# **GMRS1535A Users Manual**

# **Model GMRS-1535AA (FCC License Required)**

#### Model GMRS-1535A DISPLAY

- **1. Beep Tone Indicator:** Icon appears when beep button confirmation tone is selected; icon disappears when tone is off.
- **2. Key Lock Indicator:** Icon appears when the keypad is locked. This function disables keys such as channel up/down and MODE.
- **3. Monitor Indicator:** Icon appears when the Monitor **(M)** button is pressed and the channel monitor function is activated.
- **4 Signal Strength Indicator:** Icon appears when a signal is being received. The icon consists of five bars to indicate the received signal level. The icon also represents transmit signal power during transmission.
- **5. Coded Tone Controlled Squelch System (CTC) Indicator:** Icon appears when the CTCSS tone function is active.
- 6. Large Segment Display: Indicates the channel number in use.
- **7. Scan Indicator:** This function allows the user to scan a channel and/or a tone code 5 second to search for a valid signal.
- **8. Emergency Indicator: EMG** Icon appears when the EMG button is pressed. (The frequency is NOT monitored by authorities).
- **9. Battery Level Indicator:** Icon indicates the battery charge level.
- **10.***Hi/LO* **Indicators**: Appropriate icon appears when the transmit power is set to desired output power.
- **11. Weather Mode Indicator:** Icon will be on steady when in the weather band mode. The icon will blink when in the GMRS mode with the alert active.
- **12.** RogerBeep Tone On/Off Indicator: This icon appears when the Roger Beep tone is on, and disappears when tone is not in use.

- **13. Small Segment Display:** Displays the CTGSS tone option in the channel from (00-38).
- **14. Dual Watch Mode Indicator:** Icon appears when dual watch mode is active.
- **15. Voice Activated Transmission (VOX) Indicator:** This function allows hands free conversation. The icon appears when the VOX mode is activated.

# Powering the transceiver:

Your GMRS-1 535A radio transceiver operates on four AAA batteries. Alkaline batteries will provide slightly better performance than rechargeable batteries. Only Audiovox approved rechargeable batteries can be recharged in the radio transceiver using the optional charging stand.

#### Installing the batteries:

Battery installation is made more convenient when the belt clip is removed. To do this, release the spring clip securing the belt clip to radio and slide the belt clip downward and away from the radio body. Next, press down with the thumb at the arrow, slide the battery cover down and lift off the battery cover. Insert four AAA batteries (alternate positive ends (+) toward the bottom of the transceiver, (starting left-to-right).

- 1. Using thumb, press down on battery cover at arrow and slide cover down to open.
- 2. Slide the cover down and then lift cover at bottom to open. Remove cover.
- 3. Insert four AAA batteries (positive (+) end toward the bottom begining at left side and alternating positive terminals as shown), or insert the rechargeable batteries.

The following guidelines will improve performance and provide longer operating times for the GMRS-1535A:

- 1. Do not mix old and new batteries.
- 2. The use of alkaline-type batteries is recommended to provide the longest operating time.
  - 3. Do not mix alkaline, standard (carbon-zinc) or rechargeable batteries.
  - 4. If the unit is not to be used for an extended period of time, remove the batteries. Old or leaking batteries can cause damage to the unit and will void the warranty.

#### **GMRS-1535A OPERATIONAL MODES**

#### NOTE:

To switch between GMRS and Weather Band modes, press and hold the Mode button for 2 seconds. To differentiate between operating modes, look for HI or LO indication below the battery power level indicator when in GMRS mode. In Weather Band mode, these indications are not present. Refer to the appropriate section of this manual for detailed operating instructions for each mode. When in GMRS standby mode, the transmit/receive indicator will flash once every S seconds as the unit checks for transmissions

## **Controls:**

#### Power On/Off (15) Button

Press and hold the power on/off button ( ) for at least 2 seconds. You will hear a confirming melody to indicate the unit is on. To turn the unit off, press and hold the button for at least 2 seconds.

