

# **MXP600 Feature User Guide**

Mobile Release 2023.3

**NOVEMBER 2023** © 2023 Motorola Solutions, Inc. All Rights Reserved.



# Contents

List of Figures	11
List of Tables	12
Declaration of Conformity	13
Preface: Notice to Users (FCC)	1
Notice to Users (Innovation, Science and, Economic Development Canada (ISED))	1
FCC Licensing Information	1
Applying for Canadian License	2
Legal and Compliance Statements	
Intellectual Property and Regulatory Notices	3
ISED WLAN Statement	
Safety Information	4
Chapter 1: Read Me First	5
1.1 Notations Used in This Guide	5
1.2 Feature and Service Availability	5
Chapter 2: Radio and Battery Care	6
2.1 Looking after Your Radio	
2.2 Troubleshooting	6
2.3 Battery Storage	9
2.4 Extending Battery Life	10
2.5 Battery Charging Temperature	10
2.6 Additional Battery Warnings/Cautions	10
2.7 Battery Information	10
Chapter 3: MXP600 Radio Overview	11
3.1 One-Touch Buttons	15
3.1.1 One-Touch Button Features	15
3.1.2 One-Touch Dial	18
Chapter 4: Getting Started	19
4.1 Attaching or Removing the Antenna	
Attaching the Antenna	19
Removing the Antenna	19
4.2 Installing or Uninstalling the MicroSD Card	19
Installing the MicroSD Card	19
Uninstalling the MicroSD Card	
4.3 Installing or Uninstalling the SIM Card	23

Installing the SIM Card	23
Uninstalling the SIM Card	
4.4 Attaching or Removing the Battery	
Attaching the Battery	
Removing the Battery	27
4.5 Charging the Battery	
4.6 Turning Your Radio On or Off	
Turning Your Radio On	
Turning Your Radio Off	
4.7 Unlocking Your Radio	
4.8 Unblocking Your Radio	31
4.9 Holding Your Radio	
4.10 Recommended Wearing Position	
Chapter 5: Display and Keys	35
5.1 Default Home Screen	35
5.2 Soft Key	
5.3 Configurable Idle Screen	
5.4 Home Mode Display Text Message	
5.5 Display Features	
	30
Chapter 6: Status Indications	
6.1 Battery Status Indication.	
•	
6.1 Battery Status Indication	
6.1 Battery Status Indication 6.2 LED Status Indication	
6.1 Battery Status Indication 6.2 LED Status Indication Chapter 7: Icon Indications	
6.1 Battery Status Indication 6.2 LED Status Indication Chapter 7: Icon Indications 7.1 Status Icons	
<ul> <li>6.1 Battery Status Indication</li></ul>	39 40 <b>41</b> 41 45 46
<ul> <li>6.1 Battery Status Indication</li></ul>	
<ul> <li>6.1 Battery Status Indication</li></ul>	39 40 41 41 45 46 47 48
<ul> <li>6.1 Battery Status Indication</li> <li>6.2 LED Status Indication</li> <li>Chapter 7: Icon Indications</li> <li>7.1 Status Icons</li> <li>7.2 Talkgroup Icons Selection</li> <li>7.3 Menu Icons</li> <li>7.4 Text Entry Icons</li> <li>7.5 Messages Icons</li> </ul>	39 40 41 41 45 46 46 47 48 48
<ul> <li>6.1 Battery Status Indication</li> <li>6.2 LED Status Indication</li> <li>Chapter 7: Icon Indications</li> <li>7.1 Status Icons</li> <li>7.2 Talkgroup Icons Selection</li> <li>7.3 Menu Icons</li> <li>7.4 Text Entry Icons</li> <li>7.5 Messages Icons</li> <li>7.5.1 Inbox Icons</li> </ul>	39 40 41 41 45 46 47 48 48 48 49
<ul> <li>6.1 Battery Status Indication</li> <li>6.2 LED Status Indication</li> <li>Chapter 7: Icon Indications</li> <li>7.1 Status Icons</li> <li>7.2 Talkgroup Icons Selection</li> <li>7.3 Menu Icons</li> <li>7.4 Text Entry Icons</li> <li>7.5 Messages Icons</li> <li>7.5.1 Inbox Icons</li> <li>7.5.2 Outbox Icons</li> </ul>	39 40 41 41 45 46 47 48 48 49 50
<ul> <li>6.1 Battery Status Indication</li> <li>6.2 LED Status Indication</li> <li>Chapter 7: Icon Indications</li> <li>7.1 Status Icons</li> <li>7.2 Talkgroup Icons Selection</li> <li>7.3 Menu Icons</li> <li>7.4 Text Entry Icons</li> <li>7.5 Messages Icons</li> <li>7.5.1 Inbox Icons</li> <li>7.5.2 Outbox Icons</li> <li>7.5.3 Call-Out Icons</li> </ul>	39 40 41 41 45 46 46 47 48 48 48 48 50 50 51
<ul> <li>6.1 Battery Status Indication</li> <li>6.2 LED Status Indication</li> <li>Chapter 7: Icon Indications</li> <li>7.1 Status Icons</li> <li>7.2 Talkgroup Icons Selection</li> <li>7.3 Menu Icons</li> <li>7.4 Text Entry Icons</li> <li>7.5 Messages Icons</li> <li>7.5.1 Inbox Icons</li> <li>7.5.2 Outbox Icons</li> <li>7.5.3 Call-Out Icons</li> <li>7.5.4 Radio Messaging System Icons</li> </ul>	39 40 41 41 45 46 47 48 48 48 48 50 50 51
6.1 Battery Status Indication 6.2 LED Status Indication <b>Chapter 7: Icon Indications.</b> 7.1 Status Icons. 7.2 Talkgroup Icons Selection. 7.3 Menu Icons. 7.4 Text Entry Icons. 7.5 Messages Icons. 7.5.1 Inbox Icons. 7.5.2 Outbox Icons. 7.5.2 Outbox Icons. 7.5.3 Call-Out Icons. 7.5.4 Radio Messaging System Icons. 7.5.5 WAP Icon.	39 40 41 41 45 46 47 48 48 49 50 50 51 51 51
<ul> <li>6.1 Battery Status Indication</li> <li>6.2 LED Status Indication</li> <li>Chapter 7: Icon Indications</li> <li>7.1 Status Icons</li> <li>7.2 Talkgroup Icons Selection</li> <li>7.3 Menu Icons</li> <li>7.4 Text Entry Icons</li> <li>7.5 Messages Icons</li> <li>7.5.1 Inbox Icons</li> <li>7.5.2 Outbox Icons</li> <li>7.5.3 Call-Out Icons</li> <li>7.5.4 Radio Messaging System Icons</li> <li>7.6 Bluetooth Icons</li> </ul>	39 40 41 41 45 46 46 47 48 48 48 48 50 50 51 51 51 51 51
<ul> <li>6.1 Battery Status Indication</li> <li>6.2 LED Status Indication</li> <li>Chapter 7: Icon Indications</li> <li>7.1 Status Icons</li> <li>7.2 Talkgroup Icons Selection</li> <li>7.3 Menu Icons</li> <li>7.4 Text Entry Icons</li> <li>7.5 Messages Icons</li> <li>7.5.1 Inbox Icons</li> <li>7.5.2 Outbox Icons</li> <li>7.5.3 Call-Out Icons</li> <li>7.5.4 Radio Messaging System Icons</li> <li>7.5.5 WAP Icon</li> <li>7.6 Bluetooth Icons</li> <li>7.7 Wi-Fi Icons</li> </ul>	39 40 41 41 45 46 47 48 48 48 49 50 50 51 51 51 51 52 53

8.2 Idle Keys	55
8.3 Functions of Keys	55
Chapter 9: General Radio Operation	57
9.1 Writing Text	
9.1.1 Selecting Text Entry Modes	57
9.1.2 Selecting Text Entry Methods and Languages	57
9.1.3 Writing in iTAP Alphanumeric	57
9.1.4 Writing in TAP Alphanumeric	58
9.1.5 Word Locking	59
9.1.6 Adding Words to Dictionary	59
9.2 Locking or Unlocking the Keys or Buttons	
9.3 Selecting Talkgroups	59
9.3.1 Using Timed Talkgroup Change	60
9.3.2 Selecting Talkgroups by Index	60
9.4 High or Low Audio Toggle	60
9.4.1 Using High Audio	61
9.4.2 Using Low Audio	61
Chapter 10: Operation Modes	
10.1 Entering TMO or DMO Mode	
Entering TMO Mode	62
Entering DMO Mode	
10.2 Selecting DMO Communication Options	62
10.3 Enabling Network Monitor	63
10.4 Setting Monitor Option	63
Chapter 11: Types of Radio Calls	64
11.1 Making Calls on the Radio	
11.2 Making Calls from Messages	66
Calling Numbers from Messages	66
Making Group Calls on the Talkgroup of the Message Sender	67
11.3 Receiving Calls on the Radio	67
11.4 Dialing Short Numbers	67
11.5 Viewing the Talkgroup Speed Number	68
11.6 Selecting Talkgroups by Index	68
Chapter 12: Viewing DGNA Talkgroups	69
Chapter 13: Emergency Operations	
13.1 Entering and Exiting Emergency Mode	
Entering Emergency Mode	
Making Emergency Calls	

Initiating Disaster Alert.       73         Chapter 14: Messages.       74         14.1 New Messages.       74         14.1 New Messages.       74         14.1.1 Sending New Messages.       74         14.1.2 Configuring Delivery Reports.       75         14.1.2 Configuring Delivery Reports.       76         14.2.2 Intering the Inbox.       77         14.2.1 Receiving New Messages.       77         14.2.2 Storing Numbers from Messages.       77         14.3 Entering the Outbox.       78         14.4 Using Submenus in the Inbox and Outbox.       78         14.4 Using Submenus in the Inbox and Outbox.       78         14.5 Entering the Call-Out Box.       80         14.6 1 Entering the MB box.       80         14.6 1 Entering the MMS box.       80         14.6 2 Sending RMS Statuses.       80         14.7 Thewing WAP Messages.       81         14.8 User-Defined Templates.       81         14.8 User-Defined Templates.       82         14.9 Predefined Templates.       82         14.9.1 Viewing Predefined Templates.       83         14.9.2 Sending Status Message Number       83         14.10.3 Status Messages.       83         14.10.4 Viewing a Status Message Num	Sending Emergency SDS Status	73
14.1 New Messages.       74         14.1.1 Sending New Messages.       74         14.1.2 Configuring Delivery Reports.       75         14.1.3 Viewing Delivery Reports.       76         14.2 Entering the Inbox.       77         14.2 Entering the Inbox.       77         14.2 Entering the Inbox.       77         14.2 Storing Numbers from Messages.       77         14.2 Storing Numbers from Messages.       77         14.3 Entering the Outbox.       78         14.4 Using Submenus in the Inbox and Outbox.       78         14.4 Using Submenus in the Inbox and Outbox.       78         14.6 Radio Messaging System.       80         14.6.1 Entering the Call-Out Box.       80         14.6.2 Sending RMS Statuses.       80         14.7.1 Viewing WAP Messages.       81         14.8 User-Defined Templates.       81         14.8 User-Defined Templates.       82         14.9 Predefined Templates.       82         14.9 Predefined Templates.       83         14.10 Viewing a Status Message Number       83         14.10.1 Viewing a Status Message.       83         14.10.2 Sending Predefined Templates.       83         14.10.3 Sending Targeted Status Message.       83         14	Initiating Disaster Alert	73
14.1.1 Sending New Messages.       74         14.1.2 Configuring Delivery Reports.       75         14.1.3 Viewing Delivery Reports.       76         14.2 Entering the Inbox.       77         14.2.1 Receiving New Messages.       77         14.2.2 Storing Numbers from Messages.       77         14.3 Entering the Outbox.       78         14.4 Using Submenus in the Inbox and Outbox.       78         14.4 Using Submenus in the Inbox and Outbox.       78         14.5 Entering the Call-Out Box.       80         14.6.1 Entering the RMS Box.       80         14.6.2 Sending RMS Statuses.       80         14.6.1 Statuses       80         14.7.1 Viewing WAP Messages.       81         14.8.1 Sending User-Defined Templates.       81         14.8.2 Sending User-Defined Templates.       82         14.9 Predefined Templates.       82         14.9 Predefined Templates.       83         14.10 Status Messages.       83         14.10.1 Viewing Predefined Templates.       83         14.10.2 Sending Targeted Status Messages       83         14.10.1 Viewing a Status Messages       83         14.10.1 Viewing Targeted Status Messages       84         14.10 Status Messages.       85	Chapter 14: Messages	
14.1.2 Configuring Delivery Reports.       75         14.1.3 Viewing Delivery Reports.       76         14.2 Entering the Inbox.       77         14.2 Entering the Inbox.       77         14.2.1 Receiving New Messages.       77         14.2.2 Storing Numbers from Messages.       77         14.2.2 Storing Numbers from Messages.       77         14.3.2 Entering the Outbox.       78         14.4 Using Submenus in the Inbox and Outbox.       78         14.5 Entering the Call-Out Box.       80         14.6.1 Entering the RMS Box.       80         14.6.2 Sending RMS Statuses.       80         14.6.2 Sending RMS Statuses.       80         14.7.1 Viewing WAP Messages.       81         14.8 User-Defined Templates.       81         14.8.1 Managing User-Defined Templates.       82         14.9 Predefined Templates.       82         14.9.1 Viewing Predefined Templates.       83         14.10 Status Messages.       83         14.10.2 Sending Tredefined Templates.       83         14.10.3 Viewing a Status Messages.       83         14.10.3 Viewing Targeted Status Messages.       83         14.10.1 Viewing a Status Messages.       84         14.10 Status Messages.       85	14.1 New Messages	74
14.1.3 Viewing Delivery Reports       76         14.2 Entering the Inbox       77         14.2 Entering the Inbox       77         14.2.1 Receiving New Messages       77         14.2.2 Storing Numbers from Messages       77         14.3 Entering the Outbox       78         14.4 Using Submenus in the Inbox and Outbox       78         14.4 Using Submenus in the Inbox and Outbox       78         14.5 Entering the Call-Out Box       80         14.6 Radio Messaging System       80         14.6.1 Entering the RMS Box       80         14.6.2 Sending RMS Statuses       80         14.7 Entering the WAP Box       81         14.7.1 Viewing WAP Messages       81         14.7.2 Niewing WAP Messages       81         14.8.1 Managing User-Defined Templates       81         14.8.2 Sending User-Defined Templates       82         14.9 Predefined Templates       82         14.9.1 Viewing Predefined Templates       83         14.10.2 Sending Targeted Status Messages       83         14.10.2 Sending Targeted Status Messages       83         14.10.2 Sending Targeted Status Messages       84         14.11 Managing Additional Address       85         14.12 Setting Contacts       87	14.1.1 Sending New Messages	74
14.2 Entering the Inbox       77         14.2.1 Receiving New Messages       77         14.2.2 Storing Numbers from Messages       77         14.3 Entering the Outbox       78         14.4 Using Submenus in the Inbox and Outbox       78         14.4 Using Submenus in the Inbox and Outbox       78         14.5 Entering the Call-Out Box       80         14.6 Radio Messaging System       80         14.6.1 Entering the RMS Box       80         14.6.2 Sending RMS Statuses       80         14.7 Entering the WAP Box       81         14.7.1 Viewing WAP Messages       81         14.8.1 Managing User-Defined Templates       81         14.8.2 Sending User-Defined Templates       82         14.9 Predefined Templates       82         14.9.1 Viewing Predefined Templates       83         14.10 Status Messages       83         14.10.2 Sending Predefined Templates       83         14.10.2 Sending Targeted Status Messages       83         14.10.2 Sending Targeted Status Messages       83         14.10 Status Messages       83         14.10.2 Sending Targeted Status Messages       84         14.11 Managing Additional Address       85         14.12 Setting Contacts       87	14.1.2 Configuring Delivery Reports	75
14.2.1 Receiving New Messages.       77         14.2.2 Storing Numbers from Messages.       77         14.3 Entering the Outbox.       78         14.4 Using Submenus in the Inbox and Outbox.       78         14.4 Using Submenus in the Inbox and Outbox.       78         14.5 Entering the Call-Out Box.       80         14.6 Radio Messaging System.       80         14.6 Radio Messaging System.       80         14.6 Parting the RMS Box.       80         14.6.1 Entering the WAP Box.       80         14.7 Entering the WAP Box.       81         14.7 I. Viewing WAP Messages.       81         14.8 User-Defined Templates.       81         14.8.1 Managing User-Defined Templates.       82         14.9 Predefined Templates.       82         14.9 Predefined Templates.       82         14.9.1 Viewing Predefined Templates.       83         14.10 Status Messages.       83         14.10 Status Messages.       83         14.10.2 Sending Targeted Status Messages.       83         14.10.3 Sending Targeted Status Messages.       84         14.11 Managing Additional Address.       85         14.12 Setting Contacts.       87         15.1 Creating Contacts.       87         15.2 Ed	14.1.3 Viewing Delivery Reports	
14.2.2 Storing Numbers from Messages       77         14.3 Entering the Outbox       78         14.4 Using Submenus in the Inbox and Outbox       78         14.4 Using Submenus in the Inbox and Outbox       78         14.5 Entering the Call-Out Box       80         14.6 Radio Messaging System       80         14.6.1 Entering the RMS Box       80         14.6.2 Sending RMS Statuses       80         14.7 Entering the WAP Box       81         14.7.1 Viewing WAP Messages       81         14.8.2 Sending User-Defined Templates       81         14.8.1 Managing User-Defined Templates       82         14.9 Predefined Templates       82         14.9 Predefined Templates       82         14.9.1 Viewing Predefined Templates       83         14.10 Status Messages       83         14.10.1 Viewing a Status Messages       83         14.10.2 Sending Status Messages       83         14.10.3 Sending Targeted Status Messages       84         14.11 Managing Additional Address       85         14.12 Setting Contacts       87         15.1 Creating Contacts       87         15.2 Editing Contacts       87         15.4 Deleting Contacts       89         Deleting Contacts	14.2 Entering the Inbox	77
14.3 Entering the Outbox       78         14.4 Using Submenus in the Inbox and Outbox       78         14.5 Entering the Call-Out Box       80         14.6 Radio Messaging System       80         14.6 Radio Messaging System       80         14.6.1 Entering the RMS Box       80         14.6.2 Sending RMS Statuses       80         14.7 Entering the WAP Box       81         14.7.1 Viewing WAP Messages       81         14.8.1 Managing User-Defined Templates       81         14.8.2 Sending User-Defined Templates       82         14.9 Predefined Templates       82         14.9 Predefined Templates       82         14.9.1 Viewing Predefined Templates       83         14.10 Status Messages       83         14.10 Status Messages       83         14.10.2 Sending Status Messages       83         14.10.3 Sending Targeted Status Messages       83         14.10.3 Sending Targeted Status Messages       84         14.11 Managing Additional Address       85         14.12 Setting Contacts       87         15.1 Creating Contacts       87         15.2 Editing Contacts       87         15.4 Deleting Contacts       88         15.4 Deleting Contacts       89 <td>14.2.1 Receiving New Messages</td> <td>77</td>	14.2.1 Receiving New Messages	77
14.4 Using Submenus in the Inbox and Outbox.7814.5 Entering the Call-Out Box.8014.6 Radio Messaging System.8014.6 Radio Messaging System.8014.6.1 Entering the RMS Box.8014.6.2 Sending RMS Statuses.8014.7 Entering the WAP Box.8114.7.1 Viewing WAP Messages.8114.8 User-Defined Templates.8114.8.1 Managing User-Defined Templates.8114.8.2 Sending User-Defined Templates.8214.9 Predefined Templates.8214.9 Predefined Templates.8214.9 Predefined Templates.8314.10 Status Messages.8314.10 Status Messages.8314.10.1 Viewing a Status Message Number.8314.10.2 Sending Status Messages.8314.10.3 Sending Targeted Status Messages.8414.11 Managing Additional Address.8514.12 Setting Contacts.8715.1 Creating Contacts.8715.3 Searching Contacts.89Deleting Contacts.8915.5 Checking Capacity.89	14.2.2 Storing Numbers from Messages	77
14.5 Entering the Call-Out Box.8014.6 Radio Messaging System.8014.6 Radio Messaging System.8014.6.1 Entering the RMS Box.8014.6.2 Sending RMS Statuses.8014.7 Entering the WAP Box.8114.7.1 Viewing WAP Messages.8114.8 User-Defined Templates.8114.8 User-Defined Templates.8114.8.1 Managing User-Defined Templates.8114.8.2 Sending User-Defined Templates.8214.9 Predefined Templates.8214.9 Predefined Templates.8214.9 J. Viewing Predefined Templates.8314.10 Status Messages.8314.10 Status Message Sumber.8314.10.1 Viewing a Status Messages.8314.10.2 Sending Targeted Status Messages.8314.10.3 Sending Targeted Status Messages.8414.11 Managing Additional Address.8514.12 Setting Contacts.8715.1 Creating Contacts.8715.3 Searching Contacts.89Deleting Contacts.89Deleting Contacts.89Deleting Numbers.89Deleting Numbers.8915.5 Checking Capacity.89	14.3 Entering the Outbox	
14.6 Radio Messaging System.8014.6.1 Entering the RMS Box.8014.6.2 Sending RMS Statuses.8014.7 Entering the WAP Box.8114.7 Entering the WAP Box.8114.7.1 Viewing WAP Messages.8114.8.1 Managing User-Defined Templates.8114.8.2 Sending User-Defined Templates.8214.9 Predefined Templates.8214.9 Predefined Templates.8214.9.1 Viewing Predefined Templates.8214.9.2 Sending Predefined Templates.8314.10.3 Viewing Predefined Templates.8314.10.1 Viewing a Status Messages.8314.10.2 Sending Targeted Status Messages.8414.11 Managing Additional Address.8514.12 Setting Call-Out Availability.86Chapter 15: Contacts.8715.1 Creating Contacts.8715.2 Editing Contacts.8815.4 Deleting Contacts.89Deleting Contacts.89Deleting Numbers.8915.5 Checking Capacity.89	14.4 Using Submenus in the Inbox and Outbox	
14.6.1 Entering the RMS Box	14.5 Entering the Call-Out Box	
14.6.2 Sending RMS Statuses8014.7 Entering the WAP Box8114.7.1 Viewing WAP Messages8114.7.1 Viewing WAP Messages8114.8 User-Defined Templates8114.8.1 Managing User-Defined Templates8214.9 Predefined Templates8214.9 Predefined Templates8214.9 Predefined Templates8214.9 Liewing Predefined Templates8214.9.1 Viewing Predefined Templates8314.10 Status Messages8314.10 Status Messages8314.10.2 Sending Status Messages8314.10.3 Sending Targeted Status Messages8414.11 Managing Additional Address8514.12 Setting Call-Out Availability86Chapter 15: Contacts8715.1 Creating Contacts8715.2 Editing Contacts8815.4 Deleting Contacts89Deleting Contacts89Deleting Contacts89Deleting Contacts8915.5 Checking Capacity89	14.6 Radio Messaging System	
14.7 Entering the WAP Box8114.7.1 Viewing WAP Messages8114.8 User-Defined Templates8114.8.1 Managing User-Defined Templates8114.8.2 Sending User-Defined Templates8214.9 Predefined Templates8214.9 Predefined Templates8214.9.1 Viewing Predefined Templates8214.9.2 Sending Predefined Templates8314.10 Status Messages8314.10 Status Messages8314.10.1 Viewing a Status Message Number8314.10.2 Sending Targeted Status Messages8314.11 Managing Additional Address8514.12 Setting Call-Out Availability86Chapter 15: Contacts8715.1 Creating Contacts8715.2 Editing Contacts8815.4 Deleting Contacts89Deleting Contacts89Deleting Contacts8915.5 Checking Capacity89	14.6.1 Entering the RMS Box	80
14.7.1 Viewing WAP Messages8114.8 User-Defined Templates8114.8.1 Managing User-Defined Templates8114.8.2 Sending User-Defined Templates8214.9 Predefined Templates8214.9.1 Viewing Predefined Templates8214.9.2 Sending Predefined Templates8314.10 Status Messages8314.10.1 Viewing a Status Message Number8314.10.2 Sending Status Messages8314.10.3 Sending Targeted Status Messages8314.12 Setting Call-Out Availability86Chapter 15: Contacts8715.1 Creating Contacts8715.2 Editing Contacts8815.4 Deleting Contacts89Deleting Contacts89Deleting Numbers8915.5 Checking Capacity89	14.6.2 Sending RMS Statuses	80
14.8 User-Defined Templates.       81         14.8.1 Managing User-Defined Templates.       81         14.8.2 Sending User-Defined Templates.       82         14.9 Predefined Templates.       82         14.9.1 Viewing Predefined Templates.       82         14.9.2 Sending Predefined Templates.       83         14.10 Status Messages.       83         14.10.1 Viewing a Status Message Number.       83         14.10.2 Sending Status Messages.       83         14.10.3 Sending Targeted Status Messages.       83         14.10.3 Sending Targeted Status Messages.       85         14.12 Setting Call-Out Availability.       86         Chapter 15: Contacts.       87         15.1 Creating Contacts.       87         15.2 Editing Contacts.       88         15.4 Deleting Contacts.       89         Deleting Contacts.       89         Deleting Contacts.       89         Deleting Contacts.       89         Deleting Numbers.       89         15.5 Checking Capacity.       89	14.7 Entering the WAP Box	
14.8.1 Managing User-Defined Templates.8114.8.2 Sending User-Defined Templates.8214.9 Predefined Templates.8214.9.1 Viewing Predefined Templates.8214.9.2 Sending Predefined Templates.8314.10 Status Messages.8314.10.1 Viewing a Status Message Number.8314.10.2 Sending Targeted Status Messages.8314.10.3 Sending Targeted Status Messages.8414.11 Managing Additional Address.8514.12 Setting Call-Out Availability.86Chapter 15: Contacts.15.1 Creating Contacts.8715.2 Editing Contacts.8715.3 Searching Contacts.8815.4 Deleting Contacts.89Deleting Contacts.8915.5 Checking Capacity.89	14.7.1 Viewing WAP Messages	
14.8.2 Sending User-Defined Templates.8214.9 Predefined Templates.8214.9.1 Viewing Predefined Templates.8214.9.2 Sending Predefined Templates.8314.10.2 Sending Predefined Templates.8314.10.1 Viewing a Status Messages.8314.10.2 Sending Status Messages.8314.10.3 Sending Targeted Status Messages.8414.11 Managing Additional Address.8514.12 Setting Call-Out Availability.86Chapter 15: Contacts.8715.1 Creating Contacts.8715.2 Editing Contacts.8815.4 Deleting Contacts.89Deleting Contacts.8915.5 Checking Capacity.89	14.8 User-Defined Templates	
14.9 Predefined Templates.8214.9.1 Viewing Predefined Templates.8214.9.2 Sending Predefined Templates.8314.10 Status Messages.8314.10.1 Viewing a Status Message Number.8314.10.2 Sending Status Messages.8314.10.3 Sending Targeted Status Messages.8414.11 Managing Additional Address.8514.12 Setting Call-Out Availability.86Chapter 15: Contacts.8715.1 Creating Contacts.8715.3 Searching Contacts.8815.4 Deleting Contacts and Numbers.89Deleting Numbers.8915.5 Checking Capacity.89	14.8.1 Managing User-Defined Templates	81
14.9.1 Viewing Predefined Templates.8214.9.2 Sending Predefined Templates.8314.10 Status Messages.8314.10.1 Viewing a Status Message Number.8314.10.2 Sending Status Messages.8314.10.3 Sending Targeted Status Messages.8414.11 Managing Additional Address.8514.12 Setting Call-Out Availability.86Chapter 15: Contacts.8715.1 Creating Contacts.8715.2 Editing Contacts.8715.3 Searching Contacts.8815.4 Deleting Contacts and Numbers.89Deleting Numbers.8915.5 Checking Capacity.89	14.8.2 Sending User-Defined Templates	
14.9.2 Sending Predefined Templates8314.10 Status Messages8314.10.1 Viewing a Status Message Number8314.10.2 Sending Status Messages8314.10.3 Sending Targeted Status Messages8414.11 Managing Additional Address8514.12 Setting Call-Out Availability86Chapter 15: Contacts15.1 Creating Contacts8715.2 Editing Contacts8715.3 Searching Contacts8815.4 Deleting Contacts89Deleting Numbers8915.5 Checking Capacity89	14.9 Predefined Templates	
14.10 Status Messages8314.10.1 Viewing a Status Message Number8314.10.2 Sending Status Messages8314.10.3 Sending Targeted Status Messages8414.11 Managing Additional Address8514.12 Setting Call-Out Availability86Chapter 15: Contacts8715.1 Creating Contacts15.2 Editing Contacts8715.3 Searching Contacts8815.4 Deleting Contacts89Deleting Numbers8915.5 Checking Capacity89	14.9.1 Viewing Predefined Templates	
14.10.1 Viewing a Status Message Number.8314.10.2 Sending Status Messages.8314.10.3 Sending Targeted Status Messages.8414.11 Managing Additional Address.8514.12 Setting Call-Out Availability.86Chapter 15: Contacts.8715.1 Creating Contacts.15.2 Editing Contacts.8715.3 Searching Contacts.8715.4 Deleting Contacts and Numbers.89Deleting Numbers.8915.5 Checking Capacity.89	14.9.2 Sending Predefined Templates	
14.10.2 Sending Status Messages.       83         14.10.3 Sending Targeted Status Messages.       84         14.11 Managing Additional Address.       85         14.12 Setting Call-Out Availability.       86         Chapter 15: Contacts.         87       15.1 Creating Contacts.         15.2 Editing Contacts.       87         15.3 Searching Contacts.       88         15.4 Deleting Contacts and Numbers.       89         Deleting Contacts.       89         15.5 Checking Capacity.       89	14.10 Status Messages	
14.10.3 Sending Targeted Status Messages       84         14.11 Managing Additional Address       85         14.12 Setting Call-Out Availability       86         Chapter 15: Contacts         15.1 Creating Contacts       87         15.2 Editing Contacts       87         15.3 Searching Contacts       88         15.4 Deleting Contacts       89         Deleting Numbers       89         15.5 Checking Capacity       89	14.10.1 Viewing a Status Message Number	
14.11 Managing Additional Address.       85         14.12 Setting Call-Out Availability.       86         Chapter 15: Contacts.       87         15.1 Creating Contacts.       87         15.2 Editing Contacts.       87         15.3 Searching Contacts.       88         15.4 Deleting Contacts       89         Deleting Contacts.       89         15.5 Checking Capacity.       89	14.10.2 Sending Status Messages	
14.12 Setting Call-Out Availability.       86         Chapter 15: Contacts.       87         15.1 Creating Contacts.       87         15.2 Editing Contacts.       87         15.3 Searching Contacts.       88         15.4 Deleting Contacts and Numbers.       89         Deleting Contacts.       89         15.5 Checking Capacity.       89	14.10.3 Sending Targeted Status Messages	
Chapter 15: Contacts.8715.1 Creating Contacts.8715.2 Editing Contacts.8715.3 Searching Contacts.8815.4 Deleting Contacts and Numbers.89Deleting Contacts.89Deleting Numbers.8915.5 Checking Capacity.89	14.11 Managing Additional Address	85
15.1 Creating Contacts	14.12 Setting Call-Out Availability	86
15.2 Editing Contacts	Chapter 15: Contacts	
15.3 Searching Contacts	15.1 Creating Contacts	
15.4 Deleting Contacts and Numbers	15.2 Editing Contacts	87
Deleting Contacts	15.3 Searching Contacts	88
Deleting Numbers	15.4 Deleting Contacts and Numbers	
15.5 Checking Capacity	Deleting Contacts	
	Deleting Numbers	
15.6 Dialing through the Contact List90	15.5 Checking Capacity	
	15.6 Dialing through the Contact List	

