

ULTRA COMPACT 5 WATT UHF CB RADIO

24
MONTH
WARRANTY



RIDGE 4X4
ACCESSORIES
RYDER

INTRODUCTION

WELCOME

Thank you for purchasing the Ridge Ryder RR100A Ultra Compact 80 Channel UHF Radio. Please ensure that you have read the product manual and instructions in full, prior to installation and use. Failure to do so may result in product failure/damage or incorrect operation and therefore impact the product performance.

There are many government rules and regulations surrounding the use of UHF radio so please familiarise yourself with local legislation and the safety information on page 4 of this instruction manual before use.

FEATURES

The Ridge Ryder RR100A Ultra Compact 80 Channel UHF Radio features a sturdy aluminium diecast chassis which not only makes the unit tough, but also keeps the unit cool creating maximum transmission efficiency. The ultra compact design allows the radio to be mounted virtually anywhere in the vehicle and it includes a universal mounting bracket for simple installation. Although the radio is ultra compact, it still offers a full 5W power output which is the maximum legal limit for non-Licensed use in Australia. The unit also offers 80 narrowband channels and the channel scan feature allows you to scan through these channels with ease.

Key features include:

- Ultra compact design
- 5 watt transmission power
- 80 Narrowband channels
- Squelch control (automatic and adjustable)
- CTCSS (38ch)/DCS (104ch) codes
- Duplex range extender
- Channel scan function with open scan and group scan
- Busy channel lock out
- 5 Call ring tones
- Roger beep
- Button beep
- Priority channel
- Blue backlit display
- Aluminium die cast chassis
- Mute signal output
- External speaker jack
- Fixed cord handpiece/mic

BOX CONTENTS

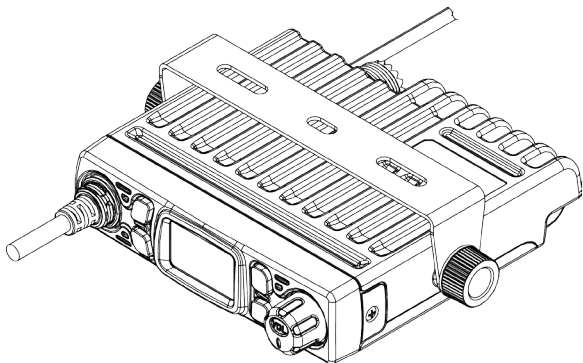
Parts supplied include:

- Main radio unit (with attached microphone handpiece)
- Microphone handpiece mount with screws
- Universal radio mounting bracket with screws
- Instruction manual



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SAFETY INFORMATION AND WARNINGS

INFORMATION ON SAFE OPERATION

Please read this information before installing or using your UHF radio.

The operation of your UHF radio in Australia is subject to conditions in the following Licence:

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

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 AIRBAGS

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

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 the two way radio." Obey all signs and instructions.

EXPOSURE TO RADIO FREQUENCY ENERGY

Your 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 radio operating procedures.

RADIO OPERATION AND EME EXPOSURE

Unauthorised 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 a persons skin, a minor burn may result.



SAFETY INFORMATION AND WARNINGS (continued)

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 the 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 on-board an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.

MEDICAL DEVICES – PACEMAKERS

The Advanced Medical Technology Association recommends a minimum separation of 15cm be maintained between a radio and 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 away from the pacemaker when the radio is powered on.
- NOT carry the radio in the breast pocket (handheld models).
- Use the ear opposite the pacemaker to minimise the potential for interference.
- Turn the radio OFF immediately 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.

MEDICAL DEVICES - OTHER

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.

