

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

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Features of This Product

- UHF FM Frequencies
- No Air-time Fees
- Up to 3 km (2-mile) Range
- 8 Main Channels
- 38 CTCSS Subchannels
- LCD Function Display
- Talk Confirmation Tone
- Call/Ring Button
- Recharging Pads
- Retractable Antenna
- Auto Battery Saver Circuitry
- Auto Squelch
- Lock Key
- Ring Notification
- Wrist Strap/Belt Clip



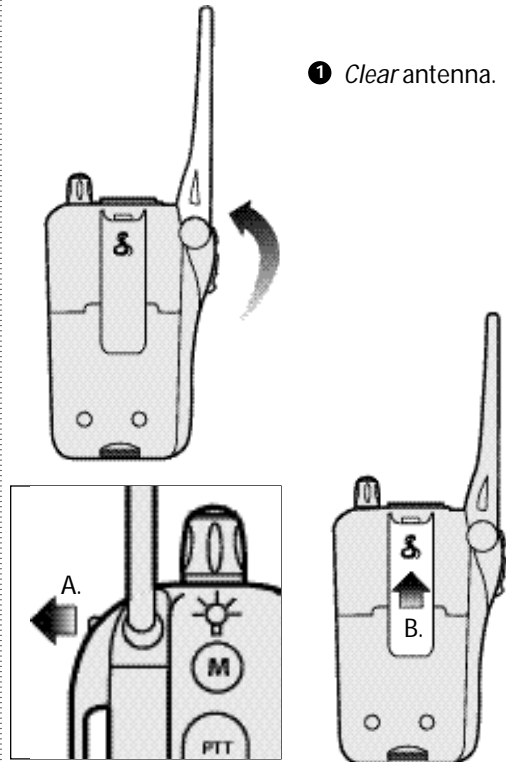
Operation

Operation

Battery Installation

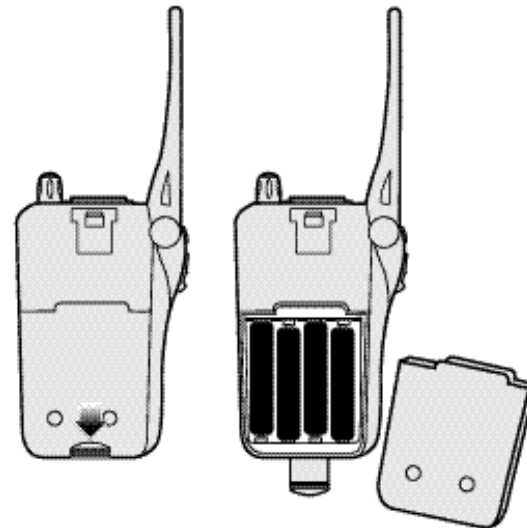
Note
Batteries not included with MicroTalk 2-way radio.

Install Batteries



1 Clear antenna.

2 Remove belt clip by (A.) pulling tab out and (B.) sliding belt clip up and off unit.




3 Pull lock tab down and lift door up (towards you) to remove battery cover.

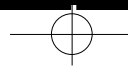
4 Insert four "AAA" batteries. Position batteries according to polarity markings.

Note
Always use high-quality alkaline or NiMH batteries.
Incorrect positioning can damage both the batteries and the unit.

Only the Cobra NiMH battery pack (part no. PMR-BP) can be recharged via the Desktop Charger (part no. PMR-CH).

See Accessories on page 30. Charge ports for recharging NiMH (Nickel Metal Hydride) battery pack are located on back of unit.

Note
When batteries are low or need charging the  BATT LOW indicator will blink. Replace alkaline batteries or recharge NiMH battery pack.

