



# **WAVE™ TWO-WAY RADIO**

## **TLK 150 User Guide**

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## Chapter 1

# Read Me First

This user guide covers the basic operations of your radios.

## Notations Used in This Manual

Throughout the text in this publication, you notice the use of **Warning**, **Caution**, and **Notice**. These notations are used to emphasize that safety hazards exist, and the care that must be taken or observed.



**WARNING:** An operational procedure, practice, or condition, and so on, which may result in injury or death if not carefully observed.



**CAUTION:** An operational procedure, practice, or condition, and so on, which may result in damage to the equipment if not carefully observed.



**NOTICE:** An operational procedure, practice, or condition, and so on, which is essential to emphasize.

## Special Notations

The following special notations are used throughout the text to highlight certain information or items:

Table 1: Special Notations

| Example                                       | Description                                                                               |
|-----------------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Menu</b> key or <b>PTT</b> button          | Bold words indicate a name of a key, button, or soft menu item.                           |
| Your radio shows Bluetooth On.                | Typewriter words indicate the MMI strings or messages displayed on your radio.            |
| <required ID>                                 | The courier, bold, italic, and angle brackets indicate user input.                        |
| <b>Setup</b> → <b>Tone</b> → <b>All Tones</b> | Bold words with the arrow in between indicate the navigation structure in the menu items. |

## Chapter 2

# Feature and Service Availability

Your dealer may have customized your radio for your specific needs.



**NOTICE:** Not all features in the manual are available in your radio. Contact your dealer for more information.

You can consult your dealer about the following:

- What are the functions of each button?
- Which optional accessories may suit your needs?
- What are the best radio usage practices for effective communication?
- What maintenance procedures promote longer radio life?

## Chapter 3

# Software Version

All the features described in the following sections are supported by the software version **R03.01.01** or later.

Contact your dealer for more information.

## Chapter 4

# Radio Care

This section describes the basic handling precaution of the radio.

Table 2: IP Specification

| IP Specification | Description                                                                                     |
|------------------|-------------------------------------------------------------------------------------------------|
| IP54             | Allows your radio to withstand adverse field conditions such as being exposed to water or dust. |



**CAUTION:** Do not disassemble your radio. This could damage radio seals and result in leak paths into the radio. Radio maintenance should only be done in service depot that is equipped to test and replace the seal on the radio.

- If your radio has been submersed in water, shake your radio well to remove any water that may be trapped inside the speaker grille and microphone port. Trapped water could cause decreased audio performance.
- If your radio has been submersed in a corrosive substance (for example, saltwater), rinse radio in fresh water then dry radio.
- To clean the exterior surfaces of your radio, use a diluted solution of mild dishwashing detergent and fresh water (for example, one teaspoon of detergent to one gallon of water).
- When cleaning your radio, do not use a high pressure jet spray on radio as this may cause water to leak into your radio.

## Chapter 5

# Radio Overview

This chapter explains the overview of your radio.



Table 3: Radio Overview

| No. | Buttons              | Descriptions                                                                   |
|-----|----------------------|--------------------------------------------------------------------------------|
| 1   | Power button         | Turn the radio on and off.                                                     |
| 2   | Volume Up button     | Increase the volume level.                                                     |
| 3   | Volume Down button   | Decrease the volume level.                                                     |
| 4   | Channel button       | Scroll up or down to the next channel or talkgroup in the list.                |
| 5   | Emergency button     | Trigger emergency.                                                             |
| 6   | Back/Home button     | Press: Go back to previous page.<br>Press and hold: Return to home screen.     |
| 7   | P2 button            | Trigger Programmed feature.<br>In the menu, it is the right navigation button. |
| 8   | P1 button            | Trigger Programmed feature.<br>In the menu, it is the left navigation button.  |
| 9   | Menu/OK button       | To access the Menu mode.<br>In the menu, it is the select button.              |
| 10  | Contacts/Info button | Press: Access the Contact List.<br>Press and hold: Access the Info menu.       |

## Programmable Buttons

You can program the programmable buttons as shortcuts to specific radio functions through Wave OnCloud (WoC) portal.

Depending on the duration of a button press, the programmable buttons function differently.

## Assignable Radio Functions

The following radio functions can be assigned to the programmable buttons by your dealer. Press the **Menu/OK** button to launch the following features.

### **Alert Tones**

Allows you to toggle the Alert Tones on and off.