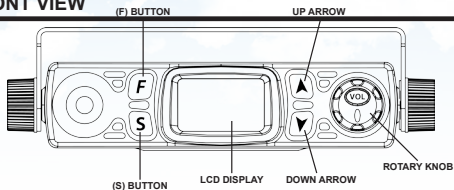
GENERAL WARNINGS

Keep the radio out of reach of babies and/or young children

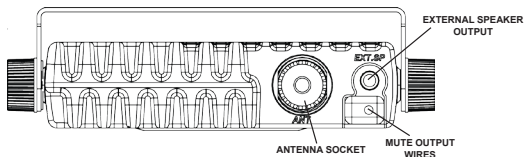


RADIO CONTROLS, CONNECTORS & DISPLAY

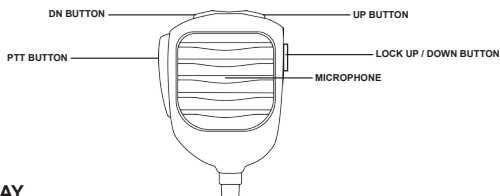
RADIO FRONT VIEW



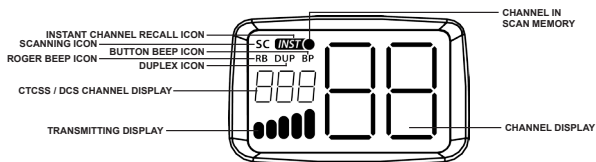
RADIO REAR VIEW



MICROPHONE HANDPIECE



LCD DISPLAY



RADIO OPERATION

POWER ON/OFF

To turn the RR100A ON, turn the **"ROTARY KNOB"** clockwise until there is a click. The LCD display will light up, indicating the unit is now ON.

To turn the RR100A OFF, turn the **"ROTARY KNOB"** anti-clockwise until there is a click. The LCD display will black out, indicating the unit is now OFF.

VOLUME CONTROL

To adjust the volume, use the **"ROTARY KNOB"**. Turn the **"ROTARY KNOB"** clockwise to increase the volume and turn the **"ROTARY KNOB"** anticlockwise to decrease the volume.

CHANNEL SELECTION

Press the **"UP ARROW"** or **"DOWN ARROW"** to scroll through the desired channel. For your reference a list of the available channels, corresponding frequencies and guidelines for their use and selection can be found on page 14 -15 of this instruction manual.

NOTE: Channels 05 and 35 are reserved for emergency use only.

SCANNING

To scan, press the **"(S) BUTTON"** and the unit will scan through all 80 channels. For advanced scanning functions refer to page 10 of this instruction manual.

INSTANT CHANNEL RECALL

To switch to the instant recall channel, press the **"(UP) BUTTON"** on the **microphone handpiece**. The unit will instantly switch to the preset channel. To set the INSTANT CHANNEL RECALL simply press and hold the **"(UP) BUTTON"** on the **microphone handpiece** when on the desired channel.

TRANSMITTING

To transmit, press and hold the **"(PTT) BUTTON"** on the microphone handpiece.

Hold the microphone approximately 5-10cm from your face and speak. To complete transmission, release the **"(PTT) BUTTON"**. Detailed transmitting operation can be found on page 12 of this instruction manual.

NOTE: Always ensure the channel is free before transmitting.

MAIN MENU

To access the main menu, while the radio is powered on, press the **"(F) BUTTON"**. To navigate through each menu option, press the **"(F) BUTTON"** multiple times until the desired feature is reached.

Menu options include:

- | | |
|---|--------------------------------------|
| 1. SQL - Squelch Sensitivity Control | 5. BCL - Busy Channel Lockout |
| 2. CTC - CTCSS/DCS Tone Settings | 6. CALL - Call Tone |
| 3. DUP - Duplex Mode | 7. RBP - Roger Beep |
| 4. SCN - Scan Options | 8. BEP - Button Beep |

To exit the menu hold down the **"(F) BUTTON"** for 3 seconds and the default channel screen will reappear, this will also save any settings you changed. Alternatively, do not press any buttons for 8 seconds and the radio will automatically exit the menu and automatically save any changed settings.



