Golden Source Electronics LTD

Operation Manual

FRS with GMRS channel
(Family Radio Service)
Model: 1031-US
(Basic function)

Issue Date:	**Jan 15, 2002**
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Doc Short name:	**OPERATMENU 000**
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Version:	**0.00**

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1 Operation Manual Version Change History

Version No.	Details	Date
0.00	- Initiate	Jan 28, 02

2. *Display Icon, LCD and Button Description*

2.1 Icon Description
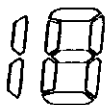
1 □ digit 7 segments, displays CHANNEL number function
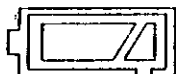
BATTERY Icon, displays BATTERY CAPACITY LEVEL and BATTERY CHARGING function

LEVEL BAR Icon, displays sound level function

LOCK Icon, displays KEY LOCKED function

SCAN Icon, displays CHANNEL SCAN function

GMRS Icon, displays GMRS CHANNEL function

VOX Icon, displays VOX transmitting function

2.2 LCD View

2.3 Button Function Description

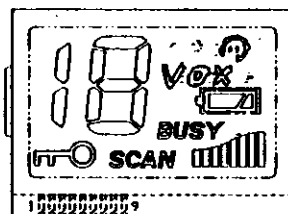| Button symbol	Description
	Power ON/OFF button function
PTT	Push to Talk function
✱	LAMP function
SCAN	SCAN function
MENU	MENU selection function
MON	MONITOR function
C	CALL alert function
▲ ▼	VOLUME UP and DOWN function

3. Turning the Unit ON

Press and hold the POWER button. The unit will "beep" with dual tone and the LCD SCREEN will briefly display a SELF-TEST SCREEN.

4. Turning the Unit OFF

Press and hold the POWER button. The unit will "beep" with a signal tone and the LCD SCREEN will turn blank.

5. Adjusting Speaker Volume

5.1 Press the ▲ button to increase the Speaker Volume.

5.2 Press the ▼ button to decrease the Speaker Volume.

5.3 The Speaker Volume level is indicated by the number of bars displayed in the lower right corner of the LCD SCREEN.

5.4 Press and hold ▲ button. The volume level will automatically increase sound level until maximal level.

5.5. Press and hold ▼ button. The volume level will automatically decrease sound level until minimal level.

5.6 Volume ▲ and ▼ button are disabled during BUTTON LOCK mode.

6. Receiving a Signal

6.1 The unit is continuously in the RECEIVE mode when the unit is ON and not Transmitting. When you receive a signal on the current channel, the RX icon (BUSY) is displayed. (See "LCD SCREEN" for details).

6.2 During receiving mode, if you pressing **PTT** button and then the unit will change to TRANSMIT mode immediately.

7. Transmitting a Signal

7.1 Check the channel activity by pressing and holding the **MON** button. You'll hear static if the channel is unoccupied. Don't use occupied channel for TRANSMIT action if someone is talking on the occupied channel.

7.2 Press and hold the **PTT** button to TRANSMIT. The TX LED Indicator will light up in RED. Hold the unit in a vertical position with the microphone 2 to 3 inches from user mouth.

7.3 While holding the **PTT** button, speak into the unit a normal tone of voice.

7.4 Release the **PTT** button when you have finished transmitting.

NOTE: In order for other people to receive your transmission, they must also be on the same channel you are currently using. Refer to the "Changing Channels" section for more information.

8. Sending CALL TONES

You can use CALL TONES to alert the other user to identify yourself. You can also use CALL TONES to signal the beginning or the end of a transmission.

8.1 Pressing **CALL** button with short touch, the call tone keep 3 seconds with transmit together.

8.2 Press and hold the **CALL** button, the Power red LED will light up and TRANSMIT will continuous until **CALL** button release.

9. LAMP / LOCK Function

9.1 Press and immediately release the **LAMP** button to light up the LCD SCREEN. The BACKLIGHT will automatically shut off after 4 seconds if no other buttons have been pressed.

