

APPENDIX 5
USERS MANUAL

USERS MANUAL FOLLOW THIS SHEET

USERS MANUAL
FCC ID: BBOFRS310WX
APPENDIX 5

Cobra® microTALK™

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 - 8:00 pm, Monday through Friday, CST.

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

If you think you need service call 1.773.889.3087

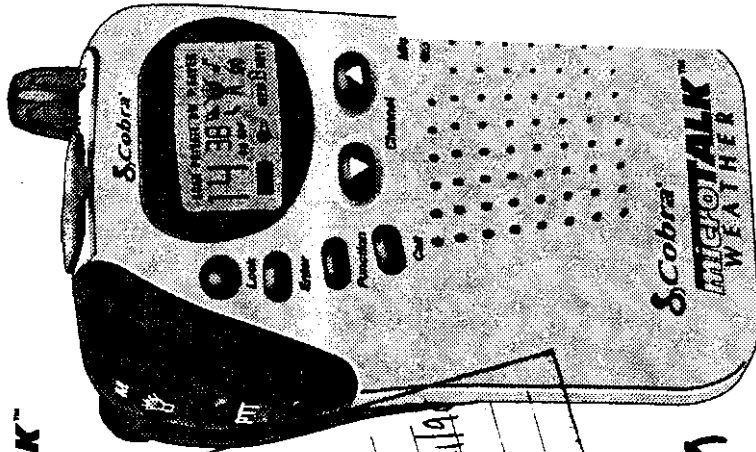
"If your product should require factory service please call Cobra first before sending your unit in. This will ensure the fastest turn-around time on your repair."

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 or 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.

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Part No. 480-284-P-001

Operating Instructions for your Cobra® microTALK™ 2 Way Radio FRS 310 WX



COBRA APPROVALS LIT. SHEET

MANUAL ADDENDUM

SIGNATURE: _____

URGENT

PRODUCT DEVELOPMENT

PRODUCT MGR. _____

ENG. PRODUCT MGR. _____

MARKETING MGR. _____

QUALITY ASSURANCE SERVICES

MARKETING SERVICES

ENGINEERING

1-29-99

"Ingenious Products for Easier Communication."

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

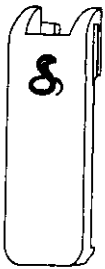
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Included Accessories		• No License Required
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The Family Radio Service Story

The Family Radio Service 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 mall? Cobra's MicroTalk radio is a great way for friends or family to increase their fun-and safety-by staying in touch while on the go.

The FCC (Federal Communications Commission) has created 14 license free frequency bands, or channels, called Family Radio Service (FRS) frequencies. All of these 14 channels are easily accessed on your Cobra FRS radio. 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.



1



2

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.

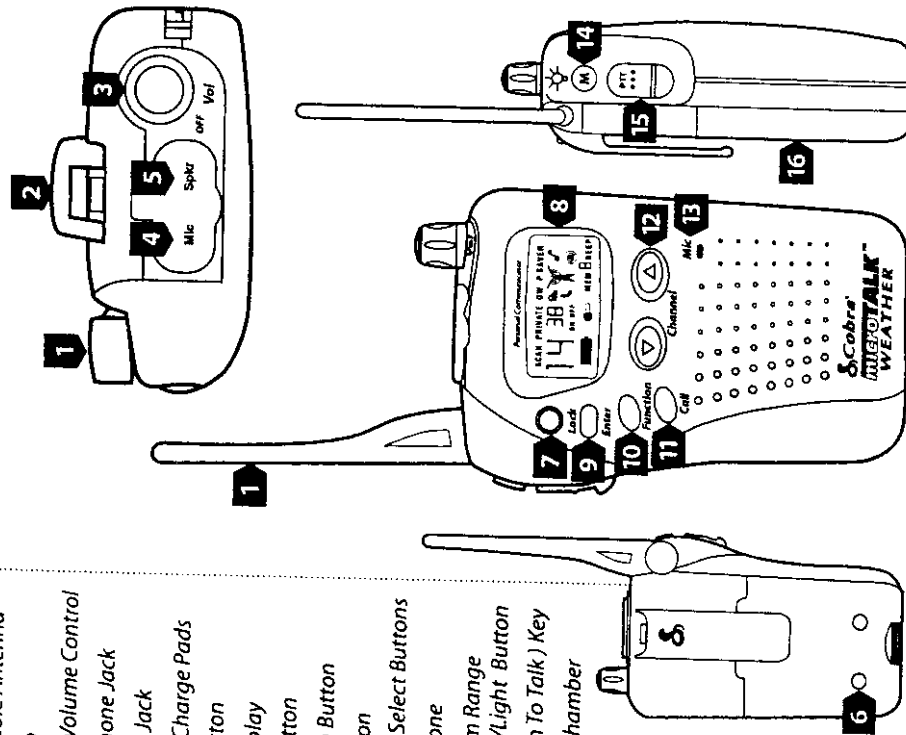
Included with your MicroTalk

- 1 Removable Belt Clip
- 2 Wrist Strap

A1

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/Light Button
- 15. PTT (Push To Talk) Key
- 16. Battery Chamber



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

Customer Support

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 - 8:00 pm CST
at: 773.889.3087

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

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

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

Operation

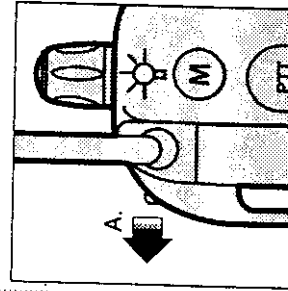
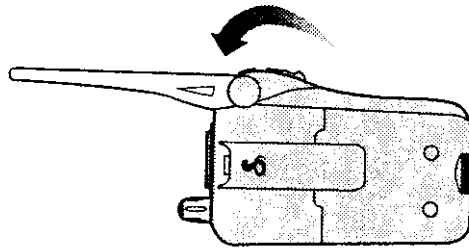
Battery Installation

Note

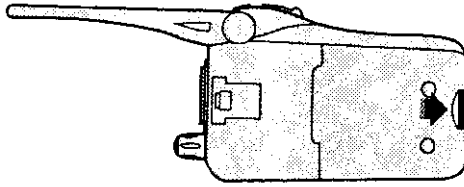
Batteries not included with MicroTalk 2-way radio.

Install Batteries

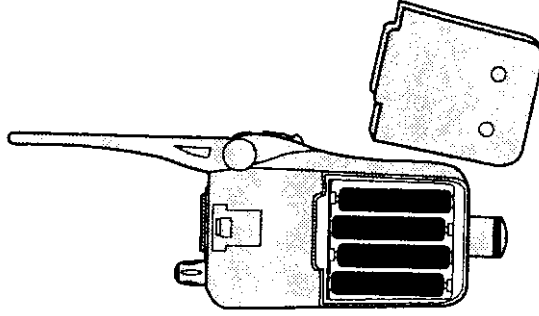
1 Clear antenna.



