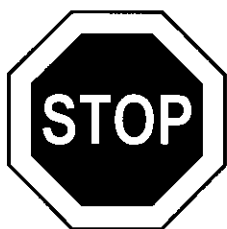


21



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



1022A

Made in China

22

**COMMUNICATOR**

**MODEL 1022**  
OWNER'S MANUAL  
INSTALLATION AND  
OPERATING INSTRUCTIONS

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



FOR INSTALLATION INFORMATION, PLEASE SEE  
"GETTING STARTED" INSTRUCTIONS ON PAGE 8 OR YOUR  
SEPARATE QUICK START GUIDE.  
© 2001 BellSouth Corporation

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

## PRODUCT DESCRIPTION

The COMMUNICATOR is the newest generation in personal two-way 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 ON/OFF 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.

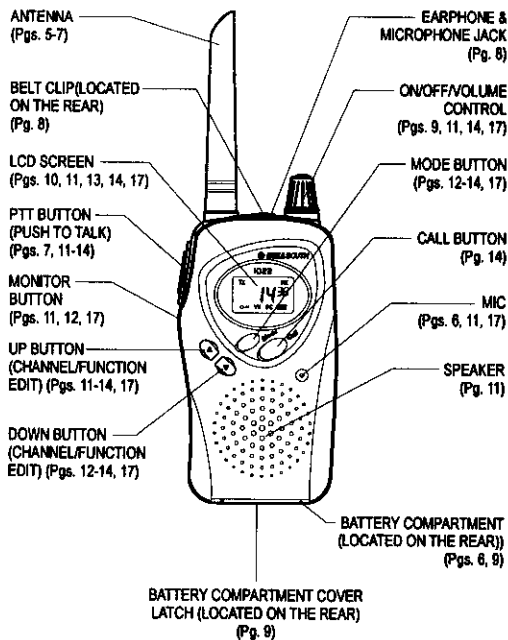
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## Special Features



3

## Special Features

### ANTENNA

### BELT CLIP

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

**(PUSH TO TALK) button** - Press to transmit.

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

**UP /DOWN buttons** - Press to change channels and select FUNCTION in every editing mode.

**BATTERY COMPARTMENT COVER LATCH** - Secures BATTERY COVER.

### EARPHONE & MIC (MICROPHONE) JACK

**ON/OFF/VOLUME CONTROL** - Rotate to turn your unit ON/OFF and to adjust the VOLUME CONTROL level.

**button** - Allows you to shift into FUNCTION editing mode.

**button** - Press to transmit CALL Tones.

### MIC - MICROPHONE

### SPEAKER

**BATTERY COMPARTMENT** - Houses four(4) "AAA" alkaline or Ni-MH rechargeable batteries (batteries not included).

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**CAUTION****Damaged ANTENNA**

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 the occupants of the 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 of 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.

**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 case 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 the batteries immediately. Dry the 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 Radiation Protection and Measurements (NCRP-1986)
- International Commission on Non-Ionizing Radiation Protection (ICNRP-1986)

To ensure 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 the COMMUNICATOR in a vertical position with its MICROPHONE 1 to 2 inches (2.5 to 5.0 cm) away from your mouth. Keep the 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 an aircraft when instructed to do so. Any use of the unit must be in accordance with airline regulations or crew instructions.

**FCC Notice**

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 the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in residential installation. This device 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 to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**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.

**SAFETY INFORMATION:**

Your wireless hand-held portable transceiver contains a low power transmitter. When the PUSH TO TALK button is pushed it sends out radio frequency (RF) signals. The device is authorized to operate at a duty factor not to exceed 50%. In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices.

**CAUTION:** To maintain compliance with the FCC's RF exposure guidelines hold the transmitter and ANTENNA at least 1 inch (2.5 cm) from your face and speak in a normal voice, with the ANTENNA pointed up and away from the face. If you wear the headset on your body while using the headset accessory, use only the supplied belt clip for this product and when transmitting, take it out of the belt to ensure that the ANTENNA is at least 1 inch (2.5 cm) from your body. Use only the supplied ANTENNA. Unauthorized ANTENNAS, modifications, or attachments could damage the transmitter and may violate FCC regulations.

**Getting Started**

Carefully remove your COMMUNICATOR from the Blister Pack. If there is any visible damage, do not attempt to operate this COMMUNICATOR. Return it to the place of purchase.

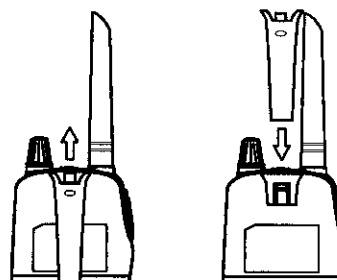
**Removing the BELT CLIP**

Figure 1

Figure 2

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 1.

**Installing the BELT CLIP**

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

**Accessory Connection**

The COMMUNICATOR is designed to be used with accessories (Earphone, Microphone, etc.).

**WARNING**

DO NOT CHARGE THIS UNIT USING AN AC/DC ADAPTER WITH REGULAR "AAA" ALKALINE BATTERIES INSTALLED. USE ONLY THE AC/DC ADAPTER WITH "AAA" NI-MH RECHARGEABLE BATTERIES. (A NI-MH RECHARGEABLE BATTERY PACK IS INCLUDED WITH THE PACKAGE.)

