

**micro**

Operating Instructions for Your Cobra® microTALK®  
2-WAY RADIO MODEL FRS 235

Guide d'utilisation du poste de radio  
ÉMETTEUR-RÉCEPTEUR FRS 235  
microTALK® de COBRA®

Instrucciones de uso del  
RADIO BIDIRECCIONAL MODELO FRS 235  
Cobra® microTALK®



**Nothing** is closer to you than your Cobra® radio.

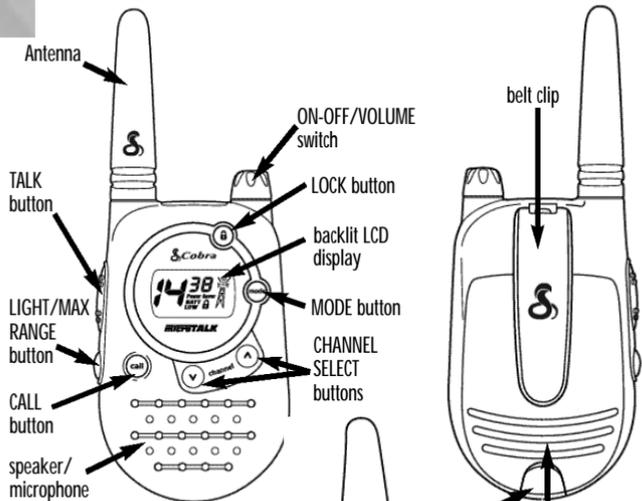
**Rien** n'est plus près de vous qu'un Cobra® radio.

**Nada** se encuentra más cerca de usted que su radio Cobra™.

pages 1-8

pages 9-16

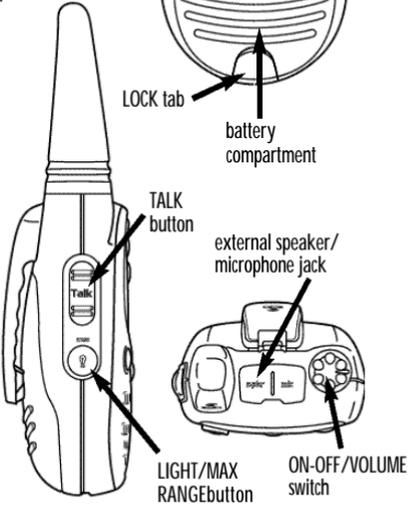
páginas 17-22



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
- 38 CTCSS PRIVACY CODES
- BATTERY SAVER circuitry
- WATER RESISTANT
- CALL ALERT
- "ROGER BEEP" confirmation tone
- AUTO SQUELCH
- MAXIMUM RANGE extender
- LOCK button
- BACKLIT LCD display
- EXTERNAL SPEAKER/MICROPHONE jack
- BELT CLIP
- WRIST STRAP

## 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...

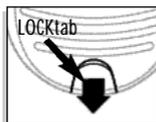
- stay in touch with others while hiking, bicycling, etc.
- keep track of family and friends in a shopping mall
- communicate between different floors of a building
- talk with neighbors
- check with traveling companions in another car
- arrange a meeting spot at crowded public events

## Caring for Your microTALK® Radio

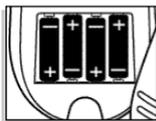
Your microTALK® radio will give you years of trouble-free service if cared for properly. Here are a few suggestions: 1) Handle the radio gently, 2) Keep it away from dust, 3) Never put the radio in water or in a damp place and 4) Avoid exposure to extreme temperatures.

## Installing or Replacing Batteries

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



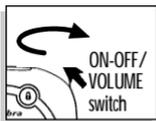
**2.** Insert four AAA batteries. (Always use high quality alkaline batteries.) Position batteries according to polarity markings.



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

## Turning On Your microTALK® Radio

**1.** Rotate the ON-OFF/VOLUME switch clockwise to turn on the unit (and to adjust the volume). An audible tone will indicate the radio is on.