#### **Adjusting the Volume**

With the unit powered on, press the Up Channel/Volume button ( $\blacktriangle$ ) to increase volume and the Down Channel/Volume button ( $\blacktriangledown$ ) to decrease volume. The display will indicate the current volume level by the small number in the icon ( )

## **Monitor/Display Backlight Button (2)**

This button is used to check activity on the current frequency before transmitting. Check activity by pressing the Monitor (M) Button longer than 2 seconds; the ◀ icon will apppear on the display and you will hear static if frequency is clear.

#### Do not transmit if you hear conversation.

Hold down the Monitor Button again longer than 2 seconds and the ◀ icon will disapppear from the display.

The monitor function will temporarily bypass the squelch setting and play all signals on a given channel. This feature is useful when communicating with other parties at extreme range.

By pressing the monitor button momentarily, the LCD backlight is turned on; the LCD backlight will turn off automatically in about 5 seconds, or when the monitor button is pressed momentarily once again.

## Push To Talk (PTT) Button (4)

Pressing and holding this button will allow you to speak to any transceiver that is set to the same channel and privacy code setting as yours. Hold the transceiver approximately 1 to 2 inches from your face as you speak into the built in microphone (9). After you have finished speaking, release the PIT Button to allow reception of incoming signals. It is not possible to transmit and receive at the same time. The Transmit/Monitor LED at the upper right corner of the LCD Panel (8) will light **red** while the PTT Button is pressed and the signal indicator will display the relative strength of the transmitted signal. Releasing the button allows the unit to revert to standby mode. When receiving an

incoming signal, the Transmit/Monitor LED indicator will light *green* and the received signal strength indicator ( ) will display the relative strenth of the signal. The PTT Button can also be used as a two-way call ringer Pressing the button twice quickly will call another party on the same channel. The Transmit LED will light *red* for approximately 3 seconds and then go out.

#### **Up Channel/Volume Button (10)**

In the standby mode, pressing this button will increment the listening volume. When in function edit mode this button will be used to adjust the unit's settings.

#### **Down Channel/Volume Button (11)**

In the standby mode, pressing this button will decrement the listening volume. When in function edit mode this button will be used to adjust the unit's settings.

## Mode Button (12)

This button is used to select various feature settings in the GMRS or weather band mode. Holding the MODE button longer than 2 seconds will toggle between the GMRS and weather band modes.

#### **Emergency (EMO) Call Button Button (14)**

This radio has a quick access button (EMO) to the Emergency and Assistance Channel. This channel is not monitored by local authorities. When using this channel, *EMG* appears on the display. Pressing this button will set the transceiver to the channel 10, 462.6750 MHZ).

# External Speaker (SPK)/Microphone (MIC) Jacks (6)

This set of jacks accepts an Audiovox headset/microphone connector for total hands-free operation.

#### Scan/Lock Button (13)

Press this Button momentarily to enable or disable the scan mode. Press and hold Button for more than 1 second to lock or unlock the key pad, except PU and Monitor (M). When the keypad the ( ) icon will display in the top right corner.

# **Operating Mode and Features**

#### **GRMS Operation**

- From GMRS standby mode, press and hold the (~) button for 2 seconds to turn on power.
- Press the MODE button so the Channel number flashes.
- Select the desired channel with the Up (10) and Down (11) Buttons. When receiving a call, the
  - signal strength meter appears to indicate incoming received signal strength and the Monitor
  - section of the Transmit/Monitor LED (16) lights green.
- Press and hold the PU button (4) to transmit, then speak into the microphone clearly and slowly. The Transmit section of the Transmit/Monitor LED (16) lights *red*.
- Release PTT Button (4) to receive.
- Communication can only be accomplished when the channel and CTCSS tone frequency of at least two parties are the same.
- The **CTC** icon will be displayed on the LCD panel if the CTCSS tone frequency function is enabled.

#### **Channel Selection**

In order to communicate with other GMRS units, both transmitting and receiving party must be on the same frequency.

The GMRS-1535A has 15 channels (frequencies) (1-15) indicated by the large digits on the LCD display panel. Channels 1 through 7 are the same frequency as FRS channels 1 through 7. Communication with Audiovox FRS and compatible units is possible on these seven channels. Before transmitting on the selected channel, press the Monitor (M) Button (2) to check the activity on that channel. It there is activity on the selected channel, change to another channel that is clear.

