APX TWO-WAY RADIOS

APX NEXT User Guide

APRIL 2019

MN005642A01-AA

Declaration of Conformity

This declaration is applicable to your radio only if your radio is labeled with the FCC logo shown below.

Declaration of Conformity
Per FCC CFR 47 Part 2 Section 2.1077(a)

Responsible Party

Name: Motorola Solutions, Inc.

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

Phone Number: 1-800-927-2744

Hereby declares that the product:

Model Name: **APX NEXT**

conforms to the following regulations:

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

Class B Digital Device

As a personal computer peripheral, this device complies with Part 15 of the FCC Rules. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1 This device may not cause harmful interference, and

2 This device must accept any interference received, including interference that may cause undesired operation.

NOTICE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules and Industry Canada license-exempt RSS standard. 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.

Important 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 which 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.

Notice to Users (FCC and Industry Canada)

This device complies with Part 15 of the FCC rules and Industry Canada's license-exempt RSS's per the following conditions:

- This device may not cause harmful interference.

- This device must accept any interference received, including interference that may cause undesired operation.

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

Software Version

All the features described in the following sections are supported by the software version **R19.00.00** or later.

See Accessing the Radio Information on page 209 to determine the software version of your radio.

Check with your dealer or system administrator for more details of all the features supported.

Déclaration de conformité

Cette déclaration est applicable à votre radio uniquement si elle porte l'étiquette du logo de la FCC ci-dessous.

Déclaration de conformité
Règlement CFR 47 partie 2 section 2.1077(a) de la FCC

Partie responsable

Nom : Motorola Solutions, Inc.

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

Numéro de téléphone : 1 800 927-2744.

Déclare par les présentes que le produit :

Nom de modèle : **APX NEXT**

sont conformes aux réglementations suivantes :

Partie 15, sous-partie B, section 15.107(a), 15.107(d) et section 15.109(a) des règlements de la FCC

Appareil numérique de Classe B

En tant que périphérique d'ordinateur personnel, cet appareil est conforme aux stipulations de la partie 15 des règlements de la FCC. Cet appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. Son utilisation est assujettie aux deux conditions suivantes :

1 Cet appareil ne doit pas causer d'interférence nuisible.

2 Cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant entraîner un fonctionnement indésirable.

AVIS:
Cet équipement a fait l'objet de tests et a été déclaré conforme aux limites établies pour un appareil numérique de classe B, conformément à la section 15 des règlements de la FCC et aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. Ces limites sont fixées afin d'offrir une protection suffisante contre des interférences nuisibles dans une installation résidentielle. Cet équipement génère, utilise et peut émettre de l'énergie de radiofréquence et, s'il n'est pas installé ou utilisé conformément aux instructions, il peut provoquer un brouillage nuisible aux communications radio. Cependant, il est impossible de garantir qu'il n'y aura aucune interférence dans une installation particulière. Si cet appareil cause une interférence nuisible à la réception de la radio ou de la télévision, ce qui peut être déterminé en éteignant et en allumant l'appareil, vous êtes encouragé à remédier à la situation en prenant une ou plusieurs des mesures suivantes :

- Réorienter ou déplacer l'antenne réceptrice.

- Augmenter la distance entre l'équipement et le récepteur.

- Brancher l'appareil dans une autre prise sur un circuit différent de celui du récepteur.

- Consulter un revendeur ou un technicien de radio ou de télévision chevronné pour obtenir de l'aide.

Consignes de sécurité importantes

Radios bidirectionnelles portatives : exposition aux radiofréquences et sécurité du produit

ATTENTION!

Cette radio ne doit être utilisée qu'à des fins professionnelles. Avant d'utiliser la radio, lisez le guide Radios bidirectionnelles portatives : exposition aux radiofréquences et sécurité du produit, qui contient d'importantes instructions de fonctionnement pour une utilisation sécuritaire et des informations sur l'exposition aux fréquences radioélectriques, dans le but d'assurer votre conformité aux normes et règlements en vigueur.