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 (Part # FA-BP) pack can be recharged.

See Accessories on page 54. 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

LCD Display

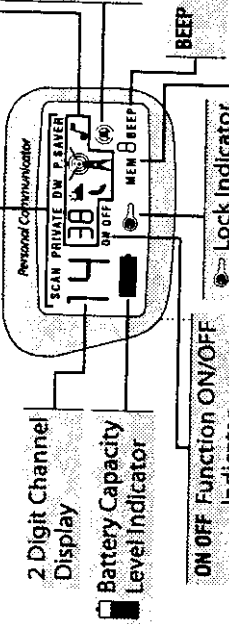
Note
The LCD can be illuminated for 8 seconds by pressing the Maximum Range Extender button.

LCD Display

- 3B CTCSS Subchannel Indicator
- Weather Indicator
- Outgoing Call Indicator
- Transmit (Talk) Indicator
- Receive (Listen) Indicator
- Talk Confirmation Tone Indicator

- SCAN
- PRIVATE
- DW
- P.SAVER
- Scan Mode Indicator
- Private Call Indicator
- Dual Watch
- Auto Battery Save Indicator

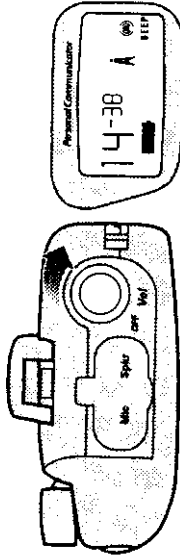
- Incoming Call Indicators:
- Ringer Indicator
 - Vibrate Indicator
 - Combination Ringer/Vibrate Indicator



Operation

Turning On Your MicroTalk

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.



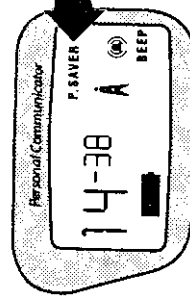
Operational Mode

Note
Whenever the unit is on you can receive communications.

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.

flashing icon



The PWR SAVER icon will flash.

Auto Battery Power Saver


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

Operation


Select Main Channel

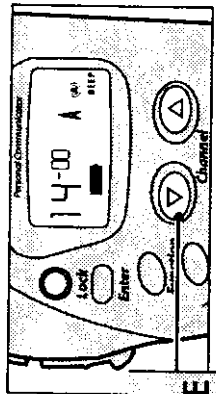
Note
Units must be on same channel and subchannels to communicate.

Note
Channels 8-12 generally are less used and give better results for communications in most areas.



Note
Push and hold the  buttons for fast channel advance.

Select Main Channel (1-14)

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.





PUSH & RELEASE

2 Select channel by pushing and releasing   buttons.

Operation


Select CTCSS Subchannel

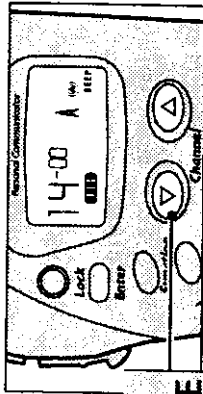
Note
If you push and hold the  button, the LCD display will cycle through the different functions.

Note
To return to operational mode and not save your last channel, push and release  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.

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.



PUSH & RELEASE



2 Select main channel by pushing and releasing   buttons.

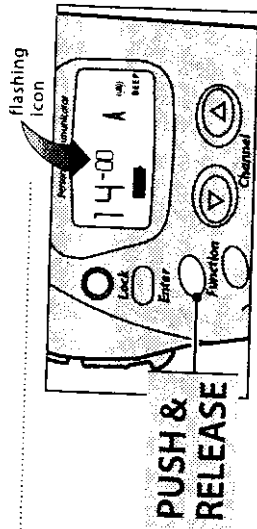
continued


Operation

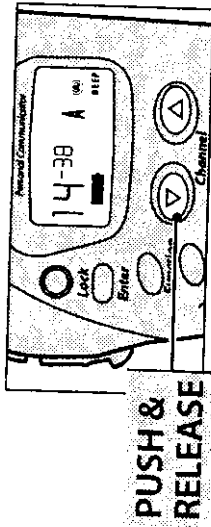
Select CTCSS Subchannel continued



Note

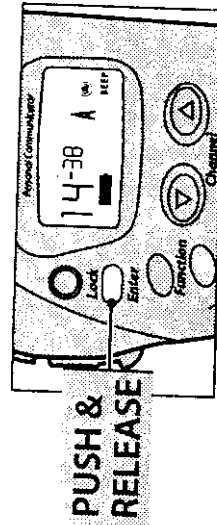
Push and hold the   buttons for fast channel advance.




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



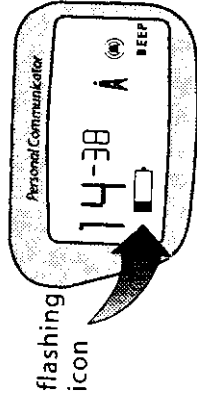
4 Select subchannel number by pushing and releasing   buttons.




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

Operation

Battery Low



When 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.

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.

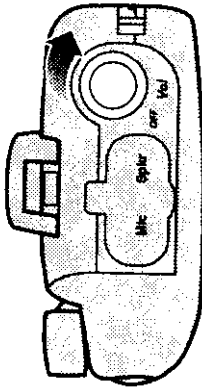
Only the Cobra NIMH battery (Part # FA-BP) pack can be recharged.

Note

NIMH rechargeable battery Pack (item #FA-BP) and 2 port desktop charger (item #FA-CH) are not included with this unit. See Accessories section on page 54.

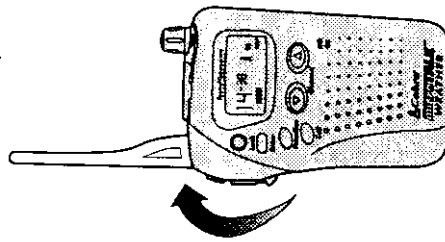
Calling Another Party

To alert another party that you wish to communicate:



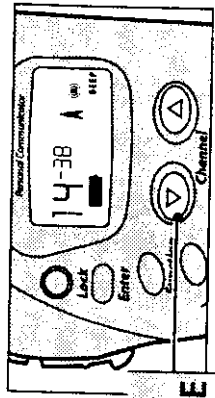
- 1 Turn on your MicroTalk 2-way radio. An audible "tone" will indicate the unit is on. The LCD will go through a 3 second self test and then to operational mode.

- 2 Place antenna in full upright position.



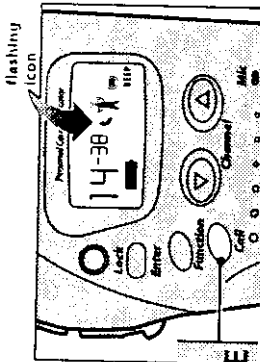
Note

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



PUSH & RELEASE

- 3 Select desired channel by pushing and releasing ∇ (Channel) buttons.



