

PRO HANDHELD 5 WATT UHF CB RADIO

24
MONTH
WARRANTY



RIDGE 4X4
ACCESSORIES
RYDER

PLU 564552

INTRODUCTION

WELCOME

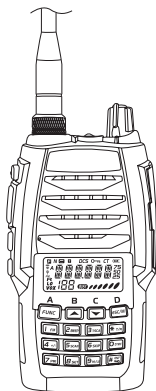
Thank you for purchasing the Ridge Ryder RR50A 5 Watt UHF CB Radio. Please ensure that you have read the product manual and instructions in full, prior to installation and use. Failure to do so may result in product failure/damage or incorrect operation and therefore impact the product performance.

FEATURES

The Ridge Ryder RR50A 5 Watt UHF CB Radio kit includes a rechargeable 5 Watt handheld radio, 240V charging dock, and 12V in car charger, belt clip and hand strap. Key radio features include:

- Up to 15km range
- 5 Watt transmission power
- 80 Narrowband channels
- Squelch control (automatic)
- CTCSS (38ch)/ DCS (83ch) codes
- Duplex range extender
- Channel scan function
- Dual channel monitor
- VOX voice operated exchange
- LED torch light
- FM radio
- 10 call ring tones
- Roger beep
- Button beep
- Changeable backlight display (Blue, orange and purple)

BOX CONTENTS



Antenna



Li-ion Battery



Charger



Belt Clip
(including screws)



Instruction
Manual



Car Charger



AC Adaptor



Earphone



Hand Strap

CONTENTS

SAFETY INFORMATION AND WARNINGS	PAGE: 4
RADIO CONTROLS	PAGE: 6
LCD DISPLAY & BATTERY INFORMATION	PAGE: 7
INSTALLING BATTERY & BELT CLIP	PAGE: 7
CHARGING & BATTERY MAINTENANCE	PAGE: 8
RADIO OPERATION - Power ON/OFF	PAGE: 9
- Volume control	PAGE: 9
- Battery voltage display	PAGE: 9
- FM Radio scan function	PAGE: 9
- LED light	PAGE: 9
- Keypad lock	PAGE: 9
 CHANNEL OPERATIONS	
- Setup	PAGE:10
- CTCSS & DCS decode setup	PAGE:10
- CTCSS & DCS encode setup	PAGE:10
- CTCSS & DCS encode/decode sync setup	PAGE:11
- Offset function	PAGE:11
- Wide/Narrow band setup	PAGE:11
- Frequency reverse/talk around setup	PAGE:12
- Busy channel lockout	PAGE:12
- PTT ID setup	PAGE:12
- TX off	PAGE:13
 BACKGROUND OPERATIONS	
- TOT timer setup	PAGE:13
- VOX/ VOX delay / VOX beep setup	PAGE:14
- Frequency step size setup	PAGE:15
- Squelch level / Battery save setup	PAGE:15
- LCD backlight/ colour setup	PAGE:16
- Scan dwell time setup	PAGE:16
- Display mode/ Primary channel setup	PAGE:17
- Battery voltage setup	PAGE:17
- Factory reset	PAGE:18
- Channel selection	PAGE:18
- Scanning	PAGE:18
- Transmitting	PAGE:18
- Receiving	PAGE:18
 FUNCTION	
- CTCSS & DCS	PAGE:19
- Dual channel monitor (DCM)	PAGE:19
- Button beep	PAGE:19
- Transmitting & receive procedure/range	PAGE:20
- Duplex mode	PAGE:21
 DUPLEX INFORMATION	PAGE:22
UHF CB CHANNEL GUIDELINES	PAGE:23
UHF CB CHANNELS AND FREQUENCIES	
- UHF channel frequency table	PAGE:24
- CTCSS tone table	PAGE:25
- DCS code table	PAGE:26
 TECHNICAL SPECIFICATIONS	PAGE:28
TROUBLE SHOOTING GUIDE	PAGE:29
WARRANTY INFORMATION	PAGE:30

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

When using the radio in a vehicle, do not place your radio in the area over an airbag, or in the airbag deployment area. Airbags inflate with great force, if a radio 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. Never use your radio outdoors during a thunderstorm.

