



TRX[®]



2W Maximum
Transmission Power



Up to 12km**
Range



Tough Chassis



USB Charging

TRX-2W1

2W UHF CB RADIO USER MANUAL

80 Australian and
New Zealand Channels

3 **THREE**
YEAR
WARRANTY

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1.0 WARNINGS

1.1 BATTERY PACK

- The battery pack should be fully charged before use. Initially charging the battery pack after purchase or extended storage (8 weeks or more) will not bring the battery to full capacity. A charge/discharge cycle of two to three times with use will bring the battery pack to its full operational capacity.
- Always charge the Battery Pack using the provided Charger. Improper charging may damage the Battery Pack or cause the Battery Pack to explode.
- Switch off the CB before charging to ensure the battery pack is charged properly.
- Avoid exposing the Battery Pack to temperatures below -20°C or above 60°C .
- Never dismantle the Battery Pack or expose the internal battery cell.
- Do not dispose of the Battery Pack in fire.
- Do not short-circuit the Battery Pack
- Dispose of the CB observing local regulations being mindful of the Battery Pack.
- Do not attempt to access the internal battery cell.

1.2 ANTENNA

- Do not use this CB radio if it has a damaged Antenna.
- Do not hold the Antenna when the CB is in use as this may reduce the range and may cause harm.
- Non-genuine Antennas, modifications or attachments could damage the CB, will void the Warranty and breach the CB's compliance

1.3 GENERAL

- If you carry any kind of personal medical device, please consult a doctor before using the Radios.
- Do not use the Radios in a potentially explosive setting (e.g. around pumps, on the lower deck of a boat or around a fuel storage area or around chemical products), or near blasting caps.
- Ensure Radios are turned off if on an airplane or in a hospital.
- Please seek advice from the Manufacturer or your Physician if using this CB in proximity to Medial Devices such as Pacemakers, Hearing Aids etc to ensure they are adequately shielded from RF energy.
- To avoid interference, avoid using the Radios near traditional radios.
- Clean the Radio with a damp cloth. Do not use any cleaning agents or solvents for cleaning.
- Do not modify the Radios in any way. In the event of damage occurring, ensure that the Radios are checked by a qualified professional.

2.0 USER LICENSE INFORMATION

The Citizen Band Radio Service (CBRS) is a two-way, short distance, communications service that can be used by any person in Australia and New Zealand, whether it is for recreational or domestic purposes, or in connection with work or business.

CBRS may be used for:

- 1. Any form of voice communications activity*
- 2. Telemetry and telecommand applications.*

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

3.0 INTRODUCTION

Thank you for purchasing the TRX-2W1 UHF 80 Channel CB Radio. This easy to use UHF CB radio with FM radio and selectable 0.5W/2W Transmit Power is perfect for every adventure.

Please read through the instructions carefully to ensure you get the most out of your new CB.

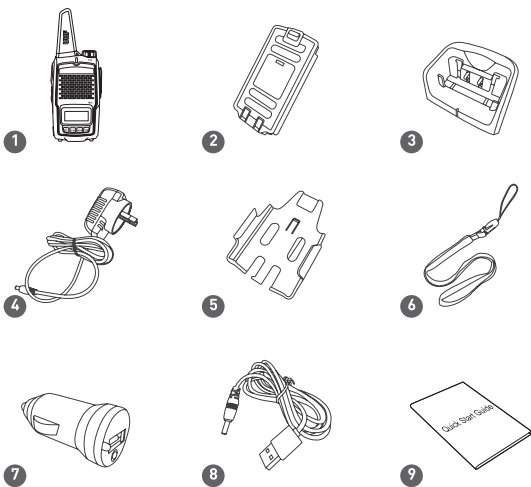
3.1 FEATURES

- 2W Transmit Power
- 12 Kilometre Range*
- 15 Hour Operating Time**
- CTCSS & DCS Privacy Codes
- Sturdy Metal Chassis
- VOX Handsfree

*Based on 5-5-90 operation cycle (5% Transmit, 5% Receive and 90% Standby using low transmit power).