### **Bluetooth**

Allows you to toggle the Bluetooth on and off.

### **Contact List**

Allows you to directly access the Contact List.

### **Do Not Disturb (DND)**

Allows you to toggle between on and off.

### **Emergency**

Allows you to initiate or cancel an emergency.

### **Location**

Allows you to toggle the Location on and off.

### **Menu**

Allows you to access the menu features.

### **Scan**

Allows you to toggle the Scan on and off.

### **Voice Announcement**

Allows you to toggle Voice Announcement on and off.

## Chapter 6

# Getting Started

This chapter provides instructions to prepare your radio for use.

## Turning the Radio On or Off



**NOTICE:** Contact your dealer for more information on ignition switch.

## Turning the Radio On

### Procedure:

To turn on your radio, press and hold the **Power** button or ignition switch.

If your radio is turned on successfully, your radio shows the following indications:

- The green LED illuminates.
- The display shows power-on animation.

## Turning the Radio Off

### Procedure:

To turn off your radio, press and hold the **Power** button or ignition switch.

If your radio is turned off successfully, your radio shows the following indications:

- A tone sounds.
- The display is off.

## Resetting the Radio

If your radio happens to be locked up and buttons are unresponsive, force reset your radio with the following step.

### Procedure:

Press and hold the **Power** button for at least 7 seconds.

## Adjusting the Volume

### Procedure:

Perform one of the following actions:

- To increase the volume of the radio, press the **Volume Up** button.
- To decrease the volume of the radio, press the **Volume Down** button.
- To mute the radio, press and hold the **Volume Down** button until the display shows x.

## Chapter 7

# Status Indicators

This chapter explains the Icons and LED indicators used in the radio.

## Display Icons

The following icons appear on the status bar at the top of the radio display. The icons are arranged left most in order of appearance or usage, and are channel-specific.

Table 4: Display Icons

| Icon                                                                                | Description                               |
|-------------------------------------------------------------------------------------|-------------------------------------------|
|    | Cellular Signal Level                     |
|    | Wi-Fi Signal Level                        |
|    | Bluetooth                                 |
|    | Bluetooth Connected                       |
|  | Global Navigation Satellite System (GNSS) |
|  | Scan                                      |
|  | Software Available                        |
|  | Downloading Software                      |
|  | Logs Available                            |
|  | Uploading Logs                            |
|  | Emergency                                 |
|  | Instant Personal Alert                    |
|  | Do Not Disturb                            |
|  | Area Talk Group                           |
|  | Ambient Alert                             |
|  | More                                      |

## LED Indications

The LED Indicator shows the operational status of your radio.

Table 5: LED Indications

| Indication               | Operational Mode                                                                                                                        |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Solid green              | <ul style="list-style-type: none"> <li>Radio is powering on</li> <li>Radio is transmitting</li> <li>Ambient Alert</li> </ul>            |
| Blinking green           | <ul style="list-style-type: none"> <li>Incoming call</li> <li>During call hang-time</li> <li>Instant Personal Alert transmit</li> </ul> |
| Blinking green slowly    | Radio enters Area Talkgroup                                                                                                             |
| Solid amber              | Emergency is declared                                                                                                                   |
| Fast blinking amber      | Emergency Alert is received                                                                                                             |
| Blinking amber           | Instant Personal Alert is received                                                                                                      |
| Blinking amber slowly    | Priority Scan is activated                                                                                                              |
| Blinking red             | Radio out of range                                                                                                                      |
| Blinking green and amber | In Do Not Disturb (DND) mode                                                                                                            |
| No indication            | <ul style="list-style-type: none"> <li>Radio powered off</li> <li>Radio kill<sup>1</sup></li> <li>Radio is idle</li> </ul>              |

<sup>1</sup> Check with your dealer or system administrator for more information.

## Chapter 8

# Fast Scroll Talkgroup List

A talkgroup list has a maximum of 96 channels.

The order of the channels are in numerical order. You can press and hold on the **Channel** button to perform the fast scroll. After the second channel, you can fast scroll the channels with an increment of 10.

**Example:** For example, if your radio has 93 channels, the increment channel change is **CH 80**  
→ **CH 90** → **CH 93** → **CH 1** → **CH 10** → **Ch 20**.

## Chapter 9

# Selecting Talkgroup

### Procedure:

Press the **Channel** button.

If the talkgroup is changed successfully, your radio shows a new talkgroup channel.