BATTERIES

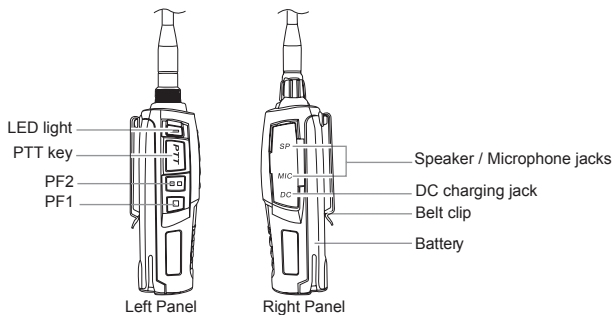
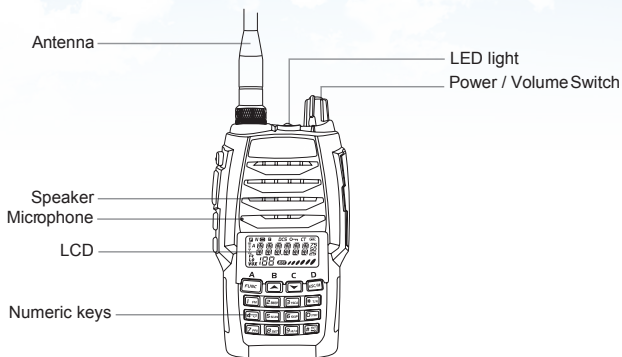
All batteries can cause property damage and/or bodily injury such as burns if conductive material such as jewelry, keys, or beaded chains touch exposed terminals. The material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

Do not replace or charge batteries in a potentially explosive atmosphere. Contact sparking may occur while installing or removing batteries and cause an explosion.

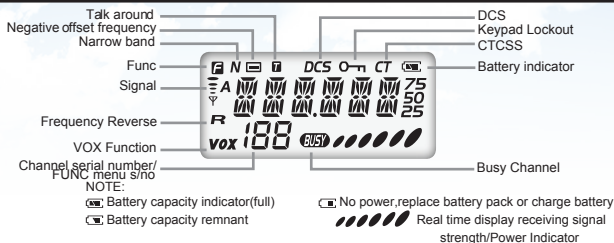


RADIO CONTROLS

RADIO LAYOUT



LCD DISPLAY



INSTALLING THE BATTERY & BELT CLIP

Battery pack:

Match the battery pack with the corresponding guides on the back of the transceiver, and push it upwards till it is fully locked by the battery latch. To remove the battery lift locking battery latch up (see arrow direction). **Note:** If the battery needs to be stored, keep it in status of 50% discharged.

Belt clip:

Place the belt clip to the corresponding grooves on the back of the transceiver, and then screw it clockwise with screws provided.

CHARGING & BATTERY MAINTENANCE

The battery pack is not charged at the factory; please charge it before use. Charging the battery pack for the first time after purchase or extended storage (more than 2 months) may not bring the battery pack to its normal operating capacity. After fully charging/ discharging cycle for two or three times, the operating capacity will reach its best performance. The battery pack life is over when its operating time decreases even though it is fully and correctly charged. Change to a new battery pack.

Note: Batteries are only covered by a 1 year warranty.

Charger Applied

Please use the specific charger appointed by our company. Other models may cause explosion and personal injury. After installing the battery pack, if the radio displays low battery with red flashing lamp or voice prompt, please charge the battery.

- ▲ Always switch OFF the transceiver equipped with a battery pack before charging. Otherwise, it will interfere with correct charging.
- ▲ To avoid interference with charging, please do not cut off the power or take out the battery during charging.
- ▲ Do not recharge the battery pack if it is already fully charged. This may shorten the life of the battery pack or damage the battery pack.
- ▲ Do not charge the battery or transceiver if it is damp. Dry it before charging to avoid danger.

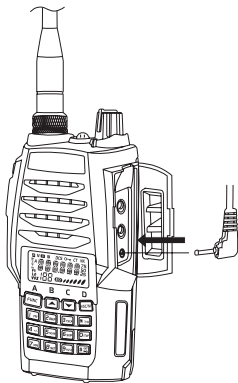
CHARGING & BATTERY MAINTENANCE

You can charge the battery or transceiver separately.

- 1.Plug the AC adaptor into the AC outlet, and then plug the cable of the AC adaptor into the DC jack located on the back of the charger. Charging indicator---Red.
- 2.Plug the battery or transceiver into the charger. Make sure that the battery is well connected with charging connectors. Charging indicator---Red. Once fully charged. Charging indicator---Green. It takes approximately 4 hours to fully charge the battery. But, the actual charging time depends on the dump battery. After fully charged, please remember to remove the battery or transceiver out of charger. Over charging will shorten the battery life and reduce its performance.

Connect the transceiver directly with adaptor or car charger to charge.

Note: Please power off the transceiver before charging the transceiver in this way. Also, it takes longer time (totally 12hours) to fully charge the transceiver in this way.



How to Store the Battery

- 1.If the battery needs to be stored, keep it in status of 50% discharged.
- 2.It should be kept in low temperature and dry environment.
- 3.Keep it away from hot places and direct sunlight.

WARNING:

- ▲ Do not short circuit battery terminals.
- ▲ Never attempt to remove the casing from the battery pack.
- ▲ Never assemble the battery in dangerous surroundings, sparks may cause an explosion.
- ▲ Do not put the battery in hot environment or throw it into a fire, it may cause an explosion.

