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User Guide

UHF028/UHF028PNP Channel UHF CB Radio Citizen Band Radio

Keep this user guide for future reference. Always retain your
proof of purchase in case of warranty service.
www.oricom.com.au

Need Help?

If you need assistance setting up or using your Oricom product now or in the future, call Oricom Support.

Australia	(02) 4574 8888
	www.oricom.com.au
	Mon-Fri 8am – 6pm AEST
New Zealand	0800 67 42 66
	www.oricom.co.nz
	Mon-Fri 10am – 8pm NZST

When a narrowband radio receives a transmission from an older wideband radio the speech may sound loud and distorted – simply adjust your radio volume for the best listening performance. When an older wideband radio receives a signal from a new narrowband radio the speech may sound quieter - simply adjust your radio volume for best listening performance. When operating a narrowband radio or Channel 41 - 80 interference is possible from wideband radios transmitting on high power or on adjacent frequency.

The issues described above **are not a fault of the radio** but a consequence of mixed use of wideband and narrowband radios.

R-NZ

This unit complies with all relevant Australian and
New Zealand approval requirements

AS/NZS 4365:2011 including radio communications

Please read before installing or operating your Oricom Radio

The operation of your UHF radio in Australia and New Zealand is subject to conditions in the following licenses:

In Australia the ACMA Radio communications (Citizen Band Radio Stations) and in New Zealand by MED the General User Radio License for Citizen Band Radio.

Safety Information and Warnings

⚠️ **WARNING**

Potentially Explosive Atmospheres
Turn your radio OFF when in any area with a potentially explosive atmosphere. Sparks in such areas could cause an explosion or fire resulting in injury or even death.

NOTE: Areas with potentially explosive atmospheres are often, but not always clearly marked. They include fueling areas such as below deck on boats; fuel or chemical transfer or storage facilities; areas where the air contains chemicals or particles, such as grain, dust, or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.

Blasting Caps and Areas
To avoid possible interference with blasting operations, turn your radio OFF near electrical blasting caps or in a "blasting area" or in areas posted: "Turn off two way radios." Obey all signs and instructions.

**Electromagnetic Interference/Compatibility**
Nearly every electronic device is susceptible to electromagnetic interference (EMI). To avoid the possibility of electromagnetic interference and/or compatibility conflicts, turn off your radio in any location where posted notices instruct you to do so such as health care facilities.

Front View
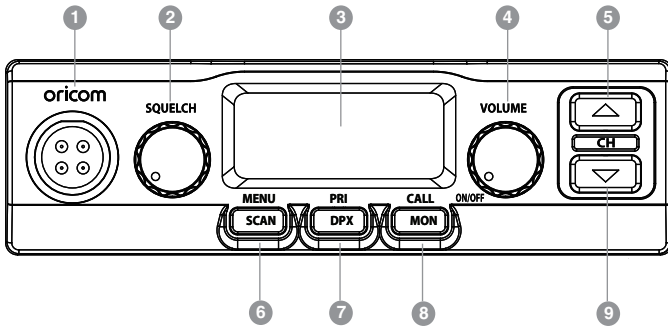
1. Microphone connector
2. SQ Control Volume
3. LCD Display
4. Power On/Off, Volume control
5. Channel Up
6. SCAN (Open,Priority,Instant,Repeater)/MENU On/Off
7. Duplex/ Primary Channel On/Off
8. Monitor/Melody Call On/Off
9. Channel Down
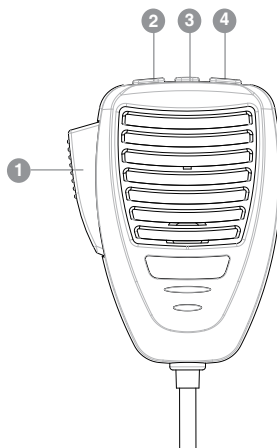
Rear View
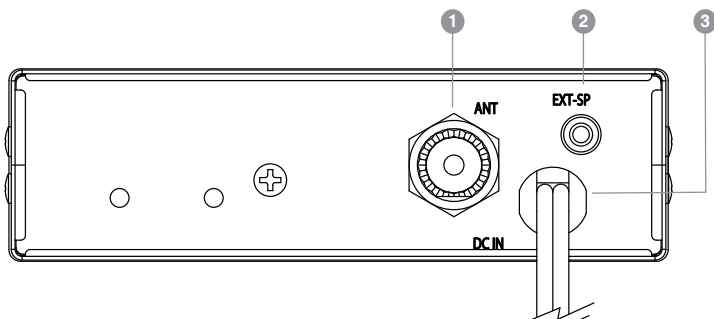
Rear view of Radio