**BATTERY INSTALLATION**

Figure 3

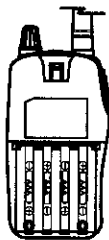
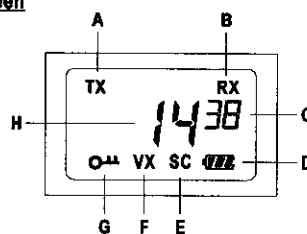


Figure 4

1. Release the BATTERY COMPARTMENT COVER LATCH located on the rear side of the unit. See Figure 3.
2. Remove the BATTERY COMPARTMENT COVER from the BATTERY COMPARTMENT. See Figure 4.
3. Install four (4) "AAA" alkaline or Ni-MH rechargeable batteries (batteries not included) following the polarities as shown in Figure 4.
4. Reinstall the BATTERY COMPARTMENT COVER and lock the BATTERY COMPARTMENT 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 rotating the ON/OFF/VOLUME CONTROL to OFF. Remove the batteries if the unit will not be used for a long period of time.

**LCD Screen**

- |                   |   |
|-------------------|---|
| A. TX             | - Displayed when transmitting a signal.                     |
| B. RX             | - Displayed when receiving a signal.                        |
| C. 38             | - CTCSS code. Changes from 1 to 38 as selected by user.     |
| D. [Battery Icon] | - Displays the current BATTERY LEVEL charge.                |
| E. SC             | - Displayed during the CHANNEL SCAN mode.                   |
| F. VX             | - Displays during the VOX mode.                             |
| G. [Lock Icon]    | - Displays when the LOCK mode is activated.                 |
| H. 14             | - CHANNEL NUMBER. Changes from 1 to 14 as selected by user. |

**Turning the Unit ON**

Rotate the ON/OFF/VOLUME CONTROL in a clockwise direction. The unit will "beep" and the LCD Screen will briefly display a SELF-TEST Screen.

**NOTE:** To reset your COMMUNICATOR, turn it ON while depressing the UP button.

**Turning the Unit OFF**

Rotate the ON/OFF/VOLUME CONTROL in a counter-clockwise direction. The LCD Screen will turn blank.

**Adjusting Speaker Volume**

- Rotate the ON/OFF/VOLUME CONTROL in a clockwise direction to decrease the SPEAKER Volume.
- Rotate the ON/OFF/VOLUME CONTROL in a counter-clockwise to increase the SPEAKER Volume.
- Press and hold the MONITOR button to confirm your SPEAKER Volume.

**Receiving a Signal**

The unit is continuously in the RECEIVE mode when the unit is ON and not transmitting. When you receive a signal on the current channel, the RX icon is displayed. (See "LCD Screen" for details.)

**Transmitting a Signal**

1. Check the channel activity by pressing and holding the MONITOR button. You'll hear static if the channel is unoccupied. Don't TRANSMIT if someone is talking on the channel. Press and hold the button to TRANSMIT. The TX icon is displayed. Hold the unit in a vertical position with the MICROPHONE 2 to 3 inches from the mouth.
2. While holding the button, speak into the unit using a normal tone of voice.
3. Release the 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.

**Changing CHANNELS**

The COMMUNICATOR has 14 available channels. To change channels, in NORMAL mode:

- 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.

**NOTE:** Refer to the "Channel Table" section of this Owner's Manual for detailed frequency listings.

**MONITOR**

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

- Press the MONITOR button for normal monitoring.

**MODE Button (Function Editing)**

1. Depress the button momentarily;
- Press the button briefly to enter into the function edit modes in due order. CTCSS / LOCK / VOX / Function Selection mode.

**NOTE:** In the current function edit mode, press the button to return to the NORMAL mode after making your selection. In the function edit mode, press the button again to shift from the current option in each submenu to the next option.

2. Depress the button for 2 (two) seconds;
- Press and hold the button to activate the CHANNEL SCAN mode.

**Changing CTCSS SUB-CHANNELS**

The COMMUNICATOR has 38 available CTCSS sub-channels. To change channels:

1. Press the button once, the CTCSS function mode is displayed on the LCD Screen and the sub-channel OF(F) (0) will flash.
2. While the sub-channel is flashing;
  - Press the UP button to move to a higher sub-channel.
  - Press the DOWN button to move to a lower sub-channel.
  - The sub-channel changes from OF(F) (0) to 38, or from 38 to OF(F) (0).

- Press the **[ENTER]** button to confirm your selection and return to the NORMAL mode. Press the **[F1]** button to shift to the next option.

**NOTE:** To communicate with other FRS units, both units must be switched to the same channel and CTCSS sub-channel.

## LOCK Function

- Press the **[ENTER]** button twice, the LOCK function mode icon is displayed on the LCD Screen and the LOCK key icon will flash.
- Press the UP **[↑]** / DOWN **[↓]** button while the CTCSS sub-channel icon is displaying ON/OFF(F) and the LOCK key icon is flashing on the LCD Screen.
- If you select OFF(F), the unit will be in the UNLOCK mode.
- If you select ON, the unit will be in the LOCK mode. (Main channel/ CTCSS channel selection, VOX are now accessible.) And the LOCK key icon will be displayed on the LCD Screen etc.
- To confirm your selection and return to the NORMAL mode, press the **[ENTER]** button.
- To confirm and shift to the next option, press the **[F1]** button.