9.2 Press and hold the **LAMP** button unit the BUTTON LOCK icon is display on the LCD SCREEN. During Button LOCK turn on, if user press button **▲ ▼** and **MENU** that will not function but LOCK icon will flashing one time with 'beep' sound to show the button are on Button LOCK mode. Press and hold LAMP button again to deactivate button LOCK mode.

NOTE: ▲ ▼ and MENU operations are disabled during BUTTON LOCK mode. But **PTT**, **CALL**, **MON** and **LAMP** button are still function.

10. MENU Function

You can use the **MENU** button to select CHANNEL number, VOX sensitivity and Volume level feature respectively.

10.1 Press the **MENU** button once to enter FRS 14 channel or GMRS 15 Channel selection mode.

   10.1.1 After enter Channel selection mode, Channel number will flash, you can press **▲** or **▼** button to select channel number. Please check the detail description in their relative paragraphs [Channel Selection Function]

10.2 Press **MENU** button 2 times to enter VOX mode

   10.2.1 Press **▲** button to select higher VOX sensitivity.

   10.2.2 Press **▼** button to select lower VOX sensitivity or VOX off mode.

   10.2.3 Please check the detail description in their relative paragraphs [VOX (hand free

function) Function].

10.3 Press MENU button 3 times to return to volume adjustment mode.

10.4 MENU button are disabled during BUTTON LOCK mode.

11. FRS / GMRS Selection Function

The unit has FRS 14 channels and GMRS 15 channels. User can select FRS or GMRS as following

11.1 On standby mode, Unit will default as FRS channel mode, press POWER button once to select GMRS channel mode. Press POWER button one more time to select back to FRS channel mode

    11.1.1 When select GMRS channel mode, the GMRS icon will show on LCD display to confirm GMRS channel mode.

    11.1.2 When select FRS channel mode, the GMRS icon will disappear to confirm FRS channel mode.

11.2 On standby mode, press the MENU button once to enter channel selection mode.

    11.2.1 After enter Channel selection mode, Channel number will flash, you can press POWER button as toggle switch to select FRS or GMRS channel.

        11.2.1.1 When select GMRS channel mode, the GMRS icon will show on LCD display to confirm GMRS channel mode.

        11.2.1.2 When select FRS channel mode, the GMRS icon will disappear to confirm FRS channel mode.

11.3 After confirm FRS or GMRS Channel, user can press ▲ or ▼ button to select channel number.

12. Channel Selection Function

The unit has FRS 14 channels and GMRS 15 channels.

12.1 Press the MENU button once to enter channel selection mode.

    12.1.1 After enter Channel selection mode, Channel number will flash, you can press POWER button to select GMRS or press back for FRS channel mode.

        12.1.1.1 When select GMRS channel mode, the GMRS icon will show on LCD display to confirm GMRS channel mode.

        12.1.1.2 When select back to FRS channel mode, the GMRS icon will disappear confirm FRS channel mode.

12.2 After confirm FRS or GMRS Channel, user can press ▲ or ▼ button to select channel number.

    12.2.1 Press ▲ or ▼ button to move to a higher or lower channel respectively.

    12.2.2 During channel number flashing, press PTT button to confirm selection channel or waiting 10 second for function confirmed automatically.

13. VOX (hand free function) Function

This function allows user to do the hand free function in Transmitting and Receiving

131.1 Press MENU button 3 times to enter VOX mode

    13.1.1 Press ▲ button to select higher VOX sensitivity.

    13.1.2 Press ▼ button to select lower VOX sensitivity or VOX off mode.

    13.1.3 During VOX sensitivity mode, press MENU button to confirm selected VOX sensitivity and return to standby mode.

13.1.4 During VOX sensitivity mode, press the PTT or CALL button to confirm selected VOX sensitivity and return to standby mode.

