

## **GX-80/90 Genex Portable LMR radio**

### **FCC RF EXPOSURE COMPLIANCE REQUIREMENTS FOR OCCUPATIONAL USE ONLY**

The Federal Communications Commission (FCC), with its action in General Docket 93-62, November 7, 1997, has adopted a safety standard for human exposure to Radio Frequency (RF) electromagnetic energy emitted by FCC regulated equipment. Maxon subscribes to the same safety standard for the use of its products. Proper operation of this radio will result in user exposure far below the Occupational Safety and Health Act (OSHA) and Federal Communications Commission limits.

DO NOT transmit for more than 50% of total radio use time (50% duty cycle). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded.

- This radio is NOT approved for use by the general population in an uncontrolled environment. This radio is restricted to occupational use, work related operations only where radio operator must have the knowledge to control the user's exposure conditions for satisfying the higher exposure limit allowed for occupational use.

- When transmitting, hold the radio in a vertical position with its microphone 2 inches (5 cm) away from your mouth.

The radio is transmitting when the red LED on the front of the radio is illuminated.

You can cause the radio to transmit by pressing the PTT bar on the radio.

These are required operating configurations for meeting FCC RF exposure compliance.

Failure to observe these restrictions mean violation.

This equipment complies with the FCC RF Exposure Limits for controlled environments.

### **- Function description**

#### **1. power on& volume control**

##### **(1) Power On**

Turn radio on by turning the power/volume Rotary switch clockwise out of detent.

When radio turns on, it make beep sound.

##### **(2) Power Off**

Turning the power /volume rotary switch counterclockwise out of detent

##### **(3) Volume up/down**

Adjusting level of volume by turning Volume rotary switch.

#### **2. Channel Selecting (Up/Down)**

User can choose a channel by adjusting Channel rotary switch

### 3. RX Operation

- 1) Busy condition is that unit is receiving a signal fixed in its channel

Unit in the busy condition will be operated according to a fixed input of tone and two Tone. Unit out of busy condition will remain LED Off

- 2) Correct Call

If a incoming signal has same tone as a fixed input of tone in selected channel, This signal is called "Correct Unit will open Audio with Green LED, If a incoming signal is not correct call, LED will be On in orange.

- 3) Monitor Operation

Whenever Monitor button is pressed, Audio must be opened regardless of the condition of busy or correct call.

- Monitor On : press Monitor button in left side of radio, Audio will be opened.

If press Monitor button for five seconds, Monitor button will be locked and then a opened audio will be maintained, even though user release monitor button. If user release monitor button within five seconds, Monitor function will be Off and then Audio will be controlled by a incoming signal.

To be out of Monitor condition, Just press monitor again.

- 4) Scan operation

- Normal scan On : Press Sacn Button on the left side of radio for two seconds,

User can initiate scan with beep sound. If no conversation is detected on any channel in the scan list, Radio will make Error beep sound, Once Scan starts, LED will flash in order of the following step repeatedly as below

RED ==→ GREED ===→ Orange

It indicates that Scan is on progress.

To stop scanning, Press Scan button again for a two seconds, Radio will go back to the original channel used before start a scan and then radio stops flashing LED.

If a conversation is detected a correct call, radio will stop on that channel and user will be able to hear the conversation. If programmed for normal scan TX, you will be able to transmit on that active channel during the programmable scan delay time. The scan delay time is the amount of time. Radio will stay on that channel once activity has cased. The radio will resume scanning once the scan delay time has expired. Scanning will continue until the channel is changed or press scan button again.

- Scan channel Delete : To temporarily delete a channel from the scan list,

simply press the scan button for a short time while stopped on the channel to be detected. This will remove that channel from the scan list until the channel is changed or the radio's power is reset. When power is restored or the scan list channel position is again selected, the original dealer programmed scan list will be activated.

- Priority Scan On : A single channel is programmed as the “ Priority” channel.  
The radio will constantly monitor this channel with flashing LED while scanning and when the radio has stopped on an active channel. If a call is detected on the “priority” channel, the radio will automatically move to, and remain on the “ Priority” channel as long as the priority conversation takes places. “priority” channel activity takes precedence over all other conversations.
- Priority Scan Off : To be out of “Priority scan” Just change Channel.  
Radio will stop for a programmed delay time and start scanning on priority scan option activity channel.
- Look back (Receiving correct call in Priority scan mode)  
Any channel, when not in the scan mode can be programmed to “look back” at the priority channel. This feature is ideal for those who do not need scan as defined above, but want to make sure that they never miss a call on the “priority” channel if another channel has been selected, the radio will periodically “look back” at the Priority channel. If activity is detected on the “priority” channel, the radio will move to that channel for as long as it remains active.
- Priority Scan TX : If a coming signal is not correct call, allow transmission on the normal channel. If a coming signal is a correct call, allow transmission on the correct call channel. After finish transmission, resume scan after scan delay time.
- Muti Scan : if press Scan key while Priority scan mode is On, Priority Channel scan and Normal scan will take place at the same time under this condition, scan sequence will be as below.  
N-Ch(1) ==> P-Ch ==> N-Ch(2)==> P-Ch ==> N-Ch(3).....

#### 4. TX operation

- 1) PTT TX

Allows transmission with pressing PTT.

- 2) To enable VOX function, first of all VOX function and its level must be set through PC programmer and then turn Radio on while pressing PTT. At a moment, radio makes beep sound.

- 3) TOT (TX Time-out-Timer)

This function will be disable TX.

When TX inhibit is used in conjunction with the time out timer, Radio will not be able to transmit for the programmed period of time after a time out occurs.

- 4) TOT Penalty option.

When a TOT occurs, TX will be inhibited for the penalty time.

- 5) BCL(Busy Channel Lock) option.

This function will inhibit TX on the operating channel while a signal is being received.

- 6) BCLO(Busy Channel Lock out) option.

Even if a call is being received, this function allows TX. It also can allow TX with correct tone.

- 7) TX Delay Option

This function is used to remove squelch tail caused by using CTCSS tone.

## **5. Power Save**

- 1) TX Power save on

The time of TX power save on can be set by programmer, while radio is in Power save on condition, TX/RX is not allowed. To be out of this mode, just press any key.

- 2) Power Save Off.

The time of “power save off” can be set by programmer.

In this condition, allows only RX.

- 3) Power save delay.

Power save mode can be cancelled whenever occurs key/TX event.

This function forces radio not to go back to Power save mode during Power save delay time that is programmable.

- 4)Power Save Sequence

Power Save Delay ==> Power Save On ==>

Power Save Off ==> Power save off ....

## **6. Low Battery Detection**

### **1) RX Low battery**

If Low battery condition is detected, Radio flash LED with beep sound. In this condition RX/TX is inhibited but one time of TX is allowed.

### **2) TX low battery**

If Low battery condition is detected while TX is active, Radio allows TX but it will be inhibited right after end of TX. There is still one-time TX chance in the low battery condition.

## **7. Scramble Function**

Four different kind of scramble can be selected to each channel.

If the same scramble is set on the same channel for each other, Normal conversation will be possible.

## **8.PC Link**

Turn radio on while pressing monitor and scan button at the same time.

Radio flash LEC in orange

To be out of PC link condition, Turn radio Off and the On.

## **9.Clone function**

1) This function gives two radios same data with clone cable.

2) To set master radio which transmit data, Turn radio on while pressing PTT and Monitor button at the same time, LED will be On in Red

3) To set slave radio which receive data from Master radio.

Turn radio on while pressing PTT and Scan button at the same time.

LED will be On in Green.

4) Once Master and slave radio is set, Please press PTT of Master radio to transmit data.