To change the channel,

- From GMRS standby mode, press the MODE button (12) until the channel number flashes.
- Press the Up Button (10) briefly to move to the next higher main channel number.
- Press the Down Button (11) briefly to move to the next lower main channel number.

#### **CTCSS Mode (Sub-Channel) Selection**

Coded Tone Controlled Squelch System (CTCSS) with 38 Sub-Frequencies. This feature allows you to utilize the coded squelch tones (00-38) within a main channel. This enables you to communicate with another party on the same main channel using the same subcode. (This filters out unwanted transmissions without the same coded squelch tone). There are 38 CTCSS Sub-channels for each main channel. A different subcode may be selected for each of the 15 channels.

To change the CTCSS Sub-channel.

- From GMRS standby mode, press the Mode Button twice; a flashing **oF** or sub-channel

number is displayed. If **oF** is displayed, press the Up or Down button to enable the CTCSS mode; the **CTC** icon will appear steady on the display with the flashing

sub-channel number.

- Then press the Up or Down button to select the desired sub-channel for use.
- Press the Power On/Oft button momentarily to confirm selection.

The CTCSS mode can be turned off by selecting the **oF** icon as the setting.

#### NOTE:

To communicate with other GMRS units, they must be switched to the same channel and CTCSS subcode. To communicate with other GMRS units that do not have subcodes, switch your unit to the same channel with the subcode set to of. The OTOSS subcodes do not prevent others from hearing your transmission. This will only allow you to ignore all traffic on a given channel not using the same subcode.

#### **VOX Selection Mode**

This option enables you to have hands-free conversation. Your voice or nearby sound is detected and the radio transmits without the need to press the PTT button. To set radio for VOX operation,

- From GMRS standby mode, press the MODE button until the VOX icon flashes on the display.
- Press the Up or Down button to select VOX On (if oF appears flashing) and the 1-5 VOX level sensitivity.
- Momentarily press the Power On/Oft button to confirm the VOX selection.
- The **VOX** icon will appear steady on the LCD display.

VOX can be turned off by selecting **oF** as the setting.

#### **Channel Scan Operation**

This feature allows you to monitor all channels automatically for valid signals. While scanning, you can transmit and receive. When a signal is received, the scan is interrupted and will return to scan mode S seconds after reception is terminated. NOTE:

While the scan function is active, the MODE button will be inoperative. The scan mode will reduce the overall battery life due to the battery save function is overridden. To enable the channel scan mode.

- From GMRS standby mode, momentarily press the SCAN Button; (SCAN) will appear on the LCD display.
- The radio will display each channel (1-15) with CTCSS code number in order as the scan mode operates to find an active main channel.
- -When unit doesn't find any signals and you want to transmit, press the PTT switch to return to seconds after the communication is completed.
- If there is no activity and you want to leave the scan mode, press the SCAN button momentarily and the unit will return to normal operation; (SCAN) icon will disappear from the LCD display.

#### **Dual Watch Mode**

This feature allows you to monitor two channels at the same time. While in dual watch mode, the unit will continuously monitor both the primary and dual watch channel. Received signals will be played for S seconds, then the unit will resume scanning the two channels. Pressing the PH button during a received transmission will set the unit to transmit on the same channel. Pressing the PH button when no signal is received will set the unit to transmit on the primary channel.

To set the Dual Watch Mode:

- From GMRS standby mode, press the MODE button 5 times; the DW icon flashes on the display. If the dual watch mode is off, the **oF** icon will also appear flashing.
- To enable the dual watch mode, press the Up or Down button; the dual watch channel number will flash and start to increment up or down as the Up or Down button is pressed.
- Press the MODE button again to select the CTCSS function and select the CTCSS code if desired for the dual watch channel just selected.
- Press the Power On/Off button to confirm selection of the dual watch channel. The display

will now alternate between the primary channel and the dual watch channel just selected.

Momentarily press the SCAN button to exit the dual watch mode.

#### **Key Tone**

This feature allows the transceiver to sound a confirmation tone whenever the following keys are pressed: Monitor (M) Button, Up/Down Buttons, MODE Button, SCAN Button, or the EMO Button.