RADIO OPERATION

POWER ON/OFF

Turn **"POWER/VOLUME" CONTROL KNOB** clockwise to turn the RR50A **ON**. Turn **"POWER/VOLUME" CONTROL KNOB** anticlockwise to turn the RR50A **OFF**

VOLUME CONTROL

Under power-on state, turn **"POWER/VOLUME" CONTROL KNOB** clockwise or anticlockwise to adjust volume.

BATTERY VOLTAGE DISPLAY

Under standby state, pressing **[PF2]**, LCD displays current battery voltage. Press this button again to clear the display.

FM RADIO SCAN FUNCTION

When unit is **ON** press **"(FUNC) BUTTON"**, a F icon will appear on the top left corner of the screen then press **"(1FM) BUTTON"** and use the **"UP ARROW"** or **"DOWN ARROW"** to scan for a radio station. To switch back to CB mode repeat above operation. If you have problems with switching back to CB mode turn the RR50A **OFF** and **ON** and repeat steps above.

LED LIGHT

Under standby state, press **"(BLUE) BUTTON"** on the side of the RR50A to switch on the LED light. Press it again to switch off.

KEYPAD LOCK

Press **"(FUNC) BUTTON"** and then press and hold the **"(*ENT) BUTTON"** for 2 seconds to lock the keypad. A small key symbol will appear above the channel number to indicate the keypad is locked. To unlock the keypad repeat the above. The small key symbol will now disappear from the display and the keypad will be functional.

NOTE: When keypad is locked, only PTT / PF1 / PF2 / **"(FUNC) BUTTON"** are available.



CHANNEL OPERATIONS

Channel operation refers to a temporary change on a current channel function. Once the radio is turned off or switched to another channel, the temporary change will be erased. Under frequency+channel mode, channel+Name Tag mode or VFO mode, the operating methods are as follows:

1. After pressing the “**(FUNC) BUTTON**”, the top left corner of LCD displays an F icon, then press “**(8SET) BUTTON**” to enter function menu.
2. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose the desired function to be set.
3. Press “**(FUNC) BUTTON**” to enter into function menu setup.
4. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose the desired contents to be set.
5. Press “**(FUNC) BUTTON**” to return to upward menu.
6. Press “**(ESC/M) BUTTON**” or “**(*ENT) BUTTON**” to confirm and exit.

NOTE: When transceiver works in professional transceiver mode, operation pressing “**(FUNC) BUTTON**” followed by “**(8SET) BUTTON**” is not valid. Under frequency mode (VFO), once the radio is turned off or changed to new VFO frequency, the channel operations setting will be remained until next change.

CTCSS/DCS DECODE SETUP

If this function is enabled, you shield your radio from other transceivers of same frequency.

1. After pressing the “**(FUNC) BUTTON**”, the top left corner of LCD displays an F icon, then press “**(8SET) BUTTON**” to enter function menu.
2. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose No.1 function item. It shows “R-CDC” on LCD
3. Press “**(FUNC) BUTTON**” to enter into function menu setup.
4. Press “**(1FM) BUTTON**” to choose CTCSS, DCS or OFF. When DCS signaling is selected, press “**(*T/R) BUTTON**” to choose DCS positive and inverse code.
5. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose the desired CTCSS / DCS encodes signaling.
6. CTCSS: 67Hz- 254.1Hz, 50 groups in total, Default: 67Hz.
7. DCS: 017N-7651, 232 groups in total. “N” stands for positive code, “I” Stands for reverse code.
8. Press “**(FUNC) BUTTON**” to go back to previous menu. Press “**(ESC/M) BUTTON**” or “**(*ENT) BUTTON**” to confirm and exit.

CTCSS/DCS ENCODE SETUP

1. After pressing the “**(FUNC) BUTTON**”, the top left corner of LCD displays an F icon, then press “**(8SET) BUTTON**” to enter function menu.
2. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose No.2 function item. It shows “T-CDC” on LCD
3. Press “**(FUNC) BUTTON**” to enter into function menu setup.
4. Press “**(1FM) BUTTON**” to choose CTCSS, DCS or OFF. When DCS signaling is selected, press “**(*T/R) BUTTON**” to choose DCS positive and inverse code.
5. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose the desired CTCSS / DCS encodes signaling.
6. CTCSS: 67Hz- 254.1Hz, 50 groups in total

7. DCS: 017N-765I, 232 groups in total. "N" stands for positive code, "I" Stands for inverse code.
8. Press "**(FUNC) BUTTON**" to go back to previous menu. Press "**(ESC/M) BUTTON**" or "**(*ENT) BUTTON**" to confirm and exit.

