



COMMUNICATOR

MODEL 1010 OWNER'S MANUAL
INSTALLATION AND
OPERATING INSTRUCTIONS



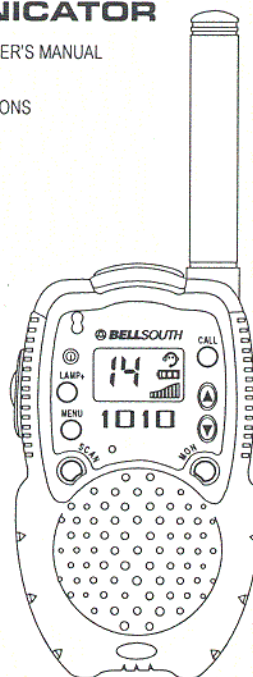
Make certain you receive the best
performance from your COMMUNICATOR.
Read this Owner's Manual first.



Made in Korea

P/N.: 8M-0021-00

PLEASE READ THIS
OWNER'S MANUAL
CAREFULLY BEFORE
USE. KEEP FOR
YOUR REFERENCE.



FOR "GETTING STARTED" INFORMATION,
PLEASE SEE INSTALLATION INSTRUCTIONS ON PAGE 9 OR YOUR
SEPARATE QUICK START GUIDE.
© 2000 BellSouth Corporation

 OIL TELCOM CO., LTD.
FCC ID: OIZ1010
JOB #: 197AK0
EXHIBIT #: 5A

Congratulations on your selection of a quality BellSouth product. With proper care and adherence to the set-up and user instructions in this Owner's Manual, this unit will provide you with years of trouble-free service.

BellSouth is committed to providing quality products that fit your needs. We would like to have any comments or suggestions you might have on this product.

You may mail your comments to:

U.S. Electronics
105 Madison Avenue
New York, NY 10016

WARRANTY

COMMUNICATOR unit received damaged as a result of shipping will require you to file a claim with the carrier to repair.

COMMUNICATOR unit received with missing parts or with damage due to abuse, inadequate packing or some other noncompliance with this limited warranty will be returned to you C.O.D., freight collect.

NOTE: A COMMUNICATOR unit received which was not made for BellSouth Products or which is not defective as determined by our test procedures will not be repaired and will be returned to you C.O.D., freight collect.

To Obtain Warranty Service

- Provide proof of the date of purchase within the package.
- Prepay all shipping costs to the authorized service center.
- Include a return shipping address within the package.

Please retain your sales receipt, the carton, the packing materials, and the printed material. The original carton is the best shipping container for the COMMUNICATOR unit should you have to return it.

For your reference:

Model Number _____

Date of Purchase _____

Name of Dealer _____

Customer Service Telephone Number:

1-800-864-2199



WOOIL TELCOM CO., LTD.
FCC ID: OIZ1010
JOB #: 197AK0
EXHIBIT #: 5B

WARRANTY

Warranty Service Not Provided

This warranty does not cover damage resulting from accident, misuse, abuse, improper installation or operation, lack of reasonable care, unauthorized modification or the affixing of any attachment not provided by BellSouth Products with the COMMUNICATOR unit, and/or loss of parts. This warranty is voided in the event any unauthorized person opens, alters or repairs the unit. All BellSouth equipment being returned for repair must be suitably packaged. BellSouth Products does not warrant that this equipment is compatible with the type of accessory of any particular COMMUNICATOR company or the services provided by it.

What To Do for Warranty Service

During the first thirty (30) days, a defective product is eligible for over-the-counter exchange at the retailer from whom it was purchased. After thirty (30) days, the defective product should be returned to the authorized service center. The shipping address of the authorized service center is:

US Electronics CONSUMER CENTER
C/O Southern Bonded Warehouse
1491 Mt. Zion Rd.
Morrow, GA 30260

Your unit will be repaired or replaced if examination by the service center determines the unit is defective.



COMMUNICATOR

CARTON CONTENTS

- Communicator
- User-Removable Belt Clip*
- Owner's Manual
- Warranty Card

*Attached to the units at the time of packaging



WOOL TELCOM CO., LTD.
FCC ID: OIZ1010
JOB #: 197AK0
EXHIBIT #: 5C



CAUTION

Damaged Antennas

Do not use any COMMUNICATOR that has a damaged antenna. If a damaged antenna comes in contact with the skin, a minor burn may result.

