

USER'S MANUAL

WIDE AREA IP & UHF 2WAY RADIO

MODEL: TA-995



CONTENTS

TA-995 DIAGRAMii	Speaker Level
Frontii	Microphone Level
Underneathii	Roger Beep
Rearii	SETTINGS
Sideii	Backlight Mode
In The Boxii	AutoLock
RADIO DISPLAYiii	Key Tone
Status LEDiii	Brightness
Taskbar Icon Displayiii	ANALOGUE SETTINGS
Menu lcon Displayiii	Duplex Mode
UHF Status Bariii	Squelch
SPECIFICATIONSiv	BCLO
BASIC OPERATIONS1	Scan
Power On1	CTCSS & DCS
Power Off1	Store Channel for Receive Only
Transmitting (TX.)	ADVANCED SETTINGS
Receiving (RX.)1	SOS Mode
Keypad Microphone1	PTT Records
ADVANCED OPERATIONS1	LCD Display Reversal
Mode Selection1	Time Zone
Dual PTT1	Power On Mode
RX. Priority1	Power Off Mode
TX. Selection1	Dual SIM
Choose Group1	IMPORTANT NOTICE
Individual User Call1	Wiring Diagram
Friends List1	ACMA Standard
Quick Dial1	UHF CB CHANNELS & FREQUENCIES
Quick Search2	WARRANTY
Text Messages2	1. Consumer guarantees
Monitor Groups2	2. Warranty against defects
Lock/Unlock Volume2	3. This warranty does not cover
AUDIO SETTINGS2	4. Warranty period
Sound Quality2	

	Speaker Level	2
	Microphone Level	2
	Roger Beep	2
SE	TTINGS	2
	Backlight Mode	2
	AutoLock	2
	Key Tone	2
	Brightness	2
ΑN	IALOGUE SETTINGS	2
	Duplex Mode	2
	Squelch	3
	BCLO	3
	Scan	3
	CTCSS & DCS	3
	Store Channel for Receive Only	3
ΑD	VANCED SETTINGS	3
	SOS Mode	3
	PTT Records	3
	LCD Display Reversal	3
	Time Zone	3
	Power On Mode	3
	Power Off Mode	3
	Dual SIM	3
IM	PORTANT NOTICE	4
	Wiring Diagram	
	Willing Diagnatii	4
	ACMA Standard	
UF		4
	ACMA Standard	4 5
	ACMA Standard IF CB CHANNELS & FREQUENCIES	4 5 6
	ACMA Standard IF CB CHANNELS & FREQUENCIES ARRANTY	4 5 6
	ACMA Standard	4 5 6 6

READ ALL INSTRUCTIONS carefully and completely before operating your radio and retain this manual for future reference.

NEVER connect the radio to a power source other than the supplied cable and 12-24-volt DC.

DO NOT place your radio in front of a vehicle airbag.

DO NOT attempt to modify your radio in any way.

 $\textbf{\textit{DO NOT}} \ allow \ children \ to \ operate \ the \ radio \ unsupervised.$

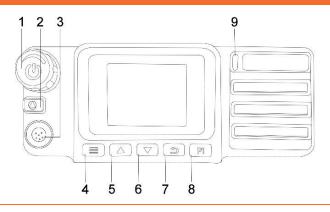
ALWAYS mount the radio on the supplied bracket and more than 20cm from the user.

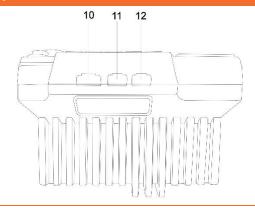
ALWAYS switch off your radio where notices restrict the use of two-way radio or mobile telephones.

ALWAYS keep the antenna more than 25 mm from any part of the head or body when transmitting.

NOTE People with pacemakers are recommended to maintain at least 20cm separation between the radio and their pacemaker.

