

Cobra®

microTALK®

Operating Instructions for Your Cobra® microTALK®
2-WAY RADIO MODEL FRS 104

Guide d'utilisation du poste de radio
ÉMETTEUR-RÉCEPTEUR MODÈLE FRS 104
microTALK® de Cobra®

Instrucciones de uso del
RADIO BIDIRECCIONAL MODELO FRS 104
Cobra® microTALK®



**Nothing comes
close to a Cobra™**

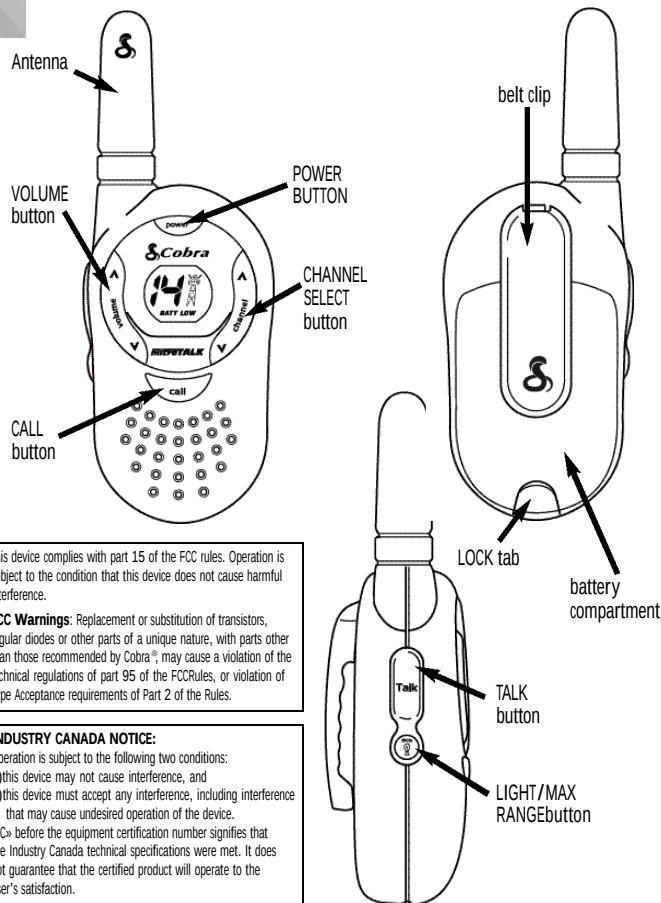
**Rien n'est comparable
à un Cobra™**

Nada se compara a Cobra™

English, pages 1-8

Français, pages 9-16

Español, páginas 17-22



This device complies with part 15 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.

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.

INDUSTRY CANADA NOTICE:

Operation is subject to the following two conditions:

- 1) this device may not cause interference, and
- 2) this device must accept any interference, including interference that may cause undesired operation of the device.

«iC» before the equipment certification number signifies that the Industry Canada technical specifications were met. It does not guarantee that the certified product will operate to the user's satisfaction.

Product Features

- TWO-WAY RADIO with up to a 2 mile (3 km) range
- 14 CHANNELS
- BATTERY SAVER circuitry
- CALL ALERT
- "ROGER BEEP" confirmation tone
- AUTO SQUELCH
- MAXIMUM RANGE extender
- BACKLIT LCD display
- BELT CLIP

Making Life Easier and Safer

People have found lots of convenient and helpful ways to use their microTALK® radios. Over time, you're bound to discover uses of your own. For example, you can...

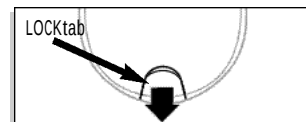
- stay in touch with others while hiking, bicycling, etc.
- keep track of family and friends in a shopping mall
- communicate between different floors of a building
- talk with neighbors
- check with traveling companions in another car
- arrange a meeting spot at crowded public events

Caring for Your microTALK® Radio

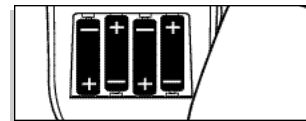
Your microTALK® radio will give you years of trouble-free service if cared for properly. Here are a few suggestions: 1) Handle the radio gently, 2) Keep it away from dust, 3) Never put the radio in water or in a damp place and 4) Avoid exposure to extreme temperatures.