1. Antenna Connection
2. 3.5mm external jack for optional 8 ohm speaker
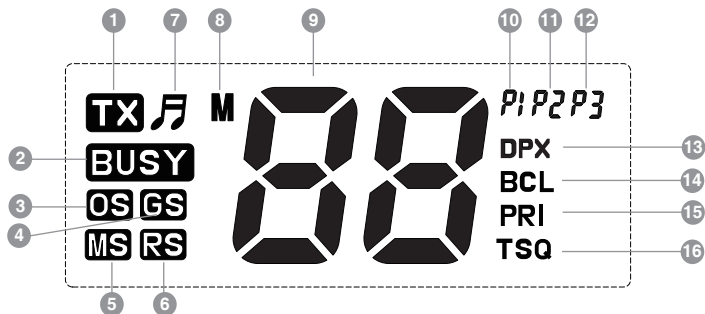3. Power Supply Connection

Microphone

1. Push to talk switch (PTT)
2. Recall/Memory of Instant channel (P1)
3. Recall/Memory of Instant channel (P2)
4. Recall/Memory of Instant channel (P3)

## LCD Icons & Indicators

LCD Display

1. TX indicator
2. Busy indicator
3. Open scan
4. Priority scan
5. Instant memory channels scan
6. Repeater channel scan
7. Roger beep indicator
8. Memory active channel indicator
9. Channel display
10. Instant channel P1
11. Instant channel P2
12. Instant channel P3
13. Duplex Channel On
14. Busy channel lock On
15. Priority Channel On
16. 38 CTCSS Tone On

Model No. UHF028 Pack Contents

    1 X UHF CB Radio

    1 X Microphone

    1 X DC Power cord with inline fuse

    1 X Mounting bracket with mounting screws
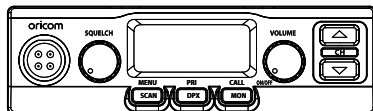
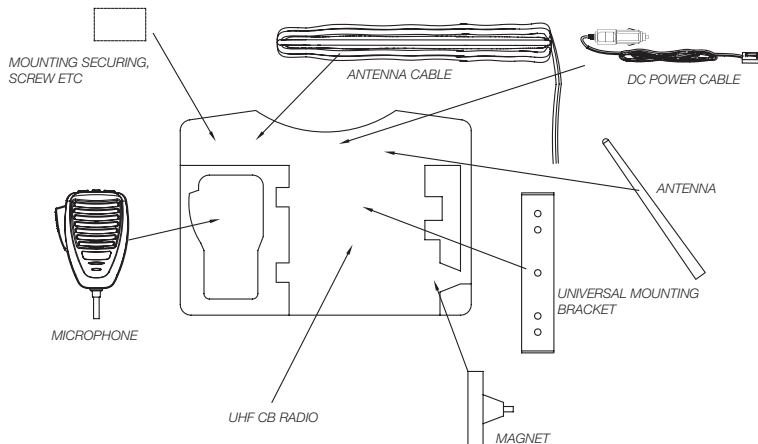## Model No. UHF028PNP Pack Contents

    1 X UHF028 CB Radio

    1 X Microphone

    1 X DC Power cord with inline fuse

    1 X Mounting bracket with mounting screws

    1 X Microphone hanger

    1 X Antenna Cable

    1 X Antenna and antenna Mount Magnet

MOUNTING SECURING, SCREW ETC

ANTENNA CABLE

DC POWER CABLE

ANTENNA

MICROPHONE

UNIVERSAL MOUNTING BRACKET

UHF CB RADIO

MAGNET

Installation

⚠️ **CAUTION** When installing your radio in your vehicle, check that during installation you do not damage any wiring or vehicle components that may be hidden around the mounting position.

For optimum performance your radio needs to be installed correctly. If you are unsure about how to install your radio, we suggest you have your radio professionally installed by a UHF specialist or Auto electrician. When installing the radio, avoid mounting it close to heaters or air conditioners. **Never press the PTT or CALL button before connecting the antenna to the radio.**

A. Radio stays ON when the ignition is switched OFF

Connect the radio's negative (black) lead to the vehicle chassis, or directly to the batteries negative terminal.