TA-995 DIAGRAM



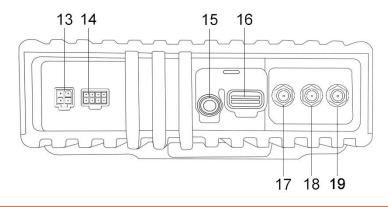


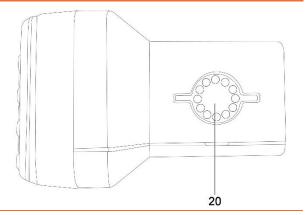
Front

- 1. Switch knob
 - Short Press to power on
 - Rotate clockwise to increase volume
 - Rotate anti-clockwise to decrease volume
 - Press and hold to power off
- 2. SOS key Press and hold for 3 seconds or until SOS message broadcast
- 3. Aviation Connector
- 4. Menu key Select and confirm key
- 5. Up key Move selection up
- 6. Down key Move selection down
- 7. Back key Returns to previous screen
- 8. P1 key
 - Change between transmission modes
 - On group select screen monitor group
- 9. Status LED

Underneath

- 10. SIM card slot 1 (Push-in-Push out lock)
- 11. SD card slot (Push-in-Push out lock)
- 12. SIM card slot 2 (Push-in-Push out lock)





Rear

- 13. 12v 24v DC Power Input
- 14. Accessory Connector
- 15. 3.5mm External Speaker Jack
- 16. USB 2.0 Input
- 17. WDMCA/LTE Antenna
- 18. GPS Antenna
- 19. UHF Antenna

Side

20. Bracket connector

In The Box

Please carefully unpack the radio and check if all items listed below are received. If any items are missing or damaged, please contact your dealer.

Item	Quantity
Mobile Radio	1
Keypad Microphone	1
Antenna (LTE & GPS)	1
Power Cord (with fuse)	1
Mounting Bracket	1
Locking Knob	2
Screw	6
Fuse (Spare)	1
User's Manual	1

RADIO DISPLAY

Status LED

OPERATING STATE	INDICATION
Logging in	Blue (Rapid blinking)
Idle	Blue (Slow blinking)
Receiving	Blue (Steady)
Transmitting	Red (Steady)
Powering off	Red (Steady)

Taskbar Icon Display

Icon	Name	Status	
46 .11	Signal	More bars indicate stronger signal strength	
†‡	Network Availability	Network Acquired	
Q	GPS	GPS Available, but not located	
•	GPS	GPS Positioning successful	
	Key Lock	Keypad Locked	
SOS	SOS	Transmit SOS or Receive SOS	
	Records	PTT Recordings is enabled	
G	Monitor	Indicates group monitor enabled	

Menu Icon Display

Icons	Name	Icons	Name
	Groups List		Phone Contacts
•	Friends List		Phone Records
	User List		Analogue Settings
	Dispatcher Messages	3	Advanced Settings
PTT	PTT Records	0	Settings

UHF Status Bar

The radio has a status bar midway down the home display screen, this status bar notes key information regarding settings of the current channel that is selected. The symbols that may be present in the status bar are listed below.

lcon	Definition
S	Power Save Mode
Н	High Transmission Power (10W)
L	Low Transmission Power
CTS	Continuous Tone-Coded Squelch System (CTCSS)
DCS	Digital Coded Squelch
+	Duplex Mode
N	Narrow Band (12.5kHz)
W	Wide Band (25kHz)
В	Busy Channel Lock Out
*	Scan Group

A quick press of the # key is used to toggle between frequency display and channel number.

Note. In analogue UHF mode the radio must be in channel mode to transmit.

