

## **FCC Radio Frequency Exposure Information**

### **WARNING !!! Read this information before using this product**

In August 1996 the Federal Communications Commission (FCC) of the United States with its action in Report and Order FCC 96-326 adopted an update safety standard for human exposure to radio frequency electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both the U.S. and international standards bodies. The design of this phone complies with the FCC guidelines and these international standards.

Use only the supplied or an approved antenna. Unauthorized antennas, modifications, or attachments could impair call quality, damage the phone, or result in violation of FCC regulations.

Do not use the phone with a damaged antenna. If a damaged antenna comes into contact with the skin, a minor burn may result. Please contact your local dealer for replacement antenna.

### **Safety Information**

Your radio 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 Therefore exposure guidelines with safety levels for hand-held wireless devices.

### **Body-worn Operation**

To maintain compliance with FCC's Therefore Exposure requirements hold the transmitter and antenna at least 1 inch (2.54 cm) from the face. If you wear the handset 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 clip to ensure that the antenna is at least 2 inch (5.0 cm) from your body. The belt clip is for storage purpose only. DO NOT TRANSMIT WHILE USING THE BELT CLIP.

POWER AMP Specification : Voltage : 6V, Current : 1A

⊗ Model name : GMRS220 and GMRS220FM - 2001 July

# **USER MANUAL**

## **UHF FM Radio Transceiver - GMRS**

**Models : GMRS-220 / GMRS-220FM**

## FLY TALK

**FLY TALK** Radio is designated frequencies operate on General Mobile Radio Service (GMRS). Two-way radio service which was established specifically for family and group recreational use. You can use your radios anywhere when you are out for shop, travel, camping, climbing and other areas.

### GMRS License:

Used of GMRS radios within the United States require a 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 GMRS system license. You will need two forms from the FCC, FCC form 159 and FCC form 05 Main Form and Schedule F. You can find the forms online at <http://www.fcc.gov/gormpage.html>, or call 1-800-418-3676.

FLY TALK have provide 15 channel for your specific use. Talk range is decreased when building and tree in the way. Dense foliage and mountains can also limit range of communication. FLY TALK also provide CTCSS; Continuous Tone Coded Squelch System function to use on the parties conversation between two party without any interference.

Be aware at following situation, which will help to extend the life cycle of FLY TALK:

- ① Do not operate the transceiver unless you are licensed to do so.
- ② 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.
- ③ Do not place your radio in front of a vehicle's air-bag. If the air-bag deploys, it could propel the transceiver like a projectile causing bodily injury.
- ④ Turn your transceiver off wherever posted notices restrict the use of radios or cellular telephones.
- ⑤ Do not use this device or change its batteries in potentially explosive atmospheres as sparks in such areas could result in an explosion.

### Call Button / Emergency Beep

- ① The call button is as similar as a phone ring,. It is capable of identifying you from the others and others to you. To set up the desire call tone, press the menu until you see a call on your transceiver, select the desire call tone by pressing the up and down key arrow. After selecting the desired call tone press the menu until you are back at the transceiver mode or by pressing the PTT button when you push the call button, your parties on the same frequency will hear the call tone which you have selected.
- ② If you are in a emergency and you need outside assistance, press and hold the call button for at least 8 sec, you will enter the emergency beep, your will hear beep sound one to another and also your transceiver will scan all the channel. (\* Note: if you do not want to hear the emergency beep, simply by turning the volume down), If there is a signal from other channel, your transceiver will lock on that channel for approx. 8 sec. If you like to talk to the lock channel, press on the PTT bottom and at the same time your are canceling the emergency beep. If you are unable to talk to

### Light / Lock Function

- ① Light function: simply push the Light / Lock button activates the back light.
- ② Lock button function: If you don't want accidentally change the frequency or channel, press the lock button for approx. 3 sec., and at the same time indicate a  mark on the LCD panel, you have successfully lock the particular channel you have selected. To cancel the lock function, repeat the above step to dysfunction the Lock function., repeat the above step to dysfunction the Lock function. Lock button function: If you don't want accidentally change the frequency or channel, press the lock button for approx. 3 sec., and at the same time indicate a  mark on the LCD panel, you have successfully lock the particular channel you have selected. To cancel the lock function, repeat the above step to dysfunction the Lock function

## Call Music

Setting the status of call music, simply press the menu button until the LCD flashes the " CALL"indicator.

