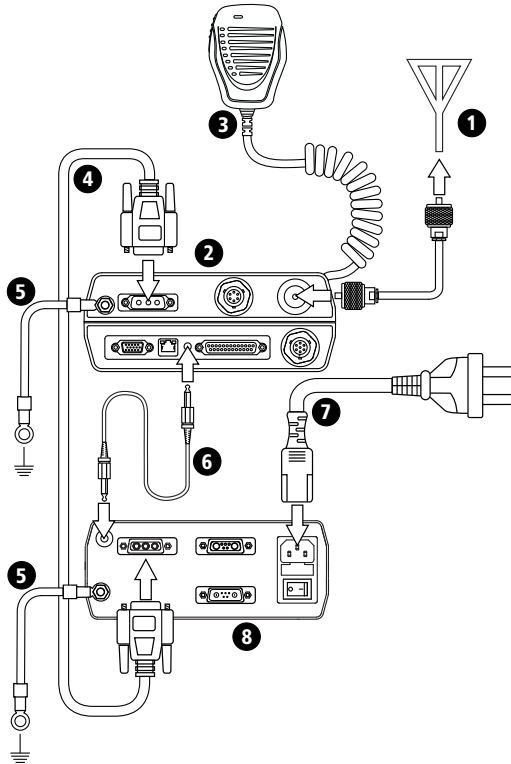


BASIC OPERATION 2

This chapter contains the following sections:

- Basic Configuration Diagram
- Antenna Type
- Channel Selection
- Making a Voice Call
- Making an Emergency Call

Basic Configuration Diagram



- 1 Antenna
- 2 Barrett 4050 HF SDR Transceiver (P/N BC40500)
- 3 DC Power Cable and Connector (P/N BCA40006)
- 4 Power cable 4022 to 4050 (P/N SA-42020)
- 5 Ground
- 6 Speaker cable (P/N SA-45010)
- 7 IEC Mains cord (P/N SA-00020)
- 8 Barrett 4022 24V Power Supply (BC402200)


Antenna Type

Before making a call, an antenna type needs to be selected from Settings < IO.

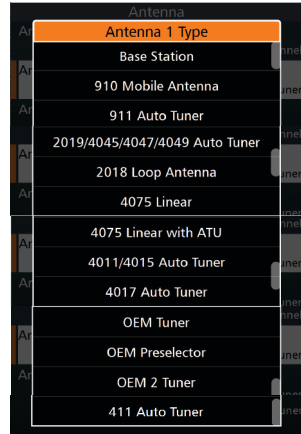
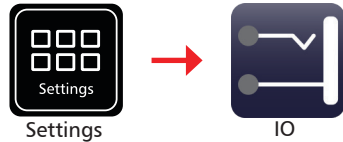
This menu sets the antenna type or linear amplifier used with the transceiver.

Tap **Antenna 1 Type** from the IO screen to display the Antenna 1 Type screen.

The Antenna Select menu can also be accessed from the Swipe screen.

To reveal more items, either swipe down on the touch screen or press .

Select an antenna type from the following:



Antenna Type	Select when...
Base Station	Base station antennas such as the Barrett 912 series are used. No tuning signals are emitted on channel change.
910 Mobile Ant	Using a Barrett 910 automatic tuning mobile antenna
911 Auto Tuner	Using a Barrett 911 automatic tuner
2019/4045/4047/4049 Auto Tuner	Using a Barrett 2019/4045/4047/4049 automatic tuning mobile HF antenna
2018 Loop Ant	Using the 2018 Mobile magnetic loop HF antenna
4075 Linear	Using the transceiver with a Barrett 4075 series linear amplifier.
4075 Linear with ATU	Using the transceiver with a Barrett 4075 series linear amplifier with ATU.
4011/4015 Auto Tuner	Using a Barrett 4011/4015 automatic tuner
4017 Auto Tuner	Using a Barrett 4017 automatic tuner
OEM Tuner	3040 tuner compatible (non-Barrett product)*
OEM Preselector	Using a non-Barrett Preselector
OEM 2 Tuner	F2265 tuner compatible (non-Barrett product)* ^
411 Auto Tuner	Using a 411 Automatic HF Tuning Unit

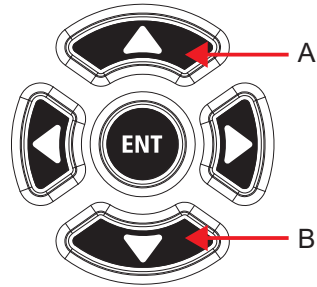
*For further information, please contact Barrett Communications.

^ Requires extra hardware. Please contact Barrett Communications.

Selecting a Channel

There are two ways to select a channel on the Barrett 4050 HF SDR Transceiver.


1. From the home screen, press the up (A) or down (B) keys on the keypad. This will allow a user to cycle through the programmed channels.
2. From the transceiver home screen, press the channels button. This brings up the Select Channel menu and shows all of the channels programmed into the transceiver in one place. Tap a channel to select it.



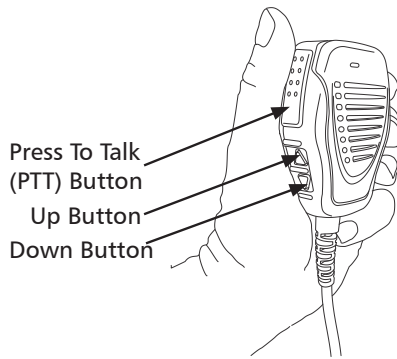
Channels

Holding down this channel button opens the Channel information screen of the currently selected channel. This allows the operator to edit channel settings. Pre-programmed channels and ALE enabled channels cannot be modified.

If there are no channels programmed into the transceiver, turn to page 60 for instructions on channel programming.