Connect the radio's positive (red) lead via the 3 Amp fuse to the battery's positive terminal. Alternatively, the positive lead could be connected at the fuse box at a point that has +13.8 Volts continuously available (preferably the battery side of the ignition switch) via the 3 Amp fuse.

B. Radio turns OFF with the ignition switch

Connect the radio's negative (black) lead to the vehicle's chassis, or directly to the batteries negative terminal.

The radio's positive (red) lead should connect to an accessory point in the vehicle's fuse box via the 3 Amp fuse.

Antenna information

The antenna (not supplied) is of critical importance, to maximize your output power and receiver sensitivity.

A poorly installed, inferior quality antenna or one not designed for the correct frequency band will give poor performance. You should only purchase an antenna designed for the 477MHz frequency band.

Antenna installation

1. Connect the antenna to the rear antenna socket using a PL259 coaxial connector (not supplied).
2. To obtain maximum performance from the radio, select a high quality antenna and mount it in a good location. **Never press the PTT or CALL button before connecting the antenna to the radio.**

Optional accessories

If required you may install an external (8 ohm, min 5w power) speaker fitted with a 3.5mm plug (not supplied).

Secondary Function Buttons

To use the primary function (SCAN, DPX,MON) press the required button.

To use the secondary function (MENU,PRI,CALL) press and hold the button for 2 seconds.

Power ON / OFF

Rotate the power switch in a clockwise direction to turn the unit ON, adjust the volume to a comfortable level. Rotate the Power Switch counter clockwise until it clicks to turn off the power.

Squelch

To adjust the level of squelch use the rotary **SQL** control. Turning the control counter clockwise reduces the amount of squelch, and turning clockwise will increase the amount of squelch. To reduce the signals that you can hear, increase the squelch, to hear more signals which may include weak signals decrease the squelch.

To Select a Channel

Press the up or down keys to step upwards or step downwards one or more channels.

Transmitting

NOTE:

Before transmitting on any channel, listen to check the channel is not already in use.

Transmitting

Select the desired channel. Press the PTT button on the microphone and speak normally into the microphone. Hold it approx. 7cm from your mouth. Release the PTT button to end the transmission and listen for a reply.
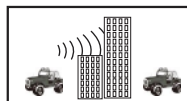
Transmitting range

The talk range depends on the environment and terrain, it will be affected by concrete structures and heavy foliage.
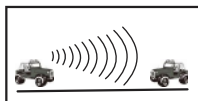
Optimal Range
Outdoors Flat, open
areas

Medium Range
Outdoors Buildings
or trees. Also near
residential buildings

Minimal Range Outdoors
Dense foliage or
mountains. Also inside
some buildings

Scanning

The radio SCAN function has the ability allow channels to be scanned for activity.

Channels can be scanned at a rate of 40 channels per 7 seconds. When a signal is found scanning will stop at that channel to allow the signal to be heard, then resume scanning when the channel is clear again.

Scan Modes

The Radio features four scan modes (Open Scan/Priority/Instant/Repeat).

During Open scan press the SCAN button to change to one of the four scan mode as below.

To stop the scan press the SC button until the scan icon is turned off or push the PTT button.

Open scan		Priority scan	
Display "OS"	Press Scan key	Display "GS"	Press Scan key

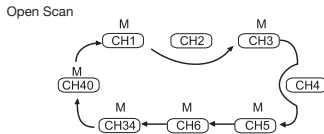| Instant scan		Repeater scan	
Display "MS"	Press Scan key	Display "RS"	Press Scan key

Scan Stop
No display

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Open Scan

The Open Scan feature scans for activity on all CB channels. Once a channel is located, scanning will pause, this will allow the signal to be heard. As soon as the channel is clear for 5 seconds, scanning will continue automatically.

Open Scan

Priority Scan

With Priority Scan the Radio scans for activity, but in addition, it also inserts your Priority Channel into the scan sequence.

This means that your Priority Channel will be monitored regularly while scanning to ensure that no calls are missed. Any signals received on your Priority Channel will take precedence over any signals received on the other channels.
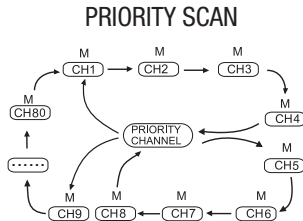
PRIORITY SCAN

This allows you to monitor a Priority Channel while scanning other channels in the memory.