To turn the key tones on or oft,

- From GMRS standby mode, press the MODE Button six times until **bp**, the Bell ( ) icon, and **On** or **oF** flash on the LOD display.
- Press the Up or Down Button to toggle the key tone feature On or Off.
- Press the Power On/Off button momentarily to confirm selection. When the key tone feature is on, the Bell icon appears steady on the display, and the beep tones sound in response to button activation.

#### **Transmit Power Selection Mode**

This feature permits selection of the transmitting power level to high (1.8 watts)or low (0.5 watt). Using low power the unit will have a lower transmit range but battery life will be increased.

To access the transmitter power selection function:

- From GMRS standby mode, press the MODE Button until the **Po** icon appears with a flashing **HI** or **Lo** indication on the display.
- Press the Up or Down button to toggle between the High and Low selections.
- Press the Power On/Oft button momentarily to confirm selection. The display will indicate the current setting in standby mode.

#### **Roger Beep Tone**

The Roger Beep is a tone which is automatically transmitted whenever the PTT button is released. This tone alerts the receiving party that the transmission has been terminated intentionally.

To enable and disable the Roger Beep tone:

- From GMRS standby mode, press the MODE Button 7 times until **rb** appears on the display with the flashing Roger Beep icon (♪ ) and On or **oF**.
- Press the Up or Down Button to select the tone on or off as desired. When enabled, the tone icon ( ♪ )appears steady on the display.
- Press the Power On/Oft button momentarily to confirm selection.

#### **Call Ringer Selection Mode**

The transceiver provides 5 user-selectable call ringer melodies to alert you to an incoming call.

Jo select your favorite call ringer melody:

- From GMRS standby mode, press the MODE button 8 times; **CA** will appear on the display, together with a flashing number be tween **1** and **5**, and an appropriate call ring.
- Press the Up or Down Button to preview and hear the 5 available call melodies.
  - Press the Power On/Off button momentarily to confirm selection.

Refer to the PU button (4) to transmit ring signal.

#### **Auto Key Lock Selection Mode**

This feature prevents accidental channel change to the preferred settings of the unit. The Auto key Lock function temporarily disables the Up, Down and Mode Buttons. To access the Auto Key Lock selection menu:,

- From GMRS standby mode, press and hold the Scan Button for over 2 seconds to Lock the Auto Key function; the ( ) icon appears on the display.
- The PTT and Monitor Buttons are not effected.
- To unlock the Auto key function press and hold the SCAN button for at least 2 seconds; the icon ( ) disappears from the display.

#### **Emergency and Assistance Channel Mode**

This radio has a quick access button (EMG) to the Emergency and Assistance Channel. This channel is not monitored by local authorities. When using this channel, **EMG** appears on the display. Pressing this button will set the transceiver to the channel 10, 462~6750 MHz). The Emergency Channel can be used transmit and receive on a special frequency (CH10: 462.6750 MHz).

The Emergency Channel can be selected quickly from any user mode. To access the Emergency Channel mode,

- Press Emergency (EMG) Button; **EMG** and Channel **10** appears on the display
- To turn off the Emergency Channel feature, press and release the EMG Button.

# Weather Band Operation

#### **Channel Selection**

This feature provides access to 10 channels within the weather band (7 NOAA channels and 3 Canadian marine channels. To select a weather channel, the unit must be in the weather channel mode. Press and hold the MODE button for at least 2 seconds; the weather alert icon ( ) will appear, together with a channel number in the band. Press the MODE button (12) until the channel number flashes.

To change the channel,

- Press the Up Button (10) briefly to move to the next higher main channel number.
- Press the Down Button (11) briefly to move to the next lower main channel number.

#### **Weather Alert Mode**

The weather alert mode notifies the user of unusual weather situations.

To access the weather alert function:

- From Weather Band standby mode, press the MODE button once to access the weather channels and use the Up or Down
- Button to select the desired channel.
- Press the MODE button again to access the weather alert function; weather icon ( ) and

**AL On** or **oF** appear flashing on the displad

- Use the Up or Down buttons to enable (**On**)/disable (**oF**) the alert function. The weather icon will stop blinking on the display when the alert is disabled.
- Press the PTT Button to confirm your selection.
- Press and hold the MODE button for at least 2 seconds to exit the weather function.