## Battery Low

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



## Auto Battery Save

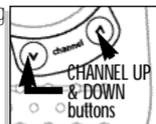
Your microTALK® radio has a unique circuit designed to extend battery life. If there are no transmissions within 10 seconds, the unit will automatically switch to Battery Save mode and POWER SAVER will appear in the display.

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 UP or CHANNEL DOWN button. (NOTE: Both radios must be tuned to the same channel to communicate.)



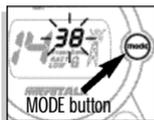
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CTCSS (Continuous Tone Coded Squelch System) is an advanced tone coding system allowing you to select one of 38 privacy codes to reduce interference from other users on the channel.

(NOTE: 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.)

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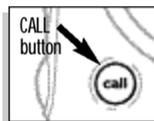
1. After selecting a channel, press and release the MODE button. Small numbers will flash next to the channel in the LCD.
2. Push the CHANNEL SELECT button up or down to select a privacy code. You can hold the button up or down for fast advance.
3. When your desired privacy code is displayed, press and release the MODE button, or do not push any buttons for 15 seconds.



## 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.

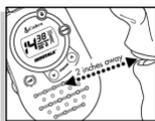
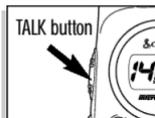


## Talking to Another Person

**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

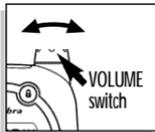
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## Listening for a Response

When you are finished talking:

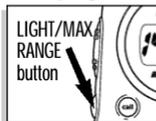
**1.** Release the TALK button to receive incoming transmissions. Your microTALK® is always in listening mode while the TALK button is not pressed.

**2.** Adjust the volume by rotating the ON-OFF/VOLUME switch.



## Illuminating the Display

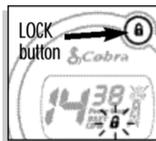
**1.** Press and release the LIGHT/MAX RANGE button to illuminate the display for 10 seconds.



## Using the Lock Function

The Lock function locks the CHANNEL and MODE buttons to prevent accidental operation. To use the Lock function:

**1.** While in Standby mode, press and hold the LOCK button for one second. The Lock icon will blink when the unit is locked. Buttons and switches that are NOT locked are the CALL, LIGHT/MAX RANGE, TALK and ON-OFF/VOLUME, which are all fully functional while the unit is locked.



**2.** To "unlock" buttons, press and release the LOCK button again. The Lock icon disappears and all buttons will be unlocked.

## 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.

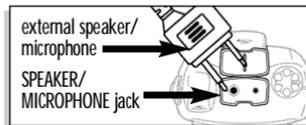


**2.** To turn Maximum Range Extender off, press and hold the LIGHT/MAX RANGE button for 1 second, or change channels.

## External Speaker/ Microphone Jack

Your microTALK® radio can be fitted with an external speaker/microphone (not included), freeing your hands for other tasks. See page 8 for optional accessories. To attach an external speaker/microphone:

1. Open the SPKR/MIC tab on top of the unit.
2. Insert the plug into the SPKR/MIC jack.



## 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.

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.

**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](http://www.cobra.com) or by e-mail to [productinfo@cobra.com](mailto: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.

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](http://www.cobra.com) or by e-mail to [productinfo@cobra.com](mailto: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

ACCESSORIES • ORDER FORM



Replacement Belt Clip FA/BC3



Vox Headset Mic MA/VOX



Ear Bud Mic with PIT MA/EBM



Lapel Speaker/Microphone MA/SM



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](http://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](mailto: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