Chapter 16: Pictures	
16.1 Starting the Picture Browser	
16.2 Navigating in Multi-Picture View	91
16.3 Navigating in Full Screen View	
16.4 Managing Comments in Pictures	
Chapter 17: Man Down (Fall Alert)	93
17.1 Setting Man Down (Fall Alert)	
17.2 Exiting Man Down (Fall Alert)	
Chapter 18: Security	
18.1 Selecting Key Index	
18.2 Managing PIN Protect	94
Protecting the Radio with a PIN Code	94
Changing PIN Codes	
18.3 Managing Keypad Lock	
Locking Keypad	95
Unlocking Keypad	
Setting Automatic Keylock Delay	
Setting Keylock on Startup	96
18.4 Managing Air Encryption	96
Viewing Air Encryption State	96
Deleting User Keys	
18.5 Verify Key Validity	96
18.6 Setting Covert Mode	
Activating Covert Mode	
Setting Vibrate in Covert Mode	
18.7 Setting Remote Control	98
Chapter 19: Setup	99
19.1 Setting Detail Vibrate	
19.2 Setting Ring Style	100
19.3 Setting Volume	100
19.4 Setting Language	101
19.5 Setting Data Function	101
19.6 Setting Audio	102
19.7 Setting Tones	103
19.8 Setting Display	
19.9 Setting Time and Date	106
19.10 Setting Energy Economy	108
19.11 Selecting Transmission Power Class	

19.12 Selecting Accessory Setup	109
19.13 Editing Book On Settings	
19.14 Setting Rotary Knob	
19.15 Entering Car Kit Settings	111
19.16 Changing the USB Settings Mode	112
19.17 Selecting Default Setting	113
Chapter 20: Bluetooth	114
20.1 Enabling Discoverable Mode	
20.2 Adding Bluetooth Devices	
20.3 Configuring Bluetooth Settings	114
20.4 Pairing Bluetooth Devices with Your Radio	
20.5 Pairing with Devices Using NFC Tag	115
20.6 Connecting Devices	
20.7 Disconnecting Devices	
20.8 Managing Devices	116
20.9 Setting Indoor Location	117
20.10 Viewing Detected Beacons	117
Chapter 21: Browser	118
21.1 Using the Browser	
Setting Up Data	
Entering the Browser	
Entering Browser Menu Panes	118
Exiting the Browser	
21.2 Tips for Browsing	119
21.2.1 Creating Bookmarks Using the Navigate Pane	
21.2.2 Creating Bookmarks Using the Bookmarks Pane	119
21.2.3 Downloading Pages Using Bookmarks	119
21.2.4 Creating Hotkeys	120
21.2.5 Downloading Pages Using Hotkeys	
21.2.6 Saving Pages for Offline Browsing	120
21.2.7 Selecting Saved Pages	
21.3 Managing Bookmarks	121
21.4 Managing Saved Pages	121
21.5 Managing Documents	
21.6 Searching for Visited URLs	122
21.7 Inserting URLs	
Chapter 22: Group Setup	123
22.1 Operation Parameters	

22.1.1 Determining Radio Mode At Radio Startup	
22.1.2 Determining Talkgroup At Radio Startup	
22.1.3 Determining Talkgroup When Switching Mode	124
22.1.4 Configuring Home Group	
22.2 Scan	
22.2.1 Activating Talkgroup Scanning	
22.2.2 Setting Talkgroups in the Active Scan List	
22.2.3 Setting Scan Lists	126
22.2.4 Deleting Talkgroups from Scan Lists	
22.3 My Groups	126
22.3.1 Adding Favorite Folders	
22.3.2 Adding Talkgroups to Favorite Folders	127
22.3.3 Editing My Folder List	127
22.3.4 Deleting Talkgroups from Favorite Folders	127
Chapter 23: Individual Setup	
23.1 Enabling or Disabling Call Waiting	
23.2 Setting Call Forwarding	128
Chapter 24: Favorites	129
24.1 Adding Folders to Favorites	
24.2 Adding Contact Numbers to Favorites	
24.3 Making Private Calls to Favorite Contacts	
24.4 Adding Talkgroups to Favorites	130
24.5 Managing Folders in Favorites	130
24.6 Deleting Items from Favorites Folder	
Deleting Single Items	
Deleting All Items	
Chapter 25: My Info	132
25.1 Viewing Personal Information	
25.2 Viewing Talkgroup Subaddresses	133
25.3 Formatting the MicroSD Card	
Chapter 26: Recent Calls	134
26.1 Viewing Recent Calls	
26.2 Calling from Recent Calls	
26.3 Storing Recent Calls into the Contact List	135
26.4 Deleting Recent Calls	135
Chapter 27: Shortcuts	
27.1 Creating Menu Shortcuts	
27.2 Managing Menu Shortcuts	

Chapter 28: Logging On or Off Radio User Identity	138
Logging On Radio User Identity	
Logging Off Radio User Identity	
Chapter 29: Networks	139
29.1 Selecting Network Operation Mode	139
29.2 Network Select	
29.2.1 Selecting Your Network	
29.2.2 Using Select Net Registration	140
29.2.3 Using Any Network Registration	140
29.3 Enabling Automatic DMO	
29.4 Talkgroup Network Select	141
29.4.1 Selecting Your Talkgroup Network	141
29.4.2 Using Select TG Net Registration	141
29.4.3 Using Prefer TG Net Registration	141
29.4.4 Using Any TG Net Registration	
Chapter 30: Location	143
30.1 Enabling GPS or GNSS	143
30.2 Viewing Your Position	143
30.3 Viewing the Testpage	144
30.4 Changing Location Accuracy	145
30.5 Backlog	145
30.5.1 Enabling or Disabling Backlog	145
30.5.2 Viewing Backlog Reports	146
30.5.3 Deleting All Backlog Reports	
Chapter 31: Packet Data	147
31.1 Viewing Data Statistics	147
31.2 Viewing Encryption Status	147
Chapter 32: Crypto Menu	148
32.1 Enabling or Disabling SIM Card End-to-End Encryption	
32.2 Setting Clear Call Alarm	
32.3 Updating Encryption Keys	
32.4 Viewing OPTA	
32.5 Setting the OPTA Filter	149
32.6 Starting Crypto Registration	149
32.7 Turning Encrypted Audio On or Off	
32.8 Setting DMO Encryption Mode	150
32.9 Selecting Encryption Keys for SDS	150
Chapter 33: Wi-Fi	151

33.1 Turning Wi-Fi On or Off	151
Turning Wi-Fi On	151
Turning Wi-Fi Off	151
33.2 Connecting to Networks Through Scan	151
33.3 Connecting to Networks Through Network List	152
33.4 Viewing Network Information	152
33.5 Viewing the MAC Address	152
33.6 Viewing Certificate Enrollment Status	153
Chapter 34: Over The Air Programming	154
34.1 Receiving LMR OTAP Update	154
34.2 Managing LMR OTAP	
34.3 Receiving Non-Mandatory Wi-Fi OTAP Update	154
34.4 Receiving Mandatory Wi-Fi OTAP Update	155
34.5 Managing Wi-Fi OTAP	155
Chapter 35: Contact Address	

# **List of Figures**

Figure 1: MXP600 Front View.	
Figure 2: MXP600 Side and Back View	13
Figure 3: MXP600 Top and Bottom View	14
Figure 4: Desktop Charger	
Figure 5: Car Charger	29
Figure 6: Travel Charger	
Figure 7: Recommended Wearing Position	
Figure 8: Wearing Position to Avoid	34
Figure 9: Default Home Screen with Icons	
Figure 10: Grid view and list view of the Main Menu	
Figure 11: Charger Mode Screen	39

# **List of Tables**

Table 1: Special Notations	5
Table 2: Displayed Messages	6
Table 3: Battery Information	
Table 4: Front View Description	11
Table 5: Side and Back View Description	13
Table 6: Top and Bottom View Description	14
Table 7: One-Touch Button Features	15
Table 8: Colors of the Soft Key Area	
Table 9: Soft Key Changes During a Call	
Table 10: Battery Icons	39
Table 11: LED Status Indication	40
Table 12: Trunked Mode Operation (TMO) Icons	41
Table 13: Direct Mode Operation (DMO) Icons	41
Table 14: General Icons	42
Table 15: TMO Talkgroup Icons	45
Table 16: DMO Talkgroup Icon and General Icons	46
Table 17: Menu Icons	46
Table 18: Text Entry Mode Icons	47
Table 19: Text Entry Method Icons	48
Table 20: Inbox Icons	48
Table 21: Outbox Icons	
Table 22: Call-Out Icons	50
Table 23: Radio Messaging System (RMS) Icons	51
Table 24: Wireless Application Protocol (WAP) Icon	51
Table 25: Bluetooth Icons	51
Table 26: Wi-Fi Signal Strength Icons	52
Table 27: Contact Types	53
Table 28: Alphanumeric and Symbol Keys	54
Table 29: Description of Idle Keys	55
Table 30: Functions of Keys	55
Table 31: Messaging Features	74

## **Declaration of Conformity**

Per FCC CFR 47 Part 2 Section 2.1077(a)



#### **Responsible Party**

Name: Motorola Solutions, Inc.

Address: 2000 Progress Pkwy, Schaumberg II, 60196.

Phone Number: 1-800-927-2744

Hereby declares that **MXP600** conforms to 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.



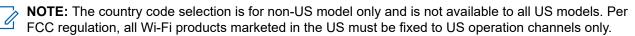
#### NOTE:

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)



MN006360A01-AL Declaration of Conformity

#### Preface

## **Notice to Users (FCC)**

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

- This device may not cause harmful interference.
- The device must accept any interference received, including interference that may cause undesired operation.
- Changes or modifications made to this device, not expressly approved by Motorola Solutions, could void the authority of the user to operate this equipment.

## Notice to Users (Innovation, Science and, Economic Development Canada (ISED))

The operation of your Motorola Solutions radio is subject to the Radiocommunications Act and must comply with rules and regulations of the Federal Government's department of Industry Canada. Industry Canada requires that all operators using Private Land Mobile frequencies obtain a radio license before operating their equipment.

## **FCC Licensing Information**

This device complies with Parts 90 and 15 of the Federal Communications Commission (FCC) Rules.

Operation is subject to the condition that this device does not cause harmful interference. The radio operates on radio frequencies that are regulated by the Federal Communications Commission (FCC). To transmit on these frequencies, you are required to have a license issued by the FCC. Application is made available on FCC Form 601 and Schedules D, H, and Remittance Form 159.

To obtain these FCC forms, request document 000601 which includes all forms and instructions. If you wish to have the document faxed, mailed, or have questions, use the following contact information.

#### Fax

Contact the Fax-On-Demand system at 1-202-418-0177

#### Mail

Call the FCC forms hotline at 1-800-418-FORM or 1-800-418-3676

#### Contact

For questions regarding FCC license, contact 1-888-CALL-FCC, 1-888-225-5322, or http://www.fcc.gov.

Before filling out your application, you must decide which frequency you can operate on. For questions on determining the radio frequency, call Motorola Solutions Product Services at: 1-800-448- 6686. Changes or modifications not expressly approved by Motorola Solutions may void the user authority granted by the FCC to operate this radio and should not be made. To comply with FCC requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services.

Replacement of any transmitter component such as crystal, semiconductor, and others not authorized by the FCC equipment authorization for this radio could violate FCC rules.



**NOTE:** Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.

# **Applying for Canadian License**

The operation of your Motorola Solutions radio is subject to the Radio communications Act and must comply with rules and regulations of the Federal Government's department of Industry Canada. Industry Canada requires that all operators using Private Land Mobile frequencies obtain a radio license before operating their equipment.

Prerequisites: Obtain the latest Canadian License Application form at http://www.ic.gc.ca/ic\_wp-pa.htm.

#### Procedure:

1. Fill in the items as per the instructions. Be sure to print legibly.

If you need additional space for any item, use the reverse side of the application.

- 2. Make a copy of your files.
- **3.** Prepare a cheque or money order payable to the "Receiver General for Canada", for an amount for each radio purchased.

The license is renewed on April 1st each year, and issued for a period of 12 months.

**4.** Mail your completed application along with your cheque or money order to the closest Industry Canada District office.

## **Legal and Compliance Statements**

## **Intellectual Property and Regulatory Notices**

### Copyrights

The Motorola Solutions products described in this document may include copyrighted Motorola Solutions computer programs. Laws in the United States and other countries preserve for Motorola Solutions certain exclusive rights for copyrighted computer programs. Accordingly, any copyrighted Motorola Solutions computer programs contained in the Motorola Solutions products described in this document may not be copied or reproduced in any manner without the express written permission of Motorola Solutions.

No part of this document may be reproduced, transmitted, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, without the prior written permission of Motorola Solutions, Inc.

### Trademarks

MOTOROLA, MOTO, MOTOROLA SOLUTIONS, and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners.

### **License Rights**

The purchase of Motorola Solutions products shall not be deemed to grant either directly or by implication, estoppel or otherwise, any license under the copyrights, patents or patent applications of Motorola Solutions, except for the normal non-exclusive, royalty-free license to use that arises by operation of law in the sale of a product.

### **Open Source Content**

This product may contain Open Source software used under license. Refer to the product installation media for full Open Source Legal Notices and Attribution content.

## European Union (EU) and United Kingdom (UK) Waste of Electrical and Electronic Equipment (WEEE) Directive



The European Union's WEEE directive and the UK's WEEE regulation require that products sold into EU countries and the UK must have the crossed-out wheelie bin label on the product (or the package in some cases). As defined by the WEEE directive, this crossed-out wheelie bin label means that customers and end-users in EU and UK countries should not dispose of electronic and electrical equipment or accessories in household waste.

Customers or end-users in EU and UK countries should contact their local equipment supplier representative or service centre for information about the waste collection system in their country.

### Disclaimer

Please note that certain features, facilities, and capabilities described in this document may not be applicable to or licensed for use on a specific system, or may be dependent upon the characteristics of a specific mobile subscriber unit or configuration of certain parameters. Please refer to your Motorola Solutions contact for further information.

#### © 2023 Motorola Solutions, Inc. All Rights Reserved

## **ISED WLAN Statement**

### CAUTION:

- **1.** The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.
- **2.** The maximum antenna gain permitted for devices in the bands 5250–5350 MHz and 5470–5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit.
- **3.** The maximum antenna gain permitted for devices in the band 5752–5850 MHz shall be such that the equipment still complies with e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate.
- **4.** The worst case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in Section 6.2.2 (3) shall be clearly indicated.
- **5.** User should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250–5350 MHz and 5650–5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

## **Safety Information**

### RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios

#### ATTENTION!

**This radio is restricted to Occupational use only.** Before using the radio, read the RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios that contains important operating instructions for safe usage and RF energy awareness and control for Compliance with applicable standards and Regulations.

For a list of Motorola Solutions-approved antennas, batteries, and other accessories, visit the following website:

#### http://www.motorolasolutions.com

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter has been approved by Industry Canada to operate with Motorola Solutions-approved antenna with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

### **Chapter 1**

## **Read Me First**

This user guide covers operating basic functions and other features of your radio. You can refer to the Product Information Manual for further information on the features.

### <sup>1.1</sup> Notations Used in This Guide

This guide is designed to give you more visual cues. The following graphic icons are used throughout the user guide.

**DANGER:** The signal word DANGER with the associated safety icon implies information that, if disregarded, will result in death or serious injury.

**WARNING:** The signal word WARNING with the associated safety icon implies information that, if disregarded, could result in death or serious injury, or serious product damage.

**CAUTION:** The signal word CAUTION with the associated safety icon implies information that, if disregarded, may result in minor or moderate injury, or serious product damage.

**ATTENTION:** The signal word CAUTION may be used without the safety icon to state potential damage or injury that is not related to the product.

**IMPORTANT:** IMPORTANT statements contain information that is crucial to the discussion at hand, but is not CAUTION or WARNING. There is no warning level associated with the IMPORTANT statement.

**NOTE:** NOTICE contains information more important than the surrounding text, such as exceptions or preconditions. They also refer the reader elsewhere for additional information, remind the reader how to complete an action (when it is not part of the current procedure, for instance), or tell the reader where something is on the screen. There is no warning level associated with a notice.

The following special notations highlight certain information:

Example	Description
Menu key or PTT button	Bold words indicate a name of a key, button, or soft menu item.
Entering TMO tone	Italic words indicate a name of the tone.
Powering Off	Typewriter words indicate the MMI strings or mes- sages displayed on your radio.
Setup $\rightarrow$ Tones $\rightarrow$ All Tones	Bold words with the arrow between indicate navi- gation structure in the menu items.

#### **Table 1: Special Notations**

## <sup>1.2</sup> Feature and Service Availability

This user guide covers all available features and services for your radio. Your service provider can customize the radio to suit your individual needs. To find out the available features and services for the radio, check with your service provider.

### Chapter 2

## **Radio and Battery Care**

Proper usage and care of your radio and battery ensure efficient operation and long life of the product.

#### 2.1

## Looking after Your Radio

Never leave your radio or battery in extreme temperatures, for example, behind a windscreen in direct sunlight. Your radio is submersible (compliant with the IP68 standard) – but only with the battery and the antenna attached. To clean your radio, use a moistened or antistatic cloth.

### NOTE:

- Ensure that no contamination is on the Gore<sup>™</sup> Port membrane, that is the area labeled as **VENT** on the back of your radio chassis.
- It is recommended to use Universal Connector Dust Cover (Motorola Solutions part number: PMHN4429\_) if your radio is deployed near the seaside or salt water area, when it is without any audio accessory attached on it.

## <sup>2.2</sup> Troubleshooting

Your radio displays the following messages:

Message	Message Description
Attachment Failed	Your radio could not perform talkgroup attachment. It keeps on trying. If it does not succeed, try another talkgroup.
Authenticate Failure	Your radio could not register on an authenticated system (for example, the Authentication Key is incorrect, or authentication is disabled).
Call Barred	The call is barred due to Barred Incoming Call or Barred Out- going Call Profile.
Call Canceled	You have canceled the call.
Call Ended	<ul><li>Faulty channel. Please try later.</li><li>You have ended the call.</li></ul>
Call Forwarding	The radio you are trying to call is not available and the call is being forwarded to another radio.
Call Modified	The call you are participating in has been modified.
Cert. not enrolled	Check for Wi-Fi update triggered from Menu failed because the required certificate is not enrolled on your radio. Contact your service provider.
Call Preempted	Channel being used for priority.

#### Table 2: Displayed Messages

Message	Message Description
Check for Updates Failed	Check for Wi-Fi update triggered from Menu failed. Contact your service provider.
Decryption Failed:	An error occurred while decrypting a message or call.
Emergency In Use	The Hot Microphone feature is active, but the channel transmit
Wait For Mic	grant has been given to another Emergency call on the same talkgroup. Your radio microphone is not active during this time, but it automatically tries to regain talk permit after a predeter- mined time.
Emgcy Mic Ended	The Hot Microphone timer automatically expired, or you pressed the <b>PTT</b> button to cancel the Hot Microphone feature.
Emergency Mic On	The Hot Microphone feature is active, and your radio is auto- matically transmitting hands free emergency audio.
Empty Entry	The speed number you dialed do not exist, or the number exists but the group is non-selectable.
Faulty Unit	Self-test failed. An operational fault has been detected with
Error	your radio. Record the error number. Turn your radio off and contact service.
File cannot be received,	The file cannot be received because the memory for its stor-
storage unavailable	age is inaccessible. See File Storage Not Available.
File Invalid	The picture you are trying to open is damage.
File Storage Not Available <b>or</b> No Picture Storage	Memory for file storage is inaccessible. Possible reasons: the microSD card is formatted incorrectly or is not installed at all, the internal radio memory is damaged, there is not enough available space to save a file, your radio is connected to a computer in the USB Mass Storage mode, or you try start the Picture Browser when the USB mode is set to <b>PEI</b> .
Gateway available	Your radio has connected to a gateway.
Gateway not available	Your radio cannot connect to a gateway, or connection has been lost.
Invalid Battery	The radio detects non-Motorola Solutions batteries and prompts you on battery authentication. This message is prompted upon power-up, with a tone.
Individual Calls Only	You can make only individual (private) calls.
Invalid ID	The entered number is not valid.
Limited Service	Emergency Calls, Emergency Alarms, and mobility operations (for example, group attachment) are allowed. All other incoming and outgoing call and data services are blocked.
List Empty	There are no programmed entries in the scrolling list. Type the entry.
List Not Attached	All talkgroups in the scan list are not attached.
List Partially Attached	The scan list is active, but not all talkgroups are attached to it.
Low Battery	The battery charge level is too low to perform the required operation.

Message	Message Description	
Message Delivered	Indicates mail successfully delivered.	
Message Failed	Indicates mail delivery failure.	
My Groups	You cannot view/delete groups when the My Groups folder	
Is Empty	empty.	
My Groups	You are not allowed to add a group to the My Groups folder	
Is Full	as it already contains the maximum allowed number of groups	
Network Trouble	Network problems. Please try again later.	
New Delivery Status	You have received a new Delivery Status.	
No Service	Your radio is outside coverage. Return to coverage.	
Not allowed in repeater mode	The service or feature is not available in the Repeater Mode.	
No Answer	The called party does not answer.	
No Entries	This message is displayed when accessing an empty list.	
No Group	• Attachment failed. Your radio detached from current talk- group. Please wait until it attaches again to the current talkgroup.	
	• Displayed when you are out of the normal coverage area of your selected talkgroup. Please select a new talkgroup that is valid for your working location.	
	<ul> <li>Indicates that a favorite group was removed from the My Groups folder.</li> </ul>	
No List	The network list is empty.	
No New or Old Messages	Indicates that there are no new or old messages in the <b>Inbox</b> .	
No Selected Scan List	You selected an empty network list.	
No Service	Your radio is out of coverage.	
Not Allowed To Initiate Call	You are not allowed to dial a number that is not in the address book.	
Not Allowed To Transmit	Release the <b>PTT</b> button and try again later. You are not allowed to send a text message or a status message to a number that is not in the address book.	
Overheating, Please Turn Ra- dio Off	Your radio turns off. Keep it turned off for 5 minutes.	
Party Busy	Called radio is busy.	
Party Not Available	Called radio is out-of-range or turned off. Please try again later.	
Please Try Again	You could not call.	
Please Wait Connecting	A message during startup.	

Message	Message Description
Radio time not updated	Check for Wi-Fi update triggered from Menu failed because radio time is not set. Update your radio time to the current date and time. If error still occurs, contact service.
Registration Failure	Your radio could not register within the system. Please try again later.
Repeater available	Your radio has connected to a repeater.
Repeater not available	Your radio cannot connect to a repeater, or connection has been lost.
SD card is not available	The microSD card is damaged or missing (only applies to radios that support microSD cards).
Service Denied	Invalid number. Call your service provider.
Service Not Available	This service is not available on the current network.
Service Restricted	• This service or feature is restricted by your service provider, it has not been purchased, or it is not available.
	<ul> <li>Check for Wi-Fi update triggered from Menu failed be- cause there is an in-progress LMR OTAP job. Complete the LMR OTAP job before trying again.</li> </ul>
Single TalkGroup Only	There is only one programmed entry in the scrolling list.
TalkGrp cannot be deleted	Your service provider set this group so you cannot delete it from the favorite talkgroup folder.
This group already exists	The group you are attempting to add exists in the <b>My Groups</b> folder.
Try Again Later	The requested service is temporarily unavailable.
Unit is OK	Self-test error. A minor fault has been detected. Your radio is
Warn:	still fully operative. If this error recur, note the error code and contact service.
Unit Not Attached	Your radio could not attach to the system. The talkgroup may not be defined in the system. Please try another group.
Warning SD card not formatted correctly	The microSD card installed in your radio is not formatted cor- rectly. To format it, contact your service provider.
Warning: Space for less than 10 picture signatures left!	Radio internal memory is running out of space and no more than 10 Digital Fingerprints can be saved.
Wi-Fi not connected	Check for Wi-Fi update triggered from Menu failed because radio is not connected to any Wi-Fi access point.
Not enough space to store picture signature!	Radio internal memory is full and no Digital Fingerprint can be saved.

# <sup>2.3</sup> Battery Storage

New Lithium-Ion batteries can be stored in ventilated, cool, and dry areas with some capacity loss in the life cycle.

Charge the battery if the battery is to be stored for a long period of time. Do not store a fully discharged battery.

Remove the battery pack from your radio if your radio is not to be used for a long period of time (few weeks).

# Extending Battery Life

A battery is an expendable part and needs replacing during the life of your radio.

To ensure maximum service life of your radio, always replace the battery with a genuine Motorola Solutions replacement.

#### 2.5

## **Battery Charging Temperature**

The temperature range of battery operation is from 0°C to +45°C in charger mode. During charging, if the temperature is out of range, the battery might not be fully charged as the charging is temporarily stopped until the temperature becomes suitable.

## 2.6 Additional Battery Warnings/Cautions

- To prevent injury, do not allow metal objects to touch the battery contacts.
- Do not disassemble.
- Do not throw in fire.
- Do not dispose of battery in household waste.
- Keep battery away from children.
- Defective battery cannot be reused. In accordance with the national regulation, the defective battery must be disposed of in an environmentally friendly manner.

# <sup>2.7</sup> Battery Information

#### **Table 3: Battery Information**

Battery Model	Normal Voltage	Minimum Ca- pacity	Typical Capacity	Weight
PMNN4801_	3.7 Vd.c	1750 mAh	1900 mAh	61.0 g
PMNN4802_	3.8 Vd.c	3200 mAh	3400 mAh	90.5g
PMNN4582_	3.7 Vd.c	2800 mAh	2900 mAh	92.5 g

**NOTE:** Certain radio models supports Hot Swap feature. Contact your Motorola Solutions dealer or supplier to learn more about the Hot Swap feature and the supported radio models.

### **Chapter 3**

## **MXP600 Radio Overview**

Familiarize yourself with the buttons and functions on your radio.

The MXP600 radio specifications are available at https://www.motorolasolutions.com/mxp600radio.

#### Figure 1: MXP600 Front View



#### **Table 4: Front View Description**

Annotation	Name	Description
1	Display	Features a high resolution of 240 x 320 pixels and 65,536 colors. Supports scalable fonts and high colored images.
2	Top Microphone	Activated in Simplex and high-audio calls such as Group Calls.
3	Earpiece	The earpiece is active in low-audio Duplex calls. The earpiece allows you to hear voice from low-au- dio calls.

