



# **User Guide**

Oricom UHF050 40 Channel UHF CB Radio



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# Please read before installing or operating your Oricom Radio

The operation of this 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 General User Radio License for Citizen Band Radio and operation is subject to conditions contained in those licences.

Channels 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 these channels.

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.

Channels marked Duplex are reserved for repeater use in some areas. These are paired with higher channels as output/input (1/31, 2/32, etc.) Check for local repeater activity before using these channels in Simplex mode to avoid interference. Channels 9 and above are the best choices for general use in Simplex mode. You can find more information about channels and frequencies by visiting the Web site:

http://www.acma.gov.au

#### Note:

Refer to the "Channel Table" section of this Owner's Manual for detailed frequency listing.

### **Safety Warning**



#### 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.

#### **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.

#### **Blasting Caps and Areas**

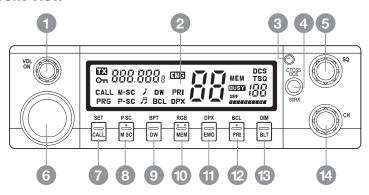
To avoid possible interference with blasting operations, turn your radio OFF near electrical blasting caps or in a "blasting area" or in areas posted: "Turn off the two way radio." Obey all signs and instructions.

#### **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.

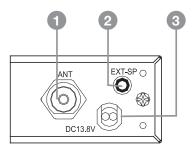
#### **Controls and Connectors**

#### **Front View**



- Rotary On / Off Switch and Volume Control
- 2. LCD Display
- 3. Rx / Tx Indicator
- 4. CTCSS / DCS, 60 Channel Rx Selector switch
- 5. Rotary squelch control
- 6. Microphone connector
- 7. Call- Call Button, Set- Set Button
- 8. M SC Memory Scan, P SC Priority Scan
- 9. DW Dual Watch, BPT Beep Tone
- 10. MEM Memory Skip, RGB Roger Beep
- 11. EMG Emergency Channel, DPX Duplex
- 12. PRI Primary, BCL Busy Channel Lock
- 13. BLT Back light, DIM DIM
- 14. Rotary Channel Button

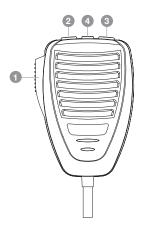
#### **Rear View**



- 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. Select Up
- 3. Select Down
- 4. Instant Channel



#### **Box Contents**

- 1 X UHF050 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 DIN mounting kit
- 1 X User Guide



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.

If you are unsure about how to install your radio, we suggest for optimum performance 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. Do not press the PTT or CALL button before installing the antenna.

#### **Antenna Installation**

To obtain the best performance from your UHF050 it is important to obtain a good quality antenna. You should purchase an antenna designed for the 477MHz frequency band.

 Connect the antenna to the rear antenna socket using a PL259 coaxial connector.

#### **DC** Power

The UHF050 is designed for 13.8V DC negative earth installations only.

- Connect the negative (Black) DC power lead to the vehicle chassis or directly to the vehicle battery negative terminal if preferred.
- Connect the positive (Red) DC power lead via the in line fuse to a suitable point in the vehicle fuse box or directly to the positive battery terminal. When selecting a suitable point take into consideration if you want your UHF 050 to be operational when the car ignition is off.

#### **DIN Kit**

The UHF050 can be installed using a optional DIN Kit - Part number; DIN050 for mounting in a vehicle dash board.

### **Optional External Speaker**

Depending on the installation it may be necessary to use an external speaker (not supplied) to give improved volume and clarity. This can be plugged into the EXT –SPK socket on the rear of the unit.

### **Operation**

#### **Dual Function buttons**

The dual function button (buttons 7 to 13) have two functions. To use the primary function (printed on the button) just press the button. To use the secondary function (printed above the button) 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 click to turn off the power.

#### Squelch

To adjust the level of squelch use the rotary SQL control. Turning the control clockwise reduces the amount of squelch, turning counter clockwise 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

To select a channel rotate the CH control clockwise or counter clockwise to the desired channel.

#### To Select A CTCSS / DCS or 60Rx Receive channels

Press the **CTCSS / DCS** button *once* to obtain CTCSS channel select. Press *twice* to obtain DCS channel select.

Press and hold the button for 2 seconds to obtain the 60Rx channels.

### **Transmitting**

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

### **Busy Channel Lock (BCL)**

If you turn ON the BCL feature of the UHF050 you will be prevented from accidentally transmitting while the channel is in use.

#### To Turn ON BCL

 Press and hold the BCL button for 2 seconds, BCL will appear on the LCD display.

#### To Turn OFF BCL

 Press and hold the BCL button for 2 seconds, BCL will disappear from the LCD display.

#### To Transmit

- 1. Select the channel you wish to use, please refer the Channel Reference at the end of this user guide for a list of available channels and their use.
- 2. Press the PTT switch on the Mic

TIP: To ensure your voice is transmitted with the best clarity hold the microphone 5 to 7 cm from your mouth, talk at a normal level, do not shout.