Visitez le site Web suivant pour obtenir la liste des antennes, des batteries et des autres accessoires approuvés par Motorola Solutions :

http://www.motorolasolutions.com

Selon la réglementation d'Industrie Canada, cet émetteur radio ne peut être utilisé qu'avec une antenne dont le type et le gain maximal (ou minimal) sont approuvés par

Industrie Canada pour cet émetteur. Afin de limiter les interférences radio pour les autres utilisateurs, le type et le gain de l'antenne doivent être choisis de façon à ce que la puissance isotrope rayonnée équivalente (P.I.R.E.) ne soit pas plus forte qu'il ne le faut pour établir la communication.

Cet émetteur radio a été approuvé par Industrie Canada pour utilisation avec une antenne approuvée par Motorola Solutions offrant le gain maximal autorisé et l'impédance requise pour le type d'antenne indiqué. Il est strictement interdit d'utiliser avec cet appareil tout type d'antenne ne figurant pas dans cette liste et présentant un gain supérieur au maximum indiqué pour le type.

Avis aux utilisateurs (FCC et Industrie Canada)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence et à la partie 15 des règlements de la FCC :

• Cet appareil ne doit pas causer d'interférence nuisible.

• Cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant entraîner un fonctionnement indésirable.

• Toute modification effectuée à cet appareil sans l'autorisation explicite de Motorola Solutions peut annuler l'autorisation d'utiliser cet appareil.

Version logicielle

Toutes les fonctions décrites dans les sections suivantes sont prises en charge par les versions logicielles **R19.00.00** ou plus récentes.

Reportez-vous à Accès aux renseignements sur la radio à la page 209 pour déterminer la version logicielle de votre radio.

Pour obtenir davantage de renseignements à propos des fonctions prises en charge, adressez-vous à votre détaillant ou à votre administrateur de système.

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Getting Started

This User Guide covers the basic operation of the APX Portables .

However, your dealer or system administrator may have customized your radio for your specific needs. Check with your dealer or system administrator for more information.

Notations Used in This Manual

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

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

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

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

📊	Top Control
🗣	Voice Control
📱	Simple Touch

What Your Dealer/System Administrator Can Tell You

Check with your dealer or system administrator for the correct radio settings, if the radio is to be operated in extreme temperatures (less than -30 °C or more than +60 °C).

You can consult your dealer or system administrator about the following:

• Is your radio programmed with any preset conventional channels?

- Which buttons have been programmed to access other features?

- What optional accessories may suit your needs?

    NOTICE:
    Specifications may vary for different radio models. Check with your dealer or system administrator for more information.

Preparing Your Radio For Use

This section provides simple instructions to prepare your radio for use.

Installing the Battery

📝 **NOTICE:**
User is notified if radio detects non-Motorola Solutions battery upon powering up, charging, or removing from the charger. This feature is applicable for IMPRES and Non-IMPRES battery. When the radio is attached with the non-Motorola Solutions battery, a tone sounds, display shows `Unknown Battry` temporarily and battery indicator is not shown in the radio display. Battery menu screen displays `Unknown Battry` permanently and IMPRES battery information is not shown on the radio display.

• Attaching the battery.

a. Align the battery with bottom rails on the back of the radio and slide the battery into the radio frame until the side latches click into place.

• Removing the battery.

a. Press the latches on both sides.

b. Pull the battery away from the radio.

Installing the Antenna

Ensure the radio is turned off before attaching the antenna.

- Attaching the antenna.
    a. Set the antenna in the receptacle.
    b. Turn the antenna clockwise and tighten the antenna by hand securely to the radio.

- Removing the antenna.
    a. To remove the antenna, turn the antenna counterclockwise.

NOTICE:
When removing the antenna, ensure that the radio is turned off.

Charging the Radio

WARNING:
To avoid possible explosion:

- Do **not** replace the battery in any area labeled **Hazardous Atmosphere**.

- Do **not** discard batteries in a fire.

Place the radio in a Motorola Solutions-approved charger.

Figure 1: Charging the Radio using a Single-Unit Charger

Powering On the Radio

📝 **NOTICE:**
Ensure to fully charge the battery before the first use.

- Turn on the radio.

  a. Rotate the **On/Off/Volume Control Knob** clockwise until you hear a click.

- Turn off the radio.

  a. To turn off the radio, rotate the **On/Off/Volume Control Knob** counterclockwise until you hear a click.

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Radio Controls

This chapter explains the buttons and functions to control the radio.

