



SRP9100

Portable Radio



Conventional – PMR

Operating Instructions

TNM-U-E-0053 Issue 1.1a, January 2010

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SRP9100 ~ PMR Portable Radio User Guide

ASSOCIATED DOCUMENTATION

The following documentation is available for use with the SRP9100 series of products:

To order copies of any of the above publications, or any other Simoco product, contact Comgroup Australia on +61 3 9730 3800 or send a Fax on +61 3 9730 3968. The Simoco web site also has a comprehensive list of documentation available for download.

www.simoco.com

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SAFETY

1. Do NOT operate your portable radio, without a handsfree kit, whilst driving a vehicle.
2. Do NOT operate your radio in an explosive atmosphere. Obey the 'Turn Off Two-way Radios' signs where these are posted, e.g. on a petrol station forecourt.
3. Do NOT dispose of batteries in a fire.

EMR SAFETY

The SRP9100 portable radio transceiver complies with the RF exposure guidelines as defined in the ARPANSA* standard "Radiation Exposure Levels to Radiofrequency fields – 3kHz to 300GHz", Schedule 5 when:

- (1) the radio is operated by an "aware" user and
- (2) the transmit duty cycle does not exceed 50% over a six minute period and
- (3) the normal operation entails the antenna being separated from the users body by not less than 2.5cm.

* Australian Radiation Protection and Nuclear Safety Agency Radiation Protection Series Publication No. 3.

HINTS FOR USING THE RADIO

- When speaking, hold the radio a few centimeters from your mouth and speak across it, rather than into it. The microphone is located near the top left of the portable radio's speaker grille.
- Keep the length of your conversation to a minimum to conserve battery life.
- When it is possible to move location, avoid making calls from known poor signal-strength areas such as the radio systems fringe areas (limit of range) or from screened or shadowed areas, e.g. an underground car park or underpass.

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1. INTRODUCTION

1.1 OVERVIEW

The SRP9100 Series Radios are a family of versatile Digital Signal Processor (DSP) controlled, two-way portable radios.

The SRP9100 Series is available in a number of frequency bands and versions for specific applications. This manual describes the operation of the SRP9130 PMR model with a 12 key keypad and SRP9120 PMR without numeric keypad.

The radio is software programmable and it can be customised to the operational requirements of your particular fleet. Your Simoco representative can help in programming your radio facilities to meet your present and future requirements.

A wide range of accessories is available to complement the SRP9100 series radios, including chargers, antenna, headsets, covert kits, holsters and carry cases. Refer to Simoco for comprehensive descriptions.

This guide describes the facilities that are currently available and can be programmed into the PMR mode of the SRP9100. This guide is applicable to SRM9100 Rev2 incorporating a dot matrix display.

1.2 CONFIGURATION

Before you can use the SRP9100, it must be configured using the Field Personality Programmer (FPP). The configuration process loads the customised radio channels, signalling and user options so that the radio will operate with your system.

Although this manual defines the configuration and use of the PMR mode, the radio can be configured easily to trunk mode using the FPP.

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2. FRONT PANEL CONTROLS



Figure 1 – SRP9100 Portable

Key/ Control		Function
On/Off/Volume		Rotate the switch clockwise to turn on the radio and then set the volume to the desired level.
Rx/Tx/Power LED		Green LED illuminates when receiving a signal. Red LED Illuminates when the radio is transmitting. Flashing Red indicates low battery.
Keypad		Used to dial channel numbers, set status and send DTMF or Selcall. Note that the SRP9120 variant does not have a keypad.
Function Key F1	M	This key's function may be configured by the programmer, it is typically programmed as the menu select key.
Function Key F2	-	This key's function may be configured by the programmer, it is typically programmed as the channel down key

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Function Key F3	+	This key's function may be configured by the programmer, it is typically programmed as the channel up key
Function Key F4	OK	This key's function may be configured by the programmer, it is typically programmed as the Send Channel Encode key. Note that during menu operations, it becomes a confirm key.
Special Function F5		This key's function may be configured by the programmer.
Special Function F6		This key's function may be configured by the programmer.
Special Function F7		This key's function may be configured by the programmer, it is typically programmed as the Alarm/Emergency key

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3. MENU SYSTEM

The SRP9100 radio software uses a programmed Menu structure to enable the operator to access all of the radio options. The structure of the menu can be programmed to meet the specific needs of individual customers.

Figure 2, over the page illustrates the menu structure of the radio. Note that the order and presence of each menu is determined by the configuration of the radio programmed by the Field Personality Programmer.

Possible Menu entries are:

- Phone Book
- Status
- Stored Calls
- Send Message
- Mute Adjust
- Setup
- Phone Book Edit
- Contrast
- Alert Volume
- Radio Information
- Network
- Received Signal Strength Indication
- Lone Worker

To assist the user in menu key selection, a soft menu label will often appear above the four function keys below the display. The label shows the user the current function for that key which may change between different menus.

Programming of menus is a configuration task normally performed by the system manager using programmer software.

3.1 MENU NAVIGATION

Pressing the “**M**” key selects menu mode from the main Channel Screen.

Once in Menu mode, the – and + keys cycle through the menus. To exit menu mode, press the “**M**” key again or the Menu timeout will exit automatically.

Generally, pressing “**M**” key while in a menu backs up to the next highest level of menu and the “**OK**” button selects the function.

The +/- keys are used to navigate through a list of options such as channels, phone book entries or increase/decrease a value.