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Instant Scan

During Priority Scan press SCAN button to start instant Scan. Only the 3 channels programmed in the instant channel buttons will be scanned.

Instant Memory

To save a channel to instant memory location, select the channel to be saved, include any CTCSS settings.

Briefly press and hold the required "P" button on the microphone. The buttons have been preprogramed with the following P1 (Ch12), P2 (Ch20), P3 (Ch40).

Instant Recall

To use the three recall functions, briefly press the P1 to P3 button. The display will show "P1" to "P3" on the LCD.

Repeater Scan

This feature scans the repeater channels only.

The repeater channels are 1 to 8 and 41 to 48.

Duplex Operation

General

Your radio has a Repeater Access function to allow use of local Repeater stations (if available in your area). Repeaters are shared radio system installed by interested parties (clubs, local business etc.) that pick transmissions on specific channels and re-transmit (or repeat) the received signal to another channel.
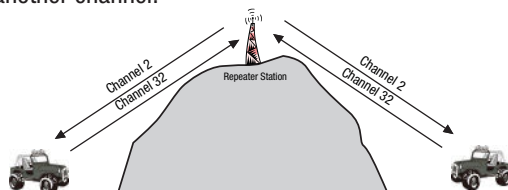
The Repeater Access function can be set (from channel 1 to 8) used by local repeater stations. When activated, your radio will receive the Repeater on its specific channel (all repeater outputs are on channel 1 to 8 and 41 to 48) but transmits to the repeater channel 31 through to 38 and 71 through to 78.

e.g.

CH01 on Duplex mode will receive on CH01 but transmit on CH31

CH02 on Duplex mode will receive on CH01 but transmit on CH32.

CH and Number	Simplex mode Transmit/Receiver Frequency (MHz)	Duplex mode Transmit Frequency(MHz)
1	476.425	477.175 CH31
2	476.450	477.200 CH32
3	476.475	477.225 CH33
4	476.500	477.250 CH34
5	476.525	477.275 CH35
6	476.550	477.300 CH36
7	476.575	477.325 CH37
8	476.600	477.350 CH38
41	476.4375	477.1875 CH71
42	476.4625	477.2125 CH72
43	476.4875	477.2375 CH73
44	476.5125	477.2625 CH74
45	476.5375	477.2875 CH75
46	476.5625	477.3125 CH76
47	476.5875	477.3375 CH77
48	476.6125	477.3625 CH78

If you transmit on CH01 duplex mode, you are actually transmitting on CH31. The repeater station down converts your signal and retransmits on CH01.

Your UHF028 allows you to pre-select Duplex operation individually on each of the repeater channels.

Press DPX button, "DPX" icon should disappear on the LCD.

Press the DPX button again to toggle the Duplex function on and off.

Monitor

Monitoring the channel is helpful as it allows you to listen for other CTCSS users not within your group.

To monitor the channel

Press the "MON" button. The "BUSY" icon should appear on the LCD.

If no signals are present, a hissing noise will indicate an empty channel.

Press again "MON" button to toggle the monitoring fucntion On and Off.

Priority Channel

To store a Priority Channel, Press and hold PRI button. The letters "PRI" will appear when the priority channel is set. The channel you selected as your Priority channel will then be automatically monitored during the Priority Scan.

> **Note:**
> You can only store one channel as your priority channel. Storing a new PRI channel will overwrite the existing selection.

To store a Priority Channel.

1. Select the required channel.
2. Press and hold the PRI button until a beep is heard. The letters "PRI" appear when the priority channel is set.

CALL

You can select from 5 call tones in menu mode.

This is the tone that is emitted when the CALL button is pressed and held.

Current regulations require call tones to be restricted to one transmission per minute. If a second transmission is attempted within one munute then an error tone will sound.
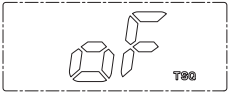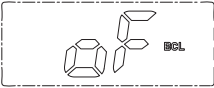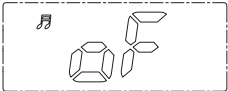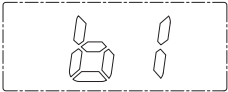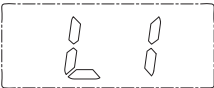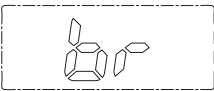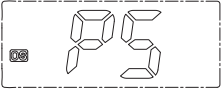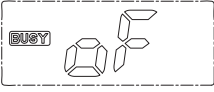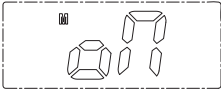
Menu Functions

The MENU feature provides a convenient method of customizing some of the radio's functions. The following menu options are available, Note that some items are only avaliable on certain channels.