Batteries

All batteries can cause property damage and/or bodily injury such as burns if conductive material such as jewelry, keys or beaded chains touches exposed terminals. The material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse or other container with metal objects.



WARNING

For Vehicles With an Air Bag

Do not place your COMMUNICATOR in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a COMMUNICATOR is placed in the air bag deployment area and the air bag inflates, the COMMUNICATOR may be propelled with great force and cause serious injury to occupants of vehicle.

Potentially Explosive Atmospheres

Turn your COMMUNICATOR OFF when in any area with a potentially explosive atmosphere, unless it is a type especially qualified for such use (for example, Factory Mutual Approved). Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Batteries

Do not replace or charge batteries in a potentially explosive atmosphere. Contact sparking may occur while installing or removing batteries and cause an explosion.

Blasting Caps and Areas

To avoid possible interference with blasting operations, turn your COMMUNICATOR OFF near electrical blasting caps or in a "blasting area" or in areas posted: "Turn off two-way radio". Obey all signs and instructions.

Note: Areas with potentially explosive atmospheres are often, but not always, clearly marked. They include fueling areas such as below deck on boats, fuel or chemical transfer or storage facilities; areas where the air contains chemicals or particles, such as grain, dust, or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.

WARRANTY

BellSouth Products

One-Year Limited Warranty

This limited warranty sets forth all BellSouth Products responsibilities regarding your COMMUNICATOR. There are no other expressed or implied warranties from BellSouth Products.

Warranty Service Provided

If you purchased the COMMUNICATOR unit new from a retail vendor, BellSouth Products warrants the unit against defects in material and workmanship for a period of one (1) year from the original date of purchase. This warranty is in lieu of all other expressed warranties. This warranty begins when you purchase the COMMUNICATOR unit and continues for (1) one year unless you sell or rent the unit, in which case the warranty stops.

BellSouth Products disclaims any implied warranty, including the warranty of merchantability and the warranty of fitness for a particular purpose, as of the date of one year from your original purchase of the COMMUNICATOR unit. BellSouth Products assumes no responsibility for any special, incidental, or consequential damages.

This warranty gives you specific legal rights and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitations of special, incidental or consequential damages or limitations on how long a warranty lasts, so the above exclusion or limitation may not apply to you.



WOOIL TELCOM CO., LTD.

FCC ID: OIZ1010

JOB #: 197AK0

EXHIBIT #: 5D

TROUBLESHOOTING

FCC NOTICE

SYMPTOM	SOLUTION
No power.	• Check BATTERIES. Ensure that the BATTERIES are installed properly. • The BATTERIES may be weak. • Replace old batteries with four (4) new "AAA" alkaline or NiMH BATTERIES.
Reception is weak.	• Press the UP (▲) button to increase VOLUME. • The receiving signal may be weak and/or out of range. • If this happens, press the MONITOR button.
Cannot change channels.	• To change channels, press the MENU button until the channel number flashes on the LCD SCREEN. • Press the UP or DOWN buttons to change channels.
Range is limited.	• BATTERIES may be weak. • Replace with new batteries if the battery charge level indicator is low. • The maximum range will vary depending on terrain and environment. • Open fields provide the maximum range, while steel/concrete structures, heavy foliage and use in buildings and in vehicles may limit the range significantly. • Wearing the radio close to the body, such as in a pocket or on a belt, will decrease range; change the location of the radio.
Sound distortion problems.	• If you are transmitting, speak in a normal tone of voice, 2 to 3 inches away from the microphone. • If you are receiving, lower the volume to a comfortable level. • Radios too close. Radios must be at least 5 feet apart; increase your distance. • Radios too far apart. Obstacles interfere with transmission. Talk range is up to 2 miles in clear unobstructed conditions.

The FCC requires that you be advised of certain requirements involving the use of this device. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in residential installation. This uses and can generate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment off and on), the user is encouraged to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that which the receiver is connected.
- Consult the manufacturer for technical assistance.

FCC INFORMATION: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Privacy of communications may not be ensured when using this equipment.

FCC WARNING: This equipment generates or uses radio frequency energy. Changes or modifications not expressly approved in writing may cause harmful interference and void the user's authority to operate this equipment.



WOOIL TELCOM CO., LTD.

