# ToooAir

# USER'S MANUAL

**WIDE AREA IP 2WAY RADIO**
**MODEL: TA-682**

## CONTENTS

***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 battery and charge via supplied charger.*

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

***DO NOT*** *attempt to modify your radio in any way.*

***DO NOT*** *allow children to operate the radio unsupervised.*

***ALWAYS*** *charge your radio at normal room temperature.* ***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-682 DIAGRAM
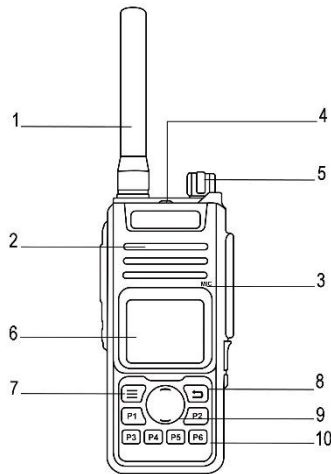


## Front

1. Antenna (Cellular)
2. Speaker
3. Microphone
4. Status LED
5. Channel knob
   - Rotate clockwise to increase volume and power on
   - Rotate anti-clockwise to decrease volume and power off
6. LCD Display
7. Menu Key
   - On home screen displays menu screen
   - Select and confirm key
8. Back Key – Returns to previous screen
9. Up / Down Arrows – On home screen displays PTT records
10. Programmable Keys
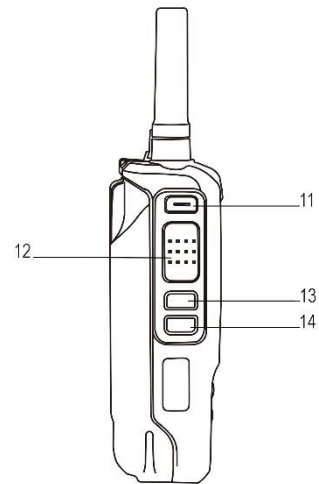
## Right

11. Side Button 1
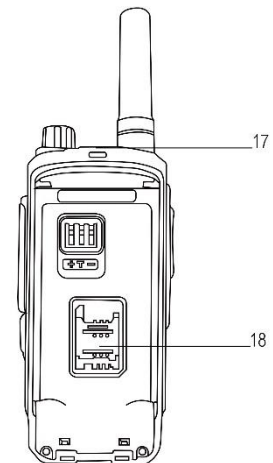    - Press and hold for keypad lock
    - Short press from group select enable/disable monitor
12. PTT (Push-to-talk) Switch
13. Side Button 2
    - Press for group list
14. Side Button 3
    - Press for Friend list
    - Press and hold for User list
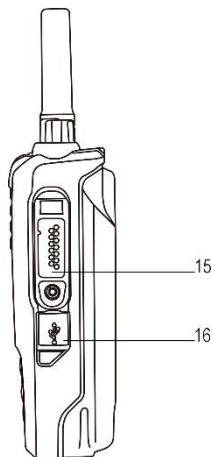
## Left

15. Pin Connector
16. Micro USB

## Rear

17. SOS – Press and hold for 3 seconds or until SOS message broadcast
18. SIM Card Slot

# RADIO DISPLAY

**Taskbar Icon Display**

| Icon | Name | Status |
|------|------|--------|
| | Battery Charging | Red: Charging<br>Green: Fully charged |
| | Signal | More bars indicate stronger signal strength |
| | Network Availability | Network Acquired |
| | GPS | GPS enabled, no GPS positioning |
| | GPS | GPS enabled, GPS positioning acquired |
| | Key Lock | Keypad locked |
| SOS | SOS | Transmit SOS or receive SOS |
| | Recordings | PTT recordings enabled |
| | Monitor | Monitor group which icon displayed against |

**Menu Icon Display**

| Icon | Name |
|------|------|
| | Friends List |
| | User List |
| | Dispatcher MSG |
| | Contacts |
| | PTT Records |
| | Advanced Settings |
| | Settings |

