

Color profile: Disabled
Composite

Musical

22 CHANNEL 2 WAY GMRS

MODEL : GMRS1100B

Instruction manual

Please read and follow this instruction manual carefully
before using the unit and retain it for future reference

05 SEP 2002

SAFETY INFORMATION

Your wireless handheld portable transceiver contains a low power transmitter. When the Push-to-talk (PTT) button is pushed it sends out radio frequency (RF) signals.

This device is authorized to operate at a duty factor not to exceed 50%. In August 1996, the Federal Communications Commission (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices.

WARNING : Adjustment to this unit or replacement of any transmitter component (crystal, semiconductor, etc.) to this unit could result in a violation of the rules.

NOTE : 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 a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that 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 try 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 into 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.

IMPORTANT - FCC LICENSING INFORMATION

This radio operates on General Mobile Radio Service (GMRS) frequencies and is subject to the Rules of the Federal Communications Commission (FCC). The FCC requires the issuance of a radio license before operating on GMRS frequencies.

Instructions on applying for the license are included in the User's Guide. For more GMRS information, see <http://www.fcc.gov/wtb/prs/genmb.html>

Violations of FCC rules and unlicensed operation on GMRS frequencies may subject the radio operator to serious penalties as provided in Sections 501 and 502 of the Communications Act, as amended. When operating on Channels 1 -7 or 15 -22, this radio is using GMRS frequencies. In addition to having a license before using these channels, every GMRS user must cooperate in sharing channels with other GMRS users by monitoring the channel before initiating transmissions, waiting until communications in progress are completed before initiating transmissions except in an emergency, engaging in only permissible communications, limiting transmissions to the minimum practical transmission time, and using the call sign issued by the FCC for station identification.

GMRS LICENSE:

USE OF THIS RADIO WITHIN THE UNITED STATES REQUIRES AN FCC GMRS LICENSE. AN INDIVIDUAL, 18 YEARS OF AGE OR OLDER, WHO IS NOT A REPRESENTATIVE OF A FOREIGN GOVERNMENT, IS ELIGIBLE TO APPLY FOR A GMRS SYSTEM LICENSE. YOU WILL NEED TWO FORMS FROM THE FCC; FCC FORM 159 AND FCC FORM 605 MAIN FORM AND SCHEDULE F. YOU CAN FIND THE FORMS ONLINE AT: [HTTP://WWW.FCC.GOV/FORMPAGE.HTML](http://www.fcc.gov/formpage.html), OR CALL 1-800-418-3676.

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PRECAUTIONS DURING OPERATION

WARNING

- Never apply any DC power to battery terminals.
- Do not attempt to charge any non-rechargeable batteries.
- Do not attempt to open the unit case.
- No user serviceable parts inside.
- Refer servicing to qualified service personnel.
- Do not modify or attempt to adjust the transceiver for any reason.
- Avoid extremes in exposure to water, heat, and cold. This transceiver is weather resistant but not waterproof.
- Do not expose the transceiver to long periods of direct sunlight, nor place the transceiver close to heating appliances.
- Do not place the transceiver in excessively dusty areas, humid areas, wet areas, nor on unstable surfaces.
- If smoke is detected coming from the transceiver, immediately switch OFF the power and remove the batteries from the transceiver. Contact your dealer.

CAUTION

- Use Batteries only for the power of the unit, Alkaline or Rechargeable batteries.
- To maintain compliance with the FCC's RF exposure guidelines, hold the transmitter and antenna at least 2 inch (5 centimeters) 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 manufacturer's supplied belt clip for this product and ensure that the antenna is at least 1/2 inch from your body when transmitting.
- Use only the supplied antenna. Unauthorized antennas, modifications, or attachments could damage the transmitter and may violate FCC regulations.