SPECIFICATIONS

Model Number:	TA-995
Dimensions:	199mm x 135mm x 72mm
Weight:	940g
Working temp:	-30°C to +75°C
Working Voltage:	12V ~ 24V
Working Current:	500mA @ LTE 220mA @ WCDMA
Idle Current:	150mA
Peak Current:	3A
Audio Output:	3W
LTE FDD:	Band 1/2/3/5/7/8/28A/28B/40
WCDMA:	Band 1/2/5/8
Maximum Output power:	LTE: 23±2.7 dBm (Power Class 3) WCDMA: +24dBm +2.5dBm /-1.5dBm (Power Class 3) UHF: <= 10W
Receiving Sensitivity:	LTE FDD: ≤-100 dBm WCDMA 850: ≤-108 dBm WCDMA 1900: ≤-109 dBm
GPS:	GPS Positioning, 1.57542GHz;
Sensitivity:	Catch -144dBm, Track -159dBm;
Data Speed Rate:	LTE FDD -Uplink 50 Mbps / Downlink 150 Mbps WCDMA -Uplink 5.76 Mbps / Downlink 42 Mbps
Protocol:	Support embedded TCP& UDP Protocols Support Protocols PAP and CHAP used for PPP connection 3GPP TS27.005.27.007
UHF Spectrum:	400MHz – 480MHz
Channel Space:	25 / 12.5KHz
Frequency Stability:	± 2.5 ppm
Band Width:	Wide / Narrow
Transmit Power:	10W
Modulation:	16KФF3E / 11KФF3E
Spurious Emissions:	≤36dBm / ≤36dBm
Adjacent Channel Power:	≥70dB / ≥60dB
RF Sensitivity:	12dB SINAD ≥0.20μV / ≥0.20μV
Adjacent Channel Selectivity:	≥60dB / ≥55dB
Intermodulation Rejection:	≥65dB/≥60dB

≥65dB / ≥65dB

Spurious Response:

BASIC OPERATIONS

Power On

Short press the switch knob, the status LED will begin to flash blue. The radio will connect to the network this can take up to 20 seconds, once connected the radio will login, the status LED will begin to flash blue rapidly.

Power Off

Press and hold the switch knob to power off. The LED will illuminate red and the LCD will display 'Power Off' during the shutting down process. (This can take up to 10 seconds)

Transmitting (TX.)

While pressing the PTT, the status LED will illuminate red indicating the radio is in transmit mode. The second line on the LCD will indicate *Talking*: and the third line will indicate broadcasters ID.

Receiving (RX.)

When receiving a transmission, the status LED will illuminate blue. The second line on the LCD will indicate *Listening:* and the third line will indicate broadcasters ID.

Keypad Microphone

First PTT button for PTToC network Tx.

Second PTT button for analogue UHF Tx.

Press ≡ (menu) key to enter menu or confirm selection

Press ▲ or ▼ keys to select items

Press [→] (back) key to return to previous menu

Press P1 or the # key for mode Tx. select, when dual mode is active In Analogue mode press and hold the * key to scan, scan group

ADVANCED OPERATIONS

Mode Selection

The radio has three different modes;

Dual Mode

Analogue Only

IP Only (PTToC Network)

To access mode selection;

- 1. Press the ≡ (menu) key
- Short press ▲ key twice and short press ≡ key to display Advanced Settings
- 3. Short press ▲ or ▼ keys to change between desired modes
- 4. Press the ≡ key to save configuration

When in dual mode, press P1 or the # key for mode TX. selection. An arrow will signify which TX. mode you are in.

Note. While in certain modes some settings may not be accessible.

Dual PTT

The keypad microphone has dual PTT buttons one for each mode. The first PTT button is for the ToooAir Push-to-Talk over Cellular (PTToC) private network and the second PTT button is for the Analogue UHF 80 CB. This feature can be disabled.

- 1. Press the ≡ (menu) key
- Short press ▲ key twice and short press ≡ key to display Advanced Settings
- Short press ▲ key twice and short press ≡ key to display PTT Settings
- Short press ▲ or ▼ keys to change between desired PTT settings
- 5. Short press ≡ key to save configuration

Note. While in a single mode the second PTT button will become inoperable.

RX. Priority

The radio can give priority to receiving a broadcaster's signal. The priority can be set to Network, Analogue, Dual or Sequential. In sequential mode the radio will switch to the last received transmission.

- 1. Press the ≡ (menu) key
- Short press ▲ key twice and short press ≡ key to display Advanced Settings
- Press ▼ three times and short press ≡ key to display RX.
 Priority
- Short press ▲ or ▼ keys to change between desired RX.
 Priorities
- 5. Short press ≡ key to save selection

TX. Selection

The radio can automatically switch between modes based on last received signal. The priority can be set to manual or auto, in auto the radio will transmit on the last received transmission (Network or UHF).

