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Printed in Thailand

User's Guide
Model M-222P

General Mobile Ra
Featuring:
- 22 Channels
- 38 CTCSS co
- VOX

Frequency Chart

Channel	Channel Frequency (MHz)	Channel Number	Channel Frequency (MHz)
	462.5625	12	467.6625
	462.5875	13	467.6875
	462.6125	14	467.7125
	462.6375	15	462.5500
	462.6625	16	462.5750
	462.6875	17	462.6000
	462.7125	18	462.6250
	467.5625	19	462.6500
	467.5875	20	462.6750
	467.6125	21	462.7000
	467.6375	22	462.7250

Chart

Code	Freq (Hz)	Code	Freq (Hz)	Code	Freq (Hz)	Code	Freq (Hz)
9	91.5	17	118.8	25	156.7	33	210.7
10	94.8	18	123.0	26	162.2	34	218.1
11	97.4	19	127.3	27	167.9	36	225.7
12	100.0	20	131.8	28	173.8	36	233.6
13	103.5	21	136.5	29	179.9	37	241.8
14	107.2	22	141.3	30	186.2	38	250.3
15	110.9	23	146.2	31	192.8		
16	114.8	24	151.4	32	203.5		

Introduction

Your M-222P represents the state-of-the art in high-tech engineer... for General Mobile Radio Service operation, this compact package... performance. It is a quality piece of electronic equipment, skillfull... with the finest components. The circuitry is all solid-state and mo... rugged printed circuit boards. Your M-222P is designed for many ... reliable, trouble-free performance.

FCC Licensing Information

Your M-222P operates on General Mobile Radio Service (GMRS) fr... is subject to the Rules and Regulations of the Federal Communica... mission (FCC). The FCC requires that all operators using General ... Service (GMRS) frequencies obtain a radio license before operatin... equipment for business, personal or recreational use. A GMRS lice... individual may be shared by immediate family members. To obtai... application forms, call the FCC forms hotline at 1-800-418-3676 o... http://www.fcc.gov. Please request forms **605** and **159** which in... necessary forms and instructions.

For questions concerning licensing, please contact the FCC at 1-8... (1-888-225-5322), or go to http://www.fcc.gov.

re

lcohol or
utions to
radio.

Do not immerse the radio in water.

Do not use the radio until completely dry.

ft damp
the radio.

Do dry the radio with a dry lint free cloth should it get wet.

Do turn off the radio and remove the batteries when storing.

LCD Display

88	Channel indicator	BATT	Battery level in...
88	CTCSS Channel indicator	•)))	Roger Beep act...
P.HIGH	Power high	♪	Key Tone active...
P.LOW	Power Low	VOX	Vox active indic...
🔒	Key pad lock indicator	CALL	Call indicator
TOT	Time Out Timer indicator		

To avoid accidentally changing radio operation, press ⊙ for 3

 icon will be appear. When the 🔒 is on the menu functions

 buttons are disabled. When locked, you will be able to turn the

, increase or decrease volume, monitor, transmit and send a call

, press ⊙ for 3 seconds.

r M-222P has 10 different call tones available. To select the call

e radio on, repeatedly press ⊙ until **CALL** appears. The current

e setting will begin to flash.

 or ⊙ to change the call tone. The new call tone will be heard

e speaker.

 or the PTT button to save the new call tone and exit the

g the call tone to 0 disables the call tone function.

one: Whenever you release the PTT button, a "Roger Beep" tone

tted to let your friends know you are finished talking. To enable

, turn the radio off. Press and hold ⊙ as you turn your radio

 will appear in the upper right position of the display. Repeat

to turn off the Roger Beep.

Operation

Power On/Off: Turn the knob on the top of the radio clockwise
radio on. Turn the knob counterclockwise to turn the radio off.

Volume: Rotate the knob clockwise to increase the volume and
counterclockwise to decrease the volume.

Talking and Listening: To communicate, all radios in your grou
the same channel and CTCSS code.

- For maximum clarity, hold radio 2 to 3 inches from mouth
- Press and hold PTT button and speak in a normal voice in
  microphone. The LED indicator light glows continuously w
  transmitting
- To receive messages, release the PTT button.

Disabling Button Beeps: A feedback beep is normally sounded
front panel button on the radio is pressed. To turn this feature or
and hold the ⊙ button 3 seconds while turning the radio on. Th
be on when beeps are enabled.

Technical Specifications

General

Frequency Range	462.56
Channels	
CTCSS Codes	
Antenna Impedance	
Speaker Impedance	
Power Supply	3 AA
Modulation Type	
Intermediate frequencies	1st IF = 21.7 MHz

Receiver

Sensitivity (for 12 dB Sinad)
Audio out put power (@ 10%THD)
Audio distortion (@ 500 mVrms)
Signal/Noise ratio
Image Rejection
Adjacent channel selectivity
Current drain (standby)