Alternately, to search for a specific channel, in the Channel Select menu tap  and type in the number of the channel as programmed in the transceiver eg. typing 4 will select channel 4.

Making a Voice Call



When Using the Microphone:

1. Press and hold the PTT (transmit) button only while talking
2. Position the microphone close to your mouth
3. Speak clearly
4. Use the word "over" to indicate that you have finished speaking, and then release the PTT (transmit) button.

Note:

- *The Barrett 4050 has a transmit time-out facility. This facility (when programmed) allows the transmitter to be keyed in transmit mode with the PTT (transmit) switch for a set time period, after which the transceiver switches to receive until the PTT (transmit button) is released and re-keyed. This facility prevents the transmitter transmitting for long periods of time if, for example, the microphone becomes jammed between seats in a vehicle causing the PTT (transmit) switch to be held down. Disabling or changing the time of the transmit timeout facility can be set either when programming the transceiver or in the RF Section of the Settings menu. See page 88.*
- *The microphone up / down buttons can be configured for channel change or volume control functions either when programming the transceiver or in the General Section of the Settings menu. See page 56.*

Making an Emergency Call

Note: the emergency call function must be enabled and emergency channels must be programmed via the Barrett 4000 Series HF SDR Programming Software (P/N BCA40001).

All Selcall emergency calls are transmitted by pressing the **CALL** and **BACK** buttons together for more than two seconds.



The action of the emergency call depends on how the transceiver has been programmed.

- Selective Call alarm that transmits and automatically changes to a selection of channels. If a GPS receiver is fitted and enabled, the GPS position is also sent with the call.

Note: After the emergency call has been sent, there is no indication that a call has been sent for security purposes and the radio resumes scanning of the currently selected scan table, ALE 2G preset map or the ALE 3G pool entries depending on the configuration..

Important: To receive a callback after issuing the emergency call it is necessary to add at least one of the emergency channels to the scan table, ALE 2G preset map or ALE 3G pool entries.

Royal Flying Doctor Service (RFDS) alarm (AUSTRALIA ONLY). Two-tone alarm 880 Hz + 1320 Hz continuous (Australian use only) – alerts the Royal Flying Doctor Service on RFDS channels.

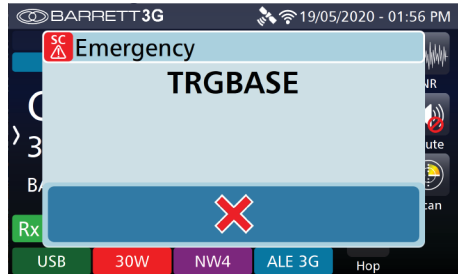
1. Select a channel with RFDS as the Selcall format.
2. Simultaneously press and hold the **CALL** and **BACK** buttons

The RFDS alarm will continue transmitting for ten seconds even if you have released the **CALL** and **BACK** buttons.

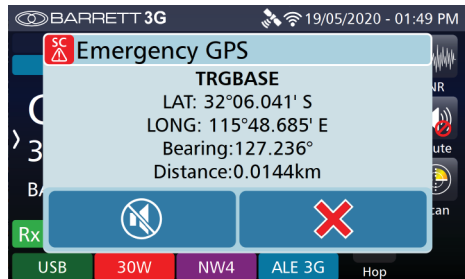
To cancel the RFDS alarm, press the **PTT** button or the **BACK** button.

Receiving an Emergency Call

On receipt of an emergency Selcall, a distinctive audio alarm is emitted and the following message displayed.



If the transceiver sending the emergency Selcall is fitted with a GPS receiver, the position will also be displayed.



SELCALL 3

This chapter contains the following sections:

- Overview
- Important Selective Calling Information
- Summary of Calling Systems
- Setting up a Self ID
- Setting up Contacts
- Making a Selcall
- Call History
- Advanced Selcall

Overview

This chapter covers all types of Selcall available on the Barrett 4050 Transceiver. All of these options are not available in all countries and may need to be purchased separately.

Selcall is a signalling system based on standard CCIR-493 for use on HF networks. It utilises a type of protocol where the transmission begins with a brief sequence of audio tones.

There are several different types of Selective Calling Systems available in addition to simple point-to-point HF communications.

The calling systems available for the transceiver are listed below:

- International (INT) - A four and six digit Selective Call system, fully interoperable with the UN format published in September 2004 and fully backwards compatible with all previous Barrett four and six digit Selcall protocols.
- OEM - A four and six digit Selective Call system compatible with other major HF manufacturers including those using encryption. Includes Selcall, Telcall, Beacon Call, Emergency call, Pagecall and GPS call.
- CCIR - A four digit Selective Call system as specified by CCIR-493.
- RFDS - Royal Flying Doctor Service (Australia Only)

Important Selective Calling Information

Selcall Self IDs

The 4050 transceiver can hold up to 14 different Selcall Self IDs assigned to it. These Selcall IDs can be any combination of four or six digit OEM or INT type ID.

Selcall Decode

The transceiver has the ability to decode both OEM and International Selcalls on any channel programmed as a Selcall channel. However, the call must be addressed to the relevant ID (OEM or INT).

Calls for each format type will only be decoded if there is at least one Self ID of that format programmed into the transceiver Self ID group.

Selcall Transmit

Selcall formats in transmit are channel specific. For example, only call types programmed for the channel are permitted. This means International format calls can only be sent on channels that are programmed as International Selcall channels. OEM calls can only be sent on channels that are programmed as OEM Selcall channels

Special Notes for the OEM Selective Call Protocol

- Six digit OEM 1 calls will only be decoded by other Barrett transceivers fitted with the OEM 1 Selcall protocol or other manufacturer's transceivers that use DES56 encryption. This does not require an export permit.
- Four digit OEM 1 calls will be decoded by Barrett 4050 transceivers using the International Selcall (four and six digit) and other manufacturer's transceivers with similar CCIR-493 based Selective Call systems.
- Four and six digit GPS and Status data calls use the OEM privacy key to encrypt the data. If this eight digit key has not been programmed by the programming software, a default privacy key of 99999999 is automatically used for transmission.
- Four and Six digit Page calls also use the privacy key but unlike the other calls, the user has the option to manually enable or disable the privacy key. When disabled, the data is sent as plain text.
- Emergency GPS calls are automatically sent as plain text (four and six digit).