If selecting talkgroup is unsuccessful, your radio plays a negative indicator tone sound and remains on the talkgroup channel.

## Chapter 10

# Radio Calls

This chapter explains the operations to receive, respond to, make, and stop calls. Calls supported are Group, Private, and Broadcast calls.

## Making Calls on the Radio

### Procedure:

- 1 Perform one of the following actions:
  - To make a group call or broadcast call, select **Channel** → *<required channel>*.
  - To make a private call, select **Contacts/Info** → *<required Contact>*.
- 2 To call, press and hold the **PTT** button.

For broadcast call, the display shows a countdown from 3, 2, and 1.

If the **PTT** button is release before the countdown completes, the call is canceled.

- 3 Wait for the Talk Permit Tone to end, and speak into the microphone.
- 4 To listen, release the **PTT** button.



**NOTICE:** This step is not applicable for broadcast call.

If your radio does not detect voice activity for a predetermined period, the call ends.

## Receiving and Responding to Calls on the Radio

When you receive calls, your radio shows the following indications:

- The green LED blinks.
- Your radio unmutes and the incoming call sounds through the speaker.
- The display shows the talkgroup name and initiators name.



**NOTICE:** For Broadcast Call, the user is not allowed to Talkback. If user attempts to talkback, the Talkback Prohibit tone sounds when the **PTT** button is pressed.

### Procedure:

- 1 To respond, press and hold the **PTT** button.
- 2 Wait for the Talk Permit Tone to end, and speak into the microphone.
- 3 To listen, release the **PTT** button.

## Chapter 11

# Supervisory Override

Supervisory Override allows a supervisor to interrupt during an ongoing call and immediately start a supervisory call.

If the user is receiving or transmitting a call and the server is interrupted by a supervisory call, your radio unmutes to the supervisory call and display the alias of the supervisor.



**NOTICE:** Contact your dealer for more information on the configuration.

## Chapter 12

# Checking Radio Information

**Prerequisites:** Turn on your radio.

**Procedure:**

- 1 To check the radio information, press and hold the **Contacts/Info** button.
- 2 Perform one of the following actions:
  - To enable radio alias during Emergency Alerts received, select **Alerts**.
  - To view the IPA received, select **IPA**.
  - To view the Cellular Status, select **Cellular Status**.
  - To view the Wi-Fi status, select **WiFi Status**.
  - To view the Bluetooth status, select **Bluetooth**.
  - To clear Bluetooth pairing, select **Bluetooth** → **Clear?**.
  - To view the log status, select **Logs**.
  - To view the Firmware Over The Air and Language pack download status, select **Software**.
  - To view the name of the radio, select **Radio ID**.
  - To view the radio serial number, select **Serial Number**.

## Chapter 13

# Bluetooth

This feature allows your radio to connect to Bluetooth (BT)-enabled Headsets and Remote Speaker Microphones through BT connection.

BT operates within a range of 10 m (32 ft) line of sight. The BT function of your radio has a maximum power of 2.5 mW (4 dBm) at the 10 m range. This is an unobstructed path between your radio and your BT-enabled device. For high degree of reliability, Motorola Solutions recommends to not separate the radio and the BT-enabled device.

If the voice and tone quality gets distorted or unclear, position your radio and the BT-enabled device close to each other to re-establish clear audio reception.

## Turning the Bluetooth On or Off

### Turning the Bluetooth On

#### Procedure:

From the menu, select **Bluetooth** → ✓.

If the BT is enabled, your radio shows the following indications:

- The display shows BT icon on the home screen.
- The Voice Announcement sounds.

### Turning the Bluetooth Off

#### Procedure:

From the menu, select **Bluetooth** → x.

If the BT is disabled, your radio shows the following indications:

- The BT icon disappear on the home screen.
- The Voice Announcement sounds.

## Viewing Bluetooth Connectivity Status

#### Procedure:

Press and hold the **Contacts/Info** button and select **Bluetooth**.

If your radio is searching for the last connected Bluetooth (BT) device, your radio shows *Searching...* and sounds the voice announcement.

If your radio is connected to the BT device, your radio shows *Connected* and sounds the voice announcement.

If your BT device is disconnected from your radio, your radio sounds a tone and attempts to reconnect to the same BT device within a reconnect Time Out.

## Clearing Bluetooth Pairing

### Procedure:

- 1 Press and hold the **Contacts/Info** button.
- 2 Select **Bluetooth Pairing** → *<device friendly name>* → **Menu/OK**.