To access the Menu functions

1. Press and hold the SCAN/MENU button for 2 seconds, then the Menu button. The first Menu function is displayed.

2. Briefly press the SCAN/MENU button to cycle through each available function. After the last function has been selected, the cycle returns to the beginning.

3. Press the channel up or down button to alter the parameters of the selected function.

4. Press and hold the SCAN/MENU button to exit and store any changes.

 * To change a value of a setting use the up or down key.

 * If you change a function setting use the SCAN/MENU key to select the next function.

 * If a button is not pressed within 8 seconds the radio will automatically exit to the menu mode.

 * The menu button allows you to make a number of configuration changes.

Functions	Display	Default	Options
38 CTCSS	TSQ	Off	Off to 38 tones
Busy Channel Lock	BCL	Off	On or Off
Roger Beep	♫	Off	On or Off
Key Beep		b1	b1=On,b2=Off
Melody Call		L1	L1 to L5
LCD backlight		br	br=Bright, dr=Dimmer
Scan stop time control	OS	P5	5,10,15,P5
Squelch delay time	BUSY	Off	2/6/10/14/ 18/22/Off
Memory scan	M	On	On or Off

CTCSS

This feature allows you to receive signals only from callers who have selected the same CTCSS.

The CTCSS setting values range from 'off' to 38 tones.

Busy Channel Lock

If you selected ON the BCL feautre of the UHF028 you will be prevented from accidentally transmitting while the channel is in use.

Roger Beep

This function emits a beep to inform the other listening stations that your transmission has finished.

Key Beep On/Off

The buttons emit a beep tone when pressed with the exception of the PTT button.

Melody Call

You can select 5 different melody tones.

LCD backlight

You can reduce the brightness of the LCD backlight while driving at night.

Scan stop control

The scan resume condition can be set as a pause(P5) or time scan (5/10/15 sec).

When a signal disappears, the scan will resume after 5 sec has elapsed regardless of the setting.

5/10/15: Scan paused for 5,10 or 15 sec. When a signal is detected, the scan resumes after that time.

P5: Scan pauses until the signal disappears and then resumes after 5 sec.

Squelch delay time

This is the time after the signal stops until the squelch mutes the audio.

It will be disabled when the scan function is selected.

The following delay times can be selected.

OF: No delay

02: 0.2 of a second

06: 0.6 of a second

10: 1 second

14: 1.4 seconds

18: 1.8 seconds

22: 2.2 seconds

Memory Scan

1. Select the required channel by pressing either the channel up or down keys.

If "M" is visible to the left of the channel number, the selected channel is already in the Open scan memory.

To disable the activity check on a channel during scan mode it should be removed from memory in menu mode. The "M" will disappear indicating the channel will not stop scanning during the Scan mode.

Factory Reset

If the radio's display locks up or stops functioning properly, you might need to reset your radio.

Caution:

This procedure clears all the information you have stored in your radio.

Before resetting your radio, try turning it off and on again. If your radio is still not functioning correctly it may need to be reset to its default settings.

While holding the Channel up button, Turn the radio on, only LCD backlight will be on for 1 to 2 seconds. The radio will then return to its original factory out condition.

Channel Frequency Table

Radiocommunications (Citizen Band Radio Stations) Class Licence 2002

No licence is required to own or operate this radio in Australia and New Zealand. The Radiocommunications (Citizen Band Radio Stations) Class Licence 2002 contains the technical parameters, operating requirements, conditions of licence and relevant standards for Citizen Band (CB) radios. CB radios must comply with the class licence for their use to be authorised under the class licence.

UHF channels and frequencies

IMPORTANT NOTE: The operation of your UHF radio in Australia and New Zealand is subject to conditions in the following licenses.

In Australia the ACMA Radio communications (Citizen Band Radio Stations) and in New Zealand by MED the General User Radio License for Citizen Band Radio.