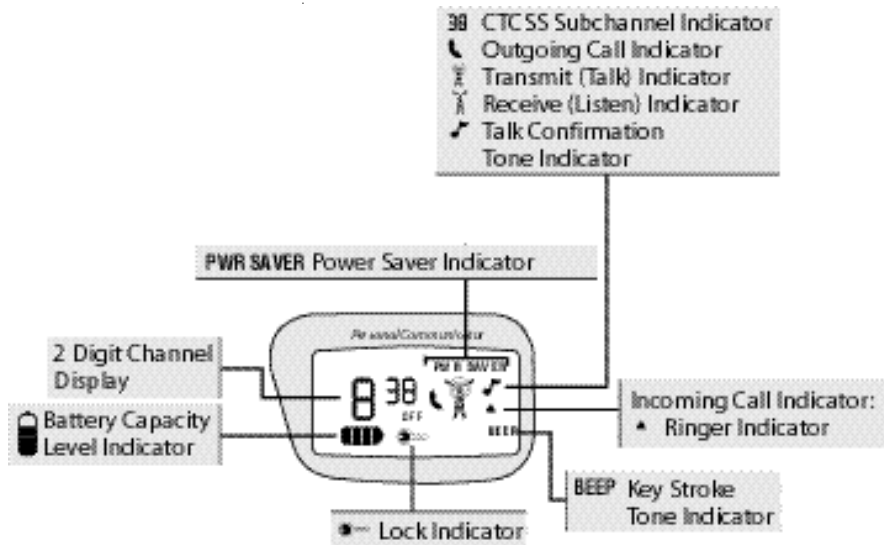


Operation

Operation

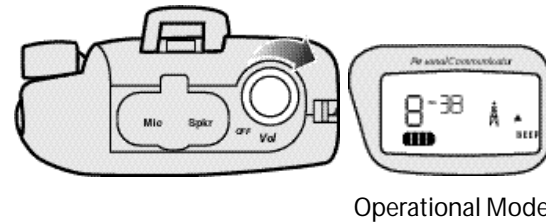
LCD Display

LCD Display



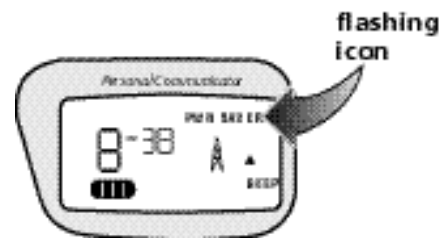
Turning On Your MicroTalk

Rotate ON - OFF Volume Control clockwise. An audible "tone" will indicate that the unit is on. The LCD will go through a 3-second self-test and then go to operational mode.



Auto Battery Power Saver

Your MicroTalk 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.



The **PWR SAVER** icon will flash.

Turning On Your MicroTalk

Note
Whenever the unit is on you can receive communications.

Auto Battery Power Saver

Note
The Auto Battery Save Circuit does not affect the unit's ability to receive incoming transmissions.

Operation

Select Main Channel


Note

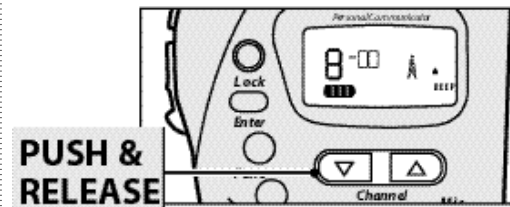
Units must be on same channel and subchannels to communicate.



Note

Push and hold the buttons for fast channel advance.

Select Main Channel (1-8)

- 1 Rotate ON - OFF Volume Control  clockwise. An audible "tone" will indicate that the unit is on. The LCD will go through a 3-second self-test and then go to operational mode.




- 2 Select channel by pushing and releasing either   button.

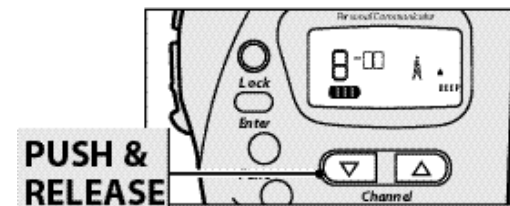
Select CTCSS Subchannel (00-38)

The CTCSS (Continuous Tone Controlled Squelch System) is a great convenience when you are in an area with many radios. It acts like a gate to transmissions from other radios. Once your radio is set to a CTCSS code, you will only hear transmissions from other radios on the same channel and the same CTCSS code.

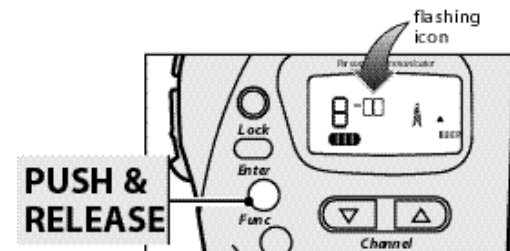
Select CTCSS Subchannel

Select CTCSS Subchannel (00-38) continued

- 1 Rotate ON - OFF Volume Control  clockwise. An audible "tone" will indicate that the unit is on. The LCD will go through a 3-second self-test and then go to operational mode.



- 2 Select main channel by pushing and releasing either   button.




- 3 Push and release  button. Small numbers flash next to channel display on LCD.

continued


Operation

Select CTCSS Subchannel

Note


If you push and hold the  button, the LCD display will cycle through the different functions.

