



# Instruction Manual

## MG-200

General Mobile Radio Service

**462MHz,22CH**



- \* **38** CTCSS Sub Tone
- \* VOX mode
- \* Scanning
- \* Monitor
- \* Key Pad Lock
- \* Dual Watch
- \* Call
- \* TX Power HI/LO
- \* RSSI
- \* Auto Power Save Mode
- \* Battery Status Indicator
- \* Back Light LCD Display
- \* Choice of Battery  
(not supplied)
  - Rechargeable Battery
  - Standard Alkaline

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## **1. INTRODUCTION**

### **1) Product Description**

MG-200 General Mobile Radio Service has been designed to enable you to use for general purpose. This is a battery powered 462 MHz transceiver. The controls are easy to use and MG-200 correspond to GMRS channel 1 to 22. Also it has a 38 CTCSS feature to get the clear communication without interference.

### **2) Package Contents**

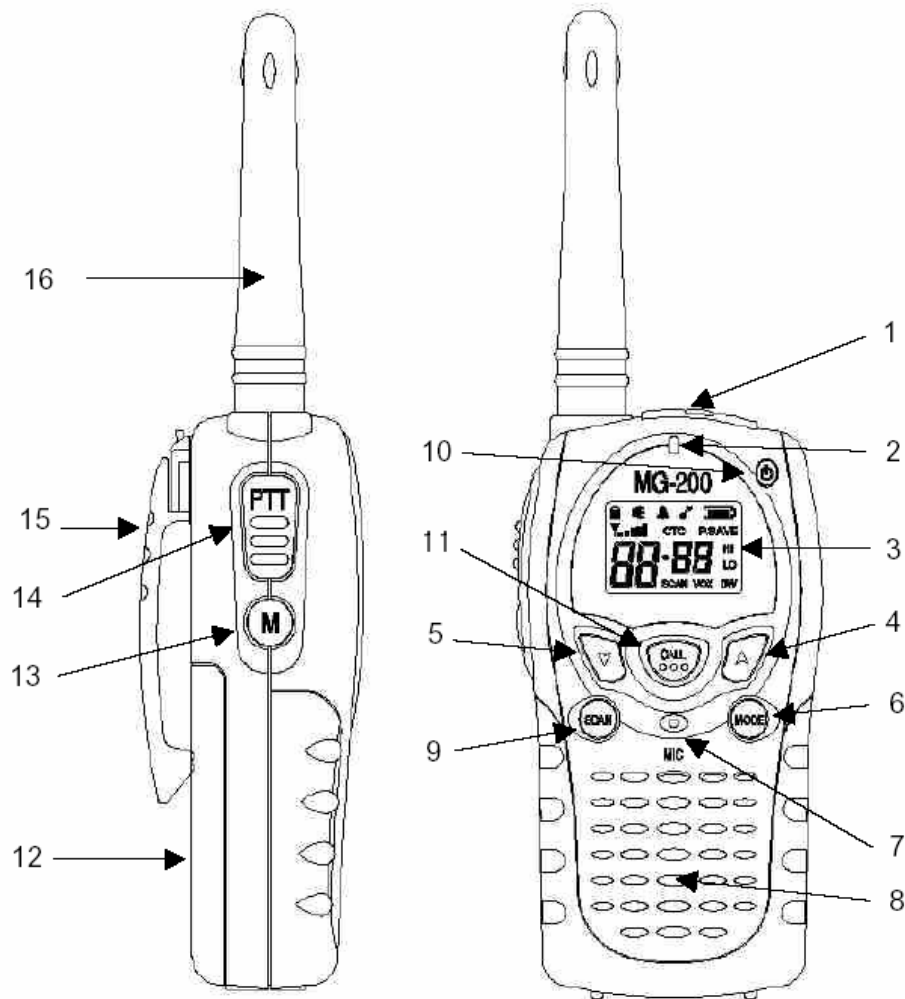
When you open the package,you should have;