Summary of Calling Systems

Call Type	International	OEM
Emergency Call	Yes	Yes
Beacon Call	Yes	Yes
Selcall	Yes	Yes
Telcall	Yes	Yes
ARINC Call	Yes	Yes
Page Call (SMS)	Yes	Yes
GPS Call (Data & Request)	Yes	Yes
Secure Call	Yes	No
Status Request Call	Yes	Yes

The three most commonly used calls are Beacon Call, Selcall and Telcall. The other calls are more advanced and can be found in the Advanced Selcall Functions section of this chapter on page 42.

Selective Call - Beacon Call

This call type allows the Operator to determine the signal quality between their station and the station they want to call on a particular channel, but without actually alerting the station they are doing so.

Selective Call - Selcall

This call type is used to hail another station or stations, the receiving station will alert the operator that a call has been received.

Selective Call - Telcall

This call type uses the Selective Call system to transport a telephone number from a station on a HF network to a base station equipped with a telephone interconnect unit to initiate phone calls onto the international telephone network.

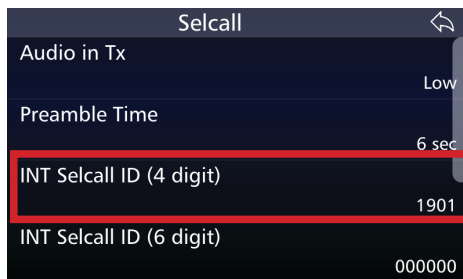
Note: For Selcall and Telcall functions to operate, channels must be enabled for Selcall operation.

Setting up a Self ID

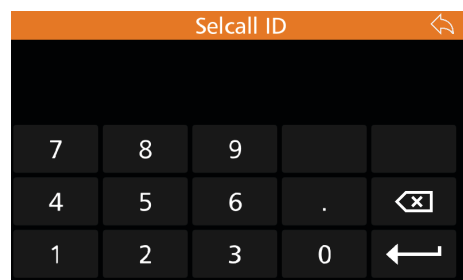
1. From the Settings menu, tap the Selcall icon.



2. Tap INT Selcall ID (4 digits). This will set up a 4 digit ID.



3. Type in a four digit number. This will either be provided to you by your network provider or an original ID may be able to be used if it does not conflict with another ID on the network.



The procedure is the same for the INT Selcall ID (6 digits), OEM Selcall ID (4 digits) and OEM Selcall ID (6 digits).

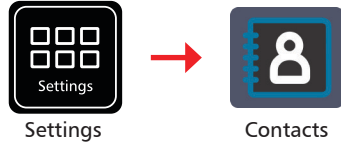
Note: Having both a four digit and the six digit ID is not required, either will still allow successful operation. It is recommended that the four digit or six digit INT and OEM IDs be the same for easy self identification.

A list of all of a transceiver's current IDs can be found under Selcall Networks in the Selcall menu.

This shows all the current Selcall IDs for a transceiver and the networks that they are attached to, see page 50.

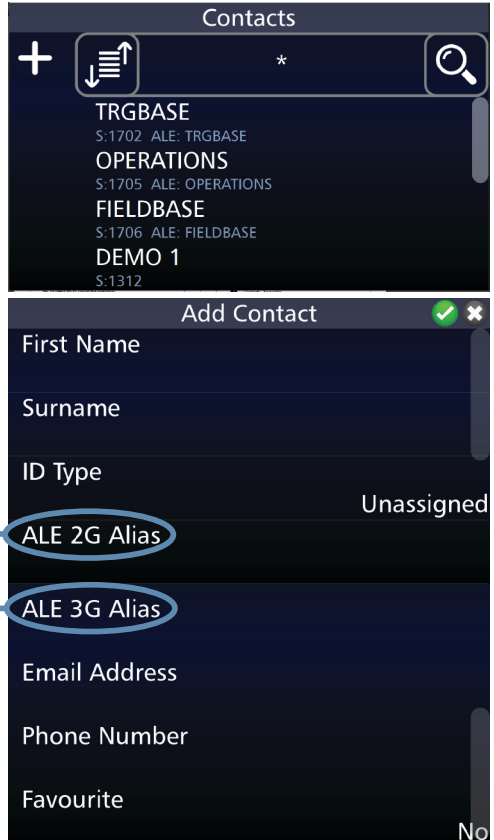
Setting up Contacts

1. From the Settings menu, tap the Contacts icon.



2. To add a new contact tap the + button on the left of screen.

The following menu will open.



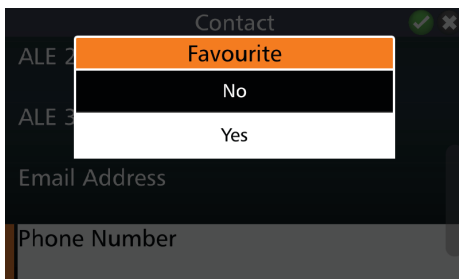
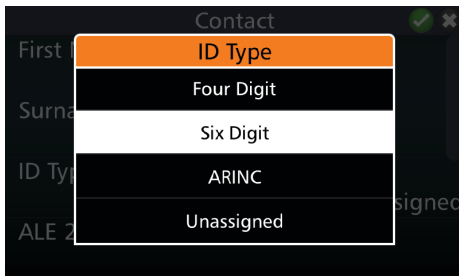
Will not be described in this manual. See ALE 2G and ALE 3G User Guide (P/N BCM40524)


From this menu, enter a name for this contact. Both first name and last name do not have to be completed.