Note

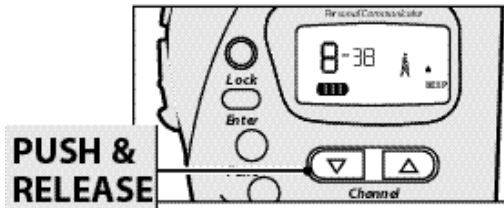
To return to operational mode and not save your last setting push and  release button.


Operation

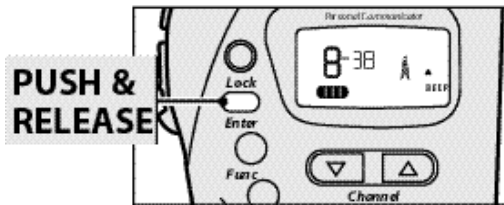
Select CTCSS Subchannel


Note
Push and hold the  buttons for fast channel advance.

Select CTCSS Subchannel (00-38) *continued*



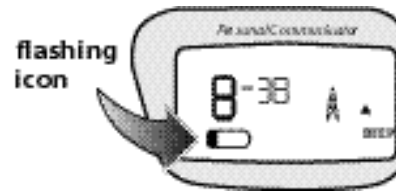
- 4 Select subcode number by pushing and releasing either  button.




- 5 When desired code is displayed push and release  button. If key stroke tone is on, an audible tone will confirm your selection.

Operation

Battery Low



When the unit is in normal use the  icon may begin flashing. This is a warning to you that your batteries are getting low.

Replace alkaline batteries as soon as possible and/or recharge NiMH battery pack.

Battery Low

Note
When battery capacity is at the 1/4 level it is recommended that you replace alkaline batteries or recharge your NiMH (Nickel Metal Hydride) battery pack.

Only the Cobra NiMH battery pack (part no. PMR-BP) pack can be recharged via the Desktop Charger (part no. PMR-CH).

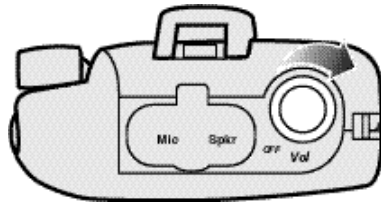
Note
NiMH rechargeable battery Pack (item no. PMR-BP) and 2 port desktop charger (item no. PMR-CH) are not included with this unit. See Accessories section on page 30.

Operation

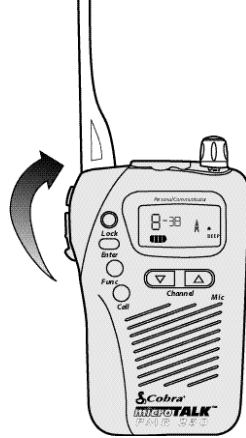
Calling Another Party

Calling Another Party

To alert another party that you wish to communicate:



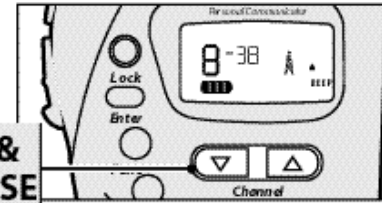
- 1 Turn on your MicroTalk 2-way radio. An audible "tone" will indicate that the unit is on. The LCD will go through a 3-second self-test and then to operational mode.



- 2 Place antenna in full upright position.

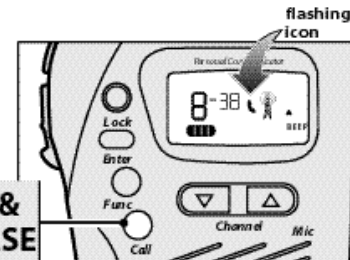
Operation

PUSH & RELEASE



- 3 Select desired channel by pushing and releasing either or button.

PUSH & RELEASE



- 4 Push and release button. The icon will flash and the icon will remain on for 3 seconds. The unit you are calling will emit a 2 second ring tone.
- 5 Wait for the party's response or proceed to "Talking To Another Party" section on next page.

Note

Both the calling and receiving units must be on same channel and subchannel for the call function to work.

Note

Your incoming "Call" audio ringing level is dependent on your unit's volume setting.