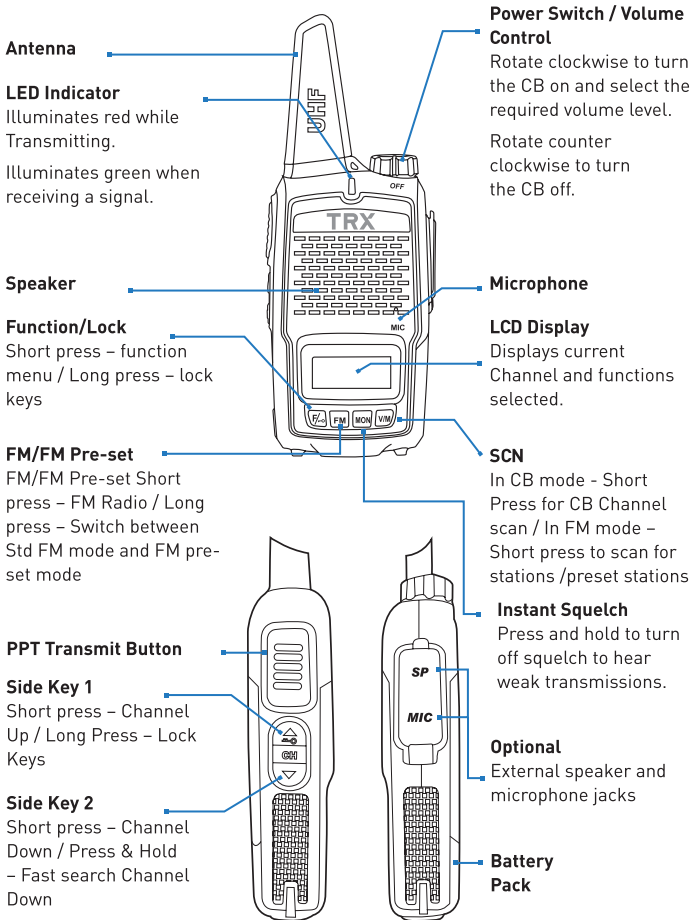
** In an open area. Range may vary due to environmental and/or topographical conditions.

3.2 PACKAGE CONTENTS

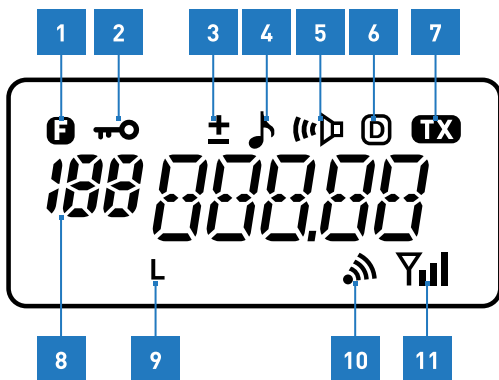


1. CB Radio
2. 1000mAh Li-ion Battery
3. Charging Stand
4. 240V Adaptor
5. Belt Clip Cradle
6. Carry Strap
7. 12V Car USB Adaptor
8. USB Charge Cable
9. Manual

3.3 PRODUCT OVERVIEW



3.4 PRODUCT OVERVIEW – LCD DISPLAY

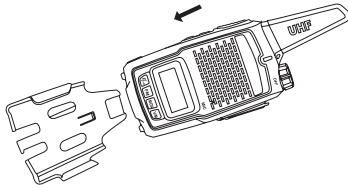


NO	ICON	MEANING
1	F	FM station storing in progress
2	key	Keyboard lock on
3	±	Repeater function on
4	♪	Roger beep on
5	speaker	CTCSS on
6	D	DCS on
7	TX	Transmit
8		Menu item number/preset FM
9	L	Low transmit power selected
10	speaker	VOX on
11	signal strength	Transmit/Receive strength

4.0 GETTING STARTED

4.1 INSTALLING THE BELT CLIP CRADLE

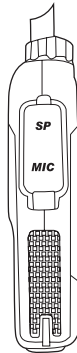
Slide the CB downwards into the cradle until it locks in. To remove the cradle, grip the cradle by the belt clip and separate slightly from the CB, then pull the CB up to remove.