Whether the unit is in GMRS or weather band mode, if a weather alert signal is received, the unit will generate a warning tone. To silence the warning tone, press any key except the PTT button. The unit will then revert to a previously selected weather channel and the weather alert will be heard.

#### **Key Tone**

This feature allows the transceiver to sound a tone whenever the following keys are pressed: Monitor (M) Button, Up/Down Buttons, MODE Button, SCAN Button, or the EMG Button.

To turn the key tones on or oft,

- From Weather Band standby mode, press the MODE button three times until **bp**, the Bell ( ) icon, and **On** or **oF** flash on the LCD display.
- Press the Up or Down Button to toggle the key tone feature On or Off.
- Press the Power On/Off button momentarily to confirm selection.
  When the key tone feature is on, the Bell icon appears steady on the display and the beep tones sound in response to button activation.

# **Battery Alert**

When the battery icon ( ) blinks on the LCD panel, recharge unit or install fresh batteries. If the batteries are not replaced the ( ) icon will appear and an audio tone will sound to warn the user that the batteries must be replaced.

#### **Batteries**

There are two methods of powering the GMRS-1535A:

- 1. Alkaline Batteries (4 x AAA size)
- 2. Rechargeable Ni-MH Batteries (Rechargeable Ni-MH batteries and Charging Stand not included). Use only Audiovox approved rechargable batteries.

**NOTE:** To extend battery life, avoid overcharging the batteries.

#### NOTES FOR GOOD COMMUNICATION

- 1. The GMRS-1535A 15 channels are shared on a 'take turns' basis. This means other groups may be talking on any of the channels. A common code of ethics/courtesy is to switch to another vacant channel and not to attempt to talk over someone who is already using the channel you first selected.
- 2. The GMRS-1535A has been designed to maximize performance and improve transmission range in the field. To avoid interference, it is recommended that you do not use the units closer than 5 feet apart.
- 3. For best transmission results, always keep your mouth about 2-3 inches from the microphone (9) and speak slowly in a normal voice.
- 4. To increase battery life, avoid features such as Scan, Dual Watch and Weather Alert. These features will reduce operating time considerably.

#### Warning

- Do not operate the transceiver unless you are licensed to do so.
- Remove the batteries from the transceiver if it is not expected to be used for long periods. This will eliminate the possibility of chemicals leaking from the batteries and corroding the transceiver.
- Avoid exposing the transceiver to water or extremes of temperature.
- Do not use this device in or near a mining facility, which uses remotely triggered explosives or in areas labeled "Blasting Area". Premature or accidental detonation may result.
- Do not attempt to modify or in any way increase the output of this transceiver Its output is designed to meet the legal limits set by the FCC.
- Do not use this device or change its batteries in potentially explosive atmospheres as sparks in such areas could result in an explosion. Turn your transceiver off wherever posted notices restrict the use of radios or cellular telephones. Facilities such as hospitals may use equipment that is sensitive to RF energy.
- Turn your transceiver off on board aircraft when requested to do so.
- Do not place your radio in front of a vehicle's air-bag. It the air-bag deploys, it could propel the transceiver like a projectile causing bodily injury.

# **Troubleshooting**

Problem	Possible cause	Correction
No transmission while	Weak batteries	Charge or replace batteries
pressing the PU Button	Incorrect battery polarity	Install the batteries
		following the directions in
		paragraph Installing the
		Batteries.
Weak or no signal received	Weak batteries	Charge or replace batteries
	Channel and privacy	Adjust the transceiver's
	Code not set the same as	Settings to match those
	target transceiver	Settings of the target
		transceiver
	Volume level too low	Increase volume level
	PTT Button inadvertently	Release PTT Button
	Depressed	
	Excessive radio	Change to a different
	interference on a particular	channel
	channel	Avoid operating in or near
	Obstruction of radio signal	large buildings or vehicles
Unit beeps, but will not	Batteries extremely	Charge or replace batteries
function when turned on	discharged	T
Reception of unwanted	CTCSS privacy mode not	Turn on the CTCSS privacy
signals	on	Mode and set code number
		to
		Match the setting of the
		target
	Lata of a same a finance	transceiver.
	Interference from	Turn the devices off or
	electronic	move father away from
	devices such as computers or TVs	them.
	ULIVS	