ID type, refers to the type of ID the transceiver you are inputting has, whether it be 4 digit, 6 digit, ARINC or unassigned. Select which is appropriate and enter the Selcall ID.

An email address and phone number can also be entered. Once again, these do not have to be entered for basic functionality of the transceiver.




To favourite this contact, select yes under Favourite.



3. To save the contact, tap  in the top right hand corner of the screen and select yes.

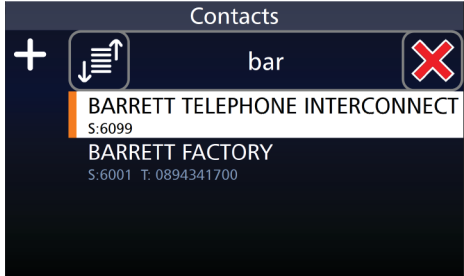
Additional Contact Information

Searching Contacts

Either tap  or press  or  to display the results of the search.

The icon on the left of the search bar clears the search and the icon on the right cancels the search

The contacts list can be sorted by first name or by last name using the icon located to the left of the search field.



Editing Contacts

To edit contact details, select the desired contact by using the  and  keys and either tap the contact or press  from the keypad

The Edit Contact screen displays. Select and change the desired settings.

Deleting Contacts

From either the Settings<Contacts screen or the Call<Contacts screen, tap and hold a contact for two seconds to trigger the Delete Contact screen. To delete the contact, select Yes, or select No to cancel the operation.

Making a Selcall

Before making a Selcall, ensure the transceiver is not scanning channels and select a Selcall channel. For more information regarding channel selection and basic voice calls, see Chapter 2 - Basic Operation (page 15).

Use the **CALL** key to access the Manual Call screen.

From this menu, Selcalls, Contacts and Favourites can be accessed.



1 Call Type Selection Menu

2 Contacts

3 Contacts - Favourites

4 Call Sub-types

5 Call Key

6 Call Type




Beacon Call

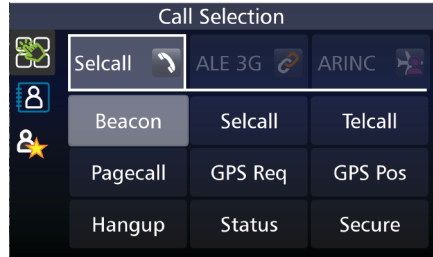
Beacon Call allows the operator to determine the signal quality between their station and the station they want to call on a particular channel, but without actually alerting the station they are doing so.

When a Beacon Call is sent to another station, and if the channel being used is open, the remote station sends back a distinctive four-tone revertive signal. The operator can judge the quality of the channel for communications purposes by the strength and clarity of this distinctive tone. Using Beacon Calls on several available channels will determine which channel is best to use for subsequent Selcalls or Telcalls.

Note: both stations must be programmed for Selcall or Telcall operation.

Sending a Beacon Call

1. Listen for traffic on your selected channel. If traffic is heard, select another channel and try again.
2. Press  and, if necessary, press the  icon to show the Call Selection screen.
3. Either:
 - Select Beacon Call, enter a Selcall Id manually and press Enter, or
 - Choose a contact from the  Contacts icon and then select Beacon Call.
4. Wait for the Beacon Call to be sent and listen for the distinctive four-tone revertive signal from the station you have called.
 - If a revertive tone is not heard, or is difficult to hear, try another channel and repeat the process until the revertive tone is clear.












Receiving a Beacon Call

When a transceiver receives a beacon request call, it responds by transmitting the Beacon Call revertive tones. No indications occur on the transceiver. Beacon Calls are not saved in the Selcall History.

Selcall

Sending a Selcall

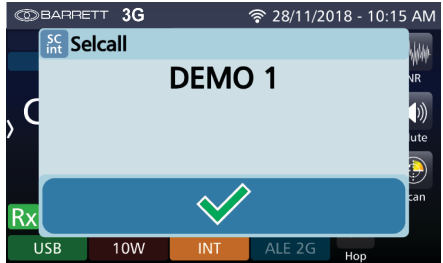
1. Select the channel to send the Selcall on (Beacon Call can be used to determine the best channel)
2. Listen for traffic on that channel. If traffic is not heard, continue.
3. Press  and, if necessary, press the  icon to show the Call Selection screen.

Call Selection			
	Selcall 	ALE 3G 	ARINC 
	Beacon	Selcall	Telcall
	Pagecall	GPS Req	GPS Pos
	Hangup	Status	Secure
4. Either:
 - Select Selcall, enter a Selcall Id manually and press Enter, or
 - Choose a contact from the Contacts icon  and then select Selcall.
5. Wait for the Selcall to be sent and listen for the revertive signal that indicates the call was successful.
 - If a revertive tone is not heard or was difficult to hear, try another channel and repeat the process until a good channel is found.
 - If a revertive tone is heard but you receive no verbal response from the station, it may be because the Operator is unavailable at the time.



Receiving a Selcall


Note: To receive a Selcall your transceiver must be programmed for Selective Call (Selcall) and where multiple channels are in use, the scan function should be activated.

When you receive a Selcall, your station sends a reverive tone (to alert the calling station that the call was received), an audible alarm sounds, the mute (squelch) (if selected) opens and the display shows who the call is from.



The audible alarm will sound for 60 seconds unless acknowledged and then time out. To cancel the alarm and acknowledge the call, press the PTT button or



tap . If the audible alarm times out, the missed call icon displays  and a periodic audio reminder is emitted.

For details of previously received Selcalls, press and hold  to display the Call History screen. Refer to the Call History section on page 37.