FCC ID: OIZ1010

JOB #: 197AK0

EXHIBIT #: SE

PRODUCT DESCRIPTION

PRODUCT DESCRIPTION

The COMMUNICATOR is the newest generation in personal two-communications. The COMMUNICATOR operates in a license-free radio band (no FCC license is needed for its operation), on any of the 14 license-free channels.

The COMMUNICATOR is a lightweight, compact two-way communication device that can be used to communicate with family or friends at parks, shopping malls, sporting events, concerts -- any indoor or outdoor activity!

The COMMUNICATOR is compatible with other brands utilizing the same frequency band (operating in the frequency range from 462.5625MHz to 467.7125MHz).

The COMMUNICATOR has 14-CHANNELS, featuring a multi-functional LCD Screen (which displays the current channel and various status icons).

Other features include ELECTRONIC VOLUME CONTROL and BATTERY SAVE CIRCUITRY.

Please read this Owner's Manual carefully to get the most out of your TWO-WAY COMMUNICATOR.

NOTE: The maximum transmission range will vary depending on terrain and environment. Range will be greater in open fields, while range is shorter within and around buildings or large structures.

This unit may not ensure privacy of communication.

SPECIFICATIONS

CTCSS CODE TABLE

#	FREQUENCY	#	FREQUENCY
1	67.0 Hz	20	131.8 Hz
2	71.9 Hz	21	136.5 Hz
3	74.4 Hz	22	141.3 Hz
4	77.0 Hz	23	146.2 Hz
5	79.7 Hz	24	151.4 Hz
6	82.5 Hz	25	156.7 Hz
7	85.4 Hz	26	162.2 Hz
8	88.5 Hz	27	167.9 Hz
9	91.5 Hz	28	173.8 Hz
10	94.8 Hz	29	179.9 Hz
11	97.4 Hz	30	186.2 Hz
12	100.0 Hz	31	192.8 Hz
13	103.5 Hz	32	203.5 Hz
14	107.2 Hz	33	210.7 Hz
15	110.9 Hz	34	218.1 Hz
16	114.8 Hz	35	225.7 Hz
17	118.8 Hz	36	233.6 Hz
18	123.0 Hz	37	241.8 Hz
19	127.3 Hz	38	250.3 Hz

WOOIL TELCOM CO., LTD.

FCC ID: OIZ1010

IOB #: 197AK0

EXHIBIT #: 5F

SPECIFICATIONS

Channels Available	14 Channels
CTCSS Code	38
Output Power (TX)	0.5W (FCC Maximum)
Battery Life	30 Hours (typical)

CHANNEL TABLE

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

CARE AND SAFETY

CARE and SAFETY

To clean the unit, wipe with a soft cloth dampened with water. Don't use cleaners or solvents on the unit; they can harm the body and leak inside, causing permanent damage. Battery contacts may be wiped with a dry, lint-free cloth.

If the unit gets wet, turn it off and remove batteries immediately. Dry battery compartment with a soft cloth to minimize potential water damage. Leave cover off the battery compartment overnight or until completely dry. Do not use the unit until completely dry.

Exposure to Radio Frequency Energy

The design of your Communicator, which generates radio frequency (RF) electromagnetic energy (EME), complies with the following national and international standards and guidelines.

The Relevant Guidelines and Standards Are:

- FCC Report and Order FCC 96-326 (August, 1996)
- American National Standards Institute (C95-1-1992)
- National Council on Radiation Protection and Measurements (NCRP-1986)
- International Commission on Non-Ionizing Radiation Protection (ICNRP - 1986)

To assure optimal unit performance and to ensure that exposure to RF energy is within the guidelines in the above standards, the following operating procedures should be observed:

FOR PORTABLE TWO-WAY COMMUNICATORS

- When transmitting with a COMMUNICATOR, hold COMMUNICATOR in a vertical position with its microphone 1 to 2 inches (2.5 to 5.0 cm) away from your mouth. Keep antenna at least 1 inch (2.5 cm) from your head and body.
- If you wear a COMMUNICATOR on your body, ensure that the antenna is at least one inch (2.5 cm) from your body when transmitting.

ELECTROMAGNETIC INTERFERENCE / COMPATIBILITY

Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electromagnetic compatibility.

- Turn your unit OFF in any facilities where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.
- Turn your unit OFF when on board aircraft when instructed to do so. Any use of the unit must be in accordance with airline regulations or crew instructions.

