

8. Using tone call

The tone call facility provides stations within a network to either call (tone encode–TE), or be called (tone decode–TD) by other stations, using the transmission of tones

Tone calls use two tones (High and Low) transmitted simultaneously to call another station. The tones used must be identical for both the transmitting and receiving transceivers.

The tones fit into two frequency bands, each with a High and Low tone, either 440 Hz or 360 Hz apart. Each of these bands must lie within the frequency range 850 Hz and 1500 Hz.

In Australia, the RFDS uses the 440 Hz frequency band, an example for this type of call would be 880 Hz and 1320 Hz. Private communications in Australia use the 360 Hz frequency band, a typical example for this type of call would be 880 Hz and 1240 Hz.

To receive a tone call your transceiver must have option TD fitted. To transmit a tone call, tone call must be enabled on the selected channel.







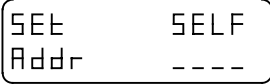



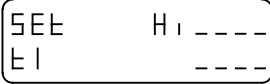
You cannot have the automatic tuning antenna (option AD) and 2-tone decoder (option TD) fitted to the same transceiver. Also, selective call and tone call cannot be enabled on the same channel.

Tones t1 and t2 are given values in the factory. You can override these settings by using the following *Set-up* procedure. To reinstate the original values, either enter '0' frequency or delete the latest channel information.

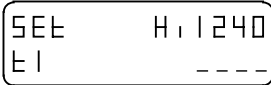

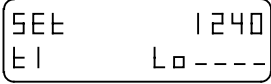



All displays in this section show examples of channel and frequency numbers. You must insert your selected channel and frequency numbers.

Setting up tone call

This procedure is similar to setting up selective call. Once in the set-up mode, you can skip through the non-important steps by pressing the Enter button.

Step	Action...	Display shows...	Remarks...
1.	To start the set-up mode, hold down  and press 		Hold the Call button down for approximately three seconds. This turns the transceiver on, and into the preamble set-up mode.
2.	Press 		This set-up is not required.
3.	Press 		This set-up is not required.
4.	Press 		This set-up is not required.
5.	Press 		This part of the procedure allows you to enter the tone calling frequencies.



Step	Action...	Display shows...	Remarks...
6.	Use the numeric buttons to enter the t1 Hi tone frequency. Entering a new number overrides an existing frequency.	 If you enter an incorrect frequency, the display shows an error. For further details, refer to section 12, <i>Display messages</i> .	There are four pairs of tone frequencies that you can set, t1, t2, t3 and t4. The t1 & t2 frequencies are pre-set in the factory. If you wish, you may alter settings. Each tone setting has a high and low frequency.
7.	Press  You must complete the next step within 60 seconds.		This sets the new t1 Hi tone frequency and allows you to set the t1 Low tone frequency.
8.	Use the numeric buttons to enter the t1 Low tone frequency.		Entering a new number overrides an existing frequency.
9.	Press  You must complete the next step within 60 seconds.		This sets the new t1 Low tone frequency and allows you to set the next tone pair t2.

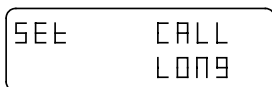


Step	Action...	Display shows...	Remarks...
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10.	Steps 6 to 9 are repeated by the transceiver for t2, t3 and t4.
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The display shows the same as in steps 6 to 9, except for the tone and frequency numbers.

When all four tone pairs are recorded, the display returns to the first set-up option



11.	Press
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This turns your transceiver off and registers all the tone call settings you have just made.
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



Enabling a channel for tone calling

This procedure explains how to enable a channel for tone calling. Initially, you need to select a channel frequency you want to enable, and then choose a tone call pair for that frequency.




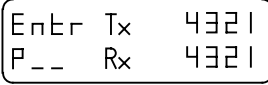
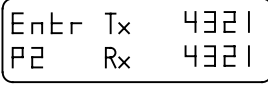

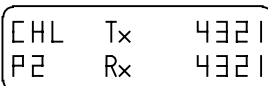
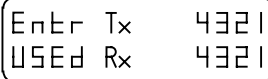
You can copy this information into the P-channel program.

This procedure is similar to *Enabling a channel for selective call* in section 5. Once in the set-up mode, you can skip through the non-important steps by pressing the Enter button.

The displays in this section will vary depending on the channel you select (ie the word inhibit may be replaced with a frequency number).

Step	Action...	Display shows...	Remarks...
1.	Use the Recall or Channel  and  buttons to find the channel you wish to enable.	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> CHL Tx 4321 29 Rx 4321 </div> An example for channel 29.	Refer to section 4, <i>Selecting channels</i> .
2.	Press 	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Enter Tx ----- 29 Rx 4321 </div>	You will hear a 'pip'.
3.	Press 	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Enter Tx 4321 29 Rx ----- </div>	You will hear a 'pip'.
4.	Press 	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Enter OPTION 29 ----- </div>	You will hear a 'pip'.



Step	Action...	Display shows...	Remarks...
4.	Press  Repeat this action until a 't' and the required tone pair appear in the left hand two spaces of the options bar.	 An example for tone pair t3.	You will hear a 'pip'.
5.	Press 		You will hear a 'pip'.
6.	Use the numeric buttons to enter the channel number you wish to use.		You will notice that the display automatically inserts a 'P' to the number.
7.	Press 	 If the channel is already used the display shows 	



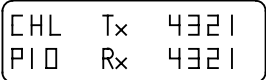
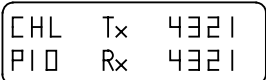



Step	Action...	Display shows...	Remarks...
8.	If the channel is already used, you can either enter another number or press Enter again to override the existing one.	The display reverts back to normal.	The information will either be stored under an existing channel number, or you will have created a new one.



Using the tone call mode


Before commencing this procedure, ensure the Mute On/Off button is in the off position (indicator off) and the antenna is tuned to the selected frequency. This section covers both transmitting and receiving a tone call.

Transmitting a tone call

Step	Action...	Display shows...	Remarks...
1.	Use the channel buttons or Recall button to select the channel you wish to use.		Ensure the channel you select is enabled for tone call. To check, press the Display button.
2.	Ensure that the channel is free from traffic.		Listen for approximately 10 seconds.
3.	Press and hold  for approximately 10 seconds. If the channel you selected was not enabled, an error message will be displayed.	The display does not change. 	You will hear a tone and the Tx indicator will be lit. You will hear a low pitched tone. The call will not be transmitted, and you must choose another channel.
4.	You can start communication when contact has been established.		

Receiving a tone call

To receive a tone call your transceiver must be fitted with option TD.

Step	Action...	Display shows...	Remarks...
1.	No action. Upon receipt of a tone call, your transceiver displays the channel number of the calling station.		<p>You will hear an alarm consisting of two sets of three short 'pips'. Following this alarm you will hear a 'pip' every four seconds.</p> <p>You can cancel the 'pips' by pressing the microphone PTT button.</p>
2.	Use the microphone in the normal manner to reply to the call.		



Using tone call