- \* MG-200 Radio Unit
- \* Antenna
- \* User's Manual

### **3) Features**

- \* CTCSS(38 Frequency)
- \* VOX(Voice Operated Switching)
- \* Scanning
- \* Monitor
- \* Keypad Lock
- \* Dual Watch
- \* TX Power HI/LO
- \* Auto Squelch
- \* RSSI(Received Signal Strength Indicator)
- \* APSC(Auto Power Saving Control)
- \* Battery Status Indicator
- \* LCD Back lighting
- \* Transmitting LED
- \* Call Signal (5 ringer signal)
- \* Beep ON/OFF
- \* Roger beep ON/OFF

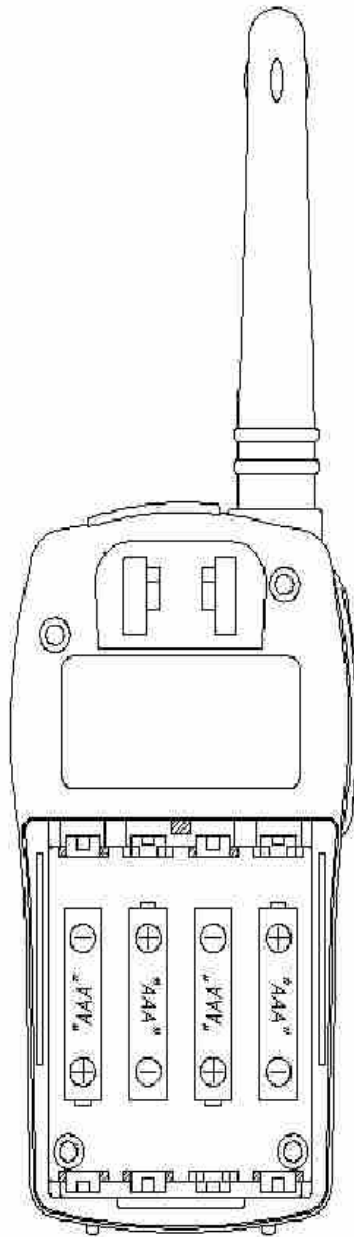
#### 4) Front side Overview



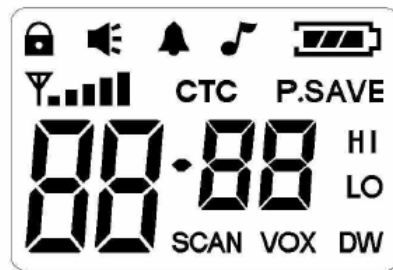
- 1 External Speaker/Microphone Jack  
(External Charger jack)
- 2 Transmit LED indicator
- 3 Liquid Crystal Display
- 4 Channel & Volume UP Button
- 5 Channel & Volume DOWN Button
- 6 MODE Button
- 7 Built-in Microphone
- 8 Built-in Speaker

- 9 SCAN Button
- 10 Power ON/OFF button
- 11 Call button
- 12 Battery Cover
- 13 Monitor/Lamp button
- 14 Push-To-Talk(PTT) Button
- 15 Belt Clip
- 16 Antenna

## 5) Rear side Overview



## 6) Function and Feature Display



	Key lock indicator : Indicates that the key lock function is in
	Monitor indicator
	Beep ON/OFF indicator : Indicates that the key tone is in use.
	Roger ON/OFF indicator : Indicates that the key tone is in use.
	Battery indicator : Indicates the battery status.
	Receive signal indicator
<b>CTC</b>	CTCSS indicator: Indicates that the CTCSS function is in use.
<b>P.SAVE</b>	Power save indicator
<b>00</b>	Channel readout : Shows the current channel number
<b>88</b>	CTCSS tone code number
<b>HI</b>	TX power High setting Indicator
<b>LO</b>	TX power Low setting Indicator
<b>SCAN</b>	Scan indicator : Indicates that scan is
<b>DW</b>	Dual Watch enable Indicator
<b>VOX</b>	VOX (Voice Activated Transmit) Indicator

## 7) Mode (Function) key sequence

- \* 1'st press -- Channel
- \* 2'nd press -- CTCSS
- \* 3'rd press -- TX power Hi/LO setting
- \* 4'th press -- Vox ON/OFF and sensitivity
- \* 5'th press -- Dual Watch setting
- \* 6'th press -- Beep tone ON/OFF
- \* 7'th press -- Roger tone ON/OFF
- \* 8'th press -- Call Ringer setting

## 2. INSTALLATION

Your MG-200 is designed to operate both in four "AAA" size rechargeable batteries (not supplied) or Alkaline Batteries(not supplied).