# **Technical Specifications:**

#### General

Frequency Range GMRS (1g Channels)

Channel Spacing

Weather Band (7 Channels)

Canadian Maritime (3 Channels)

Privacy Codes38

Dimensions (W x H x D) (Without Antenna)

462.5500 - 462.7250 MHz

12.5kHz

162.4000 - 162.5500 MHz

161.6500,161.7750, 163.2750 MHz

for each main channel 2.l0in x 3.86in x l.l0in 53.4mm x 98mm x28 mm

Power Supply]

Power Source

Operating Time

(Transmit; Receive: Standby)

(5: 5: 90 ratio)

(Based on alkaline batteries)

Alkaline Batteries, AAA (4), 6 VDC Ni-MH rechargeable, AAA (4),

4.8VDC, 650 mAh 30 hours Low Power 14 hours High Power

Receiver

**Useable Sensitivity** 

Maximum Audio Output Power

**Modulation Distortion** 

> -119dBm

> 0.3 Watt maximum (8 Ohm)

< 5%(1 kHz70%)

**Transmitter** 

**RF Output Power** 

1.8 Watt maximum (high power) 0.5 Watt maximum (low power)

Maximum Deviation

Modulation Distortion

+/- 2.5 kHz

<5%(1 kHz 70%)

This transceiver complies with FCC regulations for use in the United States of America. Use in other countries may be prohibited or restricted by local regulation. Please check with the local regulating agency before using this device outside the United States of America.

# **Weather Channel Frequencies:**

Channel	Freq. MHz	Channel	Freq. MHz
1	162.550	6	162.500
2	162.400	7	162.525
3	162.475	8	161.650
4	162.425	9	161.775
5	162.450	10	163.275

# **Main Channel Frequencies:**

Channel	Freq. MHz	Channel	Freq. MHz
1	462.5625	9	462.6250
2	462.5875	10	462.6750
3	462.6125	11	462.5500
4	462.6375	12	462.6000
5	462.6625	13	462.6500
6	462.6875	14	462.7000
7	462.7125	15	462.7250
8	462.5750		

**NOTE**: Channels 1 through 7 are shared with FRS radios.

# Continuous Tone Coded Squelch System Tone Frequencies (in Hz)

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

<sup>\*</sup>**oF** =No Tone

# **FCC License required**

This Transceiver is intended for use in the operation of commercial activities.

The Federal Communications commission (FCC) requires you to be licensed before you operate this transceiver. Unless you are already licensed to operate on one of the preset fequencies, you must apply for a frequency through the PCIA (Personal Communication Indust ry Association), a non-profit organization that assigns frequencies nationwide to help prevent conflicts between different businesses using transceivers in the same area. For more information about getting a license, contact the PCIA at 800-759-0300, extension 3068 (in Virginia 703-739-0300, extension 3068)

For other questions concerning the license application, contact the FCC at 717-337-1212, or wirte:

# FCC P.O.Box 1040 Gettysburg, PA 17325

For the latest FCC application form and instructions, call the FCC's fax-on-demand service at 1-202-418-0177 from a fax machine and request one or more of the following document s:

All forms and instructions	000600
Form 600 instructions only	006001
Main Form 600 only	006002
Form 600 schedules only	006003

If you do not have a fax machine, you can call the Government Forms Distribution Center at 1-800-418-FORM and request that the form and instructions be mailed to you.

#### FCC Part 95 Rules

You must be familiar with Part 95 of FCC Rules before you operate your transceiver. The operation instructions in this manual conform to Part 95, but do not cover all items in Part 95

Overall, Part 95 states that:

- ! You must have a valid license before you use the transceiver.
- ! As licensee, you are responsible for proper operation of all transceivers operating under y our license's authority.
- ! You can let unlicensed persons operate transmitter, as long as you take precautions to pr event unauthorized transmissions.
- ! You must use this transceiver only for commercial use of your business, and only when o

ther commercial channels (such as the telephone) are either not available or not practical.