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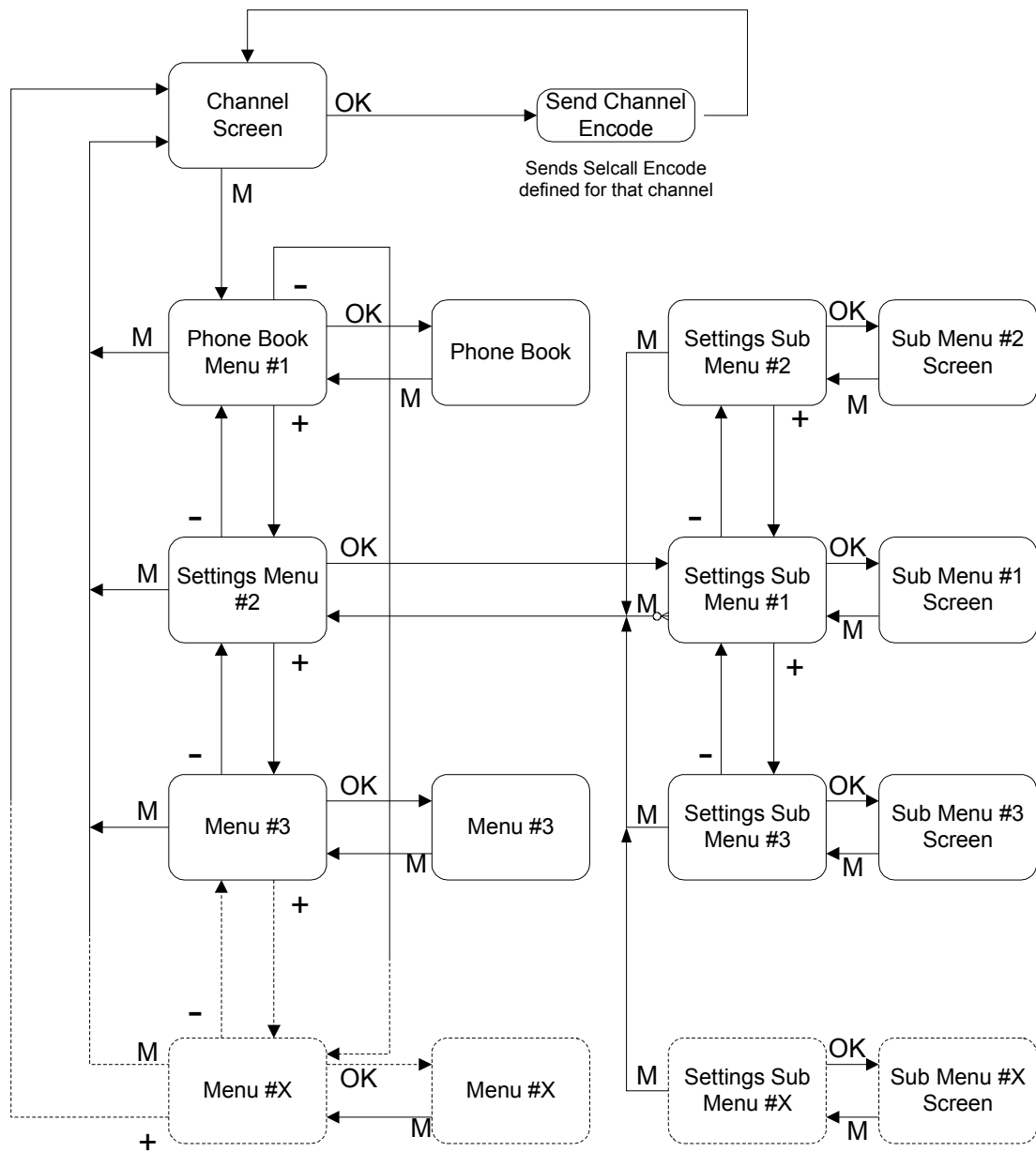


Figure 2 - Menu Navigation

The Menu entries and order can be configured and changed by the field programmer.

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4. MAIN MENU SCREENS

4.1 CHANNELS SCREEN



The Channels Screen shows the current channel and allows it to be changed.

The **Channel Name** shows the text associated with the radio channel.






The **RSSI Bars** indicate the signal strength of the current channel.

The **Battery Level** indicates the current battery condition

Pressing the **Menu** softkey enters the menu mode.

Pressing the **Call** softkey sends a Channel Encode Selcall.

Several **Icons** can be displayed as shown below:

ICONS	INDICATION
	The envelope icon indicates that there are one or more stored messages.
	The outline speaker icon indicates that a signal is present and the radio is unmuted.
	Received Signal Strength Indication (RSSI). A stronger signal will display more bars. One bar shown = approx. -118dBm, Two bars = approx. -106dBm, Three bars = approx. -96dBm, Four bars = approx. -84dBm.
	Battery level indicator. A new battery should display five bars.
	Scan Indicator. When radio is on a scan channel and scanning, the arrow will rotate.

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The **- and +** keys scroll through the entries within the current Menu Screen (e.g. Channels).

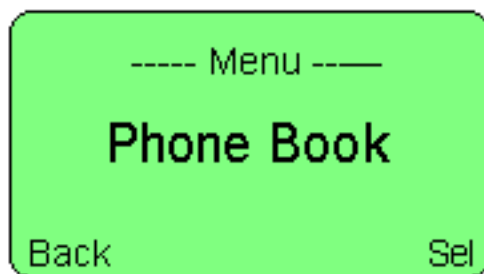
The **Keypad** may be used to enter numbers directly, which temporarily appear on the Message-Line above the softkey labels, e.g. Changing channels from the keypad can be done by entering the channel number and pressing the '#' key. [only available on keypad version]

Note: If DTMF is enabled then pressing keypad keys will send the corresponding DTMF tone. [only available on keypad version]

4.2 PHONEBOOK SCREEN

This Screen need only be accessed if Selcall is used. Selcall Identity information is stored for various users and calls can be placed to them from this Screen.

Once the M key is pressed from the main screen, the **-/+** keys cycle through the available menus. .



Once the Phonebook menu appears, press the **OK** key to select it.



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Once the Phonebook menu is selected, use the **-/+** keys to cycle through the entries.

Pressing the **OK** key will place a call to the displayed identity.

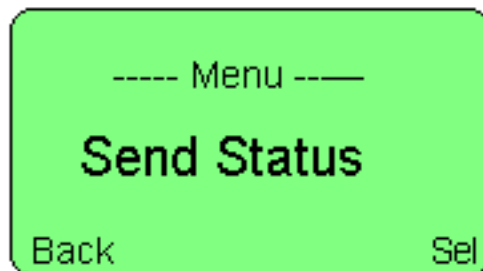
- Notes:
- 1 *If the Selcall requires a Status to be included then the **Saved-Status-Value** will be used. (See description of Status below.)*
 - 2 *The Identity shown on the display when this Screen is exited may be referenced from other Menu Screens and is called the **Current-Phonebook-Entry**.*

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4.3 STATUS SCREEN

This Screen need only be accessed if Selcall is used. Selcall Status is stored here and can be sent from this Screen.

Once the M key is pressed from the main screen, the -/+ keys cycle through the available menus. Once the Status menu appears, press the OK key to select it.



Send Status Menu Entry



The -/+ keys scroll through the Status List entries.

Pressing the **OK** key will send the displayed Status to the *Current-Phonebook-Entry*.

- Notes:
- 1 When a Status is sent, it becomes the current **Saved-Status-Value**, and can be used at a later time from other Menu Screens.
 - 2 The **Saved-Status-Value** can also be set from the Channel or Phonebook Screens by entering the number (from the Keypad) and pressing the * key. The value is saved but not sent. [only available on keypad version]

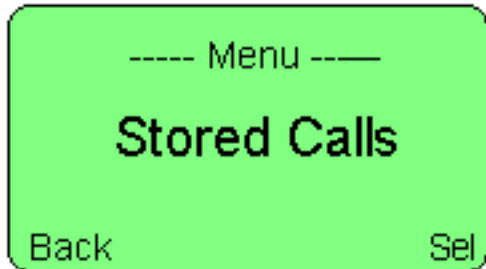
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4.4 STORED CALLS SCREEN

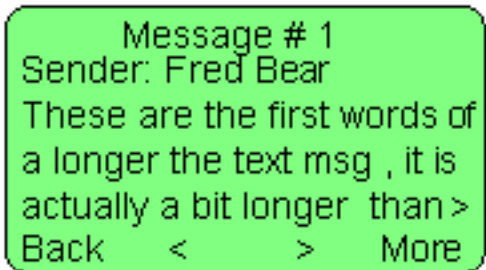
This screen is used to review data messages received or review the ten most recent missed Selcalls (ones not answered before the Alert-tone stops).