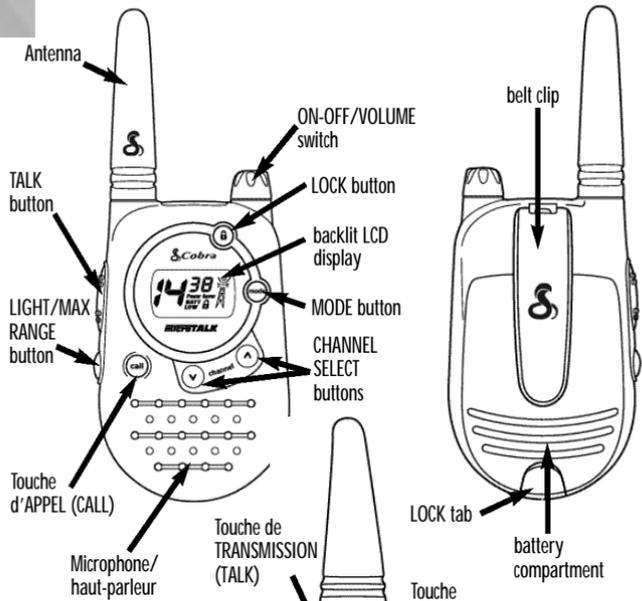
Please allow 4-6 weeks for delivery in Canada. Prices subject to change without notice.

U.S. Subtotal (Tax if applicable)	
Shipping/handling	
Total	
Canada Amount	
G.S.T. 7%	
*DST 7.5%	
Shipping/handling	\$5.50
Total	

\*Quebec residents only

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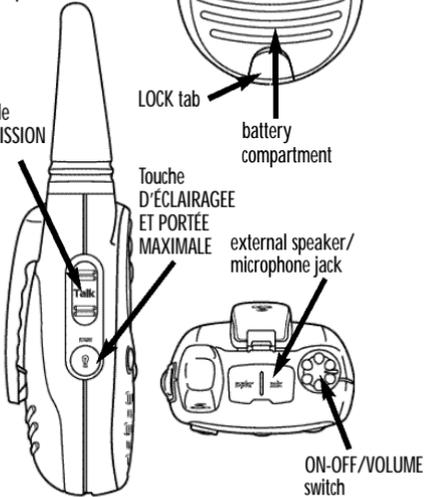
Name \_\_\_\_\_  
 Address (No P.O. Box) \_\_\_\_\_  
 City \_\_\_\_\_ State/Province \_\_\_\_\_ Zip \_\_\_\_\_ Country \_\_\_\_\_  
 Telephone (\_\_\_\_) \_\_\_\_\_ Circle One: Visa MasterCard Discover  
 Credit Card No. \_\_\_\_\_ Exp. Date \_\_\_\_\_  
 Customer Signature \_\_\_\_\_



**AVIS D'INDUSTRIE CANADA:**

L'utilisation est soumise aux deux conditions suivantes:

- 1) cet appareil ne doit pas causer de parasites, et
- 2) cet appareil doit accepter les parasites, y compris ceux pouvant causer un mauvais fonctionnement. Le symbole «IC» figurant avant le numéro d'homologation d'un appareil signifie que celui-ci répond aux normes techniques d'Industrie Canada. L'affichage de ce symbole ne garantit pas que l'appareil fonctionnera à la satisfaction du client.



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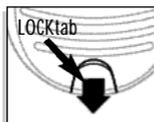
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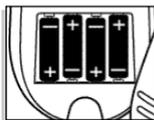
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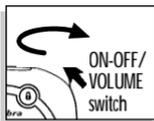
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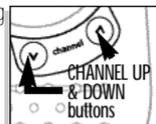
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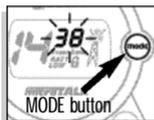
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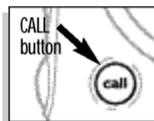
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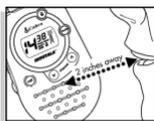
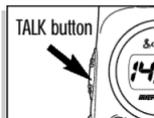


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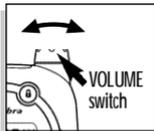
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## Listening for a Response

When you are finished talking:

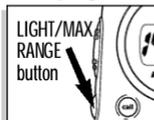
**1.** Release the TALK button to receive incoming transmissions. Your microTALK® is always in listening mode while the TALK button is not pressed.

**2.** Adjust the volume by rotating the ON-OFF/VOLUME switch.



## Illuminating the Display

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



## Using the Lock Function

The Lock function locks the CHANNEL and MODE buttons to prevent accidental operation. To use the Lock function:

**1.** While in Standby mode, press and hold the LOCK button for one second. The Lock icon will blink when the unit is locked. Buttons and switches that are NOT locked are the CALL, LIGHT/MAX RANGE, TALK and ON-OFF/VOLUME, which are all fully functional while the unit is locked.