- Press the ≡ (menu) key
- Short press ▲ key twice and short press ≡ key to display Advanced Settings
- Short press ▼ twice and short press ≡ key to display TX.
 Selection
- 4. Short press ▲ or ▼ to choose desired TX. selection
- 5. Short press ≡ key to save selection

Choose Group

The unit can change between groups to communicate with different groups of users.

- 1. Press the ≡ (menu) key
- 2. Short press ≡ key to choose the Group List
- 3. Short press ▲ or ▼ keys to choose desired group
- 4. Short press ≡ key to enter the group

Individual User Call

The unit can display all the users currently in the group and can use the user list to create temporary individual or group calls.

- Press the ≡ (menu) key
- 2. Short press ▼ key twice and short press ≡ key to display User List
- 3. Short press ▲ or ▼ keys to change between desired users
- 4. Short press ≡ key to select desired user
- Once all desired users are selected press PTT to begin temporary call

Note. Only selecting one user will begin an individual temporary call with the selected user.

Friends List

The unit can access a friends list for quick communication to create temporary individual or group calls. The friends list is like the User List accept contains a select few users like a contacts menu.

- 1. Press the ≡ (menu) key
- 2. Short press ▼ key and short press ≡ key to display Friends list
- 3. Short press ▲ or ▼ keys to change between desired users
- 4. Short press ≡ key to select desired user
- Once all desired users are selected press PTT to begin temporary Call

Note. Only selecting one user will begin an individual temporary call with the selected user.

Quick Dial

Using the numerical keypad, the radio can quick dial other radios. From the home menu in PTToC Network mode press a number to begin the quick dial when a user with the number you have dialled has been found the radio will automictically begin a private call to that user.

The numerical keypad can also be used to store users or groups as quick call functions.

Press the ≡ (menu) key

- 2. Short press ▼ key twice and short press ≡ key to display User List
- 3. Short press ▲ or ▼ keys to choose desired user
- Press and hold a desired number from the keypad to set as selected user

From the home screen pressing and holding this number will now quick call that user. Likewise, the same process is used to set groups as quick call functions by accessing the Group List.

Quick Search

Using the numerical keypad, the radio can quick search for users or groups.

- Press the ≡ (menu) key
- 2. Short press ▼ key twice and short press ≡ key to display User List
- 3. Enter desired number for user
- 4. Press the PTT to begin private call with user

Likewise, the same process is used to search for groups by accessing the Group List and short pressing \equiv (menu) key to enter searched group.

Text Messages

The unit can receive text messages. On receiving of a text message an icon (Envelope) will display in the top status line of the LCD.

- 1. Short press ≡ (menu) key
- Short press ▼ key three times and short press ≡ key to display Message List
- 3. Short press ▲ or ▼ keys to change between desired messages
- 4. Short press ≡ key to view desired message

Once all of the messages have been viewed the icon (Envelope) will be removed from display indicating no new un-read messages.

Monitor Groups

The radio can listen to multiple groups of users at once, to enable monitoring;

Frome the home screen

- 1. Press the ≡ (menu) key
- 2. Short press \equiv key to choose the Group List
- 3. Short press ▲ or ▼ keys to choose desired group
- Short press P1 or # key to enable/disable monitoring on selected group

A headset icon will appear next to the group signalling group monitor is enabled. If the radio is powered off the groups will no longer be monitored when radio is powered on.

Lock/Unlock Volume

The radio can have the volume locked to a certain volume as to avoid accidental volume changes. Saving the volume at the level desired will set the volume for next radio power on volume level.

- 1. Rotate the switch knob
- 2. LCD display will now display Volume Control
- 3. Short press ▲ or ▼ keys to lock/unlock the volume
- 4. Short press ≡ key to save configuration

Note. While the volume control is locked the switch knob will not adjust the volume.