Telcall

Telcall uses the digital Selective Call system to send a telephone number on a HF network. Telcalls are primarily used to send to stations equipped with a telephone interconnect unit to initiate phone calls onto the PSTN.

Sending a Telcall

1. Select the channel to send the Telcall on. This will be the channel provided by your network administrator to contact the interconnect.
2. Press  and, if necessary, press the  icon to show the Call Selection screen.



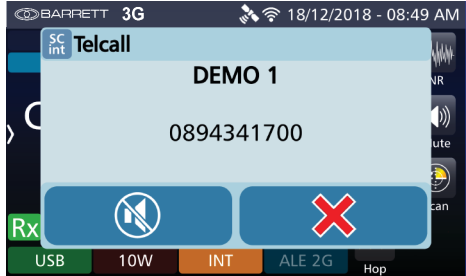
3. Either:
 - Select Telcall, enter the Selcall ID of the interconnect, select Enter phone number, enter the phone number manually and press Enter, or
 - Choose a contact from the Contacts icon  and then select Telcall. Enter the Selcall ID of the telephone interconnect, choose Select from Contact and select contact.
4. Wait for the call to be sent and listen for the revertive signal that indicates the call was successful.
 - If a revertive tone is not heard try another channel and repeat the process.
 - If the destination station is connected to a telephone interconnect, when the call is successful, wait for the telephone connection to be made and then proceed with the call.
5. Perform a Hangup Call to disconnect from the interconnect (refer to page 49 for more information on Hangup Calls).


Receiving a Telcall


Note: To receive a Telcall your transceiver must be programmed with a Self ID and where multiple channels are in use the scan function should be activated.

When you receive a Telcall, your station sends a revertive call (to alert the calling station that its call was received), an audible alarm sounds, the mute (squelch) (if selected) opens and the Telcall screen displays.




The Telcall screen shows the Selcall ID and telephone number of the caller.




Tap  to stop the audible alarm but maintain the Telcall screen.

Tap  To close the Telcall screen.

The audible alarm will sound for 60 seconds, unless acknowledged and then time out. To cancel the alarm and acknowledge the call, press the PTT button or

tap either  or  (described above). When the audible alarm times out, the call received  icon displays and a periodic audio reminder is emitted.

For details of previously received Telcalls, press and hold  to display the Advanced Call History screen.

Advanced Call History

Advanced Call History is a log of all Selcall, ALE 2G and ALE 3G call types stored in the transceiver. The log has the time of transmission, frequency and IDs of the transmitting and receiving transceivers recorded with every entry. Advanced Call History also has a 'return call' feature that directly links the call history with the transceivers call functionality whilst pre-entering the information from the selected call entry.

The Call History is also directly connected to the transceiver's contact settings, allowing calls from the same contact to be collated together - regardless of call type. This can be toggled on or off in the Call History menu.

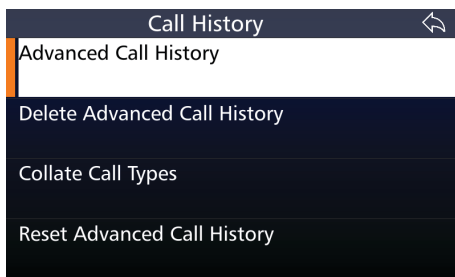
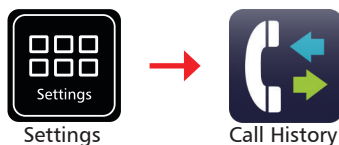
Call History Menu

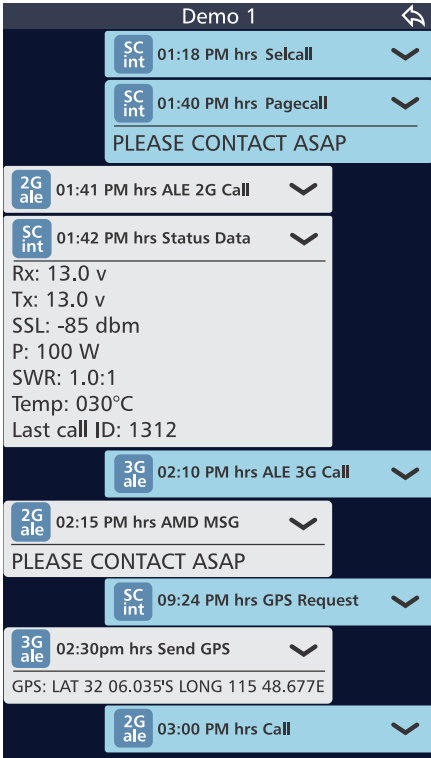
The Call History menu can be accessed via **Settings** < **Call History**.

From this menu, the Advanced Call History can be accessed, deleted, updated and the collation of the call history by contact can be toggled on or off. Update advanced call history will only appear when using a remote control application (see IP Connectivity Guide P/N BCM40507).

Enabling the Collate call types function will group calls from the same contact together - regardless of call type (Selcall, ALE 2G or ALE 3G) - based on the contacts entered into the transceiver via either the programming software or the transceiver front panel (see page 28 for further details on creating contacts).