Annotation	Name	Description	
4	Soft Key	The <b>Left</b> or <b>Right</b> soft key selects the option displayed above the key.	
5	Menu Key	• From the home screen, press to enter the main menu.	
		Used to enter context-sensitive menus.	
6	Navigation Key	To navigate throughout the interface up, down, left, and right.	
7	On/Off/End/Home Key	Press and hold to turn on or off your radio.	
		Press to end calls.	
		• Press to return to the home screen.	
8	Send Key	<ul> <li>Press to initiate or answer Duplex calls, or send messages.</li> </ul>	
		<ul> <li>From the home screen, press to enter Recent Dialed Calls.</li> </ul>	
9	Keypad	Enters alphanumeric characters for dialing, contact entries, and text messages. The keys (0–9, *, and #) support the One-Touch Button feature. Press and hold a key to activate a one-touch function assigned to it.	
10	Bottom Microphone	Activated in Duplex and low-audio calls such as Private Calls.	
11	Backlight Sensor	The backlight sensor measures ambient light inten- sity. When the display backlight is active and a low light condition is detected, the keypad is illumina- ted.	
12	Speaker	The speaker is active in high-audio Simplex calls. The speaker allows you to hear voice from high- audio calls.	

### Figure 2: MXP600 Side and Back View



#### Table 5: Side and Back View Description

Annotation	Name	Description
13	Programmable Button	<b>Programmable</b> buttons support the One-Touch Button feature.
		NOTE: The required time to press and hold a button to activate a One-Touch But- ton feature is by default set to 0.1 second.
14	Near-Field Communication Tag	Near-Field Communication (NFC) key exchange allows your radio to seamlessly pair with approved Motorola Solutions Bluetooth accessories.
15	Push-To-Talk Button (PTT)	Press and hold to talk in Simplex calls. Release it to listen.
16	GCAI-Mini Connector	Provides connection with accessories.
		<b>NOTE:</b> Turn off your radio before connect- ing accessories.
17	Antenna	Transmits or receives Radio Frequency (RF) sig- nals.
18	Rotary Knob	Rotate to set the volume.

Annotation	Name	Description
		• Press and rotate to select a different talkgroup.
19	Back Microphone	Activated during Simplex and high-audio calls such as Group Calls. The back microphone allows op- tional noise cancellation.
20	Battery	Provides battery power for your radio.
21	Battery Latch	Locks or unlocks the battery.
22	RF Connector Dust Cover	Reduces the ingress of dust and dirt

### Figure 3: MXP600 Top and Bottom View



### Table 6: Top and Bottom View Description

	Name	Description
23	Emergency Button	Press and hold the <b>Emergency</b> button to start Emergency Operations. By default, when your ra- dio is turned off, press and hold to power on in Emergency Operations.
24	LED Status Indicator	Shows the status of your radio. See LED Status Indication on page 40.
25	Bottom Connector	Used for charging and programming your radio, and connecting data transfer cables.

## 3.1 **One-Touch Buttons**

The One-Touch Button (OTB) feature allows you to activate a feature by a long key press of the programmable button.

**NOTE:** You can also assign features to the option buttons of RSM accessories.

### 3.1.1 **One-Touch Button Features**

Feature	Description
Activation of Covert Mode	Turns Covert Mode on or off.
Add Bluetooth Device	Activates scanning for Bluetooth devices.
Any Network	Selects any network.
Any Talkgroup Network	Selects any talkgroup network.
Bluetooth Smart Proximity Pairing	Activates scanning for Bluetooth Smart Proximity Pairing.
Change Audio Profile	Changes to the specific audio profile.
Change Talkgroup	Changes the talkgroup to the one programmed by your service provider.
Disconnect All Connected Bluetooth Devices	Disconnects all Bluetooth devices connected to your radio.
Display Bluetooth Generic Attribute Profile (GATT) Sen- sors Battery Levels	Displays the battery levels of all paired Bluetooth GATT-based sensor devices.
Display GATT Service Data	Displays the GATT-based sensor data.
Display Heart Rate	Displays the heart rate value received from the connected GATT-based heart rate sensor.
Display Operational-Tactical Address (OPTA)	Displays the OPTA.
DMO Pre-emptive Short Da- ta Service (SDS)	Sends the next DMO SDS or status message with elevated priority.
Flip Display	Rotates the display by 180°. Flip Display is the default function for the upper <b>Side</b> button.
Home Only	Selects only home network.
Home Talkgroup on Home Network	Selects only home network and home talkgroup network.
Inactive One Touch Key 0	The one-touch function assigned to the <b>0</b> key remains inactive until you long press the button twice.
	<b>NOTE:</b> A single long press on the <b>0</b> button calls out the <b>+</b> symbol.
Initiate Call-Out Fallback	Sends a Call-Out Fallback Alert.

#### **Table 7: One-Touch Button Features**

Feature	Description
Location Information Proto- col (LIP) Report	Sends a message with the location of your radio to a dedicated address or Selected Talkgroup (DMO Only).
Lock to Current Network	Selects the current network only.
Phone and Private Automat- ic Branch Exchange (PABX) Call Setup	Initiates a PABX call to a predefined entry in the contact list.
Phone Call Setup	Initiates a phone call to a predefined entry in the contact list.
Prefer Talkgroup Network Shortcut	Displays the Prefer Talkgroup Network menu.
Private Call Setup	Initiates a simplex or duplex private call to a predefined entry in the contact list or to the last group call originator.
Reset to Default	Resets your radio to its default settings.
Radio Messaging System (RMS) Man-Machine Inter- face (MMI) Menu	Opens the RMS menu without activating RMS mode.
RMS Mode Activation or De- activation	Toggles the RMS feature on or off.
Radio User Identity (RUI) Log On or Log Off	Toggles the RUI feature of your radio.
Scan for Bluetooth Devices	Activates scanning for Bluetooth devices after the OTB assigned to the Add Bluetooth Device function is pressed.
Select Talkgroup Network Shortcut	Displays the Select Talkgroup Network menu.
Selecting Audio Profiles	Changes the audio profile of your radio.
Send Double Push PTT Tone (D-PTT)	Sends the D-PTT tone to the currently used talkgroup.
Send Predefined Template (PDT)	Sends a predefined message to a dedicated address.
Send Status Message	Sends a dedicated status message to a dedicated address.
Send User-Defined Tem- plate (UDT)	Sends a user-defined message to a dedicated address.
Speaker Enable or Disable per Call	Enables or disables the loudspeaker for a duration of the ongoing call.
Switch to Previously Selec- ted Talkgroup	Changes the talkgroup of your radio to the previously selected talkgroup (DMO or TMO).
SIM Card End-to-End En- cryption	Enables or disables End-to-End Encryption on the SIM card.
Timed Talkgroup Change	Makes a predefined talkgroup the selected talkgroup for a specified amount of time. While you are using the predefined talkgroup, the second press of the One-Touch Button results in:
	<ul> <li>your radio returns to the original talkgroup.</li> </ul>

Feature	Description
	<ul> <li>your radio restarts the timer before returning to the previously selec- ted talkgroup.</li> </ul>
	<ul> <li>no action on your radio, depending on the configuration.</li> </ul>
	After the timer expires, your radio returns to the previously selected talk- group.
Toggle Backlight	Toggles the backlight on or off.
Toggle Backlight Intensity         Regulates the backlight intensity.	
Toggle Bluetooth Discovera- ble Mode	Turns Discoverable Mode on or off.
Toggle Bluetooth GATT Sen- sor MMI Alerts	Toggles Bluetooth GATT Sensor MMI Alerts on or off.
Toggle BSI Encryption Ena- bled or Disabled	Enables or disables BSI encryption.
Toggle Call Forwarding	Toggles Call Forwarding on or off.
Toggle Car Kit Speaker Per- manent On or Off	Permanently turns the Car Kit speaker on or off.
Toggle DMO or TMO	Toggles between TMO and DMO modes.
Toggle Extra Zoom	Turns Extra Zoom on or off.
Toggle Hi or Low Audio	Toggles audio between the external earpiece and the main speaker. Hi or Low Audio is the default function for the lower <b>Side</b> button. This feature is supported in emergency Full Duplex Private Calls (FDPC) mode. Press the One-Touch Button to toggle high or low audio state during incoming or outgoing emergency FDPC.
Toggle Horn and Lights	Toggles the horn and lights indication. Available only in Car Kit mode if the Horn and Light feature is enabled.
Toggle Howling Suppression	Enables or disables Howling Suppression.
Toggle Man Down (hence- forth known as Fall Alert) On or Off	Turns the Man Down (Fall Alert) feature on or off.
Toggle RF Power Class	Toggles the RF Power Class between high and normal.
Toggle Remote Speaker Mi- crophone (RSM) with Ear- piece	Activates or deactivates the RSM earpiece.
Toggle Screen Saver	Activates or deactivates the Screen Saver feature.
Toggle Speaker During Call	Enables or disables the loudspeaker during a call. Available only in Car Kit mode.
Toggle Talkgroup Scan	Turns the Talkgroup Scan feature in TMO Mode on or off.
Toggle Transmit Inhibit Mode (TXI)	Turns TXI on or off.
Turn Bluetooth Indoor Loca- tion On or Off	Activates Bluetooth Indoor Location.
Turn Bluetooth On or Off	Turns Bluetooth on or off.

Feature	Description
Turn Repeater Mode On or Off	Turns Repeater Mode on or off.
Unassigned	Your radio displays Unassigned Button when no feature is assigned to this button.
Universal Time Display	Displays universal time on the home screen.
Volume Down	Decreases the volume by one level.
Volume Up	Increases the volume by one level.
Wi-Fi	Turns Wi-Fi connection on or off.

### 3.1.2 **One-Touch Dial**

The One-Touch Dial feature allows you to call by pressing and holding one of the numeric keys, 1–9. If you press an unassigned key, your radio displays a negative indication message.



**NOTE:** If the One-Touch Button feature is disabled, One-Touch Dial is disabled as a consequence. In RMS mode, the One-Touch Button feature is disabled.



### **Chapter 4**

## **Getting Started**

Familiarize yourself with basic information on how to use the radio.

#### 4.1

## **Attaching or Removing the Antenna**

**NOTE:** Use only the antenna intended for your radio. Using other antennas can result in significant range loss due to poor Radio Frequency (RF) performance.

## **Attaching the Antenna**

#### **Procedure:**

- 1. Insert the threaded base of the antenna into the antenna terminal on top of your radio.
- 2. Turn the antenna clockwise until tight.

## **Removing the Antenna**

#### **Procedure:**

- 1. Turn the antenna anticlockwise.
- 2. Remove the antenna from your radio.

#### 4.2

## Installing or Uninstalling the MicroSD Card

**NOTE:** Applicable only for SD Card model.

The microSD card slot has a delicate construction. You must avoid installing or uninstalling the microSD card unnecessarily as this action can damage the mechanism of the reader. For copying files from your radio, you can use the USB Mass Storage Mode.

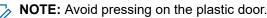
## Installing the MicroSD Card

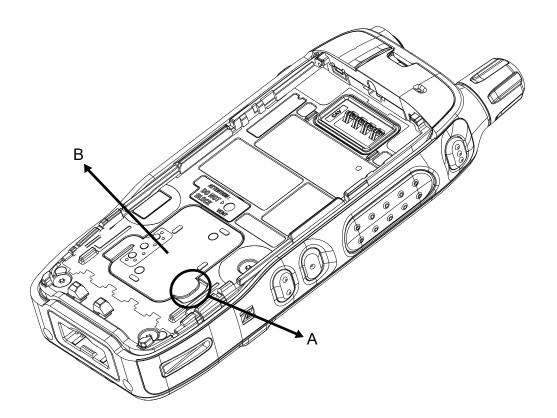
#### **Prerequisites:**

Your radio is equipped with a microSD card slot.

#### Procedure:

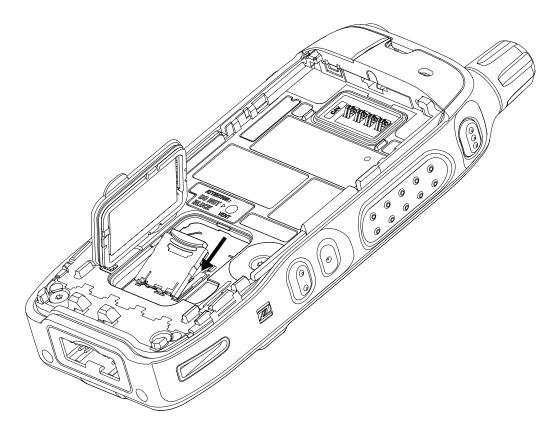
- 1. Remove the battery.
- 2. Flip open the plastic door from the finger scoop area.



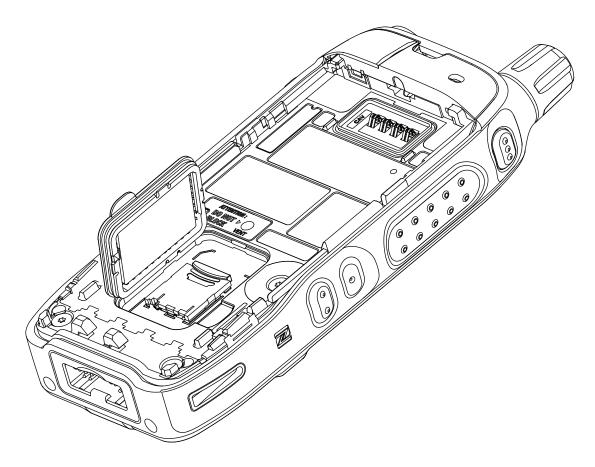


Annotation	Description
A	Finger Scoop Area
В	Plastic door

- **3.** Flip open the microSD card holder.
- **4.** Insert the microSD card into the microSD card holder ensuring that the gold contact area is facing down.



5. Close the microSD card holder and slide it to the lock position.



- 6. Close the plastic door.
- 7. Install the battery.

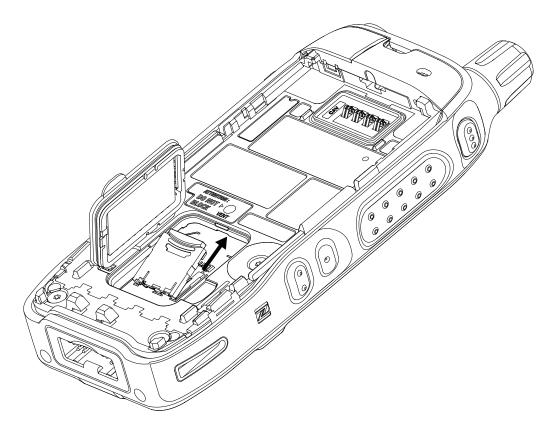
## Uninstalling the MicroSD Card

#### Procedure:

- **1.** Remove the battery.
- 2. Flip open the plastic door from the finger scoop area.

**NOTE:** Avoid pressing on the plastic door.

- **3.** Flip open the microSD card holder.
- 4. Remove the microSD card from the microSD card holder.



- 5. Close the microSD card holder and slide it to the lock position.
- 6. Close the plastic door.
- 7. Install the battery.

#### 4.3

# Installing or Uninstalling the SIM Card

- **NOTE:** Applicable only for SIM Card model.
  - The SIM card slot has a delicate construction. You must avoid installing or uninstalling the SIM card unnecessarily as this action can damage the mechanism of the reader. For copying files from your radio, you can use the USB Mass Storage Mode.

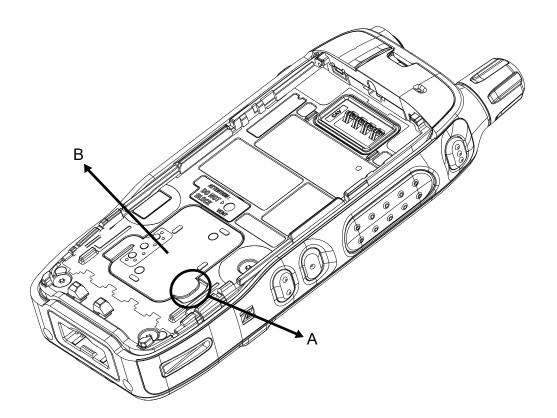
### Installing the SIM Card

Prerequisites: Your radio is equipped with a SIM card slot.

#### Procedure:

- 1. Remove the battery.
- 2. Flip open the plastic door from the finger scoop area.

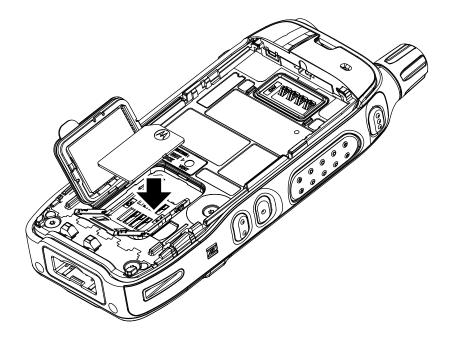
> NOTE: Avoid pressing on the plastic door.



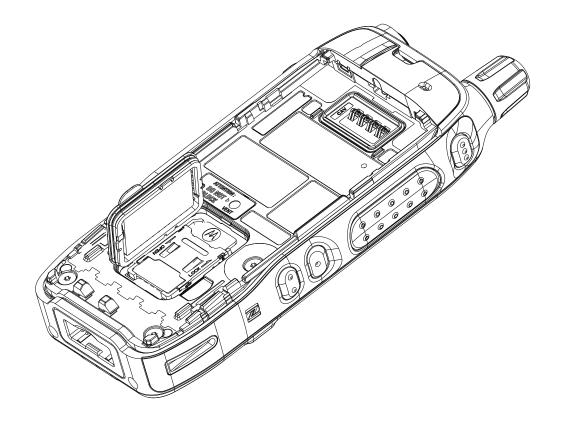
Annotation	Description	
A	Finger Scoop Area	
В	Plastic door	

**3.** Flip open the SIM card holder.

4. Place the SIM card into the SIM card holder ensuring that the gold contact area is facing down.



5. Close the SIM card holder and slide it to the lock position.



6. Close the plastic door.

7. Install the battery.

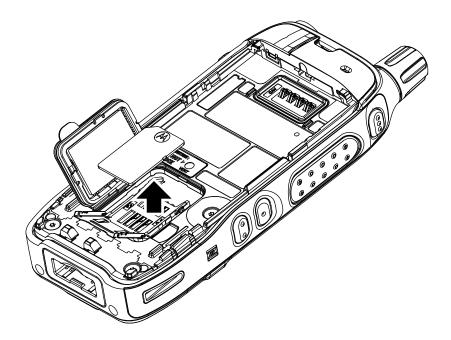
### **Uninstalling the SIM Card**

#### **Procedure:**

- 1. Remove the battery.
- 2. Flip open the plastic door from the finger scoop area.

**NOTE:** Avoid pressing on the plastic door.

- 3. Flip open the SIM card holder.
- 4. Remove the SIM card from the SIM card holder.



- 5. Close the SIM card holder and slide it to the lock position.
- 6. Close the plastic door.
- 7. Install the battery.

# Attaching or Removing the Battery

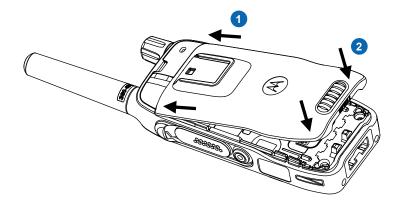
Familiarize yourself on attaching or removing the battery to or from your radio.

## **Attaching the Battery**

#### Procedure:

1. Insert battery into the compartment until the contacts align and the battery hooks in place.

2. Press down the battery until it clicks in place.



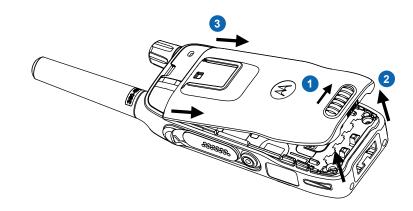
### **Removing the Battery**

#### Prerequisites:

Turn off your radio.

#### Procedure:

- 1. Slide the **Battery Latch** to the right and hold it.
- 2. Lift the battery.
- 3. Remove the battery from the compartment.





**NOTE:** Pressing the latch while slide will cause battery hard to be removed.

### 4.5 Charging the Battery

#### MPORTANT:

Use only Motorola Solutions-approved chargers, which provide optimal performance. Using other chargers may fail to fully charge, or can reduce the life of the battery.

Do not charge the battery in a hazardous area.

Do not connect a radio without a battery to the charger.

You can charge a battery separately or attached to your radio. Turn on your radio only if the radio is transmitting data wirelessly such as when using the Wi-Fi. Otherwise, your radio must be turned off.

Your radio is configurable to turn on automatically after you insert the battery. You can configure this functionality using the Customer Programming Software (CPS).

You can also configure your radio to turn on automatically after you disconnect it from the charger. This functionality is configurable using the CPS. When your radio is disconnected from the charging unit, it will automatically turn on.

NOTE: The Auto-Power On feature is not available for disconnection from the Car Kit.

#### Procedure:

1. Connect the charger to a power source according to the specification of the charger.

**NOTE:** The charger must be connected to a power outlet that is nearby and easily accessed.

Option	Actions
Using desktop chargers or Multi-Unit chargers	<ul> <li>Insert the battery or your radio with a battery into the slot of the charger.</li> </ul>
	<b>b.</b> Ensure that the battery or radio is connected to the charger.
	<b>c.</b> When charging the battery only, ensure that the LED indication on the charger shows that charging is in progress.
	d. When charging the battery through a device, ensure that the LED indication on the device shows that charging is in progress.
Using travel or car chargers	<b>a.</b> Connect the charger to your radio with the battery attached.
	<ul> <li>Ensure that your radio indicates that charging is in progress.</li> </ul>

2. Depending on the type of charger, use one of the following options:

#### Figure 4: Desktop Charger



Figure 5: Car Charger



#### Figure 6: Travel Charger



**NOTE:** If the LED of a Multi-Unit Charger (MUC) blinks red when charging, you must reinsert your radio. If the LED still blinks red after several reconnections to MUC, the battery may be damaged or have reached end of life.

#### **Postrequisites:**

The battery can heat up when charging. After charging and before using your radio, ensure that the battery and your radio are in the operating temperature range.

### 4.6 Turning Your Radio On or Off

Familiarize yourself on how to turn on or turn off your radio.

## **Turning Your Radio On**

#### Procedure:

Press and hold the **On** key.

#### **Result:**

Your radio performs a self-check and registration routine. After successful registration, your radio is in service.

**NOTE:** If Covert Mode is activated, your radio turns on without visible and audible notification.

### **Turning Your Radio Off**

#### Procedure:

Press and hold the Off key.

#### 4.7

## **Unlocking Your Radio**

For radios with general PIN authentication, the PIN length is a fixed 4-digit code. For radios with BSI and SECTRA PIN authentication, the PIN length is configurable by your service provider up to a maximum of an 8-digit code. The number of attempts for unlocking is three times for both BSI and SECTRA PIN Authentication.

**Prerequisites:** Your radio displays Unit Locked Enter Code.

#### Procedure:

Enter the PIN code at the prompt.

Result: Your radio enters the default home display.

- >> NOTE: If you are unable to unlock your radio:
  - For radios with general PIN authentication, you can only send or receive Emergency Calls and adjust the volume level with the **Rotary Knob**.
  - For radios with BSI PIN authentication, you cannot take any action.
  - The default value of the PIN is 0000.
  - The number of attempts for unlocking is three times.

#### 4.8

## **Unblocking Your Radio**

If you have entered the incorrect PIN code for more than three times (by default), use the PIN Unblocking Key (PUK) to unblock your radio.

The PUK is a master code provided by your service provider. For radios with general PUK authentication, the PUK length is a fixed 8-digit code.

For radios with BSI and SECTRA PIN authentication, the PIN length is configurable by your service provider up to a maximum of an 8-digit code. The number of attempts for unblocking is 10 times for both BSI and SECTRA PIN Authentication.

Prerequisites: Your radio displays Unit Blocked Enter PUK.

#### Procedure:

1. Enter the PUK code at the prompt.

Your radio displays the PIN code prompt.

2. Enter the PIN code at the prompt.

If your service provider enables the PIN change option, you can change your PIN code. You must enter your new PIN code twice to change the PIN code.



**NOTE:** For SECTRA Radio, once PIN is unblocked by providing the correct PUK, entering new PIN is required.

### 4.9 Holding Your Radio

Your radio has three microphones. The top microphone is for simplex dispatcher or private calls. The bottom microphone is for duplex calls. The third microphone is at the back of your radio for the optional noise cancellation feature.

#### Procedure:

Depending on the purpose, hold your radio accordingly to the following options:

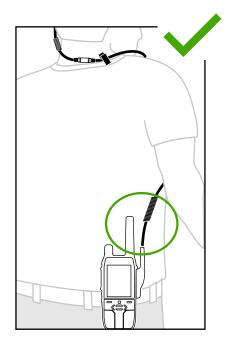
Option	Actions
Simplex Calls	<ul> <li>When using high audio, hold your radio vertically with the top microphone 5–10 cm away from your mouth.</li> <li>Speak into the ten microphone</li> </ul>
	<ul><li>Speak into the top microphone.</li><li>Listen through speaker.</li></ul>
5−10 cm	<ul> <li>Keep the antenna at least 2.5 cm from your head and body.</li> </ul>
Duplex Calls 2.5 cm	<ul> <li>When using low audio, hold your radio as you would hold a phone.</li> </ul>
	Speak into the bottom microphone.
( M)S	Listen through the earpiece.
	<ul> <li>Keep the antenna at least 2.5 cm from your head and body.</li> </ul>
Lapel or Shoulder Use	• For Group and Private Calls, turn your head towards your shoulder or lapel, and speak into the top micro-phone.
C B	• Listen through the speaker.
Speakerphone Use	Place your radio 30–60 cm away from you.
→ 30-60 cm	<ul> <li>In a noisy environment, move the radio closer to you for better transmission.</li> </ul>

### 4.10 Recommended Wearing Position

If an accessory is attached to your radio, you can optimize the performance of the antenna by the way you wear your radio with the accessory.

For optimized antenna performance, you must ensure that the accessory cable is away from the antenna of your radio.

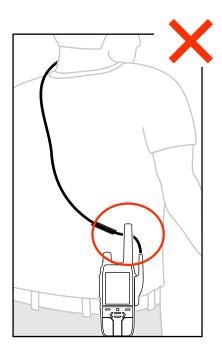
#### Figure 7: Recommended Wearing Position



Avoid overlapping the accessory cable with the antenna of your radio.

MN006360A01-AL Chapter 4: Getting Started

#### Figure 8: Wearing Position to Avoid



#### **Chapter 5**

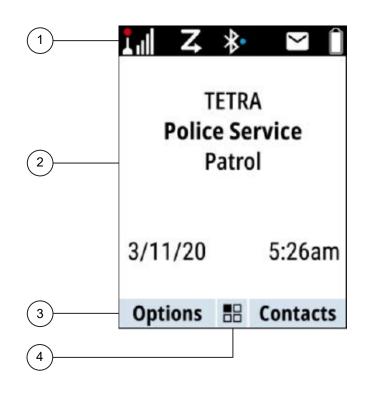
# **Display and Keys**

Familiarize yourself with the default home screen and keys elements of your radio.

#### 5.1

### **Default Home Screen**

Figure 9: Default Home Screen with Icons



Annotation	Description
1	Status icon area
2	Text display area
3	Soft key area
4	Menu/Context sensitive icon

### 5.2 Soft Key

#### Table 8: Colors of the Soft Key Area

The colors of the Soft key area change according to the mode the radio is in.

Color	Mode or State
Light Blue	Normal TMO and DMO Modes
Orange	Emergency Mode
Purple	Local Site Trunking Mode
Yellow	Call Out – Standby
Red	Call Out – Alert
Green	Call Out – Accepted
Pale Blue	Radio Messaging Service (RMS)
Gray	Radio User Identity (RUI) or Radio User Assignment (RUA)

#### Table 9: Soft Key Changes During a Call

During a call, label of the right Soft Key indicates the next possible change. Accessory default setup is:

Soft Key Label	Audio Setting	
Spkr	Audio goes to the main speaker (Speaker HIGH is displayed)	
Erpce	Audio goes to the earpiece (Speaker LOW is displayed)	
PHF	Audio goes to the Personal Hands Free (Speaker LOW is displayed)	

### 5.3 Configurable Idle Screen

Your service provider can configure the information that is displayed on the idle screen below the status icon area.

The displayed information depends on your radio configuration and services supported.

- Audio Profile Name
- BSI Registration Status
- Home Mode
- Individual Short Subscriber Identity (ISSI)
- International Talkgroup Link Alias
- Network (No Service, or Mobile Country Code (MCC)/Mobile Network Code (MNC), or Networks Alias)
- Operational-Tactical Address (OPTA)
- Radio Status
- Range
- RMS/FMS
- Scan List Alias
- Secondary Talkgroup Alias
- Talkgroup Alias
- Time and Date

Order and visibility of these items are also subject of the Configurable Idle Screen settings. Depending on the font size and icon bar, the idle screen displays three or four lines of information. By default, the information displayed on your idle screen are as follows:

#### Line 1

Network (No Service, or Mobile Country Code (MCC)/Mobile Network Code (MNC), or Networks Alias)

#### Line 2

Selected Group Folder

#### Line 3

Selected Group

#### Line 4, 5

Home Mode Display Text (if available)

#### 5.4

## Home Mode Display Text Message

Your radio is provided with a feature that allows your service provider to send special text messages to the display.