13.1.5 On VOX mode, user can speak with their voice through the Microphone to activate transmitting mode automatically.

13.1.6 During VOX Transmitting mode, if the surrounding is too noise that make your unit can not stop the transmitting and then you can press LAMP button twice to stop the VOX transmitting mode 4 seconds.

After press LAMP button twice, user has 4 seconds to adjust the VOX sensitivity to lower sensitivity that suitable a noise surrounding or off mode.

14. CHANNEL SCAN Function

Channel SCAN performs searches for active signals in an endless loop from 1 to 14 for FRS (or 1 to 15 for GMRS).

14.1 Press and release the SCAN button for active CHANNEL scanning. The channel number on the LCD SCREEN changes rapidly until an active signal is detected.

14.1.1 During channel scanning, if the SCAN button pressing one time and then channel scan function will be stopped immediately. The channel will stand back to original default channel automatically.

14.1.2 During channel scanning, if the PTT button pressing and then the channel scanning function will stand on original default channel automatically.

14.1.3 During channel scanning, if the CALL button pressing and then the channel scanning function will change to CALL function and hold existing scanning channel immediately

14.1.4 During channel scanning, if no other button pressing, unit will continuous scanning and receiving with detected channel. About two states will repeat until pressing PTT, SCAN or CALL button

14.2 When an active signals (any one channel) is detected, CHANNEL SCAN pauses keeping the active signal broadcasts.

14.3 Press the PTT button to communicate through the active signal channel and CHANNEL SCAN is deactivated.

14.3.1 If the active signal is original default channel (e.g. CH-5) and then after you press PTT button, the default channel (CH-5) will kept again.

14.3.2 If the active signal is not the original default channel (e.g. CH-1) and then after you press PTT button, the default channel (e.g. CH-5) will change to pressing channel (CH-1) automatically.

14.4 When an active signal (any one channel) is detected, but another channel is desired, press the MON button to bypass the current channel and continue to search for another active channel.

Note: We can call this function as next available channel search.

14.5 Press the SCAN button to deactivate CHANNEL SCAN mode.

15. MONITOR Function

You can use the MONITOR feature to check for weak signals in the current channel.

15.1 Press the MON button.

15.2 Press and hold the MON button until it "beeps" for continuous monitoring.

15.2.1 During continuous monitoring function, press ▲ and ▼ buttons, the UP and DOWN function can be used together with continuous monitoring.

15.2.2 During continuous monitoring function, press LAMP button, the LAMP function can

be used together with continuous monitoring.

15.2.3 During continuous monitoring function, Press PTT, SCAN, MENU and CALL button, the function will change from continuous monitoring function to action buttons respectively.

16. External DC ADAPTOR charger function – option accessory (For rechargeable battery only)

You can use the external DC ADAPTOR to charge up your rechargeable batteries by normal charging function.

16.1 External charging function

After DC header plug in the unit, the charging action will display on LCD as flashing battery icon.

16.1.1 The ADAPTOR (120V input) 6V/100mA can be used for normal charging function.

18.1.1.1 It takes approximately 14 hours to fully charge for new batteries.

16.1.2 During external ADAPTOR charging, unit will just keep rechargeable batteries charging and charging display function only.

CAUTION: During external DC ADAPTOR using, do not use non-rechargeable batteries put in your unit

17. External Accessory Control Function – option

The unit is designed to work with external earphone/microphone or external earphone/microphone with PTT control.

17.1 You can use the external accessory headset to communication with your partner as a private voice function.

17.1.1 Plug in the header of headset accessory in unit jack

17.2.2 You can push unit PTT button to transmitting or release the PTT button to receiving the signal from your partner.

17.2 You also can use the external accessory headset with PTT switch to control Transmitting function.

17.2.1 Plug in the header of headset with PTT accessory in unit jack

17.2.2 You can push external PTT switch to transmitting or release the PTT switch to receiving the signal from your partner.