#### **Call Tone**

A call tone alerts others on your channel that you want to talk. Your radio has 5 call tones to choose from.

#### To select a call tone

- 1. Press and hold SET for 2 seconds.
- Rotate the Channel button ( or press the Up / Down Select on the Mic) to select the desired Call Tone.

#### To transmit a call tone

 Pressing the call switch will cause a 3 second call tone to be transmitted.

NOTE: Australian and New Zealand standards restrict tone calling to 3 seconds in any 60 second period.

### CTCSS (Continuous Tone Coded Squelch System)

Your UHF050 has 38 CTCSS codes to minimise interference from other users. You will only hear transmissions from users using the same code.

#### To select a CTCSS code

- Press the CTCSS / DCS button, TSQ of will blink on the LCD display.
- 2. Turn the Channel control to select the desired CTCSS code.
- 3. Press the **CTCSS / DCS** button *twice* to return to standby.

### **DCS (Digitally Coded Squelch)**

Your UHF050 provides for 104 DCS codes. These are digitally coded squelch codes which provide additional privacy.

#### To select a DCS code

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 Press the CTCSS / DCS button twice, DCS – of appears on the LCD display.

- 2. Rotate the **Channel** button or press **Up / Down** Select on the Mic to select the desired DCS channel code.
- 3. Press the **CTCSS / DCS** button *once* to return to standby.

#### **Receive & Transmit Indicator**

The LED indictor will illuminate green when the unit is receiving a signal, when transmitting it will illuminate red. When in standby the LED is out.

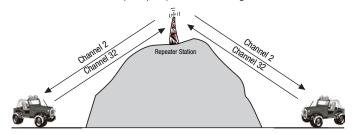
### Time Out Timer (ToT)

Australian and New Zealand standards require that if the PTT is pressed for more than 3 minutes the unit must stop transmitting. The UHF050 is set to stop transmitting after 2 minutes and 30 seconds of continous transmitting. After that time the unit will stop transmitting and TOT will appear in the display to indicate that the ToT has activated.

### **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) but transmits to the repeater channel 31 through 38.

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/ reciever 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

#### To Turn Duplex (DPX) ON

 Press and hold the **DPX** button for 2 seconds, **DPX** will appear on the LCD display.

### To Turn Duplex (DPX) OFF

 Press and hold the **DPX** button for 2 seconds, the **DPX** will disappear from the LCD display.

**NOTE:** For an up to date list of repeaters you can visit: http://www.acma.gov.au

### Roger Beep (RGB)

Roger beep emits a tone when you release the PTT switch.

### To turn ON the roger beep

 Press the RGB button for 2 seconds, the <note icon> appears in the display.

#### To turn OFF the roger beep

 Press the RGB button for 2 seconds, the <note icon> disappears from the display.

### **Emergency Channel (EMG)**

The EMG button gives instant access to emergency channels 5 and 35.

#### To access the emergency channel

- 1. Press the **EMG** button, Channel 5 I selected and displayed on the LCD.
- 2. If you press the **EMG** button a 2nd time the channel changes to 35.
- If you pres the EMG button a 3rd time the unit return to the original channel.

### **Priority Channel (PRI)**

You can select a priority channel which is used during scanning functions and can be accessed immediately via the INS button on the Microphone.

#### **To Select the Primary Channel**

- Select the desired primary channel using the channel control, including any CTCSS or DCS code.
- 2. Press the **PRI** button on the unit or press *and hold* the **INS** button on the Microphone.

#### To switch to the primary Channel

1. Press the **INS** button on the Microphone.

### **BEEP Tone (BPT)**

The Beep Tone emits a tone when you press any of the buttons on the Microphone (except the PTT switch)

#### To Turn ON the BEEP Tone

 Press and hold the BPT button for 2 seconds, BPT appears on the LCD display.

#### To Turn OFF the BEEP Tone

 Press and hold the BPT button for 2 seconds, the BPT disappears from the LCD display.

### **Memory Scan**

Initially All 40 channels are stored in memory, indicated by MEM next to the channel on the LCD display. During a memory scan all channels in memory are scanned for a signal.

### To Remove or Add a channel to the memory

- 1. Select the channel you wish to add or remove from memory.
- Press the **MEM** key to add or remove from memory, **MEM** will be displayed on the LCD if the channel is in memory.

### To start a Memory Scan

 Press the M SC button, the scan will start, M-SC will be displayed on the LCD display.

#### To stop a Memory Scan

 Press the M SC button, the scan will stop, M-SC will disappear from the LCD display.

### **Priority Scan**

In a priority scan the selected priority channel is checked for every 5 memory channels.

#### **To Start a Priority Scan**

Press the P SC button for 2 seconds, the priority scan will start,
 P-SC will be displayed on the LCD.

#### **To Stop a Priority Scan**

Press the P SC button for 2 seconds, the Priority Scan will stop, P-SC will disappear from the LCD display.

### **LCD Display Controls**

#### **Display Backlight**

You can select from two colour options for the LCD backlight. The two options are Orange and Green.