The ☒ icon will show in the Main Channel Screen when there is an entry in this Screen. Note that storing of calls is configurable and must be enabled in the Field Programmer Selcall decodes menu.

Once the M key is pressed from the main screen, the -/+ keys cycle through the available menus. Once the Stored Calls menu appears, press the OK key to select it.



Stored Calls Menu Screen



Once Store Calls menu is selected, the first message is displayed. To navigate to other messages, use the -/+ keys. If a message is longer than one screen, the **OK** key can be used to select the next screen of text.

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These are the first words of
a longer the text msg , it is
actually a bit longer than
this, if the msg is longer
use the > or < softkey
Back < > Del



This is an example of the rest of a long text screen.

Message # 1
Sender: Fred Bear
10432
Status: Return to Office
Back < > Del



An example of a Selcall received, where the caller ID was known to the Phonebook. The Phonebook entry of 10432 is labelled as "Fred Bear".

If Status text is used, (e.g. **Return to Office**) it will be displayed under the position of the calling party text and numeric Selcall ID. Should the Selcall ID and/or Status text not be defined in the radio, only the numeric values will be displayed.

The displayed number (Q02) shows the queued position of the entry. The most recent call is shown whenever this Screen is displayed.

Press the **-/+** keys to scroll through other Stored Calls.

Press the **OK** key to Selcall that caller.

Press the assigned **Reset** key to return to the **Channel Screen** without making a call.

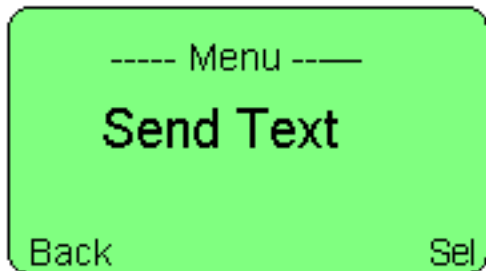
Note that the **Stored Calls Screen** will eventually time out and return to the **Channel Screen**.

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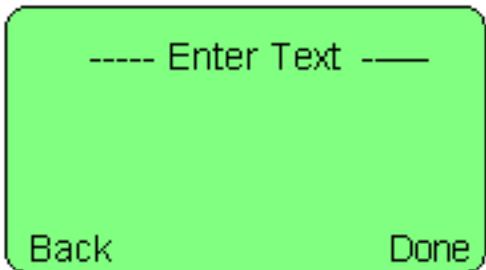
4.5 SEND MESSAGE SCREEN

This Screen allows the user to send a free form text message to another radio user in a similar manner to a cell phone SMS.

Once the M key is pressed from the main screen, the **-/+** keys cycle through the available menus. Once the Send Text menu appears, press the OK key to select it.



Send Text menu screen



Upon selecting the Send Message menu option with the **OK** key, a flashing cursor will appear on the upper left hand corner of the screen.

Each key is labelled with up to 3 text characters. The text characters are entered by pressing the keypad key once for the first character, twice for the second and three time for the third.

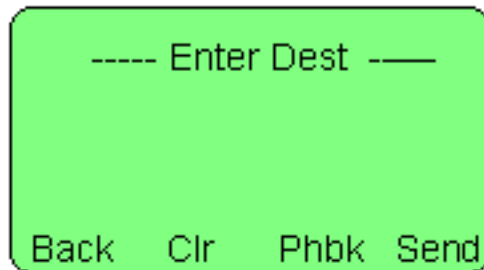
After a short delay, the cursor will advance for the next character entry.

To move the cursor left or right, use the **-/+** keys.

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To clear a character, place the cursor over the character to be cleared using the **-/+** keys. Press the assigned **reset** key to clear it. The **reset** key is usually programmed to one of the side keys.

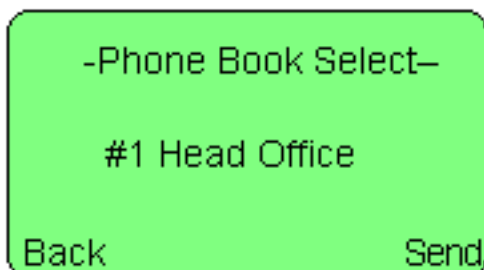
When the message is complete or to abandon the message, press the **OK** key.



To abandon the message, press the **M** key.

To manually enter the address of the called party, enter the numeric digits and then press the Send key.

To enter an address from the Phonebook, press the **+** key.



Once the Phonebook address key has been pressed, the Phonebook select menu will appear. Use the **-/+** keys to find the address of the called party and press the Send key.

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4.6 SETTINGS SCREEN

The Settings sub-menus allow the operator to edit/modify the operation of some of the general functions of the radio. The programmer can restructure or restrict access to any or all of these menus and may restructure them according to specific requirements.

The Settings sub menu contains a further sub-menu titled "Options". The Options menu contains other settings that are required less frequently.

Once the M key is pressed from the main screen, the **-/+** keys cycle through the available menus. Once the Settings menu appears, press the **OK** key to select it.



Press (**OK**) key to show the first of the submenus, and then the **-/+** keys to scroll through these screens.

The actual set-up submenus available will depend on the configuration by the Field Programmer. The settings menu structure can include:

- **Phone Book Edit**
- **Mute Adjust**
- **Alert Volume**
- **Network**
- **Radio Information**
- **Received Signal Strength Indication (RSSI)**
- **User Options (sub menu)**
 - **Key Beeps**
 - **Dual Watch**
 - **Contrast**
 - **Backlight**
 - **DTMF**

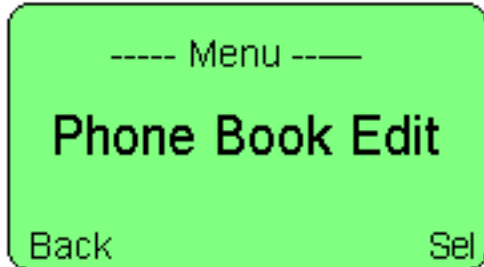
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The Settings menu options are described in further detail in the rest of this chapter.

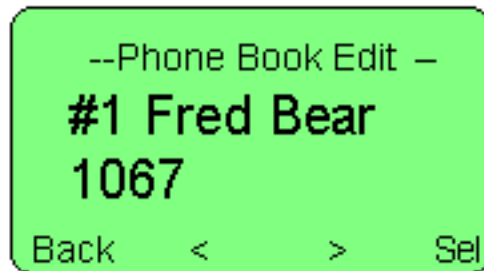
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4.6.1 Phone Book Edit

This Screen allows you to delete or edit Phone Book entries, or add a new entry.

