Aerpro
First Choice

5W UHF CB HANDHELD RADIO

TWIN PACK

APH05RKT

USER GUIDE

aerpro.com

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INTRODUCTION

WELCOME

Thank you for purchasing the Aerpro APH05RKT 5 Watt UHF CB Radio Kit. Please ensure that you have read the product manual and instructions in full, prior to use. Failure to do so may result in product failure/damage or incorrect operation and therefore impact the product performance.

FEATURES

- Up to 15km range
- 5 Watt transmission power
- 80 Narrow-band channels
- Squelch control (automatic)
- CTCSS (38ch)/ DCS (83ch) codes
- Duplex range extender
- Dual channel monitor
- VOX voice operated exchange
- Channel scan function
- LED torch light
- 10 call ring tones
- Roger beep
- Button beep
- Backlight display

BOX CONTENTS

- 2 x APH05R UHF CB Radios
- 2 x 1200mAh Lithium Batteries
- 2 x 12V Car Chargers
- 2 x 240V Charging Docks
- 2 x Hand Straps
- 2 x Belt Clips
- 2 x Earphones
- 1 x Heavy Duty Carry Case

TECHNICAL SPECIFICATIONS

Frequency	476.425 - 477.4125 Mhz
Channel number	80 channels
Sub-code	CTCSS 38 and DCS 83 sub-codes
Transmission Power	5 Watts
Battery Type	1200mAh Lithium Battery

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 of 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.

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. You physician may be able to assist you in obtaining this information.

GENERAL WARNINGS

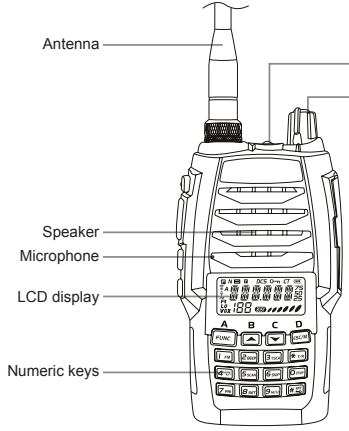
Some radios may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

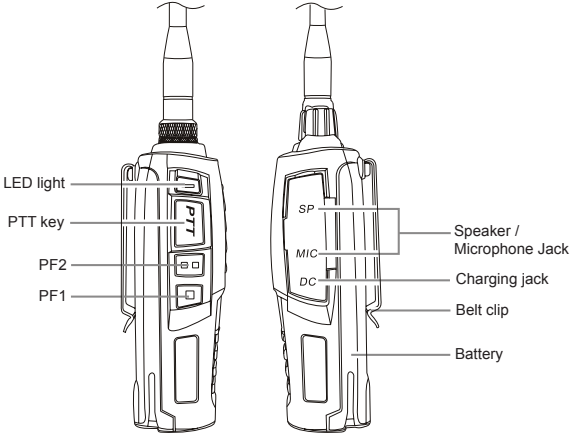
BATTERIES

All batteries can cause property damage and/or bodily injury such as burns if conductive material such as jewelery, keys, or beaded chains touch exposed terminals. Do not replace or charge batteries in a potentially explosive atmosphere.

RADIO CONTROLS

RADIO LAYOUT

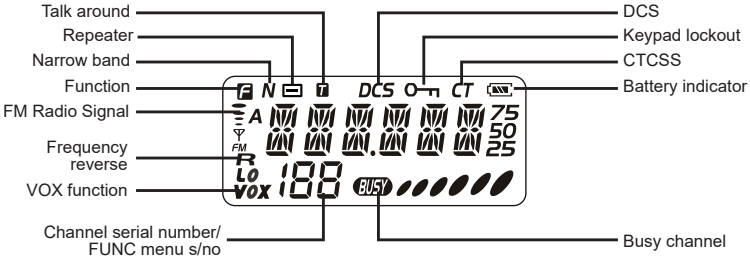




Left Panel **Right Panel**

LCD DISPLAY

LCD DISPLAY



NOTE:

Battery capacity indicator(full)