If clearing a paired Bluetooth device successfully, a positive tone sounds.

If clearing an unpaired Bluetooth device, a negative tone sounds.

## Chapter 14

# Contact List

By default, the contact list is accessible through press and hold on the programmable button. Contact your dealer for more information on the configuration.

The contact list only supports user that are available and set to Do Not Disturb (DND). If the contact is offline, it will be hidden from the list.

A contact name is no more than 30 alphanumeric characters and the contact list is displayed in an alphabetical order.

This feature supports fast scrolling by pressing and holding the **P1** or **P2** buttons when in contact list.

## Accessing Contact List

### Procedure:

- 1 To enter Contact List, press the **Contacts/Info** button.
- 2 To scroll through the Contact List, press the **P1** or **P2** button.
- 3 To exit Contact List, press the **Back/Home** button. or wait for the time out timer to expire.

When the time out timer expires, you exit the Contact List automatically.

## Chapter 15

# Menu

You are able to access the menu through the **Menu/OK** button.

The following are the available features in the Menu.

Table 6: List of Features

| Feature              | Description                                                                                                                                                                                                                                                |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| All Alert Tone       | Allows you to enable and disable All Alert Tone.                                                                                                                                                                                                           |
| Display Brightness   | Allows you to adjust the display brightness on your radio.                                                                                                                                                                                                 |
| Voice Announcement   | Allows you to enable and disable the Voice Announcement.                                                                                                                                                                                                   |
| Do Not Disturb (DND) | Allows you to change the mode of your radio from available to "do not disturb".<br> <b>NOTICE:</b> When DND is enabled, you will not be able to receive any private call. |
| Scan                 | Allows you to enable and disable the Scan feature.                                                                                                                                                                                                         |
| Location             | Allows you to enable and disable the Global Positioning System (GPS) feature.                                                                                                                                                                              |
| Wi-Fi                | Allows you to enable and disable the Wi-Fi modems.                                                                                                                                                                                                         |
| Cellular             | Allows you to enable and disable the Cellular modems.                                                                                                                                                                                                      |
| Bluetooth            | Allows you to enable and disable the Bluetooth.                                                                                                                                                                                                            |
| Speaker              | Allows you to select between internal speaker or external speaker.                                                                                                                                                                                         |

## Turning the All Alert Tones On or Off

### Turning the All Alert Tones On

**Procedure:**

From the menu, select **All Alert Tones** → ✓.

All Alert Tones are on and the Voice Announcement sounds.

### Turning the All Alert Tones Off

**Procedure:**

From the menu, select **All Alert Tones** → x.

All Alert Tones are off and the Voice Announcement sounds.

## Adjusting Display Brightness

### Procedure:

- 1 From the menu, select **Brightness**.
- 2 Select your preferred brightness level ranging from 0 to 8.

## Turning the Voice Announcement On or Off

### Turning the Voice Announcement On

#### Procedure:

From the menu, select **Voice Announcement** → ✓.

The Voice Announcement is on.

### Turning the Voice Announcement Off

#### Procedure:

From the menu, select **Voice Announcement** → x.

The Voice Announcement is off.

## Turning the DND On or Off

### Turning the DND On

#### Procedure:

From the menu, select **DND** → ✓.

If DND is on, your radio shows the following indications:

- The Voice Announcement sounds.
- The LED displays a blinking green light and amber light periodically.

### Turning the DND Off

#### Procedure:

From the menu, select **DND** → x.

If DND is off, the Voice Announcement sounds.

## Turning the Scan On or Off

### Turning the Scan On

**Procedure:**

From the menu, select **Scan** → ✓.

Scan is on and the Voice Announcement sounds.

### Turning the Scan Off

**Procedure:**

From the menu, select **Scan** → x.

Scan is off and the Voice Announcement sounds.

## Turning the Location On or Off

### Turning the Location On

**Procedure:**

From the menu, select **Location** → ✓.

Location is on and the Voice Announcement sounds.

### Turning the Location Off

**Procedure:**

From the menu, select **Location** → x.

Location is off and the Voice Announcement sounds.

## Turning the Wi-Fi On or Off

### Turning the Wi-Fi On

**Procedure:**

From the menu, select **Wi-Fi** → ✓.

Wi-Fi is on and the Voice Announcement sounds.

