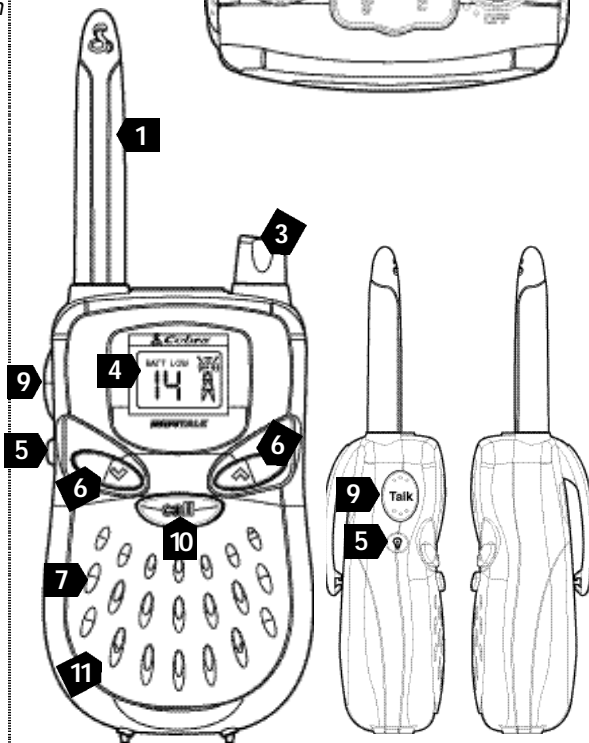
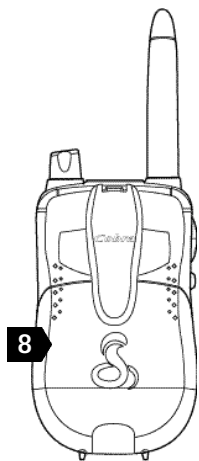
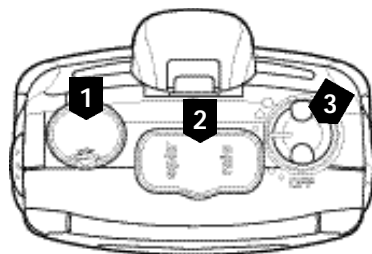
Nothing comes close to a Cobra™





Controls and Indicators

- 1. Antenna
- 2. Microphone/Speaker Jack
- 3. On/Off Volume Switch
- 4. LCD Display Panel
- 5. Light/Max Range Button
- 6. Channel Select Button
- 7. Speaker
- 8. Battery Compartment
- 9. Talk Button
- 10. Call Button
- 11. microTALK SNAP Removeable Front



Thank you for purchasing the Cobra FRS 120 2-Way Radio. Your microTALK radio comes with the new microTALK SNAP removable front, which allows you to customize the appearance of your radio! Several color choices are included with your purchase. For instructions on removing the microTALK SNAP front, see page 11. For additional color choices available as accessories (sold separately), please see the brochure and order form included.

Customer Support

Properly used, this Cobra product will give you years of reliable service. Should you encounter any problems with the product or not understand its many features, please refer to this owner's manual. If, after referring to the manual, you still need help, call Cobra Customer Service at 773.889.3087.

Cobra Customer Service

Live operators are available M-F 8:00 am - 6:00 pm CST at: 773.889.3087

Automated Technical Assistance available 24 hours a day, seven days a week. E-mail questions to: productinfo@cobraelectronics.com

Cobra on the World Wide Web: Frequently Asked Questions (FAQ) can be found on-line at: www.cobraelectronics.com

A2

A3