4.2 SPEAKER/MICROPHONE COVER

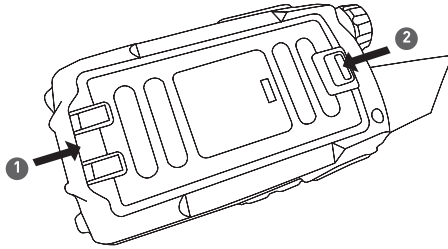
Optional earpiece microphones and speaker microphones can be installed in the ports behind this cover.

Leave this cover clipped in to help keep the CB water resistant.

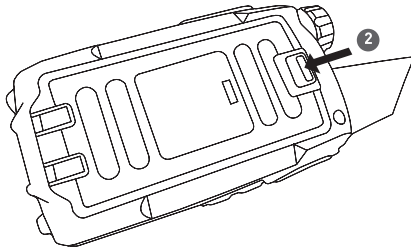


4.3 INSTALLING/REMOVING THE BATTERY PACK

To install the battery pack, insert the bottom of the battery first (1) then press to clip the top of the battery in place (2).



To remove the battery, press the release tab on the top of the battery (2) and using your fingernail, pull the battery away from the CB and remove.



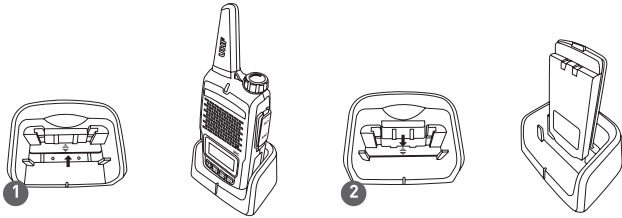
NOTE:

If the belt clip cradle is fitted to the CB, you will need to remove it before installing or removing the battery.

4.4 CHARGING THE BATTERY PACK

The battery can be charged via USB using the 240V adaptor, 12V car USB adaptor or other USB source rated at 1000mA and above such as a power bank.

Slide the CB into the cradle to begin charging.



Batteries can also be separately charged in the charger by placing a flat-blade screwdriver in the notch behind the arrow highlighted in Fig 1 to pull the internal battery frame mount forward as shown in Fig 2.

Once charging commences, the LED on the front of the charger will illuminate red to indicate that the battery pack is charging. When the battery pack is fully charged, the LED will illuminate green.

NOTE:

It can take up to 6 hours to charge the battery.

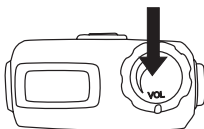
4.5 BATTERY LEVEL

When the battery level becomes low, the CB will emit an alert tone every 30 seconds indicating that it is time to recharge the battery.

5.0 OPERATION

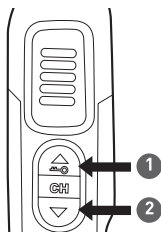
5.1 POWER/VOLUME

To switch the CB on, rotate the power/volume knob clockwise. This also selects the volume level. To turn the CB off, rotate the knob anti-clockwise until the knob clicks to the off position.



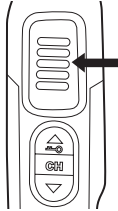
CHANNEL SELECTION

Press **Side Button 1** for Channel up and **Side Button 2** for Channel down.



5.2 TRANSMIT

To transmit, press the **PTT Transmit Button** on the side of the CB. Release the button to receive the reply.



5.3 KEYPAD LOCK

To protect against accidentally changing settings or channels, select your desired channel then press **Side Key 1** or the **F** button for more than 2 seconds to activate Keypad Lock. Press **Side Key 1** or **F** button again to remove Keypad Lock.

5.4 FM RADIO

Press the FM button briefly to activate the FM Radio. Stations can be manually selected by pressing the channel up/down keys, or press the **SCN** button to scan up to the next station.

To store a selected station in to memory (there are 25 memory locations available), press the **F** button. The station store icon will flash. Then use the channel up/down buttons to select the location number where you would like to store the selected channel. Once you select the location number, press the F button to confirm. To switch the FM radio to only select between stored stations, press and hold the **FM** button for 2 seconds.

While in FM mode, you can still receive CB Transmissions & Transmit on your selected CB Channel. Once the Transmission has completed, the FM Radio will resume in 10 seconds. To return to CB only mode, press the **FM** button briefly.