## Turning the Wi-Fi Off

### Procedure:

From the menu, select **Wi-Fi** → **x**.

Wi-Fi is off and the Voice Announcement sounds.

## Turning the Cellular On or Off

### Turning the Cellular On

#### Procedure:

From the menu, select **Cellular** → **✓**.

Cellular is on and the Voice Announcement sounds.

### Turning the Cellular Off

#### Procedure:

From the menu, select **Cellular** → **x**.

Cellular is off and the Voice Announcement sounds.

## Switching between Speaker Mode

### Procedure:

- 1 From the menu, select **Speaker**.
- 2 Perform one of the following actions:
  - To enable internal speaker, select **Internal**.
  - To enable external speaker, select **External**.

The Voice announcement sounds.

## Chapter 16

# Instant Personal Alert

Instant Personal Alert (IPA) is a notification that you can send to a contact that is busy or unable to reply to a group or private call.

When you received an IPA, your radio sounds a tone and displays an icon and the sender alias.

The IPA received is stored in the IPA Status List and allows you to view and reply at any time. When multiple IPAs are received, the latest IPA will appear at the top of the list. The IPA Status List can store up to nine alerts.

## Sending IPA

### Procedure:

Select **Contacts/Info** → *<required contact>* → **Menu/OK** button.

Your radio shows the following indications:

- A tone sounds.
- The display shows `Alert Sent`.

## Receiving IPAs

**When and where to use:** When you receive an IPA during idle mode, your radio shows the following indications:

- The IPA is added to the IPA Status List.
- A tone sounds.
- The amber LED blinks until IPA is cleared.
- The display shows the IPA icon and alias.

When you receive an IPA during a call, the IPA will not show on the radio display but is added to the IPA Status List. After the call is ended, your radio shows the following indications:

- The amber LED blinks.
- The display shows the IPA icon.

## Viewing IPA List

### Procedure:

Press and hold the **Contacts/Info** button and select **IPA**.

The display shows the latest IPA received following with the eight remaining alerts.

## Clearing IPA Status List

### Procedure:

Perform one of the following actions:

- From the contact list or IPA list, press and hold the **PTT** button on the contact that you want to clear.

- In the IPA Status List, press and hold the **Menu/OK** button on the contact that you want to clear.
- Power cycle your radio to clear all the IPAs.

## Chapter 17

# Emergency Operations

There are two ways in declaring or canceling an Emergency.

You can declare or cancel an Emergency locally by pressing the programmable button (Emergency button) or the Emergency button on your Bluetooth accessory.

You can also declare or cancel an Emergency remotely by an authorized user through WAVE APP or a dispatcher.

When Emergency is declared and radio enters into Emergency mode successfully, the display flashes with the Emergency icon. When the display flashes the Emergency icon, you are only allowed to view the battery status, volume control, make an emergency call and exit the emergency mode.

During the Emergency mode, any call launched is declared as Emergency Call.

## Declaring Emergency

### Procedure:

Press and hold the **Emergency** button.

The display shows a countdown from 3, 2, and 1 with increasing tone.

If Emergency is declared by mistake, during the countdown, release the **Emergency** button to cancel declaring Emergency.

If Emergency is declared successfully, your radio shows the following indications:

- The Emergency tone sounds.
- The amber LED illuminates.
- The display shows Emergency icon.

If Emergency is failed to declare, your radio returns to the previously selected channel.

## Cancelling Emergency

### Procedure:

Press and hold the **Emergency** button.

The display shows a countdown from 3, 2, and 1 with increasing tone.

If Emergency is declared by mistake, during the countdown, release the **Emergency** button to cancel declaring Emergency.

If Emergency is cancelled successfully, the display returns to previously selected channel.

## Receiving Emergency Alerts

When you receive a Declared-Emergency Alert, your radio shows the following indications:

- The Emergency tone sounds.
- The amber LED blinks for 2 seconds.

- The display shows the Declared-Emergency Alert icon and the initiator's alias.
- The alert has a higher priority compare to making or receiving call.

When you receive a Cancelled-Emergency Alert, your radio shows the following indications:

- The Emergency tone sounds.
- The amber LED blinks until all Emergency Alerts are cleared from the Emergency Alert List.
- The display shows the Cancelled-Emergency Alert icon and the initiator's alias.
- The alert has a higher priority compare to making or receiving call.