**2.** To "unlock" buttons, press and release the LOCK button again. The Lock icon disappears and all buttons will be unlocked.

## 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.

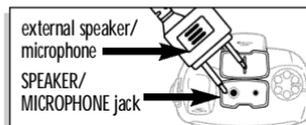


**2.** To turn Maximum Range Extender off, press and hold the LIGHT/MAX RANGE button for 1 second, or change channels.

## External Speaker/ Microphone Jack

Your microTALK® radio can be fitted with an external speaker/microphone (not included), freeing your hands for other tasks. See page 16 for optional accessories. To attach an external speaker/microphone:

**1.** Open the SPKR/MIC tab on top of the unit.



**2.** Insert the plug into the SPKR/MIC jack.

## 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 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.

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.

**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](http://www.cobra.com) or by e-mail to [productinfo@cobra.com](mailto:productinfo@cobra.com).**

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**

**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

**B. RECEIVER (continued)**

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-BC3



Vox Headset Mic  
MA-VOX



Ear Bud Mic with PTT  
MA-EBM



Lapel Speaker/  
Microphone  
MA-SM



NIMH Rechargeable  
Battery Pack  
FA-BP



2 Port Desktop  
Charger  
FA-CG

Item #	Cost Ea.	Qty.	Amount

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Call 514-683-1771 for pricing.

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9 a.m. - 5 p.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.  
Prices subject to change without notice.

Amount	
G.S.T. 7%	
*QST 7.5%	
Shipping/ handling	\$5.50
Total	

\*Quebec residents only

**For additional customer assistance and warranty information, contact your local dealer.**

Name \_\_\_\_\_

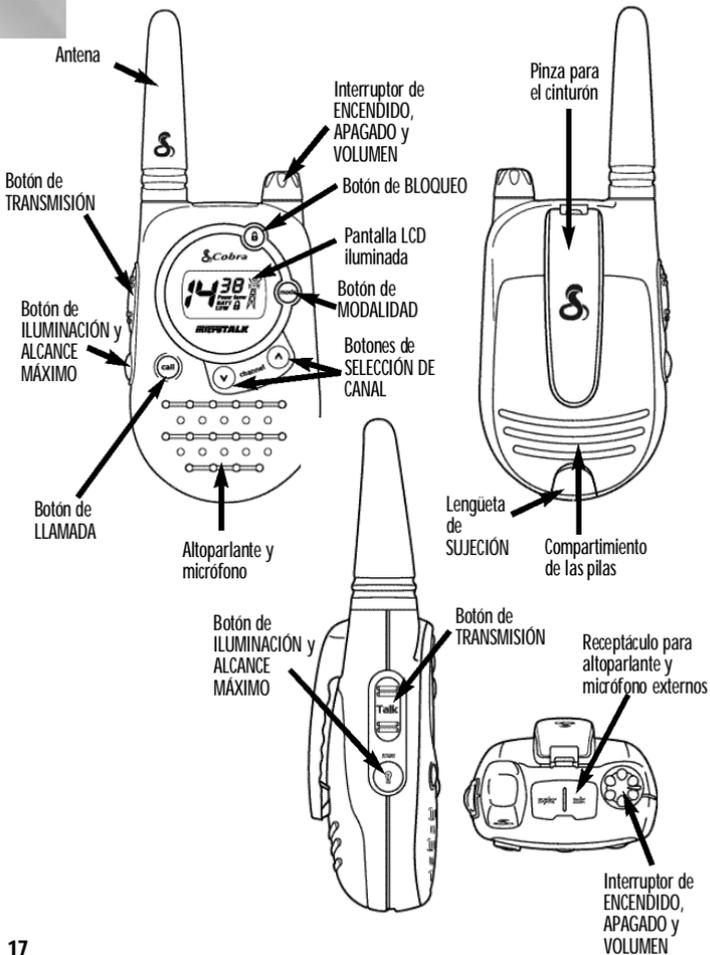
Address (No P.O. Box) \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_ Zip \_\_\_\_\_ Country \_\_\_\_\_