The message is limited to 24 characters. The message stays on the home screen until a new home mode display message is received. Power cycle your radio to replace the Home Display message to the predefined one.

### 5.5 Display Features

Your radio utilizes colors to highlight certain special situations:

- When your radio is in an emergency mode/call.
- When in the call-out mode (alert received state, standby state, accept the state).
- In the Radio User Assignment (RUA)/Radio User Identity (RUI), when you are logged on or pseudo logged on.

If the display flip is provisioned, your radio can reverse the direction of the display. Hence, the display can be read when holding your radio upside down.

Your radio has three levels of font size that you can choose using the menu.

The Main Menu has two display formats. You can choose to view the Main Menu items in a list or in grid icons. Navigate through the Main Menu using the navigation keys (**Up**, **Down**, **Left**, and **Right** buttons). A handle scrollable bar appears when Main Menu items span the display view.

#### Figure 10: Grid view and list view of the Main Menu



Backlight on/off toggling setting applies according to your selected audio profile setting. The backlight can be provisioned to operate in one of the following modes:

#### Default

The backlight on/off state follows the generic configuration.

#### Semi-Auto

Pressing a provisioned One-Touch Button toggles the on/off state of the backlight. The backlight is also turned off automatically when the backlight timer runs out.

#### Auto

Pressing any key automatically turns on the backlight.

#### Disabled

The backlight is disabled for a dimmed display.

The backlight remains on until the backlight timer runs out, or if a provisioned One-Touch Button is pressed to turn it off. You can also toggle between the modes using the menu. The backlight modes are assigned using the configuration tool, and the setting is applied according to the user profile.

Your radio supports an option to display a screen saver when your radio has been idle for a set time, or when you explicitly activate it. The screen saver consists of an image, which can be provisioned from any GIF image, a text string which can also be provisioned, and the date and time. When the screen saver is being displayed, any key input or incoming service causes the screen saver to deactivate.

#### **Chapter 6**

# **Status Indications**

Familiarize yourself with the status indications of your radio.

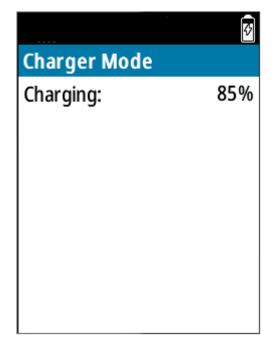
#### 6.1

## **Battery Status Indication**

Your radio indicates low battery level by playing an audible alert when the battery charge falls to a preset level. The low battery alert can be programmed to be 5, 10, or 20 % of remaining capacity by your service provider. The default setting is 5 %. The service provider also configures how frequently the alert repeats.

When your radio is charging, it displays the Charger Mode screen. The screen displays an appropriate Battery Charge Progress icon and charging progress expressed in percentage.

#### Figure 11: Charger Mode Screen



#### Table 10: Battery Icons

0%–5%	5%–15%	15%–25%	25%-40%	40%–60%	60%–80%	80%–100%
Battery Capacity						
					1	Î
Battery Charging						
•	J	J		M	0	Ø

### 6.2 **LED Status Indication**

#### **Table 11: LED Status Indication**

Indication	Status when Not Charging	Status when Charging
Solid green	<ul><li>In use</li><li>Repeating call</li></ul>	Battery is fully charged
Blinking green	<ul><li>In TMO service or idle</li><li>Switching modes from TMO to DMO</li></ul>	Battery is charged at 90%
Solid red	Out of service	Rapid charge
Blinking red	<ul><li>Connecting to a network</li><li>Switching modes from DMO to TMO</li></ul>	Faulty or invalid battery
Solid orange	<ul> <li>Radio is powering on</li> <li>Transmit inhibit mode in service</li> <li>Channel busy in DMO</li> <li>Radio interference in DMO</li> </ul>	Not applicable
Blinking orange	Incoming private or phone call	Battery is on standby to rapid charge
No indication	<ul><li>Radio powered off</li><li>Radio in Covert Mode</li></ul>	Not applicable

When you charge your radio in a multi-unit charger and the battery is at the 90–100% charge level, the LED indicators on your radio and on the multi-unit charger differs:

- LED on your radio blinking green.
- LED on the multi-unit charger solid green.

If you insert your radio with a deeply discharged battery into the multi-unit charger, the LED on your radio shows blinking red, indicating a charging error. Resolve this error by reinserting your radio.

#### Chapter 7

# **Icon Indications**

Familiarize yourself with the icons on your radio.

# 7.1 Status Icons

Status icons appear when your radio is engaged in certain activities or when you have activated certain features.

Depending on your service provider settings, status icons can appear in normal or large size. By default, they are large on the home screen and normal when browsing though your radio menu.

Table 12:	Trunked	Mode	Operation	(TMO	) Icons
-----------	---------	------	-----------	------	---------

lcon	Name	Description	
	In Service	Transmission is available.	
Ĩ	No Service	Transmission is not available.	
ıll	Signal Strength	The more bars, the stronger the signal.	
HU .11	RF Power	High Radio Frequency (RF) Power is enabled. The more bars, the stronger the signal.	
Δ	Migration	Your radio is registered to a foreign network.	
Î,	Broadcast Call	Your radio is in a Broadcast Call.	
Z	Scan	Talkgroup scanning is activated on your radio.	
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Packet Data or Mul- ti-Slot Packet Data (MSPD)	<ul> <li>The more blue sections on the icon, the faster the data transfer.</li> <li>Four gray sections – Context activated and data idle.</li> <li>One blue section – Packet Data is active.</li> <li>Two blue sections – Multi-Slot Packet Data is active.</li> </ul>	

#### Table 13: Direct Mode Operation (DMO) Icons

lcon	Name	Description	
	In Service	The connection status of your radio to a gateway.	
_		<ul> <li>Solid – Your radio is linked to a gateway.</li> </ul>	
		<ul> <li>Blinking – Your radio is not linked to a gateway.</li> </ul>	
.11	Direct Mode Call	Your radio is receiving a Direct Mode call. The more bars, the stronger the signal.	
<b>H</b> 1	High RF Power: re- ceiving	The High RF Power option is enabled. Your radio is re- ceiving a call.	

lcon	Name	Description
<b>₽</b>	Direct Mode	Your radio is in Direct Mode, a radio-to-radio communica- tion.
	Repeater Mode	Your radio is operating as a repeater in Repeater Mode. This icon blinks when the radio is in Repeater Back- ground Mode.
R	DMO Repeater	The <b>Repeater</b> option in DMO Mode is selected.
	Communication Mode	<ul> <li>Solid – Your radio detects the repeater. For example, your radio receives a presence signal.</li> </ul>
		<ul> <li>Blinking – Your radio does not detect the repeater yet or attachment is happening.</li> </ul>
		<ul> <li>No icon – Radio-to-radio and gateway communica- tion.</li> </ul>
		The <b>GW + Rep</b> option in DMO Mode is selected.
		<ul> <li>Solid – Your radio detects the repeater and the repeater icon is solid. Your radio detects the gateway and the <b>In Service</b> icon is solid. For example, your radio receives a presence signal.</li> </ul>
	Automatic DMO Mode Enabled	Indicates that Automatic DMO is enabled.
R	Automatic DMO Mode Disabled	Indicates that Automatic DMO is disabled.

#### Table 14: General Icons

lcon	Name	Description	
Ň	All Ring Tones Off	• The volume is set to zero when <b>Volume Adj. Mode</b> is set to <b>Common</b> .	
		<ul> <li>Both Simplex and Duplex ring volume is set to zero when Vol- ume Adj. Mode is set to Individual.</li> </ul>	
<b>*</b>	Simplex Ring Muted	The Simplex ring volume is set to zero.	
		<ul> <li>Duplex ring volume is set to more than zero.</li> </ul>	
(#	Duplex Ring Muted	The Duplex ring volume is set to zero.	
		<ul> <li>The Simplex ring volume is set to more than zero.</li> </ul>	
,ŧ	Vibrate Only	To alert you of an incoming message, your radio vibrates.	
,ŧ	Vibrate then Ring	To alert you of an incoming message, your radio vibrates and then rings.	
	Low Audio	The audio is set to a minimum level.	
		<b>NOTE:</b> You can set different icons (A to E) for audio profiles.	

lcon	on Name Description		
$\mathbf{D}$	High Audio	The audio is set to a maximum level.	
		<b>NOTE:</b> You can set different icons (A to E) for audio profiles.	
	Permanent Disable in Car Kit.	Audio is disabled in the car kit.	
	Earpiece Connected	An earpiece is connected to your radio.	
	GNSS (Global Navi-	• Solid – Your radio detects a fixed location.	
	gation Satellite Sys- tems)	<ul> <li>Blinking – Your radio is acquiring a fixed location. This feature is an optional setting and may not be enabled on your radio.</li> </ul>	
<b>&amp;</b>	RUI Pseudo Log On	You are in pseudo log on state.	
≡¢	RUI Packet Data	You are in pseudo log on state when the Packet Data feature is activated and an active data session is in progress.	
<b></b>	RUI Packet Data	You are in pseudo logged on state when the Packet Data feature is activated and the external device sets up data connection with your radio.	
]	Battery Strength	The remaining power level of your battery.	
<i>ō</i>	Battery Charging	The battery is charging.	
	Emergency	Your radio is in Emergency Operation.	
		<ul> <li>Solid – The Emergency Operation starts.</li> </ul>	
		Blinking – Your radio is in emergency receiving state.	
4	Disaster Alert Call	Your radio is in a Disaster Alert Call.	
Q	List Scrolling	The Rotary Knob is in list scrolling mode.	
Ł	New Message Has Arrived	Your radio receives a new message.	
$\sim$	New Message in In- box	You have unread messages in your inbox.	
۲	Unread WAP Mes- sage	A new page is loaded to the browser.	
ka	Man Down (hence- forth known as Fall Alert) Active	The Man Down (Fall Alert) feature is active on your radio.	
*	Man Down Alert (Fall Alert)	<ul> <li>Blinking – Your radio is in a Pre-Alert mode and signals Man Down (Fall Alert) conditions.</li> </ul>	
		Solid – Your radio enters the Alert mode.	
*	Man Down (Fall Alert) Failure	The Man Down (Fall Alert) device failed.	

lcon	Name	Description
	Call-Out	Indicates Call-Out alert.
Ł	Call-Out Alert Ar- rived	Your radio receives a new Call-Out message.
	Call-Out Alert Un- read	You have unread alerts in the <b>CO Box</b> .
<b>Q</b>	Indoor Location En- abled	Indicates that Indoor Location operation is enabled.
9	Indoor Location Sus- pended	Indicates that Indoor Location operation is temporarily suspended.
Ø	Secure Operation	Solid – Your radio is operating in a secure channel.
		Blinking – Your radio is receiving an encrypted voice call.
Ø	Encryption Off	Blinking – SIM Card End-to-End Encryption is disabled in DMO and TMO.
Δ	SIM End-to-End En- cryption in TMO	SIM Card End-to-End Encryption is enabled in TMO.
	SIM End-to-End En- cryption in DMO	SIM Card End-to-End Encryption is enabled in DMO. Numbers <b>1</b> and <b>2</b> indicate the selected type of DMO encryption keys.
<b>√</b>	SDS End-to-End En- cryption	A Short Data Service (SDS) message or message recipient address is encrypted.
		In High Security mode, when your radio only processes encrypted information. This icon is always visible when you are in the messages menu such as <b>Inbox</b> .
$\oplus$	Unread (New) WAP Message	You have not entered <b>WAP Box</b> since the last WAP message received.
		Blinking – The priority is high.
A	Keys Locked	Indicates that keys are locked.
I	Non-Secured Call in TMO	Blinking – Air encryption is not available when your radio is in TMO and attempts to connect to a gateway.
	Non-Secured Call in DMO	Blinking – Air Encryption is not available when your radio is in DMO. This icon appears after you press the <b>PTT</b> button.
	Non-formatted SD Card	• Solid – The microSD card is not formatted at all, formatted incor- rectly, or damaged.
		<ul> <li>Blinking – The microSD card is being formatted.</li> </ul>
¢	USB Connected	Your radio is connected to the computer through a USB cable. This icon is visible only in Mass Storage mode.
≱∙	Bluetooth Connec- ted	Bluetooth is enabled and at least one device is connected to your radio.
≯	Bluetooth Discon- nected	<ul> <li>Solid – Bluetooth is enabled but no devices are connected to your radio.</li> </ul>

lcon	Name	Description
		<ul> <li>Blinking – Bluetooth is enabled and your radio is in the Discover- able Mode or connecting to a remote device.</li> </ul>
<b>3</b> 2	Remote Control	Your radio is being remotely controlled and some commands are being executed in the background. For example, your radio is being controlled by special SDS messages or triggered to send a GNSS location report.
((t· ((t·	Wi-Fi Strength	The more bars, the stronger the Wi-Fi signal.
[+1]) [	OTAP over Wi-Fi Available	Indicates that there is an OTAP over Wi-Fi update available.

### 7.2 Talkgroup Icons Selection

Talkgroup icons are used to indicate that a talkgroup has a special function, show the status of network selection, and/or show the talkgroup properties. A talkgroup without an icon does not have a special function attached to it.

Talkgroup icons are displayed next to the talkgroup alias on idle display and when scrolling through the common or favorite folders.

**NOTE:** When in Direct Mode Operation (DMO), Trunked Mode Operation (TMO) talkgroups are not shown in common folders.

#### Table 15: TMO Talkgroup Icons

lcon	Talkgroup in Com- mon Folders	Talkgroup in Favor- ites Folders	Instance when the Icon is Displayed
	Displayed in TMO	Displayed in TMO and DMO	When the selected talkgroup is a SIM TMO talkgroup, and is not registered to a SIM network. A single network is available.
	_	Displayed in DMO	When the selected talkgroup is a SIM TMO talkgroup. A single network is available.
((1))	Not displayed	Displayed in TMO and DMO	When the selected talkgroup is a normal TMO talkgroup. A single network is available.
11	Displayed in TMO	Displayed in TMO and DMO	Displayed when the selected talkgroup is an ISI or Any network TMO talkgroup. Multiple networks are available.
	Displayed in TMO	Displayed in TMO and DMO	Displayed when the selected TMO ISI talk- group is not assigned to a home network. Multiple networks are available.
((e)) A	Displayed in TMO	Displayed in TMO	Displayed when the selected normal TMO talkgroup is not assigned to the current net-work. A single network is available.

#### Table 16: DMO Talkgroup Icon and General Icons

lcon	Talkgoup in Common Folders and Favorite Folders
•	Displayed when a DMO talkgroup is selected.
	Displayed when your radio is locked to a current single network. The selected ISI talkgroup or Any Net talkgroup allows multiple networks.

### 7.3 Menu Icons

Menu icons help you to identify the items in the menu at first glance. You can choose to view the Main Menu items in a list or in grid icons.

#### Table 17: Menu Icons

lcon	Name	Description
	Main Menu Items or Context Sensitive Menu	It is assigned to <b>Menu</b> when the main menu items/context-sensitive menu are active.
	Messages	Send status messages. Send text messages (free text or according to user defined or predefined templates). Received messages in <b>In-box</b> .
<b>≜</b> ≡	Contacts	Add, search, edit, or erase entries in the contact list.
•	Pictures	Allows you to browse and manage photos.
<b>∦•</b>	Bluetooth	Allows you to manage Bluetooth settings.
	Browser	Starts the WAP browser.
*	Man Down (hence- forth known as Fall Alert)	Allows you to activate the Man Down (Fall Alert) feature.
۹.	Security	Lets you turn on/off and verify security features, and change pass- words.
\$	Setup	Allows you to customize your radio.
<b>.</b>	Group Setup	Contains additional menu items for Scanning Talkgroups features.
	Individual Setup	Contains additional call settings for individual calls.
*	Favorites	Contains shortcuts to frequently used talkgroups and contact num- bers.
	My Info	Displays information about your radio and its numbers.
2	Recent Calls	Contains a list of recent calls.

lcon	Name	Description
	Shortcuts	Allows you to view and manage shortcuts to menu items.
٩	RUI	Allows you to log in and log out of your radio.
	Networks	Allows you to select a network.
	Location	Displays location of your radio.
C	Packet Data	Allows you to send data from your radio to other devices.
	Crypto Menu	Allows you to manage SIM card based End-to-End Encryption.
		<b>NOTE:</b> Applicable only for SIM Card model.
s.C.	Services	Allows you to manage Broadcast, Assistance, and Disaster Calls.
	Wi-Fi	Allows you to manage the Wi-Fi functions to access a network.
Ē	Wi-Fi OTAP	Allows you to manage Wi-Fi OTAP features.

### 7.4 Text Entry Icons

In the text entry screen, icons indicate the text entry mode and method that you are using. A character counter displayed on the text entry icon indicates the amount of characters that can be entered.

Press the # key to toggle through the text entry modes.

Primary Icon	Secondary Icons	Description
<b>1</b> t	21	Indicates all lower-case TAP text entry method.
11	<b>2</b> †	Indicates all upper-case TAP text entry method.
<b>1</b> û	<b>2</b> û	Indicates <b>first letter upper-case TAP</b> text entry method.
1	21	Indicates all lower-case iTAP text entry method.
11	21	Indicates <b>all upper-case iTAP</b> text entry method.
	21	Indicates <b>first letter upper-case iTAP</b> text entry method.

#### Table 18: Text Entry Mode Icons

#### Table 19: Text Entry Method Icons

lcon	Description
abc	Latin alphabet – all lower-case
Abc	Latin alphabet – first letter upper-case
ABC	Latin alphabet – all upper-case
123	Numeric
NUM	Locks for numeric entry only
@	Symbol
<b>5</b> x	Mandarin Phonetic Symbol
あい	Japanese Hiragana syllabary
21	Korean alphabet
dào	Chinese Pinyin
<b>~~</b>	Chinese characters strokes

### 7.5 Messages Icons

Message icons are used as a description or quick indication of the message status.

#### 7.5.1 Inbox Icons

The inbox folder contains up to 100 new or old incoming messages. The **Messages** sub-menu indicates the number of the messages. For example, the indication 2/4 means that two unread and four read messages are in the inbox.

#### Table 20: Inbox Icons

lcon	Description
Regular Mes	ssages
F	Message is unread.
	Message is read.
Protected M	essages
<b>E</b>	Protected Message is unread.

lcon	Description
<b>F</b>	Protected Message is read.
Secured Messages	3
<b>—</b>	Secured Message is unread.
F	Secured Message is read.
Protected and Sec	ured Messages
<b>F</b>	Protected and Secured Message is unread.
F	Protected and Secured Message is read.
General	
SMS	The sender's name and number is in the Message View.
$\mathfrak{O}$	The date and time of message arrival is in the Message View.
	The delivery status for Store and Forward messages is received.

# 7.5.2 Outbox Icons

The outbox stores up to 100 sent messages that are arranged chronologically.

#### Table 21: Outbox Icons

lcon	Description
Regular Mes	sages
8 N	Message delivery is in progress.
	Message delivery is accomplished.
×	Message delivery failed.
$\sim$	Outgoing message is successful.
×	Outgoing message failed.
Protected M	essages
R B	Protected Message delivery is in progress.
	Protected Message delivery is accomplished.
×	Protected Message delivery failed.

Icon	Description
	Outgoing Protected Message is successful.
2	Outgoing Protected Message failed.
Secured Messages	
e B	Secured Message delivery is in progress.
<b>Y</b>	Secured Message delivery is accomplished.
×	Secured Message delivery failed.
<b>•</b>	Outgoing Secured Message is successful.
×	Outgoing Secured Message failed.
Protected and Secu	ured Messages
8 B	Protected and Secured Message delivery is in progress.
	Protected and Secured Message delivery is accomplished.
<b>X</b>	Protected and Secured Message delivery failed.
	Outgoing Protected and Secured Message is successful.
×	Outgoing Protected and Secured Message failed.

### 7.5.3 Call-Out Icons

#### Table 22: Call-Out Icons

lcon	Description
	Call-Out folder.
Ę	Call-Out Message in the inbox is unread.
Ę	Call-Out Message in the inbox is read.
<b>Ş</b>	Protected Call-Out Message in the inbox is unread.
Ę	Protected Call-Out Message in the inbox is read.
Ę	Call-Out Message in the outbox is read.

Icon	Description
<b>F</b>	Protected Call-Out Message in the outbox is read.

# 7.5.4 Radio Messaging System Icons

#### Table 23: Radio Messaging System (RMS) Icons

lcon	Description
	A new RMS status message is received.
•	An RMS status message is sent.
Ę	RMS Box Read Message
<b>F</b>	RMS Box Unread Message

### 7.5.5 WAP Icon

#### Table 24: Wireless Application Protocol (WAP) Icon

lcon	Description
WAP	WAP message.

# <sup>7.6</sup> Bluetooth Icons

These icons indicate the type of Bluetooth device paired with your radio, and when listed during discovery and radio scan.

#### Table 25: Bluetooth Icons

lcon	Description
*	Bluetooth data
<b>(</b>	Bluetooth earpiece
•	Bluetooth accessory with PTT
<b>*•</b> ))	Bluetooth sensor

### 7.7 Wi-Fi Icons

#### Table 26: Wi-Fi Signal Strength Icons

lcon	Description		
C	Wi-Fi operation in progress.		
Wi-Fi Signal	Strength		
ê	Wi-Fi signal is excellent.		
<b></b>	Wi-Fi signal is good.		
((;	Wi-Fi signal is average.		
((1-	Wi-Fi signal is poor.		
((t-	Wi-Fi signal is unavailable.		
Wi-Fi Signal	Strength for Secured Networks		
7	Wi-Fi signal is excellent for secured networks.		
<b>7</b>	Wi-Fi signal is good for secured networks.		
<b>7</b>	Wi-Fi signal is average for secured networks.		
	Wi-Fi signal is poor for secured networks.		
	Wi-Fi signal is unavailable for secured networks.		
Wi-Fi Signal	Strength for Open Networks		
<del>?</del>	Wi-Fi signal is excellent for open networks.		
<b>?</b>	Wi-Fi signal is good for open networks.		

lcon	Description	
<b>?</b>	Wi-Fi signal is average for open networks.	
	Wi-Fi signal is poor for open networks.	
(î;	Wi-Fi signal is unavailable for open networks.	

### 7.8 Contacts

The Contacts menu stores all your contact numbers.

Each contact entry requires the following information:

#### Name

If you store more than one number to one contact, this entry is required.

#### Туре

Each contact must be assigned to one of the following types:

#### Table 27: Contact Types

lcon	Description
2	Private
	Cannot have a speed dial number.
<b>1</b>	Mobile
	Home
Û	Work
J	PABX
1	Other
•	Pickers
	Indicate more than one number in a contact.

#### # (number)

Each contact entry must contain a number.

#### Speed #

Shows the default Speed Dial number. You can accept or change it.

#### Simplex (Private only)

Shows the hook method for simplex calls.

#### Duplex (Private only)

Shows the hook method for duplex calls.

#### Chapter 8

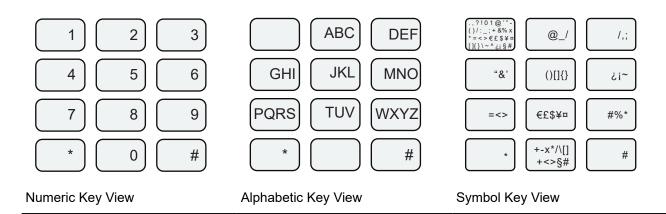
# **Keypad Overview**

Familiarize yourself with the keys on your radio.

#### 8.1

# **Alphanumeric and Symbol Keys**

List of keys and characters in Alphanumeric Mode for TAP or iTAP.



#### Table 28: Alphanumeric and Symbol Keys

Numeric Keys	Alphabets	Symbols
1	Not applicable	.,?!01@'"-()/:_;+&%×*=<>€£\$¥¤ []{}\~^¿;§#
2	ABCabc	@_\
3	DEFdef	/,;
4	GHIghi	"& '
5	JKLjkl	()[]{}
6	M N O m n o	¿i~
7	PQRSpqrs	= <>
8	T U V t u v	€£\$¥¤
9	WXYZwxyz	# % *
0	Not applicable	+ - × * / \ [ ] = < > § #

### 8.2 Idle Keys

From an idle display, you have easy access to stored target lists.

#### Table 29: Description of Idle Keys

Кеу	Description
<b>Up</b> Navigation	Press to access the Favorite Talkgroup list.
Down Navigation	Press to access the Recent Calls list.
Send	Press to access the Last Dialed Numbers list.
Contacts	Press to access the Address Book.

### <sup>8.3</sup> Functions of Keys

#### Table 30: Functions of Keys

Кеу	Description
Menu	Press to open an active context-sensitive menu.
Select	Press to select the highlighted choice and place the selection in the main text area.
Delete	Press once to delete the last entered character.
	Press and hold to clear the entire main text area.
<b>Up</b> Navigation	In TAP, press to reject word completion and scroll up.
	In TAP, press to change the previous letter from lowercase to upper- case.
Down Navigation	In TAP, press to reject word completion and scroll in the text area.
	In TAP, press to change the previous letter from uppercase to lower-case.
Left Navigation	Press to navigate to the left. Press and hold to repeat.
	In TAP, if a word completion is available, press to reject the comple- tion.
Right Navigation	Press to navigate to the right. Press and hold to repeat.
	In TAP, if a word completion is available, press to accept the word.
Send	Press to start calls or send messages.
	Disabled in browser active state.
End	Press to end calls.
	Press to deactivate the browser.
0 to 9	In numeric mode, press to enter a digit at insertion point.
Any numeric key	Press and hold to enter TAP or iTAP alphanumeric mode.

Кеу	Description
	Press and hold to enter numeric mode.
	In TAP, press to reject word completion and continue entering text. A new word completion starts after TAP timeout.
0	Press to run through single shift, uppercase, and lowercase func- tions.
*	Press to insert a space.
	In TAP, press to reject word completion and insert a space.
	Press to enter a new word into the user dictionary.
	Press and hold to enter a carriage return.
#	Press once to run through <b>Symbol</b> , <b>Numeric</b> , <b>Primary</b> , and <b>Secon- dary</b> entry modes.
	Press and hold to return to the default entry mode.

#### **Chapter 9**

# **General Radio Operation**

Get to know the general operations of your radio.

### 9.1 Writing Text

This section provides information on entering texts on your radio.

#### 9.1.1

### **Selecting Text Entry Modes**

Prerequisites: Your radio displays the text entry screen.

#### Procedure:

- **1.** Press Menu  $\rightarrow$  Entry Mode.
- 2. Select one of the following options:
  - Primary for entering alphanumeric characters.
  - Numeric for entering numbers only.
  - Symbol for entering symbols only.
  - Secondary for entering alphanumeric characters (this mode is optional and you have to add it to the list). It is convenient when you use one language, and sometimes wish to switch to another one.

#### 9.1.2

### **Selecting Text Entry Methods and Languages**

Prerequisites: Your radio displays the text entry screen.

#### Procedure:

- **1.** Press Menu  $\rightarrow$  Entry Setup.
- 2. Use the Right or Left navigation key to select one of the following options:
  - TAP Enter letters, numbers, and symbols by pressing an alphanumeric key one or more times.
  - iTAP Allows the radio to predict each word as you press an alphanumeric key.

**NOTE:** You can use these methods in the languages programmed in the radio.

# 9.1.3 Writing in iTAP Alphanumeric

Prerequisites: Your radio displays the text entry screen.

**NOTE:** In the text entry screen, you can also press **#** key repeatedly to toggle through the entry modes.

When and where to use: It allows you to write quicker. For example, try to write David 232!

#### Procedure:

- 1. Press Menu  $\rightarrow$  Entry Setup  $\rightarrow$  Prim..
- 2. Select iTAPEnglish and press Back.
- **3.** Press Menu  $\rightarrow$  Entry Mode.
- 4. Select Primary.
- 5. Press 3 key.

The alternative row opens and shows **D E F 3**.

6. Continue entering the letters by pressing one key for each letter. Press 2, 8, 4, and 3 keys.

**NOTE:** Automatic shift to upper case is used at the beginning of a message, after punctuation followed by space, or for the first letter of a word created as a new contact entry.

The alternative row highlights **David**.

- 7. Press \* key.
- Press 2 key and scroll the alternative row by pressing Right Navigation key to reach 2.
   It automatically changes the entry mode to Numeric.
- 9. Press 3 and 2 keys.
- 10. Press and hold 1 key until 0 at the end changes to ..

The alternative row highlights 232.

- 11. Scroll the alternative row by pressing the **Right** Navigation key to reach the required symbol.
- 12. Press Select.

Result: You have entered David 232!.

#### 9.1.4

### Writing in TAP Alphanumeric

Prerequisites: Your radio displays the text entry screen.

#### **Procedure:**

- 1. Press Menu  $\rightarrow$  Entry Setup  $\rightarrow$  Seco..
- 2. Select TAPEnglish and press Back.
- 3. Press Menu  $\rightarrow$  Entry Mode.
- 4. Select Secondary.
- **5.** Press the key labeled with the desired character, once for the first character, twice for the second, and so on.

#### Example:

To enter letter s, press **7** key four times. To enter number 7, press the **7** key five times. If you do not press a key for a few seconds, the character is accepted, and the cursor moves to the next position.

## 9.1.5 Word Locking

Prerequisites: Your radio displays the text entry screen.