### To select the backlight colour (BLT)

1. Press the **BLT** button, the display will toggle between Orange and Green.

### **Display Brightness**

You can reduce the brightness of the LCD backlight to be more comfortable while driving at night.

#### To Dim the display

1. Press *and hold* the **DIM** button for 2 seconds, the display will toggle between normal and DIM brightness levels.

#### 60 Rx channels

The UHF050 has 60 receive only channels which can be programmed from 450MHz to 512MHz in steps of 12.5KHz.

#### To program a receive channel.

- Press and hold the 60Rx button for 2 seconds, the display will show channel 41. to select a different channel use the Channel control.
- Press the PRI button, the 450 in the frequency display will start blinking, use the Channel control to select the desired MHz.
- 3. Press the **PRI** button, the **000** in the frequency display will start blinking, use the Channel control to select the desired KHz.
- 4. Press **MEM**, the frequency is stored to that channel.

### **Factory Reset**

Should it be necessary you can return all the UHF050 settings to the factory defaults to do this.

- Switch the unit OFF.
- 2. Press and hold the CALL button.
- 3. While *still holding* the **Call** button, turn the power switch to ON, this will reset the factory defaults.

## **Specifications**

Available Tx Channels	38
Power Output	5 Watts
CTCSS Sub Channels	38 per channel
DCS Codes	104 per channel
Receive only channel Range	450MHz to 512Mhz in 12.5KHz steps
Input Voltage	10VDC to 15VDC
In-line fuse rating	2 Amps
Antenna Impedance	50 Ohms

### Frequency Table (Channel 1-20)

Channel	Frequency (MHz)	Usage
1	476.425	Duplex RX/Simplex
2	476.45	Duplex RX/Simplex
3	476.475	Duplex RX/Simplex
4	476.5	Duplex RX/Simplex
5	476.525	Emergency
6	476.55	Duplex RX/Simplex
7	476.575	Duplex RX/Simplex
8	476.6	Duplex RX/Simplex
9	476.625	Simplex
10	476.65	Simplex
11	476.675	Simplex (Calling channel)
12	476.7	Simplex
13	476.725	Simplex
14	476.75	Simplex
15	476.775	Simplex
16	476.8	Simplex
17	476.825	Simplex
18	476.85	Simplex
19	476.875	Simplex
20	476.9	Simplex

### Frequency Table (Channel 21-40)

Channel	Frequency (MHz)	Usage
21	476.925	Simplex
22	476.95	No Use
23	476.975	No Use
24	477	Simplex
25	477.025	Simplex
26	477.05	Simplex
27	477.075	Simplex
28	477.1	Simplex
29	477.125	Simplex
30	477.15	Simplex
31	477.175	Duplex TX/Simplex
32	477.2	Duplex TX/Simplex
33	477.225	Duplex TX/Simplex
34	477.25	Duplex TX/Simplex
35	477.275	Emergency
36	477.3	Duplex TX/Simplex
37	477.325	Duplex TX/Simplex
38	477.35	Duplex TX/Simplex
39	477.375	Simplex
40	477.4	Simplex

### **Warranty**

- (a) Warranty. Oricom International Pty Ltd (Oricom) warrants that the product is free from defects in materials and workmanship for a period of 36 months effective from the date of purchase. This warranty in no way affects your statutory warranty under the Trade Practices Act 1974 or any other similar legislation. It is important that you read the Warranty Card as it contains full and additional details of the warranty, limitation of warranty and conditions for receiving the warranty services during the warranty period. The Warranty Card is located in the package.
- (b) Exclusion and limitation of liability. Oricom will not be in breach of a warranty or condition expressly stated in this User Guide or the Warranty Card or implied by the Trade Practices Act and excludes any liability arising under any statutory or common law for damages or any other remedy if the damage occurs as a result of:
- (i) Failure by you to follow the instructions in the User Guide for the installation and proper functioning of the product;
- (ii) Negligence on your part or misuse by you of the product;
- (iii) Any un-controlled external cause to the phone not functioning including but not limited to electricity failure, lighting, over voltage;
- (iv) Non adherence by you to the warnings in the User Guide and the wUser Guide generally; and
- (v) Modification to the product or services carried out to the product by anyone other than Oricom or on Oricom's behalf.

Oricom will not be liable for consequential losses including loss of profits arising from a cause of action in contract, tort or any other statutory or common law (except where a statute or any law prohibits this exclusion).

The warranty does not extend to damage caused by misuse, negligence, excessive voltage, faults on the telephone line or lightning. This warranty in no way affects your statutory rights. Full details of the warranty are contained in the enclosed warranty card.

### **Customer Support**

If you feel this product is not working correctly please consult the user guide and ensure that you are using the product in accordance with the instructions.

To order spare parts additional radio, replacement batteries and in case of any technical issues you may have with the product please consult our website for further information or send us an email for a prompt response to your enquiry.

In the unlikely event of a fault developing, please contact us for assistance. If the product is then found to be faulty you will be asked to return it directly to us with a copy of the purchase receipt.

#### Australia

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

#### **Customer Support**

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