RADIO OPERATION (continued)

FACTORY RESET

To reset the radio, press and hold the “**(F) BUTTON**” while powering on the radio. “RES” will be shown on the LCD display indicating the radio is being reset to factory default settings.

FUNCTION- Squelch

WHAT IS SQUELCH?

Squelch controls silence the constant background noise in two-way radio receivers during periods of inactivity. The radio will still receive transmissions when a signal is present, however it will eliminate background noise when a signal is not present. The squelch default on the RR100A is closed.

SETTING SQUELCH

To open the squelch, press and hold the “**(F) BUTTON**” for 2 seconds. The unit will beep and background noise can now be heard.

To close the squelch, press and hold the “**(F) BUTTON**” for 2 seconds.. The unit will beep and the background noise can no longer be heard.

To access squelch control, press the “**(F) BUTTON**” once, SQL will display on the screen. Press the “**UP ARROW**” or “**DOWN ARROW**” to select an option between 1-9. 1 is the most sensitive setting and it will open on very weak signals, while 9 is the least sensitive setting and will only open on very strong signals. Once the desired setting is selected, press and hold the “**(F) BUTTON**” for 3 seconds to save the setting. The unit will automatically change back to the default screen.

NOTE: The factory default setting of the RR100A is 3 which is medium sensitivity.

FUNCTION- CTCSS & DCS

WHAT IS CTCSS AND DCS?

CTCSS (Continuous Tone-Coded Squelch System) and DCS (Digitally Coded Squelch) modify the transmission signal to allow multiple users to share the same channel without disturbing each other. This is an important feature on a radio when there are many radio users in the same area.

CTCSS continuously superimposes any one of about 50 low-pitch audio tones on the transmitted signal, ranging from 67 to 254 Hz.

DCS was designed as the digital replacement for CTCSS. DCS adds a 134.4 bps (sub-audible) bit stream to the transmitted audio

CTCSS or DCS is enabled by on the radio through selectable sub channels. When CTCSS or DCS is enabled, incoming signals must be on the same CTCSS or DCS sub channel as the receiving radio or they will be filtered out.

NOTE: The CTCSS and DCS Tone Charts can be found on pages 16 - 18 at the rear of this manual.



FUNCTION- CTCSS & DCS (continued)

SETTING CTCSS & DCS

CTCSS and DCS work on individual channels, so the radio must first be on the channel the user wishes to communicate on. Then, to access the CTCSS/DCS Function, press the **“(F) BUTTON”** twice, CTC will display on the screen (Note CTCSS and DCS can not be used simultaneously).

To enable CTCSS, press the **“UP ARROW”** or **“DOWN ARROW”** until CTC appears on the screen, channel selection can be made between 1-38. Once the desired setting is selected, press and hold the **“(F) BUTTON”** for 3 seconds to save the setting. The unit will automatically change back to the default screen with the CTCSS sub channel now on display.

To enable DCS, press the **“UP ARROW”** or **“DOWN ARROW”** until DCS appears on the screen, channel selection can be made between 00-104 (Note, channels: 100, 101, 102, 103 & 104 are displayed 00, 01, 02, 03 and 04 respectively). Once the desired setting is selected, press and hold the **“(F) BUTTON”** for 3 seconds to save the setting. The unit will automatically change back to the default screen with the DCS sub channel now on display.

To turn off CTCSS and DCS, press the **“UP ARROW”** or **“DOWN ARROW”** until **“CTC OF”** appears. Press and hold the **“(F) BUTTON”** for 3 seconds to save the setting. The unit will automatically change back to the default screen.

FUNCTION- Duplex Mode (basic)

WHAT IS DUPLEX?

The duplex mode on the radio helps increase the range of the radio using repeater stations. In duplex mode, the fixed position station forwards the signal it receives from repeater input stations (31-38)/(71-78) to the corresponding output stations (1-8)/(41-48). Any transmissions sent on non-duplex channels are sent in simplex mode, or directly between radios without the use of a repeater.