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FEATURES

- Up to 5 mile range
- Total 22 Channels
 1. 21 Main Channels with 38 CTCSS Sub-channels
 2. 1 Emergency Channel
- Built-in VOX Function with adjustable Mic sensitivity
- Time-Out-Timer (Transmitter operation timer)
- Auto channel Scan
- Channel Memory Presets
- Multi-function Back-lit LCD Display
- Talk Confirmation Tone and Call / Ring Button
- Detachable Belt Clip
- Auto Battery Saver
- External Microphone Speaker Jacks

UNPACKING

Carefully unpack the transceiver. We recommend that you identify the items listed below before discarding the packing material.

- Transceiver x1
- Detachable Belt Clip x1
- Instruction Manual x1

SPECIFICATION

Frequency Range

Our 22 Channel GMRS unit represents one of the most advanced FM two-way radios used with the following UHF frequencies.

Main Channels

Channel	Frequency	Transmission Power
1	462.5625 MHz	2W
2	462.5875 MHz	2W
3	462.6125 MHz	2W
4	462.6375 MHz	2W
5	462.6625 MHz	2W
6	462.6875 MHz	2W
7	462.7125 MHz	2W
8	467.5625 MHz	0.5W
9	467.5875 MHz	0.5W
10	467.6125 MHz	0.5W
11	467.6375 MHz	0.5W
12	467.6625 MHz	0.5W
13	467.6875 MHz	0.5W
14	467.7125 MHz	0.5W
15	462.5500 MHz	2W
16	462.5750 MHz	2W
17	462.6000 MHz	2W
18	462.6250 MHz	2W
19	462.6500 MHz	2W
20	462.7000 MHz	2W
21	462.7250 MHz	2W

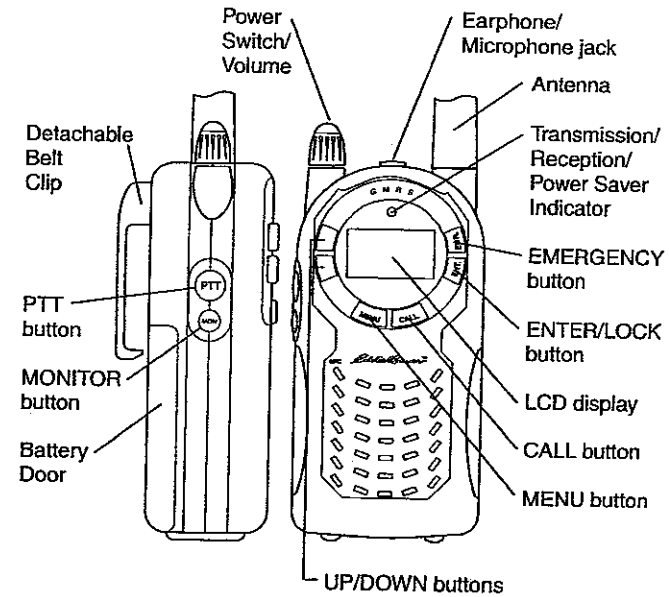
Emergency Channel

Channel	Frequency	Transmission Power
Ech1	462.6750 MHz	2W

Power supply:

6V (FOUR "AA" Batteries)

CONTROLS AND INDICATORS

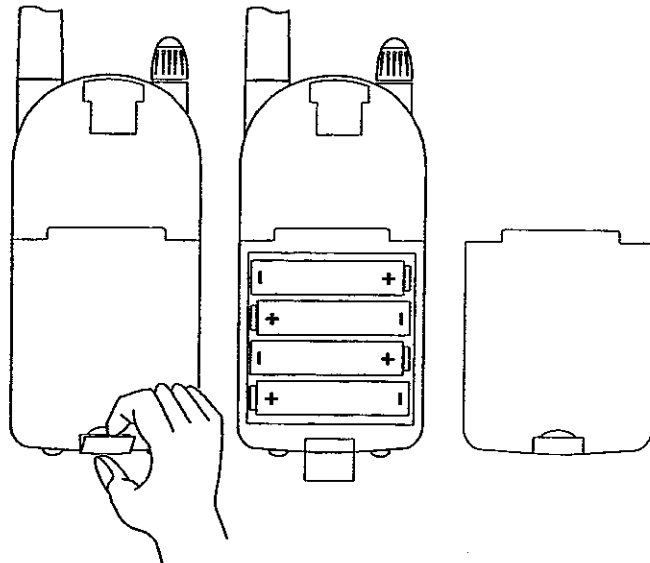


Display and Indicators


LCD display - indicates Channel numbers, Lock, Beep, Low Battery Level, etc.