PUSH & RELEASE

- 4 Push and release ∇ button. The indicator icon will flash and the ∇ icon will remain on for 3 seconds. The unit you are calling will hear a 2 second ring tone.

- 5 Wait for the party's response or proceed to "Talking To Another Party" section on next page.

Note

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

Operation

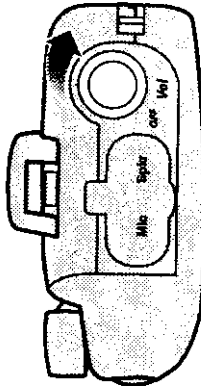
Talking to Another Party

Note

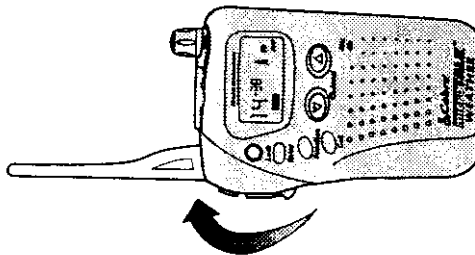
Both units must be on same channel and subchannel to communicate.

Talking To Another Party

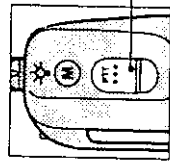
To send your outgoing message:



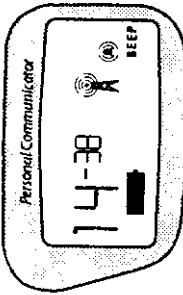
- 1 Turn on your MicroTalk 2-way radio. An audible "tone" will indicate the unit is on. The LCD will go through a 3 second self test and then go to operational mode.



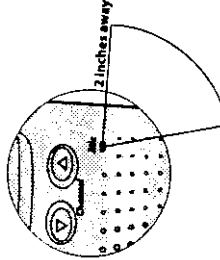
- 2 Place antenna in full upright position.



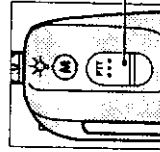
- 3 Push and hold PTT button.



- 4 The BEEP icon will appear.



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



- 6 Release button and listen for response.

Note

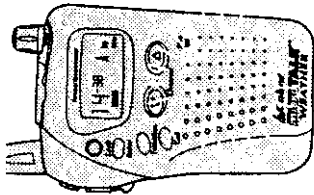
When you release the PTT button, the person you are talking to will hear a tone indicating that it's ok to talk. See Talk Confirmation Tone section on page 14.

Operation

Note

While PTT button is depressed you cannot receive incoming calls.

Talk Confirmation Tone



Talk Confirmation Tone

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

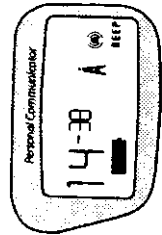
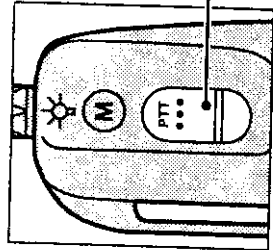
This alerts the other party that you are finished talking and it's OK for them to begin talking.

Listening For Another Party

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

Listening For Another Party

When finished talking:



RELEASE

Listening mode.

- 1 Release button to receive incoming transmissions.

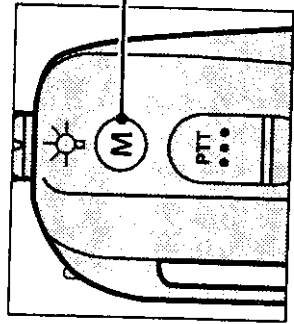
Your MicroTalk is always in listening mode when the PTT button is not pressed and you are not in function mode. See Advanced Features section on page 20.

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.

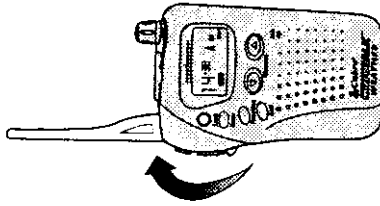
Note
To learn more about the range of your MicroTalk, see MicroTalk Range Section on page 18.

Range is dependent on battery condition and geographic territory.

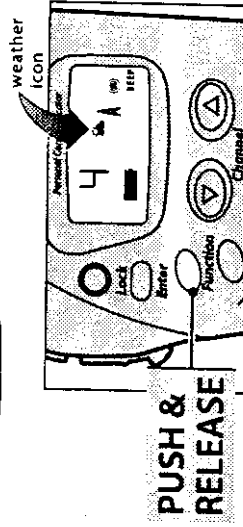
Operation

Listening to Weather Channels

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



2 Place antenna in full upright position.



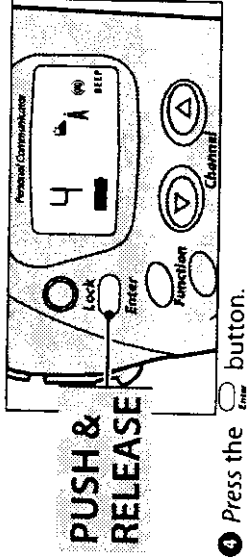
PUSH & RELEASE

3 Push and release button until icon flashes. The last weather channel tuned will be displayed.

Operation

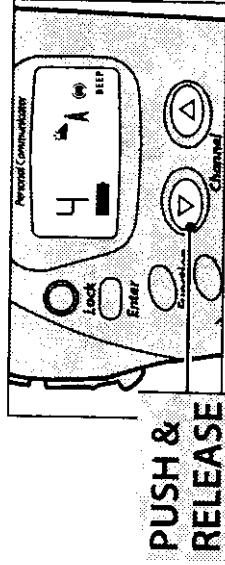
Listening to Weather Channels

Listening to Weather Channels



PUSH & RELEASE

4 Press the button.



PUSH & RELEASE

5 Press the buttons to select the appropriate channels for your area.

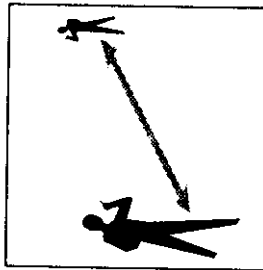
6 To exit weather reception, press the button until the desired function is reached.

MicroTalk Range

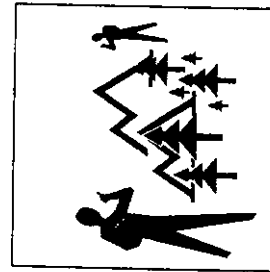
Making Life Easier and Safer

MicroTalk Range

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

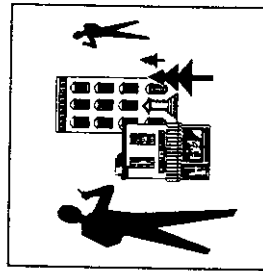


1. Under flat, open conditions you will experience the MicroTalk's maximum range.



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.