APX NEXT Overview

Front View

No.	Description
1	Digital Mic 1
2	Touch Screen
3	Display Sleep/Wake and Home Button

Rear View

No.	Description
4	RF Antenna

No.	Description
5	Secure/Clear Switch
6	Channel Selector
7	On/Off and Volume Control Knob
8	Digital Mic 2
9	3-Dot Programmable Feature Button
10	Speaker
11	NFC Antenna
12	Battery
13	Charging Contacts

Top View
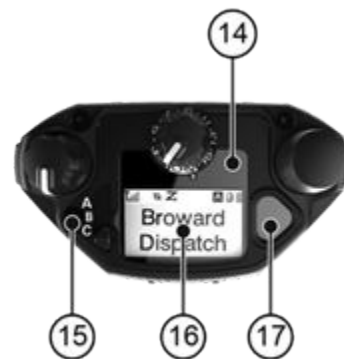
No.	Description
14	Status LED
15	ABC Programmable Switch
16	Top Display
17	Top (Orange) Button

Side Views

No.	Description
18	Purple Programmable Button
19	Push-to-Talk Button
20	1-Dot Programmable Feature Button
21	2-Dot Programmable Feature Button
22	Battery Latch

No.	Description
23	Accessory Connector

Home Screen

Figure 2: Home Screen

Table 1: Home Screen

No.	Description
	Status Bar Status icons appear at the status bar to provide device-specific information or status.
	Cockpit Widget Allows you to view and change your current operational status.
	Radio Control Widget Shows information and notifications of LMR activities. Provides quick access to LMR features.

No.	Description
	LMR Icons Provides information or status of LMR-specific features.
	Zone and Channel Display/Changer Allows you to change zone and channel from the Home screen. Also shows channel errors, trunking statuses, call states, and notifications.
	Lightbar Reflects the active call state of the radio.
	Radio Quick Settings Launches the Radio Quick Settings Menu where you can quickly toggle LMR features on the radio. This shortcut is deactivated if all LMR features are disabled.
	Home Revert Feature Reverts to the default channel.

No.	Description
	Menu Feature Launcher Widget Provides shortcuts to features that are configured to this widget. Also launches the Menu Feature Launcher screen.
	Widgets Functions as shortcuts to radio features.

Programmable Features

Any reference in this manual to controls that are preprogrammed means that a qualified radio technician must use the radio programming software to assign a feature to a control.

Your dealer can program the programmable buttons as shortcuts to radio functions or preset channels/groups depending on the duration of a button press:

Assignable Radio Functions

Bluetooth On/Off
Allows you to turn on/off the Bluetooth.

Bluetooth Configuration
Allows you to access to the **Bluetooth** menu.

Bluetooth Audio Reroute
Allows you to toggle the audio route between the radio speaker or Remote Speaker Microphone and the Bluetooth headset.

Bluetooth Headset PTT
Keys up the Bluetooth Headset microphone.

Call Alert
Allows the radio to function like a pager, or to verify if a radio is active on the system.

Call Response
Allows you to answer a private call.

Channel
Selects a channel.

Contacts
Selects the **Contacts** menu.

Dynamic ID (Conventional Only)
Allows you to edit the ASTRO Individual ID and/or MDC Primary ID of the radio.

Dynamic Priority (Conventional Only)
Allows any channel in a Scan List (except for the Priority-One channel) to temporarily replace the Priority-Two channel.

Emergency
Depending on the programming, initiates or cancels an emergency alarm or call.

Internet Protocol Address
Displays the Internet Protocol (IP) address, device name, and status of the radio.

Location
Determines the current location (latitude, longitude, time, and date), and also the distance and bearing to another location or turns the GPS functionality on or off for all locations.

Message
Enters the current message list.

Mode Select
Long-press programs a button with the current zone and channel of the radio; once programmed, the short-press of that button changes the radio zone channel to the programmed zone and channel.

Monitor (Conventional Only)

Monitors a selected channel for all radio traffic until the function is disabled.

Multiple Private Line (Conventional Only)

Selects the Multiple Private Line lists.

Nuisance Delete

Temporarily removes an unwanted channel, except for priority channels or the designated transmit channel from the scan list.

One Touch 1–4

Launches a specific feature with. You can set up as many as four separately programmed buttons for four different features.

Phone

Allows you to make and receive calls similar to standard phone calls.