NOTE: Detailed information about duplex mode and use of duplex mode can be found on page 13 of this instruction manual.

SETTING DUPLEX MODE

Duplex mode can only be selected when the radio is on a duplex channel (1 – 8 or 41-48). The following steps will only enable duplex operation on the selected channel. If you wish to enable duplex on another channel, you will need to follow the procedure again on the selected channel.

To access duplex mode, press the **“(F) BUTTON”** three times, DUP will display on the screen. Press the **“UP ARROW”** or **“DOWN ARROW”** and the channel number will change from “0” to “r” (for channels 1-8), or from “4” to “n” (on channels 41-48). Once the desired setting is selected, press and hold the **“(F) BUTTON”** for 3 seconds to save the setting. The unit will automatically change back to the default screen with your current duplex channel selection. The channel selected between 1-8 will now be displayed with an “r” (instead of 0) and any channel selected between 41-48 will be displayed with a “n” (instead of 4).

To turn off duplex mode on the selected channel, press the **“(F) BUTTON”** three times, and press the **“UP ARROW”** or **“DOWN ARROW”** until the channel is displayed again. Once the desired setting is selected, press and hold the **“(F) BUTTON”** for 3 seconds to save the setting.



FUNCTION- Open Scan & Group/Priority Scan

WHAT IS SCAN?

The scan function allows selected channels to be scanned automatically at 20 channels per 3 seconds. When a signal is detected the scanning will hold on the channel, once the signal is lost the radio will continue scanning after 3 seconds.

HOW TO SCAN

The scan feature can be enabled by pressing the **"(S) BUTTON"**. The scan feature will enable the radio to automatically scan through selected channels at 20 channels per 3 seconds. The direction of the scan can simply be changed by using the **"UP ARROW"** or **"DOWN ARROW"**. The user can still transmit on the selected channel at anytime by pressing the **"(PTT) BUTTON"** on the microphone handpiece, once the transmission is complete the radio will continue scanning after 20 seconds. To stop scanning, press the **"(S) BUTTON"** and the radio will revert back to the current channel.

SELECTING A SCAN OPTION

The RR100A has two scan types, "OS" Open Scan (default) and "GS" Group/Priority Scan (selectable). To change between OS and GS, press the **"(F) BUTTON"** four times, SCN will display on the screen. Press the **"UP ARROW"** or **"DOWN ARROW"** to select "OS" or GS. Once the desired setting is selected, press and hold the **"(F) BUTTON"** for 3 seconds to save the setting.

SETTING OPEN SCAN (OS)

Open scan is the default setting on the RR100A and all 80 channels are programmed which is indicated by a black dot at the top of the LCD in front of the channel number.

To disable a channel from being scanned, select the channel to be disabled, hold the **"(S) BUTTON"** for 3 seconds until the dot disappears. This channel will no longer scan. To enable the channel to scan again, select the channel to be enabled, press and hold the **"(S) BUTTON"** for 3 seconds until the dot in front of the channel number reappears. Only channels with a dot at the top of the LCD in front of the channel number will scan in this mode.

GROUP CHANNEL SCAN (GS) / INSTANT CHANNEL SCAN

Group scan is a selectable option on the RR100A. Group scan allows the user to select a group of channels to monitor. When the group scan option has been selected, channels need to be chosen to scan, initially no channels will be selected. To choose which channels will be scanned, press the **"UP ARROW"** or **"DOWN ARROW"** to select a channel. Press and hold the **"(S) BUTTON"** for 3 seconds until the dot appears. This channel will now scan.

To stop the channel from scanning (if you have already enabled it), select the channel to be disabled, press and hold the **"(S) BUTTON"** for 3 seconds until the dot in front of the channel number disappears. Only channels with a dot at the top of the LCD in front of the channel number will scan in this mode.