AUDIO SETTINGS

Sound Quality

The unit can use either 4K or 8K voice quality. 8k is a clearer audio but is only compatible with the ToooAir 4G range radios. To change between the levels;

- 1. Press the ≡ (menu) key
- Short press ▲ key twice and short press ≡ key to display Advanced Settings
- Short press ▲ 5 times and short press ≡ key to display Sound Quality settings
- Short press ▲ or ▼ keys to change between desired setting
 - a. STD Mode = 4K
 - b. HQ Mode = 8K
- 5. Short press ≡ key to save configuration

Note. The sound quality must be set to the same across all devices for communication compatibility.

Speaker Level

The speaker level for the unit can be adjusted, these settings can be found under Advanced Settings > SPK Level.

Microphone Level

The Microphone level for the unit can be adjusted, these settings can be found under Advanced Settings > MIC Level.

Roger Beep

The unit can have the roger beep disabled/enabled; this function can be accessed via Settings > Roger Beep.

SETTINGS

Backlight Mode

The display can be turned off after idle time or left on there is three modes; Auto: Backlight will turn on automatically when any key is pressed or if radio receives a transmission. If there is no operation for 10 seconds, Backlight will turn off automatically.

Keys: Backlight will not turn on when the PTT is pressed or radio receives a transmission. Backlight will turn on if a keypad key is pressed and will remain on for 10 seconds.

Open: LCD backlight will remain on.

- 1. Short press ≡ (menu) key
- 2. Short press ▲ key once and short press ≡ key to display Settings
- Short press ▼ key and short press ≡ key to display Backlight Mode settings
- 4. Short press ▲ or ▼ keys to change between desired settings
- 5. Short press ≡ key to save configuration

AutoLock

The unit comes with a keypad auto lock feature that prevents the keypad from being accidently pressed.

- Short press ≡ (menu) key
- 2. Short press ▲ key once and short press ≡ key to display Settings
- Short press ▼ key five times and short press ≡ key to display AutoLock settings
- 4. Short press ▲ or ▼ keys to change between desired settings
- 5. Short press ≡ key to save configuration

After 5 seconds of idle time the keypad will lock and a lock symbol will appear in the top status display bar indicating the keypad is locked. To unlock the keypad press and hold the back key. Ref. 7 until display prompts with 'Unlocked'. Keypad will lock again after 5 seconds of idle time.

Key Tone

The unit can create an audible tone every time a button is pressed; this function can be enabled/disabled via Setting > Key Tone.

Brightness

The brightness of the display can be adjusted. These settings can be found under Settings > Brightness.

ANALOGUE SETTINGS

Duplex Mode

The radio can be placed into duplex mode on channels 1 to 8 and 41 to 48 While on channels 1 to 8 or 41 to 48

Press and hold the # key on the keypad for 4 seconds until you will see a "+" appear on the analogue status bar. This notes the current channel is in duplex mode and will transmit/receive 30 channels higher.

To stop duplex mode, select desired channel, press and hold the # key on the keypad for 4 seconds until you will see the "+" disappear from the analogue status bar. This notes the current channel is not in duplex mode and will transmit/receive on the current channel.

Squelch

The radio audio can open at varying levels of received signal strength.

- Short press ≡ (menu) key
- Short press ▲ key three times and short press ≡ key to display analogue Settings
- Short press ▼ key three times and short press ≡ key to display SQL Settings
- Short press ▲ or ▼ keys to change between desired levels of squelch
- 5. Short press ≡ key to save configuration

Note. Higher the number for the squelch setting the stronger the signal strength is required for receiving of transmissions.

BCLO

Busy Channel Lock Out is used to stop the use of the PTT if the radio is receiving a UHF transmission.

- 1. Short press ≡ (menu) key
- Short press ▲ key three times and short press ≡ key to display analogue Settings
- Short press ▼ key eight times and short press ≡ key to display
 BCLO Settings
- 4. Short press ▲ or ▼ keys to change between desired settings
- 5. Short press ≡ key to save configuration

Note. Once enabled transmitting from the radio will be disable while the radio is receiving a transmission and will only enable again after the radio has stopped receiving a transmission.