CTCSS/DCS ENCODE/DECODE SYNCHRONOUS SETUP

THIS means that users can synchronize the CTCSS/DCS decode and encode. Users can also adjust them simultaneously.

1. After pressing the "**(FUNC) BUTTON**", the top left corner of LCD displays an F icon, then press "**(8SET) BUTTON**" to enter function menu.
2. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose No.3 function item. It shows "C-CDC" on LCD
3. Press "**(FUNC) BUTTON**" to enter into function menu setup.
4. Press "**(1FM) BUTTON**" to choose CTCSS, DCS or OFF. When DCS signaling is selected, press "**(*T/R) BUTTON**" to choose DCS positive and inverse code.
5. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose the desired CTCSS / DCS encodes signaling.
6. CTCSS: 67Hz- 254.1Hz, 50 groups in total.
7. DCS: 017N-765I, 232 groups in total. "N" stands for positive code, "I" Stands for reverse code.
8. Press "**(FUNC) BUTTON**" to go back to previous menu. Press "**(ESC/M) BUTTON**" or "**(*ENT) BUTTON**" to confirm and exit.

OFFSET FUNCTION

This function is disabbed

WIDE/NARROW BAND SETUP

On the basis of national conditions, users can set channel spacing as 25K (wide band) or 12.5K (narrow band) to communicate.

1. After pressing the "**(FUNC) BUTTON**", the top left corner of LCD displays an F icon, then press "**(8SET) BUTTON**" to enter function menu.
2. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose No.5 function item. It shows "W/N" on LCD
3. Press "**(FUNC) BUTTON**" to enter into function menu setup.
4. Press "**UP ARROW**" or "**DOWN ARROW**" button to select desired band width **W25K**: wide band. **N12.5**: Narrow band.
5. Press "**(FUNC) BUTTON**" to go back to previous menu. Press "**(ESC/M) BUTTON**" or "**(*ENT) BUTTON**" to confirm and exit.



FREQUENCY REVERSE/ TALK AROUND OPTION

1. After pressing the “**(FUNC) BUTTON**”, the top left corner of LCD displays an F icon, then press “**(8SET) BUTTON**” to enter function menu.
2. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose No.6 function item. It shows “REV/TA” on LCD
3. Press “**(FUNC) BUTTON**” to enter into function menu setup.
4. Press “**UP ARROW**” or “**DOWN ARROW**” button to select desired setup. **REV**: The frequency reverse function is selected. **TA**: The talk around function is selected.
5. Press “**(FUNC) BUTTON**” to go back to previous menu. Press “**(ESC/M) BUTTON**” or “**(*ENT) BUTTON**” to confirm and exit.

NOTE: After relevant function is selected on current channel, under standby mode, users can press “**(FUNC) BUTTON**” and then hold “**(*T/R) BUTTON**” to start chosen function.

BUSY CHANNEL LOCKOUT

BCLO is to disable transmitting while RX signal is received. Once the channel is busy and you press PTT, the radio will beep as warning and get back to receiving.

1. After pressing the “**(FUNC) BUTTON**”, the top left corner of LCD displays an F icon, then press “**(8SET) BUTTON**” to enter function menu.
2. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose No.7 function item. It shows “BUSY” on LCD.
3. Press “**(FUNC) BUTTON**” to enter into function menu setup.
4. Press “**UP ARROW**” or “**DOWN ARROW**” button to select desired setup. **BCL**: Enable BCL, carrier wave lockout, transmitting is prohibited when current channel receives a matching carrier wave; **BTL**: Enable BTL, transmitting is prohibited when current channel receives a matching carrier wave with dis-matching CTCSS/DCS. **OFF**: Busy Channel Lockout is turned off.
5. Press “**(FUNC) BUTTON**” to go back to previous menu. Press “**(ESC/M) BUTTON**” or “**(*ENT) BUTTON**” to confirm and exit.

PTT ID SETUP

1. After pressing the “**(FUNC) BUTTON**”, the top left corner of LCD displays an F icon, then press “**(8SET) BUTTON**” to enter function menu.
2. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose No.8 function item. It shows “PTT-ID” on LCD.
3. Press “**(FUNC) BUTTON**” to enter into function menu setup.
4. Press “**UP ARROW**” or “**DOWN ARROW**” button to select desired setup. **BOT**: Start, press [PTT] button to send a series of DTMF code. **EOT**: End, release [PTT] button to send a series of DTMF code. **BOTH**: Start and End; **OFF**: PTT ID is turned off.
5. Press “**(FUNC) BUTTON**” to go back to previous menu. Press “**(ESC/M) BUTTON**” or “**(*ENT) BUTTON**” to confirm and exit.

TX OFF

After starting this function, **[PTT]** button is unavailable. Current channel of transceiver is working under receiving mode.