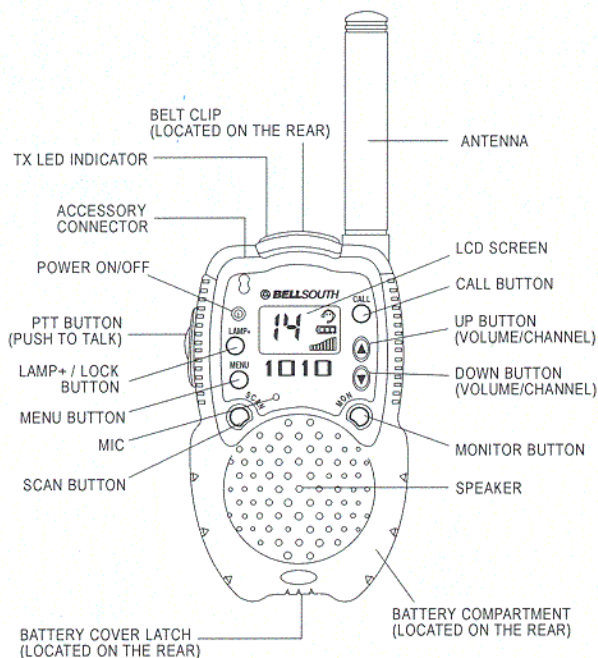
WOOIL TELCOM CO., LTD.

FCC ID: OIZ1010

JOB #: 197AK0

EXHIBIT #: 56

SPECIAL FEATURES



OPERATION

Battery Charge Level/Low Battery Indication

- The BATTERY CHARGE LEVEL is indicated by the number of squares present inside the BATTERY icon on the LCD SCREEN.
- When the battery charge level is low, the BATTERY icon will flash to indicate that the batteries need to be replaced.

Sending Call Tones

You can use Call Tones to alert the other user or to identify yourself. You can also use Call Tones to signal the beginning or the end of transmission.

- Press and release the **CALL** button.
- Release the **CALL** button, Your Call Tones will transmit.

Accessory Connection

The COMMUNICATOR model is designed to work with accessories. When those accessories are connected through ACCESSORY CONNECTOR, the HEADPHONE icon is prompted on the LCD SCREEN indicating the COMMUNICATOR is operating with accessories.

Accessories Available

The following accessories work with the COMMUNICATOR

- Charging Kit
(NI-MH Rechargeable Batteries and AC/DC Adapter)
- Speaker Microphone with Lapel Clip
- VOX Headset
- Neck Strap
- Carrying Case



WOOL TELCOM CO., LTD.

FCC ID: OIZ1010

JOB #: 197AK0

EXHIBIT #: **SH**

OPERATION

1. Select the desired channel before activation FULL SCAN. When a channel has been selected press the MENU button twice or once more during CHANNEL SCAN mode until a CTCSS number flashes. Press the SCAN button to activate CTCSS Code scan. The CTCSS number on the LCD Screen changes rapidly until an active CTCSS Code is detected.
2. When an active CTCSS Code (one of 38 codes) is detected, SCAN pauses keeping the active signal broadcasted. Press PTT to communicate through the active channel and FULL SCAN is deactivated. If another code is desired, press UP/DOWN button to search for another active CTCSS Code.
3. Press the SCAN button to deactivate CTCSS CODE SCAN. The SCAN stops at starting channel + CTCSS Code when no active channel is detected. But the SCAN stops at a different channel when an active channel is detected.

SPECIAL FEATURES

ANTENNA

LCD (Liquid Crystal Display) SCREEN - Displays current channel selection and other radio status symbols.

CALL BUTTON - Press to transmit CALL Tones.

UP/DOWN BUTTONS - Press to adjust volume level and change channels.

MIC - MICROPHONE

MONITOR BUTTON - Press to tune in and hold onto weak signals.

SPEAKER

BATTERY COMPARTMENT - Houses four (4) "AAA" ALKALINE or NiMH Batteries (not included).

BATTERY COVER LATCH - Secures BATTERY COVER.

SCAN BUTTON - Used to activate/deactivate CHANNEL SCAN.

MENU BUTTON - Allows you to change channels.

LAMP+ / LOCK BUTTON - Used to turn LCD Screen LAMP ON/OFF. Buttons are locked when pressed and held.

PTT (PUSH TO TALK) BUTTON - Press to transmit.

POWER ON / OFF - Press and hold the POWER button to turn your unit ON / OFF.