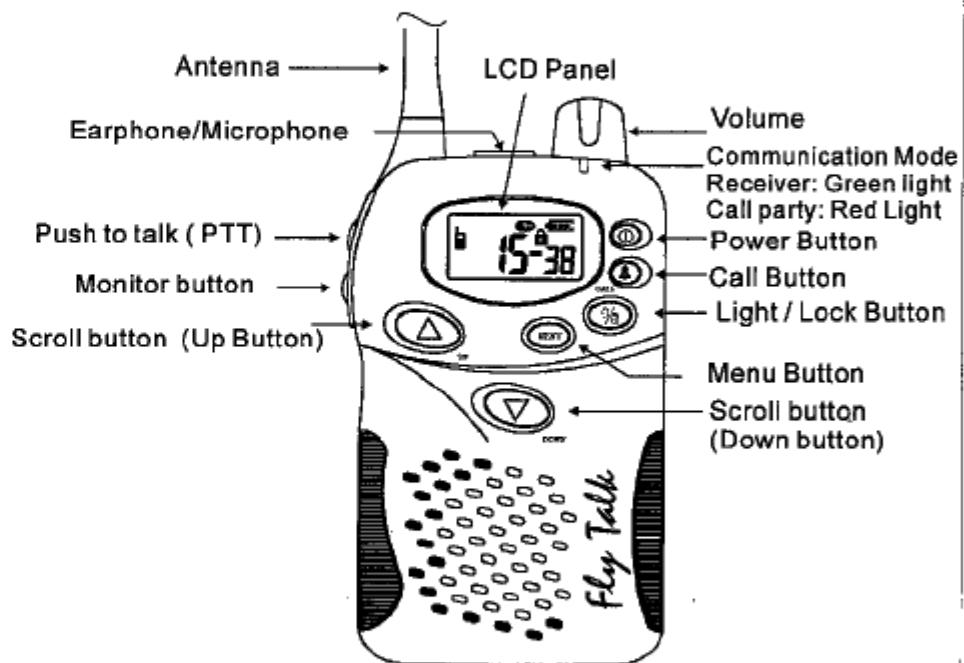
- ① Press up button or down button key to choose the Music ring as you need.
- ② Once the desired call ring is chosen , press PTT button to return to main menu or press menu to go to the next function menu.
  - ✓ Call rings Music will play the music when selection has been choose.

## Automatic Power Off Function

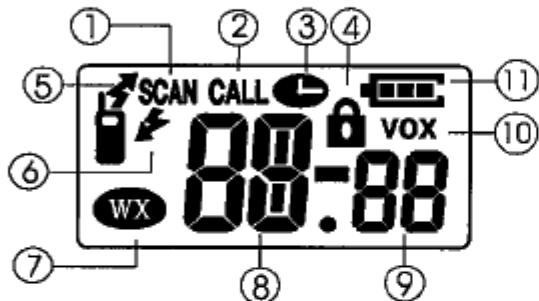
Press the menu button until you see the APO  mark flashing.

- ① Press the up or down key to select the desired time ( 1- 8 HRS) for automatic shut off. Or select "-" for continuous on.
- ② After selecting the desired time , press the PTT button to return to the stand by mode or you can press the menu button to also return to the stand by mode.
  - ✓ Once you have selected the desired SHUT OFF time, it will shut off at that time. . But keep in mind, if you press any buttons during stand by, your transceiver will re-start the SHUT- OFF time.
  - ✓ Your transceiver will give you a warning beep sound before shut off . If you wish to continue using the transceiver, simply push the PTT button. Otherwise your transceiver will shut off at the selected time.

## FUNCTION KEY AND LOCATION



## LCD Operation



1	Channel auto scan
2	Call ring setting / call party indicator
3	Auto power off indicator
4	Lock indicator
5	Call party
6	Receiver indicator
7	Weather radio station indicator
8	Current channel (1-15) & FM radio (only for GMRS-220FM)
9	Current code indicator. CTCSS code (01-38) or non-CTCSS function (00)
10	Voice activated transmission indicator
11	Battery meter indicator

## Selecting FM radio capability (Only for with FM function model)

Press the menu button until you see the **FM** flashes on the LCD panel.