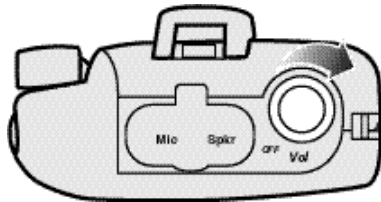
Operation

Talking to Another Party

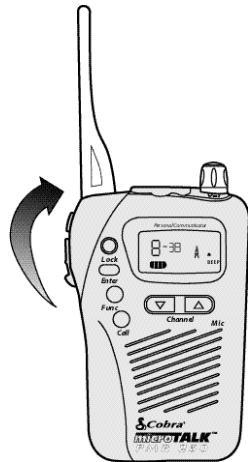
Note
Both units must be on same channel to communicate.

Talking To Another Party

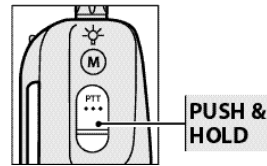
To send your outgoing message:



- 1 Turn on your MicroTalk 2-way radio. An audible "tone" will indicate that the unit is on. The LCD will go through a 3-second self-test and then go to operational mode.



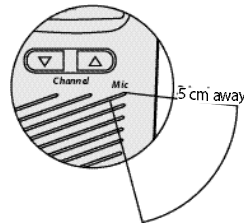
- 2 Place antenna in full upright position.



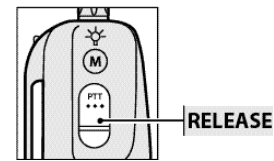
- 3 Push and hold button.



- 4 The icon will appear.



- 5 Hold mic about 5 cm from mouth. Speak in a normal voice.



- 6 Release button and listen for response.

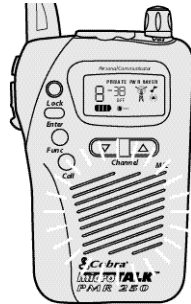
Note
While PTT button is depressed you cannot receive incoming calls.

Note
When you release the PTT button, the person you are talking to will hear a tone indicating that it's OK to talk. See Talk Confirmation Tone section on page 14.

Operation

Talk Confirmation Tone

Talk Confirmation Tone



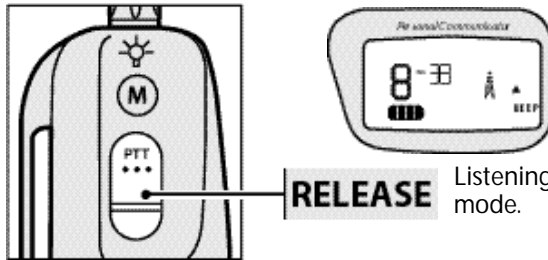
Your listener will hear an audible tone when you release the PTT button.

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

Listening For Another Party

Listening For Another Party

When you have finished talking:



RELEASE Listening mode.

- 1 Release button to receive incoming transmissions.

Your MicroTalk is always in listening mode when the PTT button is not pressed and you are not in function mode. See Advanced Features section on page 20.

Note
While PTT button is depressed you cannot receive incoming communications.

Operation

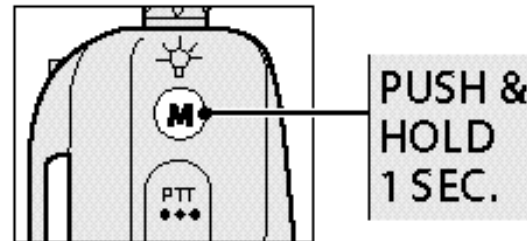
Auto Squelch

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

Auto squelch can be temporarily removed to allow all signals to enter by pressing the button (Maximum Range Extender).

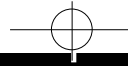


- 1 Push and hold the button for 1 second to allow all signals to enter.

Maximum Range Extender

Note
To learn more about the range of your MicroTalk, see MicroTalk Range Section on page 16.

Range is dependent on battery condition and the features of the terrain.



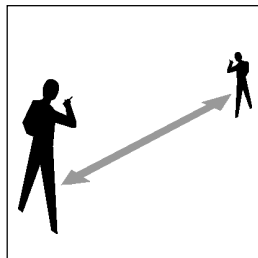
MicroTalk Range

Making Life Easier and Safer

MicroTalk Range

MicroTalk Range

Your MicroTalk Radio has a range of up to 3 km (2 miles). This effective range may 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.



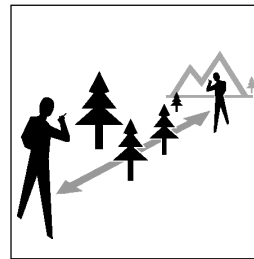
3. Range will be further reduced by dense foliage and hilly terrain.