Battery capacity remnant

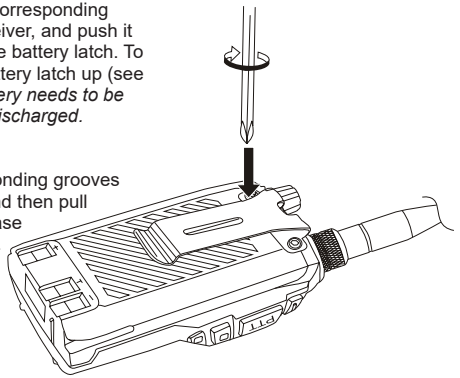
No power,replace battery pack or charge battery

Real time display receiving signal strength / Power Indicator

INSTALLING THE BATTERIES & 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 pull downwards. Press and hold release tab, then pull upwards to release.



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 Supplied.

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.

You can charge the battery of the transceiver directly with the AC adapter or with the charging dock.

1.Plug the AC adapter into the AC outlet, and then plug the cable of the AC adapter into the DC port located on the side of the CB radio.

2.Place the transceiver into the charger. Charging with the transceiver turned off will charge the battery faster. The battery indicator on the transceiver will appear and flash until it's fully charged. 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.

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 OPERATIONS

POWER ON/OFF

Turn **"POWER/VOLUME" CONTROL KNOB** clockwise to turn the APH05R **ON**.
Turn **"POWER/VOLUME" CONTROL KNOB** anticlockwise to turn the APH05R **OFF**.

VOLUME CONTROL

When in power-on state, turn the **"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 APH05R **OFF** and **ON** and repeat steps above.
Frequency can also be "Directly Dialled in" , EG 104.30 Mhz is Keypad 10430

LED LIGHT

Under standby state, press **"(BLUE) BUTTON"** on the side of the APH05R 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

HOW TO ENTER PROGRAMMING 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 the desired function to be set.
3. Press **"(FUNC) BUTTON"** to enter into setup.
4. Press **"(8SET)BUTTON"** to enter function menu
5.Press **"UP or DOWN ARROW"** button to choose the desired content to be set
6. Press **"(FUNC) BUTTON"** to return to upward menu.
7. Press **"(ESC/M) BUTTON"** or **"(#ENT) BUTTON"** to confirm and exit.

CTCSS/DCS *RECEIVE* [R-CDC Option 1]

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 N and inverse **I** 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.

CTCSS/DCS *TRANSMIT* [T-CDC Option 2]

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 **"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.

CTCSS/DCS *TRANSMIT* [T-CDC Option 2] (Continued)

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 *TRANSMIT & RECEIVE* [C-CDC Option 3]

Users can synchronize the CTCSS/DCS codes. Users can also adjust them individually with R-CDC & T-CDC.
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 [OFFSET Option 4]

This function is disabled – **Default Setting is 0.000**

WIDE/NARROW W/N Option 5]

Channel bandwidth of 12.5Khz (narrow) or 25Khz (wide) can be selected
TO COMPLY WITH AUSTRALIAN REGULATIONS THIS MUST BE 12.5Khz

REVERSE/ TALK AROUND [REV / TA Option 6]

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 LOCK OUT [BUSY Option 7]

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 [PTT-ID Option 8]

Disabled for Australia

CHANNEL OPERATIONS (continued)

TX OFF [TX-IHB Option 9]

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 MENU

TO ENTER THE BACKGROUND MENU

1. ***With the radio turned OFF***, press and hold **[PF1]** button and then turn on the transceiver until you hear a "beep" sound, then release the **[PF1]** button to enter into the background operation.
2. Press **"UP ARROW"** or **"DOWN ARROW"** buttons 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 [TOT Option 1]

The purpose of **T**ime-**O**ut-**T**imer is to restrict transceiver from continuous long-term transmission. When the continuous transmission time is beyond the set 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 until you hear a "beep" sound, then release the **[PF1]** button to enter into the background operation.
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, Up to 10 minutes of TOT is programmable in steps of 15 seconds.
5. Press **"(FUNC) BUTTON"** to go back to previous menu. Press **"(ESC/M) BUTTON"** or **"(#ENT) BUTTON"** to confirm and exit.