Private Call (Trunking Only)

Allows a call from one individual radio to another.

Private Line Defeat (Conventional Only)

Overrides any coded squelch (DPL or PL) that is preprogrammed to a channel.

Priority Dispatch

Allows you to call the dispatcher on a different talkgroup.

Query

Launches a list of predefined short text messages only after successfully logged in the two-Factor Authentication.

Radio Profiles

Allows easy access to a set of preprogrammed visual and audio settings of the radio.

Recent Calls

Allows easy access to the list of calls recently received or made.

Rekey Request

Notifies the dispatcher that a new encryption key is needed.

Repeater Access Button (RAB) (Conventional Only)

Allows you to manually send a repeater access codeword.

Reprogram Request (Trunking Only)

Notifies the dispatcher that a new dynamic regrouping assignment is needed.

Request-To-Talk (Conventional Only)

Notifies the dispatcher that you want to send a voice call.

Scan

Toggles scan on or off.

Scan List Programming

Selects the scan list for editing (by pressing and holding the Scan button).

Secure Transmission Select (Conventional and Trunking)

Toggles the Secure Transmission On or Off when the Secure/Clear Strapping field is set to `Select` for the current channel and when the radio is model/option capable.

Selective Call (Conventional Only)

Calls an assigned radio.

Site Display/Search (Trunking Only)

Displays the current site ID and RSSI value; performs site search for Automatic Multiple Site Select (AMSS) or SmartZone operation.

Site Lock/Unlock (Trunking Only)

Locks onto a specific site.

Status (ASTRO 25 Trunking Only)

Sends data calls to the dispatcher about a predefined status.

Talkaround/Direct (Conventional Only)

Toggles between using a repeater or communicating directly with another radio.

Talkgroup (Conventional Only)

Allows a call from an individual radio to a group of radios.

Text Messaging Service (TMS)

Selects the text messaging menu.

TMS Quick Text

Selects a predefined message.

User

Automatically registers the user to the server.

Zone Select

Allows selection from a list of zones.

Basic Zone Bank

Provides access from up to six zones by toggling between two banks of three zones, one group of three (A, B, and C) to a second group of three zones (D, E, and F).

Enhanced Zone Bank

Provides access from up to 75 zones by toggling between 25 banks (A, B, ... X or Y) of three zones.

Wi-Fi®

Toggles Wi-Fi on or off.

Assignable Settings or Utility Functions

Light/Flip
Press the button to toggle the display backlight on or off; press and hold the button to reverse the content of the top display.

TX Power Level
Toggles transmit power level between high and low.

Voice Announcement
Audibly indicates the current feature mode, Zone, or Channel that you have been assigned to.

Voice Mute
Toggles voice mute on or off.

Volume Set Tone
Sets the volume set tone.

Keyboard

Use the keyboard in portrait or landscape orientation to enter alphanumeric text on your radio.

Gestures

Use finger gestures on the screen to navigate through your radio.

Table 2: Gestures and Behaviors

Gesture	Behavior
Tap	Used to select a menu item
Tap and Hold	Used to access shortcut items
Scroll	Used to vertically scroll the viewing area of your screen
Left to Right Swipe	Used to navigate to the previous screen

Voice Control

The Voice Control feature allows you to perform tasks on your radio with voice commands. Voice Control functions

with the Virtual Partner feature to provide an enhanced hands-free user experience.

You can start giving commands to your radio by pressing and holding the **Voice Control** button. For example, you can say things such as:

- "Go to Zone Z and Channel C"

- "What is my zone and channel?"

- "What is my volume?"

- "Start scanning"

- "What is my battery level?"

- "What time is it?"

- "Change to M mode"

ViQi

ViQi functions with the Voice Control feature to provide critical information through common query searches and dialog interaction.

The ViQi retrieves important information from the database without having to access another device, vehicle, or even wait for the dispatcher to run a query for you. You can also customize your request and the desired response to ensure an accurate delivery of information.

ViQi is activated only with Press and Hold of the **Voice Interface Button (VIB)**.

1	Voice Interface Button (VIB)

With the ViQi feature, you can say things such as:

- "Search vehicle with plate number..."

- "Search driver's license..."

Status Indicators

This chapter explains the status indicators of the radio.