### Cautions

Never attempt to charge Alkaline or Dry Cell Batteries. When recharging the rechargeable batteries, use only recommended one. Use of other batteries will cause damage to your MG-200 transceiver.  
Other type of batteries may burst causing personal injury.

#### 1) Installation of the batteries

- \* Ensure that the MG-200 sets to power off.
- \* Hold the radio and battery cover with the back facing you.
- \* Press and slide the battery cover.
- \* Install four "AAA" size Alkaline batteries or rechargeable batteries.  
**Note : Carefully observe the polarity of the batteries before installing.**
- \* Replace the cover.

#### 2) Antenna

The antenna is not detachable type.  
Keep the Antenna at least 2 inches (5 cm) away from your head and body.

## 3. Basic Operation

#### 1) On/Off & Volume control Switch

Radio ON : Press the power button at least for 2 seconds. You will hear confirming melody to indicated the unit is on.  
Radio Off : Press the power button at least for 2 seconds.  
Volume setting : Press up[▲] or down[▼] button to adjust a level that is most comfortable for you while monitor is active.

#### 2) Setting the Channel and tone code(CTCSS)

MG-200 has 22 main channels and 38 sub-channels.  
\* 22 Frequency channels  
\* 38 CTCSS Code ( indicated by **CTC** icon on the LCD )

##### To select the channel

- \* Turn the radio on
- \* Press **MODE** button once, [XX] digit will blink on the LCD. XX is a channel
- \* Press up[▲] or down[▼] button to choose the channel.
- \* Press the PTT button to confirm.

##### To set the tone codes(CTCSS)

- \* Press **MODE** button once more, [XX of up to 38] will appear and CTC icon and tone code digit will blink on the LCD. " of " means no CTCSS code.
- \* Press up[▲] or down[▼] button to choose the desired sub-channel to use.
- \* Press the PTT button to confirm.



### 3) Setting the Transmit Power HI/LO

- \* HI : 2.0W TX power
- \* LO : 500mW TX power

#### To set the TX output power

- \* Press the MODE button until the [ **PO LO or HI** ] appears.
- \* Press the up[▲] button or down [▼] button to set the TX power
- \* Press the PTT button or MODE button to confirm.
- \* **HI** or **LO** will appear on the LCD.

### 4) VOX (Voice Operated Switching)

This option enables you to have hands-free conversation. You do not have to operate the PTT button each time when you want to transmit.

You can also choose the VOX sensitivity to suit your environment of operation.

(Ex ; noisy road,motor bike,factory etc.)

#### To set the VOX mode.

- \* Press the MODE button until the [ **Uo oF or x** ] appears. **x** is a vox level
- \* **VOX** icon will be appeared on the LCD.

#### To set the VOX level

- \* Press the up[▲] button or down [▼] button to set the VOX level from 1 to 5.  
"oF" is disable the VOX function.  
" 5 " is least sensitive.  
" 1 " is most sensitive.
- \* Press the PTT button to confirm.

### 5) Setting the DW(dual watch) and CTC in DW mode.

#### To active the DW mode

- \* Press the MODE button until the [ **oF or 1 up to 22** ] and **DW icon** blink on the LCD.
- \* Press the up[▲] button or down [▼] button to choose the channel.  
" oF " means no DW mode.  
**If DW mode is set to oF,next ctc code setting step will skip.**
- \* Press the MODE button once more,the [ **XX oF** ] and **DW icon** will blink on the LCD.  
; **XX** is a Channel."oF" means no CTCSS code.
- \* Press the up[▲] button or down [▼] button to choose the sub tone code.  
"oF " will change to selected sub tone code.[ **1 up to 38** ]
- \* Press the PTT button to confirm.
- \* **DW** icon will appear on the LCD.