Transmission, Reception and Power Saver Mode indicator - When transmitting, the indicator (RED) stays on. The indicator fast flashes when receiving a signal and slow flashes in Power Saver Mode.

BATTERIES INSTALLATION



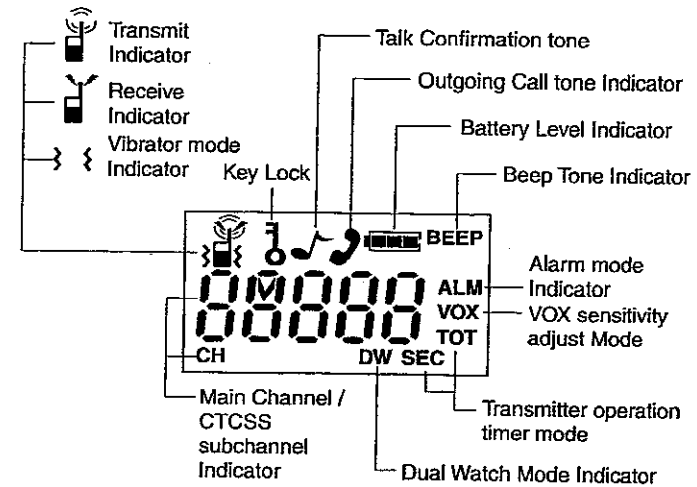
1. Pull lock tab down and lift door up (towards you) to remove battery cover.
2. Insert four "AA" batteries. Position batteries according to polarity markings.

Note : When batteries are low the  BATT LOW indicator will blink. Replace alkaline batteries or the rechargeable battery.

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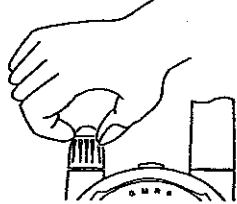
LCD DISPLAY



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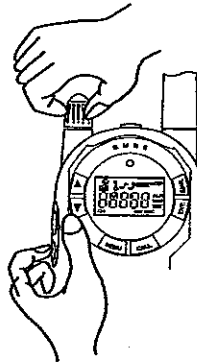
BASIC OPERATION

- a) To Turn On The Unit or To Turn Off The Unit
Rotate the Pwr/Vol rotary switch on or off.



- b) To Totally Reset the unit

1. Before switch on the unit, press MON and DOWN buttons together.
2. While holding the above two keys, switch on the unit.
3. STILL keep pressing MON and DOWN buttons until the display has finished the flashing action.
4. The unit will auto reset all its function and preset memory, and auto re-start with "beep" function auto selected.

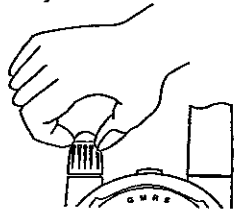


- c) Auto Battery Power Saver

The unit has a special function designed to extend battery life. If there are no transmissions or receptions for 0.5 sec, the unit will automatically switch to battery save mode for 1 sec.

- d) To Adjust VOLUME control

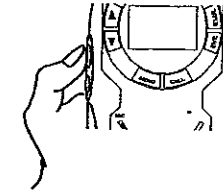
Rotate the Pwr/Vol rotary switch to increase / decrease volume.



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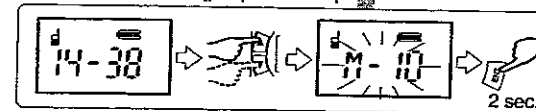
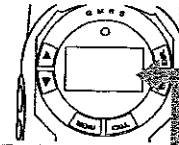
- e) To Transmit

Simply talk to the built-in microphone as VOX (Voice Activated Transmission) turns into transmission mode automatically, or press the PTT (Push-To-Talk) button.