6.0 MENU NAVIGATION

To navigate the Main CB Menu, please use the following buttons:

Press F	Enter Main Menu. The current menu item number and name will be displayed
Press Channel Up/Down	Select menu item to be adjusted
Press F	To enter adjustment mode
Press Channel Up/Down	To adjust the menu item
Press F	To confirm the menu item selection
Press Channel Up/Down	Continue to select menu items to be adjusted
Press PTT/ Transmit	To exit menu

6.1 MAIN MENU FUNCTION OVERVIEW

The following table lists all available Main Menu settings on this CB. Please see detailed descriptions of selected functions following this table.

MENU ITEM	LCD ID	FUNCTION	OPTIONS	DEFAULT	COMMENT
1	POW	Transmit Power	High (2W), LOW (0.5W)	HIGH	Preserve battery for short distance comms
2	SQL	Squelch Level	0-9	4	Adjusts squelch sensitivity
3	Vox	VOX Handsfree	OFF, 1-9	OFF	Voice activated transmission
4	BEEP	Key beep	OFF/ON	OFF	Turn on to hear a tone when buttons are pressed.
5	SAVE	Power save	ON/OFF	ON	Prolongs battery life in standby

MENU ITEM	LCD ID	FUNCTION	OPTIONS	DEFAULT	COMMENT
6	tOt	Time out timer	30, 60, 90, 120, 180	180s	Sets max continuous transmit time
7	SCAN	Scan mode	CO/SE/tO	CO	Pause, stop on signal or stop. See page page 18
8	KEYBO	Key auto lock	OFF/ON	OFF	Auto locks keys after 12 seconds
9	ROGER	Roger Beep	OFF/ON	OFF	Roger beep when you end a transmission
10	Led	LED backlight control	AUTO/OFF/ON	AUTO	LED backlight Auto (off after 7s), always off/on
11	BUSY	Busy channel lockout	OFF/ON	OFF	Blocks transmission if channel is busy
12	RPt	Repeater	OFF/ON	OFF	Allows repeater transmission
13	CtCSS	CTCSS select	OFF/1-38	OFF	CTCSS code select. See page page 20.
14	dCS	DCS select	OFF/1-104	OFF	DCS code select. See page page 20.
15	OPMSG	Startup message	n/a	n/a	Not applicable
16	CNAME	Channel name	CHAN/ FREQ/ NAME	CHAN	Select to display channel name or frequency

6.2 ADDITIONAL FUNCTION INFORMATION

6.2.1 SELECTABLE TRANSMIT POWER: MENU ITEM 1

This CB has two transmission power modes. For close range communications it is recommended that you use the 0.5W Low Transmit Power setting to preserve the battery life. For longer distance communications, use the full 2W High Transmit Power setting (default).

Low or full transmit power for this CB can be set by channel. This allows you to program specific channel(s) to transmit in low or full power. These settings are retained even if the CB is turned off. An "L" icon is displayed on the LCD if the selected channel is set to Low power mode.

NOTE:

The optimal transmit range for this CB is achieved in flat, open outdoor areas. This is reduced where there are obstructions such as buildings or rough terrain, or when the CB is used in confined spaces such as vehicle to vehicle communications. Do not use these CB's when less than 1.5m apart as this may cause interference.

6.2.2 SQUELCH LEVEL: MENU ITEM 2

Squelch blocks the background noise while there are no signals present. Use this menu to select your desired level. Generally for busy CB areas where you are receiving strong transmissions, use a higher setting. If there are not many CB transmissions or general interference in your area (eg for use in country areas), you can use a lower squelch setting. To quickly disable squelch you can also press the **MON** button.

6.2.3 VOX: MENU ITEM 3

VOX – Voice Activated Transmit allows you to talk handsfree either just with the CB or using optional Speaker/Microphone & Earpiece Microphones. To activate VOX, set function to a value between 1 and 9 – with 1 being the lowest sensitivity to trigger a transmission and 9 being the highest.