When and where to use: To add the words that are not in the dictionary.

### **Procedure:**

- 1. Press Menu  $\rightarrow$  Entry Setup  $\rightarrow$  Prim.
- 2. Select iTAPEnglish and press Back.
- **3.** Enter the word. Scroll the alternate line for a word option. Each option is successively highlighted and partially locked.
- **4.** Enter the second part of the word. The first part remains unchanged (locked). The newly entered letters are highlighted and then locked while you scroll to the next word option.
- 5. Press the \* key. The word is placed in the text area with a space and automatically added to the dictionary.

## 9.1.6 Adding Words to Dictionary

When and where to use: Every language has a dictionary of its own. Words (including alphanumeric abbreviation) can be formed.

### Procedure:

Create the word in the dictionary.

Once you enter a word followed by space, it is automatically stored in the dictionary.

**NOTE:** The word appears as a choice whenever you press the same key combination in the future.

#### 9.2

## Locking or Unlocking the Keys or Buttons

### **Procedure:**

Press Menu key and \* key.

> NOTE: The Emergency button is not locked. Entering Emergency Mode unlocks all keys.

#### 9.3

## **Selecting Talkgroups**

Follow these procedures to select talkgroup manually. If the selected talkgroups is an InterSystem Interface (ISI) talkgroup, your radio can migrate to another talkgroup linked network, changing the talkgroup automatically.

### Procedure:

From the home screen, use one of the following methods:

• Press Left or Right Navigation key. Press Select to confirm.

- Select **Options** → **TG by abc**. Enter a talkgroup name and select the talkgroup name from the list.
- Select Options → TG by Folder. Select a folder (for example, Favorite) and then a talkgroup name.
   NOTE: Your radio can access up to three levels of the folder structure.

## 9.3.1 Using Timed Talkgroup Change

This feature allows you to switch a selected talkgroup between the currently selected talkgroup and a predefined talkgroup (TMO or DMO), making the predefined talkgroup the selected talk group for a predefined time by using a One-Touch button. After the timer expires, your radio returns to the previously selected talkgroup.

**Prerequisites:** Timed Talkgroup Change is assigned to a One-Touch button.

## Procedure:

- 1. Press and hold the One-Touch button.
- 2. Your radio switches the selected talkgroup to the predefined talkgroup for a predefined amount of time.

During the predefined time the radio initiates or joins group communication (SDS, status SDS, or call) on the predefined talkgroup as the selected talkgroup.

Your service provider can assign a function to the second press of the One-Touch button to:

- Return to previously selected talkgroup
- Restart the predefined time
- No action
- **3.** When the timer expires (potentially after being restarted a number of times) the radio switches to the previously selected talkgroup.

## 9.3.2 Selecting Talkgroups by Index

### Procedure:

- 1. From the home screen, enter talkgroup speed number and \*.
- 2. Press Attach.



**TIP:** To start a group call, press the PTT button.

## 9.4

## High or Low Audio Toggle

Your radio is able to switch from the external earpiece to the main speaker using One-Touch button and is not required to disconnect the external earpiece.

The internal speaker is at the middle of your radio for high audio. The internal earpiece is at the top of your radio for low audio. Audio can be routed to either the speaker or the earpiece using the **Audio Toggle** menu or the assigned One-Touch Button. To route the audio using the **Audio Toggle** menu, you must select **Menu**  $\rightarrow$  **Setup**  $\rightarrow$  **Audio Toggle**.

The internal speaker is at the middle of your radio for high audio. The internal earpiece is at the top of your radio for low audio. Audio can be routed to either the speaker or the earpiece using the **High or Low Audio Toggle** from the Radio Quick Settings or the assigned One-Touch Button.

The states of the routed audio are:

## Speaker High

Indicates that audio is routed to the main speaker.

### Speaker Low

Indicates that audio is routed to the earpiece or the personal hands-free (PHF) earpiece, and not to the main speaker.

## 9.4.1 Using High Audio

When and where to use: Placing or receiving a Duplex Private call.

### Procedure:

- 1. Hold your radio in a vertical position with its top microphone 5 cm to 10 cm away from your mouth.
- **2.** Speak into the top microphone and listen through the internal speaker. Keep the antenna at least 2.5 cm from your head and body.

## 9.4.2 Using Low Audio

When and where to use: Placing or receiving a Duplex Private call.

- **1.** Hold your radio to your ear.
- **2.** Speak into the bottom microphone and listen through the earpiece. Keep the antenna at least 2.5 cm from your head and body.

## **Operation Modes**

This section contains information on available modes that your radio can operate in.

# Entering TMO or DMO Mode

## **Entering TMO Mode**

### **Procedure:**

Perform one of the following actions:

- From the home screen, press Options. Select Trunked Mode.
- Press the Menu key, select Networks  $\rightarrow$  Trunked Mode.

## **Entering DMO Mode**

### **Procedure:**

Perform one of the following actions:

- From the home screen, press Options. Select Direct Mode.
- Press the Menu key, select Networks  $\rightarrow$  Direct Mode.

## <sup>10.2</sup> Selecting DMO Communication Options

In Direct Mode Operation (DMO), you have different options to communicate with other radios in the same talkgroup through the gateway or repeater.

- 1. From the home screen, press Options.
- 2. Select Config..
- 3. Select a DMO communication by using one of the following options:

Option	Actions
To communicate in your radio range only	Select MS-MS.
To communicate with the infrastructure using the first available gateway for that talkgroup	Select Gateway → Automatic.
To communicate with the infrastructure using the specified gateway address for that talk- group	<ul> <li>a. Select Gateway → Specific.</li> <li>b. If your radio displays Selected Gate- way: None, press Edit to enter the current gateway address.</li> </ul>

Option	Actions
To use the first available repeater for that talk- group	Select <b>Repeater</b> .
To use the first available gateway or repeater for that talkgroup	Select <b>GW + Rep</b> .
To use the first available gateway for that talk- group	Select Automatic.
To use a gateway with the specified gateway address for that talkgroup	<ul> <li>a. Select Specific.</li> <li>b. If your radio displays Selected Gate- way: None, press Edit to enter the current gateway address.</li> </ul>

**NOTE:** When your radio cannot communicate with the gateway and repeater even if a talkgroup to use them is configured, your radio attempts MS-MS communication.

### **Result:**

When your radio detects the gateway, repeater, or both, the respective icon appears solid.

# <sup>10.3</sup> Enabling Network Monitor

## Procedure:

- 1. From the home screen, press Options.
- 2. Select Network Monitor.

# 10.4 Setting Monitor Option

- 1. From the home screen, press **Options**.
- 2. Select Monitor.
- 3. Select one of the following options:

Option	Description
Off	Your radio works as a repeater only without operation.
Receive Only	To listen only.
Receive&Transmit	To listen and transmit by pressing the PTT button.

## **Types of Radio Calls**

Your radio can make Group, Private, Phone and Private Automatic Branch Exchange (PABX), and Broadcast calls in Trunked Mode Operation (TMO), Direct Mode Operation (DMO), or both.

Call Type	Description	DMO	ТМО
Group Calls	Group Calls are point-to-multipoint call operations. Your radio must be configured as a member of the talkgroup for you to communicate within the group.	~	~
D-PTT Preempt Group Calls	D-PTT Preempt Group Calls are preemptive priority calls that allow superiors to temporarily interrupt and speak in an ongoing group call.	~	~
Private Calls	Private Calls are calls from one individual radio to anoth- er. If configured, your radio can block outgoing private calls. The following are private calls that needs to be blocked in TMO:	Simplex Calls only	Simplex and Du- plex Calls
	Half Duplex		
	Full Duplex		
	PSTN (Telephony)		
	• PABX		
	The following are private calls that needs to be blocked in DMO:		
	Calls between Motorola Solutions radios		
	Calls using Repeater		
	Calls using Gateway		
Phone or PABX Calls	Phone Calls allow you to call a landline telephone num- ber or a cellular mobile phone number. PABX Calls allow you to call local (office) extension numbers.	×	~
Broadcast Calls	Broadcast Group Calls are high-priority group calls from the console operator to all radios at one or more sites. Your radio can monitor a Broadcast Call but you cannot talk back.	×	~
	<b>NOTE:</b> In TMO mode, broadcast call can be for- warded from the Gateway to a DMO open talk- group or Attached DMO Talkgroup if configured.		

# Making Calls on the Radio

## Procedure:

Make calls by using one of the following options:

Option	Actions			
Group Calls	To initiate:			
	a. Press and hold the <b>PTT</b> button.			
	<b>b.</b> Wait for the Talk Permit Tone and speak into the microphone.			
	<b>c.</b> To listen, release the <b>PTT</b> button.			
	To end the call, do one the following actions before the talk permit is gran- ted (depending on the configuration set by your service provider):			
	Release the <b>PTT</b> button.			
	Press the END key (default).			
D-PTT Preempt Group	In a group call:			
Calls	<ul> <li>Press the PTT button twice on your radio or the Remote Control Unit (RCU).</li> </ul>			
	<b>b.</b> Speak into the microphone.			
Simplex Private Calls	To initiate:			
	<b>a.</b> From the home screen, enter a number.			
	<b>b.</b> Press <b>Ctype</b> until you see <b>Private</b> call type.			
	c. Optional: Select Menu $\rightarrow$ E2E Mode $\rightarrow$ E2E On/E2E Off $\rightarrow$ Done.			
	NOTE: Applicable only for models with E2EE Radio Hardware. E2EE Radio Hardware allows you to change between E2E En- crypted Call or Non Encrypted Call modes.			
	<ul> <li>d. If Private Call Hook Customization is enabled, select Menu → Hook</li> <li>Method → <required hook="" method=""> → Done.</required></li> </ul>			
	e. Press and hold the PTT button.			
	f. Wait for the Talk Permit Tone and speak into the microphone.			
	<b>g.</b> To listen, release the <b>PTT</b> button.			
	To end the call, press the <b>End</b> key.			

Option	Actions			
Duplex Private Calls	To initiate:			
	<b>a.</b> From the home screen, enter a number.			
	b. Press Ctype until you see Private call type.			
	c. Optional: Select Menu $\rightarrow$ E2E Mode $\rightarrow$ E2E On/E2E Off $\rightarrow$ Done.			
	NOTE: Applicable only for models with E2EE Radio Hardware. E2EE Radio Hardware allows you to change between E2E En- crypted Call or Non Encrypted Call modes.			
	d. If Private Call Hook Customization is enabled, select Menu $\rightarrow$ Hook Method $\rightarrow$ <required hook="" method=""><math>\rightarrow</math> Done.</required>			
	e. To start the call, press the <b>Send</b> key.			
	To end the call, press the <b>End</b> key.			
Phone or PABX Calls	To initiate:			
	<b>a.</b> From the home screen, perform one of the following actions:			
	<ul> <li>Enter a number and press Ctype until you see Phone or PABX call type.</li> </ul>			
	• Enter the predefined Phone or PABX speed dial number and <b>#</b> key.			
	<b>b.</b> To start the call, press the <b>Send</b> key.			
	To end the call, press the <b>End</b> key.			
Broadcast Calls	To initiate:			
	<b>a.</b> From the menu, select <b>Services</b> $\rightarrow$ <b>Broadcast</b> .			
	<b>b.</b> To start the call, press the <b>PTT</b> button.			
	To end the call, press the <b>End</b> key.			

## <sup>11.2</sup> Making Calls from Messages

You can call a number embedded in the message in the Inbox or Outbox folder or start a group call with the message sender of a talkgroup using the Embedded Number feature. The Embedded Number feature is enabled by your service provider.

## **Calling Numbers from Messages**

When and where to use: To return a voice call to the sender of a message or to any number that is embedded in the message text.

Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select **Messages**  $\rightarrow$  **Inbox**.
- 3. Highlight the required message and select Read.
- 4. Press the PTT button.

The radio displays a list of numbers, including the number of the sender.

- 5. To call, select the required number and do one of the following:
  - Press the PTT button.
  - Press the Send key.
- 6. Press Ctype to select one of the following type of calls:
  - Private
  - Phone
  - PABX
- 7. Do one of the following to initiate the call:
  - Press the **PTT** button.
  - Press the Send key.

# Making Group Calls on the Talkgroup of the Message Sender

When and where to use: To make a group call with the message sender of a talkgroup.

Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Messages  $\rightarrow$  Inbox.
- 3. Select the required message and press the PTT button.

# **Receiving Calls on the Radio**

#### Procedure:

Receive calls by using one of the following options:

Option	Actions		
Group Call in Idle	To respond, press and hold the <b>PTT</b> button.		
Group Call in Ongoing Group Call	<ul> <li>When your radio receives a group call with higher priority while in an active group call, respond by performing one of the following actions:</li> <li>a. To end the current group call and start the incoming one, select Join.</li> </ul>		
	<ul> <li>b. To cancel the incoming group call, select End.</li> </ul>		
Individual Call	<ul> <li>a. To respond to private calls, perform one of the following actions:</li> <li>i. Press the PTT button.</li> <li>ii. Press the Send key.</li> <li>b. To end the call, press the End key.</li> </ul>		

# Dialing Short Numbers

You can dial part of the full number of a recipient and your radio automatically completes the number.

Prerequisites: Using an example with the full number of the radio is 4282564.

## Procedure:

- 1. Dial 564 instead of the full number.
- 2. To start the call, press PTT or the Send key.

# <sup>11.5</sup> Viewing the Talkgroup Speed Number

With Talkgroup Speed Dial, you can join a talkgroup by dialing the index of the talkgroup. You need not choose the talkgroup from talkgroup folders and lists.

### **Procedure:**

- 1. From the home screen, press Options.
- 2. Search talkgroups by using one of the following options:

Option	Actions	
Searching talkgroups from the fold- er	a.	Select <b>TG by Folder</b> $\rightarrow$ <i><required folder="" talkgroup=""></required></i> .
	b.	Highlight the required talkgroup.
Searching talkgroups by entering the name	a.	Select <b>TG by abc</b> .
	b.	To narrow down the name of the talkgroup, enter up to 15 characters.
	c.	Highlight the required talkgroup.

3. Press Menu and select View.

## Example:

Your radio displays SpeedNum1\*, which means that the speed number of this talkgroup is 1.

### 11.6

## Selecting Talkgroups by Index

Dialing by index search from the following list:

- Talkgroup ID/Index
- User defined Index

### Procedure:

- 1. From the home screen, enter the talkgroup speed number and \*.
- 2. Press Attach.

You can start a group call by pressing the **PTT** button.

## **Viewing DGNA Talkgroups**

DGNA allows the network operator to dynamically manage talkgroups on your radio over the air interface by transmitting data to your radio.

Prerequisites: Your radio receives the DGNA message.

- 1. To view the added talkgroups details, press View.
- 2. Scroll through the list to select the required talkgroup.
- 3. To select the DGNA group, press Attach.

## **Emergency Operations**

Emergency Operations are used in critical situations.

#### **Emergency Operation Services:**

- Emergency Alarm
- Emergency Call (Group, Private, or Phone)
- Emergency Status
- Emergency Alert

#### **Emergency Services are initiated in:**

- Emergency Mode
- Silent Emergency Mode

Pressing the **Emergency** button triggers Emergency Operation. When you press the **Emergency** button, your radio activates one or more of the emergency services (depending on provisioned settings).

- Entry into Emergency Mode or Silent Emergency Mode
- Sending of Emergency Alarm (or other status message)
- Starting Hot Mic operation
- Start an Emergency individual call
- Powering up the terminal

The following lists the Emergency features available on your radio.

#### **Emergency Alarm**

A special status message that is sent when your radio enters Emergency Operations to the Console to alert the operator regarding emergency condition.

**NOTE:** Emergency Alarm in DMO mode can be configured to send in all DMO modes or when your radio is synced through Gateway.

#### **Emergency Call**

Calls initiated in Emergency mode are known as Emergency Calls. Emergency Call is the highest preemptive priority call. Available Emergency Call types:

- Emergency Call There are 2 types of Emergency Calls available:
  - Tactical Group Call Your radio sends an emergency alarm and/or makes an Emergency Call on the current channel.
  - Non-tactical Group Call Your radio reverts to the preprogrammed emergency channel to send an alarm and/or make an Emergency Call.
- Emergency Private Call or Integrated Services Digital Network (ISDN)
- A simplex or duplex call with emergency priority.
- Emergency Full Duplex Private Calls (FDPC) supports high/low audio state.

#### **Emergency Status**

Enables your radio to send a status message with a preprogrammed value to the destination address set by your service provider. Status is not re-sent when Emergency Alarm or Hot Microphone is configured.

## **HotMic Operation**

Thare are 2 types of HotMic available:

#### Hot Mic

Automatically grants your radio with a talk permit for a provisioned amount of time without needing to press the PTT button during Emergency Operation.

HotMic operation is applicable for:

- Tactical and non-tactical Emergency groups.
- Half-Duplex and Full-Duplex Private Calls.

#### **Alternating Hot Mic**

An enhancement of the Hot Microphone where your radio alternately enters transmission phases (your microphone is active) and reception phases (you can only listen) for an amount of time precisely determined by your service provider.

#### **Silent Emergency Operation**

Enables your radio to enter Emergency Operations with no audible indications or keypad tones.

All the display indications are as in the home mode.

Your radio will stay in or switch to TMO when Silent Emergency Mode is activated.

#### **Emergency Alert**

Allows your radio to send emergency alerts to other radios within DMO and TMO without TMO coverage by pressing the **Emergency** button.

### **Emergency Destination in LST**

This is a Software Selling Feature.

Allows your radio to send emergency requests to a different destination while in local site trunking mode.

## 13.1 Entering and Exiting Emergency Mode

## **Entering Emergency Mode**

### Procedure:

Enter emergency mode by using one of the following options:

Option	Actions
Emergency Mode with Alarm	To enter:
	• Press and hold the <b>Emergency</b> button.
	Dial a predefined number.
	To exit: Press the End key.
Silent Emergency Mode	To enter: Press and hold the <b>Emergency</b> button.
	To exit: Press the Menu and Right Navigation keys simultane- ously.
Emergency Destination in LST	To enter: Press and hold the Emergency button.

## Making Emergency Calls

## Procedure:

Make emergency calls by using one of the following options:

Option	Actions
Group Call	To enter: Press and hold the <b>Emergency</b> button.
	<b>To talk:</b> Press and hold the <b>PTT</b> button to talk and wait for the <i>Talk Permit</i> tone.
	<b>To exit:</b> Press the <b>Menu</b> and <b>Right</b> Navigation keys simultane- ously.
Emergency Private Call/ISDN	To enter: Press the Emergency button.
	To exit:
	• Release the <b>PTT</b> button.
	• Press the <b>End</b> key (default).
	NOTE: Available only when Emergency Private Call is enabled on your radio and the predefined IS- SI is configured.
Emergency Hot Mic	To enter: Press and hold the <b>Emergency</b> button.
	To restart transmission, press <b>Emergency</b> button.
	<b>To talk:</b> Speaks clearly into the microphone.
	To exit:
	<ul> <li>If configured, press the <b>PTT</b> button. If the PTT but- ton is held, your radio will continue PTT operation in Emergency Group Call mode.</li> </ul>
	• Press the <b>End</b> key.
	• Press the <b>End</b> soft key.
Emergency Alternating Hot Mic	To enter: Press the Emergency button.
	<b>To talk:</b> Speaks clearly into the microphone.
	Press the <b>End</b> key to end transmission early.
	To exit:
	• If configured, press the <b>PTT</b> button.
	<ul> <li>Press the <b>Right</b> soft key (only during the transmission phase).</li> </ul>
	Exit Emergency Operations.

## Sending Emergency SDS Status

Prerequisites: Pre-defined SSI and status number is configurable.

## Procedure:

Press and hold the **Emergency** button.

## **Initiating Disaster Alert**

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Services  $\rightarrow$  Disaster Alert.
- 3. To start the call press PTT button.

Result: Your radio displays Disaster Alert In Use.

## Messages

The Messages feature allows you to send, receive, and store and forward text messages.

You can manage messages with the following messaging features. Collaborative Messaging and Radio Messaging System (RMS) are additional features. Check with your service provider for configuration.

## **Table 31: Messaging Features**

Messaging Feature	Description
Send	Compose and send messages to a group, individual, or external sub- scriber number.
Receive	Receive incoming messages with notification and quick access.
Store and Forward	Save incoming and outgoing messages for editing later. Stored out- going messages are sent to the receiver when connection is restored.
Collaborative Messaging	External devices connected through Bluetooth or cable can send and receive messages when your radio application is enabled.
Radio Messaging System	Receive and send messages through the TETRA network. The RMS Box is available in the Messages menu if RMS is enabled.
	<b>NOTE:</b> This is a Software Selling Feature.

# New Messages

The New Message menu allows you to create and send new messages. You can also request for Delivery Reports upon sending a message to a recipient.

## 14.1.1 Sending New Messages

- 1. From the home screen, press the Menu key.
- **2.** Select Messages  $\rightarrow$  New Message.

3. Send messages by using one of the following options:

Option	Actions
Sending Messages to Private or Phone	<b>a.</b> Create a message and press <b>Send</b> .
	b. Select Private or Phone.
	<b>c.</b> Enter the recipient number or choose from contacts by pressing <b>abc</b> .
	NOTE: For Private target selection, you can enter either Individual Short Subscriber Identity (ISSI), Individu- al TETRA Subscriber Identity (ITSI), or Group Short Subscriber Identity (GSSI) of the recipient.
	ISSI or ITSI is a unique and individual ID assigned to each radio.
	GSSI in Dimetra is called Group ID or Talkgroup ID.
Sending Messages to Groups	a. Create a message and press Send.
	b. Select Group.
	<b>c.</b> Select a group that you want to send the message to.
Sending Store and Forward Mes- sages	a. Press the Menu key and select Message Setup $\rightarrow$ On/ Offline users.
	<b>b.</b> Create a message and press <b>Send</b> .
	c. Select Private or Phone.
	<b>d.</b> Enter the recipient number or choose from contacts by pressing <b>abc</b> .

- 4. Perform one of the following actions:
  - Select Send.
  - Press the Send key.
  - Press the **PTT** button.

# 14.1.2 Configuring Delivery Reports

Prerequisites: Contact your service provider to enable Delivery Reports.

- 1. From the home screen, press the Menu key.
- **2.** Select Messages  $\rightarrow$  New Message.
- 3. Press Menu key and select Delivery Report.
- **4.** Select one of the following options:

Option	Description
None	No delivery reports are required.
Received	Delivery reports are required when the recipient receives your messages.
Consumed	Delivery reports are required when the recipient reads your mes- sages.
Both	Delivery reports are required when the recipient receives and reads your messages.

# 14.1.3 Viewing Delivery Reports

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Navigate to the required message by selecting Messages  $\rightarrow$  Inbox or Outbox.
- 3. Select Read.
- 4. Press Menu  $\rightarrow$  Delivery Status.

**Result:** Your radio shows the following behavior depending on the timing in which your message is delivered.:

Delivery Report Received Tim- ing	Radio Behavior
Shortly after the message is sent	<ul> <li>Displays one of the following notifications: Message Sent</li> <li>A Delivery Report is not requested and a Store and Forward message is received in the Store and Forward server.</li> </ul>
	<b>Message Delivered</b> A Delivery Report is requested and the recipient receives the mes- sage.
	<b>Message Read</b> The <b>Consumed</b> Delivery Report is requested and the recipient opens the message.
	Message Failed The Delivery Report is requested and the recipient does not re- ceive the message within the stipulated time.
	<ul> <li>Saves the Delivery Report and a copy of the message in the Outbox.</li> </ul>
After a longer period	Saves the Delivery Report and a copy of the message in the <b>Outbox</b> .
After a longer period and func- tionality of the Delivery Report Notifications is configured by your service provider	• Saves the Delivery Report and a copy of the message in the <b>Outbox</b> .
	<ul> <li>Temporarily saves the Delivery Report message in the Inbox.</li> <li>The notification disappears after it is read.</li> </ul>
	Displays the New Message icon.

Delivery Report Received Tim- Radio Behavior ing

• Displays the New Delivery Status notification screen (if possible).

# Entering the Inbox

The inbox stores incoming messages.

### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select **Messages**  $\rightarrow$  **Inbox**.

### 14.2.1

## **Receiving New Messages**

When you receive a new message, your radio shows the following indications:

- Plays a tone.
- Displays the New Message icon and animation.

#### Procedure:

Receive new messages by selecting one of the following options:

Option	Description
Read	To read the whole message.
Back	To dismiss the message.
	<b>NOTE:</b> If you dismiss the message, you can access the message later from the Inbox.

## 14.2.2

## **Storing Numbers from Messages**

You can save the sender's number or embedded number from a message to a new or existing contact.

#### **Prerequisites:**

Contact your service provider to enable the Embedded Number feature.

- 1. From the home screen, press the Menu key.
- **2.** Select **Messages**  $\rightarrow$  **Inbox**.
- 3. Highlight the required message and select **Read**.
- 4. Press the PTT button.
- 5. Radio displays a list of the numbers (including the senders number).
- 6. Highlight the required number and press Store.
- 7. Highlight required contact and press View.

8. Store the number by using one of the following options:

Option	Actions
Saving as a new contact	<ul><li>a. Select [New Contact] and fill out the required fields.</li><li>b. Press Done.</li></ul>
Saving in an existing contact	<ul><li>a. Select Edit.</li><li>b. Choose the Type of the new number and press Done.</li></ul>

# <sup>14.3</sup> Entering the Outbox

The outbox stores outgoing messages.

## Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select **Messages**  $\rightarrow$  **Outbox**.

## <sup>14.4</sup> Using Submenus in the Inbox and Outbox

- 1. From the home screen, press the Menu key.
- **2.** Select **Messages**  $\rightarrow$  **Inbox** or **Outbox**.
- 3. Highlight the required message and press the Menu key.
- 4. Apply submenu features by using one of the following options;

Option	Actions
Saving the message as a template	<ul><li>a. Select Store.</li><li>b. Change the default name of the template and press OK.</li></ul>
Deleting the message	<ul><li>a. Select Delete.</li><li>b. To confirm, select Yes.</li></ul>
Deleting all messages in the Inbox or Outbox	<ul><li>a. Select Delete All.</li><li>b. To confirm, select Yes.</li></ul>

Option	Actions
Invoking the edit screen with the original message as default text, and the message originator as the recipi- ent	<ul> <li>a. Select Reply and edit the text.</li> <li>b. To send, perform one of the following options: <ul> <li>Select Send.</li> <li>Press the PTT button.</li> <li>Press the Send key.</li> </ul> </li> <li>NOTE: Applicable only for Inbox.</li> </ul>
Invoking the edit screen with previ- ously entered text to the same recipi- ent	<ul> <li>a. Select Resend and edit the text.</li> <li>b. To send, perform one of the following options: <ul> <li>Select Send.</li> <li>Press the PTT button.</li> <li>Press the Send key.</li> </ul> </li> </ul>
Invoking the edit screen with an old message and send it to a different recipient	<ul> <li>a. Select Forward and edit the text.</li> <li>b. To send, perform one of the following options: <ul> <li>Select Send.</li> <li>Press the PTT button.</li> <li>Press the Send key.</li> </ul> </li> </ul>
Refreshing the list of messages to display new messages	Select <b>Refresh</b> .
<ul> <li>Displaying the date and time of the message when it is in one of the following status:</li> <li>Sent</li> <li>Delivered</li> <li>Read</li> <li>Expired and undelivered</li> <li>Expired and unread</li> <li>Failed due to an unknown error</li> </ul>	Select <b>Delivery Status</b> . <b>NOTE:</b> Applicable only for Outbox.
Protecting the message and avoid deleting or overwriting it	Select Protect.
Removing protection from the mes- sage	Select <b>Unprotect</b> . <b>NOTE:</b> Message protection is enabled in the Inbox and Call Out Inbox. You can only delete unprotected messages.

## 14.5 Entering the Call-Out Box

The Call-Out (CO) Box contains incoming and outgoing Call-Out messages. Your radio plays a Call-Out tone according to the configured indication profile. The indication profile is configured based on the severity level of a matching Group Short Subscriber Identity (GSSI) and Sub-Address Group Call-Out.

## Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Messages  $\rightarrow$  CO Box.

## 14.6

## **Radio Messaging System**

The Radio Messaging System (RMS) feature allows your radio to receive and send RMS messages.

NOTE:

This is a Software Selling Feature.

This feature is only available when enabled by your service provider.

## 14.6.1 Entering the RMS Box

## Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select **Messages**  $\rightarrow$  **RMS Box**.

## 14.6.2

## Sending RMS Statuses

Prerequisites: Contact your service provider to enable the Send RMS/FMS menu item.

**NOTE:** If the **Send RMS/FMS** menu is disabled, your radio can only receive Radio Messaging System (RMS) messages.

- 1. From the home screen, press the Menu key.
- 2. Select Messages  $\rightarrow$  Send RMS/FMS.
- 3. Perform one of the following actions:
  - Press and hold a required key (for RMS status 0–9).
  - Press the required two keys combination (for RMS status 10-99).
  - Scroll to the required RMS status.
  - Type out a message using RMS Free Text (available in SDS-TL only).

## 14.7 Entering the WAP Box

Each Wireless Application Protocol (WAP) Push message can be loaded immediately or stored as a message in **WAP Box**.

### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Messages  $\rightarrow$  WAP Box.

## 14.7.1

## Viewing WAP Messages

The Wireless Application Protocol (WAP) is used to access the mobile web from a radio through a WAP browser. The WAP Push feature allows WAP content to be sent to a radio. WAP Push messages are encoded messages that include links to WAP addresses.

### **Procedure:**

- 1. From the home screen, press the Menu key.
- **2.** Select Messages  $\rightarrow$  WAP Box.
- 3. Select the required message.
- 4. View the message in the browser by selecting Go to.

## <sup>14.8</sup> User-Defined Templates

A template box stores user-defined message templates.

## 14.8.1 Managing User-Defined Templates

When and where to use: To manage your saved templates.

- 1. From the home screen, press the Menu key.
- **2.** Select Messages  $\rightarrow$  Templates.
- 3. Highlight the required template and press Menu.
- 4. Manage templates by using one of the following options:

Option	Actions
Viewing the template	Select View.
Deleting the template	Select Delete.

Option	Actions
Editing the template	a. Select Edit Text.
	<b>b.</b> Edit the text.
	c. Press the Menu key and select:
	• Save Changes – To save the edited template.
	• <b>Store</b> – To save the edited template as a new template.
Editing the name of the template	a. Select Edit Name.
	<b>b.</b> Edit the template name and press <b>OK</b> .

#### 14.8.2

## **Sending User-Defined Templates**

When and where to use: To send your saved templates.

### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Messages  $\rightarrow$  Templates.
- 3. Highlight the required template name and press Send.
- 4. Send the message by using one of the following options:

Option	Actions
Sending the message to a talkgroup	Select the required talkgroup from the TalkGroup List.
Sending the message to an address in your contact list	<ul><li>a. Press abc.</li><li>b. Select the name of the recipient.</li></ul>
Sending the message to a contact or talkgroup that is not configured in the radio	<ul><li>a. Enter the contact number.</li><li>b. Press Send.</li></ul>

# Predefined Templates

Predefined message templates are programmed into your radio.

## <sup>14.9.1</sup> Viewing Predefined Templates

- 1. From the home screen, press the Menu key.
- **2.** Select Messages  $\rightarrow$  Predefined.
- 3. Highlight the required template and press Menu key.
- 4. Select View.

## 14.9.2 Sending Predefined Templates

### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Messages  $\rightarrow$  Predefined.
- 3. Highlight the required template.

You can edit the predefined template before you send it. Press the **Menu** key and select **Edit**. The edit screen opens with the template text. You are only allowed to replace the existing text.

- 4. To send the template, perform one of the following actions:
  - Select Send.
  - Press the PTT button.
  - Press the Send key.

## 14.10 Status Messages

There are two types of status messages: statuses and targeted statuses. Your service provider determines which type is enabled on the radio.

# 14.10.1 Viewing a Status Message Number

### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Messages  $\rightarrow$  Send Status.
- 3. Press the Menu key and select View.

#### 14.10.2

## **Sending Status Messages**

When and where to use: Status messages are sent to either a selected talkgroup or a programmed private number. Only one option can be enabled at a time.

- If sending statuses to talkgroups is enabled, switch to the talkgroup to which you want to send a status message.
- If sending statuses to private numbers is enabled, no action is needed. The private number is set up by your service provider.

- 1. From the home screen, press the **Menu** key.
- **2.** Select Messages  $\rightarrow$  Send Status.

3. Send status messages by using one of the following options:

Option	Actions
Sending existing status messages in your radio	<ul> <li>a. Select the required status message.</li> <li>b. Perform one of the following actions: <ul> <li>Press Select.</li> <li>Press the PTT button.</li> <li>Press the Send key.</li> </ul> </li> </ul>
Sending status messages using a status number or if the status list is empty	<ul><li>a. Enter a 5-digit status message number.</li><li>b. Press Send.</li></ul>

## 14.10.3

## **Sending Targeted Status Messages**

When and where to use: Targeted Status Messages are sent to any talkgroup defined for your radio or any private number from the contact list or entered manually.



NOTE: This feature is not supported on Dimetra networks.

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Select Messages  $\rightarrow$  Send Status.
- 3. Send status messages using one of the following options:

Option	Action
Sending existing status messages in your radio	<ul><li>a. Select the required status message.</li><li>b. Press the Send key.</li></ul>
Sending status messages using a status number or if the status list is empty	<ul><li>a. Enter a 5-digit status message number.</li><li>b. Press Send.</li></ul>

4. Select a recipient using one of the following options:

Option	Actions
Sending to a private number	<ul> <li>a. Enter the number or press abc to select the name from your contact list.</li> <li>b. Press the Send key.</li> </ul>
Sending to a talkgroup	Select the required talkgroup from the TalkGroup List

**Result:** The display shows one of the following delivery reports:

- Status Sent
- Status Failed

## 14.11 Managing Additional Address

The Additional Address feature allows the radio to send Radio Messaging System (RMS) messages and Local Information Protocol (LIP) reports to additionally defined recipients.

- 1. From the home screen, press the Menu key.
- 2. Select Messages  $\rightarrow$  Additional Address.
- 3. Manage additional addresses by using one of the following options:

Option	Actions
Enabling or disabling Additional Ad- dress	<ul> <li>a. Select Enable.</li> <li>b. Select one of the following options: <ul> <li>On – To activate.</li> <li>Off – To deactivate.</li> </ul> </li> </ul>
Selecting additional addresses	<ul> <li>a. Select Select Address.</li> <li>b. Scroll to select the alias of the Additional Address and press Select.</li> </ul>
Viewing additional addresses	<ul> <li>a. Select Select Address.</li> <li>b. Scroll to select the alias of the Additional Address you wish to view.</li> <li>c. Press the Menu key.</li> <li>d. Select one of the following options: <ul> <li>Edit – for User Defined Additional Address alias.</li> <li>View – for Pre-defined Additional Address alias.</li> </ul> </li> <li>The display shows the Alias, the ISSI/ITSI/GSSI and the Status of the address (Pre-Defined or User Definded).</li> </ul>
Entering new additional addresses	<ul> <li>a. Select Select Address.</li> <li>b. Select [New Address].</li> <li>c. Press Change key.</li> <li>d. Enter new values of the Alias and ISSI/ITSI/GSSI fields, press Done key.</li> <li>The new alias appears in the list of available aliases.</li> <li>There is no possibility to have two Additional Address items with the same Additional Address Alias.</li> </ul>

Option	Actions
Editing additional addresses	<b>NOTE:</b> Applicable only for User-Defined positions.
	a. Select Select Address.
	<ul> <li>b. Scroll to select the alias of the Additional Address you wish to edit.</li> </ul>
	c. Press Menu key.
	d. Select Edit.
	e. Press Change key.
	<ul> <li>f. Enter new values of the Alias and ISSI/ITSI/GSSI fields, press Done key.</li> </ul>
	The changed alias appears in the list of available aliases. There is no possibility to have two Additional Address items with the same Additional Address Alias.
Deleting additional addresses	<b>NOTE:</b> Applicable only for User-Defined positions.
	a. Select Select Address.
	<ul> <li>b. Scroll to select the alias of the Additional Address you wish to delete.</li> </ul>
	c. Press Menu key.
	d. Select <b>Delete</b> and confirm deletion by the <b>OK</b> key.

## 14.12 Setting Call-Out Availability

Prerequisites: Contact your service provider to enable the Call-Out Availability feature.

- 1. From the home screen, press the Menu key.
- **2.** Select Messages  $\rightarrow$  Call-Out Availability.
- 3. Select one of the following options:
  - Available
  - Not available

## Contacts

Contacts feature offers "address-book" capabilities on your radio. Each entry matches the alias (name) and ID (number) that used to initiate a call.

Contacts from your radio can placed into multiple folders inside your address book. Folder name can be edited when creating the folder or when adding or editing a new contact (if configured).

**NOTE:** You can enter a maximum of 15 characters when naming the folder.

Contact entries are sorted alphabetically according to entry alias. Each alias can be associated with up to five IDs of different call forms.

## <sup>15.1</sup> Creating Contacts

### Procedure:

- 1. From the home screen, press Contacts key.
- 2. Select [New Contact].
- 3. Highlight Name and press Change. Enter the name of your contact and press OK.
- 4. Highlight Folder and press Change.

**NOTE:** If you save a new contact and change its contact folder, the contact is saved in both "All" folder and the selected contact folder. If you save the new contact without change its contact folder, the contact appears in "All" folder only.

5. Highlight Type and press Change. Select the required type of your contact.

## NOTE:

You can also use the Left and Right Navigation keys to select the type of your contact.

If **Private** is selected, you can set the hook method for **Simplex** and **Duplex** calls (if the respective Private Call Hook Customization is enabled).

- 6. Highlight # (number) and press Change. Enter the number of your contact and press Ok.
- If needed, highlight Speed # and press Change. Enter the speed dial number (1–1000) and press OK.

**NOTE:** If the entered number exist, the radio displays Overwrite?. Press **Yes** to confirm, or **No** to enter the speed dial number again.

8. Press Done.

Result: You have created a contact with one number. To add more numbers, repeat steps step 5-step 7.

# 15.2 **Editing Contacts**

#### **Procedure:**

1. From the home screen, press Contacts key.

- 2. Select the contact you want to edit.
- 3. Press the Menu key.
- 4. Press Edit.
- 5. Select one of the following entries and press Change to edit it:
  - Name
  - Folder
    - NOTE:
      - When **No Folder** is selected, the contact is removed from its original folder.
      - When changing a contact to a folder where the contact already exists, no changes are made.
      - When changing a contact to a new folder, the contact is added to the new folder and removed from the previous folder.
      - When a folder has reached its maximum capacity, a notification is displayed.
  - Type
  - # (number)
  - Speed #
  - Simplex
  - Duplex

**NOTE: Simplex** and **Duplex** options are only available if the contact **Type** is Private and the respective Private Call Hook Customization is enabled.

6. Press Done.

# <sup>15.3</sup> Searching Contacts

### Procedure:

To search for contacts, perform one of the following options:

Options	Actions
Search from Contacts Menu	<b>a.</b> From the home screen, press the <b>Contacts</b> key.
	<b>b.</b> Type in your contact using the keypad.
Search from Contacts Folder	<b>a.</b> From the home screen, press the <b>Contacts</b> key.
	<b>b.</b> Select a folder.
	<b>c.</b> Type in your contact using the keypad.

# <sup>15.4</sup> **Deleting Contacts and Numbers**

## **Deleting Contacts**

## Procedure:

- 1. From the home screen, press Contacts key.
- **2.** Highlight a contact you want to delete.
- 3. Press the Menu key.
- 4. Select Delete Contact.
- 5. Select Yes.

## **Deleting Numbers**

## Procedure:

- 1. From the home screen, press Contacts key.
- 2. Select a contact you want to edit.
- 3. Highlight the required number you want to delete.
- 4. Press Menu.
- 5. Select Delete number.

**NOTE:** If an entry contains only one number, deleting the number deletes the entry.

6. Press Yes.

# <sup>15.5</sup> Checking Capacity

When and where to use: To see how many numbers are stored in the radio.

- 1. From the home screen, press Contacts key.
- 2. Press the Menu key.
- 3. Select Capacity.
- 4. Select one of the following options:
  - Private
  - Phone/PABX
  - Contact

## <sup>15.6</sup> Dialing through the Contact List

- 1. From the home screen, press Contacts key.
- 2. Select the required contact or enter up to 12 characters of the contact name.
- **3.** If the contact has more than one number, use **Left** and **Right** Navigation keys to select the required number.
- 4. To initiate a simplex call, press the **PTT** button with a **Private** number. Otherwise use the **Send** key to initiate a duplex call.

## **Pictures**

The Pictures menu activates the Picture Browser for saved pictures in the microSD card or internal radio memory.

# <sup>16.1</sup> Starting the Picture Browser

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Pictures.

Result: The Picture Browser starts.

# <sup>16.2</sup> Navigating in Multi-Picture View

### Procedure:

Navigate the Picture Browser in Multi-Picture View by using one of the following options:

Option	Actions
Highlighting another item	Press the Navigation keys or rotate the Rotary Knob.
	<ul> <li>To move from the first to the last item, press the Left/ Down Navigation key or rotate the Rotary Knob anti- clockwise.</li> </ul>
	<ul> <li>To move from the last to the first item, press the Right/ Down Navigation key or rotate the Rotary Knob clock- wise.</li> </ul>
Displaying content of a folder	a. Highlight the folder and press Select.
	<b>b.</b> Highlight the folder and press the <b>Rotary Knob</b> .
Returning to the previous folder or go- ing up a level	Highlight the folder in the upper left corner of the display (with three dots) and press <b>Select</b> .
Displaying a picture in full screen view	<b>a.</b> Highlight the picture and press <b>View</b> .
	<b>b.</b> Highlight the picture and press the <b>Rotary Knob</b> .
Returning to the main menu	Press Exit.
Viewing more options for pictures	Highlight the picture and press the <b>Menu</b> key.

## <sup>16.3</sup> Navigating in Full Screen View

## Procedure:

Navigate the Picture Browser in Full Screen View by using one of the following options:

Option	Actions
Displaying the previous picture	Press the <b>Left</b> navigation key.
Displaying the next picture	Press the <b>Right</b> navigation key.
Zooming-in a picture by one level	Perform one of the following actions:
	Press the * key.
	Rotate the Rotary Knob clockwise.
	NOTE: Zoom up to five levels.
Moving the displayed area of the zoomed picture	Press the <b>Navigation</b> keys.
Returning to the Full Screen View from the zoomed view	Perform one of the following actions:
	Press Cancel.
	Press the Rotary Knob.
Returning to the Multi-Picture View	Perform one of the following actions:
	• Press <b>Back</b> .
	Press the Rotary Knob.
Removing a picture	Press Delete.

## <sup>16.4</sup> Managing Comments in Pictures

A comment can have a maximum of 144 characters. If the Digital Fingerprint feature is active or the picture exceeds 3 MB, adding and editing comments are disabled.

- 1. From the home screen, press the Menu key.
- 2. Select Pictures.
- 3. Highlight the required picture and press the Menu key.
- 4. Select Comment.
- 5. Perform one of the following actions:
  - Enter a new comment.
  - Edit an existing comment.
- 6. Confirm changes by pressing Save.

## Man Down (Fall Alert)



**NOTE:** This is a Software Selling Feature.

Man Down (henceforth known as Fall Alert) alerts when no movement occurs for a set time or the radio stays at an angle of tilt below a defined value. The radio alerts you when:

- Its tilt exceeds a predefined angle value.
- No movement is detected in a predefined time interval.

# <sup>17.1</sup> Setting Man Down (Fall Alert)

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Man Down (henceforth known as Fall Alert).
- 3. Select one of the following options:
  - **On** Activates the feature.
  - Off Deactivates the feature.

## 17.2 Exiting Man Down (Fall Alert)

### **Procedure:**

To exit Man Down (henceforth known as Fall Alert), do one of the following:

- Press and hold the Exit soft key.
- Press the **PTT** button.

## **Security**

Security menu stores all your security settings.

18.1

## **Selecting Key Index**

**NOTE:** Applicable only for ETEE model (microSD card based), use MR2021.1 and above for HSM card model.

You are allowed to change the index set name of the active key in the radio using the End-to-End Index Set Change feature. The feature End-to-End Index Set Change is enabled by your service provider.

### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Select Security  $\rightarrow$  E2E options  $\rightarrow$  Sel Key Idx.

## 18.2

## **Managing PIN Protect**

PIN Protect allows you to configure PIN code authentication at the next power on.

**NOTE:** To increase security, set your own PIN code. By default the PIN code are all zeros (depending on the length of the PIN code). For radios with general PIN authentication, the PIN length is a fixed 4-digit code. For radios with BSI and SECTRA PIN authentication, the PIN length is configurable by your service provider up to a maximum of 8-digit code Customers are strongly advised to change the default PIN code in order to protect devices from unauthorized access.

## Protecting the Radio with a PIN Code

### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Security  $\rightarrow$  PIN Protect.
- 3. Select On.
- 4. Enter the PIN code.

Postrequisites: Each time you turn on the terminal, PIN code is required.

## **Changing PIN Codes**

**NOTE:** This feature is only available when enabled by your service provider.

## **Procedure:**



- 1. From the home screen, press the Menu key.
- **2.** Select Security  $\rightarrow$  Change Code.
- 3. Radio prompts for the Old Code.
- 4. If the entered code matches the old code, radio prompts for the new code twice.

Result: Your radio displays Code Accepted.

## 18.3 Managing Keypad Lock

Keypad Lock lock the keypad on your radio.

**NOTE:** By default, the **Power** and **Emergency** buttons are always operative when the keypad is locked.

## Locking Keypad

## **Procedure:**

Perform one of the following actions:

- Press Menu and select Security -> Keylock Setup -> Lock Keypad.
- Press the predefined menu shortcut.

## **Unlocking Keypad**

## Procedure:

Press Menu  $\rightarrow$  \*.

## **Setting Automatic Keylock Delay**

- 1. From the home screen, press the Menu key.
- 2. Select Security  $\rightarrow$  Keylock Setup  $\rightarrow$  Delay.
- 3. Use Up and Down Navigation keys to change the minutes and press Done.

## **Setting Keylock on Startup**

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Security  $\rightarrow$  Keylock Setup  $\rightarrow$  Start Locked.
- 3. Select one of the following options:

Option	Description
On	Enables keypad lock on the radio at next power on.
Off	Disables keypad lock on the radio at next power on.

# Managing Air Encryption

 $\square$ 

**NOTE:** This is a Software Selling Feature.

Air Encryption enables encryption of entire communication between the radio and infrastructure, which results in increased security of calls, messages, and data.

## **Viewing Air Encryption State**

Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select **Security**  $\rightarrow$  **AirEncrypt**.

Result: Your radio displays:

- Air Encryption Is Off The Air Encryption is not activated.
- Air Encryption Is On The Air Encryption is activated.

## **Deleting User Keys**

**IMPORTANT:** The key deletion takes up to 30 seconds. During this period, the battery must not be removed. Removing the battery during this period may lead to radio malfunction.

Prerequisites: Ensure that the user key deletion is enabled in the codeplug.

## Procedure:

 $\mathsf{Press}^* \to {}^* \to {\boldsymbol{0}} \to {\boldsymbol{0}} \to {\boldsymbol{\#}} \to {\boldsymbol{\#}}.$ 

**Result:** Encryption and/or Authentication keys are deleted. The radio enters Temporary Disable state and the service provider must manually restore it.

# <sup>18.5</sup> Verify Key Validity

Key (K) is a secret key the infrastructure uses to authenticate your radio in the system providing service confidentiality between your radio and the system. Static Cipher Key (SCK) is a secret key used for the Air

Interface Encryption Class 2. It is used to encrypt calls and data in TMO and DMO. The SCKs used in TMO are called TMSCKs and SCKs used in DMO are called DMSCKs.

When and where to use: To ensure that the authentications in your radio are valid and can be used for encryption.

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Security.
- 3. Select one of the following options:

Option	Actions	
K Validity	Your radio displays:	
	• K is Valid – The infrastructure can authenticate your radio.	
	• K is Invalid – The infrastructure is unable to authenti- cate your radio. Contact your service provider to restore the key to your radio.	
TMSCK Validity	Your radio displays:	
	• TMSCK is Valid – The radio can work encrypted in TMO.	
	• TMSCK is Invalid – The radio cannot work encrypted in TMO. Contact your service provider to restore SCKs to your radio.	
DMSCK Validity	Your radio displays:	
	• DMSCK is Valid – The radio can work encrypted in DMO.	
	• DMSCK is Invalid – The radio cannot work encrypted in DMO. Please contact your service provider to restore SCKs to your radio.	
DMO SCK	IMPORTANT: Changing this setting may cause radios not to operate correctly.	
	a. Press Next.	
	<b>b.</b> Select one of the following options:	
	• <b>Yes</b> – To change the key.	
	• <b>No</b> – To leave the key.	

## 18.6 Setting Covert Mode



**NOTE:** This is a Software Selling Feature.

Covert Mode enables you to completely shut down all visible and audible alerts and notifications, making the radio unnoticeable even in a silent and dark environment.

## **Activating Covert Mode**

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- **2.** Select Security  $\rightarrow$  Covert Mode.
- 3. Select one of the following options:

Option	Description
On	All tones are set to off.
	<ul> <li>Backlight and the LED are disabled immediately</li> </ul>
	Group audio is routed to the earpiece.
	• Your radio displays: Covert Mode On.
Off	<ul> <li>All settings for tones, backlight and audio are restored.</li> </ul>
	• Your radio displays: Covert Mode Off.

## **Setting Vibrate in Covert Mode**

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Security  $\rightarrow$  Covert Mode  $\rightarrow$  Vibrate.
- 3. Select one of the following options:

Option	Description	
On	Restore all vibrations.	
Off	Disable all vibrations.	

## 18.7 Setting Remote Control

There are two types of remote control, Short Data Service (SDS) Remote Control and Status Remote Control. Only one type of remote control can be active on your radio.

**NOTE:** SDS Remote Control is a Software Selling Feature.

When and where to use: To toggle remote control

- 1. From the home screen, press the Menu key.
- **2.** Select Security  $\rightarrow$  Remote Control.
- 3. Select On to enable, or Off to disable remote control.

## Chapter 19

# Setup

The Setup menu allows you to change the general configuration on your radio.

## <sup>19.1</sup> Setting Detail Vibrate



- 1. From the home screen, press the Menu key.
- 2. Select Setup  $\rightarrow$  Vibrate  $\rightarrow$  Custom....
- **3.** Depending on the type of calls, configure vibrate settings by performing one of the following actions.

Option	Actions
Phone, PABX, and Duplex Private Call	a. Select Duplex Calls.
	<b>b.</b> Select one of the following options:
	Vibe then Ring
	Vibe Only
	Ring Only
Simplex Private Call	a. Select Simplex Calls.
	<b>b.</b> Select one of the following options:
	Vibe then Ring
	Vibe Only
	Ring Only

Option	Actions
Group Call	<ul> <li>a. Select Group Call.</li> <li>b. Select one of the following options: <ul> <li>Vibe On</li> <li>Vibe Off</li> </ul> </li> </ul>
Status Messages and Text Messages	<ul> <li>a. Select Mail Rcvd.</li> <li>b. Select one of the following options: <ul> <li>Vibe then Ring</li> <li>Vibe Only</li> <li>Ring Only</li> </ul> </li> </ul>

# <sup>19.2</sup> Setting Ring Style

## Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Setup  $\rightarrow$  Ring Style.
- 3. Select one of the following options:

Option	Description
Duplex	To set a new ring style for all incoming duplex calls.
Simplex	To set a new ring style for all incoming simplex calls.
DMO Simplex	To set a new ring style for all incoming Direct Mode Opera- tion (DMO) simplex calls.

The display shows the current ring style used.

4. Scroll to the desired style and press Select.

The new ring style is played immediately for a few seconds. If necessary, adjust the volume level.

# <sup>19.3</sup> Setting Volume

- 1. From the home screen, press the Menu key.
- **2.** Select Setup  $\rightarrow$  Set Volume.
- 3. Select Speaker or Earpiece.
- 4. Select one of the following options:

Option	Description	
Voice Vol	Sets the volume level for voice.	
Duplex Vol	Sets the volume level for duplex ringtones.	
Simplex Vol	Sets the volume level for simplex ringtones.	
Keypad Vol	Sets the volume level for keypad tones.	
Tones Vol	Sets the volume level for alert tones.	
Call-Out Vol	Sets the volume level for Call-Out tones (if enabled).	

**NOTE:** If the display shows only one option **Volume**, you can adjust all of the above settings at once. You have the option to change the settings individually when the **Volume Adj. Mode** is set to **Individual**.

5. Press Right or Left Navigation key to change the value.



**NOTE:** When the battery level is low it is not recommended to attach the 4  $\Omega$  speaker to the radio as it can cause reset or shutdown of the radio.

# <sup>19.4</sup> Setting Language

Prerequisites: Your service provider sets the available list of languags.

#### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select **Setup**  $\rightarrow$  **Language**.
- 3. Select desired language.

## 19.5

## **Setting Data Function**

You can set up your radio to transmit and receive data from an external device.



NOTE:

When set to Voice Only, the built-in data modem is disabled to conserve battery power.

#### **Prerequisites:**

Connect your radio accessory connector to an external device using the PMKN4127 or PMKN4129 cable.

The external device must run an application complying with TETRA standards.

Enter Trunked Mode Operation (TMO) only and not Transmit Inhibit Mode (TXI).

- 1. From the home screen, press the Menu key.
- **2.** Select Setup  $\rightarrow$  Data Setup.
- 3. Select one of the following options:

Option	Description
Voice Only	Your radio receives and transmits voice calls only.

Option	Description
Data Only	Your radio acts as a modem. It rejects incoming and outgo- ing voice calls (except for Emergency Calls), status and text messages.
Voice & Data	Your radio acts as a modem but voice calls have priority over data calls and can interrupt them.

# <sup>19.6</sup> Setting Audio

- 1. From the home screen, press the Menu key.
- **2.** Select **Setup**  $\rightarrow$  **Audio**.
- **3.** Set audio by using the following options:

Option	Actions
Adjusting audio parameters in the current operating environment	<ul><li>a. Select Audio Profile.</li><li>b. Select a required profile.</li></ul>
Setting the howling suppression mode	<ul> <li>a. Select Howling Suppr</li> <li>b. Select the required setting.</li> <li>NOTE: Howling suppression increases the stability of the acoustic feedback loop. Your service provider can set up the state of the howling suppression on powering up the radio. Depending on the settings, the radio can either disable the howling suppression or set the last remembered state.</li> </ul>
Setting the noise suppression mode	<ul> <li>a. Select Noise Suppr</li> <li>b. Select one of the following options: <ul> <li>Disabled - Disable noise suppression.</li> <li>Basic - Enable basic noise suppression.</li> <li>Advanced<sup>1</sup> - Enable dual microphone noise suppression.</li> <li>Wind Suppr.<sup>1</sup> - Enable dual microphone noise suppression with wind suppression capability.</li> </ul> </li> </ul>

<sup>&</sup>lt;sup>1</sup> Option is only available when the Software Selling Feature Dual Microphone Noise Suppression is enabled.

Option	Actions
Controlling audio routing between the speaker and earpiece for pri- vate or group call	<ul> <li>a. Select Audio Toggle.</li> <li>b. Select one of the following options <ul> <li>Always Loud - For high audio to come from the speaker.</li> <li>Spkr Cntrl - For audio to go through the earpiece or speaker.</li> </ul> </li> </ul>
Setting the volume to Individual or Common	<ul><li>a. Select Volume Adj. Mode.</li><li>b. Select Individual or Common.</li></ul>
Setting extra loud volume on ac- cessories	<ul> <li>a. Select Extra Loud Accry.</li> <li>b. Select Enabled or Disabled.</li> <li>NOTE: When enabled, warning messages will be prompted.</li> </ul>

# <sup>19.7</sup> Setting Tones

Your radio has two tone packs that is Classic Tones (default) and New Tones.

Prerequisites: Contact your service provider to enable a tone pack.

- 1. From the home screen, press the Menu key.
- **2.** Select Setup  $\rightarrow$  Tones.
- 3. Set tones by using the following options:

Option	Actions
Keypad Tone	<ul><li>a. Select Keypad Tone.</li><li>b. Select On or Off.</li></ul>
All Tones	<ul><li>a. Select All Tones.</li><li>b. Select On or Off.</li></ul>
Tone indication when pressing the <b>PTT</b> button	<ul> <li>a. Select Talk Permit.</li> <li>b. Select one of the following options: <ul> <li>No Tone - No tone heard upon pressing the PTT button.</li> <li>Short Tone - Short tone heard upon pressing the PTT button.</li> <li>Normal Tone - Normal tone heard upon pressing the PTT button.</li> <li>or .</li> </ul> </li> </ul>

Option	Actions
Tone indication when a recipient is ready to receive transmission	<ul><li>a. Select Clear to send.</li><li>b. Select Tone On or Tone Off.</li></ul>
Tone indication for missed calls, un- read messages, and low battery lev- el	<ul> <li>a. Select Periodic Alert.</li> <li>b. To activate or deactivate periodic tones, select Alert.</li> <li>c. To indicate the time between each periodic tone, select Period.</li> </ul>
D-PTT tone when your radio is idle or in a Group Call	<ul> <li>a. Select D-PTT Tones.</li> <li>b. To activate or deactivate D-PTT tones, select D-PTT Mode.</li> <li>c. To indicates how many times the D-PTT tone is played, select Tone Style.</li> </ul>

# <sup>19.8</sup> Setting Display

	<b>⊥</b> ull	AD		<b>Ĭ</b> ııI	
Main Menu	Setup			Display	
텯 Messages	Vibrate			Flip Display:	Off
🛤 Contacts	Ring Style			Font Level:	1
Pictures	Set Volume			Backlight:	Auto
🔦 Security	Data Setup			Brightness:	8
💿 Setup	Audio		·	LCD Off:	1 minute
놓 Group Setup	Tones			Wallpaper:	Off
🔄 Favorites	Display				
Select Back	Select	Ba	ack	Change	Done

- 1. From the home screen, press the Menu key.
- **2.** Select **Setup**  $\rightarrow$  **Display**.
- **3.** Set the display by using the following options:

Option	Actions		
Adjusting font size	a. Select Font Level.		
	<b>b.</b> Perform one of the following actions:		
	• For small font size, select <b>1</b> .		
	• For medium font size, select <b>2</b> .		
	• For large font size, select <b>3</b> .		