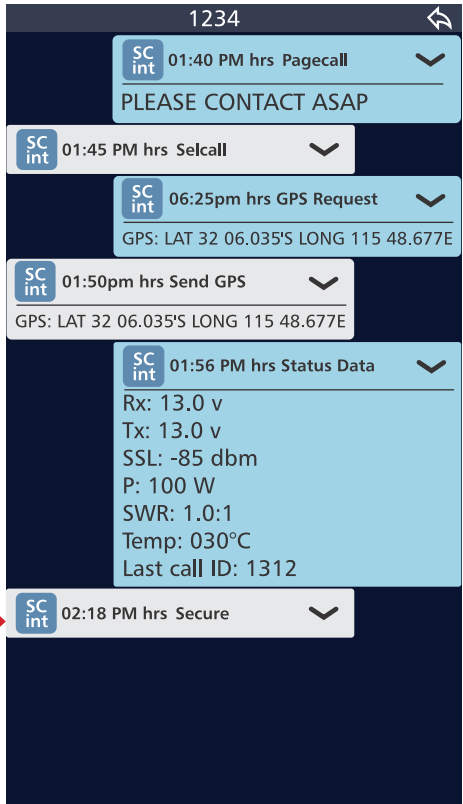
Disabling the Collate call types function will collect calls in threads based on the call type (Selcall, ALE 2G or ALE 3G) and sender regardless of whether they are entered as a contact.





Pressing an arrow reveals further information about a call including frequency, channel number, as well as to and from addresses.

Uncollated Calls

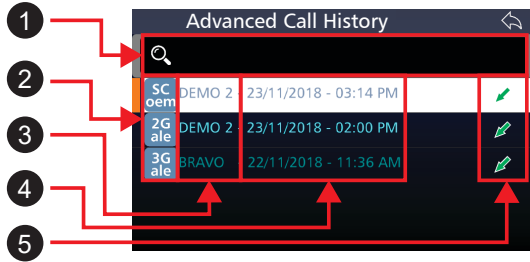


Collated Calls

Pressing a call bubble within a thread will initiate the return call process to the sender. Please note that this function is unavailable for ALE 2G and 3G NetCalls.

Advanced Call History Menu

This menu can be accessed by either pressing and holding the **Call button for 2 seconds** or via the **Settings < Call History Menu**. Both display the same features and have the same functionality.



- 1** Search







The Search function allows an operator to search the following fields: first name, surname, phone number or email address of a contact; Selcall ID, ALE 2G or ALE 3G alias; date or time of call or data type call (GPS, status, pagecall).
- 2** Call Type








The call types are outlined in the table below.
- 3** ID or Alias

This is the ID, address or Alias of the remote transceiver that the local transceiver is/was communicating with.
- 4** Date and time

The date and time of the most recent call in a thread are displayed here.
- 5** Incoming or Outgoing call

The arrows display whether the last call in the message thread was a transmitted, received or missed call.


Icon	Description
	Call transmitted
	Call Received
	Missed Call
	Missed Call count
	Call sent and delivered at other station * For 2G and 3G only
	Call sent but not delivered at receiving station *for 2G and 3G only. The red cross indicates non-delivery as a default state until a call sent acknowledgment is received

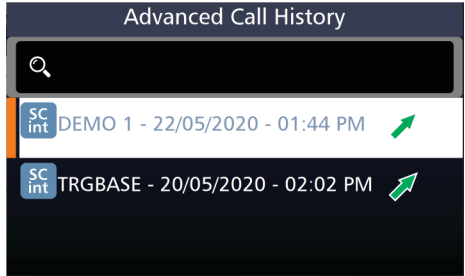
Icon	Description
	Selcall INT format
	Selcall OEM format
	Selcall CCIR format
	Selcall RFDS format
	Emergency Selcall format
	ALE 2G format
	ALE 3G format

Adding a Contact from Call History

A contact can be added or edited directly from the Advanced Call History menu.


To add/edit a contact, press and hold the call history thread and select Add/Edit Contact.

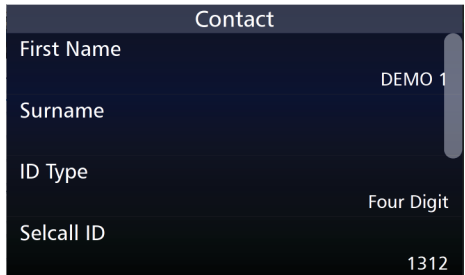
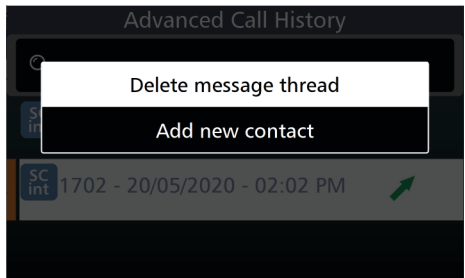
Fill/edit the appropriate fields and save by pressing the .



Deleting a Message Thread

Delete an entire message thread by long pressing on the thread and selecting "Delete Message Thread".

Select  to confirm or  to cancel.



Advanced Selcall Functions

The call types and settings in this section are less commonly used but are useful in all manner of situations.

Selcall Settings

From the Settings menu, select Selcall to view the Selcall Settings for the transceiver.

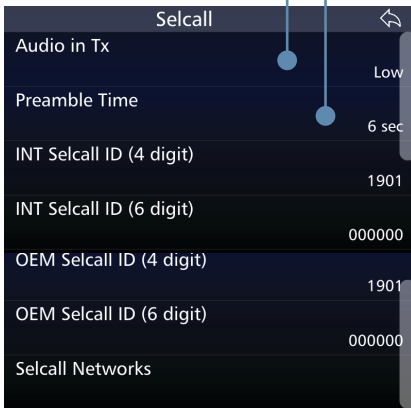


Settings



Selcall

The following menu displays:



The volume of the Selcall audio during Transmit. It can be Selected as Low, High or Off.

The length of the Selcall preamble. 500ms are recommended per channel in the scan group + 1 second.

Default 4-digit INT Selcall ID. Identifies the transceiver to other users when using an INT channel.

Default 6-digit INT Selcall ID. Identifies the transceiver to other users when using an INT channel.

4-digit OEM Selcall ID. Identifies the transceiver to other users when using an OEM channel.





6-digit OEM Selcall ID. Identifies the transceiver to other users when using an OEM channel.