18. Battery Capacity Level/Low Battery Indication

18.1 The BATTERY CAPACITY LEVEL is indicated by the number of squares present inside the BATTERY icon on the LCD SCREEN.

18.2 When the BATTERY CAPACITY LEVEL is low, the BATTERY outside case icon will flash and 'beep' with three tones to indicate that the batteries need to be replaced.

19. Major Function

Channels Available	FRS 14 Channels
	GMRS 15 Channels
Output ERP Power (TX)	50 mW
Range	2 Miles

20. Channel Table

21.1 FRS Frequency and channel table

Channel NO.	Frequency (MHz)	Channel NO.	Frequency (MHz)	Channel NO.	Frequency (MHz)
1	462.5625	6	462.6875	11	467.6375
2	462.5875	7	462.7125	12	467.6625
3	462.6125	8	467.5625	13	467.6875
4	462.6375	9	467.5875	14	467.7125
5	462.6625	10	467.6125		-

21.2 GMRS Frequency and channel table

Channel NO.	Frequency (MHz)	Channel NO.	Frequency (MHz)	Channel NO.	Frequency (MHz)
1	462.5625	6	462.6875	11	462.5500
2	462.5875	7	462.7125	12	462.6000
3	462.6125	8	462.5750	13	462.6500
4	462.6375	9	462.6250	14	462.7000
5	462.6625	10	462.6750 *	15	462.7250

* GMRS - emergency channel 462.6750MHz (CH-10)

22. Outlook and Button view
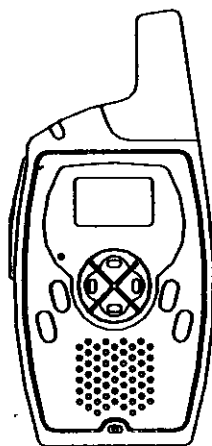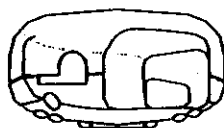
FCC Notice

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Notice

Safety Information:

Your wireless hand-held portable transceiver contains a low power transmitter. When the Push-to-Talk (PTT) button is pushed it sends out radio frequency (RF) signals. In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices.

Important: To maintain compliance with the FCC's RF exposure guidelines, hold the transmitter and ANTENNA at least 1 inch (2.5 centimeters) from your face and speak in a normal voice, with the ANTENNA pointed up and away from the face. If you wear the handset on your body while using the headset accessory, use only the supplied BELT CLIP for this product and when transmitting, take it out of the belt to ensure that the ANTENNA is at least 1 inch (2.5 centimeters) from your body.

Use only the supplied ANTENNA. Unauthorized antennas, modifications, or attachments could damage the transmitter and may violate FCC regulations.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

APPENDIX II

NOTE

When the Radio is transmitting on GMRS frequencies, that operation on GMRS frequencies requires an FCC license and such operation is subject to additional rules specified in 47 C.F.R. Part 95.

FCC Licensing Information

Operation on GMRS frequencies requires a license from the Federal Communications Commission (FCC).

Information regarding an application for your license can be obtained as follows if your intend to use the GMRS channels:

Website - http://wireless.fcc.gov/prs/genmbl.html

Tel. 1-800-418-3676

GMRS Licensing Information

Before any station transmits on any channel authorized in the GMRS from any point within or over the territorial limits of any area where radio services are regulated by the FCC, the responsible party must obtain a license for a GMRS system. An individual 18 years of age or older, who is not a representative of a foreign government, is eligible to apply for a GMRS system license. Application for a GMRS system license is made on FCC Form 605 and you can obtain a copy from the FCC's Web site: http://www.fcc.gov/formpage.html or by calling the FCC's Forms Distribution Center 1-800-418-FORM (3676), or from the fax-on-demand by dialing (202) 418-0177. There is a filing fee. For information on fees, see the FCC's Web site: http://wireless.fcc.gov/csinfo/feeinfo.html