6.2.4 SCAN MODE: MENU ITEM 7

Channel Scan is useful to scan the available CB channels to either find who is transmitting nearby or to find a free channel to transmit on. There are three channel scan modes to choose from:

CO: This function will scan all 80 CB channels and when there is a transmission detected, the CB will remain on this channel for around 3 seconds after the transmission has completed. If there are no more transmissions after the 3 seconds, the CB will continue scanning. If you press PTT Transmit within the 3 seconds, you can transmit on the channel the scan stopped on.

SE: Stops on the channel where there is a signal discovered.

t0: As with the CO option, this will stop on a received CB signal but will recommence searching as soon as the transmission has finished.

6.2.5 BUSY CHANNEL LOCK: MENU ITEM 11

This feature can prevent Transmission on busy Channels. Select ON and Transmissions will be blocked from the CB if there is another transmission occurring on the same Channel.

NOTE:

This setting applies to individual channels so select the channel you wish to apply this setting to first.

6.2.6 REPEATER: MENU ITEM 12

The UHF Repeater/Duplex system helps increase the range of UHF radios using repeater stations that are usually located in country areas and they are positioned generally in an elevated location to overcome obstructions such as hills, valleys and buildings that would normally block CB Transmissions. In repeater mode, the Repeater Station forwards the signal it receives from repeater input channels 31-38/71-78 to the corresponding output channels 1-8/41-48. This CB can only transmit in Duplex on Channels 1-8 and 41-48. To transmit in Duplex, select one of these Channels then select Menu Item 12, then select **ON**.

For channels that have Duplex activated **±** will display on the CB's LCD screen to indicate that Duplex has been activated for that Channel.

In Australia, please visit www.tropinet.com/uhf-repeaters to see if there is a Repeater in your area. In New Zealand, please visit www.nzart.org.nz/info/repeaters to see if there is a Repeater in your area.

6.2.7 CTCSS & DCS: MENU ITEMS 13 & 14

CTCSS and DCS are systems used to ignore other users who you may be sharing the same UHF channel with. This allows you to filter the other transmissions by sharing a selected CTCSS and/or DCS between your calling group. A reminder that using CTCSS or DCS codes does not make your transmissions secure.

For communication to take place between two CB's with CTCSS and/or DCS enabled, they must set to the same channel and must have the same CTCSS and/or DCS settings.

6.3 CTCSS FREQUENCY TABLE

SUB CHANNEL	FREQUENCY (HZ)	SUB CHANNEL	FREQUENCY (HZ)	SUB CHANNEL	FREQUENCY (HZ)
1	67.0	14	107.2	27	167.9
2	71.9	15	110.9	28	173.8
3	74.4	16	114.8	29	179.9
4	77.0	17	118.8	30	186.2
5	79.7	18	123.0	31	192.8
6	82.5	19	127.3	32	203.5
7	85.4	20	131.8	33	210.7
8	88.5	21	136.5	34	218.1
9	91.5	22	141.3	35	225.7
10	94.8	23	146.2	36	233.6
11	97.4	24	151.4	37	241.8
12	100.0	25	156.7	38	250.3
13	103.5	26	162.2		

6.4 DCS FREQUENCY TABLE

CHANNEL NUMBER	OCTAL CODE	CHANNEL NUMBER	OCTAL CODE	CHANNEL NUMBER	OCTAL CODE
1	023	13	071	25	143
2	025	14	072	26	145
3	026	15	073	27	152
4	031	16	074	28	155
5	032	17	114	29	156
6	036	18	115	30	162
7	043	19	116	31	165
8	047	20	122	32	172
9	051	21	125	33	174
10	053	22	131	34	205
11	054	23	132	35	212
12	065	24	134	36	223

7.0 UHF CHANNELS & FREQUENCIES

7.1 LEGALLY RESTRICTED

Channel 5 and 35

These are reserved as Emergency channels and should only be used in an Emergency.

Channels 22 and 23

These are reserved for telemetry, telecommand and packet data. Transmission on these channels is blocked on this CB.

Channels 61, 62 and 63

Reserved for future allocation and transmission on these channels is blocked on this CB.

7.2 SPECIAL USE

Channel 10

4WD Clubs or convoys and National Parks

Channel 11

Is the calling channel and should be used to initiate contacts/ conversations. Once this is done, you should then change to a free channel.