## Responding to Emergency Alert

### Procedure:

- 1 Press and hold the **Contacts/Info** button.
- 2 Select **Emergency Alert** → *<required Emergency Alert List>*.  
If the Emergency Alert List is empty, the **Emergency Alert** is not displayed.
- 3 To call, press and hold the **PTT** button.

## Receiving Emergency Calls

When you receive a Emergency Call, your radio shows the following indications:

- The Emergency tone sounds.
- The green LED lights up.
- For Group Call, the display shows the Emergency Call icon, Talkgroup Channel alias for 2 seconds, and then scroll to Caller Alias.
- For Private Call, the display shows the Emergency Call icon and the initiator's alias.

## Clearing Emergency Alert List

**Prerequisites:** An Emergency Alert in the Emergency Alert List is cleared when a corresponding Cancelled-Emergency Alert is received. Else, manually clear the list with the following actions.

### Procedure:

Perform one of the following actions:

- In the Emergency Alert List, press and hold the **Emergency** button on the Emergency Alert Alias that you want to clear.
- Power cycle your radio to clear all the Emergency Alerts.

When all Emergency Alerts are cleared, the **Emergency Alert** is not displayed from the **Contacts/Info** button option and the amber LED dissolves.

## Chapter 18

# Area Talkgroup

When you enter a geographic area, you are able to view and hear the notifications for the talkgroup area in that geofence.

The Area Talkgroup is added to the Area Talkgroup List in alphabetical order. Once you are added to the Area Talkgroup list, your radio receives calls from both the Area Talkgroup and the talkgroup the radio was on prior to entering the Area Talkgroup. To initiate an Area Talkgroup call, select the Area Talkgroup using the **Channel** button.

When you are in the Area Talkgroup, your radio sounds the Voice Announcement, the green LED blinks, and the display shows the talkgroup alias.

When you exit the Area Talkgroup, your radio sounds the Voice Announcement and the display shows the talkgroup alias as well. If you are in a call when you exit the Area Talkgroup, the call continues without dropping. When the call finally terminates, your radio then exits the Area Talkgroup.

If the Area Talkgroup is removed, you will go back to your previous channel.

## Chapter 19

# Radio Stun

Radio Stun indicates that the radio is disabled.

When your radio is in Radio Stun mode, all the buttons except for the **Power**, **Contacts/Info**, **P1**, **P2**, **Back/Home**, and **Volume Up and Down** buttons are disabled. All voice activity and LED indications are disabled as well.

In powered on state, pressing the **Contacts/Info** button displays the Radio Stun screen.

## Chapter 20

# User Disabled or Suspended

User Disabled or Suspended indicates that your account is disabled or suspended. When your account is disabled or suspended, you are not able to login to the PTT server.

Your radio sounds a tone, red LED blinks, and flashes the User Disable/suspended icon.

The **Contacts/Info**, **Menu/OK**, and **Volume Up and Down** buttons still works normally.

When you presses the **PTT** button, your radio tries to login to the PTT server. If your radio able to connect to the PTT server, it will bring you to the normal login screen, else the User Disable/suspended icon flashes.

## Chapter 21

# Radio Kill

Radio Kill indicates that your radio is permanently disabled.

In a normal Operation mode, when your radio receive a kill command, your radio will turn off.

While in Kill mode, there are no User Interface (UI) on your radio and you are not able to turn on your radio. Your radio can only be re-activated by Motorola Solutions.

Contact your dealer for more information.

## Chapter 22

# Ambient Listening

This feature allows the authorized user to listen to the ambient audio of a specific radio during idle mode.

When an authorized user starts ambient listening on a specific radio, the radio plays a tone, displays the ambient listening icon and the alias of the authorized user. Ambient listening stops when a different type of call is initiated or received.

## Chapter 23

# Authorized Accessories List

Table 7: Audio

| Part Number | Description                       |
|-------------|-----------------------------------|
| AC000240A01 | Wideband External Speaker         |
| GMMN4065    | Visor Microphone (Omni-Direction) |
| PMMN4127_   | Bluetooth RSM                     |
| PMMN4129_   | Wideband Compact Microphone       |

Table 8: Antenna

| Part Number | Description             |
|-------------|-------------------------|
| AN000358A01 | LTE Antenna             |
| AN000359A01 | GNSS Dash Mount Antenna |