Radio Icons

Table 3: Status Icons

These icons appear at the status bar to provide device-specific information or status.

Icon	Description
	Battery Indicates the remaining battery level of the radio.
	Bluetooth On Bluetooth is on and ready for Bluetooth connection.

Icon	Description
	Bluetooth Connected Bluetooth is connected to the external Bluetooth device.
	GPS GPS is enabled and signal is available.
	LTE Network Strength
	Wi-Fi The radio is connected to a Wi-Fi network. The number of bars represents the signal strength of the network.

Table 4: LMR Icons

These icons appear at the Radio Control Widget to provide information or status of LMR-specific features.

Icon	Description
	Received Signal Strength Indicator (RSSI) The number of bars represents the received signal strength of the current site (trunking only).
	Receiving The radio is receiving a call or data.
	Transmitting The radio is transmitting a call or data.

Icon	Description
	Roaming The radio has roamed to and is registered to a foreign system.
	Monitor (Carrier Squelch) The selected channel is being monitored (during conventional operation only).
	In-Call User Alert The In-Call User Alert feature is enabled. The voice of the affiliated trunking talkgroup or selected conventional channel is muted.
	Secure Operation Steady – The radio is operating in a secure channel.

Icon	Description
	Blinking – The radio is receiving an encrypted voice call.
	AES Secure Operation Steady – The radio is operating in an AES-secure channel. Blinking – The radio is receiving an AES-encrypted voice call.
	Scan The radio is scanning a scan list.
	Priority Channel Scan Blinking – The radio detects activity on the designated Priority-One channel. Steady – The radio detects activity on the

Icon	Description
	designated Priority-Two channel.
	Vote Scan The Vote Scan feature is enabled.
	Priority Vote Scan Blinking – Steady –
	Direct On – The radio is configured for direct radio-to-radio communication (during conventional operation only). Off – The radio is connected with other radios through a repeater.

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Icon	Description	Icon	Description
〔〕		**IP** 〓	**User Login Indicator (IP Packet Data)** Steady – The user is associated with the radio. Blinking – The device registration or user registration with the server failed due to an invalid username or pin.
〓	**Backup PTT**	**IP** 〓	**User Login Indicator (IP Packet Data)** The user is logged in to the secured IP packet data.
⚡L	**Power Level** On – The radio is set at low power. Off – The radio is set at high power.	⇄ 〓	**Data Activity** Data activity is present on the radio.
A to **Y**	**Zone Bank** The radio is in the dedicated zone bank.		

LED Indications

The LED Indicators are activated in the following modes (order by priority):

- Radio Configuration Mode
- Recovery and Fastboot Mode
- Charging Mode
- Operation Mode (mission critical)

Table 5: LED Indications (Radio Configuration Mode)

Indication	Status
Blinking Green	Configuration in process
Blinking Red	Configuration failed
Alternating Green and Red	Configuration in progress while battery is low

Table 6: LED Indications (Recovery and Fastboot Mode)

Indication	Status
Solid Red (two seconds) to Blinking Red (twice)	Recovery/software update
Blinking Red	Fastboot

Table 7: LED Indications (Charging Mode)

Indication	Status
Solid Red	Charging
Blinking Green	Charging at > 90%
Solid Green	Fully charged
Blinking Red	Charging error

NOTICE:
If there is a low priority notification, the LED indicates the low priority notification followed by the charging indications.

Table 8: LED Indications (Operation Mode)

Indication	Status
Green	Powering on
Blinking Red	Low battery (< 15%)
Rapidly Blinking Red	Critically Low Battery (< 5%)
Blinking Blue	Low priority notification
Rapid Blinking Blue	High priority notification
Blinking Yellow	Pre-buffering
Red	Audio muted

Radio Control Widget Lightbar

The Radio Control Widget Lightbar reflects the active call state of the radio.
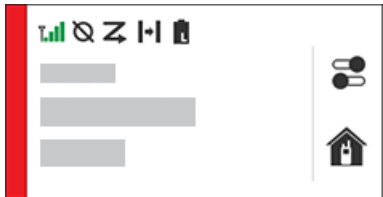
Table 9: Radio Control Widget Lightbar

The following table shows the color of the Lightbar and its corresponding call state.