- ① Press the up or the down button to begin scanning the radio frequency.
- ② When the transceiver receive a radio signal, the scan will stop. And at the same time, you are able to listen to that particular radio channel.
  - ✓ If it isn't the radio channel you desired, rescan by pressing the up or the down button.
  - ✓ If when you are listening to the radio and someone is trying to reach you on the transceiver, you transceiver automatically switch to the transceiver mode. If you desired not to answer the call simply ignore and it will automatically switch back to the radio mode.
- ③ By pressing the PTT button returns you to the FRS mode. Or if you wish, press the menu button will disable the radio function.

## Selecting WX radio capability (Only for with FM function model)

Press the menu button until you see the **WX** flashes on the LCD panel.

- ① Press the up or the down button to begin scanning the WX station (Weather Radio station). You can select one of the 10 channels.
- ② By pressing the PTT button returns you to the FRS mode. Or if you wish, press the menu button will disable the radio function.

### Selecting the Auto Scan Mode (Scan)

Press the Menu button until you see "Scan" flashing on the LCD panel.

- ① Presses up or down button to begin auto scan.
- ② If there is any signals during scan, the LCD panel will flashing the channel waiting for you input, if you wish to use this channel.
- ③ If you do decide to use this signal, simply press the PTT button.
  - ✓ If you wish to stop scan, press the up or the down button.

### Voice Activated Transmission (VOX) --optional function

Press the Menu button until you see "VOX" display on the LCD panel.

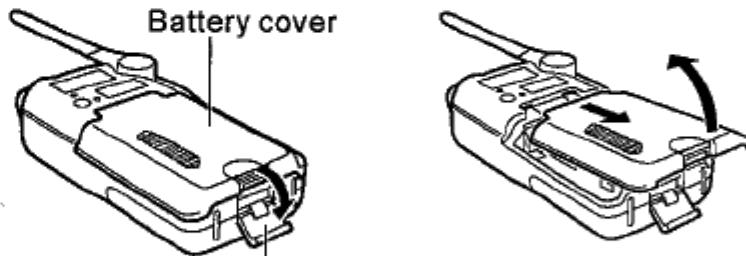
- ① Presses up or down button to select "-", "1", "2", "3", "4" or "5".
- ② If you want to turn off the VOX function. Please select the "-" then press the PTT button to confirm.
- ③ If you want to use the VOX. Please select a voice activated sensitive level from 1 to 5. Level 5 is the most sensitive; level 1 is the less one. Once you decide the sensitivity then press the PTT button to confirm.
- ④ When you turn on the VOX function then the "VOX" will be displayed on the LCD panel.
- ⑤ This function allows hands free conversation.

### Battery Install / Battery Capacity Indicator

Fly Talk radio require 3 AA alkaline batteries for GPFRS200 series or 4 AAA for GPFRS210 and GPFRS220 series alkaline batteries to operate. Alkaline batteries will last longer than the normal batteries. The battery-meter located on the front LCD panel display-- means full battery power, as the power is used, the bars will disappear, at same time the radio will indicate the beeping sound to remind you to replace the batteries. When battery is low, you should change the batteries as soon as possible, This will prevent the signal transmission lost.

#### Battery Install

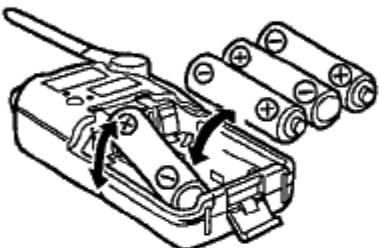
1. Carefully release batteries safety lock, then remove



Note: Take off the belt clip as your need.

## Battery Install

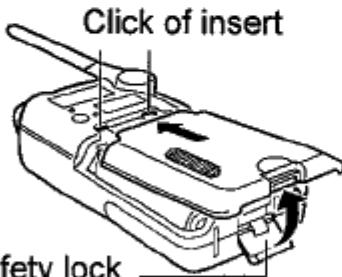
2. Install (or remove) 4 AAA alkaline batteries or Ni-MH rechargeable batteries.



Note:

- Never attempt to charge alkaline or dry cell batteries. When recharging use only the rechargeable batteries supplied with your transceiver.
- Do not force it. As you might damage the lock flap. Make sure it is properly assemble as the procedure.

3. Slide batteries cover over until secure. To lock the battery cover close the flap as show until you hear a click.



## Selecting the CTCSS frequency

Press the menu button to enter the setup mode.