Option	Actions
Configuring the screen saver on the home screen	a. Select Screen Saver.
	<b>b.</b> Perform one of the following actions:
	<ul> <li>To display the screen saver when your radio is inactive for a pre-determined period, select Acti- vate → Auto.</li> </ul>
	<ul> <li>To disable to screen saver, select Activate</li> <li>→ Disabled.</li> </ul>
	• To set the text on the screen saver, select <b>Text</b> .
	<b>NOTE:</b> The color display tones down to eight colors in screen saver mode.
Adjusting backlight	a. Select Backlight.
	<b>b.</b> Perform one of the following actions:
	<ul> <li>To illuminate backlight when your radio is turning on, charging, receiving signals, and when press- ing keys on your radio or connected accessory, select Auto.</li> </ul>
	<ul> <li>To illuminate backlight when your radio is turning on, charging, or when the backlight One-Touch button is pressed, select <b>Semi Auto</b>.</li> </ul>
	<ul> <li>To disable backlight for a dimmed display, select Disabled.</li> </ul>
	NOTE: The color display tones down to eight colors when you disable backlight for a dimmed display.
Adjusting the brightness for display	a. Select Brightness.
and keypad according to ambient light	<b>b.</b> Perform one of the following actions:
	<ul> <li>To manually adjust the brightness level, select Level.</li> </ul>
	<ul> <li>To enable or disable automatic adjustment to ambient light, select Automatic.</li> </ul>

Option	Actions		
Adjusting the display timer	a. Select LCD Off.		
	<ul> <li>b. Set the timer to determine how long the display remains on in idle by selecting one of the following options:</li> </ul>		
	Disabled		
	• 30 seconds		
	• 1 minute		
	• 2 minutes		
	• 5 minutes		
	• 15 minutes		
	• 30 minutes		
	<b>NOTE:</b> When you set the timer to <b>Disabled</b> , the display remains on all the time.		
Enabling or disabling the wallpaper for	a. Select Wallpaper.		
the home screen	b. Select On or Off.		
Changing the display of main menu items	a. Select Menu Layout.		
	<b>b.</b> Perform one of the following actions:		
	• To display menu items in a list, select List.		
	<ul> <li>To display menu items in 3 x 3 grid icons, select Grid.</li> </ul>		

## 19.9

## **Setting Time and Date**

**NOTE:** If the Home Display Text Message feature is enabled, Home Mode Display Text may cover time and date, depending on the Configurable Idle Screen settings. Infrastructure synchronizes the time and date. When not within the infrastructure signal range you can set the values manually.

- 1. From the home screen, press the Menu key.
- **2.** Select Setup  $\rightarrow$  Time & Date.

**3.** Set the time and date by using the following options:

Option	Actions
Displaying the time and date on your home screen	<ul><li>a. Select Display.</li><li>b. Perform one of the following actions:</li></ul>
	<ul> <li>To display the time and date, select Time &amp; Date.</li> </ul>
	• To display the time only, select <b>Time Only</b> .
	• To display the date only, select <b>Date Only</b> .
	• To disable the time and date display, select <b>Off</b> .
Formatting the time	<b>a.</b> Select Format $\rightarrow$ Format Time.
	<b>b.</b> Select one of the following options:
	• 12-Hour
	• 24-Hour
Formatting the date	a. Select Format $\rightarrow$ Format Date.
	<b>b.</b> Select one of the following options:
	• DD/MM/YY
	MM/DD/YY
	DD-MON-YY
	• YY/MM/DD
Setting the time and date manually	a. Select Set.
	<ul> <li>Select one of the following options and adjust the value with the Navigation keys or keypad.</li> </ul>
	Set Time
	Set Date
	Time Offset
	c. Press Done.
	<b>NOTE:</b> The offset value is adjusted with 15 minute steps, up to 14 hours ahead or behind.
Setting automatic updates for the time and date	a. Select System Update.
	<b>b.</b> Perform one of the following actions:
	<ul> <li>To use internal time and offset, ignoring updates from the infrastructure, select Off.</li> </ul>
	<ul> <li>To update time from the offset programmed by your service provider from the infrastructure time, select <b>Time Only</b>.</li> </ul>
	<ul> <li>To update time and offset received from the in- frastructure, select <b>Time &amp; Offset</b>.</li> </ul>

## 19.10 Setting Energy Economy

Energy Economy (EE) is a mode of operation to save battery life.

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Setup  $\rightarrow$  Energy Economy.
- 3. Set Energy Economy by using the following options:

Option	Actions	
Enabling or disabling Energy Economy	a. Select EE Selection.	
	b. Select On or Off.	
Viewing the Energy Economy status	Select EE Status.	

## <sup>19.11</sup> Selecting Transmission Power Class

 $\Box$ 

**NOTE:** This is a Software Selling Feature.

Transmission Power feature enables your radio to choose whether to transmit with Class 3, Class 3L, or Class 4. The RF Power icon indicates when the radio uses this feature.

When and where to use: Use this procedure when you are entering the area that requires higher signal strength.

- 1. From the home screen, press the Menu key.
- **2.** Select **Setup**  $\rightarrow$  **RF Power**.
- 3. Select one of the following options:

Option	Description
Hi RF Power	Activates Transmission Power Class.
Normal RF Pwr	Deactivates Transmission Power Class.



- Changing RF Power Class to **Normal RF Pwr** during calls may result in dropping the call. The power level may be not sufficient to sustain the transmission.
- Battery consumption is higher when Hi RF Power is selected.

## 19.12 Selecting Accessory Setup

You can connect IMPRES, CORE, Other, or Secondary accessories to the radio side connector.

**NOTE:** Availability of Accessories Setup might vary depends on configuration

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- **2.** Select Setup  $\rightarrow$  Accry Setup.
- 3. Select one of the following options:

Option	Description		
Auth. Enh. RSM/PHF	Select an accessory from the list of authenticated third- party RSM.		
Auth. Basic EARP/PHF	Select an accessory from the list of authenticated third- party headset (receive-only earpiece or with PTT PHF).		
Secondary Accry	Specify if the accessory is connected to the RSM.		
Bluetooth Headset	Select an accessory from the list of available Bluetooth headsets.		

>> NOTE: Depending on the configurations, Accry Setup will list out additional items.

## 19.13 Editing Book On Settings

The Book on Setup menu item allows you to edit RUA/RUI feature settings to automatically accept or reject book on requests.

- 1. From the home screen, press the Menu key.
- **2.** Select Setup  $\rightarrow$  Book on Setup.
- 3. Select one of the following options:

Option	Description		
Book on Accept	Your radio accepts all book on requests.		
Book on Reject	Your radio rejects all book on requests without any notifi- cation.		

## 19.14 Setting Rotary Knob

The Rotary Knob menu item allows you to set all the related functionality of the Rotary Knob.

- 1. From the home screen, press the Menu key.
- **2.** Select Setup  $\rightarrow$  Rotary Knob.
- 3. Set the rotary knob by using the following options:

Option	Actions
Setting the mode for the Rotary Knob	<ul> <li>a. Select Rotary Mode.</li> <li>b. Perform one of the following actions: <ul> <li>To enable both volume and scroll modes, select Dual.</li> <li>To control volume, select Volume.</li> <li>To change talkgroups or scroll through menus, select Scroll.</li> </ul> </li> </ul>
Setting the lock function for the Rotary Knob	<ul> <li>a. Select Rotary Lock.</li> <li>b. Perform one of the following actions;</li> <li>To lock the Rotary Knob, select Locked.</li> <li>To unlock the Rotary Knob, select Unlocked.</li> <li>To disable the lock function, select Disabled.</li> </ul>
Setting the Rotary Knob function when the keypad is locked	<ul> <li>a. Select In Keypad Lock.</li> <li>b. Perform one of the following actions: <ul> <li>For volume setting and scrolling, select Lock None.</li> <li>For scrolling only, select Lock Volume.</li> <li>For volume setting only, select Lock Scroll.</li> <li>To disable both volume setting and scrolling, select Lock Both.</li> </ul> </li> </ul>
Enabling or disabling con- tinuous scrolling in a talk- group list	<ul><li>a. Select Wrap Around.</li><li>b. Select On or Off.</li></ul>
Setting the scrolling range in a talkgroup list	<ul> <li>a. Select Scroll Range.</li> <li>b. Perform one of the following actions: <ul> <li>For scrolling through talkgroups in the current folder only, select Stay In Range.</li> <li>For scrolling through all talkgroups and folders, select Scroll To Next.</li> </ul> </li> </ul>
Enabling or disabling a confirmation prompt be- fore selecting a talkgroup	<ul><li>a. Select Confirm TG Sel</li><li>b. Select On or Off.</li></ul>

Option	Actions
Setting the Side Button function	<ul><li>a. Select Function Keys.</li><li>b. Perform one of the following actions:</li></ul>
	<ul> <li>To set the function according to the Rotary Mode, select Side.</li> </ul>
	<ul> <li>To set the function for volume setting, select Volume Ad- just.</li> </ul>
	<ul> <li>To set the function to predefined One-Touch Button features, select OTB Feature.</li> </ul>

## 19.15 Entering Car Kit Settings

The car kit connects accessories to your radio in a car and enables you to operate your radio hands-free. You can connect visor microphones, external speakers, handsets, external Push-to-Talk (PTT), and external emergency buttons through the car kit.

**NOTE:** An external TETRA or GPS antenna connected to the cradle improves signal reception.

- 1. From the home screen, press the Menu key.
- 2. Select Setup  $\rightarrow$  Car Kit.
- 3. Set the car kit by using the following options:

Option	Actions
Activating or deactivating external speakers	<ul><li>a. Select Spkr On/Off.</li><li>b. Select Speaker On or Speaker Off.</li></ul>
Enabling or disabling extra sound and light notification on incoming private calls	<ul><li>a. Select Horn&amp;Lights.</li><li>b. Select On or Off.</li></ul>
Enabling or disabling vibration	<ul> <li>a. Select Vibrate.</li> <li>b. Perform one of the following actions: <ul> <li>To disable vibration, select Always Ring Only.</li> <li>To enable vibration as defined in the Vibrate menu, select Normal Settings.</li> </ul> </li> </ul>
Setting the radio display when connec- ted to a car kit	<ul> <li>a. Select Display → Flip Display.</li> <li>b. Perform on of the following actions: <ul> <li>For normal display, select Off.</li> <li>For flipped display, select On.</li> </ul> </li> </ul>

Option	Actions
Defining the backlight function when connected to a car kit	<ul> <li>a. Select Backlight.</li> <li>b. Perform one of the following actions: <ul> <li>To turn on backlights by pressing any button, select Auto.</li> <li>To keep backlights off, select Disabled.</li> <li>To turn on or off backlights by pressing a function button, select Semi Auto.</li> </ul> </li> </ul>
Defining accessories connected to a car kit	<ul> <li>To keep backlights on, select On.</li> <li>a. Select Accry Setup.</li> <li>b. Select one of the following options: <ul> <li>GCAI Accessory</li> <li>Visor Microphone</li> <li>External Speaker</li> </ul> </li> <li>NOTE: Visor microphones and external speakers must be configured to operate your radio with a car kit.</li> </ul>

## <sup>19.16</sup> Changing the USB Settings Mode

USB Settings allows you to set the mode that your radio enters when connected to a computer.

## Prerequisites:

Your radio only supports the following characters to compose file names:

- Numeric digits
- English alphabetic characters
- Space
- Non-alphabetic characters: ! # \$ % & ' () @ ^ \_ ` { } ~.

**NOTE:** Before using non-alphabetic characters, ensure that your computer system supports them.

- 1. From the home screen, press the Menu key.
- **2.** Select Setup  $\rightarrow$  USB Settings.
- 3. Press Change.
- 4. Select one of the following options:

Option	Description
Mass Storage	Manage pictures that are stored in the internal flash memory or microSD card on a computer. Installing additional applica- tions is not required. When you connect your radio to the

Option	Description
	computer, you can manage pictures from the <b>My Pictures</b> and <b>My Received Files</b> folders.
Peripheral Equipment Inter- face (PEI)	Enables communication with your radio using standard pro- tocols from the European Telecommunications Standards In- stitute (ETSI). You can manage pictures, radio settings, and services. This mode provides access for external applications.

## 19.17 Selecting Default Setting

The Default Settings sub-menu item resets your radio back to default settings.

- 1. From the home screen, press the Menu key.
- **2.** Select Setup  $\rightarrow$  Def. Settings.
- 3. To confirm, press Yes.

## **Chapter 20**

# **Bluetooth**

The Bluetooth menu allows you to manage the Bluetooth feature.

## 20.1

## **Enabling Discoverable Mode**

## Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Setup  $\rightarrow$  Bluetooth  $\rightarrow$  Discoverable.

#### **Result:**

Your radio remains discoverable to other Bluetooth-enabled devices for the configured time.

# Adding Bluetooth Devices

#### **Prerequisites:**

For sensor devices and radio control devices, contact your service provider to add them into the radio codeplug.

Examples of sensor devices are barcode scanners and heart rate sensors.

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Select Setup  $\rightarrow$  Bluetooth  $\rightarrow$  Add Device.

## 20.3 Configuring Bluetooth Settings

- 1. From the home screen, press the Menu key.
- **2.** Select **Bluetooth**  $\rightarrow$  **Settings**.
- 3. Select one of the following options:

Option	Description
Bluetooth	Enables or disables Bluetooth.
Name	Edits the name of your radio. This name is visible to other remote devices.
Discoverable	Defines how long your radio remains discoverable.
Indications	Enables or disables audible indications from your radio during Bluetooth actions.

Option	Description
Audio	Determines the audio connection mode for headsets.
	• <b>Power Optimized</b> – The Bluetooth audio link is released when there is no active call. This option increases the battery life time, but causes a delay in the call setup time for group calls. This delay can cause audio loss on some headsets.
	<ul> <li>GC Optimized – The Bluetooth audio link is kept open all the time. This option ensures that audio in group calls is not delayed and the audio link is not lost, but shortens the battery life time.</li> </ul>
	<b>NOTE:</b> This setting does not affect the Motorola Solutions headset with PTT (NNTN8143_ or NNTN8191_) as it is always in the <b>GC Optimized</b> mode.

# Pairing Bluetooth Devices with Your Radio

Pairing is a process that creates a link between two Bluetooth-enabled devices. Once paired, devices remember each other and every subsequent connection between them is authenticated automatically.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Bluetooth  $\rightarrow$  Add Device.

The device that you want to connect with must be in pairing mode.

3. Highlight the required device and select Connect.

Improve the connection between an accessory and your radio by pressing the **PTT** button on the accessory.

4. If needed, enter a PIN code or a passkey.

**NOTE:** If you enter an incorrect PIN code and the subsequent pairing take too long or result in an error message, power cycle the Bluetooth device. Your radio accepts three attempts.

# Pairing with Devices Using NFC Tag

Near-Field Communication (NFC) is a wireless technology used to ease pairing between two NFC-enabled devices. Your radio and the device must be close together.

## Procedure:

1. Touch the NFC tag of the device to the NFC tag of your radio.

The device prompts you to confirm pairing with the radio.

2. Select pairing confirmation on the device.

**Result:** Bluetooth standard pairing process occurs between your radio and the device.

## 20.6

## **Connecting Devices**

**NOTE:** If Secure Connection Only is enabled for your radio, your radio only connects to accessories that support secure connection. Your radio can only pair with one device using secure connection.

#### **Prerequisites:**

- To connect to specific devices, contact your service provider to configure your radio.
- Use only pre-approved sensor devices such as barcode scanners and heart rate sensors.

#### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select **Bluetooth**  $\rightarrow$  **Devices**.
- 3. Highlight the required device and press Menu/OK.
  - >> NOTE:

Depending on languages installed on the radio, some characters in names of devices might not be displayed properly.

Radio-initiated automatic reconnection with several remote Bluetooth devices at the same time cannot be guaranteed to be successful in 100%, due to the fundamental nature of Bluetooth. In case the reconnection fails after a power cycle, reconnect the device manually.

4. Select Connect.

## 20.7 Disconnecting Devices

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Disconnect devices from your radio by using one of the following options.

Option	Actions
Disconnecting a device	<b>a.</b> Select <b>Bluetooth</b> $\rightarrow$ <b>Devices</b> .
	<b>b.</b> Highlight the required device and press <b>Disconnect</b> .
Disconnecting all devices	Select Bluetooth $\rightarrow$ Disconnect All.

# <sup>20.8</sup> Managing Devices

- 1. From the home screen, press the Menu key.
- **2.** Select **Bluetooth**  $\rightarrow$  **Devices**.
- 3. Highlight the required device and press the Menu key.
- 4. Select one of the following options:

Option	Description
Name	Displays the name of the device. The name is editable only if your service provider did not pre-set it.
Туре	Displays the type of device. This menu item cannot be config- ured.
Delete	Removes the device from the list of paired devices.

## 20.9 Setting Indoor Location

**NOTE:** Your service provider can enable this feature.

The use of the Indoor Location feature may have a small and negligible impact on other Bluetooth functions on your radio.

## Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select **Bluetooth**  $\rightarrow$  **Indoor Location**.
- 3. Select Change.
- 4. Select On or Off to activate or deactivate Indoor Location.

Result: Your radio is now able to detect Bluetooth location beacons when Indoor Location is activated.

# 20.10 Viewing Detected Beacons

**Prerequisites:** Turn on Indoor Location. If Indoor Location is turned off, the screen displays Service Restricted.

## Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select **Bluetooth**  $\rightarrow$  **Indoor Location**.
- 3. Select Beacons Found.
- 4. Select the preferred beacon.

The screen displays details of the beacon.

## **Chapter 21**

## **Browser**

Browser menu activates a WAP browser to browse the Internet from your radio.

# Using the Browser

## **Setting Up Data**

## **Procedure:**

- 1. From the home screen, press the Menu key.
- **2.** Select Setup  $\rightarrow$  Data Setup.
- 3. Select to Data Only or Voice & Data.

## **Entering the Browser**

## **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Select Browser.
- 3. To exit the browser, press and hold the End key.

## **Entering Browser Menu Panes**

## Procedure:

1. Press the Menu key.

Your radio displays the Navigate pane or the last browser menu pane.

- **2.** If you navigate to a web page that has two or more soft keys options, the **Options** pane appears. Perform one of the following actions:
  - In the **Options** pane, scroll to other panes by pressing the **Left** or **Right** navigation keys.
  - Select Browser Menu and scroll to the required pane.

## **Exiting the Browser**

## Procedure:

To exit the browser, press and hold the End key.

# <sup>21.2</sup> Tips for Browsing

Tips for methods that help with easy browsing.

## 21.2.1 Creating Bookmarks Using the Navigate Pane

## Procedure:

- 1. Open the browser and browse to the required page.
- 2. Enter the browser menu by pressing Menu.
- 3. Select Mark Page.

The screen displays the title and URL of the marked page

- 4. Press Save or Select.
- 5. Select Menu.
- 6. Perform one of the following actions:
  - Confirm the created bookmark by selecting Save.
  - Edit the title, folder, choice, and URL of the created bookmark by selecting Edit.

# 21.2.2 Creating Bookmarks Using the Bookmarks Pane

## Procedure:

- 1. Open the browser and scroll to the **Bookmarks** pane.
- 2. Select Organise or More...

The **Organise** option is for when no bookmarks are saved.

- 3. Select Menu.
- 4. Scroll to New Bookmark.
- 5. Enter the title and URL of the bookmark, and select the location of the bookmark.
- 6. Press Save.

## 21.2.3 Downloading Pages Using Bookmarks

## Procedure:

- 1. Open the browser and scroll to the **Bookmarks** pane.
- 2. Scroll to the required bookmark and select Go.

## **Result:**

The bookmark downloads the selected page.

## 21.2.4 Creating Hotkeys

## Procedure:

- 1. Open the browser and scroll to the Bookmarks pane.
- 2. Scroll to the required bookmark and press Menu.
- Select Hotkeys and an unassigned key. The available keys are 1 to 9.
- 4. Select Assign.

Result: The display shows the bookmark and assigned hotkey.

## 21.2.5

## **Downloading Pages Using Hotkeys**

## Procedure:

- 1. Open the browser.
- 2. Download a bookmarked page by pressing and holding the corresponding hotkey.

## 21.2.6 Saving Pages for Offline Browsing

## **Procedure:**

- 1. Open the browser and browse to the required page.
- 2. Press Menu.
- 3. Scroll to the Tools pane.
- 4. Select Save Page.

If required, you can edit the suggested page title.

5. Scroll down and select Save.

Result: Your radio saves the page into the Bookmarks Saved Pages folder.

## 21.2.7 Selecting Saved Pages

## Procedure:

- 1. Open the browser and scroll to the **Bookmarks** pane.
- 2. Select Organise or More...

The **Organise** option is for when no bookmarks are saved.

- 3. Enter the Saved Pages folder by selecting Go.
- 4. Select a saved page and press OK.

**Result:** The display shows the saved page. Depending on the saved page, you can browse the web from there.

## <sup>21.3</sup> Managing Bookmarks

## Procedure:

- From the Bookmarks pane, select Organise or More...
   The Organise option is for when no bookmarks are saved.
- 2. Scroll to a bookmark and press Menu.
- **3.** Select one of the following options:

-	
Option	Description
Back	To display the bookmarked page.
Details	To modify the title and URL of the bookmark.
Delete	To delete the bookmark.
New Bookmark	To create a bookmark.
New Folder	To create a folder.
Move	To move the bookmark to a new folder.
Delete All	To delete all bookmarks.
Hotkeys	To assign hotkeys to bookmarks.

## <sup>21.4</sup> Managing Saved Pages

- 1. From the Bookmarks pane, select the Saved Pages folder.
- 2. Scroll to a saved page and press Menu.
- **3.** Select one of the following options:

Option	Description
Back	To display the saved page.
Details	To modify the title and URL of the saved page.
Update Page	To replace the saved version with the current version that must be downloaded from the server.
Delete	To delete the page from the cache.
Delete All	To delete all saved pages from the caches.
Cancel	To exit and return to the previous page.

## <sup>21.5</sup> Managing Documents

## Procedure:

- 1. From the Tools pane, select More...
- 2. Scroll to a document and press Menu.
- 3. Select one of the following options:

Option	Description
Show URL	To display the URL of the current page.
Save Page	To create a snapshot of the document.
Find Text	To find a text string in the document.
Copy Text	To copy text from the document to the clipboard.

## <sup>21.6</sup> Searching for Visited URLs

You can search up to nine recently visited pages from the History pane.

## **Procedure:**

- 1. From the History pane, select the URL.
- 2. Press OK.

## 21.7

## **Inserting URLs**

The Text Input pane is visible when text entry fields are active. This pane allows you to input alphanumeric characters and symbols.

## Procedure:

- 1. From the browser, select the URL.
- 2. Open the Text Input pane by pressing the abc softkey.
- 3. Insert the URL by pressing the following softkeys:

Option	Description
abc	To insert alphabetic characters in lower case.
ABC	To insert alphabetic characters in upper case.
123	To insert numeric characters and symbols.

- 4. Select www for HTTP mode.
- 5. Select .com or other required extensions.

**Result:** The display shows the URL with the selected extension.

## **Chapter 22**

# **Group Setup**

The Group Setup menu item allows you to set the operation parameters, scanning and my groups folder.

## 22.1

## **Operation Parameters**

Operation Parameter is used to define the radio mode and the talkgroup at the radio startup, and when changing modes TMO to DMO and TMO to Repeater.

## 22.1.1

## **Determining Radio Mode At Radio Startup**

When and where to use: To set radio mode at startup.

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Group Setup  $\rightarrow$  Operations Parameters  $\rightarrow$  Startup.
- 3. Select one of the following options:

Option	Desciption
ТМО	Your radio powers up in Trunked Mode Operation (TMO).
DMO	Your radio powers up in Direct Mode Operation (DMO).
Last Selected	Your radio powers up in the mode it was in when last powered down.

## 22.1.2 Determining Talkgroup At Radio Startup

When and where to use: To determine the talkgroup of your radio at radio startup.

- 1. From the home screen, press the Menu key.
- 2. Select Group Setup  $\rightarrow$  Operations Parameters  $\rightarrow$  Home Group Startup.
- 3. Select one of the following options:

Option	Desciption
Last Selected	Your radio enters the last selected TMO or DMO talk- group before power down.
Home Group	Your radio enters the Home Group (TMO or DMO) at power-up, depending on the radio mode entered at power up.

## 22.1.3

## **Determining Talkgroup When Switching Mode**

When and where to use: To determine the talkgroup of your radio when switching from TMO to DMO or Repeater mode.

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Group Setup  $\rightarrow$  Operations Parameters  $\rightarrow$  Home Group TMO to DMO/Repeater.
- 3. Select one of the following options:

Option	Desciption
Last Selected	Your radio enters the last selected DMO talkgroup when in DMO. If Group Mappings are configured, they take precedence. The DMO Talkgroup mapped to the current TMO Talkgroup is used.
Group Mappings	Your radio enters the DMO Home Group unless a Group Mapping is configured. If Group Mappings are configured, they take precedence. The DMO Talkgroup mapped to the current TMO Talkgroup is used
Home Group	Your radio enters the DMO Home Group, ignoring possible group mappings.

## 22.1.4 Configuring Home Group

When and where to use: To configure the home groups on your radio.

- 1. From the home screen, press the Menu key.
- 2. Select Group Setup  $\rightarrow$  Operations Parameters.
- **3.** Perform one of the following actions:

Option	Action
To configure the TMO Home Group or Home Folder	Select TMO Home Group.
To configure the DMO Home Group	Select DMO Home Group.

## <sup>22.2</sup> Scan

The Scan menu item allows you to activate or deactivate scanning, view the active scan list, and edit the scan lists. This feature is available only for Trunked Mode Operation. Your radio joins any group call as long as this group is defined in the scan list and scan is turned on.

# 22.2.1 Activating Talkgroup Scanning

When and where to use: If you want to monitor any TMO Group Call in the defined talkgroup list.

## **Procedure:**

- 1. From the home screen, press the Menu key.
- **2.** Select Group Setup  $\rightarrow$  Scan  $\rightarrow$  Scanning.
- **3.** Select **Select List** and then a list name. Your radio displays list name selected.
- 4. Select Scanning  $\rightarrow$  On.

Result: Your radio is scanning on the predefined scan list.

## 22.2.2

## **Setting Talkgroups in the Active Scan List**

When and where to use: If you want to edit talkgroups in the active scan list.

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Group Setup  $\rightarrow$  Scan  $\rightarrow$  Active List.

**NOTE:** If Scanning is Off is displayed, go to Group Setup  $\rightarrow$  Scan  $\rightarrow$  Scanning  $\rightarrow$  On to enable scanning.

- 3. Select View and highlight the required talkgroup.
- 4. Press Menu.
- 5. Select one of the following options:

Option	Description
Delete	Erases this group from the active scan list.
Priority	Sets the priority status of the talkgroup:
	• Low
	Medium
	● High

## 22.2.3 Setting Scan Lists

When and where to use: If you want to set up any scan list.

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Group Setup  $\rightarrow$  Scan  $\rightarrow$  Scan Lists.
- 3. Highlight the required scan list and press **Menu** to see additional settings:

Option	Description
Rename	Enters new name for that scan list.
Capacity	Displays the number of assigned and unassigned talk- groups for the scan list.
Clear	Deletes all the talkgroup assigned to that scan list.
Add Group	Adds a talkgroup to the scan list. Select one talkgroup from your talkgroup folders and assign appropriate pri- ority.
Edit	Changes the priority of the required talkgroup or dele- tes it.

# 22.2.4 **Deleting Talkgroups from Scan Lists**

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Group Setup  $\rightarrow$  Scan  $\rightarrow$  Scan Lists.
- 3. Highlight the required scan list and press  $\textbf{Menu} \rightarrow \textbf{Edit}.$
- 4. Highlight the required talkgroup and press  $Menu \rightarrow Delete$ .

## <sup>22.3</sup> My Groups

The My Groups sub-menu allows you to select or edit your favorite group list.

# Adding Favorite Folders

- 1. From the home screen, press the **Menu** key.
- 2. Select Group Setup  $\rightarrow$  My Groups.
- 3. Select [New Folder].
- 4. Enter the name and select OK.

# Adding Talkgroups to Favorite Folders

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Group Setup  $\rightarrow$  My Groups.
- 3. Select <FolderName>.
- 4. Select [New Group].
- 5. Select the required talkgroup by Folder or by alphabetic search.

## 22.3.3 Editing My Folder List

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Group Setup  $\rightarrow$  My Groups.
- 3. Highlight required favorite folder.
- 4. Press Menu.
- 5. Edit the folder by using the following options:

Option	Actions
Renaming the folder	a. Select Rename Folder.
	<b>b.</b> Enter the new name of the folder and press <b>OK</b> .
Deleting the folder	a. Select Delete Folder.
	b. Press Yes.
	NOTE: You cannot delete the last favorite fold- er.