1. After pressing the “**(FUNC) BUTTON**”, the top left corner of LCD displays an F icon, then press “**(8SET) BUTTON**” to enter function menu.
2. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose No.9 function item. It shows “TX-IHB” on LCD.
3. Press “**(FUNC) BUTTON**” to enter into function menu setup.
4. Press “**UP ARROW**” or “**DOWN ARROW**” button to select desired setup. **ON**: TX Off is enabled. **OFF**: TX Off is disabled.
5. Press “**(FUNC) BUTTON**” to go back to previous menu. Press “**(ESC/M) BUTTON**” or “**(*ENT) BUTTON**” to confirm and exit.

BACKGROUND OPERATIONS

Under any mode, the background operations will be changed & stored as the latest value permanently, until next change, operations as follows

1. With the radio turned off, press and hold **[PF1]** button and then turn on the transceiver. Keep pressing **[PF1]** button for 3 seconds to enter into background operations.
2. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose the menu item you want to set.
3. Press “**(FUNC) BUTTON**” to enter into function menu setup.
4. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose the desired setup.
5. Press “**(FUNC) BUTTON**” to go back to previous menu. Press “**(ESC/M) BUTTON**” or “**(*ENT) BUTTON**” to confirm and exit.

TOT TIMER SETUP

The purpose of Time-out-timer is to restrict transceiver for continuous long-term transmission. When the continuous transmission time is beyond the due time, transceiver is forced to stop transmitting and makes a beeping sound.

1. With the radio turned off, press and hold **[PF1]** button and then turn on the transceiver. Keep pressing **[PF1]** button for 3 seconds to enter into background operations.
2. Press “**UP ARROW**” or “**DOWN ARROW**” button to choose No.1 function item. It shows “TOT” on LCD.
3. Press “**(FUNC) BUTTON**” to enter into function menu setup.
4. Press “**UP ARROW**” or “**DOWN ARROW**” button to set desired TOT time. 15-600 seconds, 10 minutes of TOT is to be optional, per level interval of 15 seconds.
5. Press “**(FUNC) BUTTON**” to go back to previous menu. Press “**(ESC/M) BUTTON**” or “**(*ENT) BUTTON**” to confirm and exit.



BACKGROUND OPERATIONS (continued)

VOX SETUP

When this function is enabled, you can begin transmitting by speaking, no need to press the [PTT] button. If you want to make use of this function, you should insert the earpiece fitted with the transceiver.

1. With the radio turned off, press and hold [PF1] key and then turn on the transceiver. Keep pressing [PF1] key for 3 seconds to enter into background operations.
2. Press "UP ARROW" or "DOWN ARROW" button to choose No.2 function item. It shows "VOX" on LCD.
3. Press "(FUNC) BUTTON" to enter into function menu setup.
4. Press "UP ARROW" or "DOWN ARROW" button to set desired VOX level.
5. Press "(FUNC) BUTTON" to go back to previous menu. Press "(ESC/M) BUTTON" or "(*ENT) BUTTON" to confirm and exit.

VOX DELAY SETUP

The fact that the transceiver sends the calling by VOX and instantly returns to receiving mode might result in residual information loss. To avoid this loss, you can set suitable delay time.

1. Press and hold [PF1] button till the transceiver emits "a tone", and then release it to enter into background operation.
2. Press "UP ARROW" or "DOWN ARROW" button to choose No.3 function item. It shows "VOXDEY" on LCD.
3. Press "(FUNC) BUTTON" to enter into function menu setup.
4. Press "UP ARROW" or "DOWN ARROW" button to set desired setup. 0.5S-5S, 10 levels of delay time in total to choose, per level interval of 0.5S.
5. Press "(FUNC) BUTTON" to go back to previous menu. Press "(ESC/M) BUTTON" or "(*ENT) BUTTON" to confirm and exit.

VOX BEEP SETUP

After enabling this function, the transceiver will beep when transmitting by VOX.

1. Press and hold [PF1] button till the transceiver emits "a tone", and then release it to enter into background operation.
2. Press "UP ARROW" or "DOWN ARROW" button to choose No.4 function item. It shows "VOXTON" on LCD.
3. Press "(FUNC) BUTTON" to enter into function menu setup.
4. Press "UP ARROW" or "DOWN ARROW" button to set desired setup. **ON:** VOX beeping is enabled. **OFF:** VOX beeping is disabled.
5. Press "(FUNC) BUTTON" to go back to previous menu. Press "(ESC/M) BUTTON" or "(*ENT) BUTTON" to confirm and exit.

FREQUENCY STEP SIZE SETUP

This function is valid only when the radio is in frequency mode. Frequency input and frequency scan are both restricted by stepping.

