



## Operating Instructions

PMR795 80 Channel UHF 2 Way  
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](http://www.oricom.com.au)

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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.



This unit complies with all relevant Australian and New Zealand approval requirements AS/NZS 4365:2011 including radio communications (Electromagnetic Radiation Human Exposure) standard 2003.

# Safety Information and Warnings



### WARNING

#### **Information on Safe Operation**

Read This Information Before Using 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.

#### **Radio Antenna**

Do not use any radio that has a damaged antenna. If a damaged antenna comes in contact with the skin, a minor burn may result.

Unauthorized antennas, modifications, or attachments could damage the radio and violate compliance. Do NOT change or modify the antenna.

Do NOT hold the antenna when the radio is "IN USE." Holding the antenna reduces range and may cause bodily harm.

#### **Safety and general use whilst in a vehicle**

Check the State and Federal laws and regulations regarding the use of two way radios in the area where you drive, and always obey them.

#### **For Vehicles fitted with Air Bags**

Do not place your radio in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a radio is placed in the air bag deployment area and the air bag inflates, the radio may be propelled with great force and cause serious injury to the occupants of the vehicle.

#### **Read all these Safety Warnings before you install batteries.**

- Do not dispose of the batteries in a fire as they may explode.
- Exercise extreme care when handling batteries in order not to short the battery with conducting materials such as rings, bracelets and keys. The battery or conduction material may overheat explode and or cause burns.



### WARNING

- Never replace batteries in a potentially explosive atmosphere (such as where gas is leaking) as contact sparking may occur while installing or removing the batteries and cause a fire or an explosion.
- Do not modify, cut, disassemble, crush, bend, puncture, heat or damage the batteries.
- If batteries leak, do not let the battery liquid touch skin or eyes. If this happens, immediately flush the affected areas with water, and seek medical assistance. Released electrolyte is corrosive and may cause damage to the eyes and skin. It may be toxic if swallowed.
- Do not immerse or expose the batteries to water or other liquids.
- Never use damaged batteries as they may explode.
- Remove batteries when they are no longer able to hold a charge and when the equipment will not be used for an extended period of time.  
Dispose of batteries according to local regulations, never in your household rubbish.

### **WARNING:**

Risk of explosion if battery is replaced by an incorrect type.

### **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.



### WARNING

#### **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 the two way radio.” Obey all signs and instructions.

#### **Exposure to Radio Frequency Energy**

Your Oricom two-way radio complies with Australian Communications Authority Radio communications (Electromagnetic Radiation-Human Exposure) Standard, 2003.

To assure optimal radio performance and make sure human exposure to radio frequency electromagnetic energy is within the guidelines set out in the above standards always adhere to the following procedures.

#### **Transmit and Receive Procedure**

Your two-way radio contains a transmitter and a receiver. To control your exposure and ensure compliance with the general population/uncontrolled environment exposure limits, always adhere to the following procedure:

- Transmit no more than 50% of the time.
- To receive calls, release the PTT button.
- To transmit (talk), press the Push to Talk (PTT) button.

Transmitting 50% of the time, or less, is important because the radio generates measurable RF energy exposure only when transmitting (in terms of measuring standards compliance).

Always hold the radio approximately 5cm in front of your mouth with the antenna pointing away from your head.



### WARNING

#### **Radio Operation and EME Exposure**

Unauthorized antennas, modifications, or attachments could damage the radio and violate compliance.

Do NOT hold the antenna when the radio is "IN USE." Holding the antenna reduces the effective range.

Do not use the radio if the antenna is damaged. If a damaged antenna makes contact with your skin, a minor burn can result.

If you wear a radio on your body when transmitting, always fit the radio on the belt clip (supplied). Always ensure the radio and its antenna are at least 5cm from your body when transmitting.

#### **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.

#### **Aircraft**

When instructed to do so, turn off your radio when onboard an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.



### WARNING

#### **Medical Devices - Pacemakers**

The Advanced Medical Technology Association recommends that a minimum separation of 6 inches (15cm) be maintained between a handheld wireless radio and a pacemaker. These recommendations are consistent with the independent research by and recommendations of the U.S. Food and Drug Administration.

People with pacemakers should:

- ALWAYS keep the radio more than 15cm from their pacemaker when the radio is turned ON.
- Not carry the radio in the breast pocket.
- Use the ear opposite the pacemaker to minimize the potential for interference.
- Turn the radio OFF immediately if there is any reason to suspect that interference is taking place.

#### **Medical Devices - Hearing Aids**

Some radios may interfere with some hearing aids.

In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

#### **Other Medical Devices**

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

#### **General warnings**

Never use your radio outdoors during a thunderstorm.

Keep the radio out of reach of babies and young children.

## Installation

### Removing the Belt Clip

Pull the belt clip latch away from the radio.

While pulling the belt clip latch, push up the belt clip.

### Installing the Belt Clip

Slide the belt clip into the slot.

A “click” indicates the belt clip is locked into position.