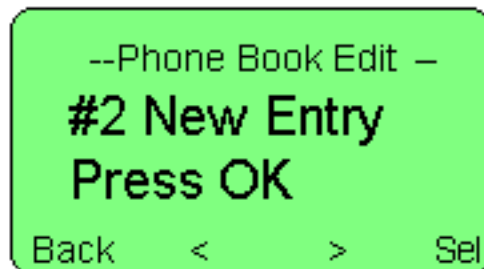


The Phone Book Edit Menu is selected by pressing the **OK** key, otherwise use the **-/+** keys to view other Settings sub menus.



4.6.1.1 ADD ENTRY

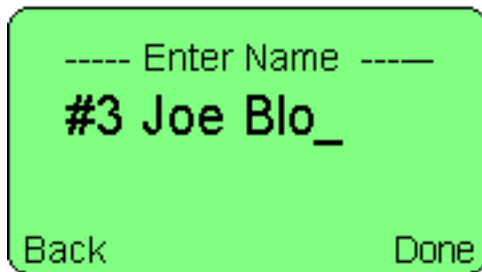
Scroll to the end of the Phone Book Edit main screen. The last entry is **New Entry**.



Select this with the **OK** key.

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The next available entry number is displayed with a blank name field.

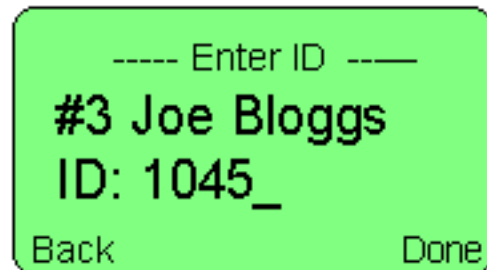


Use the keypad to type the dialstring for the new entry. (refer to Section [4.1.6.4](#)).

Use the -/+ keys to move the cursor.

To delete the digit at the cursor, press the assigned **Clear** function key (normally one of the side keys).

Press (**OK**) to accept the number and display the next screen.



Use the keypad to type the name (refer to Section [4.1.6.4](#)).

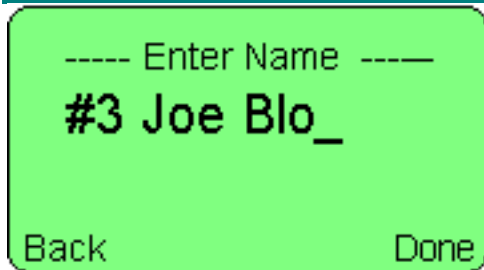
Press (**OK**) to accept the name and go to the Main Channel Screen or (**M**) key to Exit without saving.

4.6.1.2 DELETE AN ENTRY

Bring up **phone book edit** on the screen as for add entry and press the -/+ keys to select the entry to delete.

Press the **OK** key when it is displayed.

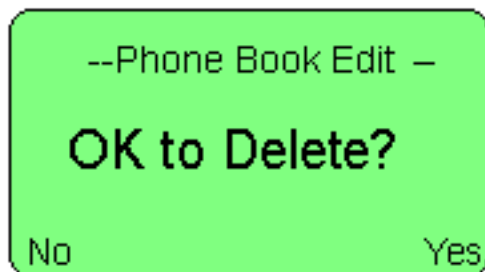
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Press the assigned **Clear** function key (normally one of the side keys) with the cursor over the last character and delete all the name characters.

Press **OK**.

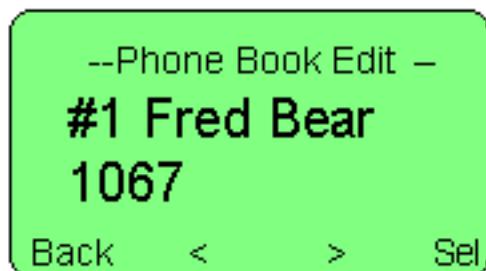
A confirmation screen will appear.



If it is OK to delete, press the **OK** key to delete the entry. If not OK to delete, press the **M** key to exit to the Phone Book Edit screen.

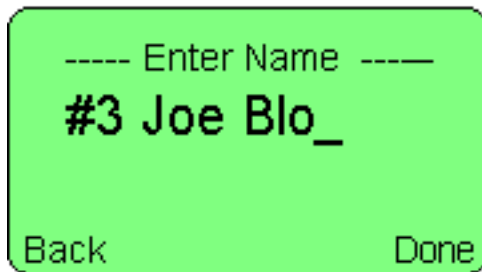
4.6.1.3 EDIT AN EXISTING ENTRY

From the Phone Book Edit main screen, choose the entry to edit with the **-/+** keys.



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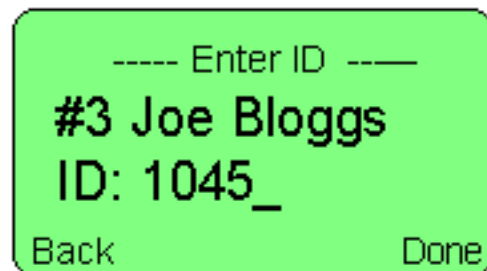
Select the entry with the **OK** key.



Use the keypad to type the dialstring for the new entry. (refer to Section [4.1.6.4](#)).

To delete the digit at the cursor, press the assigned **reset** key (usually one of the side keys).

Press **(OK)** to accept the name and display the next screen.



Use the keypad to type the ID (refer to Section [4.1.6.4](#)).

Press **(OK)** to accept the ID and go to the Main Channel Screen or **(M)** key to Exit without saving.

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4.6.1.4 USING THE KEYPAD FOR ALPHANUMERIC TEXT

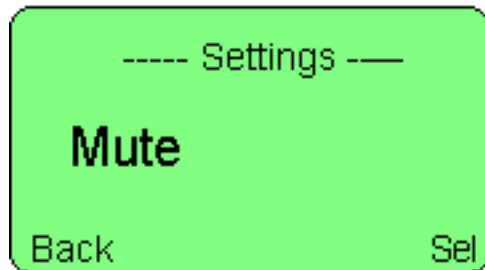
When using the keypad to type text:

- press the appropriate keypad key a number of times until the desired character or number is selected,
- the current character space is identified by a flashing block cursor,
- use ***/#** to select lower/upper case letters, respectively,
- use the **0** key to insert a space,
- use the **-/+** keys to move to the next or previous character space to be entered/modified, and
- Press **(OK)** to accept and go to the next Screen.

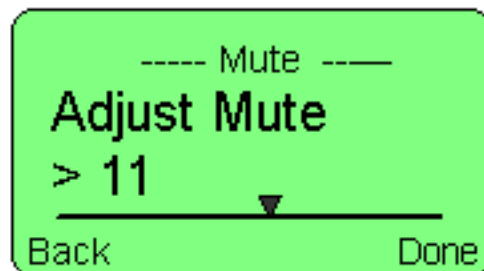
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4.6.2 Mute Adjust

From the Settings Sub Menu, step through the menu options with the **-/+** keys until the Mute menu is displayed.