1. Press and hold **[PF1]** button till the transceiver emits "a tone", and then release it to enter into background operation.
2. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose No.5 function item. It shows "STEP" on LCD.
3. Press "**(FUNC) BUTTON**" to enter into function menu setup.
4. Press "**UP ARROW**" or "**DOWN ARROW**" button to set desired setup. Stepping: 5k/ 6.25K/ 10K / 12.5K/ 15K/ 20K/ 25K 30K/ 50K
5. Press "**(FUNC) BUTTON**" to go back to previous menu. Press "**(ESC/M) BUTTON**" or "**(*ENT) BUTTON**" to confirm and exit.

SQUELCH LEVEL SETUP

This function is used to setup the receiving signal intensity. If the receiving signal intensity reaches a certain level, you can hear the other party calling, otherwise transceiver will remain mute.

1. Press and hold **[PF1]** button till the transceiver emits "a tone", and then release it to enter into background operation.
2. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose No.6 function item. It shows "SQL" on LCD.
3. Press "**(FUNC) BUTTON**" to enter into function menu setup.
4. Press "**UP ARROW**" or "**DOWN ARROW**" button to set desired setup. Off-9: 10 levels of squelch in total, "off" as min setup value (Normally open)
5. Press "**(FUNC) BUTTON**" to go back to previous menu. Press "**(ESC/M) BUTTON**" or "**(*ENT) BUTTON**" to confirm and exit.

BATTERY SAVE SETUP

Users can start this function to extend the standby time.

1. Press and hold **[PF1]** button till the transceiver emits "a tone", and then release it to enter into background operation.
2. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose No.7 function item. It shows "SAVE" on LCD.
3. Press "**(FUNC) BUTTON**" to enter into function menu setup.
4. Press "**UP ARROW**" or "**DOWN ARROW**" button to set desired setup. **ON**: Battery saving is enabled. **OFF**: Battery saving is disabled.
5. Press "**(FUNC) BUTTON**" to go back to previous menu. Press "**(ESC/M) BUTTON**" or "**(*ENT) BUTTON**" to confirm and exit.



LCD BACKLIGHT SETUP

1. Press and hold **[PF1]** button till the transceiver emits "a tone", and then release it to enter into background operation.
2. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose No.8 function item. It shows "LIGHT" on LCD.
3. Press "**(FUNC) BUTTON**" to enter into function menu setup.
4. Press "**UP ARROW**" or "**DOWN ARROW**" button to set desired setup. **AUTO**: Automatic, after enabling the backlight, it lights for a while before quench automatically. **OFF**: Normally close.
5. Press "**(FUNC) BUTTON**" to go back to previous menu. Press "**(ESC/M) BUTTON**" or "**(*ENT) BUTTON**" to confirm and exit.

LCD BACKLIGHT COLOR SETUP

There are three kinds of backlight color to be optional.

1. Press and hold **[PF1]** button till the transceiver emits "a tone", and then release it to enter into background operation.
2. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose No.9 function item. It shows "COLOUR" on LCD.
3. Press "**(FUNC) BUTTON**" to enter into function menu setup.
4. Press "**UP ARROW**" or "**DOWN ARROW**" button to set desired setup. **BLUE**: blue backlight. **PURPLE**: purple backlight. **ORG**: orange backlight.
5. Press "**(FUNC) BUTTON**" to go back to previous menu. Press "**(ESC/M) BUTTON**" or "**(*ENT) BUTTON**" to confirm and exit.

SCAN DWELL TIME SETUP

There are three kinds of scan dwell time to be optional.

1. Press and hold **[PF1]** button till the transceiver emits "a tone", and then release it to enter into background operation.
2. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose No.10 function item. It shows "SCANTM" on LCD.
3. Press "**(FUNC) BUTTON**" to enter into function menu setup.
4. Press "**UP ARROW**" or "**DOWN ARROW**" button to set desired dwell time. **5S**: Once the radio receives a matching signal, Scan mode will stop for 5 seconds and then continue scanning. **10S**: Once the radio receives a matching signal, Scan mode will stop for 10s and then continue scanning.
5. Press "**(FUNC) BUTTON**" to go back to previous menu. Press "**(ESC/M) BUTTON**" or "**(*ENT) BUTTON**" to confirm and exit.

DISPLAY MODE SETUP

There are display modes as channel number display, channel frequency+ channel number display and channel name display, 3 modes in total for option.

1. Press and hold **[PF1]** button till the transceiver emits "a tone", and then release it to enter into background operation.
2. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose No.11 function item. It shows "DSP" on LCD.
3. Press "**(FUNC) BUTTON**" to enter into function menu setup.
4. Press "**UP ARROW**" or "**DOWN ARROW**" button to set desired setup. **FREQ:** Frequency + Channel number (Amateur transceiver mode) press ==button to switch into VFO mode. **CH:** Channel number (Professional transceiver mode). **NAME:** Channel name display. When a channel is not named, LCD displays current frequency and channel number. Otherwise, LCD displays channel name.
5. Press "**(FUNC) BUTTON**" to go back to previous menu. Press "**(ESC/M) BUTTON**" or "**(*ENT) BUTTON**" to confirm and exit.