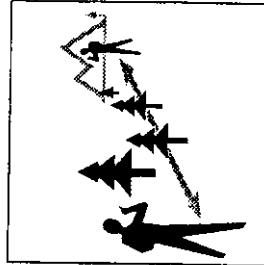


2. Range can be reduced by buildings and foliage in the path of the signal.

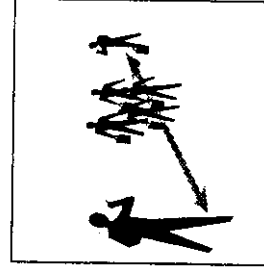
MicroTalk 2-Way Radios Can Make Life Easier and Safer

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.

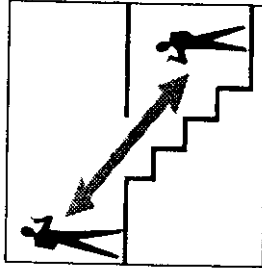
MicroTalk 2-Way Radios Can Make Life Easier and Safer

continued

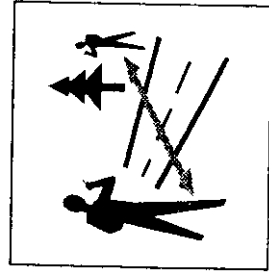
Making Life Easier and Safer

MicroTalk 2-Way Radios Can Make Life Easier and Safer

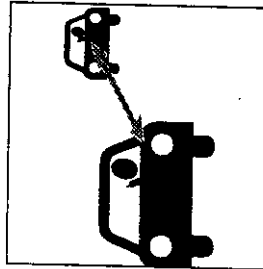
MicroTalk 2-Way Radios Can Make Life Easier and Safer *continued*



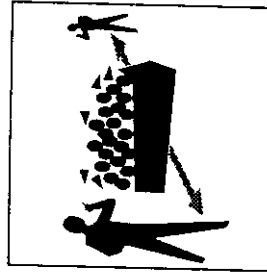
3. Communicating between basement and first, second or third floor.



4. Talking to a neighbor or a friend.



5. Checking on traveling companions in another car.



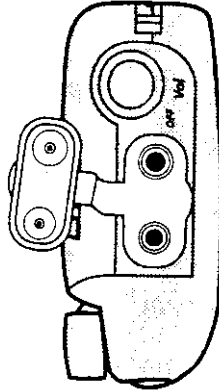
6. Agree on a meeting spot after an event.

External Microphone/Speaker Jack

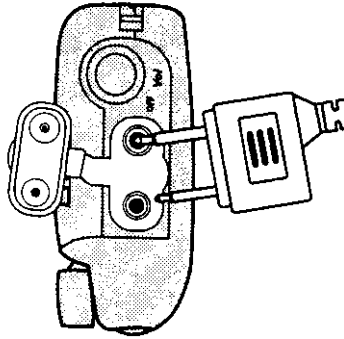
External Microphone/Speaker Jack

Your MicroTalk 2-Way Radio can be fitted with a variety of accessories, (not included) freeing your hands for other tasks.

To attach an external microphone/speaker accessory:



1 Open Mic/Spkr tab on top of unit.





2 Insert plug into the Mic/Spkr jacks.

External Microphone/Speaker Jack


Advanced Features

Advanced Features

Note

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

Note

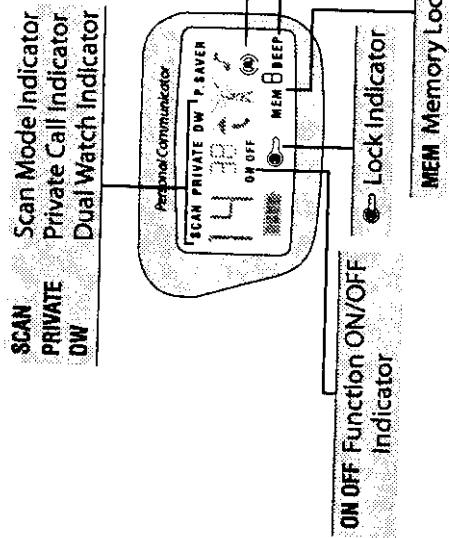
To exit out of function mode and return to operational mode without saving entered information simply press the .

Advanced Features


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

- 10 Memory Storage Location and Recall
- Memory Scan
- Channel/Sub Channel Scan
- Private Call® (Voice Scramble)
- Ring/Vibrate Notification Modes
- Tone Indicator Settings
 - Key Stroke Tone
 - Talk Confirmation Tone
- Lock Key
- Dual Watch

Advanced Features



Note


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

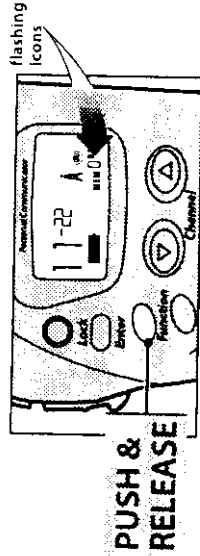
If, after 10 seconds no selection is made, the unit will return to operational mode.


Advanced Features

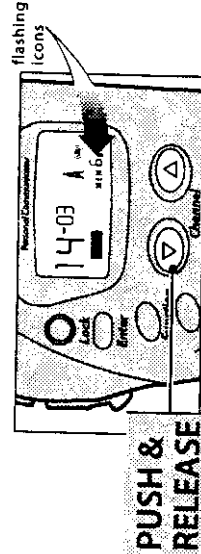
Programming Memory Locations



Programming Memory Locations
Your MicroTalk has 10 memory (0-9) locations for storing your most frequently used channels.

- 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.

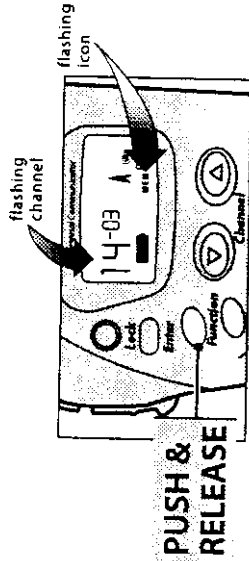



- 2 Push and release  button until MEM icon and a memory location flashes.

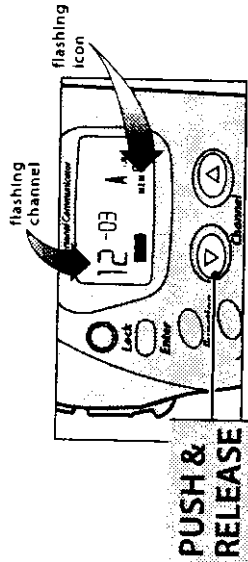




- 3 Select memory location you wish to change by pushing and releasing   buttons (Use MEM 6 for this example).