To achieve maximum range the auto squelch can be overridden. Refer to Maximum Range Extender section on page 15.

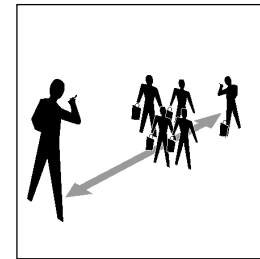
MicroTalk 2-Way Radio Can Make Life Easier and Safer

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

Some suggestions include:



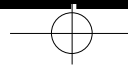
1. Talking with fellow hikers.



2. Keeping track of your family and friends in a shopping centre.

MicroTalk 2-Way Radio Can Make Life Easier and Safer

continued

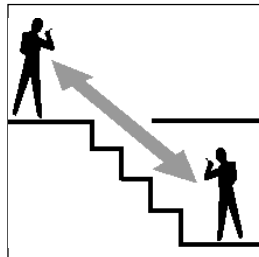


Making Life Easier and Safer

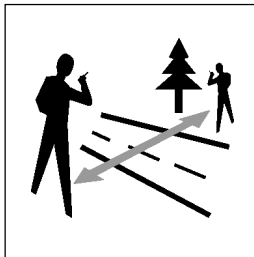
MicroTalk 2-Way Radio Can Make Life Easier and Safer

Note
In some countries it may be illegal to use a hand held radio whilst driving a motor vehicle.

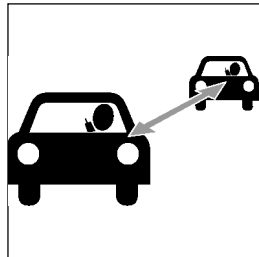
MicroTalk 2-Way Radio Can Make Life Easier and Safer *continued*



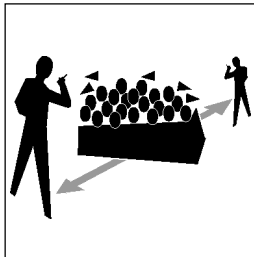
3. Communicating between different floors of a building.



4. Talking to a neighbour or a friend.



5. Checking on travelling companions in another car.



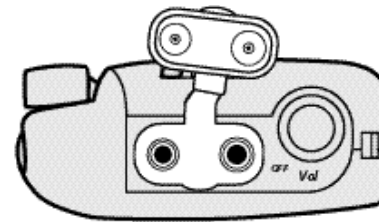
6. Agreeing on a meeting spot after an event.

External Microphone/Speaker Jack

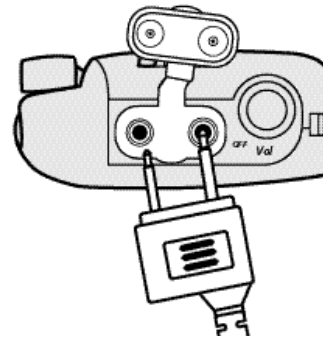
External Microphone/Speaker Jack

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:



1 Open Mic/Spkr tab on top of unit.



2 Insert plug into the Mic/Spkr jacks.



External Microphone/Speaker Jack

Note
External microphone/speaker (item #FA-SM) is not included with this unit. See Accessories section on page 30 for available units.


Advanced Features

Advanced Features

Note

When using or programming functions, pushing and releasing the  button or the  button will save all entered information.

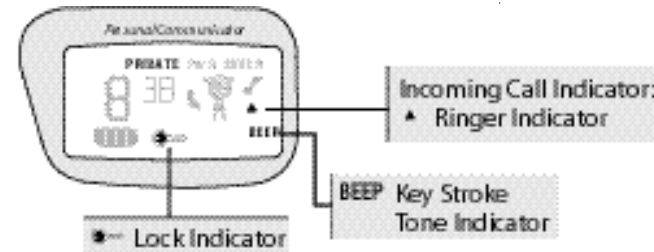
Note

To exit out of function mode and return to operational mode without saving entered information simply press the  button.


Advanced Features

Your MicroTalk has many advanced features not found on other 2-way radios. These include:

- Ring Notification Modes
- Tone Indicator Settings
 - Key Stroke Tone
 - Talk Confirmation Tone
- Lock Key



Note

If you push and hold the  button, the MicroTalk will cycle through the different functions.

If after 10 seconds no selection is made, the unit will return to operational mode.