PRIMARY CHANNEL SETUP

The transceiver will allow you to have both the current channel and Primary channel at stand by. Normally only one channel is available in standby state. This function will allow you to have 2 channels at standby.

1. Press and hold **[PF1]** button till the transceiver emits "a tone", and then release it to enter into background operation.
2. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose No.14 function item. It shows "PRI-CH" on LCD.
3. Press "**(FUNC) BUTTON**" to enter into function menu setup.
4. Press "**UP ARROW**" or "**DOWN ARROW**" button to set desired setup. **CH:** 001-080
5. Press "**(FUNC) BUTTON**" to go back to previous menu. Press "**(ESC/M) BUTTON**" or "**(*ENT) BUTTON**" to confirm and exit.

BATTERY VOLTAGE

1. Press and hold **[PF1]** button till the transceiver emits "a tone", and then release it to enter into background operation.
2. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose No.15 function item. It shows "V-BATT" on LCD.
3. Press "**(FUNC) BUTTON**" to display remaining battery voltage.
4. Press "**(FUNC) BUTTON**" to go back to previous menu. Press "**(ESC/M) BUTTON**" or "**(*ENT) BUTTON**" to confirm and exit.



FACTORY RESET

1. Press and hold **[PF1]** button till the transceiver emits "a tone", and then release it to enter into background operation.
2. Press "**UP ARROW**" or "**DOWN ARROW**" button to choose No.16 function item. It shows "RESET" on LCD.
3. Press "**(FUNC) BUTTON**" to enter into function menu setup.
4. Press "**UP ARROW**" or "**DOWN ARROW**", words **OFF, INIT OR FACT** appear on LCD. **OFF**: To turn off (No operation). **INIT**: Restore all functions settings to factory default. (The channel information will not reset). **FACT**: Restore all settings, including channels and functions setting, to factory default.
5. Press "**(*ENT) BUTTON**" on the very bottom right side of the key pad, this will reset to factory settings and to confirm and exit..

CHANNEL SELECTION

Turn the RR50A on and the channel number will be displayed on the screen. Press the "**UP ARROW**" or "**DOWN ARROW**" to scroll to the desired channel.

Note: If there is blank channel between two channels, the radio will skip it and get to next channel. For your reference a list of the available channels, corresponding frequencies and guidelines for their use and selection can be found on page 15-16 of this instruction manual.

Channel input by keypad.

Under channel mode and FM Channel mode, type number of 3 digits (001-128) to switch to the desired channel. If the input channel is not edited, transceiver would emit error prompt and back to current channel. For example, if you type 001, then it gets channel No.1.

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

SCANNING

To scan, press and hold the "**(FUNC) BUTTON**", the top left corner of the LCD Displays F icon and then press "**(5SCAN) BUTTON**" to begin frequency scan which will then scan through all 80 channels.

To stop scanning, press the "**(ESC/M) BUTTON**". Channel scan can change scan direction by pressing "**UP ARROW**" or "**DOWN ARROW**".

Add/delete scan list.

This function is only accessible via using software.

TRANSMITTING

To transmit, press and hold the "**(PTT) BUTTON**" on the side of the radio. Hold the radio with the microphone approximately 5-10cm from your face and speak. To complete transmission, release the "**(PTT) BUTTON**".

NOTE: Always ensure the channel is free before transmitting. See pg 21 for more information.

RECEIVING

The LCD will display the signal strength icon when receiving a signal.

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 page 10 of this instruction manual.

FUNCTION- Dual Channel Monitor (DCM)

WHAT IS DUAL CHANNEL MONITOR (DCM)?

Generally on a UHF only one channel can be monitored at a time (unless the radio is in scan mode). Dual channel monitor allows two channels to be monitored simultaneously.

FUNCTION- Button Beep

WHAT IS BUTTON BEEP?

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



FUNCTION- 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 the LCD will display the signal strength, and then you can hear if the other party is calling. **NOTE:** You may not receive the call if you set a high “squellch off” level of the transceiver. If current channel has been programmed with signaling, you can only hear the call from the same signaling, other calls can not be heard. 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.

Be sure that the channel you want to use is not in busy state through monitoring for a while by pressing the programmed Squellch off “**(PF1) BUTTON**”. Under these conditions, press the “**(PTT) BUTTON**” and speak into microphone. Please keep around 2.5-5cm distance between microphone and your lip. And please speak in normal tone to make the receiver obtain best tone quality. **NOTE:** Holding [PTT], signal strength shows on the screen when the transceiver is transmitting. Release the PTT to receive.