Advanced Features



- 4 Push and release  button again. 14-MAIN CHANNEL will flash and only the MEM icon will remain flashing.



- 5 Select desired main channel you wish to store (1-14) by pushing and releasing   buttons. (Use CHANNEL 12 for this example.)


Note
Once you enter memory mode you can talk and listen to any channel you select after programming is complete. See Using Memory Locations section on page 28.

continued

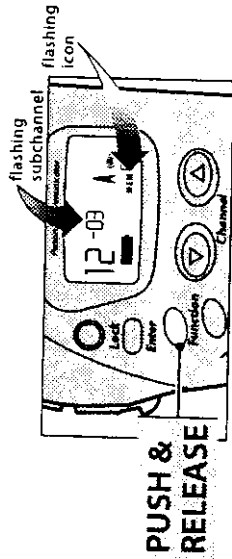
Advanced Features

Programming Memory Locations


Note

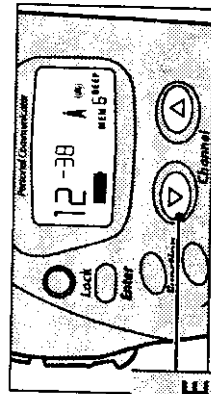
Push and hold the  button for fast channel advance.

Programming Memory Locations continued





PUSH & RELEASE


Push and release  button which sets main channel in memory and moves to subchannel selection. The subchannel begins flashing. The MEM icon will remain flashing.



PUSH & RELEASE




Select desired subchannel you wish to store (00-38) by pushing and releasing   buttons. (Use SUBCHANNEL 38 for this example.)

Note


You can push and hold the  button to begin talking anytime.

Advanced Features

Your MicroTalk will stay in the subchannel section until you:

- A Push and hold  button to set memory location and stay in memory scan.
- or...
- B Push and release  button to return to operational mode.
- or...
- C Push and release  button to proceed to next function mode (Scan).

Note

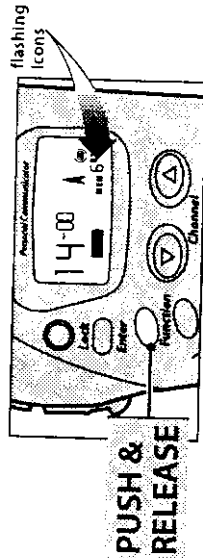
If you push and hold the  button, the LCD display will cycle through the different functions.

Advanced Features

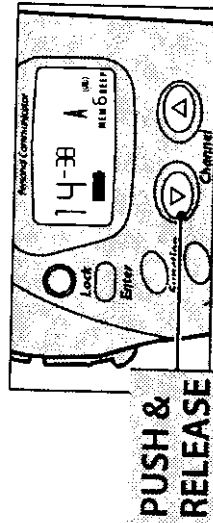
Using Memory Locations

Memory Channel Recall/Talk

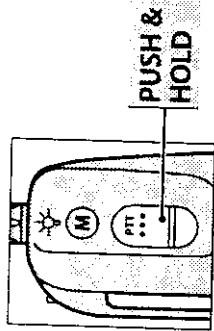
To recall a channel in memory:



- 1 Push and release **MEM** button until MEM icon and a memory location flashes.

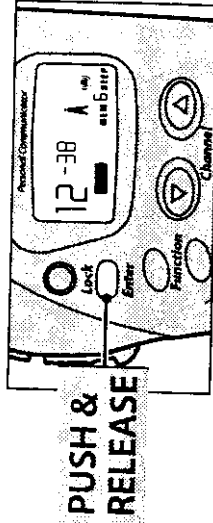


- 2 Select desired memory location you wish to recall (0-9) by pushing and releasing **MEM** buttons.



- 3 Push and hold **MEM** button and talk. Your radio will stay on this recalled location until you exit out of memory function mode.
- 4 Repeat step 2 for recalling other memory locations.

To exit the Memory Mode and return to Operational Mode:



- 5 Push and release **MEM** button.

Note


If function button is pushed while listening/talking, programming will begin. See Programming Memory Locations on page 24.

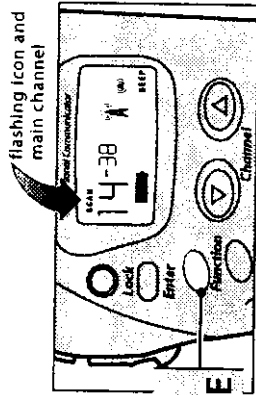
Advanced Features

Scan Function

Note
The MicroTalk "zeros out" the subchannels to allow scanning of the main channels.

Scan Function

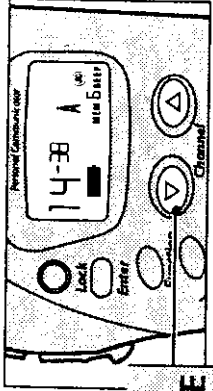
- 1 Rotate ON - OFF Volume Control  clockwise. An audible "tone" will indicate the unit is on and then the LCD will go through a 3 second self-test and then go to operational mode.




PUSH & RELEASE

- 2 Push and release  button until scan icon and 14 main channel flashes.



Advanced Features



PUSH & RELEASE

- 3 Push and release  buttons and the unit will begin scanning the main channels.
- 4 Unit will continue to scan all main channels and stop if an incoming transmission is detected.

Your MicroTalk will pick it up for 10 seconds. Within 10 seconds you can:

- A Push and hold  button and talk. Your radio will return to operational mode on that channel.
- or...
- B Push and release  button to rescan the main channel.
- or...
- C Proceed to subchannel scan on next page.

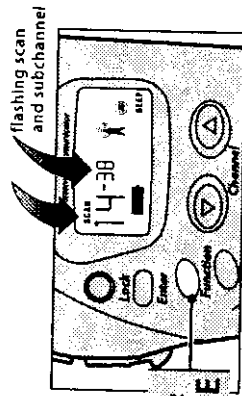
continued

Advanced Features

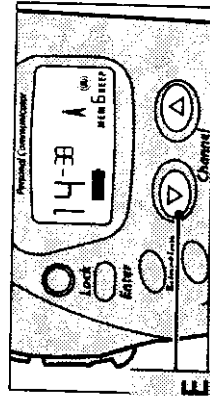
Scan Function

Scan Function *continued*

To scan subchannels:



- 1 Push and release button and subchannel and scan icon will flash.

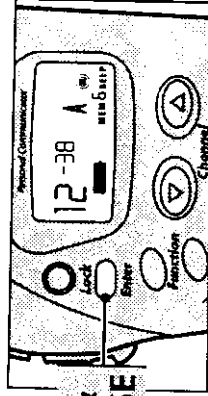


- 2 Push and release button and subchannel scanning begins and stops when an incoming transmission is detected.