NOTE: The instant channel on the radio will also scan during this mode every 1.5 seconds. To select the priority channel (a channel to be monitored regularly), press the **"UP ARROW"** or **"DOWN ARROW"** to select a channel and hold down the **"(UP) BUTTON"** on the microphone handpiece until "INST" appears at the top of the LCD. This will now be the instant channel. To disable the instant channel reverse the above procedure on the selected channel and "INST" disappear from the top of the LCD.



FUNCTION- Busy Channel Lockout

WHAT IS BUSY CHANNEL LOCKOUT?

The busy channel lockout feature will not allow the radio to transmit if it detects activity on a channel. This is particularly important in areas where many users are using CTCSS. The disadvantage of using CTCSS in shared frequencies is that, since users cannot hear transmissions from other groups, they may assume that the frequency is idle and then transmit on top of another user, thus accidentally interfering with the other group's transmissions. Busy channel lockout feature will stop this from occurring.

SETTING BUSY CHANNEL LOCKOUT

To access the busy channel lockout feature, press the **"(F) BUTTON"** five times, "BCL" will display on the screen. Press the **"UP ARROW"** or **"DOWN ARROW"** to select an option; "on" or "off". Once the desired setting is selected, press and hold the **"(F) BUTTON"** for 3 seconds to save the setting. The unit will automatically change back to the default screen.

FUNCTION- Call Tone

WHAT IS CALL TONE?

A call tone is a 2 second signal that is sent out from the radio to let other users know you would like to talk to them. It is an alternative option from just speaking into the MIC to identify the user. The RR100A has 5 call tone options.

To use the call tone, press the **"(DN) BUTTON"** on the Handpiece Mic and the tone will play.

NOTE: Legislation only allows the call tone to be used once per minute, if the call button is pressed more than once in a minute, an error message will appear on the screen.

SETTING CALL TONE

To access the call tone options, press the **"(F) BUTTON"** six times, CALL will display on the screen. Press the **"UP ARROW"** or **"DOWN ARROW"** to select an option; "1-5". Once the desired setting is selected, press and hold the **"(F) BUTTON"** for 3 seconds to save the setting. The unit will automatically change back to the default screen.

FUNCTION- Roger Beep

WHAT IS ROGER BEEP?

When the **"(PTT) BUTTON"** is released after transmission, the radio will send a short beep to indicate the transmission has finished. This is known as a roger beep.

SELECTING ROGER BEEP

To access the roger beep feature, press the **"(F) BUTTON"** seven times, RBP will display on the screen. Press the **"UP ARROW"** or **"DOWN ARROW"** to select an option; "on" or "off". Once the desired setting is selected, press and hold the **"(F) BUTTON"** for 3 seconds to save the setting. The unit will automatically change back to the default screen.



FUNCTION- Button Beep

WHAT IS BUTTON BEEP?

When buttons are pressed on the radio and handpiece microphone (exc. PTT Button), the radio emits a beep tone to indicate the button has been pressed. The radio has button beep default "on".

SELECTING BUTTON BEEP

To access the button beep feature, press the "**(F) BUTTON**" eight times, BEP will display on the screen. Press the "**UP ARROW**" or "**DOWN ARROW**" to select an option; "on" or "off". Once the desired setting is selected, press and hold the "**(F) BUTTON**" for 3 seconds to save the setting. The unit will automatically change back to the default screen.

TRANSMITTING – Using The UHF Radio

TRANSMIT AND RECEIVE PROCEDURE

Your UHF radio contains a transmitter and 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**" on the microphone handpiece.
- To transmit (talk), press the "**(PTT) BUTTON**" on the microphone handpiece.

When powered on and not transmitting, the radio is always in receive mode. When a signal is received or when transmitting, the signal strength indicator will display on the LCD.

For others to receive your transmission, they must be on the same channel as you and if CTCSS or DCS is enabled, the same sub channel must also be selected.

NOTE: Before transmitting on a UHF channel, always listen to ensure it is not already in use.

NOTE: 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).