- ! You must always yield the operating frequency to communications that involve the safety of life or property.
- ! You must take reasonable precautions to prevent harmful interference to other services o perating on the same frequency.
- ! You must not transmit program material of any kind used in connection with commercial b roadcasting.
- ! You must not provide a service that is normally handles by telephone or telegraph unless such broadcasts involve the safety of life and property or in emergencies such as an eart hquake, hurricane, flood or a similar disaster where normal communications channels are d isrupted.
- ! During each transmissions or exchange of transmissions, you must identify your station wi th the call sign issued to you by the FCC, or once each 15 minutes during periods of conti nuous operation.
- ! You must keep a written record of any maintenance or modifications made to the transceiver, and you must make this record available for inspection upon demand by the FCC.

Violating any of the provisions of Part 95 can result in fines and/or confiscation of equipme nt.

Your transceiver might cause TV or Radio interference even when it is operating properly. To determine whether your transceiver is causing the interference, turn off your transceiver. If the interference goes away, your transceiver us causing it. Try to eliminate the interference by:

- ! Moving your transceiver away from the receiver
- ! Contacting your local authorized dealer for help

If you cannot eliminate the interference, the FCC requires that you stop using your transceiver.

Before you operate the transceiver, you must obtain your license. It is illegal to transmit wit hout the appropriate license, which you can get by submitting a completed FCC Form 600 to the FCC (or through the PCIA). Furthermore, your are required to understand Part 95 of the FCC Rules and Regulations prior to operating your transceiver. It is the user's respon sibility to see that this unit is operating at all times in accordance with the FCC Rules and Regulations.

#### **Safety Information**

Your Handheld Radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as "Occupational Use Only", meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards. This radio is NOT intended for use by the "General Population" in an uncontrolled environment.

This radio has been tested and complies with the FCC RF exposure limits for "Occupational Use O nly." In addition, your Handheld radio complies with the following Standards and Guidelines with re gard to RF energy and electromagnetic

energy levels and evaluation of such levels for exposure to humans:

- FCC OET Bulletin 65 Edition 01-01 Supplement C, Evaluating Compliance with FCC Guidelines f or Human Exposure to Radio Frequency Electromagnetic Fields.
- American National Standards Institute (ANSI) (C95.1 1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- American National Standards Institute (C95.3 1999), IEEE Recommended Practice for the Measur ements of Potentially Hazardous Electromagnetic Fields — RF and Microwave.

To ensure that your exposure to RF electromagnetic energy is within the FCC allowable limits for occupational use, always adhere to the following guidelines:

**DO NOT** operate the radio without a proper antenna attached, as this may damage the radio and m ay also cause you to exceed FCC RF exposure limits. A proper antenna is the antenna supplied with the radio by the manufacturer or an antenna specifically authorized by the manufacturer for use with this radio.

For body worn operation, this handheld radio has been tested and meets the FCC RF exposure guid elines when used with the TTI or authorized OEM dealers accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guideline.

To provide the recipients of your transmission the best sound quality, hold the antenna at least 2.5 c m (1 inch) from your mouth.

**USE ONLY** authorized accessories (speaker/microphones, handstraps, etc.) with your radio. Use of u nauthorized accessories can cause the FCC RF exposure compliance requirements to be exceeded.

The information listed above provides the user with the information needed to make him or h er aware of RF exposure, and what to do to assure that this radio operates within the FCC RF exposure limits of the radio.

#### ELECTROMAGNETIC INTERFERENCE/COMPATIBILITY

During transmissions, your handheld radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs ar e posted to do so.

DO NOT operate the transmitter in areas sensitive to electromagnetic radiation, such as hospitals, aircraft, and blasting sites.

#### **CAUTIONS:**

- NEVER hold the transceiver so that the antenna is very close to, or touching exposed parts of the body while transmitting. The transceiver will perform best if the microphone is 2.5–5 cm (1 to 2 i nches) away from the mouth and the transceiver is vertical.
- For body worn operation, this handheld radio has been tested and meets the FCC RF exposure gui delines when used with the TTI or authorized OEM dealers accessories supplied or designated for th is product. Use of other accessories may not ensure compliance with FCC RF exposure guideline.
- DO NOT push the PTT when not actually desiring to transmit.