Color	Call State
Light Blue	Open

Yellow	Receiving

Red	Transmitting

Color	Call State

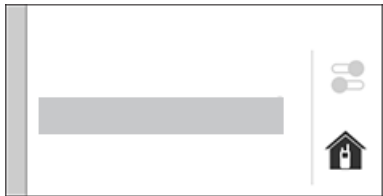| Gray	Unprogrammed

General Radio Operation

This chapter explains the general radio operations of your radio.

Selecting a Zone

Use one the following methods to select a zone.

If…	Then…
If you want to use the preprogrammed ABC Zone Switch,	rotate the **ABC Zone Switch** to the required position.
If you want to use the Radio Control Widget,	**a** From the **Home** screen, tap the **Zone and Channel Display/Changer**. **b** Perform one of the following actions: **a** Select **Current Zone <zone**

If…	Then…
	name>, then select the required zone followed by the required channel.

If…	Then…
	📝 **NO-TICE:** If the de-fault or last known chan-nel is con-fig-ured on the radio, it au-tomat-ically se-lects the high-lighted

If…	Then…
	chan-nel. **b** Select **Recent** followed by one of the recently used zone and channel.

The change of zone is reflected on the **Home** screen.

Selecting a Channel

Use one the following methods to select a channel.

If…	Then…
If you want to use the preprogram-med Chan-nel Selector,	rotate the **Channel Selector** to the required position.

If…	Then…
If you want to use the Radio Control Widget,	**a** From the **Home** screen, tap the **Zone and Channel Display/Changer**. **b** Perform one of the following actions: **a** Select the required channel from the **Channel** tab. **b** Select the **Recent** tab followed by one of the recently used zone and channel.

The change of channel is reflected on the **Home** screen.

Saving Zones and Channels as Mode Select

The Mode Select feature allows you to save the current zone and channel on your radio to one of the five Mode Select feature icons. After that, the icons function as shortcuts to the saved zone and channel.

Navigate to the required zone and channel.

1 From the **Home** screen, tap **More** to launch the **Menu Feature Launcher** screen.

2 Tap and hold one of the **Mode Select** feature icons.

The zone and channel are saved to the desired **Mode Select** feature icon.

Managing Notifications

The **Notification Center** provides short and concise information about an activity or event. Drag down the **Status Bar** to open the **Notification Center**. Swipe up from the bottom of the screen to close the **Notification Center**.

1 Drag down the **Status Bar** to open the **Notification Center**.

2 Perform the following actions to manage your notifications:

• To respond to a notification, tap the assigned action message.

- To clear all notifications, tap **Clear All**.

3 Swipe up from the bottom of the screen to close the **Notification Center**.

Radio Calls

Your radio can make talkgroup, private, enhanced private, and telephone call in conventional and/or trunking mode.

Table 10: Types of Radio Call and Their Supported Modes

Call Type	Conventional Mode	Trunking Mode
Talkgroup	Yes	Yes
Private	No	Yes
Enhanced Private	No	Yes
Telephone	No	Yes

Talkgroup Call

A talkgroup call is a point-to-multipoint call operation. Your radio must be configured as a member of the talkgroup for you to communicate within the talkgroup.

Making Talkgroup Calls

1 Use one of the following methods to make talkgroup calls.

If…	Then…
If you want to make talkgroup calls in trunking mode,	**a** See Selecting a Zone on page 34 and Selecting a Channel on page 35 to ensure that you are in the desired zone and channel.
If you want to make talkgroup calls in conventional mode,	**a** From the **Home** screen, tap **More** to launch the **Menu Feature Launcher** screen. **b** Tap **Talkgroup**, then select the desired talkgroup.

If…	Then…
	The change of talk-group is reflected on the **Home** screen.

2 Press and hold the **PTT** button to transmit.

3 Wait for the Talk Permit tone, then speak into the microphone.

4 Release the **PTT** button to listen.

Advanced Features

This chapter explains the operations of the features available in your radio.

Contacts

This feature provides "address-book" capabilities on your radio. Each entry corresponds to an alias (name) or ID (number) that you use to initiate a call.

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

Also, each entry, depending on context (conventional, trunking, or phone), associates with one or more of the following types of calls:

• Phone Call

• Private Call

• Selective Call

• Call Alert

Each entry within Contacts contains the following information:

• Call Alias (Name)

• Call ID (Number)

• Call Type (Icon)

• WACN ID (ASTRO 25 Trunking IDs only)

• System ID

> NOTICE:
> Your radio must be preprogrammed to allow you to add, edit, or delete the contact entries.