Your MicroTalk will pick it up for 10 seconds. Within 10 seconds you can:

- A Push and hold button and talk. Your radio will return to operational mode on that channel.
- Or...
- B Push and release button to rescan the main channel.

To exit the Scan Mode and return to Operational Mode:



- 1 Push and release button.

Note

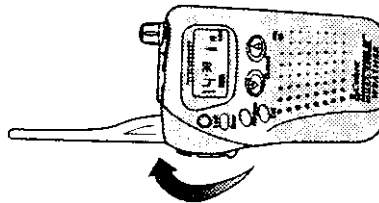
If you wish to proceed to the next function mode, push and release button. (Private Call Voice Scramble).

Advanced Features

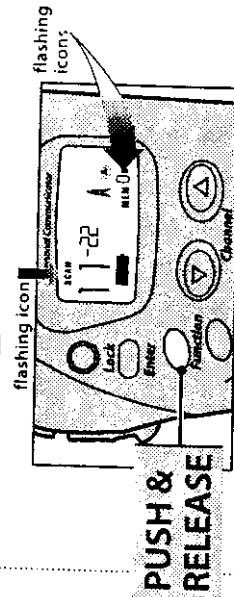
Memory Scan Function

Memory Scan conveniently allows you to access frequently used channel and sub-channel combinations.

1 Turn on your MicroTALK 2-way radio. An audible "tone" will indicate 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.



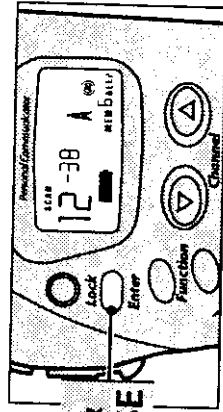
PUSH & RELEASE

3 Push and release **Function** button until **MEM 0** and **SCAN** icon flash.

Advanced Features

Memory Scan Function

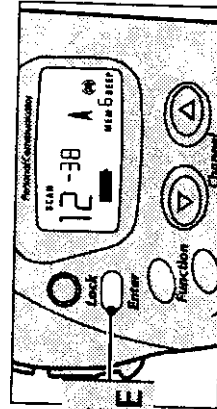
Memory Scan Function continued



PUSH & RELEASE

- 4 Press the **Function** button to begin the scan mode.
- 5 The radio will stop at the first memory location for 1/2 second.

- If no signal is detected it will move on.
- If a signal is detected, it will stay at that location for 10 seconds. If you want to stay at that location for more than 10 seconds, press and release the Enter button.



PUSH & RELEASE


6 To leave Memory Scan, press and release the **Function** button at any time.

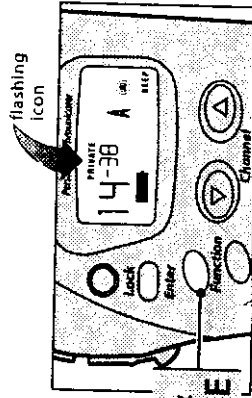
Advanced Features

Private Call (Voice Scrambling)


Private Call (Voice Scrambling)
Private Call ensures that no one can eavesdrop on your conversation.

To engage the Private Call function:

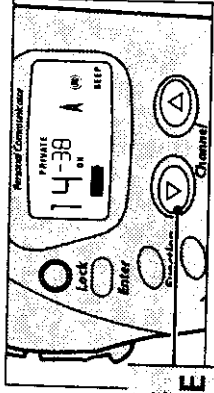
- 1 Rotate ON - OFF Volume Control  clockwise. An audible "tone" will indicate the unit is on and then the LCD will go through a 3 second self-test and then go to operational mode.



PUSH & RELEASE

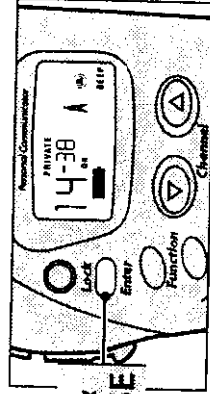
- 2 Push and release  button until PRIVATE icon flashes.

Advanced Features




PUSH & RELEASE

- 3 Push and release  buttons until ON icon is visible.



PUSH & RELEASE

- 4 Push and release  button. Unit will go to operational mode or push function button to proceed to next function.

Note


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

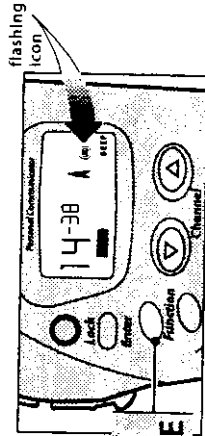
If, after 10 seconds no selection is made, the unit will return to operational mode.

Advanced Features



Ringer/Vibrate Modes

Your Microtalk will signal you that there is an incoming transmission with either a tone or a vibration or both. To set for Ringer/Vibrate:

- 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.




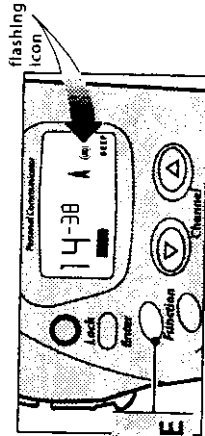
PUSH & RELEASE

- 2 Push and release  button until  icon flashes.



Ringer/Vibrate Modes

Your Microtalk will signal you that there is an incoming transmission with either a tone or a vibration or both. To set for Ringer/Vibrate:

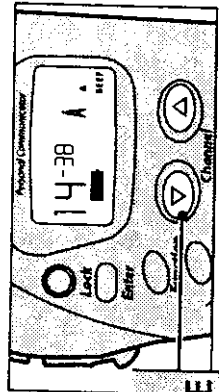
- 1 Rotate ON - OFF Volume Control  clockwise. An audible "tone" will indicate the unit is on and then the LCD will go through a 3 second self-test and then go to operational mode.



PUSH & RELEASE

- 2 Push and release  button until  icon flashes.

Advanced Features



PUSH & RELEASE

- 3 Push and release   buttons until  icon appears for ringer mode.

continued

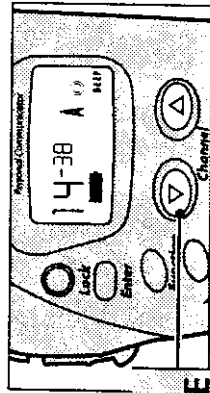
Ringer/Vibrate Modes

Note

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

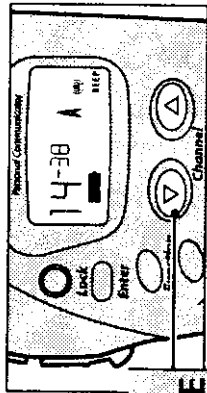
If, after 10 seconds no selection is made, the unit will return to operational mode.