Transmitter

Modulation	FM 1.8
Signal/Noise ratio	
Current drain (max)	

tons & Indicators

Intercom

Use 🔊 to:
- Turn power on/off
- Adjust Volume

LED indicator light

Ext. Spk/Mic

Use (MON) to:
Monitor Channel activity

Use (UP) to:
Scroll through menus

Use (MENU) to:
- Lock the key pad
- Exit the menu (when pressed while in a menu)
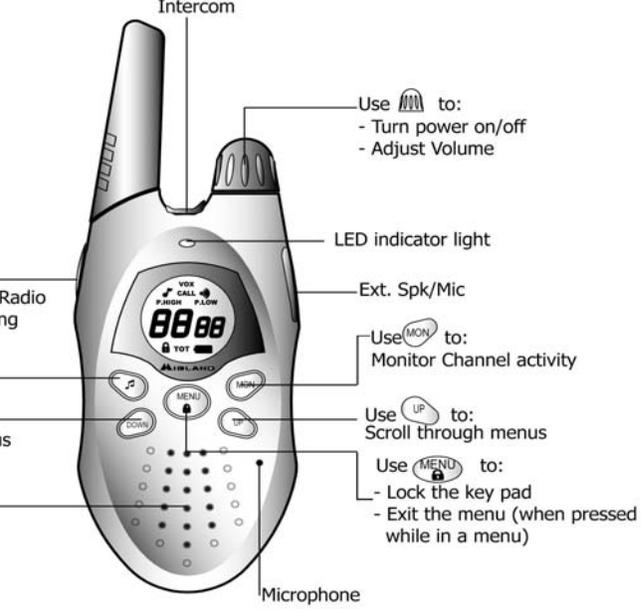
Microphone

External Speaker/Microphone Jack: Your M-222P can be use optional external speaker/microphone or headset, freeing your ha tasks. To use an optional speaker/microphone or headset:
- Open the SPK/MIC cover on right side of the radio.
- Insert the plug(s) into the SPK/MIC jacks.

Intercom: Your M-222P can be used with optional accessories th radio to operate as an intercom system.
- Open the INT cover on top of the radio.
- Insert the appropriate plug into the INT jack.

Belt clip: Your M-222P comes with a belt clip. To install the belt
- Slide the clip down into the slots on the back of the radio latching mechanism clicks.

To remove the belt clip:
- Pull outward on the latching tab while gently sliding the b the top of the radio.

atteries

dio operates with 3 AA Alkaline batteries. The belt clip should be
e battery installation or removal. To install or remove batteries:

f radio facing you, gently press the triangular battery latch
top of the radio.
he bottom edge of the battery cover and lift the cover off.
batteries observing the polarity as shown.
wo alignment tabs on the top edge of the cover into their slots
own on the bottom of the cover to secure.

are not included.
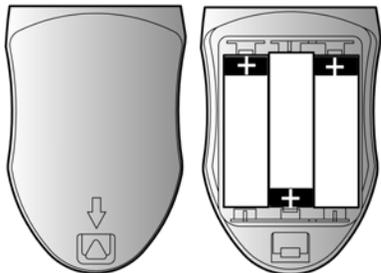
VOX: VOX (voice operated transmit) operation allows you to tran
using the PTT button when using a headset. To enable VOX opera

- Open the SPK/MIC cover on right side of the radio.
- Insert the headset plug(s) into the SPK/MIC jacks.
- Set the VOX switch on headset to VOX position.
- Turn on the radio. The **VOX** icon will appear.

Note: The VOX level must be set properly for correct VOX op

VOX Level setup: Your M-222P has three selectable VOX levels.
should be adjusted so that your voice causes the radio to transmi
environmental noise does not. To set the VOX level:

- With the radio on, repeatedly press   until **vox** appear
  VOX setting will begin to flash.
- Press ⊘ or ⊙ to change the VOX level.
- Press ⊙ or the PTT button to save the new call tone an
  menus.

Note: Selecting level 0 will disable VOX operation without regard
switch setting on the headset.

...tion: Your M-222P has 22 channels available. To change

...e radio on, repeatedly press ⊙ until the current channel
...on flashes.
...e ⊙ or ⊙ buttons to change the channel.
...⊙ or the PTT button to save the new channel and exit the
...

88 88

...on: Your M-222P has 38 CTCSS codes available. The selected
...y be different for each channel. To select a CTCSS code for the
...:
...e desired channel selected, repeatedly press ⊙ until the current
... code number flashes.
... ⊙ or ⊙ buttons to change the CTCSS code number.
...⊙ or the PTT button to save the new CTCSS code and exit the
...
...g a CTCSS code of 0 will disable the CTCSS feature. To
...etween two M-222P radios, both the channel and

CTCSS code selections must be the same. To communicate with o...
and brands of radios the actual radio frequency and CTCSS freque...
matched. The frequency charts at the back of this book are inclu...
this selection. In general, the first fourteen channel selections ma...
communicate with most FRS radios.

Monitor button: Pressing and holding the   button lets you h...
so you can adjust the volume level of the radio level when not re...
The ⊙ should be used to check activity on current channel befo...

Time out Timer: The Time-out Timer feature helps extend batte...
preventing accidental continuous transmission. The radio will emi...
tone if the PTT button is pressed continuously for 60 seconds an...
stop transmitting.

Power Selection: Your M-222P has two transmit power levels. T...
power level on channels 1-7 and 15-22:
- Press ⊙ until the **P.HIGH** or **P.LOW** icon flashes.
- Press ⊙ or ⊙ for select between high and low power l...
- Press the PTT button for save and exit.

Note: On channels 8-14 no power level selection is possible.

NCE REQUIRED

bile Radio Service) frequencies
ations Commission) license.
luded in the owner's manual. A
hannels 1 - 7 or 15 - 22, which
erious penalties could result for
of FCC rules, as stipulated in
02 (amended).

FCC which should be used for
2P. GMRS users should also
sions only, avoiding channel
g prudent with the lenght of their

ould be directed to the FCC at
ailable on the FCC's website at

95.0

the following national and
g exposure of human being to

Commission, Code of Federal

(ANSI) / Institute of Electrical
1-1992
gineers (IEEE) C95.1-1999

n and Measurements (NCRP)

ing Radiation Protection

ce with the general population
ansmit no more than 50% of
nergy exposure only when