Channel		Tx Freq MHZ	Rx Freq MHz	Channel		Tx Freq MHz	Rx Freq MHz
01*		*476.4250*	476.4250	21		476.9250	476.9250
	41*	-	476.4375		61‡	—	—
02*		*476.4500*	476.4500	22†		476.9500	476.9500
	42*	-	476.4625		62‡	—	—
03*		*476.4750*	476.4750	23†		476.9750	476.9750
	43*	-	476.4875		63‡	—	—
04*		*476.5000*	476.5000	24		477.0000	477.0000
	44*	-	476.5125		64	477.0125	477.0125
05*		*476.5250*	476.5250	25		477.0250	477.0250
	45*	-	476.5375		65	477.0375	477.0375
06*		*476.5500*	476.5500	26		477.0500	477.0500
	46*	-	476.5625		66	477.0625	477.0625
07*		*476.5750*	476.5750	27		477.0750	477.0750
	47*	-	476.5875		67	477.0875	477.0875
08*		*476.6000*	476.6000	28		477.1000	477.1000
	48*	-	476.6125		68	477.1125	477.1125
9		476.6250	476.6250	29		477.1250	477.1250
	49	476.6375	476.6375		69	477.1375	477.1375

10		476.6500	476.6500	30		477.1500	477.1500
	50	476.6625	476.6625		70	477.1625	477.1625
11		476.6750	476.6750	31*		477.1750	477.1750
	51	476.6875	476.6875		71*	477.1875	-
12		476.7000	476.7000	32*		477.2000	*477.2000*
	52	476.7125	476.7125		72*	477.2125	-
13		476.7250	476.7250	33*		477.2250	*477.2250*
	53	476.7375	476.7375		73*	477.2375	-
14		476.7500	476.7500	34*		477.2500	*477.2500*
	54	476.7625	476.7625		74*	477.2625	-
15		476.7750	476.7750	35*		477.2750	*477.2750*
	55	476.7875	476.7875		75*	477.2875	-
16		476.8000	476.8000	36*		477.3000	*477.3000*
	56	476.8125	476.8125		76*	477.3125	-
17		476.8250	476.8250	37*		477.3250	*477.3250*
	57	476.8375	476.8375		77*	477.3375	-
18		476.8500	476.8500	38*		477.3500	*477.3500*
	58	476.8625	476.8625		78*	477.3625	-
19		476.8750	476.8750	39		477.3750	477.3750
	59	476.8875	476.8875		79	477.3875	477.3875
20		476.9000	476.9000	40		477.4000	477.4000
	60	476.9125	476.9125		80	477.4125	477.4125

* The primary use for these channels is repeater operation using 750 kHz offset. Channels 1-8 and 41-48 inclusive are used for mobile reception and channels 31-38 and 71-78 for mobile transmission.

† Speech telephony shall be inhibited on these channels.

‡ At the time of production Channels 61,62 and 63 are guard channels and are not available for use.

Channel 5 and 35 (paired for Duplex repeaters) are reserved as emergency channels and should be used only in an emergency.

CTCSS and DCS will not operate on channel 5 and 35.

A list of currently authorised channels can be obtained from the ACMA website in Australia and the MED website in New Zealand. Channel 11 is a calling channel generally used to call others and channel 40 is the customary road vehicle channel.

Once contact is established on the calling channel, both stations should move to another unused "SIMPLEX" channel to allow others to use the calling channel.

Channels 22 and 23 are for Telemetry and Telecommand use, voice communications are not allowed on these channels by law.

Channel 9 and above are the best choices for general use in Simplex mode.

38 CTCSS CODE LIST

CODE	Frequency(Hz)	CODE	Frequency(Hz)
OFF	OFF	20	131.8
1	67.0	21	136.5
2	71.9	22	141.3
3	74.4	23	146.2
4	77.0	24	151.4
5	79.7	25	156.7
6	82.5	26	162.2
7	85.4	27	167.9
8	88.5	28	173.8
9	91.5	29	179.9
10	94.8	30	186.2
11	97.4	31	192.8
12	100.0	32	203.5
13	103.5	33	210.7
14	107.2	34	218.1
15	110.9	35	225.7

16	114.8	36	233.6
17	118.8	37	241.8
18	123.0	38	250.3
19	127.3		

Customer Support

If you have any problems setting up or using this product you will find useful tips and information in the Troubleshooting section of this user guide as well as "Frequently Asked Questions" on our website www.oricom.com.au.

If you have further questions about using the product after reviewing the resources above or would like to purchase replacement parts or accessories please call our Customer Support Team. Our dedicated local support team are more likely to be able to help you than the retailer where you made your purchase.