Scan

The radio can scan through selected channels looking for transmission on the channel, the scan will scan through channels inside the scan group. A Star displayed in the status bar, notes if the current channel is in the scan group. To scan through the scan group press and hold the * key on the keypad for 2 seconds. Pressing the * key again will stop the scan and revert to the original channel the scan was commenced from. If the radio stops on a busy channel, pushing the PTT will stop the radio from scanning and place the radio on the channel currently stopped. To add/remove channels to the scan group find a channel that is not in the scan group, noted by the Star in the status bar.

- 1. Short press ≡ (menu) key
- Short press ▲ key three times and short press ≡ key to display Analogue Settings
- Short press ▲ key three times and short press ≡ key to display
 Scan. Add
- 4. Short press ≡ key to add channel to the scan group

When you add the channel to the scan group a Star will now be displayed in the status bar. This indicates current channel is in the scan group.

Note. Removing a channel from the scan group is the same process but selecting delete when in Scan. Add Settings.

CTCSS & DCS

To activate Continuous Tone-Coded Squelch System, select desired channel.

- 1. Short press ≡ (menu) key
- Short press ▲ key three times and short press ≡ key to display Analogue Settings
- Short press ▲ key five times and short press ≡ key to display RX.
- CTCSS settings will be displayed, pressing the # key will change to DCS settings
- 5. Short press ▲ or ▼ keys to select desired configuration
- 6. Short press ≡ key to save configuration

Note. The same procedure is used to select TX CTCSS or DCS by selecting TX. CDC. In the Analogue Settings menu.

Store Channel for Receive Only

You can store any channel from 400MHz to 480MHz as a receive only channel in memory locations 121 to 199. These can also be added to the scan group.

- 1. In analogue mode short press *, this enables frequency display
- 2. Key in a frequency between 400Mhz and 480Mhz

- Short press ≡ (menu) key
- Short press ▲ key three times and short press ≡ key to display Analogue Settings
- Short press ▼ key once and short press ≡ key to display Storage Channel
- Key in a channel number between 121 199 and short press ≡ key to save configuration

Note. These channels are receive only channels.

ADVANCED SETTINGS

SOS Mode

The unit has an SOS alert feature that if held for 3 seconds will send an alert message to all other users. This feature can be disabled/enabled;

- 1. Short press ≡ (menu) key
- Short press ▲ key twice and short press ≡ key to display ADV Settings
- Short press ▲ key six times and short press ≡ key to display SOS Settings
- 4. Short press ▲ or ▼ keys to change between desired settings
- Short press ≡ key to save configuration

Note. HOT MIC mode opens the Tx. for 10 seconds when the SOS alert is triggered. Disabling the SOS mode for the unit will not prevent the unit from receiving SOS alerts, if you would like this feature completely removed please contact your local dealer.

PTT Records

The unit can record all the audio the unit is receiving. To listen to these recordings;

- Short press ≡ (menu) key
- Short press ▼ key four times and short press ≡ to display PTT Records list
- 3. Short press ▲ or ▼ keys to change between desired recording
- 4. Short press ≡ key to play recording

Note. The recording function needs to be enabled to listen to recordings this function can be enabled/disabled under Settings > Record Control

LCD Display Reversal

The LCD display can be inversed if the unit is mounted upside down to change LCD display;

- Short press ≡ key
- Short press ≜ key twice and short press ≡ key to select ADV
- Short press ▼ key eight times and short press ≡ key to enter Rotate Settings
- 4. Short press ▲ or ▼ keys to select desired configuration
- 5. Short press ≡ key to save configuration

Once inverse setting is selected and saved, the LCD display will reverse the display. This setting can be undone by following above steps and selecting the normal setting and saving.

Time Zone

The radio can have the time displayed on the LCD adjusted to match local time zone. These settings can be found under Settings > Time Zone.

Power On Mode

The unit can turn on via the accessory line or the power knob. These settings can be found under ADV Settings > PWR ON MODE.

Power Off Mode

The unit can turn off via the accessory line or the power knob. These settings can be found under ADV Settings > PWR OFF MODE.

Dual SIM

The unit can operate with two sim cards, adjusting the active sim card settings can be found under ADV Settings > Dual SIM.