Press the **OK** key for the Mute adjustment screen.



To adjust the mute settings, use the **-/+** keys to adjust the mute threshold. A numeric value of the present mute level is shown along with a sliding indicator.

When the appropriate setting is displayed, press the **OK** key to save the new setting.

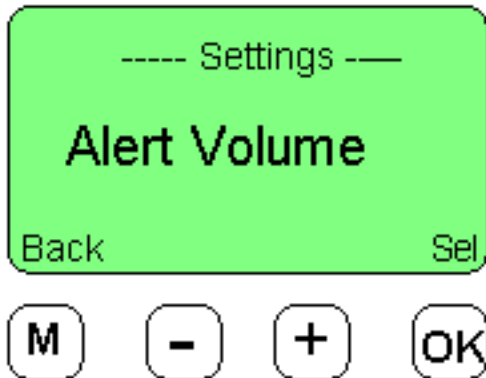
Pressing the **M** key will exit back to the settings menu without altering the mute setting.

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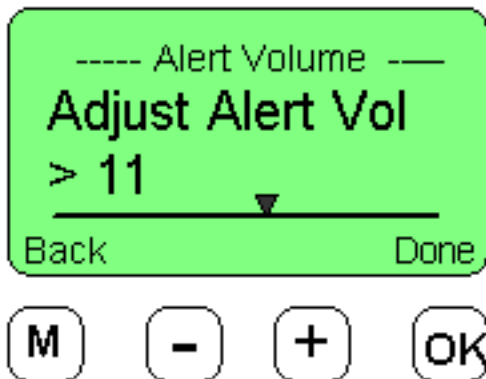
4.6.3 Alert Volume

This Screen allows you to set the level of the Alert Volume Beep Tone in relation to the current Volume setting. The level can be set in 63 steps over the range -31 to +30, with 0 being about the same as the voice level.

From the Settings Sub Menu, step through the menu options with the **-/+** keys until the Alert menu is displayed.



Press the **OK** key for the Alert Volume adjustment screen.



Use the **-/+** keys to change the relative alert volume level. The beep will sound at the indicated level each time the setting is changed.

Press **OK** to accept the setting and go to the Channel Screen.

Pressing the **M** key will exit back to the settings menu without altering the mute setting.

Note: A minimum Alert Level may be set to ensure the Alerts can always be heard from the speaker.

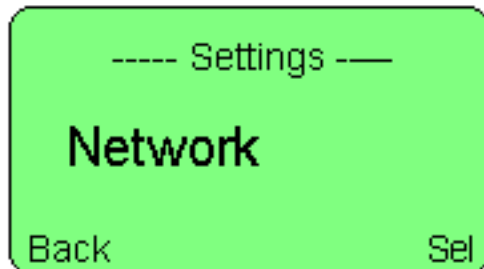
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4.6.4 Network

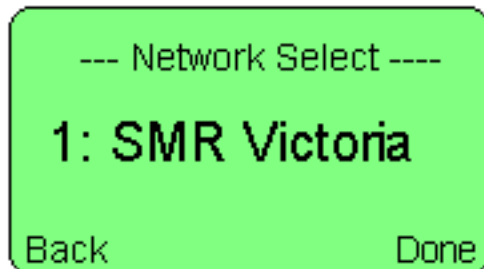
The Network Screen allows you to switch operation between;

- Trunk Network 1
- Trunk Network 2 or
- PMR.

From the Settings Sub Menu, step through the menu options with the **-/+** keys until the Network Setting menu is displayed.



Press the **OK** key for the Network Selection screen.



Use the **-/+** keys to make your selection.

Press **OK** to accept that selection and go to the selected mode.

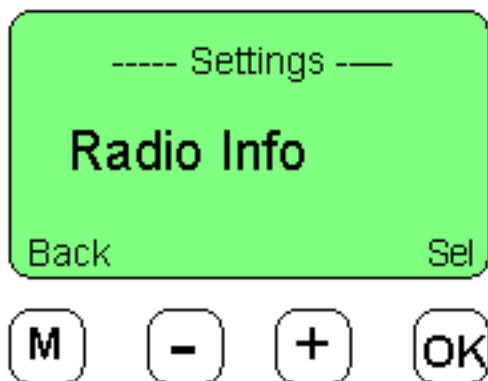
Refer to the Trunk Operating Instructions for Trunk operation.

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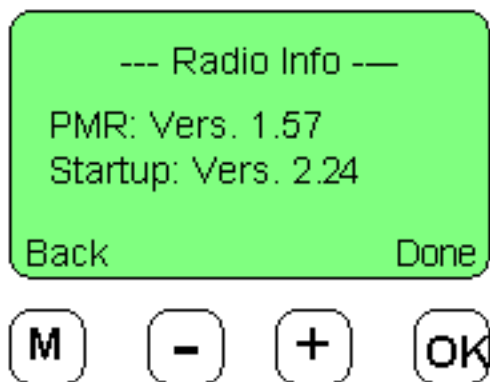
4.6.5 Radio Information

This Screen displays information that identifies the Programmer File description, Software Version and Radio Serial Number.

From the Settings Sub Menu, step through the menu options with the **-/+** keys until the Radio Info menu is displayed.



Press the **OK** key for the Radio Info screen.



Use the **-/+** keys to scroll through the information pages. These are:

- Radio Software
- Serial Number
- Electronic Serial Number
- Radio ID

This is a read only Screen, press **OK** to go to the Channel Screen.

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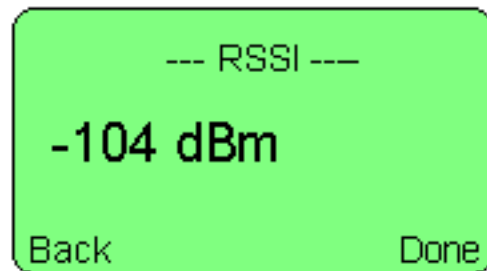
4.6.6 Received Signal Strength Indication

This screen displays the received signal strength in dBm. The reading is accurate with about +/- 1 dBm up to -80dBm if the radio has been correctly calibrated.

From the Settings Sub Menu, step through the menu options with the -/+ keys until the RSSI menu is displayed.



Press the **OK** key for the RSSI screen.



The RSSI will be displayed until either the **M** key is pressed to return to the next highest menu level or the **OK** key is pressed which will return to the main channel menu.

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4.6.7 Key Beeps

This menu is contained in the “User Options” sub menu.



The Key Beeps Menu is selected by pressing the **OK** key, otherwise use the -/+ keys to view other Settings sub menus.