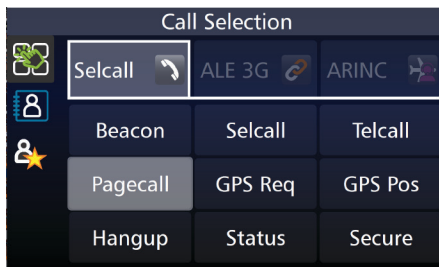
A list of the transceiver's Selcall IDs on saved Selcall Networks. Can be modified. See page 50.

Pagecall

Pagecall (SMS) allows messages of up to 32 characters in INT format, or 64 characters in OEM format to be sent to or received from other transceivers with Pagecall facilities.

Sending a Pagecall


1. Select the channel on which to send the Pagecall (Beacon Call can be used to determine the best channel)
2. Listen for traffic on that channel. If traffic is not heard, continue.
3. Press  and, if necessary, press the  icon to show the Call Selection screen.
4. Either:
 - Select Pagecall, enter the Selcall ID of the transceiver you wish to contact, type in the message and press Enter, or
 - Choose a contact from the  Contacts icon  and then select Pagecall. Type in the message and press Enter.
5. Wait for the call to be sent and listen for the revertive signal that indicates the call was successful.
 - If a revertive tone is not heard try another channel and repeat the process.




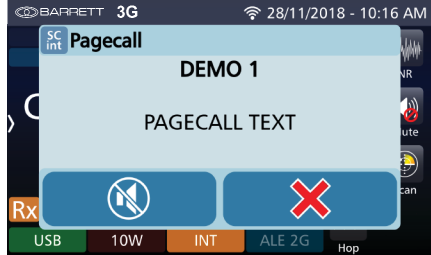
Receive a Pagecall

When a Pagecall is received, an audible alarm sounds, any mute is disabled and the Pagecall screen displays.



The Pagecall screen shows the Selcall ID and message.

Tap  to stop the audible alarm but maintain the Pagecall screen.

Tap  To close the Pagecall screen.



The audible alarm will sound for 60 seconds and then time out. To cancel the alarm before the time out period, and to acknowledge the call press the PTT

button or tap either  or  (described above). When the audible alarm times out, the call received icon displays and a periodic audio reminder is emitted.

When the audible alarm times out, the call received icon displays.

This message can be retrieved from the Advanced call history menu (see page 37).



GPS Request

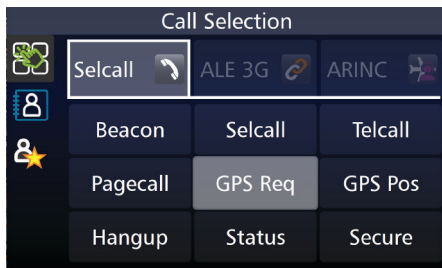
Use this option to request a remote station's GPS position. Information from the remote station will be either the latest GPS position of the station or the following error messages:

- "GPS data not available"

The GPS Request displays the GPS coordinates of the remote station's position as well as the bearing of and distance from the receiver.

Sending a GPS Req

1. Select the channel on which to send the GPS Req (Beacon Call can be used to determine the best channel).
2. Listen for traffic on that channel. If traffic is not heard, continue.
3. Press 
4. Either:
 - Select GPS Req, enter the selcall ID of transceiver you wish to contact and press Enter, or
 - Choose a contact from  the Contacts icon and then select GPS Req.
5. Wait for the call to be sent and listen for the revertive signal that indicates the call was successful.
 - If a revertive tone is not heard try another channel and repeat the process.
6. The receiving station will transmit it's position if fitted with a GPS receiver.

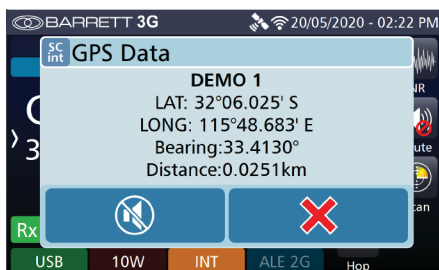


The GPS Data screen displays the caller's Selcall Alias (or alternately, their Selcall ID)

To stop the alarm sounding but

keep the display, press .

To close the screen, press .





GPS Position

Use this option to send your GPS position to another station.

Note: a GPS receiver must be connected and receiving position information when using the GPS call option.

Sending a GPS Pos

1. Select the channel on which to send the GPS Pos (Beacon Call can be used to determine the best channel).
2. Listen for traffic on that channel. If traffic is not heard, continue.
3. Press 
4. Either:
 - Select GPS Pos, enter the selcall ID of the transceiver you wish to contact and press Enter, or
 - Choose a contact from the  and then select GPS Pos.
5. Wait for the call to be sent and listen for the revertive signal that indicates the call was successful.
 - If a revertive tone is not heard try another channel and repeat the process.






Note: If a GPS receiver is not connected or hasn't acquired a GPS signal the "GPS Pos" call type will not be available.

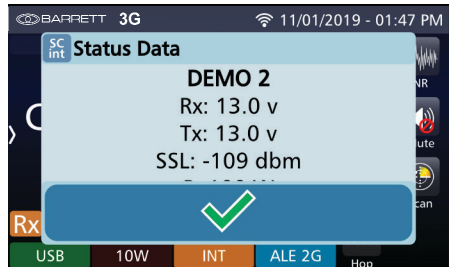
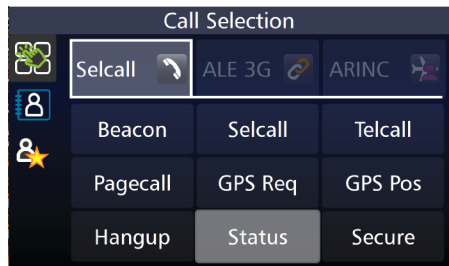
Status Call

A Status call allows the operational status parameters of any Barrett transceiver fitted with Selcall to be accessed. This status is sent from the remote transceiver as a Selcall with the status information embedded within the Selcall structure. Information retrieved for remote diagnosis of transceiver performance includes:

- Receive state battery voltage
- Last transmit state battery voltage
- Signal strength indication of received status request Selcall
- Forward power output level
- VSWR of the antenna
- Temperature
- Selcall ID of the last radio called.