- ① Select the CTCSS frequency
- ② Press the up or the down button to select one of the 38 CTCSS frequency/channel.
- ③ If it is the desired frequency, simply press the PTT button
  - ✓ CTCSS will not guaranteed privacy but it guaranteed noise reduction.
  - ✓ Selecting 00 returns to the regular mode.

CTCSS Table

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

## Selecting the CTCSS frequency (noise reduction)

### Selecting a frequency

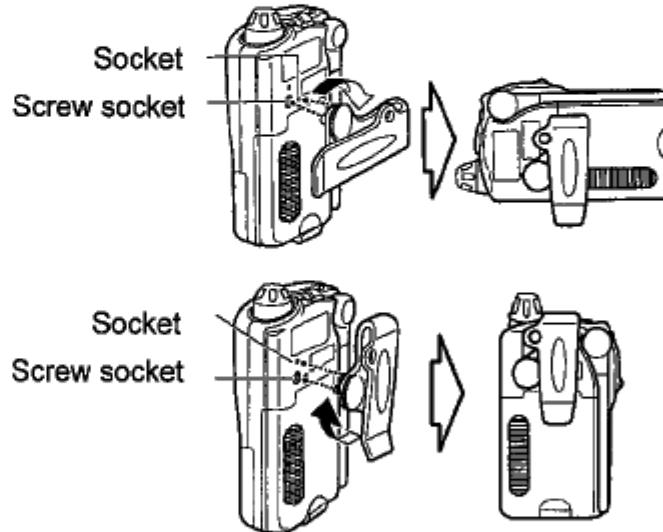
- 1 You can select one of the 15 channels. Please have in mind that you party must have the same channel to be able to converse.
- 2 Once you've selected the same channel, you can start using your transceiver.
  - ✓ If you do not wish to change to different channel or using the CTCSS, or might accidentally changed to other channel, press the lock button so that you won't inadvertently change the channel.
  - ✓ In the CTCSS mode, change the mode back to 00 so that you can use the basic channel.

Frequency Table

No.	Freq.(MHz)	No.	Freq.(MHz)	No.	Freq.(MHz)
1	462.5625	7	462.7125	13	462.6500
2	462.5875	8	462.5750	14	462.7000
3	462.6125	9	462.6250	15	462.7250
4	462.6375	10	462.6750		
5	462.6625	11	462.5500		
6	462.6875	12	462.6000		

### Belt Clip Install

Aim the screw to the screw socket provided on the back of the transceiver. Depending on your need. You can use the belt clip either vertically or horizontally by holding the belt clip vertical or horizontal, and insert the screw to the screw socket by twisting the screw clockwise and counter clockwise to loosen.



## Quick Start

- ① By pressing the power button for over a second, your transceiver will be in the ON position.
- ② By twisting knob and adjust the radio volume. ( Clock wise for loud volume and counter clockwise for soft)
- ③ You also may use the up and down arrow button to select on one of the 14 channel.
  - ✓ You may also use the scan button to select an open frequency.
  - ✓ Your party must use the same frequency and the same CTSS frequency.
- ④ After completing the first three steps, you can start receiving Transmission.
- ⑤ If you need to transmit of answering to your party, press down the PTT button , the light of communication mode will indicate in RED, at the same time  mark will appear on the LCD panel. Your voice will transmit to your party's FRS.
  - ✓ You may also use the call button to ring your parties
  - ✗ Do not talk without Pressing down the PTT button.
- ⑥ Only by releasing the PTT button, you are able then receive your parties transmission. At same time the light of your communication mode will turn to green and you also will see the  mark on your transceiver LCD panel.
- ⑦ By completing the above step, you will be able to transmit and receive transmission through your transceiver.
- ⑧ If you need to turn off your transceiver, press and hold the power button for at least 3 sec.
  - ✓ Your transceiver is able to turn the power off automatically, but you must first manually set the desired time. Once the time expired, your transceiver will turn the power off automatically.

## FCC Licensing Information

This GMRS-220 radio operate on GMRS frequencies which require a license from the Federal Communications Commission (FCC) for business ,personal, and recreational use. A GMRS license held by an individual may be shared by immediate family members.

At the date of this publication the application for your FCC license is made on FCC from 605(with optional Schedule F). To obtain forms , call the FCC forms hotline at: 1-800-418-3676 or go to <http://www.fcc.gov>

For questions concerning licensing , contact the FCC at 1-888-CALL-FCC (1-888-225-5322) , or go to <http://www.fcc.gov>