#### To stop the dual watch(DW)

- \* Press the "**SCAN**" button,the unit will stop the dual watch and will return to normal operation and **DW** icon will disappear from the LCD.
- \* **DW** icon will disappear from the LCD.

## 6) Beep tone

### To activate or disable the beep tone

- \* Press the Mode button until [ **bP on** or **oF** ] and the **BELL** icon blink on the LCD.
- \* Press the up[▲] button or down [▼] button.
- \* Press the PTT button to confirm.

## 7) Roger tone

This feature will give the tone signal to other parties when transmitting finished (when PTT button is released.)

### To activate or disable the Roger tone

- \* Press the Mode button until [ **rb on** or **oF** ] and the **roger** icon blink on the LCD.
- \* Press the up[▲] button or down [▼] button.
- \* Press the PTT button to confirm.

## 8) Call Ringer Selection Mode

This feature provides 5 user selectable call ringer signal.

### To set your favorite call ringer signal.

- \* Press the MODE button until the [ **CA 1** or up to **5** ] appears on the LCD.
- \* Press the up[▲] button or down [▼] button to select the call melody type.
- \* Press the PTT button to confirm.
- \* To activate the call , click the "CALL" button.

## 9) Transmitting

- \* Press and hold the PTT button (The "TX" LED will light with red color)
- \* Speak slowly and clearly
- \* To stop the transmission,release the PTT button
- \* If there are no more receiving signal for 5 seconds,the unit will go into power save mode and then the "TX" LED will blink with yellow color.

## 10) Receiving

The coding feature reduce the possibility of interference and provide enhanced communication.You can only listen to a call that has correct matching code.

### Important ;

Before transmitting or receiving to the other parties ;

- \* Correct channel is selected ( 1 to 22 ) and
- \* Correct code is set ( 00 to 38 )

## 11) Channel Scanning

This feature allows you to monitor all activated channels while scanning.

### To activate the Scan

- \* Press the **Scan** button
- \* Radio will begin scanning..
- \* When in scan mode,the display will show each scanning channel.
- \* After an activated channel is scanned and received signal and then if there is no more signal,the scan will resume automatically.

### To disable the Scan

- \* Press the **SCAN** button, the unit will stop the scanning.
- \* **SCAN** icon indicator will disappear from the LCD
- \* The unit will return to home channel.

## 12) Call

- \* Click the CALL button.(The "TX" LED will light with red color.)

## 13) Monitoring the channel

It is used for listening the weak signal or to hear all activities on the channel by manually overriding channel sub tone code setting.

### To activate the Monitor feature

- \* Press and hold the **"M"** (monitor) button for over two seconds.
- \* When you hear the sound,release the **"M" (monitor)** button.  
(The **monitor** icon will appear on the LCD.)

### To disable the Monitor feature

- \* Press and hold the **"M" (monitor)** button for over two seconds.  
(The **monitor** icon will disappear on the LCD.)

## 14) Keypad Lock

The lock function is to avoid the accidental changes to channel with other radio settings.All buttons will be locked except the Power,PTT,EMG and monitor button.

### To lock the keypad

- \* Press and hold down the **SCAN** button for over 2 seconds.
- \* Keypad will lock.( **LOCK** icon will appear on the LCD)

### To unlock the keypad

- \* Press and hold down the **SCAN** button for over 2 seconds.
- \* Keypad will unlock. ( **LOCK** icon will disappear on the LCD)

### **15) Backlight**

Backlight is used to improve the display visibility in dark condition.


#### **To activate the Backlight**

- \* Press the **"M" (monitor)** button in a moment.

#### **To disable the Backlight**

- \* Press the **"M" (monitor)** button in a moment once again.

### **16) Battery status indicator**

The  icon will blink when the radio is in low battery power.

Charge the rechargeable battery or replace the batteries.

- \* Full battery - three segments are displayed.
- \* Low battery - one segment is displayed.
- \* Low battery warning - Battery indicator will brinking.

### **17) External charger socket**

MIC socket can be used for the charging purpose.

It should use the recommended rechargeable battery and wall charger.

### **18) External Speaker - Mic**

Use the approved accessories only to have the optimum performance.

- \* Ear/Mic unit