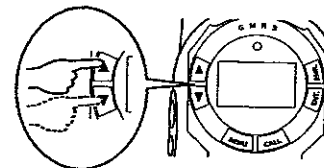
- f) To Retrieve Preset Memory

1. In normal operation mode, press UP or DOWN button to enter memory retrieve mode.
2. The LCD flashes with the memory number and its Ch1/CTCSS content.
3. Press the UP or DOWN button to set the desired memory preset number.
4. Press and hold ENTER button for 2 seconds.



- g) Automatic Channel Scan

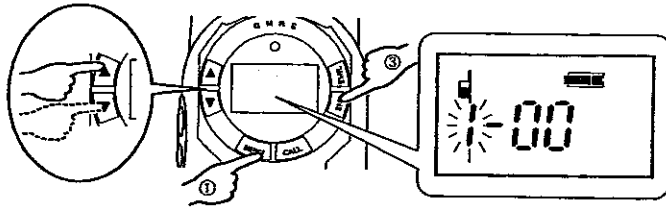
Press and hold the UP or DOWN button to search signals. When the unit catches a strong signal, scan will stop for 5 seconds. If you want to stop at that channel, press the PTT or ENTER button. If you want to exit scan mode without changing original main channel, press MON button.



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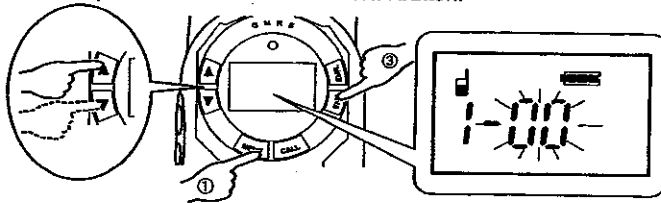
To SELECT MAIN CHANNEL

1. Press the MENU button. The LCD display flashes as shown at below.
2. Press the UP or DOWN button to set a desired channel.
3. Press the MENU button to continue other settings.
To complete the setting, press the ENTER button.



To SELECT CTCSS TONE

1. After setting the Main Channel, press the MENU button again. The LCD display flashes as shown at below.
2. Press the UP or DOWN button to set a desired sub-channel from 00 (CTCSS TONE Off) to 38.
3. Press the MENU button to continue other settings.
To complete setting, press the ENTER button.



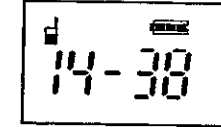
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To SET PRESET MEMORY

You can store the most frequently used channels up to 10 presets.

1. Press the MENU button and set main and sub-channel as desired.

For example: Channel 14-38 as shown at right



2. Press the MENU button. The LCD display with the memory number and its Ch1/CTCSS content.

To see a memory number, press the MON button.

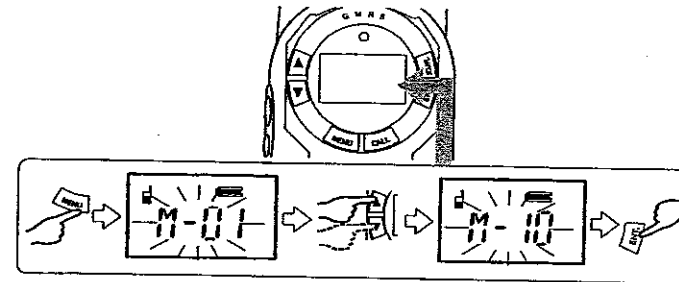
3. Press the UP or DOWN button to set a desired memory preset number.

For example: Memory preset number M-10 as shown at right.

4. Press and hold the ENTER button for 2 seconds. You will hear a confirmation beep. A channel number is stored, then the display shows a stored channel number.

5. Press the MENU button to continue other settings.

To complete setting, press the ENTER button.