Channel 18

RV – Caravanner and Campers Convoy Channel

Channel 29

HWY – road safety channel Pacific HWY, Pacific Motorway (NSW & QLD)

Channel 40

Australia wide road safety channel – primarily used by Truckies and Pilot Vehicles.

7.3 GENERAL CHANNELS

Channels 1-8 & 31-38 plus 41-48 & 71-78

Duplex Channels. These channels are used for Duplex operation in areas where there is a repeater which provides extended range. If there is no repeater in the area, these channels can also be used for standard communication.

Channels 9, 12-17, 19-21, 24-28, 30, 39, 49-60 & 79-80

General communication channels at all times.

8.0 UHF FREQUENCIES

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
Channel 1	476.4250	Channel 32	477.2000	Channel 63	
Channel 2	476.4500	Channel 33	477.2250	Channel 64	477.0125
Channel 3	476.4750	Channel 34	477.2500	Channel 65	477.0375
Channel 4	476.5000	Channel 35	477.2750	Channel 66	477.0625
Channel 5	476.5250	Channel 36	477.3000	Channel 67	477.0875
Channel 6	476.5500	Channel 37	477.3250	Channel 68	477.1125
Channel 7	476.5750	Channel 38	477.3500	Channel 69	477.1375
Channel 8	476.6000	Channel 39	477.3750	Channel 70	477.1625
Channel 9	476.6250	Channel 40	477.4000	Channel 71	477.1875
Channel 10	476.6500	Channel 41	476.4375	Channel 72	477.2125
Channel 11	476.6750	Channel 42	476.4625	Channel 73	477.2375
Channel 12	476.7000	Channel 43	476.4875	Channel 74	477.2625
Channel 13	476.7250	Channel 44	476.5125	Channel 75	477.2875
Channel 14	476.7500	Channel 45	476.5375	Channel 76	477.3125
Channel 15	476.7750	Channel 46	476.5625	Channel 77	477.3375
Channel 16	476.8000	Channel 47	476.5875	Channel 78	477.3625
Channel 17	476.8250	Channel 48	476.6125	Channel 79	477.3875
Channel 18	476.8500	Channel 49	476.6375	Channel 80	477.4125
Channel 19	476.8750	Channel 50	476.6625		
Channel 20	476.9000	Channel 51	476.6875		
Channel 21	476.9250	Channel 52	476.7125		
Channel 22	476.9500	Channel 53	476.7375		
Channel 23	476.9750	Channel 54	476.7625		
Channel 24	477.0000	Channel 55	476.7875		
Channel 25	477.0250	Channel 56	476.8125		
Channel 26	477.0500	Channel 57	476.8375		
Channel 27	477.0750	Channel 58	476.8625		
Channel 28	477.1000	Channel 59	476.8875		
Channel 29	477.1250	Channel 60	476.9125		
Channel 30	477.1500	Channel 61			
Channel 31	477.1750	Channel 62			

9.0 WARRANTY TERMS & CONDITIONS

Our goods come with guarantees that cannot be excluded under the Australian & New Zealand 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.

This warranty is provided in addition to your rights under the Australian & New Zealand Consumer Law.

Directed Electronics Australia Pty Ltd (Directed Electronics) warrants that this product is free from defects in material and workmanship for a period of 36 months from the date of purchase or for the period stated on the packaging. This warranty is only valid where you have used the product in accordance with any recommendations or instructions provided by Directed Electronics.

This warranty excludes defects resulting from alterations of the product, accident, misuse, abuse or neglect.

In order to claim the warranty, please contact us directly for the fastest service contact us directly via the contact details on the included yellow contact information document. Alternately you can return the product to the retailer from which it was purchased or if that retailer is part of a National network, a store within that chain, along with satisfactory proof of purchase. The retailer will then return the goods to Directed Electronics. Directed Electronics will repair, replace or refurbish the product at its discretion. The retailer will contact you when the product is ready for collection. All costs involved in claiming this warranty, including the cost of the retailer sending the product to Directed Electronics, will be borne by you.

Email: info@trx.com.au

10.0 NOTES

TRX[®]



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DIRECTED

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