VOX *VOICE OPERATED TRANSMISSION* [VOX Option 2]

Voice Operated Transmission **VOX** allows you to transmit without needing to press the **[PTT]** button. If you want to make use of this function, you should insert the earpiece supplied with the transceiver.
1. ***With the radio turned OFF***, press and hold **[PF1]** button and then turn on the transceiver until you hear a “beep” sound, then release the **[PF1]** button to enter into the background operation.
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 TIME DELAY [VOX DEY Option 3]

When using the VOX option , transmission stops and returns to receive mode after you stop talking, an adjustable delay time can be programmed.
1. ***With the radio turned OFF***, press and hold **[PF1]** button and then turn on the transceiver until you hear a “beep” sound, then release the **[PF1]** button to enter into the 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”** buttons to set desired delay. 0.5S-5S, 10 levels of delay time in total are available in level intervals 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 [VOXTON Option 4]

If enabled , the transceiver will beep when transmitting by VOX.
1. ***With the radio turned OFF***, press and hold **[PF1]** button and then turn on the transceiver until you hear a “beep” sound, then release the **[PF1]** button to enter into the background operation.
2. Press **“UP ARROW”** or **“DOWN ARROW”** buttons to choose No.4 function item. It will show **“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 beep is enabled. **OFF**: VOX beep 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 [STEP Option 5]

This function is not enabled for use in Australia
The Default setting is **10 K**

SQUELCH LEVEL [SQL Option 6]

This option sets the Squelch level
To Receive signals from more distant users , set the Squelch level lower.
To only Receive signals from closer users , set the Squelch level higher.
1. ***With the radio turned OFF***, press and hold **[PF1]** button and then turn on the transceiver until you hear a "beep" sound, then release the **[PF1]** button to enter into the 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 choose the 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 SAVER [SAVE Option 7]

Enabling Battery Saver reduces the Transmitter power to lower battery consumption
1. ***With the radio turned OFF***, press and hold **[PF1]** button and then turn on the transceiver until you hear a "beep" sound, then release the **[PF1]** button to enter into the 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.

DISPLAY BACK LIGHTING [LIGHT Option 8]

1. ***With the radio turned OFF***, press and hold **[PF1]** button and then turn on the transceiver until you hear a "beep" sound, then release the **[PF1]** button to enter into the 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: Backlight stays ON for 3 Seconds **OFF** No Backlight
5. Press **"(FUNC) BUTTON"** to go back to previous menu. Press **"(ESC/M) BUTTON"** or **"(#ENT) BUTTON"** to confirm and exit.

DISPLAY BACKLIGHT COLOUR [COLOUR Option 9]

There are three user selectable back light colours.
1. ***With the radio turned OFF***, press and hold **[PF1]** button and then turn on the transceiver until you hear a "beep" sound, then release the **[PF1]** button to enter into the 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 choose the desired setup.
WHITE: white backlight
PINK: pink backlight
RED: red backlight
5. Press **"(FUNC) BUTTON"** to go back to previous menu. Press **"(ESC/M) BUTTON"** or **"(#ENT) BUTTON"** to confirm and exit.

SCAN DELAY TIME [SCANTM Option 10]

This sets the time length the scanner will stop on a Busy Signal
1. ***With the radio turned OFF***, press and hold **[PF1]** button and then turn on the transceiver until you hear a "beep" sound, then release the **[PF1]** button to enter into the 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 signal, Scan mode will stop for 5 seconds and then continue scanning.
10S: Once the radio receives a 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 [DSP Option 11]

There are 3 Selectable display modes - **CH** Channel, **FREQ** Frequency and **NAME**

1. ***With the radio turned OFF***, press and hold **[PF1]** button and then turn on the transceiver until you hear a "beep" sound, then release the **[PF1]** button to enter into the 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
CH: Channel number.
NAME: Channel name display. If a channel is not named, LCD displays current frequency and channel number as per **FREQ** selection, 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.