# SPECIFICATIONS

| | |
|---|---|
| **Model Number:** | TA-682 |
| **Dimensions:** | 135mm x 60mm x 41mm |
| **Weight:** | 300g |
| **Working temp:** | -30℃ to +75℃ |
| **Working Voltage:** | 3.3V ～ 4.2V (Standard 3.8V) |
| **Working Current:** | 500mA @ LTE<br>220mA @ WCDMA |
| **Peak Current:** | 2 A |
| **LTE FDD:** | Band1:2100MHz, Band 2:1900MHz, Band3:1800MHz, B5:850MHz, B7:2600MHz, B8:900MHz, B28:700MHz, B40:2300MHz |
| **WCDMA:** | Band1:2100MHz, Band5:850MHz |
| **Maximum Output power:** | LTE:23±2.7 dBm (Power Class 3)<br>WCDMA:24 +1/-3dBm (Power Class 3) |
| **Receiving Sensitivity:** | LTE FDD ≤-100 dBm;<br>WCDMA 850:≤-108 dBm;<br>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<br>WCDMA  -Uplink 5.76 Mbps / Downlink 42 Mbps |
| **Protocol:** | Support embedded TCP& UDP Protocols Support Protocols PAP and CHAP used for PPP connection<br>3GPP TS27.005,27.007 |

# BASIC OPERATIONS

## Power On
Turn on/off volume switch clockwise to power on.
1. LED will flash blue as the TA-682 powers up
2. The unit will attempt to connect to the network and login (this can take 20 seconds)

## Power Off
Turn the volume switch anticlockwise to power off. The LED will illuminate red and the LCD will display 'Power Off' during the shutting down process. (this can take 10 seconds)

## Transmitting
Press the PTT and the LED will illuminate red indicating the radio is in transmit mode. When in the transmitting mode, the LCD will display 'Talking'.

## Receiving
The LED is illuminated blue, it indicates the radio is receiving a transmission. The LCD will display 'Listening' and the user currently transmitting.

## Quick Access
The programmable keys (P1 – P6) can be used as quick access keys. While in either group select or user list, select desired group/user and long press desired key to set as quick call access to that group or user. You will be notified by a "Defined" prompt.

# ADVANCED OPERATIONS

## Keypad
Press ≡ (menu) key to enter menu
Press ▲ or ▼ keys to select items
Press ↺ (back) key to return to previous menu
Press ≡ key to confirm selection

## Choose Group
The unit can change between groups to communicate with different 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

Note. This function can also be done by pressing side button 2. Ref. 13

## Friend List
The unit can access a friends list for quick communication to create temporary individual or group calls.
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
5. Once all desired users are selected press PTT to begin temporary call

Note. This function can also be done by pressing side button 3. Ref. 14

## 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.
1. 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
5. Once all desired users are selected press PTT to begin temporary call

Note. This function can also be done by pressing and holding side button 3. Ref. 14

## Text Messages
The unit can receive text messages. On receiving of a text message an icon (Envelope) will display in the top black status line of the LCD.
1. Short press ≡ (menu) key
2. 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.

# 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
3. Short press ▼ key once and short press ≡ key to display backlight mode settings
4. Short press ▲ or ▼ keys to change between desired setting
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.
1. Short press ≡ (menu) key
2. Short press ▲ key once and short press ≡ key to display Settings
3. Short press ▼ key twice and short press ≡ key to display AutoLock settings
4. Short press ▲ or ▼ keys to change between desired setting
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 black status display bar indicating the keypad is locked. To unlock the keypad press and hold side button 1. Ref. 11 until display prompts with 'Unlocked'. Keypad will lock again after 5 seconds of idle time.

## Fonts
The display font can be adjusted to personal preference to adjust font settings;
1. Short press ≡ (menu) key
2. Short press ▲ key once and short press ≡ key to display Settings
3. Short press ▼ key four times and short press ≡ key to display font settings
4. Short press ▲ or ▼ keys to change between desired setting
5. Short press ≡ key to save configuration

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

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

# ADVANCED SETTINGS

## Sound Quality

The unit can use either 4K or 8K voice quality to change between the levels;

1. Short press ≡ (menu) key
2. Short press ▼ key twice and short press ≡ key to display ADV Settings
3. Short press ▼ key three times and short press ≡ key to display Sound Quality settings
4. 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.

## Speaker Level

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

## Microphone Level

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

## 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
2. Short press ▼ key twice and short press ≡ key to display ADV Settings
3. Short press ▼ key four times and short press ≡ key to display SOS Settings
4. Short press ▲ or ▼ keys to change between desired setting
5. Short press ≡ key to save configuration

Note. Even with this feature disabled the unit will still receive SOS alerts, if you would like this feature completely removed please contact your local ToooAir dealer.

## PTT Records

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

1. Short press ≡ (menu) key
2. Short press ▲ key three 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 Advanced Settings > Record Control

## Time Zone

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

# 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 adapter.

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

• DO NOT attempt to modify your radio in any way.

• 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.

# 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: info@toooair.com.au

## 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-682 Wide Area IP 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.**
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