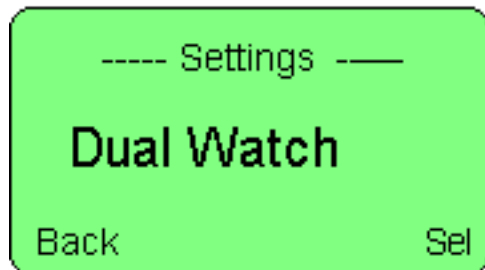


When the Key Beeps menu is selected, the Key Beeps can be enabled with the + key or disabled with the - key. The state of the Key Beeps is displayed. Pressing the OK key returns to the Settings sub menu. Pressing the Exit key returns to the main channel screen.

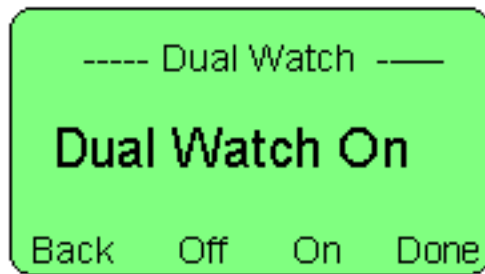
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4.6.8 Dual Watch

This menu is contained in the “User Options” sub menu.



The Dual Watch Menu is selected by pressing the **OK** key, otherwise use the **-/+** keys to view other Settings sub menus.



When the Dual Watch menu is selected, the Dual Watch function can be turned on and off with the **-/+** keys. Pressing the **OK** key returns to the Settings sub menu.

Pressing the Exit key returns to the main channel screen.

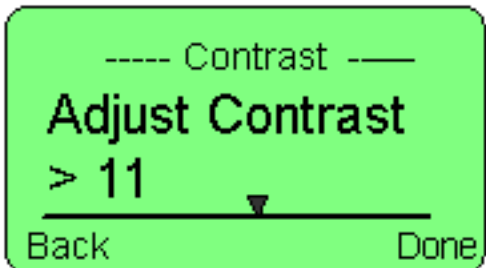
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4.6.9 Contrast

This menu is contained in the “User Options” sub menu.



The Contrast Menu is selected by pressing the **OK** key, otherwise use the **-/+** keys to view other Settings sub menus.



When the Contrast menu is selected, the Contrast can be adjusted with the **-/+** keys. The numeric value of the Contrast is displayed along with a sliding indicator.

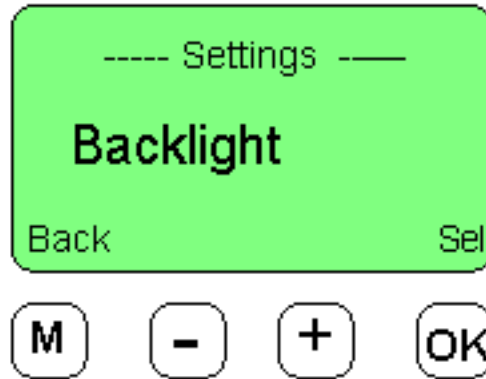
Pressing the OK key returns to the Settings sub menu.

Pressing the Exit key returns to the main channel screen.

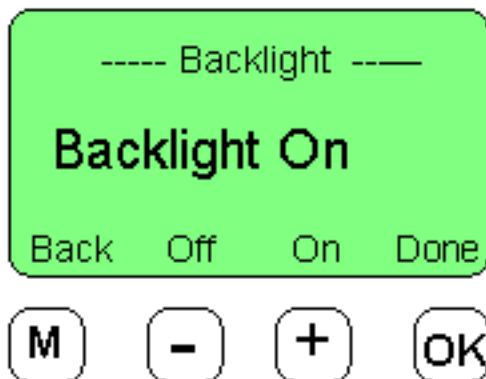
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4.6.10 Backlight

This menu is contained in the “User Options” sub menu.



The Backlight Menu is selected by pressing the **OK** key, otherwise use the **-/+** keys to view other Settings sub menus.

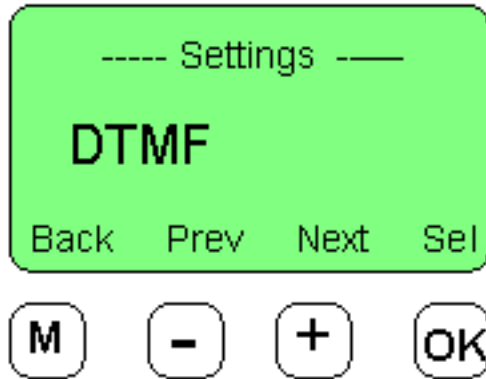


When the Backlight menu is selected, the Backlight can be turned on and off with the **-/+** keys. Pressing the **OK** key returns to the Settings sub menu. Pressing the **Exit** key returns to the main channel screen.

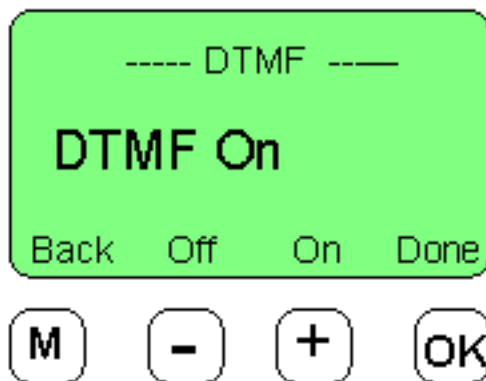
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4.6.11 DTMF

This menu is contained in the “User Options” sub menu.



The DTMF Menu is selected by pressing the **OK** key, otherwise use the **-/+** keys to view other Settings sub menus.



When the DTMF menu is selected, DTMF dialling can be turned on and off with the **-/+** keys. Pressing the **OK** key returns to the Settings sub menu. Pressing the **Exit** key returns to the main channel screen.

5. COMMON FUNCTIONS AND FACILITIES

5.1 SWITCH-ON/SWITCH-OFF

Turn the **On/Off/Volume** Knob clockwise to switch the portable radio **ON**.

The display will illuminate and show a 'Welcome Message' and the Selcall Identity of the portable radio.

After a brief time the display will revert to the **Channel Screen**, at which time the portable radio is ready for use.

Turning the **On/Off/Volume** knob anticlockwise will switch the portable radio **off**.

If the radio **Inactivity Timer** is enabled, the portable radio will automatically turn **off** after several hours of inactivity (i.e. no keys pressed).

The radio will emit warning beeps for 10 seconds prior to switching off. Pressing any key will reset this timer.

5.1.1 Volume Adjustment

The Volume Control adjusts the speech level at the loudspeaker or remote speaker microphone. Rotating clockwise increases the volume and anti-clockwise decreases the volume.


Note: The radio may be programmed so that the volume cannot be turned off completely.

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5.2 RECEIVING



The portable radio will listen on the displayed Channel.

The Speaker Icon  will show when a valid signal is being received and audio will be heard at the Loudspeaker.

Changing channels can be achieved by any of the following:

- Pressing the **-/+** keys.
- Entering the desired channel number from the Keypad and pressing **#** (e.g. **12#**) [only available on keypad version].
- Pressing a **Go-to-Channel** Function Key, refer to Section 7.11.