FUNCTION- Duplex Mode Via Repeaters

DUPLEX / REPEATER MODE [FUNC 4]

This feature allows the use of local repeater stations that are designed to automatically re-transmit your broadcast over larger areas and 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 channels.
In Duplex / Repeater mode, the fixed position Repeater forwards the signal it receives from repeater input Channel

SELECTING REPEATER [FUNC 4]

To access the Repeater option , press the **"(FUNC) button"** and then press the "**(4 +/-)** button" The Repeater Icon will appear in the display
The Repeater option is only selectable on **Channels 01→08** and **Channels 41→48.** ***Turn this option ON for every Channel you need***

DUPLEX / REPEATER INFORMATION

DUPLEX RECEIVE/TRANSMIT CHANNEL GUIDE

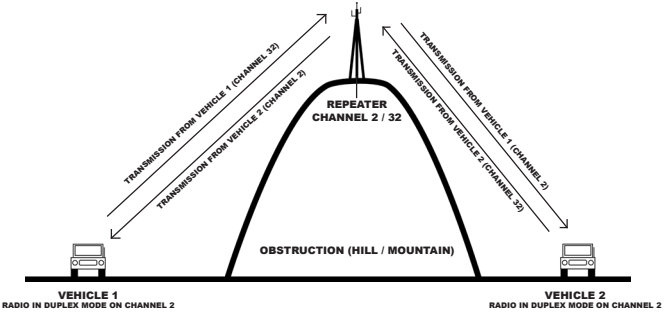
The following table displays the receive and transmit channels when using repeater stations:

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 RSM 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 normal 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.
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 RSM 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 (Data Only).
• Channel 40 - road channel (Australia).
• ***Channels 61, 62 and 63 are reserved for future use and TX is inhibited on these channels***.

UHF CB 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	
2	476.450	22	Data Only	42	476.4625	62	Reserved
3	476.475	23	Data Only	43	476.4875	63	Reserved
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

CTCSS TONE TABLE (Codes 01 -> 38)

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		

DCS CODE TABLE

CODE	DCS CODE (OCTAL)	CODE	DCS CODE (OCTAL)
39	022	65	152
40	025	66	155
41	026	67	156
42	031	68	162
43	032	69	165
44	036	70	172
45	043	71	174
46	047	72	205
47	051	73	212
48	053	74	223
49	054	75	225
50	065	76	226
51	071	77	243
52	072	78	244
53	073	79	245
54	074	80	246
55	114	81	251
56	115	82	252
57	116	83	255
58	122	84	261
59	125	85	263
60	131	86	265
61	132	87	266
62	134	88	271
63	143	89	274
64	145	90	306

DCS CODE TABLE (continued)

CODE	DCS CODE (OCTAL)
91	311
92	315
93	325
94	331
95	332
96	343
97	346
98	351
99	356

CODE	DCS CODE (OCTAL)

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 On/Off switch is broken. (Contact your local dealer for repairs) D. Battery terminal 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	Squelch level is set too low or switched OFF
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 firmly screwed on.
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.
Reciever 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.
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.

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 ±20%
Battery Life	More than 12 Hours (1200mAh), by 5-5-90 work cycle
Frequency Stability	±2.5ppm
Operating Temperature	-20~ +55℃
Size	195×56×30mm (with battery pack, no antenna)
Weight	185 g (with battery pack, no antenna)

Receiving Part	
	Narrow band
Sensitivity(12dB SINAD)	≤0.35μV
Adjacent Channel Selectivity	≥60dB
Intermodulation	≥60dB
Spurious Rejection	≥80dB

Audio Response	6dB / per interval
Hum & Noise	≥45db
Audio Distortion	≤5%
Audio Power Output	500mW (at 10%)

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

TECHNICAL ASSISTANCE

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

EMAIL: service@tdj.com.au

TEL: 03 – 8587 8898

FAX: 03 – 8587 8866

Mon-Fri 9am – 5pm AEST

Please retain this user guide for future reference.

If you would like to download a digital copy of this manual, or other Aerpro manuals/ software, please visit the Aerpro.com website and click on ‘Firmware & Manuals” or search for the product model number for more information, accessories and products.

This manual is considered correct at time of printing but is subject to change.
For latest manuals and updates refer to the website.

www.aerpro.com