

## **M538-BS(Base Station)**

### **Operating instructions**

NOTICE: All persons shall maintain a minimum of 35 cm separation distance when transmitting in order to meet the Maximum Permissible Exposure level of 0.2mW/cm<sup>2</sup>.

1. Power Supply: The M538-BS is powered by a transformer that will convert from 120 volt AC to 12 volt DC, with a current capacity of 900mA.

2. Function:

A. Transmit and receive. The M538-BS will operate as a transceiver, meaning it will both transmit and receive messages from other MURS radio units. The M538-BS is equipped to operate on 5 channels, with 38 sub channels. In order to communicate with another MURS radio, the channel and the sub channel must be set alike. The M538-BS also has 4 separate call tones that can be used to page other users before starting a conversation. The M538-BS can also receive an alert signal from the MURS ALERT transmitter. This will notify you of activity at the location of the MURS Alert Transmitter.

B. LCD Display. The LCD will display channel, CTCSS, Tone, TX, RX, Lock Icon(\*\*), and Alert Icon(\*\*). When the base station is powered up, it will return to the same channel, CTCSS, and tone that it had when it was turned off.

C. Earphone. The M538-BS is equipped with a jack for an earphone.

D. Relay Function. The red and black push button terminals on the back of the base station are a Normally Open (NO) relay. The relay will make closure for several seconds when an alert signal is received from the MURS Alert transmitter. The relay has a capacity of 5A @ 28V DC.

E. Operating range. The M538-BS is capable of communicating up to 2 or more miles. This will vary depending on the local terrain.

3. Operation:

A. ON/OFF/Volume. With the transformer plugged into an outlet, you can turn the power on or off by rotating the volume dial on the left side of the base station. This will also control the level of the volume.

B. Changing Channels. You can select the proper channel by pressing the up or down key. The lock Icon(\*\*) must be deactivated before you can change the channel.

C. Sub Channels (CTCSS). You can select the proper sub channel by pressing the mode button once. This will cause the CTCSS display to flash. You can then select the proper sub channel by pressing the up or down key. The lock Icon(\*\*) must be deactivated before you can change the sub channel.

D. Call Tone. You can select between 4 different call tones. You can select the proper call tone by pressing the mode button twice. This will cause the Tone display to flash. You can then select the proper call tone by pressing the up or down key. The lock Icon(\*\*) must be deactivated before you can change the call tone.

E. Lock. The lock icon(\*\*) will indicate that the unit is locked and the channel, sub channel and tone will not be able to be changed. To lock the unit, press and hold the MODE button for 2 seconds. To unlock the unit, press and hold the MODE button for 2 seconds.

F. PTT. The PTT (push to talk) button is used so that you can send a message to another unit. Simply press the PTT button and speak with a clear voice into the base station. When you are done speaking, release the button. When the PTT is pushed, the TX display will show on the

LCD. This means that you are transmitting.

G. Call Tone. The call tone can be used to initiate a conversation. In order to send a call tone, simply press and release the CALL button.

H. Monitor. The MON button will allow you to monitor the channel that you are using. When the MON button is pressed, you will be able to hear an conversations that are occurring on any sub channels. This can be used so that you do not talk over others that are trying to use the channel.

I. MODE.

a. The MODE button is used to control the Channel, CTCSS, Call tone, lock(\*\*) and alert icon(\*\*). To lock or unlock the controls, you must press and hold the MODE button for 2 seconds. If the lock icon is not displayed, you can use the MODE button to toggle through the Channel, CTCSS, and Tone functions

b. If the base station has received an alert signal from the MURS ALERT transmitter, the alert icon(\*\*) will be displayed in the LCD. To remove the alert icon, press the mode button for 1 second.