NOTE: Do not transmit between two radios that are less than 1.5m apart, otherwise you may experience interference.

NOTE: The UHF radio is simplex "one way at a time". While you are speaking, you can not receive a transmission.

NOTE: The UHF radio is an open Licence band. Always identify yourself when transmitting.

TRANSMITTING RANGE

The transmitting range will depend on the antenna, terrain, surroundings and environment, it will be affected by obstructions such as hills, buildings and foliage. The use of duplex mode will extend the transmission range in areas where a repeater station is present.



DUPLEX OPERATION VIA REPEATERS

DETAILED EXPLANATION OF DUPLEX

This feature allows the use of local repeater stations that are designed to automatically re-transmit your broadcast over large areas, thus increasing the range of the UHF radio. Repeater stations are privately operated radio systems and are installed throughout Australia each repeater station operates on preset channels. Check the area you plan on traveling to for any repeaters and their channel.

The duplex mode on the radio helps increase the range of the radio using repeater stations. In duplex mode, the fixed position station forwards the signal it receives from repeater input stations (31-38)/(71-78) to the corresponding output stations (1-8)/(41-48). Any transmissions sent on non-duplex channels are sent in simplex mode, or directly between radios without the use of a repeater.

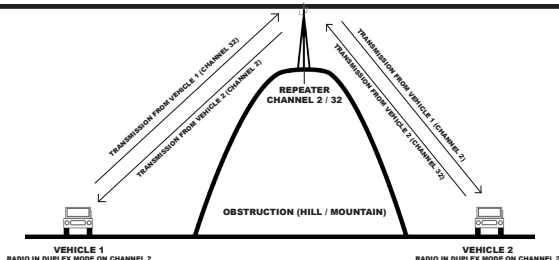
DUPLEX RECEIVE/TRANSMIT CHANNEL GUIDE

The following table displays the receive and transmit channels when using repeater stations:

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	*Channel 5/35 is emergency channel only							

VISUAL REPRESENTATION OF DUPLEX



UHF CB CHANNEL GUIDELINES

RADIO COMMUNICATIONS (CITIZEN BAND RADIO STATIONS) CLASS Licence 2002

NOTE: The operation of your UHF radio in Australia and New Zealand is subject to conditions in the following Licences: In Australia, the ACMA Radio Communications (Citizen Band Radio Stations) and in New Zealand by MED the General User Radio Licence for Citizen Band Radio.

No Licence is required to own or operate this radio in Australia or New Zealand. The Radio Communications (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. Licences for Repeater Channels 44 & 45 will not be Licenced for an additional 6 to 12 months to allow extra time for owners of Channel 5 Emergency repeaters to upgrade equipment to meet new standards.

Channels 1 to 8 and 41 to 48 – Repeater Channels. Enable duplex mode on your radio to use any available repeaters.

Channels 5 & 35 – Emergency use only. Monitored by volunteers, no general conversations are to take place on these channels.

Channels 22 & 23 – Data transmissions only (excluding packet).

Channels 31 to 38 and 71 to 78 – Repeater inputs. Do not use these channels for simplex transmissions as you will interfere with conversations on channels 1 to 8 and 41 to 48.

The Australian Government legislated that channels 5 & 35 on the UHF CB Band are reserved for emergency use only.

As at January 2007 the maximum penalties for the misuse of the legally allocated CB emergency channels are:

- For general misuse – if an individual 2 years of imprisonment, otherwise \$165,000 (a \$220 on-the-spot fine can be issued in minor cases); or,
- For interference to an Emergency call – an individual, 5 years imprisonment, otherwise \$550,000.

If you do find you are interfering with another persons conversation, just select another channel.

IMPORTANT CHANNEL INFORMATION

A list of currently authorised channels can be obtained from the ACMA website in Australia and the MED website in New Zealand.