Sending a Status Call

1. Select the channel to send the Status Call on (Beacon Call can be used to determine the best channel).
2. Listen for traffic on that channel. If traffic is not heard, continue.
3. Press 
4. Either:
 - Select Status, enter the Selcall ID of the transceiver you wish to contact and press Enter, or
 - Choose a contact from the  Contacts icon  and then select Status.
5. Wait for the call to be sent and for the remote station to return its status data.



If a reply is not received, either repeat the process or change the channel and repeat.

Secure Call

The Secure Call option provides the transceiver operator with a secure speech path using an in-band hopping technique. Secure Call is simple to use requiring each radio to be setup with the same four digit "Selcall Secure Call Code".

Features:

- The Secure Call is limited to point to point and point to multi point (group call) communications between radios within a network.
- If any radio drops out of the secure call, it is not possible to re-enter the secure call. Operators can re-establish the link following the Secure Call method.


Secure Call Codes

A Secure call code is necessary to make a successful secure call. Create a Secure Call Code via Settings, Security, Secure Call Code. Type a 4 digit number.

Note: The 4 digit secure call code must be the same for both the transmitting and receiving stations.




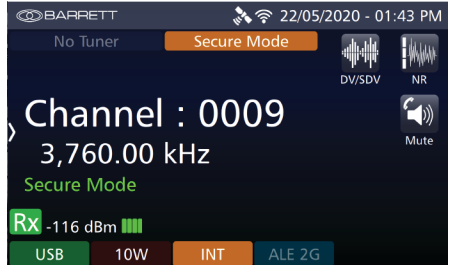
Sending a Secure Call

1. Select the channel to send the Secure call on (Beacon Call can be used to determine the best channel).
2. Listen for traffic on that channel. If traffic is not heard, continue.
3. Press 



4. Either:

- Select Secure, enter the Selcall ID of the transceiver you wish to contact and press Enter, or
- Choose a contact from the Contacts icon  and then select Secure.



5. Listen for the secure call revertive tone from the called station which indicates the call was successful.

Note: The secure call revertive tone has a different sound to the revertive tones of the other call types.

If the revertive tone was not heard, try another channel and repeat the process.

Now the transceivers can communicate securely using a voice call. Other users on the frequency will only hear garbled speech.


To exit secure mode, either a Hangup call can be sent or press the “back” key.

Hang-up Call

When a call to a telephone interconnect base station has completed or a secure call link is complete, the operator should ‘hang-up’ by sending a hang-up code to a telephone interconnect or secure call linked transceiver.

Note: If the hang-up call is unsuccessful for any reason, the telephone interconnect will time out and hang-up automatically. There is no time out once linked.

Sending a Hang-up Call

1. Press 
2. Select Hangup and enter the Selcall ID of the station you wish to disconnect from. Listen for hang-up revertive tone which confirms the disconnect was successful.



Sending the Hangup call from either secure call linked transceivers will disconnect both transceivers from secure call mode.

Selcall Networks

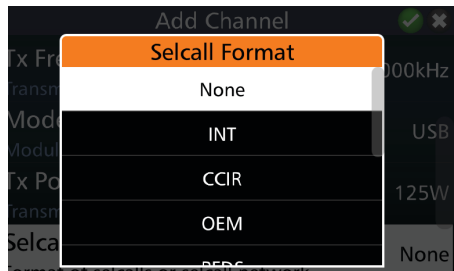
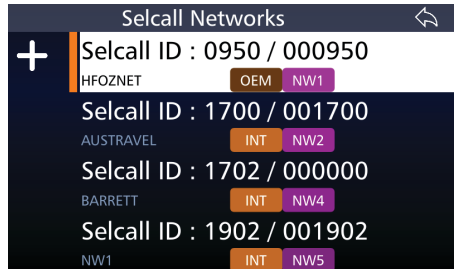
The Selcall Network screen is a list of the transceiver's 4 and 6 digit IDs on various HF networks. These are programmable and up to 5 networks can be stored on the transceiver.

Creating a New Selcall Network

1. Access the menu via **Settings** and **Selcall**. Select **Selcall Networks**.



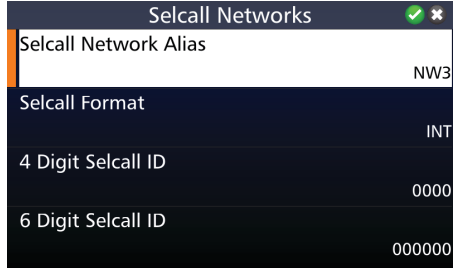
2. Tap the + symbol to create a new Selcall Network.
3. Selcall Network Alias refers to the name of the network on your transceiver. This is not read or transmitted by any external transceivers or displayed when you transmit.
4. Selcall Format chooses whether the network transmits over INT, CCIR, OEM or RFDS frequencies. All transceivers in the network will need to be the same in order to transmit between each other.
5. The Selcall IDs on each network may be specific to each network. These will generally be provided by the network administrator.
6. Select the green tick and then Yes to save the Network.



Editing an Existing Selcall Network

To edit a Selcall Network, select the desired network and either tap the network or press  from the keypad.

The Selcall Network screen displays. Edit the details as described above (for Creating a New Selcall Network).



Deleting an Existing Selcall Network

Select the Selcall Network to be deleted, then tap and hold for three seconds.

A confirmation message displays.

Tap  .