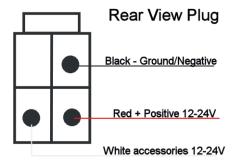
IMPORTANT NOTICE

READ ALL INSTRUCTIONS carefully and completely before operating your radio and retain this manual for future reference.

- NEVER connect the radio to a power source other than via supplied power cable and 12-24 volts DC.
- DO NOT place your radio in front of a vehicle airbag.
- DO NOT attempt to modify your radio in any way.
- ALWAYS mount the radio on the supplied bracket and more than 20cm from the user.
- ALWAYS switch off your radio where notices are displayed that restrict the use of two-way radio or mobile telephones.
- DO NOT hold radio / speaker to ear.

Wiring Diagram

The TA-995 can receive power input of 12-24V and a peak current of 3A the wiring diagram follows;



Please ensure installation follows above wiring diagram and installation requirements to avoid damage or abnormal functionality of the radio.

ACMA Standard

The use of the Citizen Band radio service is licensed in Australia by the ACMA Radio communications (Citizens Band Radio Stations) Class License and in New Zealand by the Ministry of Economic Development (MED) General User Radio License (GURL) for Citizens Band Radio, and operation is subject to conditions contained in those licenses.

In Australia there are numerous repeater sites that input/receive channels for long distance communication between sites. The repeaters work by taking input on channels 31 to 38 and 71 to 78, and re-broadcast the signal on channels 1 to 8 and 41 to 48, to extend the range of the communication. While operating in Australia certain transmissions must meet the ACMA standard they are as follows:

- CB transmitter shall not be operated on UHF emergency channels 5 and 35.
- No voice transmission is permitted on data (telemetry/telecommand) channels 22 and 23.
- Before transmitting on a channel always listen in on the channel selected to ensure it is not already being used before transmitting.
- Avoid operation on locally used repeater input channels 31 to 38 and channels 71 to 78 or locally used repeater receiving channels 1 to 8 and channels
 41 to 48, unless long-distance communication via the repeater facility is specifically required.
- Transmissions on channels 61 to 63 are inhibited and are reserved for future allocation.

The TA-995 meets the ACMA standard and will inhibit voice operation on channels 22 and 23 and inhibit all operations on channels 61 to 63. In the event that additional telemetry/telecommand channels are approved by the ACMA, these channels shall be added to those currently listed where voice transmission is inhibited.

The TA-995 operates on narrowband (2.5 kHz deviation) 12.5 kHz channel spacing. This can lead to potential operational issues with older equipment still operating on wideband (5.0 kHz deviation) 25 kHz channel spacing. The original 40 channels were designed for wideband channel spacing and with the new technology narrowband channel spacing has halved the channel spacing which is how we now have 80 channels. Older equipment still operating on wideband will only operate on original 40 channels and could potentially interfere with narrowband 41 to 80 channels which sit inside the original 40 channel band. Due to the deviation differences between the two channel spacings narrowband and wideband there will be volume differences of the communication between the old equipment and the new equipment. A list of currently authorized channels can be obtained from the ACMA website in Australia and the MED website in New Zealand.

UHF CB CHANNELS & FREQUENCIES

Channel Number

Legend

zegena	
Duplex Mode Receive	DRX
Duplex Mode Transmit	DTX
Emergency Use Only	
Receive Only	RX
Inaccessible	Х

Channel Number	Frequency (MHz)
1. DRX	476.425
2. DRX	476.450
3. DRX	476.475
4. DRX	476.500
5. E, DRX	476.525
6. DRX	476.550
7. DRX	476.575
8. DRX	476.600
9	476.625
10	476.650
11	476.675
12	476.700
13	476.725
14	476.750
15	476.775
16	476.800
17	476.825
18	476.850
19	476.875
20	476.900
21	476.925
22. RX	476.950
23. RX	476.975
24	477.000
25	477.025
26	477.050
27	477.075
28	477.100
29	477.125
30	477.150
31. DTX	477.175
32. DTX	477.200
33. DTX	477.225
34. DTX	477.250
35. E, DTX	477.275
36. DTX	477.300
37. DTX	477.325
38. DTX	477.350
39	477.375
40	477.400