TX (Transmission) LED INDICATOR - Illuminates red when transmitting.

ACCESSORY CONNECTOR

BELT CLIP



WOOL TELCOM CO., LTD.
FCC ID: OIZ1010
JOB #: 197AK0
EXHIBIT #: 51

GETTING STARTED

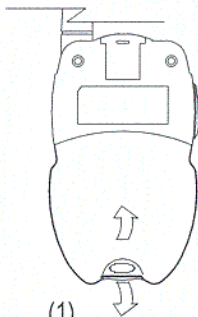
WARNING

DO NOT CHARGE UNIT USING AC/DC ADAPTER WITH REGULAR AAA ALKALINE BATTERIES INSTALLED.

ONLY USE THE AC/DC ADAPTER WITH AAA NI-MH RECHARGEABLE BATTERIES.

(NOT INCLUDED!)

BATTERY INSTALLATION



(1)
Figure 1.

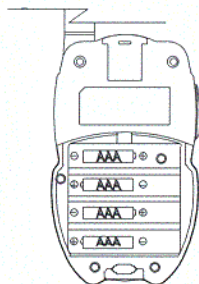


Figure 2.

1. Release the BATTERY COVER LATCH located on the rear side of the unit (1), and remove the BATTERY COVER from the BATTERY COMPARTMENT (2) See Figure 1.
2. Install four (4) "AAA" Alkaline Batteries (not included) following the polarities as shown in Figure 2.
3. Reinstall the BATTERY COVER and lock the BATTERY COVER LATCH into position.

The COMMUNICATOR has a built in POWER SAVER feature for maximum battery life. But when the COMMUNICATOR is not being used, conserve battery power by pressing the **POWER** button to OFF.

Remove the batteries if the unit will not be used for a long period of time.

OPERATION

MONITOR

You can use the MONITOR feature to check for weak signals in the current channel.

- CTCSS Code deactivation: When an incoming signal does not have the same CTCSS Code, the TX/RX LED Indicator lights up in green, but no message is received. Press the **MONITOR** button to deactivate CTCSS Code. You can listen for incoming audio signal. CTCSS Code is deactivated when the **MONITOR** button is pressed.
- Press and hold the **MONITOR** button until it "beeps". MONITOR feature works continuously until released - press **MONITOR** button to deactivate this feature.
- Press the **MONITOR** button for channel skipping during SCAN mode.

LAMP+ (LAMP/BUTTON LOCK)

- Press and release the **LAMP+** button to light up the LCD SCREEN. The backlight will automatically shut off after 4 seconds when no other button has been pressed
- Press and hold the **LAMP+** button until the LOCK icon is displayed. Volume and channel scan operations are disabled during **BUTTON LOCK** Mode. Press and hold the **LAMP+** button again to deactivate **BUTTON LOCK** mode.

CHANNEL SCAN

Channel Scan performs searches for active signals in an endless loop from 1 to 14, and an endless CTCSS Code loop from 0 to 38.

1. Press and release the **MENU** button and the current number flashes. Press the **SCAN** button to activate CHANNEL SCAN. The CTCSS number is set at 0, and the channel number on the LCD Screen changes rapidly until an active signal is detected.
2. When an active signal (one of 14 channels) is detected, SCAN pauses keeping the active signal broadcasted. Press **PTT** to communicate through the active signal channel and FULL SCAN is deactivated. If another channel is desired, press **UP/DOWN** button to continue searching.
3. Press **SCAN** button to deactivate CHANNEL SCAN. The SCAN stops at starting channel when no active channel is detected. But the SCAN stops at a different channel when an active channel is detected.

NOTE: Volume and channel change operations are disabled during **BUTTON LOCK** mode. Press and hold **LAMP+** again to deactivate **BUTTON LOCK** mode.

FULL SCAN (CTCSS CODE SCAN)



WOOIL TELCOM CO., LTD.
FCC ID: OIZ1010
JOB #: 197AK0
EXHIBIT #: 51

Changing CHANNELS

The COMMUNICATOR has 14 available channels. To change channels:

1. Press and hold the **MENU** button until the current channel number flashes on the LCD SCREEN.
2. While the channel number is flashing:
 - Press the **UP** (**▲**) button to move to a higher channel.
 - Press the **DOWN** (**▼**) button to move to a lower channel.
 - The channel changes from 1 to 14, or from 14 to 1.
3. Press the **MENU** button or **PTT** button to select the desired channel and return to NORMAL mode.