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.

FUNCTION- Duplex Mode Via Repeaters

WHAT IS 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.

SETTING DUPLEX MODE

1. After pressing the “**(FUNC) BUTTON**”, the top left corner of LCD displays an F icon, then press “**(4+/-) BUTTON**” to turn on. This symbol  will appear at the top left corner of LCD.



DUPLEX RECEIVE/TRANSMIT CHANNEL GUIDE

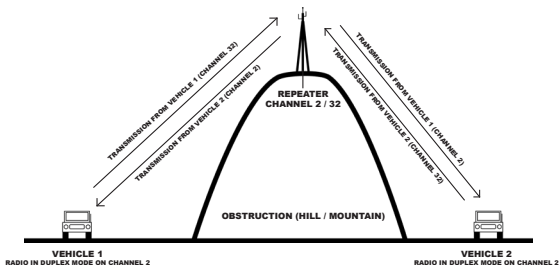
The following table displays the receive and transmit channels when using repeater stations:

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	71	72	73	74	75	76	77	78

*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		
59	346		
60	351		
61	356		
62	364		
63	365		
64	371		
65	411		
66	412		
67	413		
68	423		
69	431		
70	432		
71	445		
72	446		
73	452		
74	454		
75	455		
76	462		
77	464		
78	465		

TECHNICAL SPECIFICATIONS

General	
Frequency Range	UHF: 476.4250-477.4125MHz
Channel Capacity	80 channels
Phase-locked Step	5KHz, 6.25KHz
Operating Voltage	7.4 DC $\pm 20\%$
Battery Life	More than 12 Hours (1200mAh), by 5-5-90 work cycle
Frequency Stability	± 2.5 ppm
Operating Temperature	-20~ +55°C
Size	195×56×30mm (with battery pack, no antenna)
Weight	185 g (with battery pack, no antenna)

Receiving Part	
	Narrow band
Sensitivity(12dB SINAD)	$\leq 0.35\mu\text{V}$
Adjacent Channel Selectivity	≥ 60 dB
Intermodulation	≥ 60 dB
Spurious Rejection	≥ 80 dB
Audio Response	6dB / per interval
Hum & Noise	≥ 45 dB
Audio Distortion	$\leq 5\%$
Audio Power Output	500mW (at 10%)

Transmitting Part	
Modulation	11KΦF3E
Adjacent Channel	≥ 60 dB
Hum & Noise	≥ 40 dB
Spurious Emission	≤ -36 dB
Audio Response	6dB / per interval
Audio Distortion	$\leq 5\%$

TROUBLE SHOOTING GUIDE

Problem	Corrective Action
No power	A. The battery pack may be exhausted. Recharge or replace the battery pack. B. The battery pack may not be installed correctly. Remove the battery pack and install it again. C. The power switch is broken. (Contact your local dealer for repairs) D. Battery touch is broken. (Contact your local dealer for repairs)
Battery power dies shortly after correctly charging.	The battery packs life is finished. Replace the battery pack with a new one.
Transceiver cannot scan	The channels are not in the scan list.
No sound after using microphone for a while	Earphone jack is broken. (Contact your local dealer for repairs)
Communication distance becomes short, and it is low sensitivity	A. Check whether the antenna is in good condition and the antenna base does not come adrift. B. The selected mode frequency is not in accordance with local frequency when programming.
Cannot talk to or hear other members in your group	A. Different frequency or channel used, try another. B. Different CTCSS / DCS settings. Please reset settings. C. Out of communication range.
Cannot power on or frequent power-off	Check whether the battery terminals are out of shape or broken.
Receiver cannot hear you or intermittent when receiving sound	Check if the MIC is faulty. (Contact your local dealer for repairs)
Intermittent receiving with loud noise.	A. Out of communication range or obstructed by tall buildings or in basement and so on. B. 450 filter is broken, (Contact your local dealer for repairs)
Loudspeaker become lower or with "ka ka" sound after using a certain time	Check whether the loudspeaker net is broken. Iron powder or dust is in the loudspeaker. (Contact your local dealer for repairs)
Receive voice from the other party but can not transmit	Check [PTT] key. (Contact your local dealer for repairs)
Receiving indicating lamp lightens but no sound	A. Low volume, please turn on clockwise. B. Loudspeaker is broken. (Contact your local dealer for repairs) C. Earphone jack is broken. (Contact your local dealer for repairs) D. Volume switch is broken. (Contact your local dealer for repairs)

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: 564552 CODE RR50A

Manufactured and packaged for SRGS PTY LTD

ABN 23 113 230 050

751 Gympie Road, Lawnton Queensland 4501, Australia

MADE IN CHINA