41. DRX	476.4375
42. DRX	476.4625
43. DRX	476.4875
44. DRX	476.5125
45. DRX	476.5375
46. DRX	476.5625
47. DRX	476.5875
48. DRX	476.6125
49	476.6375
50	476.6625
51	476.6875
52	476.7125
53	476.7375
54	476.7625
55	476.7875
56	476.8125
57	476.8375
58	476.8625
59	476.8875
60	476.9125
61. X	476.9375
62. X	476.9625
63. X	476.9875
64	477.0125
65	477.0375
66	477.0625
67	477.0875
68	477.1125
69	477.1375
70	477.1625
71. DTX	477.1875
72. DTX	477.2125
73. DTX	477.2375
74. DTX	477.2625
75. DTX	477.2875
76. DTX	477.3125
77. DTX	477.3375
78. DTX	477.3625
79	477.3875
80	477.4125

Frequency (MHz)

Remark	Channel Number
Commercial Pre-Programmable	81 - 120
User Programmable RX. Only	121 - 199

WARRANTY

This warranty against defects is given by Tooo Air Pty Ltd ABN 58 615 252 536

1. Consumer guarantees

- 1.1 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.
 - 1.2 To the extent we are able, we exclude all other conditions, warranties and obligations which would otherwise be implied.

2. Warranty against defects

- 2.1 This warranty is in addition to and does not limit, exclude or restrict your rights under the Competition and Consumer Act 2010 (Australia) or any other mandatory protection laws that may apply.
- 2.2 We warrant our goods to be free from defects in materials and workmanship for the warranty period of 12 months from the date of original sale. Subject to our obligations under clause 1.2, we will at our option, either repair or replace goods which we are satisfied are defective. We warrant any replacement parts for the remainder of the period of warranty for the goods into which they are incorporated.
 - 2.3 To the extent permitted by law, our sole liability for breach of a condition, warranty or other obligation implied by law is limited
 - (a) in the case of goods we supply, to any one of the following as we decide -
 - (i) the replacement of the goods or the supply of equivalent goods;
 - (ii) the repair of the goods;
 - (iii) the cost of repairing the goods or of acquiring equivalent goods;
 - (b) in the case of services we supply, to any one of the following as we decide
 - (i) the supplying of the services again;
 - (ii) the cost of having the services supplied again.
- 2.4 For repairs outside the warranty period, we warrant our repairs to be free from defects in materials and workmanship for three months from the date of the original repair. We agree to re-repair or replace (at our option) any materials or workmanship which we are satisfied are defective.
- 2.5 We warrant that we will perform services with reasonable care and skill and agree to investigate any complaint regarding our services made in good faith. If we are satisfied that the complaint is justified, and as our sole liability to you under this warranty (to the extent permitted at law), we agree to supply those services again at no extra charge to you.
- 2.6 To make a warranty claim you must before the end of the applicable warranty period, return the goods you allege are defective, provide written details of the defect, and give us an original or copy of the sales invoice or some other evidence showing details of the transaction.

2.7 Send your claim to:

Tooo Air Pty Ltd. Suite 1103, 1 Newland Street, Bondi Junction NSW 2022.

Tel: (02) 9157 0540 Email: <u>info@toooair.com.au</u>

3. This warranty does not cover

This warranty will not apply in relation to:

- (a) goods modified or altered in any way;
- (b) repairs performed other than by our authorised representative;
- (c) defects or damage resulting from misuse, accident, impact or neglect;
- (d) goods improperly installed or used in a manner contrary to the relevant instruction manual; or
- (e) goods where the serial number has been removed or made illegal
- (f) goods connected to an incorrect power source

4. Warranty period

The warranty on the ToooAir TA-995 Wide Area IP & UHF 2 Way Radio and Power Adapter is 12 Months. No repair or replacement during the warranty period will renew or extend the warranty period past the period from the original date of purchase.



ToooAir Pty. Ltd.

Address: Suite 1103, 1 Newland Street Bondi Junction, NSW 2022

Phone: +61 (02) 9157 0540 Website: www.toooair.com.au Email: info@toooair.com.au