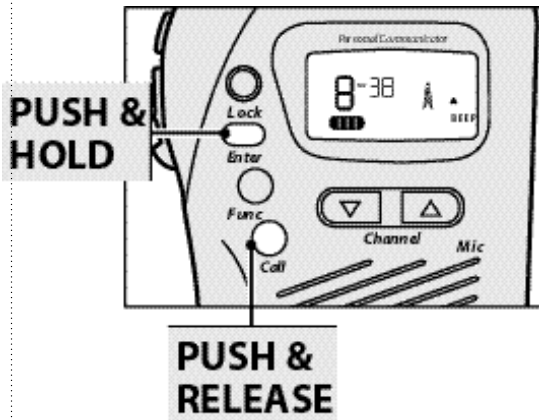
Advanced Features

Ringer Modes

Ringer Modes

Your MicroTalk will signal you that there is an incoming transmission with a ring tone. To set Ringer:




Note
Unit must be in operational mode to test ring.



Advanced Features

Ringer Test

To test the ringer mode:

- 1 Rotate ON - OFF Volume Control  clockwise. An audible "tone" will indicate the unit is on and then the LCD will go through a 3 second self-test and then go to operational mode.
- 2 Push and hold  button.
- 3 Quickly push and release  button. Unit will ring for 5 seconds.

Advanced Features

Tone Settings

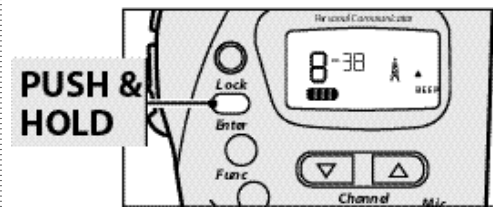
Note
The Key Stroke Tone and Talk Confirmation Tone can be temporarily turned on or off at any time while in operational mode.

Tone Setting

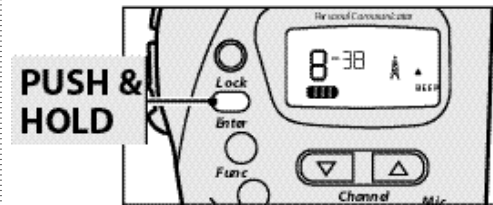
The Key Stroke Tone and Talk Confirmation Tone can be temporarily turned on or off during the operation of your MicroTalk 2-Way Radio.

Key Stroke Tone Indicator

You will hear an audible tone when any button is pushed (except PTT button). To turn the audible tone on or off:



- 1 Push and hold **Enter** button until **KST** icon disappears from the LCD display.

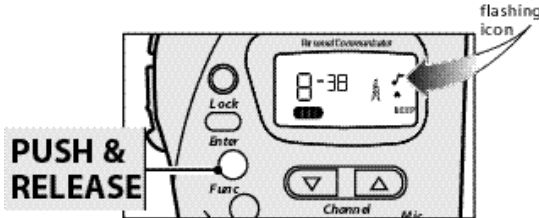


- 2 To return to the audible mode, push and hold **Enter** button until **KST** icon appears in the LCD display.

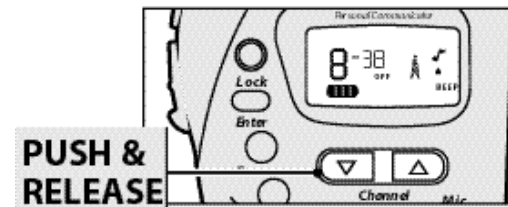
Advanced Features

Talk Confirmation Tone Indicator

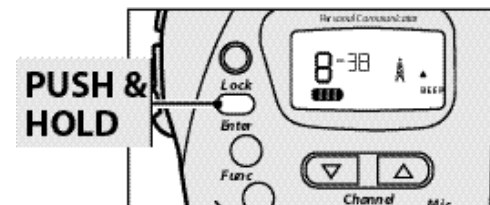
To temporarily eliminate the Talk Confirmation Tone:



- 1 Push and release **Func** button until **flashing icon** flashes.



- 2 Push and release either **Channel** or **Mic** button until **flashing icon** appears in the LCD display.



- 3 Push and hold **Enter** button. **flashing icon** will disappear.

Note
For more information see Talk Confirmation Tone section on page 14.

Note
To restore the Talk Confirmation Tone repeat steps 1- 3 as shown to the left.

Note
When you push and hold the PTT button, the unit exits out to operational mode.

If after 10 seconds no selection is made, the unit will return to operational mode.