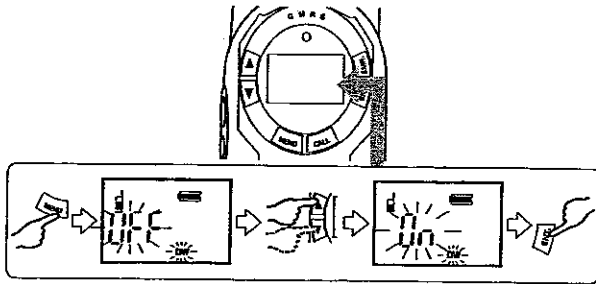


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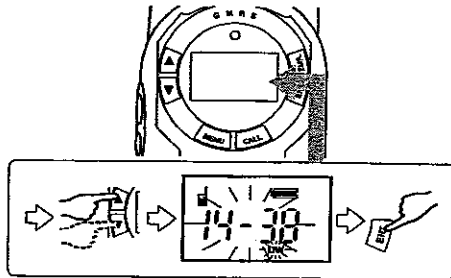
To SET DUAL WATCH FUNCTION

This feature enables you to monitor 2 channels simultaneously. Set Main and Sub channels you want to monitor prior to set Dual Watch Function.

1. Press the MENU button repeatedly until the LCD display flashes "On" or "OFF" as shown at below.
2. Press UP or DOWN button to toggle between "On" or "OFF".
3. Press ENTER button for confirmation.



4. Press the UP or DOWN button to set a desired channel to monitor.
Example: 14-38
5. Press the MENU button to continue other settings.
To complete setting, press the ENTER button.



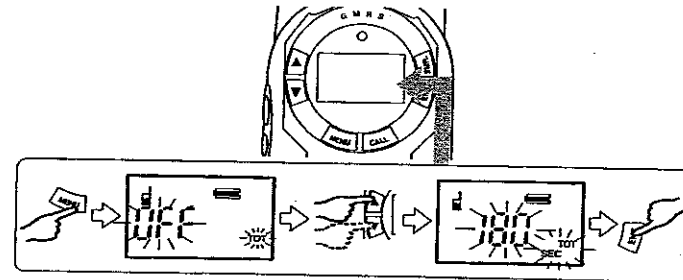
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To SET TIME-OUT-TIMER (TRANSMITTER OPERATION TIMER)

When you communicate by using repeaters, you should keep your transmission unit as brief as possible. Most repeaters have built-in timers that limit single transmission to 3 minutes or less. You can set the transceiver to stop transmitting and sound a beep if you exceed a set time limit with a single transmission.

To select a value for the time-out timer,

1. Press the MENU button repeatedly until the LCD display flashes as shown at below.
2. Press the UP or DOWN button to set a desired time from 10 seconds to 180 seconds.
3. Press the MENU button to continue other settings.
To complete setting, press the ENTER button.



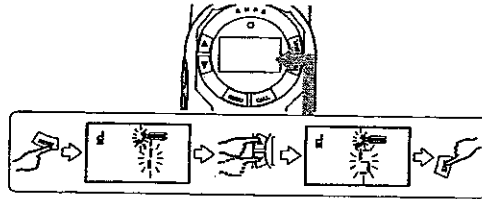
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To SELECT CALL TONES

Call tones sound like a telephone ring, and are convenient for quickly identify yourself to another party. Persons whom you call will instantly recognize you because of your call tone. As the unit features 5 different tones, you can select and set your favorable tone.

1. Press the MENU button repeatedly until the LCD display flashes as shown at below.
2. Press the UP or DOWN button to set a desired tone from 1 to 5.
3. Press the MENU button to continue other settings.

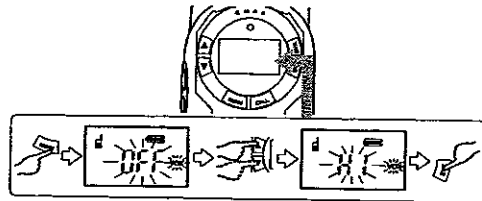
To complete setting, press the ENTER button.



To SELECT VOX LEVEL

This feature enables you to adjust VOX microphone sensitivity.

1. Press the MENU button repeatedly until the LCD display flashes as shown at below.
2. Press the UP or DOWN button to set a desired level.
H1 - High Sensitivity Lo - Low Sensitivity OFF - VOX OFF
3. Press the MENU button to continue other settings.
To complete setting, press the ENTER button.