Note: If the displayed channel is a Vote or MultiAx channel then the received signal strength display will change to scanning. In this mode, a signal bar will move left and right until a signal is found. When stopped on a channel, the channel name will be displayed.

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5.3 TRANSMITTING

To avoid interfering with other users of the channel, listen first to ensure no transmissions are occurring. Make sure that the Speaker Icon is not shown.

Hold the portable a few centimeters from the mouth, press the “Press to talk” (PTT) switch and note that the Tx-LED is RED. Speak clearly across the face of the portable in a normal conversational manner. Note that the microphone is on the top left hand side of the radio.

In most systems it is important to wait a short time between pressing PTT and commencing to speak. This ensures that the path is properly established and avoids lost or distorted speech.

Use the correct operating procedure and keep transmissions short.

Release the PTT switch as soon as the message is finished.

- Notes:*
- 1 A channel may be programmed as “Receive-only” or “Transmit Inhibit” may be programmed which disallows PTT while the radio is receiving a signal. A continuous tone will be heard if PTT is attempted.*
 - 2 A Transmit Limit Timer may be set-up that limits a continuous transmission on a channel. The last 10 seconds before the timer expires may be accompanied by warning tones.*
 - 3 The radio may be programmed to send a Selcall (ANI) when the PTT is pressed or released. This may introduce a short delay before the microphone is enabled or after PTT is released.*

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5.4 SELCALL FUNCTIONS

5.4.1 Receiving a Selcall

A number of different options can be set up by your dealer to sound various alert tones when a selcall is received. Consult your dealer for a detailed explanation of your radios set up.



When a Selcall is received the radio may respond by:

- Showing flashing "Call Received" text to indicate that the radio has been Called,
- Sounding an Alert tone, or
- Displaying the Name of the caller (if it exists in the Phonebook) or the numerical identity of the caller (if unknown) in the Name field.

Pressing the **OK** key to call the party back or pressing **M** will clear the icon, stop the Alert tone and return to the main screen.

5.4.2 Sending a Selcall

Refer to sections on *Phonebook Screen* (page 7) and *Status Screen* (page 9) for methods of sending a Selcall.

5.4.3 Other Selcall Functions

The SRP9100 series has several other functions that affect how the radio operates with received signals or selcalls. These are described later in this booklet under the headings:

Monitor/Reset	(refer to Section 6.1)
Reset	(refer to Section 6.3)
Transpond Enable	(refer to Section 6.6)

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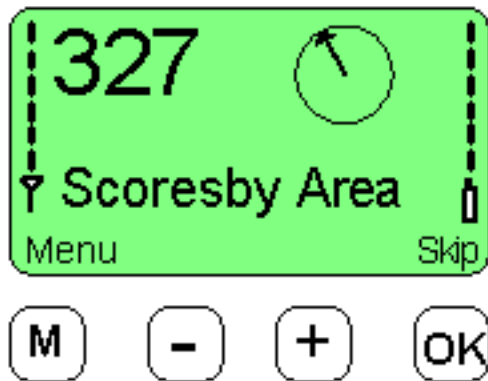
Send-1, Send-2 (refer to Section 6.5)
Special Encode1...8 (refer to Section 6.10)

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5.5 SCAN FUNCTIONS

Scanning consists of sequentially searching up to 16 channels for a valid signal (RF, CTCSS or DCS tone). When found, the radio will stop on that channel until the signal disappears again.

While listening on the channel, the User can PTT on that channel. After the signal disappears the radio will remain listening on the channel for a short time (typically 3 seconds) before resuming scanning.



If a **Priority/Emergency Channel** is assigned, the radio will interleave a check of this channel between each normal channel check. The radio may also check the Priority Channel every few seconds while stopped on a channel. If a signal is found on the Priority Channel then the radio will switch to that channel immediately.

To activate Scanning, select a channel that has been programmed as a scan channel. Consult your dealer for your customised key configuration.

5.5.1 Scan Screen

The display shows the name of the current Scan Channel (e.g. "Scan 23"), which can be changed using the **-/+** keys. This will take the radio to other channels which may be either Scan Channels or Normal Channels depending on the radio's configuration.

Scanning is indicated by a rotating arrow symbol.

When stopped on a channel, the lower line shows the name of the selected site, and the scanning indicator is replaced by the signal strength display.

The **Skip** function key temporarily deletes the channel from the Scan-Group. Skipped channels are restored when a different Scan Group is selected or if the Scan Channel is re-selected. The Priority Channel cannot be skipped.

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Scan groups may be assigned as user scan groups using the field programmer. There may be up to 4 user scan groups.

If a scan group is assigned as a user scan type, the user is able to edit the channels in the scan group from the keypad [only available on keypad version].

The user can then enter the edit submenu for that group by pressing the * key. Editing is described in the next section.

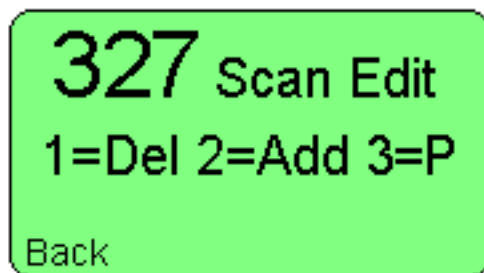
While listening on the channel, the User can PTT on that channel. After the signal disappears the radio will remain listening on the channel for a short time before resuming scanning.

The Keypad may be used for quick channel change (e.g. 456#) while the radio is scanning.

5.5.2 Scan-Edit Screen.

If the current channel is a scan channel and that scan channel has been assigned as a user editable scan channel, it may be edited by pressing the * key.

This menu will not be accessible if the channel has not been enabled for editing in the Field Programmer. The sub menu screen is shown below.



The scan edit sub menu shows the keys that are available to modify the scan group.

To delete a channel from the scan group, press 0 followed by the channel to delete and then # or **OK**. To delete channel 14, press 014#. The display will briefly show “deleted” and return to scan mode.

To add a channel to the scan group, press the 1 key followed by the channel to add, and then the # or **OK** key. To add channel 34, press 134#.

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To change the priority channel, press the 2 key followed by the new priority channel group, and then the # or **OK** key. To change the priority channel to 21, press 221#.

The radio will attempt to save the old priority channel into the scan group so that it is not lost. If there is not room in the scan group to save the priority channel, the portable will sound an error beep.

5.6 KEYPAD LOCK

The radio has a keypad lock function that may be enabled by the field programmer during configuration. If this function is activated, a key icon will be displayed in the top left-hand side of the display when locked.

To unlock the keypad, it is necessary to press and hold down the **OK** key for 2 seconds. After 2 seconds, the key icon will disappear and the keys will be enabled.

The keypad will automatically re-lock after a period of 10 seconds following no key activity.

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6. SPECIAL FUNCTION KEYS

This section lists Functions that may be programmed to the F1, F2, F3, F4, F5 F6 or F7 keys.

Consult your Simoco Dealer for which functions have been programmed in to your radio.