### Installing the Batteries

WHEN USING RECHARGEABLE BATTERIES (not included) :

The charge time is about 12 hours, charging is indicated by a red light on the top of the display and the battery meter indicators flashing, once batteries are fully charged the red light will turn off.

Use 3 AAA 500mAH NiMH rechargeable batteries and 5V 1Amp USB power adaptor.

NOTE: DO NOT CHARGE ALKALINE BATTERIES.

### FOR USE OF NON RECHARGEABLE BATTERIES:

1. Slide down the battery compartment cover.
2. Insert 3 x AAA batteries (not included).
3. Position the batteries according to the polarity marking on the battery compartment.

After placing batteries into correct positions, replace the battery cover.

*Notes:*

- *Use only the same type and make of batteries.*
- *Remove the batteries if the units will not be used for a long period of time.*



### Low Battery Meter Indicator

When the battery level is low, the battery icon will display the low battery status by flashing on and off. The battery symbol will continue to flash until it totally drains the battery, you will then have to replace the batteries.

### Transmitting Range

The talk range will depend on your surroundings and environment it will be affected by obstructions such as hills or buildings.

Don't try to use two radio units which are less than 1.5 m (5 feet) apart. Otherwise, you may experience interference.

Talk range depends on the terrain. It will be affected by concrete structures, heavy foliage and by operating radios indoors or in vehicles.



**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


## Oricom PMR795 2-Way CB Radio



### LCD Screen

**80** Channel Number

**38** CTCSS Code. Changes from 1 to 38 as selected by the user.

 Displays the Battery charge level. When the bars are reduced, the battery needs recharging.

**TX** Displayed when transmitting a signal.

**RX** Displayed when receiving a signal.

**DCM** Displayed when the Dual Watch function is turned ON.

**VOX** Displayed when the VOX feature is enabled.

# Operation

## Turning the Unit ON/OFF



### To Turn ON;

- Press and hold the Menu/PWR until you hear a beep sound.

### To switch OFF;

- Press and hold the Menu/PWR.

## Adjusting the Speaker Volume

You have 8 preset volume levels. To increase the volume press the Up / Scan button and to decrease the volume, press the Down / Mon button, press PTT button or Menu/PWR button to confirm.

## Changing Channels

To change channels, once you have turned your unit on, press the Menu/PWR once and use the Up/Down buttons to scroll through to your preferred channel. Press the PTT button to confirm channel. Your PMR795 is simplex “one way at a time”. While you are speaking, you can not receive a Transmission.

Your PMR795 is an open--license band. Always identify yourself when transmitting on the same channel.

**IMPORTANT:** Before transmitting on a channel listen to ensure it is not already in use.

## Key Lock

Press & hold Lock button for 6 seconds, the unit will be locked and lock icon will appear on the LCD screen. When the radio is locked, only the Torch button, Menu/PWR button (for power on and off only), PTT button and Lock button are active. Press & hold Lock button for 3 seconds to unlock the radio.

### Torch

Press and hold the Torch button to turn on, release to turn off. The torch can still be used when the radio is off.

### Auto Scan

To turn on Auto Scan, press & hold the Up / Scan button for 2 seconds. To turn off Auto Scan, press & hold the Up / Scan button for 2 seconds, or the Menu / PWR button.

### Monitor (Zero squelch)

Press & hold the Down/Mon button for 2 seconds to activate monitor.

Press & hold the Down/Mon button for 2 seconds to deactivate monitor.

### Transmitting (Sending speech)

The unit is in RX mode when turned ON and not transmitting. When a signal is received on the selected channel, "RX" icon will display on the LCD screen.

- a. Press and hold the PTT (Push to Talk) button to transmit your voice. "TX" will display on the LCD screen.
- b. Hold the unit in a vertical position with the Mic (Microphone) 5 cm away from your mouth. While holding the PTT button, speak into the microphone in a normal tone of voice.
- c. Release the PTT button when you have finished transmitting. For others to receive your transmission, they must be on the same channel as you.

### CTCSS/DCS

Press the Menu/PWR button twice and use the Up / Down to select CTCSS/DCS Continuous Tone-Coded Squelch System channel. CTCSS eliminates interference from other users on the same channel.

**CTCSS** = Coded tone controlled squelching system. This allows you to talk on a private sub channel on an active channel.

DCS is a digital extension of CTCSS.

DCS=DCS is a digital extension of CTCSS. It provides extra, digitally coded, squelch codes that follow after the 38 CTCSS codes. CTCSS 1 to 38, followed by DCS 1-83.

## VOX

Voice operated transmitter, allows you to transmit with your voice without pressing the PTT button.

Your PMR795 is equipped with an adjustable Voice Operated Transmitter (VOX) that can be used for automatic voice transmission.

In this mode, transmission is automatically initiated by speaking into the microphone. There is no need to push the PTT button. To activate, press the Menu/PWR button 3 times, screen will display VOX and the current VOX setting. Press the Up or Down buttons to select voice level (from 1 to 3 level or OF), press the PTT button to confirm setting, VOX default setting is off.