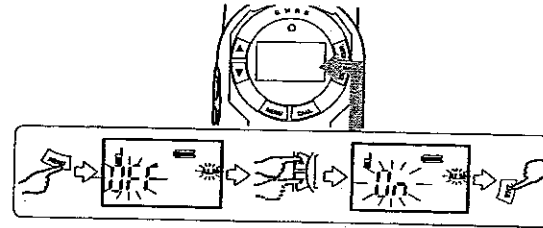


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To TURN ON OR OFF ALARM

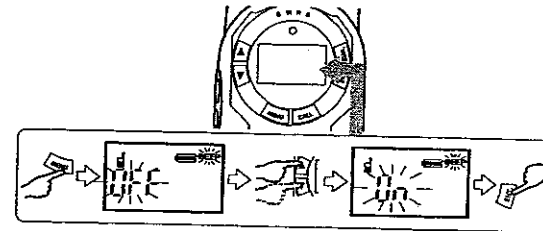
You can turn On or Off Ringer if you desire.

1. Press th MENU button repeatedly until the LCD display flashes as shown at below.
will appear and flash.
2. Press the UP or DOWN button to turn on the Ringer. will appear
3. Press the MENU button to continue other setting.
To complete setting, press the ENTER button.



To TURN ON OR OFF BEEP

1. Press the MENU button repeatedly until the LCD display flashes as shown at below.
2. Press the UP or DOWN button to turn on the Beep.
3. Press the MENU button to continue other setting to complete setting, press the ENTER button.

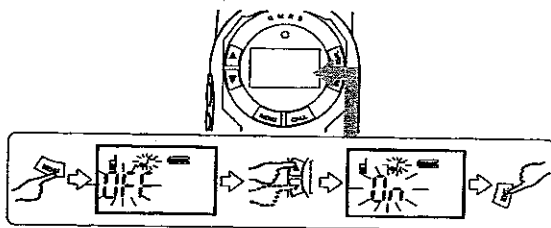


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To TURN ON OR OFF ROGER (TALK CONFIRMATION TONE)

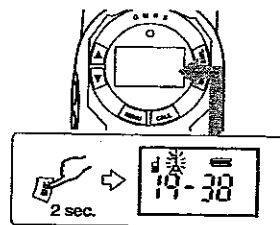
This alerts the other party that you are finished talking and it's OK for them to begin talking.

1. Press the MENU button repeatedly until the LCD display flashes as shown at below.
2. Press the UP or DOWN button to turn on the beep.



To LOCK CONTROL BUTTONS (UP/DOWN, MENU BUTTONS)

Press and hold the ENTER button for 2 seconds. Key icon  will appear on the display.



TROUBLESHOOTING:

Problem	Solution
No Power	Reposition or replace Alkaline batteries.
Message Not Transmitted	Make sure the Push-To-Talk (PTT) button is completely pressed as you transmit. Reposition or replace batteries.
Message Not Received	Confirm units have the same channel and CTCSS sub-channel settings. Make sure Push-To-Talk (PTT) button is not inadvertently being pressed. Reposition or replace batteries. Obstructions, operating indoors, or in Vehicles may interfere with communication. Change your location. Check to make sure Volume is turned up.
Hearing Other Conversation or Noise on a Channel	Adjust Squelch level (page 14). Shared Channel or CTCSS sub-channel may be in use, try another.
Limited Communication Range	Steel / concrete structures, heavy foliage, and use in buildings and in vehicles will decrease range, check for clear line of sight to improve transmission. Wearing the unit close to body such as in a pocket or on a belt will decrease range, change location of the unit.
Heavy Static or Interference	Units are too close. Units must be 10 meters apart, increase your distance. Units are too far apart. Obstacles interfere with transmission. Communication range is up to 10 kilometers in clear, unobstructed conditions.
Cannot change Channel / CTCSS Sub-channel settings	Make sure the unit's key is unlocked.
Low batteries	Replace Alkaline batteries . Extreme operating temperatures will affect the life of the batteries.