Table 9: Cables

| Part Number | Description                                 |
|-------------|---------------------------------------------|
| CB000935A01 | Giboshi Terminal Adapter (Japan model only) |
| HKN4137_    | Mobile Power Cable 10 ft, 14 AWG, 15 A      |
| HKN9327BR   | Ignition Switch Cable                       |
| PMLN8153_   | Power Supply Adaptor and Cable              |
| PMKN4148    | 20 Pin MAP USB Programming Cable            |
| PMKN4149    | 20 Pin MAP Test and USB Programming         |
| PMKN4147    | Front Telco MMP USB Programming             |

Table 10: Mounting Accessory

| Part Number | Description               |
|-------------|---------------------------|
| FTN6083_    | DIN Mounting Accessory    |
| RLN6466_    | Low Profile Trunnion Kit  |
| RLN6467_    | High Profile Trunnion Kit |
| RLN6468_    | Key Lock Trunnion         |

Table 11: Other Accessories

| Part Number | Description                             |
|-------------|-----------------------------------------|
| GMBN1021_   | Rear Accessory Connector Seal with Pins |
| HLN9457_    | 16 Pin MAP Connector Kit                |

| Part Number | Description                    |
|-------------|--------------------------------|
| PMLN5620_   | Connector Extender (20 pieces) |
| RLN4836_R   | Emergency Footswitch           |
| RLN4856_    | Remote Mount Footswitch PTT    |
| RLN4857_    | Push Button with Remote PTT    |

# Limited Warranty

## MOTOROLA SOLUTIONS COMMUNICATION PRODUCTS

### I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

Motorola Solutions, Inc. ("Motorola Solutions") warrants the Motorola Solutions manufactured Communication Products listed below ("Product") against defects in material and workmanship under normal use and service for a period of time from the date of purchase as scheduled below:

|                     |        |
|---------------------|--------|
| Mobile Radio        | 1 Year |
| Product Accessories | 1 Year |

Motorola Solutions, at its option, will at no charge either repair the Product (with new or reconditioned parts), replace it (with a new or reconditioned Product), or refund the purchase price of the Product during the warranty period provided it is returned in accordance with the terms of this warranty. Replaced parts or boards are warranted for the balance of the original applicable warranty period. All replaced parts of Product shall become the property of Motorola Solutions.

This express limited warranty is extended by Motorola Solutions to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by Motorola Solutions. Motorola Solutions assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of Motorola Solutions.

Unless made in a separate agreement between Motorola Solutions and the original end user purchaser, Motorola Solutions does not warrant the installation, maintenance or service of the Product.

Motorola Solutions cannot be responsible in any way for any ancillary equipment not furnished by Motorola Solutions which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment is expressly excluded from this warranty. Because each system which may use the Product is unique, Motorola Solutions disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

### II. GENERAL PROVISIONS

This warranty sets forth the full extent of Motorola Solutions responsibilities regarding the Product. Repair, replacement or refund of the purchase price, at Motorola Solutions option, is the exclusive remedy. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. IN NO EVENT SHALL MOTOROLA SOLUTIONS BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW.

### III. STATE LAW RIGHTS:

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION OR EXCLUSIONS MAY NOT APPLY.

This warranty gives specific legal rights, and there may be other rights which may vary from state to state.

## IV. HOW TO GET WARRANTY SERVICE

You must provide proof of purchase (bearing the date of purchase and Product item serial number) in order to receive warranty service and, also, deliver or send the Product item, transportation and insurance prepaid, to an authorized warranty service location. Warranty service will be provided by Motorola Solutions through one of its authorized warranty service locations. If you first contact the company which sold you the Product (for example, dealer or communication service provider), it can facilitate your obtaining warranty service. You can also call Motorola Solutions at 1-800-927-2744.

## V. WHAT THIS WARRANTY DOES NOT COVER

- 1 Defects or damage resulting from use of the Product in other than its normal and customary manner.
- 2 Defects or damage from misuse, accident, water, or neglect.
- 3 Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.
- 4 Breakage or damage to antennas unless caused directly by defects in material workmanship.
- 5 A Product subjected to unauthorized Product modifications, disassembles or repairs (including, without limitation, the addition to the Product of non-Motorola Solutions supplied equipment) which adversely affect performance of the Product or interfere with Motorola Solutions normal warranty inspection and testing of the Product to verify any warranty claim.
- 6 Product which has had the serial number removed or made illegible.
- 7 Rechargeable batteries if:
  - any of the seals on the battery enclosure of cells are broken or show evidence of tampering.
  - the damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.
- 8 Freight costs to the repair depot.
- 9 A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with Motorola Solutions published specifications or the FCC certification labeling in effect for the Product at the time the Product was initially distributed from Motorola Solutions.
- 10 Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.
- 11 Normal and customary wear and tear.