## 22.3.4 Deleting Talkgroups from Favorite Folders

- 1. From the home screen, press the Menu key.
- **2.** Select Group Setup  $\rightarrow$  My Groups.
- **3.** Select required favorite folder.
- 4. Delete talkgroups by using one of the following options:

Option	Actions
Deleting a talkgroup	Highlight the talkgroup and select <b>Delete</b> .
Deleting all talkgroups	Press Menu and select Delete All.

## **Chapter 23**

# **Individual Setup**

Individual setup menu allows you to set call settings for individual calls.

## 23.1

## **Enabling or Disabling Call Waiting**

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Select Individual Setup  $\rightarrow$  Trunked Mode  $\rightarrow$  Call Waiting.
- 3. Perform one of the following actions:
  - To enable Call Waiting, select **On**.
  - To disable Call Waiting, select Off.

## 23.2 Setting Call Forwarding

#### **Prerequisites:**

Enter Trunked Mode Operation (TMO).

- 1. From the home screen, press the Menu key.
- 2. Select Individual Setup  $\rightarrow$  Trunked Mode  $\rightarrow$  Call Forwarding.
- 3. Set Call Forwarding by using the following options:

Option	Actions
Enabling Call Forwarding	Select Config Sending $\rightarrow$ On.
Disabling Call Forwarding	Select Config Sending $\rightarrow$ Off.
Setting predefine condition messages	<ul> <li>a. Select Config.</li> <li>b. Select one of the following options: <ul> <li>Always</li> <li>Busy</li> <li>No Answer</li> </ul> </li> </ul>
Displaying last forward call	Not Reachable Select Last Result.

## **Chapter 24**

# **Favorites**

**Favorites** contains shortcuts to frequently used talkgroups and contact numbers that are organized in favorite folders.

When and where to use: You can quickly access favorite folders from the home screen by:

## **Procedure:**

- 1. Press Up Navigation key to access the folders.
- 2. Use Navigation Keys or Rotary Knob to scroll through items inside the folders.

## 24.1

## **Adding Folders to Favorites**

Prerequisites: Favorites contains less than three favorite folders.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Favorites  $\rightarrow$  [New Folder]

# Adding Contact Numbers to Favorites

## Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Contacts
- 3. Highlight a contact that you want to add to **Favorites** and using the **Left** or **Right** Navigation key select the required number.
- 4. Press the Menu key and select Add to Favorites.
- 5. Select a folder you want to add the contact number to and press Select.

## <sup>24.3</sup> Making Private Calls to Favorite Contacts

- 1. To select a contact number you want to call, from the home screen do one of the following:
  - Press the **Up** Navigation key.
  - Go to **Options** → **TG by Folder**, select the required favorite folder, and highlight the contact number.

2. Depending on the mode, make private calls by using one of the following options:

Option	Actions
Making simplex calls in TMO or DMO	<ul> <li>a. Press and hold the PTT button.</li> <li>b. Wait for the Talk Permit tone before talking.</li> <li>c. Release the PTT button to listen.</li> </ul>
Making duplex calls in TMO	<ul> <li>a. Press the Send key to initiate the call.</li> <li>b. You hear a ringing tone until the called party answers the call.</li> </ul>

3. To end the call, press the End key.

# Adding Talkgroups to Favorites

## **Prerequisites:**

To add a DMO talkgroup, ensure that your radio is in DMO. To add a TMO talkgroup, ensure that your radio is in TMO.

#### **Procedure:**

- 1. From the home screen, press **Options**.
- 2. Select one of the following options:
  - TG by Folder contains talkgroups arranged by folders.
  - **TG by abc** contains talkgroups arranged alphabetically.
- 3. Find and highlight a talkgroup that you want to add to Favorites.
- 4. Press the Menu key and select Add to Favorites.
- 5. Select a folder you want to add the talkgroup to and press **Select**.

## 24.5

## **Managing Folders in Favorites**

- 1. From the home screen, press the Menu key.
- 2. Select Favorites.
- 3. Highlight a required folder.
- 4. Press the Menu key.
- 5. Select one of the following options:

Option	Actions
Renaming the folder	<ul> <li>Press Rename Folder to change the folder name.</li> </ul>
	<b>b.</b> Press <b>OK</b> to confirm renaming the folder.

Option	Actions	
Deleting the folder	a. Press the <b>Delete Folder</b> to remove selec- ted folder.	
	<b>b.</b> Press <b>Yes</b> to confirm deletion.	

# 24.6 **Deleting Items from Favorites Folder**

## **Deleting Single Items**

You can choose to delete individual item or delete all items from the favorite folder.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Favorites.
- 3. Select a folder containing the item you want to remove.
- 4. Highlight the item and select **Delete**.

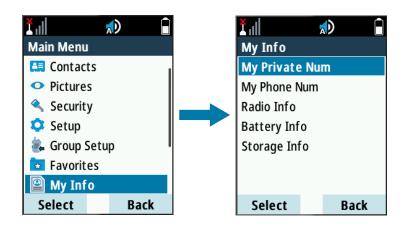
## **Deleting All Items**

- 1. From the home screen, press the Menu key.
- 2. Select Favorites.
- 3. Select a required folder.
- 4. Press the Menu key and select Delete All.

# My Info

My info menu enables you to view your private, phone, and radio information.

# **Viewing Personal Information**



- 1. From the home screen, press the Menu key.
- 2. Select My Info.
- **3.** Select one of the following options:

Option	Description
My Private Num	To view the private number of your radio.
My Phone Num	To view the phone number of your radio.
Radio Info	To view other information such as manufactur- er, product type, ISSI, TEI, Serial Number, and OPTA.
Battery Info	To view the power level of the battery.
Storage Info $\rightarrow$ Radio Storage	To view the amount of free and total space of the internal memory.
Storage Info $\rightarrow$ SD card Storage	To view the amount of free and total space of the microSD card.

Option	Description
SIM Info	To view the arbitrary textual information of a smart card.

### NOTE:

You can edit the displayed phone number by selecting Edit.

You can view the storage space of the microSD card only if the card is correctly formatted. Your radio must not be connected to the computer in the Mass Storage Mode.

# 25.2 Viewing Talkgroup Subaddresses

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Select My Info  $\rightarrow$  Talkgroup Info.
- 3. To view a subaddress, select the talkgroup from the talkgroup list.

# Formatting the MicroSD Card

You can format microSD cards that are non-formatted or incorrectly formatted. If the microSD card is correctly formatted, this option is not visible in the menu.

**NOTE:** Formatting removes all files saved in the microSD card.

- 1. From the home screen, press the Menu key.
- 2. Select My Info  $\rightarrow$  Storage Info  $\rightarrow$  Format SD card.
- 3. Confirm formatting by pressing Yes.

## **Recent Calls**

Recent call menu allows you to view the call history of last dialed numbers, answered call numbers, and missed call numbers.

# Viewing Recent Calls

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Select Recent Calls.
- 3. View recent calls by using the following options:

Option	Actions	
Viewing dialed calls	<ul> <li>a. Select Dialed.</li> <li>b. Press Menu key and select View to view your dialed number.</li> </ul>	
Viewing received calls	<ul> <li>a. Select Received.</li> <li>b. Press Menu key and select View to view your received call.</li> </ul>	
Viewing missed calls	<ul> <li>a. Select Missed.</li> <li>b. Press Menu key and select View to view your missed call.</li> </ul>	

Call time information is only available if the time and date are set in the radio. Call duration is not available in the missed calls list.

## 26.2 Calling from Recent Calls

- 1. From the home screen, press the Menu key.
- 2. Select Recent Calls.
- 3. Select one of the following options:
  - Dialed
  - Received
  - Missed
- 4. Highlight the required call.

5. Perform one of the following actions:

Option	Actions	
Making private calls	<b>a.</b> Press <b>PTT</b> button to make the call.	
Making phone calls	<b>a.</b> Press <b>Send</b> key to make the call.	

Phone calls are only supported in Trunked Mode Operation (TMO).

# Storing Recent Calls into the Contact List

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Recent Calls.
- 3. Select on of the following options:
  - Dialed
  - Received
  - Missed
- 4. Press Store.

If Store is not assigned to the Left soft key, the number is already stored in your contact list.

**5.** Store the number by using one of the following options:

Option	Actions	
Storing the number as a new entry	Select [New Contact].	
Storing the number as an existing entry	a. Select the entry.	
	b. Press View.	
	c. Select Edit.	

- 6. Highlight the contact type field.
- 7. Display the required contact type for the number by scrolling to the left or right.
- 8. Select Done.

#### 26.4

## **Deleting Recent Calls**

- 1. From the home screen, press the Menu key.
- 2. Select Recent Calls.
- 3. Select on of the following options:
  - Dialed
  - Received
  - Missed

- 4. Highlight the required call and press Menu.
- **5.** Delete calls by using one of the following topions:

Option	Actions
Deleting a call	a. Select Delete.
Deleting all calls	a. Press Delete All.

## **Shortcuts**

Shortcuts menu allows you to set up shortcuts to access frequently used menu items.

### 27.1 Creating Menu Shortcuts

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Scroll to the item that you want to create a shortcut for.
- 3. Highlight the item.
- 4. Press and hold Menu.

A confirmation message is displayed.

5. Select Yes.

The key for the shortcut is displayed.

6. Press Done.

# Managing Menu Shortcuts

- 1. From the home screen, press the Menu key.
- 2. Select Shortcuts.
- 3. Highlight a required shortcut and press Menu.
- 4. Manage menu shortcuts by using the following options:

Option	Actions	
Changing the assigned key	<ul> <li>a. Select Edit.</li> <li>b. Enter the required number from 1 to 20.</li> <li>c. Press OK.</li> </ul>	
Deleting a shortcut	Select <b>Delete</b> $\rightarrow$ <b>Yes</b> .	
Deleting all shortcuts	Select <b>Delete All</b> $\rightarrow$ <b>Yes</b> .	

# Logging On or Off Radio User Identity

## Logging On Radio User Identity

#### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select  $RUI \rightarrow Log on$ .
- 3. Perform one of the following actions:

Option	Action	
Selecting an existing user ID	<ul><li>a. Select User ID.</li><li>b. Select your user ID from the list.</li></ul>	
Creating a user ID	<ul><li>a. Select [New User ID].</li><li>b. Enter your user ID.</li></ul>	

- 4. Select User PIN.
- 5. Enter your credentials and press OK.

## Logging Off Radio User Identity

- 1. From the home screen, press the Menu key.
- 2. Select  $RUI \rightarrow Log off$ .
- 3. Press Accept.

## **Networks**

This is a Software Selling Feature. The Networks menu allows you to switch between the radio operation modes.

## <sup>29.1</sup> Selecting Network Operation Mode

- 1. From the home screen, press the Menu key.
- 2. Select Networks.
- 3. Select one of the following options:

Option	Description	
Network Sel	Selects the network to which the radio is allowed to regis- ter.	
Trunked Mode	Switches to the mode using infrastructure.	
Direct Mode	Switches to the mode without using infrastructure.	
Repeater Mode	Switches to the Repeater Mode.	
TXI Mode	Activate to stop sending any radio transmission.	
	NOTE: If your radio is in TXI Mode, you cannot switch from Direct Mode to Trunked Mode or Repeater Mode.	
Automatic DMO	Enable or Disable Automatic DMO.	
	<b>NOTE:</b> When the radio enters Automatic DMO through a gateway, the radio does not support Private Calls.	
TG Net Sel	Selects one or multiple networks determined by the selected tell talkgroup.	

# <sup>29.2</sup> Network Select

The Network Select sub-menu allows you to select a network to register your radio.

### 29.2.1 Selecting Your Network

**NOTE: Network Sel** is available only in TMO or Gateway mode, otherwise your radio displays Service Restricted message.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Networks  $\rightarrow$  Network Sel  $\rightarrow$  Home Only.

Your radio registers to the home network.

### 29.2.2 Using Select Net Registration

Use this feature to migrate to another predefined network when you are out of the range of your network and your radio displays the No Service message.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Networks  $\rightarrow$  Network Sel  $\rightarrow$  Select Net.
- 3. Select the required network from the list.

Result: Your radio registers to the selected network.

#### 29.2.3

## **Using Any Network Registration**

Use this feature when your radio loses the home network coverage and you want to increase the number of networks it can scan and register.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Networks  $\rightarrow$  Network Sel  $\rightarrow$  Any Network.

Your radio selects and registers to the network automatically from the predefined list.

### 29.3 Enabling Automatic DMO

#### Procedure:

1. From the home screen, press the Menu key.

2. Select Networks  $\rightarrow$  Network Sel  $\rightarrow$  Automatic DMO  $\rightarrow$  Enable/Disable.

# 

You can enable or disable Automatic DMO in the options menu using TMO, DMO, and Automatic DMO option keys.

Private Calls are not supported when your radio enters Automatic DMO through a gateway.

## 29.4 Talkgroup Network Select

The Talkgroup Network Select sub-menu allows you to select one or multiple networks to register your radio accordingly to the selected talkgroup.

29.4.1

## Selecting Your Talkgroup Network

**NOTE: TG Net Sel** is available when the selected talkgroup is a Any Net talkgroup or a InterSystem Interface (ISI) talkgroup, otherwise your radio display Service Restricted message.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Networks  $\rightarrow$  TG Net Sel  $\rightarrow$  Home Only.

Your talkgroup registers to the home network.

### 29.4.2 Using Select TG Net Registration

When and where to use: If the talkgroup selected is an Any Net talkgroup, this menu displays multiple networks allowed for registration. If the talkgroup selected is an ISI talkgroup, this menu displays multiple talkgroup linked networks. Use this feature to migrate to another predefined network, when you are out of the range of your network and your radio displays the No Service message.

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Select Networks  $\rightarrow$  TG Net Sel  $\rightarrow$  Select TG Net.
- 3. Select the required network from the list.

#### 29.4.3

## **Using Prefer TG Net Registration**

When and where to use: If the talkgroup selected is an Any Net talkgroup, this menu displays multiple networks allowed for registration. If the talkgroup selected is an ISI talkgroup, this menu displays multiple talkgroup linked networks. Use this feature to select a network that is most preferred. The selected network is the first priority for scanning and registration.

- 1. From the home screen, press the Menu key.
- 2. Select Networks  $\rightarrow$  TG Net Sel  $\rightarrow$  Prefer TG Net.
- 3. Select the required network from the list.

### 29.4.4 Using Any TG Net Registration

When and where to use: Your radio has lost its network coverage and wants to increase the number of networks it can scan and register. If the talkgroup selected is an Any Net talkgroup, this menu displays all networks allowed for scanning and registration. If the talkgroup selected is an ISI talkgroup, this menu displays all talkgroup linked networks allowed for scanning and registration.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Networks  $\rightarrow$  TG Net Sel  $\rightarrow$  Any TG Net.

Your radio selects and registers to the network automatically from the predefined list.

## Location

The Location menu allows you to enable the Global Positioning System (GPS) or Global Navigation Satellite System (GNSS). You can also view your position and testpage, and change the accuracy of the location.

### <sup>30.1</sup> Enabling GPS or GNSS



**NOTE:** Your service provider can enable this feature.

#### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Location  $\rightarrow$  Interface  $\rightarrow$  On.

# <sup>30.2</sup> Viewing Your Position

Procedure:



- 1. From the home screen, press the Menu key.
- **2.** Select Location  $\rightarrow$  Position.

The display shows your last calculated position.

3. To refresh your position, select **Position** and press **Refresh**.

#### **Postrequisites:**

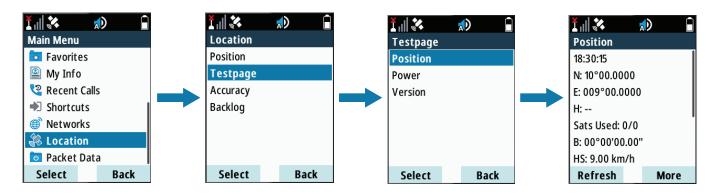
Sometimes, the GPS or GNSS feature is unable to complete calculating a location.

Enhance the GPS or GNSS performance by performing the following actions:

- Stay in the open.
- Enhance reception by repositioning your radio.

• Stand still.

# <sup>30.3</sup> Viewing the Testpage



- 1. From the home screen, press the Menu key.
- **2.** Select Location  $\rightarrow$  Testpage.
- 3. Select one of the following options:

Option	Description	
Position	To view detailed information of your current position. Your radio displays:	
	• Time	
	• <b>N</b> for latitude	
	E for longitude	
	H for height	
	Sats Used for several tracked satellites	
	• <b>B</b> for bearing	
	HS for horizontal speed	
	LC for level of confidence	
Power	To view detailed information of a satellite. Your radio dis- plays:	
	PRN code	
	Status	
	• Mode	
	• C/N for carrier-to-noise ratio	
Version	To view detailed information of the software version. Your radio displays:	
	SW for software version	

0	nti	on
U	ρτι	on

Description

- **HW** for hardware version
- ASIC for application-specific integrated circuit
- **RC** for release code

### 30.4 Changing Location Accuracy

**NOTE:** The accuracy of the Global Positioning System (GPS) or Global Navigation Satellite System (GNSS) Location Service depend on the coverage and selected accuracy mode.

#### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Location  $\rightarrow$  Accuracy.
- **3.** Select one of the following options:

Option	Description
Medium	To optimize power consumption but with less accurate posi- tioning.
High	To have more accurate positioning but with more power con- sumption.

**NOTE: Medium** is the default mode. If your radio is connected to an external charging device, your radio automatically enters the **High** mode.

### <sup>30.5</sup> Backlog

Backlog sub-menu allows you to enable or disable, view, and delete backlog reports.

**NOTE:** The backlog of location reports is only available when Local Information Protocol (LIP) is enabled.

### 30.5.1 Enabling or Disabling Backlog

- 1. From the home screen, press the Menu key.
- 2. Select Location  $\rightarrow$  Backlog  $\rightarrow$  Enablement.
- 3. Select one of the following options:

Option	Description
On	To enable recording the location report backlog.
Off	To disable recording the location report backlog.

# 30.5.2 Viewing Backlog Reports

#### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Location  $\rightarrow$  Backlog  $\rightarrow$  Reports.

Result: The display shows the number of backlog reports that are stored.

# 30.5.3 Deleting All Backlog Reports

- 1. From the home screen, press the Menu key.
- **2.** Select Location  $\rightarrow$  Backlog  $\rightarrow$  Delete All.

## **Packet Data**

**NOTE:** This is a Software Selling Feature.

Packet Data menu allows you to view the data statistics and encryption status of your radio.

# <sup>31.1</sup> Viewing Data Statistics

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Packet Data.

**NOTE:** Data services are only available in TMO Mode. The data option must be set to **Voice Data** or **Data Only**.

3. Select one of the following options:

Option	Description
Sent Data	Displays the number of KBs sent and through- put since current Packet Data activation.
Received Data	Displays the number of KBs received and throughput since current Packet Data activa-tion.
Bandwidth	Shows the active data session percentage.
Failed Transfer	The percentage of failed sent/received packets.

**NOTE:** N.A. – Standby packet data session.

# 31.2 Viewing Encryption Status

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- **2.** Select Packet Data  $\rightarrow$  Encryption.

**Result:** The encryption state of the ongoing packet data session is displayed:

- Packet Data Channel Clear
- Packet Data Channel Encrypted
- Encryption N/A (clear)

## **Crypto Menu**

**NOTE:** Applicable only for SIM Card model.

Crypto menu allows you to manage SIM card based End-to-End Encryption.

## <sup>32.1</sup> Enabling or Disabling SIM Card End-to-End Encryption

#### **Prerequisites:**

Perform the following actions:

- Insert the SIM card into your radio.
- Ensure that you are not in an active call.
- Ensure that you do not press the **PTT** button.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Crypto Menu  $\rightarrow$  Crypto Function.
- 3. Select one of the following options:

Option	Description	
Encryption On	To enable encryption.	
Encryption Off	To disable encryption.	

Result: The display shows a message and icon of the encryption status.

#### 32.2

## **Setting Clear Call Alarm**

The Clear Call Alarm menu is used to configure an alarm tone to notify on any clear transmission.

- 1. From the home screen, press the Menu key.
- 2. Select Crypto Menu  $\rightarrow$  Clear Call Alarm.
- 3. Select Simplex Calls or Duplex Calls.
- 4. Select one of the following options:

Option	Description
Off	To disable the alarm.

Option	Description
Single	To enable the alarm to ring once at the beginning of a clear call.
Continuous	To enable the alarm to ring periodically throughout a clear call.

## 32.3 Updating Encryption Keys

#### **Prerequisites:**

- End-to-End Encryption is enabled.
- Ensure that you are not in an active call or in Direct Mode Operation (DMO).

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Crypto Menu  $\rightarrow$  Upd Encr Keys  $\rightarrow$  Upd Group Key.

# <sup>32.4</sup> Viewing OPTA

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Crypto Menu  $\rightarrow$  Show OPTA.

## 32.5 Setting the OPTA Filter

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Select Crypto Menu  $\rightarrow$  OPTA Filter.
- 3. Scroll to characters that must be masked when the OPTA name is displayed and press Select.
- 4. Press Done to confirm the settings.

#### 32.6

## **Starting Crypto Registration**

Prerequisites: Ensure that your radio is not in an active call or in Direct Mode Operation (DMO).

- 1. From the home screen, press the Menu key.
- 2. Select Crypto Menu  $\rightarrow$  Crypto Registr  $\rightarrow$  Start Registr.

## 32.7 Turning Encrypted Audio On or Off

When and where to use: To determine if audio is muted in erroneous decryption.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Crypto Menu  $\rightarrow$  Audio Settings.
- 3. Select one of the following options:

Option	Description
Encr Audio On	To turn on encrypted audio.
Encr Audio Off	To turn off encrypted audio.

### 32.8 Setting DMO Encryption Mode

#### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Crypto Menu  $\rightarrow$  DMO Encr Mode.
- 3. Select one of the following options:

Option	Description
DMO 1	To enable crypto mode bit 1.
DMO 2	To enable crypto mode bit 2.

### 32.9 Selecting Encryption Keys for SDS

- 1. From the home screen, press the Menu key.
- **2.** Select Crypto Menu  $\rightarrow$  SDS Encr Mode.
- 3. Select encryption keys by using one of the following options:

Option	Actions
Selecting the encryption key for indi- vidually addressed SDS	<ul><li>a. Select Individual SDS.</li><li>b. Select Global Key or Group Key.</li></ul>
Selecting the encryption key for group addressed SDS	<ul><li>a. Select Group SDS.</li><li>b. Select Global Key or Group Key.</li></ul>

# Wi-Fi

The Wi-Fi menu enables operating Wi-Fi functions to access a network.

## 33.1 Turning Wi-Fi On or Off

Prerequisites: Contact your service provider to enable the Wi-Fi feature for your radio.

## **Turning Wi-Fi On**

#### Procedure:

1. From the home screen, press the Menu key.

**2.** Select Wi-Fi  $\rightarrow$  Wi-Fi: Off  $\rightarrow$  On.

#### **Result:**

The display shows a notification of the Wi-Fi status.

## **Turning Wi-Fi Off**

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Select Wi-Fi  $\rightarrow$  Wi-Fi: On  $\rightarrow$  Off.

#### **Result:**

The display shows a notification of the Wi-Fi status.

#### 33.2

## **Connecting to Networks Through Scan**

Prerequisites: Turn on Wi-Fi.

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- **2.** Select **Wi-Fi**  $\rightarrow$  **Scan**.

When the scan is complete, your radio displays a list of Wi-Fi networks within range.

3. Select the required network and press Connect.

IMPORTANT: When the Wi-Fi function is enabled, and Active Scanning is constantly turned on, an attacker can use the Wi-Fi signal to identify and monitor the location of your radio. When a Wi-Fi feature is required for Active Scan, you are recommended to enable the Wi-Fi Auto Off feature to minimize your risk.



**NOTE:** Your radio can only connect to networks that are predefined in the codeplug. If you attempt to connect to non-defined networks, the display shows a negative notification.

**Result:** When your radio is connected to the network, the display shows a positive notification.

#### 33.3

## **Connecting to Networks Through Network List**

Prerequisites: Turn on Wi-Fi.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Wi-Fi  $\rightarrow$  Network List.
- 3. From the list of predefined networks, highlight the required network.

**NOTE:** The Network List lists all predefined networks. However some of the listed networks may not be within Wi-Fi range of your radio.

4. Press Connect.

Result: When your radio is connected to the network, the display shows a positive notification.

### <sup>33.4</sup> Viewing Network Information

Prerequisites: Connect to a network.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Wi-Fi  $\rightarrow$  Network Information.

Result: The display shows information of the connected network.

### <sup>33.5</sup> Viewing the MAC Address

#### Procedure:

- 1. From the home screen, press the Menu key.
- **2.** Select Wi-Fi  $\rightarrow$  MAC Address.

Result: The display shows the MAC address of the Wi-Fi chip.

## <sup>33.6</sup> Viewing Certificate Enrollment Status

The certificate enrollment validates your radio to be able to use certain radio features such as Wi-Fi OTAP or 802.1x EAP-TLS. The certificate enrollment only needs to be performed one time, and automatically starts when you first configure and connect your radio Wi-Fi to an access point with internet connection. Your radio is already preloaded with the required root certificates and settings for the enrollment.

#### **Prerequisites:**

Turn on Wi-Fi.

When and where to use: To check the status of the certificate enrollment.

#### Procedure:

- 1. From the home screen, press the Menu key.
- 2. Select Wi-Fi  $\rightarrow$  Cert. Management.

#### **Result:**

Your radio displays the following information.

Category	Description
Device Key	Indicate whether the Radio Device Key Pair is present in the radio.
Base	Indicates the enrollment status of the Base Certificate in the ra- dio.
Wi-Fi OTAP	Indicates the enrollment status of the Wi-Fi Over-the-Air Pro- gramming (OTAP) Service Certificate.
Wi-Fi Enterprise	Indicates the enrollment status of the Wi-Fi Enterprise Service Certificate.

#### If enrollment is successful

Your radio displays Enrolled for each respective certificate.

#### If enrollment failed or enrollment not started

Your radio displays Not Enrolled for each respective certificate. You can trigger a re-enrollment using the **Retry** button.

**NOTE:** The **Retry** button will not be visible if the certificate enrollment was rejected by the server.

## **Over The Air Programming**

4

**NOTE:** This is a Software Selling Feature.

Over The Air Programming (OTAP) enables remote radio reconfiguration over TETRA network and Wi-Fi network.

#### 34.1

## **Receiving LMR OTAP Update**

**Prerequisites:** Your radio display shows an **OTAP** prompt with Reboot required. Accept update? text for a new configuration update.

#### Procedure:

Select Accept to accept or Reject to reject the new configuration update.



**NOTE:** A timer is set when the prompt is displayed. Request is automatically rejected if there is no user response to the prompt when the timer runs out.

**Result:** When the OTAP installation prompt is accepted, your radio updates with the new configuration as received over OTAP. Visible indication guidance and update status is provided during the update. When the OTAP installation prompt is rejected, your radio returns to idle mode.

# Managing LMR OTAP

#### **Procedure:**

- 1. From the home screen, press the Menu key.
- 2. Select LMR OTAP.
- 3. Select one of the following options:

Option	Description
Update Preference	Currently only <b>User Confirmation to Update Now</b> is available.
Last Updated	Shows the last installed LMR OTAP information and sta- tus of the installation.

34.3

## **Receiving Non-Mandatory Wi-Fi OTAP Update**

**Prerequisites:** Your radio display shows an Wi-Fi OTAP prompt with Reboot required. Accept update? text for a new configuration update.

#### Procedure:

Install updates by using one of the following options:

Option	Actions	
Installing updates immediately	Select Now.	
Installing updates later	<ul> <li>a. Select Later. Your radio shows New radio settings before upgrade completion will not be preserved.</li> <li>b. Perform one of the following actions:</li> </ul>	
	• To return to <b>Wi-Fi OTAP</b> prompt, select <b>Back</b> .	
	<ul> <li>To postpone the update, select <b>Confirm</b>.</li> <li>The <i>Wi-Fi Update Available</i> icon is indicated at the status bar.</li> </ul>	

**Result:** When the OTAP installation prompt is accepted, your radio updates with the new configuration as received over OTAP. Visible indication guidance and update status is provided during the update. When the OTAP installation prompt is rejected, your radio returns to idle mode.

### <sup>34.4</sup> Receiving Mandatory Wi-Fi OTAP Update

**Prerequisites:** Your radio display shows an Wi-Fi OTAP prompt with Reboot in 10 for auto update text for a new configuration update.

#### Procedure:

Your radio reboots to complete installation once the countdown timer expires.

**NOTE:** All LMR services are unavailable during the countdown period.

#### 34.5

## **Managing Wi-Fi OTAP**

**NOTE:** This feature is only available when enabled by your service provider.

- 1. From the home screen, press the Menu key.
- 2. Select Wi-Fi OTAP.
- 3. Select one of the following options:

Option	Description
Check for Updates	Checks for new available updates.
Install Update	Installs the postponed update. The <b>Wi-Fi OTAP</b> prompt appears.
Last Updated	Shows the last installed Wi-Fi OTAP information and sta- tus of the installation.

## **Contact Address**

#### Motorola Solutions Korea, Inc.

8F, HanyangTower, 12 Beobwon-ro 11gil, Songpa-gu, Seoul, 05836, Republic of Korea