Telephone (\_\_\_\_) \_\_\_\_\_ Circle One: Visa MasterCard Discover

Credit Card No. \_\_\_\_\_ Exp. Date \_\_\_\_\_

Customer Signature \_\_\_\_\_



## Características del producto

- RADIO BIDIRECCIONAL con alcance máximo de 3,2 km (2 millas)
- 14 CANALES
- 38 CÓDIGOS CTCSS DE COMUNICACIÓN PRIVADA
- Circuito de AHORRO DE PILA
- RESISTENTE AL AGUA
- AVISO DE LLAMADA
- AVISO SONORO DE CAMBIO
- REDUCCIÓN AUTOMÁTICA DE RUIDO DE FONDO
- Extensor de ALCANCE MÁXIMO
- Botón de BLOQUEO
- Pantalla LCD ILUMINADA
- Receptáculo para ALTOPARLANTE Y MICRÓFONO EXTERNOS
- PINZA PARA EL CINTURÓN
- CORREA PARA LA MUÑECA

## Una vida más sencilla y segura

La gente ha descubierto muchas formas prácticas y útiles de utilizar sus radios microTALK®. Con el paso del tiempo, es muy probable que descubra sus propias aplicaciones. Por ejemplo, usted puede...

- Mantenerse en contacto con otras personas en excursiones, paseos en bicicleta, etc.
- Saber dónde está su familia o sus amigos en un centro comercial
- Comunicarse de un piso a otro en un edificio.
- Hablar con sus vecinos
- Comunicarse con compañeros de viaje en otro automóvil
- Ponerse de acuerdo en un punto de reunión en eventos públicos concurridos

## Cuidado del radio microTALK®

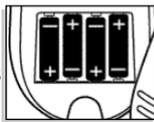
El radio microTALK® le dará largos años de servicio sin problemas si lo cuida correctamente. He aquí algunas sugerencias: 1) Maneje el radio con cuidado, 2) mantenga el radio lejos del polvo, 3) nunca sumerja el radio en agua ni lo coloque en lugares húmedos y 4) evite la exposición a temperaturas extremas.

## Instalación y reemplazo de las pilas

1. Baje la lengüeta de SUJECIÓN para quitar la tapa del compartimiento de las pilas.



2. Inserte cuatro pilas tipo "AAA". (Siempre utilice pilas alcalinas de alta calidad.) Coloque las pilas de acuerdo con las marcas de polaridad.



(NOTA: Consulte la página 22 para obtener información sobre el paquete de pilas y el cargador de escritorio que se ofrecen como accesorios optativos.)

## Encendido del radio microTALK®

1. Gire el interruptor de ENCENDIDO, APAGADO y VOLUMEN en sentido horario para encender la unidad y ajustar el volumen. Un aviso sonoro le indicará que el radio está encendido.



## Pila con carga baja

Quando la carga de la pila está baja, comienza a parpadear el indicador BATTLOW (pila con carga baja).



## Ahorro automático de carga de las pilas

El radio microTALK® tiene un circuito especial diseñado para prolongar la vida útil de las pilas. Si no hay transmisiones en un periodo de diez segundos, la unidad cambia automáticamente a la modalidad de ahorro de carga de carga de las pilas y aparece el mensaje "POWER SAVER" en la pantalla. Esto no afecta la capacidad de la unidad para recibir transmisiones.



## Selección del canal

1. Con el radio encendido, seleccione cualquiera de los 14 canales oprimiendo los botones de CAMBIO DE CANAL.

(NOTA: Ambos radios deben estar sintonizados en el mismo canal para que puedan comunicarse.)



## Selección del código de comunicación privada CTCSS

El sistema CTCSS (sistema de reducción de ruido de fondo controlado por tonos codificados) es un avanzado sistema de codificación por tonos que le permite seleccionar uno de 38 códigos de comunicación privada para reducir la interferencia provocada por otros usuarios del canal.