Please note the following channel guidelines:

- Channels 01-08 (and 31-38), and Channels 41-48 (and 71-78) are repeater channels.
- Channels 05 and 35 are emergency channels, do not use these unless it is an emergency.
- Channel 11 is a calling channel.
- Channels 22 and 23 are for telemetry and telecommand applications.
- Channel 40 – road channel (Australia).
- Channels 61, 62 and 63 are for future use and TX is inhibited on these channels.



UHF CHANNELS AND FREQUENCIES

UHF CHANNEL FREQUENCY TABLE

CH#	FREQ.	CH #	FREQ.	CH#	FREQ.	CH #	FREQ.
1	476.425	21	476.925	41	476.4375	61	476.9375
2	476.450	22	476.950	42	476.4625	62	476.9625
3	476.475	23	476.975	43	476.4875	63	476.9875
4	476.500	24	477.000	44	476.5125	64	477.0125
5	476.525	25	477.025	45	476.5375	65	477.0375
6	476.550	26	477.050	46	476.5625	66	477.0625
7	476.575	27	477.075	47	476.5875	67	477.0875
8	476.600	28	477.100	48	476.6125	68	477.1125
9	476.625	29	477.125	49	476.6375	69	477.1375
10	476.650	30	477.150	50	476.6625	70	477.1625
11	476.675	31	477.175	51	476.6875	71	477.1875
12	476.700	32	477.200	52	476.7125	72	477.2125
13	476.725	33	477.225	53	476.7375	73	477.2375
14	476.750	34	477.250	54	476.7625	74	477.2625
15	476.775	35	477.275	55	476.7875	75	477.2875
16	476.800	36	477.300	56	476.8125	76	477.3125
17	476.825	37	477.325	57	476.8375	77	477.3375
18	476.850	38	477.350	58	476.8625	78	477.3625
19	476.875	39	477.375	59	476.8875	79	477.3875
20	476.900	40	477.400	60	476.9125	80	477.4125

UHF CHANNELS AND FREQUENCIES (continued)

CTCSS TONE TABLE

CODE	FREQ. (Hz)	CODE	FREQ. (Hz)
OF	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		

UHF CHANNELS AND FREQUENCIES (continued)

DCS CODE TABLE

CODE	DCS CODE (OCTAL)	CODE	DCS CODE (OCTAL)
1	022	27	152
2	025	28	155
3	026	29	156
4	031	30	162
5	032	31	165
6	036	32	172
7	043	33	174
8	047	34	205
9	051	35	212
10	053	36	223
11	054	37	225
12	065	38	226
13	071	39	243
14	072	40	244
15	073	41	245
16	074	42	246
17	114	43	251
18	115	44	252
18	116	45	255
20	122	46	261
21	125	47	263
22	131	48	265
23	132	49	266
24	134	50	271
25	143	51	274
26	145	52	306

UHF CHANNELS AND FREQUENCIES (continued)

DCS CODE TABLE (continued)

CODE	DCS CODE (OCTAL)	CODE	DCS CODE (OCTAL)
53	311	79	466
54	315	80	503
55	325	81	506
56	331	82	516
57	332	83	523
58	343	84	526
59	346	85	532
60	351	86	546
61	356	87	565
62	364	88	606
63	365	89	612
64	371	90	624
65	411	91	627
66	412	92	631
67	413	93	632
68	423	94	654
69	431	95	662
70	432	96	664
71	445	97	703
72	446	98	712
73	452	99	723
74	454	100 (o0)	731
75	455	101 (o1)	732
76	462	102 (o2)	734
77	464	103 (o3)	743
78	465	104 (o4)	754

INSTALLATION

UHF RADIO INSTALLATION

CAUTION: When installing the radio into a vehicle, check that during installation no damage is caused to wiring or vehicle components that may be hidden around the mounting position. Avoid mounting the radio near heaters or air conditioners. For optimum performance, the radio must be installed correctly. If you are unsure about how to install your radio, we recommend having the radio installed by a professional, i.e. a UHF Specialist or Auto Electrician.