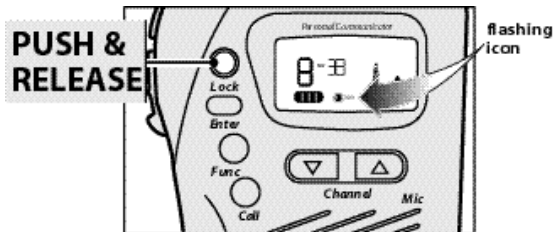
Advanced Features

Lock Function

Lock Function





The purpose of the LOCK function is to lock most buttons to avoid accidental operation.

To engage the LOCK function:



Note
Call button, Range Extender button and PTT button do not lock and are fully operational while the unit is locked.

The unit cannot lock while in function mode.

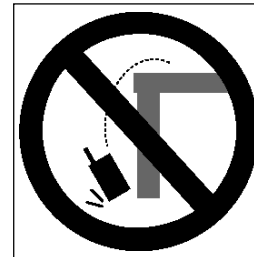
- 1 Push and release  button.  icon flashes. Most buttons are locked.
- 2 To "unlock" push and release  button again. Buttons are "unlocked" and  icon disappears.

Caring for Your **microTALK™** Radio

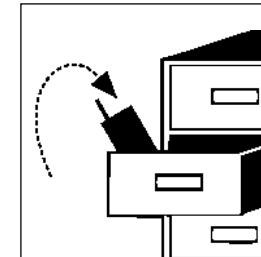
Caring for Your MicroTalk Radio

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

Here are some suggestions:



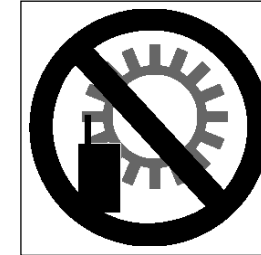
1. Handle unit gently.



2. Keep away from dust.



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



4. Avoid exposure to extreme temperatures.

Caring for Your MicroTalk Radio

micROTALK™ Specifications

micROTALK™ Specifications

I. GENERAL SPECIFICATIONS

A. FREQUENCY

PMR Channel	Channel Frequency In MHz
1	446.00625
2	446.01875
3	446.03125
4	446.04375
5	446.05625
6	446.06875
7	446.08125
8	446.09375

B. RECEIVER

	UNIT	
1. SENSITIVITY FOR 12 DB SINAD	μV	0.25
FOR CALL SIG.DETECTION	μV	0.2
2. MAX. AUDIO OUTPUT @10% THD	mW	100
3. MAX.S/N RATIO @ 1mV RF INPUT	dB	45
4. SQUELCH		
a) SENS.	μV	0.2
b) ATTACK TIME	ms	120
c) CLOSING TIME	ms	200
5. AUDIO FREQUENCY RESP.		
@ 300 HZ	dB	-6
@ 3000 HZ	dB	-6
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	
1. EFFECTIVE RADIATED POWER	mW	500
2. CARRIER FREQ.STABILITY	Hz	500
3. MODULATION LIMITING	kHz	2.5
4. CARRIER ATTACK TIME	ms	80
5. AUDIO FREQUENCY RESPONSE		
@ 300 HZ	dB	-6
@ 3000 HZ	dB	-6
6. AUDIO DISTORTION	%	3
7. HUM and NOISE	dB	45
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	V	4.8 - 6.0

The use of this 2-way radioproduct involves the public airways and its use may be subject to local laws, regulations, and ordinances. Before using the product you should check to see that the contemplated use does not violate any local law, regulation or ordinance that may be applicable.



Accessories

Notes



(1) NiMH Rechargeable Battery Pack
High performance Nickel Metal Hydride battery pack for multiple recharging
PMR-BP



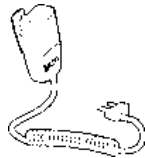
2 Port Desktop Charger
Charges your MicroTalk Radio and (1) NiCad battery pack
PMR-CH



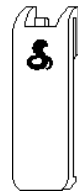
Carrying Case
Durable case perfectly fits your MicroTalk radio
PMR-CCB



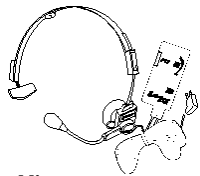
Ear Bud Mic with PTT
Integrated speaker/mic adapter that fits in your ear. Includes shirt clip.
PMR-EBM



Lapel Microphone
Remote microphone/speaker connection.
PMR-SM

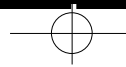


Replacement Belt Clip
PMR-BC



Vox Mic
VOX (Voice Operated Transmitter) adapter allows you hands-free operation.
PMR-VOX

You Can Find These High-Quality Accessories At Your Local Cobra Dealer.