(NOTA: Si utiliza un código de comunicación privada, los dos radios deben estar sintonizados al mismo canal y el mismo código de comunicación privada para que puedan comunicarse. En cada canal se recuerda el código de comunicación privada más reciente que usted seleccionó.)

## Para seleccionar un código de comunicación privada:

- Después de seleccionar un canal, oprima y suelte el botón de MODALIDAD. En la pantalla comenzará a parpadear un número pequeño junto al número de canal.
- Oprima el botón de CAMBIO DE CANAL para seleccionar un código de comunicación privada. Puede mantener oprimido el botón para avanzar o retroceder rápidamente por los números de código.
- Quando aparezca en la pantalla el número del código de comunicación privada que desea utilizar, oprima y suelte el botón de MODALIDAD o no oprima ningún botón durante 15 segundos.



## Para llamar a otra persona

Para avisar a otra persona que quiere hablar con ella:

- Oprima y suelte el botón de LLAMADA. La otra persona oirá una señal de timbrado de dos segundos de duración. Usted no podrá transmitir ni recibir durante los dos segundos de la señal de llamada.

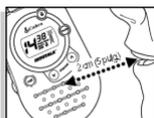


### Para hablar con otra persona

1. Mantenga oprimido el botón de TRANSMISIÓN.

2. Hable normalmente, con el micrófono a unos 5 cm (2 pulgadas) de la boca.

3. Suelte el botón de TRANSMISIÓN cuando termine de hablar y espere a la respuesta. No podrá recibir llamadas mientras el botón de TRANSMISIÓN está oprimido.



### Aviso sonoro de cambio

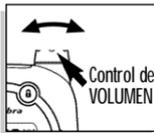
La persona con la que está hablando oír una señal cuando usted suelte el botón de TRANSMISIÓN. Esta señal le avisa a la persona que usted ha terminado de hablar y que la otra persona puede comenzar a hablar.

### Para escuchar a la otra persona

Al terminar de hablar:

1. Suelte el botón de TRANSMISIÓN para recibir transmisiones. El radio microTALK® siempre está en la modalidad de recepción cuando el botón de TRANSMISIÓN no está oprimido.

2. Ajuste el volumen girando el interruptor de ENCENDIDO, APAGADO y VOLUMEN.



### Iluminación de la pantalla

1. Oprima y suelte el botón de ILUMINACIÓN y ALCANCE MÁXIMO para iluminar la pantalla durante diez segundos.



### Función de bloqueo

La función de bloqueo se utiliza para bloquear los botones de CAMBIO DE CANAL y el botón de MODALIDAD, impidiendo que sean accionados de manera accidental. Para utilizar la función de bloqueo:

1. En la modalidad de espera, mantenga oprimido el botón de BLOQUEO durante un segundo. El icono de bloqueo parpadeará si la unidad está bloqueada. Los botones e interruptores que no se bloquean son los de LLAMADA, ILUMINACIÓN y ALCANCE MÁXIMO, TRANSMISIÓN y ENCENDIDO, APAGADO y VOLUMEN, que siguen funcionando normalmente aunque la unidad esté bloqueada.



2. Para desbloquear los botones, vuelva a oprimir y soltar el botón de BLOQUEO. El icono de bloqueo desaparecerá de la pantalla y los botones quedarán desbloqueados.

### Reducción automática de ruido de fondo

El radio microTALK® está equipado con una función de reducción automática de ruido de fondo, que cancela automáticamente las transmisiones débiles y el ruido indeseable provocado por las condiciones del terreno o porque está en el límite de alcance.

### Extensor de alcance máximo

Puede apagar temporalmente la función de reducción automática de ruido de fondo para permitir la recepción de todas las señales y así extender el alcance máximo del radio.

**1.** Mantenga oprimido el botón de ILUMINACIÓN y ALCANCE MÁXIMO durante cinco segundos.

Sonarán dos señales para indicarle que el extensor de alcance máximo está encendido.

**2.** Para apagar el extensor de alcance máximo, mantenga oprimido el botón de ILUMINACIÓN y ALCANCE MÁXIMO durante un segundo o cambie de canal.