## CA

Call allows you to select different tones for transmission to an operator on the same channel.

Press Menu/PWR button 4 times, screen will display CA, the selected tone number will flash. Press UP or Down buttons to select call tone from 01~10, press PTT button to confirm call tone setting. Default setting for call tone is 01.

There are 10 call tones available in this unit. To activate a call tone, briefly press the PTT twice. This can only be activated once every 3 minutes.

## TOT

Time out timer means the unit will automatically stop transmitting after 30 sec or 60 sec continuous transmission.

Press Menu button 5 times, screen will display 60 TO, press Up or Down button to select 60 or 30 seconds or OF. Default setting is 60 seconds, press the PTT button to confirm changes.

### Roger Beep

Roger beep means a tone added to the end of broadcast, it indicates that the user/operator has concluded speaking. This is a tone which is automatically transmitted whenever the PTT button is released.

This alerts the receiving party that you have ended the transmission, and you are now in receive mode.

Press Menu button 6 times, screen will display ON RO, press up or down button to choose RO OF or ON, press the PTT button to confirm changes.

### Key Tone

You can turn on and off an audible sound when keys are pressed. Press Menu button 7 times, screen will display a bell and ON, press Up /Scan button to choose ON or Down/Mon button to choose OF. Default setting is ON, press the PTT button to confirm changes.

### DCM

Dual channel monitoring allows you to monitor two channels, eg: channels 12 and 17 can be monitored or 49 and 59.

Press Menu button 9 times, screen will display DCM OF, press Down or UP to choose DCM OF or ON, when DCM is turned on, the channel will need to be set by using the UP / Down buttons. Press the PTT button to confirm selection.

### Important:

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

When the PTT and/or CALL buttons are continuously pressed, your Radio cannot receive any transmissions.

### Reset the unit

Remove the batteries from the battery compartment, press and hold the Menu/PWR button, now install the batteries making sure they are in the right polarity. Your radio will turn on and display CH 12, release the Menu/PWR button.

### Duplex operation via Repeaters

This feature allows to use local repeater stations that are designed to automatically re-transmit your broadcast over a large area thus giving you increased range.

Repeaters stations are privately operated radio systems installed throughout Australia.

For example, if you wish to access a repeater station in your area which operates on channel 2, you need to set the Duplex access on this Channel.

When you have turned on the Duplex setting in the menu for the selected channel (and you are within range of a local repeater), your radio will automatically transmit to the repeater on channel 32.

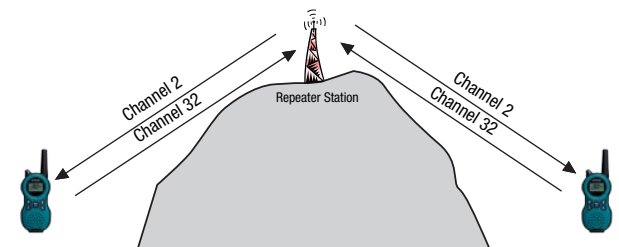
Turning on/off Duplex on channels

- Select the required channel to suit the repeater station you wish to access (Channels 1 – 8 and 41 – 48).
- Press the Menu button eight times, "RPT" icon will display
- Press the UP or DOWN button to set the Duplex function to On or Off.
- Press the PTT button to confirm your setting.
- The RPT icon will display to indicate that Duplex is set on that channel.

Receive Channel	1	2	3	4	5*	6	7	8
Transmit channel	31	32	33	34	35*	36	37	38

Receive Channel	41	42	43	44	45	46	47	48
Transmit channel	71	72	73	74	75	76	77	78

\* Channel 5 is emergency channel only



## 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	Rx	Channel		Tx	Rx
		Freq MHz	Freq MHz			Freq MHz	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



## Channel Frequency Table

	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. In addition, any designated repeater channel may be used for simplex operation in areas where it is not used for repeater operation.

† 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 channels 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.

## TROUBLE SHOOTING GUIDE

PROBLEM	GUIDE
No power or radio switchs off after short time	<ol style="list-style-type: none"> <li>1: Check charger and batteries are installed correctly.</li> <li>2: Clean battery contacts (Important!).</li> <li>3: Replace batteries with fully charged or new batteries.</li> <li>4: Battery capacity poor: battery defective or at end of life, replace batteries.</li> </ol>
I cannot communicate with other group members	<ol style="list-style-type: none"> <li>1: Verify, that the channel frequency and the CTCSS settings are the same on all radios.</li> <li>2: The other group members are not within radio coverage.</li> </ol>
Audio cutting in and out at receivers end.	<ol style="list-style-type: none"> <li>1: Too weak signal-too far away.</li> <li>2: External mic defective? Please contact Oricom Support.</li> </ol>
Too many transmissions heard on my channel.	<ol style="list-style-type: none"> <li>1: Another group is using the same channel number -change channel</li> </ol>