Cobra®

Cobra® **MICRO TALK™**

**Private Mobile Radio
2-Way Radio**

**Cobra MicroTalk PMR 250
Betriebsfunkgerät für
Gegensprechbetrieb**

**Radio móvil privada
bidireccional
Cobra MicroTalk
PMR 250**

**Appareil de
radiocommunication
à usage privé**

**Ricetrasmittitore
portatile per
uso privato**

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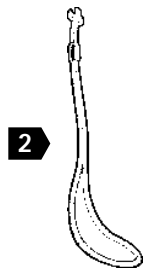
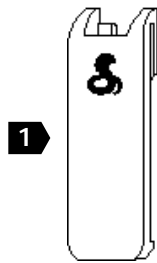
"Ingenious Products for Easier Communication."

The Private Mobile Radio Story

The Private Mobile Radio Story

Ever wish you could talk to someone who wasn't within earshot? Like contacting ski partners back at the lodge? Or letting a friend know how to find you in a busy shopping centre? Cobra's MicroTalk radios are a great way for friends or family to increase their fun - and safety - by staying in touch while on the go and they are perfect for business use as well, such as office to warehouse communications.

The ERC (European Radiocommunications Committee) has created 8 channels, called Private Mobile Radio (PMR). These channels are in the UHF (Ultra High Frequency) band which means great penetration through buildings, thick forests, hills, and other dense structures. They are also FM (Frequency Modulation) signals which means crystal-clear reception even in crowded noisy environments.

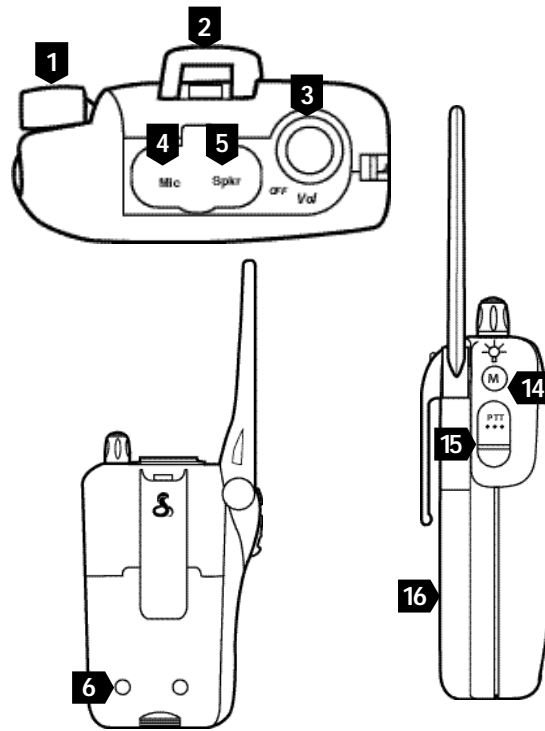
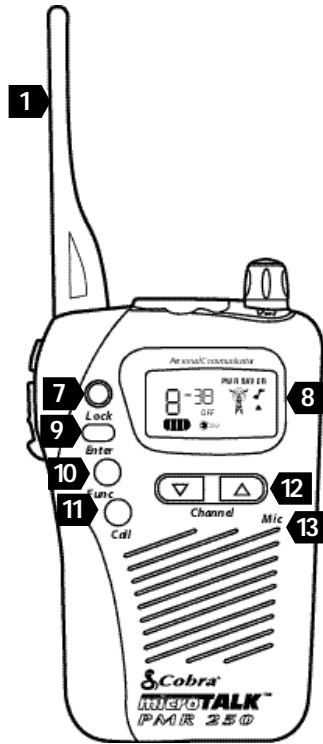


Included with your MicroTalk

- 1. Removable Belt Clip
- 2. Wrist Strap

Controls and Indicators

- 1. Retractable Antenna
- 2. Belt Clip
- 3. On/Off Volume Control
- 4. Microphone Jack
- 5. Speaker Jack
- 6. Battery Charge Pads
- 7. Lock Button
- 8. LCD Display
- 9. Enter Button
- 10. Function Button
- 11. Call Button
- 12. Channel Select Buttons
- 13. Microphone
- 14. Maximum Range Extender Button
- 15. PTT (Push To Talk) Key
- 16. Battery Chamber



Thank you for purchasing the Cobra PMR 250 2-way Radio. Properly used, this Cobra product will give you many years of reliable service.

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