6.1 MONITOR

Opens/Closes the audio (signaling) mute.

Only valid on Non-Community Repeater type channels and/or Closed Selcall channels without Receiver Lock-out programmed.

6.2 SQUELCH DEFEAT

Opens/Closes the squelch (carrier) mute.

6.3 RESET

Closes the audio (signaling) mute on closed Selcall Channels.

6.4 SCAN

Activate Scanning, refer to Section 5.5.

6.5 SEND-2

Sends a specific selcall sequence.

6.6 TRANSPOND DISABLE

Disables Individual Call Acknowledge. When pressed, a single beep indicates on and two beeps indicate off.

6.7 CTCSS

Defeats the CTCSS mute on the channel

Only valid on Non-Community Repeater type channels and/or Open Selcall channels.

6.8 MUTE

Provides direct access to the Mute Setup screen and allows the user to change the mute level from that screen.

6.9 GOTO CHAN A, B, C, D

Selects predefined Channel A, B, C or D, and may return on the second press.

The Defined Channel may be redefined if held for approximately 2 seconds.

Field programmer configuration will affect the previously described behaviour.

6.10 SPECIAL ENC 1...8

Sends Special Encode 1, 2, ... 8

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6.11 ALARM

Put the mobile into Alarm mode.

6.12 REPEATER DEFEAT

Allows the radio to transmit on the reverse frequency on a Repeater Channel.

When the key is pressed again (or the Channel is changed) the transmit frequency reverts to the original setting.

Repeater defeat mode is indicated to the user by a single beep at the start of each PTT.

6.13 LOW POWER

Forces the radio to low power.

Pressing again puts the radio back to the power level defined for the current channel. This is not affected by Channel changes.

When pressed, a single beep indicates low power mode and two beeps indicate low power mode off.

6.14 CHANNEL UP AND DOWN

These functions change channels in the upward or downward directions.

6.15 SEND CHANNEL ENCODE

Sends the encode that has been defined for that particular channel.

6.16 SEND DTMF 1 AND 2

This function sends the predefined DTMF tone sequence that had been previously set in the Field Programmer.

6.17 USER CTCSS

If enabled by the Field Programmer, this function will allow the user to select the CTCSS tone to be used.

6.18 SCRAMBLER ON/OFF

If enabled by the Field Programmer, this function toggles the state of the speech scrambler. When active, there will be a short audible tone at the start of PTT to inform the user of the scrambler activation. Each time the key is pressed, the display will show 'On' and 'Off'.

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7. OPTIONS

The following options are available, contact your dealer for further information.

7.1 HIGH CAPACITY BATTERY

This battery can be used where there are more demands on the time that the radio must be operational, or where transmissions are more frequent.
Capacity of 2700mAH

7.2 MID CAPACITY BATTERY

Mid sized capacity battery for the portable. 2100mAH Capacity.

7.3 SINGLE POCKET CHARGER

Charger capable of charging one portable radio at a time.

7.4 FOUR POCKET CHARGER

Charger for up to four portable radios at once.

7.5 VEHICLE MOUNTED CHARGER

Charger for in vehicle charging of the portable.

7.6 LIGHTWEIGHT CARRY CASE

Carry case for light duty use.

7.7 HEAVY DUTY CARRY CASE

Carry case for heavy duty use with belt loop attachment.

7.8 SHOULDER STRAP

Shoulder strap that fits on portable.

7.9 LIGHTWEIGHT LAPEL SPEAKER MICROPHONE

Combined small speaker and microphone for light duty use.

7.10 MEDIUM WEIGHT LAPEL SPEAKER MICROPHONE

Combined speaker and microphone for heavier duty use.

7.11 HEAVY DUTY LAPEL SPEAKER MICROPHONE

Combined speaker and microphone for heaviest duty use.

7.12 LIGHTWEIGHT HEADSET

Headset with boom microphone with PTT key.

7.13 EARPIECE

Earpiece for portable radio.

Appendix A - Alert Tones and Messages

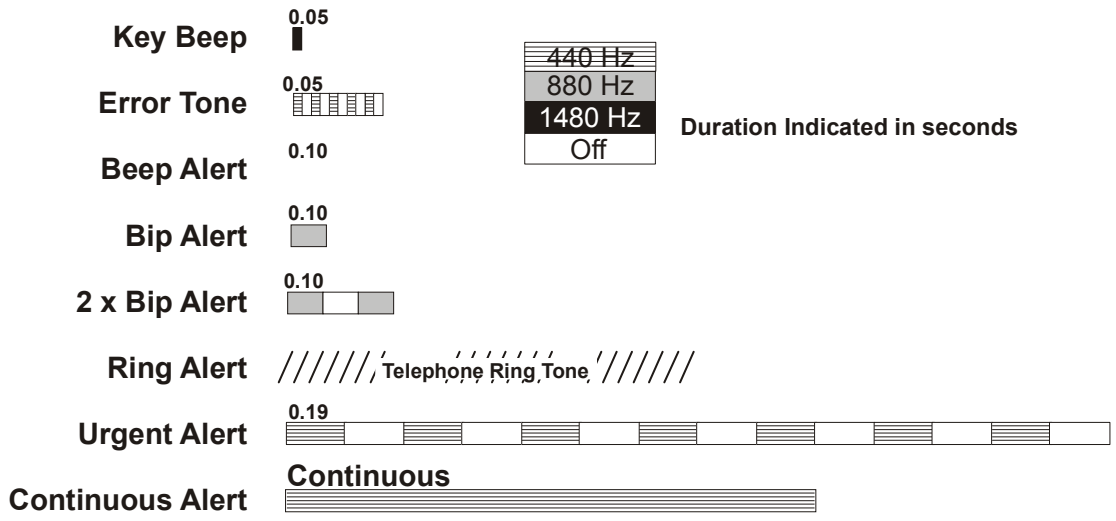


Figure 3 - Alert Tones

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Appendix B - Glossary

A summary of common radio terms and some other terms used in this document, and their meanings, are given below.

Alert tones	The transceiver emits these tones to indicate an invalid operator or error.
Cradle	The bracket that holds the microphone when it is not in use (on hook).
Current Phonebook Entry	Name that would be shown were the Phonebook screen shown.
DSP	Digital Signal Processor.
DTMF	Dual Tone Multi-Frequency (Signaling Method).
LCD	Liquid crystal display.
MIC	Abbreviation for microphone.
MPT1327	Refers to the UK Ministry for Post and Telecommunications specification defining the low level protocol for public trunking systems.
MPT1343	Refers to the UK Ministry for Post and Telecommunications specification defining the User Interface for radios operating on MPT1327 public trunking systems.
Network	The trunking infrastructure and all its interconnections.
PTT	Press-to-Talk. Hold down the Press-to-talk switch on the microphone for the duration of the transmission.
RF	Radio Frequency.
RSSI	Received Signal Strength Indicator
Saved Status Value	The last Status that was sent, entered or optionally received.