Important

Please retain your purchase receipt and attach to the back page of this user guide as you will need to produce this if warranty service is required.

Express Warranty (Australia)

This Express Warranty is provided by Oricom International Pty Ltd ABN 46 086 116 369, Unit 1, 4 Sovereign Place, South Windsor NSW 2756, herein after referred to as "Oricom".

Oricom warrants that the product is free from defects in materials or workmanship during the Express Warranty Period. This Express Warranty does not extend to any product from which the serial number has been removed or was purchased outside of Australia.

The benefits of this Express Warranty are in addition to other rights and remedies you may have under the Australian Consumer Law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. In the event of a minor failure, Oricom reserves the right to choose to repair or replace the product.

The Express Warranty Period will be a period of 5 years beginning on the date of purchase of the product evidenced by your dated sales receipt. You are required to provide proof of purchase as a condition of receiving Express Warranty services.

You are entitled to a replacement product or repair of the product at our discretion according to the terms and conditions of this document if your product is found to be faulty within the Express Warranty Period. This Express Warranty extends to the original purchaser only and is not transferable.

Products distributed by Oricom are manufactured using new materials or new and used materials equivalent to new in performance and reliability. Spare parts may be new or equivalent to new. Spare parts are warranted to be free from defects in material or workmanship for thirty (30) days or for the remainder of the Express Warranty Period of the Oricom branded product in which they are installed, whichever is longer. During the Express Warranty Period, Oricom will where possible repair and if not replace the faulty product or part thereof. All component parts removed under this Express Warranty become the property of Oricom. In

the unlikely event that your Oricom product has a recurring failure, Oricom may always, subject to the Competition and Consumer Act 2010, at its discretion, elect to provide you with a replacement product of its choosing that is at least equivalent to your product in performance.

No change to the conditions of this Express Warranty is valid unless it is made in writing and signed by an authorised representative of Oricom.

Oricom will not be liable under this Express Warranty, and to the extent permitted by law will not be liable for any defect, loss, damage or injury arising out of or in connection with a:

1. Failure by you to adhere to the warnings and follow the instructions set out in this user guide for the proper installation and use of the product;
2. Willful misconduct or deliberate misuse by you of the product;
3. Any external cause beyond our control, including but not limited to power failure, lightning or over voltage; or
4. Modification to the product or services carried out on the product by anyone other than Oricom or Oricom's authorised service provider.

How to make a claim under your Express Warranty in Australia

Oricom has a simple warranty process for you to follow:

- Please call or email our Customer Support Team, 02 4574 8888 or support@oricom.com.au.
- A Customer Support Team member will verify after troubleshooting with you if your product qualifies under warranty. If so, they will give you a Product Return Authorisation number.
- We will then email a Return Authorisation form and a Repair Notice (if necessary), together with instructions on how to return the product for warranty service.

Please note that if a Customer Support Team member advises that your product does not qualify for return, this warranty does not apply to your product. Products that are authorised to be returned to Oricom in Australia must include all of the following:

- A completed Return Authorisation form
- A copy of your Proof of Purchase (please keep your original copy)
- The faulty product, including all accessories.

Send the approved returns to:

Oricom International Pty Ltd
Locked Bag 658
South Windsor NSW 2756 Australia

Please note that this Express Warranty excludes expenses incurred by you in returning any faulty product to us. You must arrange and pay any expenses incurred (including postage, delivery, freight, transportation or insurance of the product) to return the faulty product to us, however, we will arrange delivery of the repaired or replaced faulty product to you.

Important Information

Repair Notice

Please be aware that the repair of your products may result in the loss of any user-generated data (such as stored telephone numbers, text messages and contact information). Please ensure that you have made a copy of any data saved on your product before sending for repair. Please also be aware that products presented for repair may be replaced by refurbished products or parts of the same type rather than being repaired.

ORICOM CUSTOMER SUPPORT

Oricom have a trained and dedicated team of Customer Support Representatives, each with the knowledge and resources to assist in answering your questions quickly and efficiently.

Oricom Support - Australia

For all product enquiries, troubleshooting or to discuss the range of Oricom products, feel free to contact Oricom or visit our website for answers to frequently asked questions.

(02) 4574 8888
Monday - Friday 8am – 6pm AEST
Email: support@oricom.com.au
www.oricom.com.au

Oricom Support - New Zealand

0800 674 266
Monday - Friday 11am - 7pm NZST
Email: support@oricom.co.nz