## VI. PATENT AND SOFTWARE PROVISIONS

Motorola Solutions will defend, at its own expense, any suit brought against the end user purchaser to the extent that it is based on a claim that the Product or parts infringe a United States patent, and Motorola Solutions will pay those costs and damages finally awarded against the end user purchaser in any such suit which are attributable to any such claim, but such defense and payments are conditioned on the following:

- 1 Motorola Solutions will be notified promptly in writing by such purchaser of any notice of such claim,
- 2 Motorola Solutions will have sole control of the defense of such suit and all negotiations for its settlement or compromise, and

- 3 Should the Product or parts become, or in Motorola Solutions opinion be likely to become, the subject of a claim of infringement of a United States patent, that such purchaser will permit Motorola Solutions, at its option and expense, either to procure for such purchaser the right to continue using the Product or parts or to replace or modify the same so that it becomes non-infringing or to grant such purchaser a credit for the Product or parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or parts as established by Motorola Solutions.

Motorola Solutions will have no liability with respect to any claim of patent infringement which is based upon the combination of the Product or parts furnished hereunder with software, apparatus or devices not furnished by Motorola Solutions, nor will Motorola Solutions have any liability for the use of ancillary equipment or software not furnished by Motorola Solutions which is attached to or used in connection with the Product. The foregoing states the entire liability of Motorola Solutions with respect to infringement of patents by the Product or any parts thereof.

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## **VII. GOVERNING LAW**

This Warranty is governed by the laws of the State of Illinois, U.S.A.

# Legal and Compliance Statements

## Supplier's Declaration of Conformity

### Supplier's Declaration of Conformity

Per FCC CFR 47 Part 2 Section 2.1077(a)



#### Responsible Party

Name: Motorola Solutions, Inc.

Address: 1303 East Algonquin Road, Schaumburg, IL 60196-1078, U.S.A.

Phone Number: 1-800-927-2744

Hereby declares that the product:

Model Name: **TLK 150**

conforms to the following regulations:

FCC Part 15, subpart B, section 15.107(a), 15.107(d), and section 15.109(a)

#### Class B Digital Device

As a personal computer peripheral, this device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference, and
- 2 This device must accept any interference received, including interference that may cause undesired operation.



#### NOTICE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or TV technician for help.

For country code selection usage (WLAN devices)



**NOTICE:** The country code selection is for non-US model only and is not available to all US models. Per FCC regulation, all Wi-Fi products marketed in the US must be fixed to US operation channels only.

Wireless Device Country Approvals Regulatory markings, subject to certification, are applied to the device signifying that the radio(s) is/are approved for use in the US. Operation of the device without regulatory approval is illegal.

## Notice to Users

This device complies with Part 15 of the FCC rules per the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.



**CAUTION:** Changes or modifications made to this device, not expressly approved by Motorola Solutions, could void the authority of the user to operate this equipment.

## Disclaimer

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This voice coding Technology is licensed solely for use within this Communications Equipment. The user of this Technology is explicitly prohibited from attempting to decompile, reverse engineer, or disassemble the Object Code, or in any other way convert the Object Code into a human-readable form.

U.S. Pat. Nos. #5,870,405, #5,826,222, #5,754,974, #5,701,390, #5,715,365, #5,649,050, #5,630,011, #5,581,656, #5,517,511, #5,491,772, #5,247,579, #5,226,084 and #5,195,166.

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## Important Safety Information

### ATTENTION!

**This radio is designed to meet General Population usage.** Before using the radio, read the RF Energy Exposure and Product Safety Guide for Mobile Two-Way Radios which contains important operating instructions for safe usage and RF energy awareness and control for Compliance with applicable standards and Regulations.

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range, except for transmission with 5.2 GHz High Power Data Communication System base Station or Relay Station.

|                                                                                     |    |    |    |    |    |    |    |
|-------------------------------------------------------------------------------------|----|----|----|----|----|----|----|
|  | AT | BE | BG | HR | CY | CZ | DK |
|                                                                                     | EE | FI | FR | DE | EL | HU | IE |
|                                                                                     | IT | LV | LT | LU | MT | NL | PL |
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