NOTE: Refer to the "Channel Table" section of this owner's manual for detailed frequency listings.

Changing CTCSS CODE - Sub-channel

The Communicator has 38 available CTCSS Codes. Please set CTCSS Code in addition to channel setting if you do not want to be bothered by someone else. To set CTCSS Code:

1. Press the **MENU** button twice until the current CTCSS number flashes. (Or press the **MENU** button again when you are in Channel Setting mode.)
2. While the CTCSS Number is flashing:
 - Press the **UP** (**▲**) button to move to a higher Code.
 - Press the **DOWN** (**▼**) button to move to a lower Code.
 - The channel changes from 0 to 38, or from 38 to 0.
3. Press the **MENU** button or **PTT** button to select the desired channel and CTCSS Code, and return to NORMAL mode.

NOTE: Refer to the "CTCSS CODE TABLE" section of this owner's manual for detailed frequency listings.

Removing the BELT CLIP

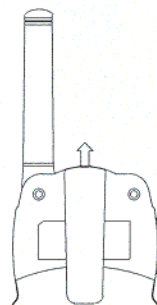


Figure 3.

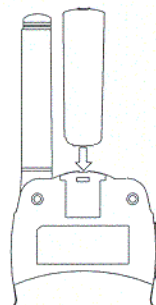


Figure 4.

1. Pull the BELT CLIP LATCH away from the unit.
2. While pulling the BELT CLIP LATCH, push up on the BELT CLIP to remove it from the unit, as shown in Figure 3.

Installing the Belt Clip

1. Slide the BELT CLIP into the BELT CLIP SLOT as shown in Figure 4.
2. A "click" indicates the BELT CLIP is locked into position.



WOIL TELCOM CO., LTD.
FCC ID: OIZ1010
JOB #: 197AK0
EXHIBIT #: 5K

GETTING STARTED

Turning the Unit ON

Press and hold the **POWER** button. The unit will "beep" and the LCD SCREEN will briefly display a SELF-TEST SCREEN.

Turning the Unit OFF

Press and hold the **POWER** button. The unit will beep and the LCD SCREEN will turn blank.

Adjusting Speaker Volume

- Press the **UP** () button increase the **SPEAKER** volume.
- Press the **DOWN** () button to decrease the **SPEAKER** volume.
- The Speaker volume level is indicated by the number of bars displayed in the lower right corner of the LCD SCREEN.

Receiving a Signal

The unit is continuously in the **RECEIVE** mode when the unit is ON. When you receive a signal, the current channel is displayed. (See "LCD Screen" for details).

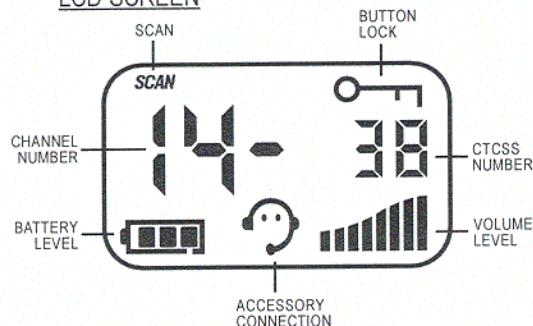
Transmitting a Signal

1. Check channel activity by pressing and holding the **PTT** button to **TRANSMIT**. The **TX LED INDICATOR** will light up in red. You'll hear static if the channel is clear to use. Don't transmit if someone is talking on the channel. Hold the unit in a vertical position with the microphone 2 to 3 inches from the mouth.
2. While holding the **PTT** button, speak into the unit using a normal tone of voice.
3. Release the **PTT** button when you have finished transmitting.

NOTE: In order for other people to receive your transmission, they must also be on the same channel you are currently using. Refer to the "Changing Channels" section for more information.

GETTING STARTED

LCD SCREEN



SCAN	Displayed during CHANNEL SCAN mode.
	Press and hold the LAMP+ button until BUTTON LOCK symbol is displayed.
14	CHANNEL NUMBER changes from 1 to 14 as selected by user.
	Active during Channel or Full Scan Modes. This prompts "Waiting for further signal" from detected channel.
38	CTCSS Code changes from 0 to 38.
	Displays current BATTERY LEVEL charge.
	Displayed when accessories are connected.
	Displays current VOLUME LEVEL .