# **GM-N1 MANUAL**

# **Functions and Operations**

## 1. Powering On/Off

Turn the Power/Volume Knob clockwise to switch the transceiver power ON till a click is heard.

### 2. Selecting a Channel

Press UP/DOWN Key to select a desired channel. Press UP key to increase the channel, press DOWN key to decrease the channel.

## 3. PTT (push to talk) Button

Press PTT key, then speak into the microphone to call.

Release it to receive.

# 4. Noise Cancelling (Press and hold the [NC] button to activate)

Long press Noise Cancelling Button for 2 seconds to turn on noise cancelling function until a beep is heard and the noise cancelling indicator lights blue when transmitting. This function can also be turned on/off even during a call.

### 5. Monitor (Press and hold the [Channel -] to activate)

Use the Monitor function to check if a channel is currently in use by others.

When an empty channel is located, you will hear continuous static and noise on that channel.

## 6. Time-out Timer(TOT) (Programmable on PC)

The purpose of the Time-out Timer is to prevent any caller from using a channel for an extended period of time. If you continuously transmit for a period of time that exceeds the programmed time set by programming software, the transceiver will stop transmitting and an alert tone will sound. To stop the tone, release the PTT key.

#### 7. Scan (Press [NC] button to get into scan mode)

When a transceiver is set by programmable software as scannable, press the channel select key to channel 16, the transceiver will automatically detect the activities of scannable channels from 1 to 16, (programmable software can define different channels to be scannable or unscannable). When a scanned channel has signals, transceiver will automatically stay in this channel for talking.

Transceiver will stay in a channel having signals, 5 seconds after the signals disappear, it will continue scanning next channels.

When there are less than 2 scannable channels, it can not scan.

# 8. Battery Save

Battery Save function will decrease the amount of power used when a signal is not being received and no operations are being performed (no keys are being pressed, and no switches are being turned). While the channel is not busy and no operation is performed for 5 seconds, battery save turns ON. When a signal is received or an operation is performed, battery save turns OFF.

## 9. Busy Channel Lockout(BCL)

When activated, BCL prevents you from interfering with other parties who may be using the same channel that you selected. Pressing the PTT switch while the channel is in use will cause your transceiver to emit an alert tone and transmission will be inhibited(you cannot transmit).

Release the PTT switch to stop the tone and return to receive mode.

Note: Busy Channel Lockout shall be setup in PC software.

## 10. High/Low Power Output

Switch the power output between high and low in PC software. Default: Channel 8-14 are low power, remains are high power.

# 11. Wide/Narrow Band (25KHz/12.5KHz)

You can select wide band and narrow band by manual. Default: Channel 8-14 are narrow bands, remains are wide band.

### 12. VOX (Press the [Channel+] to turn the VOX on/off)

VOX operation allows you to transmit hands-free. VOX function shall be setup in PC software. When operating VOX, you must set a VOX Gain level. This setting allows the transceiver to recognize sound levels. If the microphone is too sensitive, it will begin transmitting when there is noise in the background. If it is not sensitive enough, it will not pick up your voice when you begin speaking. Be sure to adjust the VOX Gain level to an appropriate sensitivity to allow smooth transmission.

Note: If a speaker/microphone is connected to the transceiver while the VOX function is switch ON and the VOX Gain level is configured to a higher, more sensitive level, louder received signals may cause the transceiver to start transmission.

#### 13. DCS Mode

You can setup DCS mode on each channel in PC software. There are two options: Normal and Special.

When you choose special one, even you have the same DCS with other radio, you cannot hear others and others also cannot hear you, this function will guarantee privacy of your talk. Default: Normal.

### 14. QT/DQT

A QT tone/DQT code is a sub-audible tone/code which allows you to ignore ( not hear ) calls from other parties who are using the same channel.

When a channel is set up with a QT tone or DQT code, squelch will only open when a call containing a matching tone or code is received. Likewise, signals that you transmit will only be heard by parties whose QT/DQT signaling matches your transceiver.

If a call containing a different tone or code is made on the same channel you are using, squelch will not open and you will not hear the call. This allows you to ignore(not hear) these calls. Although it may seem like you have your own private channel while using QT/DQT, other parties can still hear your calls if they set up their transceiver with the same tone or code.

### 15. The transceiver channel frequencies are shown in the figure below:

Ch.No.	Tx Freq.(MHz)	Rx Freq.(MHz)	Ch.No.	Tx Freq.(MHz)	Rx Freq.(MHz)
1	462.5625	462.5625	15	462.5500	462.5500
2	462.5875	462.5875	16	462.5750	462.5750
3	462.6125	462.6125	17	462.6000	462.6000
4	462.6375	462.6375	18	462.6250	462.6250
5	462.6625	462.6625	19	462.6500	462.6500
6	462.6875	462.6875	20	462.6750	462.6750
7	462.7125	462.7125	21	462.7000	462.7000
8	467.5625	467.5625	22	462.7250	462.7250
9	467.5875	467.5875	23	467.5500	462.5500
10	467.6125	467.6125	24	467.5750	462.5750
11	467.6375	467.6375	25	467.6000	462.6000
12	467.6625	467.6625	26	467.6250	462.6250
13	467.6875	467.6875	27	467.6500	462.6500
14	467.7125	467.7125	28	467.6750	462.6750
			29	467.7000	462.7000
			30	467.7250	462.7250

Note: Ch 8-14 must not exceed 0.5W.

# **■ FCC Compliance Statements:**

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**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.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. Do not use this device when the antenna shows obvious damages. Hold this transmitter approximately 25 mm away from your face and speak normal with the antenna pointed up and away. Use the supplied belt clip for body-worn configuration as other accessories may not comply to the limits.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.

## **■** Licensing Information

Use our radio in USA is subject to the rules & regulations of FCC. Changes or modifications not expressly approved by our may void the user authority granted by the FCC to operate this radio and should not be made. To comply with FCC requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services. Replacement of any transmitter component (crystal, semiconductor, etc) not authorized by the FCC equipment authorization for this radio could violate FCC rules.

**Note:** Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.

**Important:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device. Your radio is set up to transmit a regulated signal on an assigned frequency. It is against the law to alter or adjust the settings inside the radio to exceed those limitations. Any adjustments to your radio must be made by qualified technicians.