Installing or Replacing Batteries

1. Pull down the LOCK tab to remove the battery compartment cover.



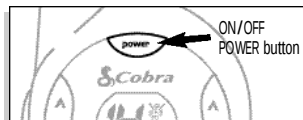
2. Insert four AAA batteries. (Always use high quality alkaline batteries.) Position batteries according to polarity markings.



(NOTE: See page 8 for information about optional battery pack and desktop charger accessories.)

Turning On Your microTALK® Radio

1. Press and hold the ON/OFF POWER button for 2 seconds. A series of audible tones will indicate the radio is on.



2. Your microTALK® is now in Standby mode, ready to receive transmissions. The radio is always in Standby mode except when the TALK or CALL buttons are pressed.

Battery Low

When battery power is low, the BATT LOW indicator will blink.



Auto Battery Save

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

Selecting a Channel

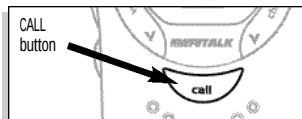
1. With the radio on, select any of the 14 channels by pushing the CHANNEL SELECT button up or down (**NOTE:** Both radios must be tuned to the same channel to communicate.)



Calling Another Person

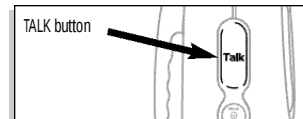
To alert another person that you are calling:

1. Press and release the CALL button. The other person will hear a 2-second ringing tone. You cannot send or receive transmissions during the 2-second call tone.

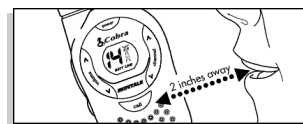


Talking to Another Person

1. Press and hold the TALK button.



2. With the microphone about 2 inches (5 cm) from your mouth, speak in a normal voice.



3. Release the button when you're finished talking and listen for a response. You cannot receive incoming calls while pressing the TALK button.

"Roger Beep" Confirmation Tone

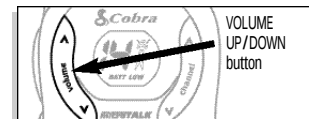
Your listener will hear an audible tone when you release the TALK button. This alerts the other party that you are finished talking and it is OK for them to speak.

Listening for a Response

When you are finished talking:

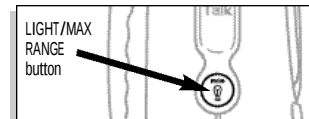
1. Release the TALK button to receive incoming transmissions. Your microTALK® is always in listening mode while the TALK or CALL buttons are not pressed.

2. Adjust the volume by pushing the VOLUME UP or VOLUME DOWN button.



Illuminating the Display

1. Press and release the LIGHT/MAX RANGE button to illuminate the display for 10 seconds.



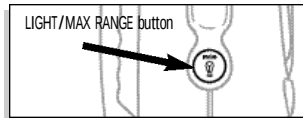
Auto Squelch

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

Maximum Range Extender

You can temporarily turn off Auto Squelch, allowing all signals to be received and extending the maximum range of your radio:

1. Press and hold the LIGHT/MAX RANGE button for 5 seconds. You will hear 2 beeps indicating that Maximum Range Extender is on.

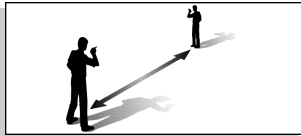


2. To turn Maximum Range Extender off, press and hold the LIGHT/MAX RANGE button for 1 second, or change channels.

microTALK® Range

Your microTALK® radio has a range of up to 2 miles (3 km). 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.



Dense foliage and hilly terrain will further reduce the signal.



Remember, you can achieve maximum range by using Maximum Range Extender. See above for details.

FOR PRODUCTS PURCHASED IN U.S.A.

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.

Customer Assistance

After reading this owner's manual, if you have any questions about installing or operating your microTALK® radio, or if you are missing any parts, please contact Cobra® first. Do not return this product to the store. Cobra® Electronics offers the following customer support services.