NOTE: Never transmit, press the “(PTT BUTTON)” or “(DN BUTTON)” on the **microphone handpiece** before connecting the antenna to the radio. Transmitting without an antenna **will** damage the radio.

To install the radio and handpiece: **1.** Fix the radio bracket in a suitable location. **2.** Fix the radio to the radio bracket using the thumb screws provided. **3.** Fix the microphone handpiece bracket in a suitable location.

There are two recommended methods of installation:

1. Radio remains ON when the ignition switch is OFF (when the vehicle is turned off):

- Connect the radio's negative (black) lead to the vehicle's chassis, or if preferred, directly to the battery's negative terminal.
- Connect the radio's positive (red) lead to the battery's positive terminal. Alternatively, the positive lead could be connected into the fuse box at a continuous voltage point that has +13.8 volts available.

2. Radio turns OFF with the ignition switch (when the vehicle is turned off):

- Connect the radio's negative (black) lead to the vehicle's chassis, or if preferred, directly to the battery's negative terminal.
- The radio's positive (red) lead should connect to an accessory point in the vehicle's fuse box. This point should supply +13.8 volts only when the ignition switch is turned ON or in the ACCESSORY position.

NOTE: When installing the radio with either method above, ensure the in-line fuse is not removed from the wiring.

UHF RADIO INSTALLATION- Mute Wire Connection

The mute signal output will mute the car stereo every time a UHF signal is received. This feature is only compatible with aftermarket car radio that have a mute wire in the wiring loom. To use this feature, connect the blue wire from the RR100A radio to the mute wire on the rear of the aftermarket car radio (the mute wire colour on the aftermarket car radio may vary depending on the type and model of your radio). Then connect the black wire from the RR100A radio to the chassis of your car radio.

NOTE: The mute signal output is a positive (+) signal, make sure your car stereo is compatible.

UHF ANTENNA INSTALLATION

The antenna (not supplied) is of critical importance and must be connected to the UHF radio before transmitting. You should purchase an antenna designed for 477Mhz and ensure it is a suitable antenna for your environment to ensure the radio performs correctly.

To install the antenna:

1. Locate a suitable location on the vehicle and mount the antenna using an appropriate mounting bracket.
2. Run the antenna cable from the antenna to the radio and ensure it is secure.
3. Connect the antenna to the rear antenna socket using a PL259 coaxial connector (not supplied).



WARRANTY

This product is guaranteed against defects for a period of 24 months from date of purchase. This warranty is provided by Super Cheap Auto Pty Ltd ACN 085 395 124 (Supercheap Auto) of 751 Gympie Rd Lawnton QLD 4501. Ph (07) 3482 7500. Supercheap Auto will offer a repair, replacement product or store credit if the product is assessed as being defective during the warranty period.

To claim under this warranty, take this product to the Front Service Desk of your nearest Supercheap Auto store. For store locations, visit www.supercheapauto.com.au (AUS) or www.supercheapauto.co.nz (NZ). You will need your receipt or proof of purchase.

Additional information may be requested of you to process your claim. Should you not be able to provide proof of purchase with a receipt or a bank statement, identification showing your name, address and signature may be required to process your claim. This product may need to be sent to the manufacturer to assess the defect before determining any claim. Faults or defects caused by product modification, misuse and abuse, normal wear and tear or failure to follow user instructions are not covered under this warranty. 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 for 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.

Any expenses incurred relating to the return of this product to store will normally have to be paid by you. For more information contact your nearest Supercheap Auto store.

The benefits to the consumer given by this warranty are in addition to other rights and remedies of the Australian Consumer Law in relation to the goods and services to which this warranty relates.

PLU: 533226 CODE RR100A

Manufactured and packaged for SRGS PTY LTD

ABN 23 113 230 050

751 Gympie Road, Lawnton Queensland 4501, Australia

MADE IN CHINA



RIDGE 4X4
ACCESSORIES
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