GE Mobile Communications

S-550
CONTROL UNIT

GE Mobile Communications

Operator's Manual

SAFETY INFORMATION . . .

The operator of any two-way mobile radio should be aware of certain hazards common to the operation of vehicular two-way radio transmitters.

A list of the possible hazards are as follows:

1. Radio Frequency Injury

To prevent burns or related physical injury from radio frequency energy, do not operate the transmitter when anyone outside of the vehicle is within two feet of the antenna.

2. Explosive Atmospheres

Just as it is dangerous to fuel a vehicle with the motor running, do not operate the radio transmitter while fueling the vehicle. Do not carry containers of fuel in the trunk of the vehicle when the radio is mounted in the trunk.

3. Interference to Vehicular Electronic Systems

Electronic fuel injection systems, electronic anti-skid braking systems, electronic cruise control systems, etc., are typical of the types of electronic devices which may malfunction due to the lack of protection from radio frequency energy present when transmitting. If the vehicle contains such equipment, consult the dealer for the make of vehicle and enlist his aid to determine if such electronic circuits perform normally when the radio is transmitting.

4. Dynamite Blasting Caps

Dynamite blasting caps may be caused to explode by operating a vehicular two-way radio transmitter within 500 feet of the blasting caps. Obey the "Turn Off Two-Way Radios" signs posted where dynamite is being used. When transporting caps in your vehicle:

1. Carry the blasting caps in a closed metal box with a soft lining.

2. Do not use the transmitter whenever the blasting caps are being put into or being removed from the box.

UNDER U.S. LAW, OPERATION OF AN UNLICENSED RADIO TRANSMITTER WITHIN THE JURISDICTION OF THE UNITED STATES MAY BE PUNISHABLE BY A FINE UP TO $10,000, IMPRISONMENT UP TO TWO YEARS, OR BOTH!

CONTROLS AND INDICATORS

CONTROLS

The **POWER/VOLUME** control is a rotary control switch that serves two functions. It controls the input power to the control unit and the radio and adjusts the speaker volume. An audible click will be heard when power is applied. Position dots on the knob indicate the volume setting.

POWER/VOLUME

The **CHANNEL** select switch is a 16-position rotary switch that selects one of up to 16 channels. The selected channel is displayed on the 7-segment display.

CHANNEL

The **SQUELCH** control is a rotary control that sets the squelch threshold. Turning the control clockwise will unsquelch the radio and allow you to hear noise on the speaker. Position dots on the knob indicate the squelch level setting.

SQUELCH
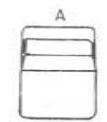
The **MODE A/B** switch is a two position slide switch that allows you to select up to 32 channels. Channels 1 thru 16 are selected by moving the **MODE** switch to position A. The second group of 16 channels is selected by mode B. The channels in each mode are identified as 1 thru 16.

MODE A/B

The **SCAN** pushbutton switch turns the scan function on or off. Press the **SCAN** button once to turn on scan. The scan **ON** indicator will light. Press again to turn the scan function off.
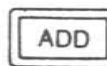
SCAN

The **ADD** pushbutton switch adds selected channels to the scan list. Select the desired scan channel using the **CHANNEL** select switch and press the **ADD** pushbutton once. The scan **ON** indicator will light showing that the channel has been added. If front panel programmable, press the **ADD** pushbutton twice to establish the Priority 1 channel.

ADD

DEL

DELETE

The **DELETE** pushbutton switch deletes selected channels from the scan list. Select the channel to be deleted using the **CHANNEL** select switch and press the **DELETE** pushbutton. The scan display will be blanked.

INT
EXT

PA
INT/EXT PA
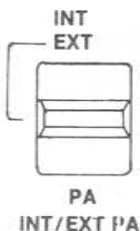
The three position **INT/EXT/PA** slide switch selected the internal speaker, external speaker, or the Public Address function. Slide the switch up to select the internal speaker. The center position selects the external speaker for receive audio only and the down position selects the Public Address Option. In this position mic audio is amplified and then applied to the external speaker.

DUAL

DUAL CTRL

The **DUAL CTRL** switch allows the radio to be operated by either of two remotely located control units. Control is transferred between the two control units by momentarily pressing the **DUAL CTRL** switch. The **ON** indicator will light indicating that the control unit has control.

INDICATORS

The **CHANNEL** indicator displays the channel selected for operation (1-16). The indicator is lighted when power is applied.

TX

The red **TX** indicator lights when the transmitter is keyed, i.e., Push-To-Talk **(PTT)** switch is pressed.

BSY

The yellow busy **(BSY)** indicator lights when a receive signal is present on the selected channel. The indicator operates independent of Channel Guard.

The **SCAN** indicator displays the following conditions:

• When scan is on, the display indicates the channel currently being received. It will be blank if a carrier is not present on the scanned channels.

• When scan is off, the display indicates that the selected channel is a channel from the scan list by displaying the same number. The display will be blank if the selected channel is not from the scan list.

ON

The red scan indicator lights when the scan funciton is enabled.

P1

The yellow **P1** (Priority 1 channel) indicator lights when a signal is received on the priority 1 channel with scan on. With scan off, the indicator lights when the channel selected is a priority 1 channel.

DUAL

The green **ON** indicator lights when the **DUAL CTRL** switch is momentarily pressed, indicating that the control unit has control.

PROGRAMMING

All channels are front panel programmable. Channels are added to or deleted from the scan list using the **ADD** and **DELETE** buttons on the front panel. The priority channel is either programmed from the front panel or by control unit modification. If the control unit is modified, the priority channel will follow the channel select switch.

FRONT PANEL PROGRAMMING

1. Turn the control unit on.

2. Turn scan off, if it was on (red indicator is off).

3. Using the channel select switch select the channel(s) to be added to the scan list. Press the **ADD** button once to add each channel as it is selected. Press the **ADD** button twice if the particular channel is to be established as Priority 1.

4. To delete any channel from the scan list, press the **DELETE** button once as the channel is selected.

SELECTABLE PRIORITY

1. Non-priority channels are selected as above.

2. The Priority channel follows the channel select switch.

TO RECEIVE A MESSAGE

1. Turn the **OFF/VOLUME** control to the on position. An audible click will be heard when power is applied. The position dots indicate the audio level.

2. Select the desired operating channel using the channel select switch.

3. Adjust the volume control until the noise is easily heard, but not annoyingly loud. You may need to turn the **SQUELCH** control counterclockwise.

4. Set the squelch threshold by coming off-hook with the microphone and turning the **SQUELCH** control counterclockwise until a noise is heard. Now turn the **SQUELCH** control clockwise until the noise just disappears.

TO TRANSMIT A MESSAGE

1. Turn the radio on and select the desired operating channel.

2. Decide what you want to say. If you intend to send a lengthy message (or several messages), the vehicle engine should be running to keep the battery charged.

3. Pick up the microphone and listen briefly to the speaker to make sure that no one else is using the channel.

4. Press the Push-To-Talk **(PTT)** switch on the microphone and identify yourself. Example: "Unit 5 to headquarters". (The red transmit indicator on the control unit will turn on each time you press the **PTT** switch.

5. Release the **PTT** switch and wait for an answer to your call. "Example: Go ahead, Unit 5". Then complete your message.

NOTE: Always speak in a normal voice. Hold the microphone cupped in your hand and touching your cheek lightly. Speak across the face of the microphone, not directly into it. Shouting will actually reduce your range, so do not speak any louder than normal.

NOTES