- **Automated Help Desk is available 24 hours a day, 7 days a week at 773-889-3087.**
- **Customer Service Operators are available at the same number 8:00 a.m. to 6:00 p.m. CST Monday through Friday (except holidays).**
- **Questions can be faxed to 773-622-2269.**
- **Technical assistance is available on-line in the Frequently Asked Questions (FAQ) section at www.cobra.com or by e-mail to productinfo@cobra.com.**

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.

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.

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 3-4 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.

FOR PRODUCTS PURCHASED IN CANADA

Your new Cobra® FRS is covered by a two (2) year replacement warranty. If any manufacturing defect becomes apparent in this product within two years from the original date of purchase, it will be replaced. Please return the FRS radio to your dealer with original or copy of dated proof of purchase.

Customer Assistance

After reading this owner's manual, if you have any questions about installing or operating your microTALK® radio, or if you are missing any parts, please contact Cobra® first. Do not return this product to the store. Cobra® Electronics offers the following customer support service.

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

This warranty does not cover damages due to careless handling, negligence, accident, abuse or failure to follow operating instructions. Alteration of this product or defacing of the serial number cancels all obligations of this warranty. This warranty gives you specified legal rights. Additional warranty rights may be provided by law in some areas.

For out of warranty service, ship prepaid this product to: AVS Technologies Inc., 2100 TransCanada Hwy S., Montreal, Quebec, H9P 2N4. We reserve the right to repair or replace the unit with an equivalent product. Please include the following information:

Date of purchase:

Model No.:

Dealer Purchased from:

Dealer address:

Dealer phone No.:

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	-121
FOR CALL SIG DETECTION	dBm	-121
2. MAX. AUDIO OUTPUT @10% THD	mW	200
3. MAX. S/N RATIO @ 1mV RF INPUT	dB	50
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	60
8. INTERMODULATION REJECTION	dB	65
9. SPURIOUS RESPONSE REJECTION	dB	55

C. TRANSMITTER

	UNIT	NOMINAL
1. 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) TXON	mS	30
b) TXOFF	mS	5

D. POWER SUPPLY

1. BATTERY LIFE (1:1:18 RATIO)	HR	24
2. BATTERY OPERATING RANGE	V	4.0 - 6.0



Replacement
Belt Clip
FA-BC6



NIMH Rechargeable
Battery Pack
FA-BP



2 Port Desktop
NIMH Charger
FA-CF

Item #	US Cost Ea.	Canada Cost Ea.	Qty.	Amount

Ordering from U.S.

Call 773-889-3087
for pricing or visit
www.cobra.com

For credit card orders fill
out order form and fax
to 773-622-2269

Or call 773-889-3087
(Press 1 from the main
menu) 8:00 am-6:00 pm,
M-F, CST.

Make check or money
order payable to:
Cobra Electronics
Attn: Accessories Dept.
6500 West Cortland St.
Chicago, IL 60707
Please allow 2-3 weeks
for delivery in U.S.
Prices subject to change
without notice.

Amount	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

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

Tax
Table

Illinois residents add 8.75%
Indiana residents add 5%
Michigan residents add 6%
Ohio residents add 6%
Wisconsin residents add 5%

Ordering from Canada

(Call 514-683-1771
for pricing)

Order by phone:

Call 514-683-1771
(Press 1 from the main menu)
9 a.m. - 5p.m., M-F, EST.

Order by e-mail:
cobraextras@avs.ca

Order by mail or fax: Please
fill out order form below,
and mail/fax directly to:

AVS Technologies Inc.
2100 Trans Canada Hwy. S.
Montreal, Que. H9P 2N4

Fax to: 514-683-5307

Please allow 4-6 weeks
for delivery in Canada.
Prices subject to change
without notice.

U.S. Subtotal	
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Shipping/handling	
Total	
Canada Amount	
G.S.T. 7%	
*GST 7.5%	
Shipping/ handling	\$5.50
Total	

*Quebec residents only

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please visit our website:

www.cobra.com

Click "shop Cobra™"

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Address (No P.O. Box) _____

City _____ State/Province _____ Zip _____ Country _____

Telephone (____) _____ Circle One: Visa MasterCard Discover

Credit Card No. _____ Exp. Date _____

Customer Signature _____