## VOX Selection

- Press the **[ENTER]** button thrice, the VOX function mode icon is displayed on the LCD Screen and the VX icon will flash.
- Press the UP **[↑]** / DOWN **[↓]** button while the CTCSS sub-channel icon is displaying ON/OFF(F) and the VX icon is flashing.
- To turn off the VOX feature, select OFF(F).
- In the VOX mode, the VX icon will be displayed on the LCD Screen.
- To confirm your selection and return to the NORMAL mode, press the **[ENTER]** button.
- To confirm and shift to the next option, press the **[F1]** button.

# Specifications

Channels Available	14 Channels
CTCSS Sub-channel	38 for each Channels
Output Power (TX)	0.5W (FCC Maximum)
Battery Life	21 Hours (typical)
Range	About 2 Miles

**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

**NOTE:** The maximum transmission range will vary depending on terrain and environment.

## CHANNEL SCAN

CHANNEL SCAN performs searches for active signals in an endless loop from 1 to 14 or from 14 to 1.

- At NORMAL mode, press the **[ENTER]** button for longer than 1 second to activate the CHANNEL SCAN. This feature allows you to scan for an active channel and communicate with the transmitting party.
- In using the SCAN mode, the SC icon blinks on the LCD Screen. Press the **[ENTER]** or the **[F1]** button to stop the SCAN function and return to the home channel.
- The unit will begin scanning for an active main channel and CTCSS sub-channel. If active channel is detected, the RX icon will appear and the scanned main/CTCSS sub-channel number will be displayed on the LCD Screen.
- If there is no transmission for over 5 seconds from the active main scanned channel, the unit will continue to search for another active channel.
- When receiving a transmission, you can restart the SCAN function by pressing the UP **[↑]** / DOWN **[↓]** button.

## Sending Call Tones

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

- Press and hold the **[ENTER]** button.
- Release the **[ENTER]** button. Your Call Tones will transmit to nearby receivers set to the same channel.

# Specifications

**SUB-CHANNEL TABLE**

CTCSS Channel	Freq (Hz)	CTCSS Channel	Freq (Hz)	CTCSS Channel	Freq (Hz)
1	67.0	14	107.2	27	167.9
2	71.9	15	110.9	28	173.8
3	74.4	16	114.8	29	179.9
4	77.0	17	118.8	30	186.2
5	79.7	18	123.0	31	192.8
6	82.5	19	127.3	32	203.5
7	85.4	20	131.8	33	210.7
8	88.5	21	136.5	34	218.1
9	91.5	22	141.3	35	225.7
10	94.8	23	146.2	36	233.6
11	97.4	24	151.4	37	241.8
12	100.0	25	156.7	38	250.3
13	103.5	26	162.2	00	No Tone

SYMPTOM	SOLUTION
<b>No power.</b>	<ul style="list-style-type: none"> <li>• Check batteries. Ensure that the batteries are installed properly.</li> <li>• The batteries may be weak.</li> <li>• Replace old batteries with four (4) new 'AAA' alkaline or Ni-MH rechargeable batteries.</li> </ul>
<b>Reception is weak.</b>	<ul style="list-style-type: none"> <li>• Rotate the ON/OFF/VOLUME CONTROL in a counterclockwise direction to increase VOLUME.</li> <li>• The receiving signal may be weak and/or out of range.</li> <li>• If this happens press the MONITOR button.</li> </ul>
<b>Cannot change CTCSS sub-channels.</b>	<ul style="list-style-type: none"> <li>• To change CTCSS sub-channels, press the button until the CTCSS sub-channel number flashes on the LCD Screen.</li> <li>• Press the UP or DOWN buttons to change the CTCSS sub-channels.</li> <li>• Batteries may be weak.</li> </ul>
<b>Range is limited.</b>	<ul style="list-style-type: none"> <li>• Batteries may be weak.</li> <li>• Replace with new batteries if the BATTERY CHARGE LEVEL indicator is low.</li> <li>• The maximum range will vary depending on terrain and environment.</li> <li>• Open fields provide the maximum range, while steel/concrete structures, heavy foliage and use in buildings and in vehicles may limit the range significantly.</li> <li>• 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.</li> </ul>
<b>Sound distortion problems.</b>	<ul style="list-style-type: none"> <li>• If you are transmitting, speak in a normal tone of voice, 2 to 3 inches away from the MICROPHONE.</li> <li>• If you are receiving, lower the VOLUME to a comfortable level.</li> <li>• Radios too close. Radios must be at least 5 feet apart; increase your distance.</li> <li>• Radios too far apart. Obstacles interfere with transmission. Talk range is up to 2 miles in clear unobstructed conditions.</li> </ul>

## Warranty Information

### 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.

# 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.

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

# Warranty

## 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