Ringer/Vibrate Modes continued



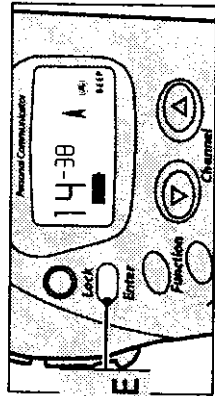
PUSH & RELEASE

- 4 Push and release buttons again. icon appears for vibrator mode.



PUSH & RELEASE

- 5 Push and release buttons again and both icons will be displayed for ringer/vibrate mode.



PUSH & RELEASE

- 6 After selecting the mode you desire push and release button or button to proceed to next function.

Note

Unit must be in operational mode to test ring/vibrate.

Ringer/Vibrate Test

To test the ringer/vibrate mode:

- 1 Turn on unit.
- 2 Push and hold button.
- 3 Quickly push and release button. Unit will ring, vibrate, or ring/vibrate for 5 seconds.

Advanced Features

Tone Settings

Note

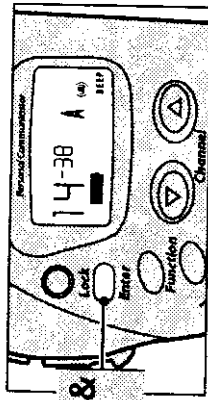
The Key Stroke Tone and Talk Confirmation Tone can be temporarily turned on or off at any time while in operational mode.


Tone Setting

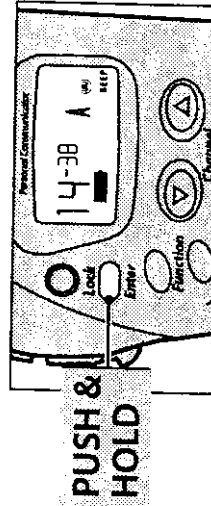
The Key Stroke Tone and Talk Confirmation Tone can be temporarily turned on or off during the operation of your MicroTalk 2-Way Radio.

Key Stroke Tone Indicator BEEP

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



- 1 Push and hold  button until BEEP icon disappears in the LCD display.

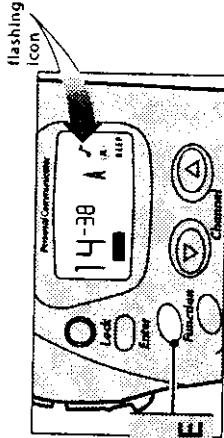



- 2 To return to the audible mode, push and hold  button until BEEP icon appears in the LCD display.

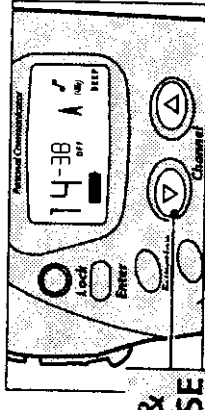
Advanced Features

Talk Confirmation Tone Indicator

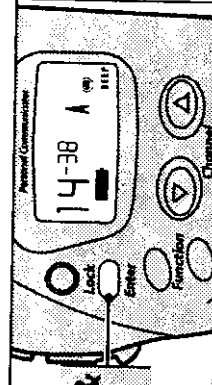
To temporarily eliminate the Talk Confirmation Tone:





- 1 Push and release  button until  icon flashes.



- 2 Push and release  buttons until OFF icon appears in the LCD display.



- 3 Push and hold  button.  icon will disappear or press and hold function key to proceed to next function.

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

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

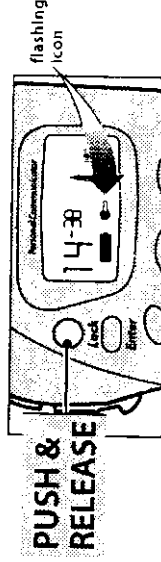
The unit cannot lock while in function mode.

Dual Watch Function

Lock Function

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

To engage the LOCK function:



- 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.

Dual Watch Function

Dual Watch allows you to simultaneously monitor any two preselected Family Radio Service channels.

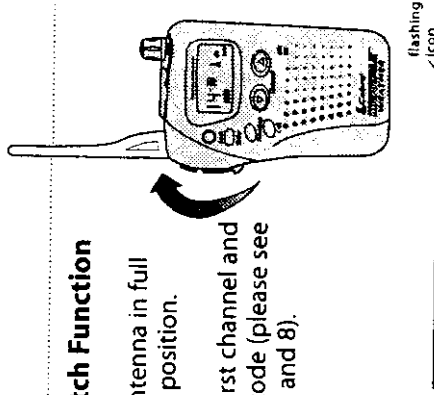
- 1 Turn on your MicroTALK 2-way radio. An audible "tone" will indicate the unit is on. The LCD will go through a 3 second self test and then go to operational mode.

continued

Advanced Features

Dual Watch Function

- 2 Place antenna in full upright position.
- 3 Select first channel and CTCSS code (please see pages 7 and 8).



PUSH & RELEASE

- 4 Press and release button until DW icon flashes.

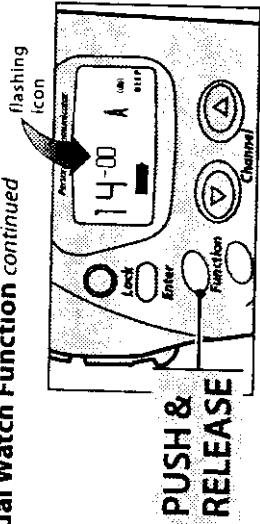
- 5 Press buttons to select second channel.

continued

Advanced Features

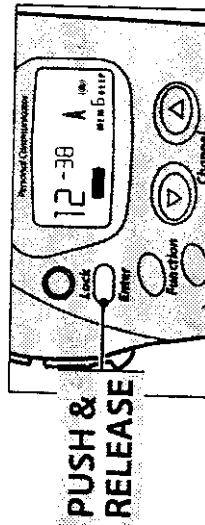
Dual Watch Function

Dual Watch Function continued



6 Press **Power** button to set CTCSS. CTCSS channel numbers will flash.

7 Press **Function** **Channel** buttons to select CTCSS.



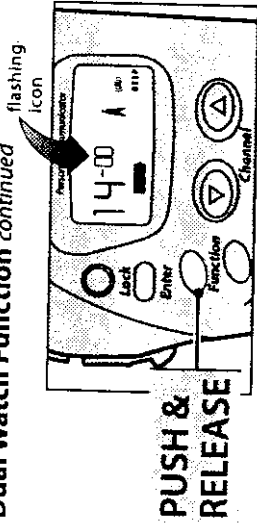
8 Press **Power** button. This will store the second channel and CTCSS and go to normal mode

continued

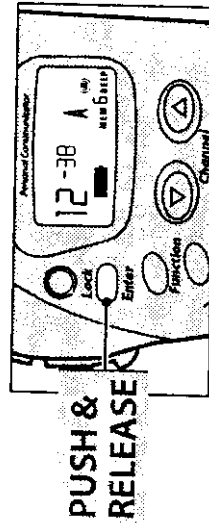
Advanced Features

Dual Watch Function

Dual Watch Function continued



9 To begin Dual Watch mode from normal mode, press the **Power** button until DW icon flashes.



10 Press **Power** button. Dual watch will begin.

11 Press **Power** to exit Dual Watch mode.

Frequency Range

Frequency Ranges

The MicroTalk unit represents one of the most advanced FM two-way radios available.