**1.** Abra la lengüeta del receptáculo del altoparlante y micrófono externos, localizado en la parte superior de la unidad.

**2.** Introduzca la clavija en el receptáculo para altoparlante y micrófono.

### Alcance del radio microTALK®

El radio microTALK® tiene un alcance máximo de 3,2 km (2 millas). El alcance variará dependiendo del terreno y las condiciones.

El radio funcionará con el alcance máximo en zonas planas y despejadas. La presencia de edificios y follaje en la trayectoria de la señal pueden reducir el alcance. El follaje denso y el terreno montañoso reducirán la señal.

Recuerde que puede obtener el mayor alcance con el extensor de alcance máximo. Consulte la sección anterior para conocer los detalles.

### Receptáculo para altoparlante y micrófono externos

El radio microTALK® puede equiparse con altoparlante y micrófono externos (no incluidos), para que usted pueda utilizar el radio a manos libres. Consulte la página 22 para conocer los accesorios optativos. Para conectar el altoparlante y micrófono externos:



Para obtener ayuda o información sobre la garantía, comuníquese con un distribuidor local.

Para conocer la disponibilidad y los precios de los accesorios, comuníquese con un distribuidor local.



Altoparlante y micrófono de solapa MA-SM



Placa de reemplazo para el cinturón FAB-C3



Paquete de pilas NIMH recargables FAB-EP



Aurífonos con micrófono Vaux MA-VOX



Cargador de escritorio para pilas NIMH con dos receptáculos de carga FAB-CG



Auricular miniatura con micrófono y botón de transmisión MA-EBM

## Especificaciones generales

### A. FRECUENCIAS

#### ASIGNACIÓN DE CANALES

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

### B. RECEPTOR

	UNIDAD	NOMINAL
1. SENSIBILIDAD		
12 DB SEÑAL MÁS RUIDO Y DISTORSIÓN (SINAD)	dBm	-121
PARA DETECCIÓN DE SEÑAL DE LLAMADA	dBm	-121
2. SALIDA SONORA MÁXIMA CON 10% DE DISTORSIÓN ARMÓNICA TOTAL (THD)	mW	200
3. RELACIÓN MÁXIMA SEÑAL-RUIDO CON ENTRADA DE RADIOFRECUENCIA DE 1 mV	dB	50
4. REDUCCIÓN DE RUIDO DE FONDO		
a) SENSIBILIDAD	dB m	-121
b) TIEMPO DE ATAQUE	ms	150
c) TIEMPO DE CIERRE	ms	200
5. RESPUESTA DE FRECUENCIA SONORA		
A 300 Hz	dB	-3
A 2500 Hz	dB	-10

### 6. ANCHO DE BANDA DE DESPLAZAMIENTO DE SEÑAL

6. ANCHO DE BANDA DE DESPLAZAMIENTO DE SEÑAL	±kHz	5
7. RECHAZO DE CANALES ADYACENTES	dB	60
8. RECHAZO DE INTERMODULACIÓN	dB	65
9. RECHAZO DE RESPUESTAS ESPURIAS	dB	55

### C. TRANSMISOR

	UNIDAD	NOMINAL
1. POTENCIA	mW	500
2. FRECUENCIA PORTADORA		
ESTABILIDAD	±Hz	500
3. LIMITACIÓN DE MODULACIÓN	kHz	2.5
4. TIEMPO DE ATAQUE DE PORTADORA	ms	30
5. RESPUESTA DE FRECUENCIA SONORA		
A 300 Hz	dB	-10
A 2500 Hz	dB	4
6. DISTORSIÓN SONORA	%	3
7. ZUMBIDO	dB	38
8. COMPORTAMIENTO DE FRECUENCIAS TRANSITORIAS		
a) TRANSMISOR ENCENDIDO	ms	30
b) TRANSMISOR APAGADO	ms	5

### D. FUENTE DE PODER

1. DURACIÓN DE LA PILA (RELACIÓN 1:1:18)	HORAS	24
2. INTERVALO OPERATIVO DE LA PILA	V	4.0 - 6.0



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Sistemas de advertencia de tráfico  
Accesorios  
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