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

CTCSS Channel

CTCSS Channel	Frequency	CTCSS Channel	Frequency
01	67.0 Hz	21	136.5 Hz
02	71.9 Hz	22	141.3 Hz
03	74.4 Hz	23	146.2 Hz
04	77.0 Hz	24	151.4 Hz
05	79.7 Hz	25	156.7 Hz
06	82.5 Hz	26	162.2 Hz
07	85.4 Hz	27	167.9 Hz
08	88.5 Hz	28	173.8 Hz
09	91.5 Hz	29	179.9 Hz
10	94.8 Hz	30	186.2 Hz
11	97.4 Hz	31	192.8 Hz
12	100.0 Hz	32	203.5 Hz
13	103.5 Hz	33	210.7 Hz
14	107.2 Hz	34	218.1 Hz
15	110.9 Hz	35	225.7 Hz
16	114.8 Hz	36	233.6 Hz
17	118.8 Hz	37	241.8 Hz
18	123.0 Hz	38	250.3 Hz
19	127.3 Hz		
20	131.8 Hz		

Caring for Your MicroTalk™ Radio

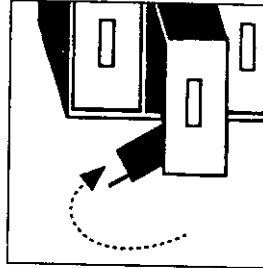
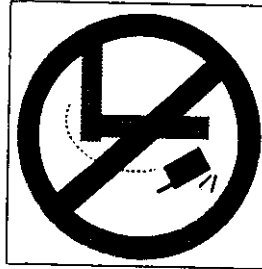
Weather Frequency Ranges

Weather Channel	Channel Frequency In MHz	Weather Channel	Channel Frequency In MHz
1	163.275	6	162.450
2	162.550	7	162.500
3	162.400	8	162.525
4	162.475	9	162.650
5	162.425	10	161.775

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.

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.

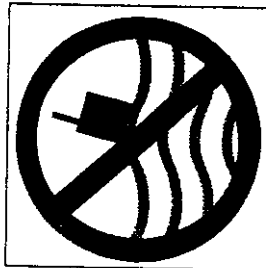
I. GENERAL SPECIFICATIONS

A. GENERAL

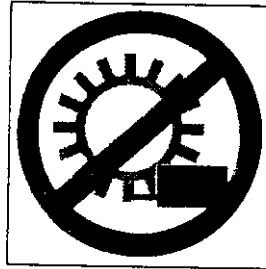
CH=14 CHANNELS WITHIN 462-467 MHz

B. RECEIVER

	UNIT
1. SENSITIVITY FOR 12 DB SINAD FOR CALL SIG. DETECTION	uV 0.25
2. MAX. AUDIO OUTPUT @10% THD	uV 0.2
3. MAX. S/N RATIO @ 1mV RF INPUT	MW 100
4. SQUELCH	DB 45
a) SENS.	uV 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



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



4. Avoid exposure to extreme temperatures.

microTALK™ Specifications

Limited Two Year Warranty



Cobra Electronics Corporation
 6500 West Cortland Street
 Chicago, Illinois 60707

C. TRANSMITTER

1. EFFECTIVE RADIATED POWER	UNIT	500
2. CARRIER FREQ. STABILITY	mW	
3. MODULATION LIMITING	HZ	500
4. CARRIER ATTACK TIME	KHZ	2.5
5. AUDIO FREQUENCY RESPONSE	mS	80
@ 300 HZ	DB	-6
@ 3000 HZ	DB	-6
6. AUDIO DISTORTION	%	3
7. HUM and NOISE	DB	45
8. TRANSIENT FREQ. BEHAVIOR	mS	30
a) TX ON	mS	5
b) TX OFF		
D. POWER SUPPLY		
1. BATTERY LIFE (1:1:18 RATIO)	HR	24
2. BATTERY (4 x AAA)	V	4.8 - 6.0

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.

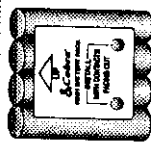
Exclusions: This limited warranty does not apply; 1) to any product damaged by accident; 2) in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs; 3) if the serial number has been altered, defaced or removed; 4) if the owner of the product resides outside 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.

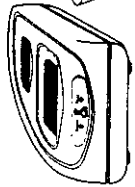
Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

Optional Accessories

Accessory Order Form



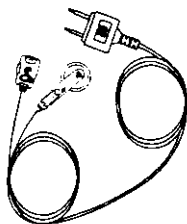
(1) NIMH Rechargeable Battery Pack
 High performance Rechargeable Nickel Metal Hydride battery pack
 FA-RP \$29.95



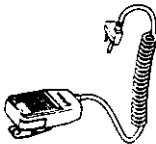
2 Port Desktop Charger
 Charges your MicroTalk Radio and (1) NiCad battery pack
 FA-CH \$29.95



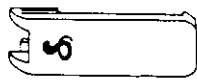
Camouflage Carrying Case
 Durable nylon case perfectly fits your MicroTalk radio
 FA-CC \$19.95



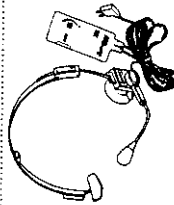
Ear Bud Microphone
 Miniature microphone and earbud for private listening.
 MA-EBM \$29.95



Lapel Speaker/ Microphone
 Remote speaker/microphone combination.
 MA-SM \$24.95



Replacement Belt Clip
 FA-BC \$4.95



VOX Headset/Mic
 VOX (Voice Operated Transmitter) provides hands-free operation.
 MA-VOX \$49.95

Item #	Description	Cost Ea.	Qty.	Amount
FA-RP	NIMH Rechargeable Battery Pack	\$29.95		
MA-EBM	Ear Bud Microphone	\$29.95		
MA-VOX	Vox Headset/Mic	\$49.95		
FA-CH	2 Port Desktop Charger	\$29.95		
MA-SM	Lapel Speaker/Microphone	\$24.95		
FA-CC	Camouflage Carrying Case	\$19.95		
FA-BC	Replacement Belt Clip	\$4.95		
Subtotal				
Tax Table (Tax if applicable)				
Shipping/handling				\$4.00
Total				

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%

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 - 8:00 pm, M-F, CST.
 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

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

Allow 4 to 6 weeks for delivery. Offer valid in Continental U.S. only.

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Joe H. Stahl