Contacts Tab

When you select a contact from the **Contacts** list, you are able to view the available call types and the associated call IDs in **Contact Details**.

You can view the assigned IDs for a call type by tapping the drop-down list of an ID. You can also add a contact to your favorites list by tapping the **Favorite** icon.

The Floating Action Button (**FAB**) icon on this screen allows you to add **New Contact** or access the **Dialer** feature.

Call List Tab

Your radio supports a maximum of 50 Call Lists. Each list can store up to 100 IDs.

✎ **NOTICE:**
Your radio is preprogrammed with a few contacts per Call Lists. Check with your dealer or system administrator for more information.

The Floating Action Button (**FAB**) on this screen allows you to:

- **Edit Current Call List**
- Access the **Dialer** feature
- **See Radio List**
- **See Phone List**
- **See Messaging List**

Making Calls from Contacts

1 From the **Home** screen, tap **Contacts**.

2 Scroll to the required contact.

3 Tap the assigned call icon to initiate the call.

Changing Call Type in Contacts

1 From the **Home** screen, tap **Contacts**.

2 Scroll to the required contact.

3 Tap and hold the call icon.

4 Select the required call type.

Searching Contacts

1 From the **Home** screen, tap **Contacts**.

2 Tap the **Search** icon, then enter the name of the contact.

Creating New Contacts

1 From the **Home** screen, tap **Contacts**.

2 Tap the Floating Action Button (**FAB**) then select **New Con**.

3 Tap **New Contact**.

4 Enter the name of the contact in the text field.

5 Tap **More Numbers**.

6 Select a contact type.

7 Enter the required information.

8 Repeat steps step 5 through step 7 to add more numbers.

9 When you are done, tap ⬜.

Dialer

This feature allows you to dial a number to initiate a Private or Phone Call.

Making Calls from the Dialer

1 From the **Home** screen, navigate to the **Dialer** feature.

2 Enter the required number.

3 Tap the **More Options** icon to select the call type.

4 Press the **Initiate Call** icon to start the call.

5 Press **End** to end the call.

Recents

The **Recents** screen shows the 50 most recent calls on your radio.

Table 11: Icons on the Recents Screen

Icon	Description
	Missed Call
	Received Call
	Outgoing Call

Icon	Description
	Emergency Call
	Private Call
	Page
No icon	Dispatch Call

While in the **Recents** screen, the following applies:

- Tapping a saved contact brings you to the **Contact Details** screen.

- Tapping an unsaved number brings you to the **Dialer** screen with the number appearing in the text input field.

Making Calls from Recents Tab

1 From the **Home** screen, navigate to the **Dialer** feature.

2

Tap the ⏰ icon.

All of your recent calls are displayed here.

3 Tap any call from the list to make the call.

4 Press the **Initiate Call** icon to start the call.

5 Press **End** to end the call.

Message

This features allows you to quickly send and receive messages directly from your radios. The maximum length of characters for a text message is 200.

Opening Last Message

Tap the Message section at the Home Screen to open the last message.

Composing and Sending Text Message

1

Tap ![icon] to compose a new text message to a contact.

2 Perform one of the following actions:

- Use **New Conversation** to start composing message.

- Search and select the contact from the contact list.

3 Use the keyboard to type or edit your message.

4

Tap ![icon] to send the message.

Viewing Text Message from the Inbox

Tap ![icon] to view all the messages in the inbox.

Scan Lists

Scan lists are created and assigned to individual channels/groups. Your radio scans for voice activity by cycling through the channel/group sequence specified in the scan list for the current channel/group.

Your radio supports different types of Scan Lists:

- Trunking Priority Monitor Scan List

- Conventional Scan List

- Talkgroup Scan List

Please refer to a qualified radio technician for the maximum number of Scan Lists can be programmed in your radio. These lists must be preprogrammed by a qualified radio technician.

Viewing Scan Lists

![icon]From the **Home** screen, tap the **Scan List**.

Changing Priority Status

Change the priority status from the **Scan List** menu.

Menu Feature Launcher

Menu Feature Launcher widget has three menu features. The first two will be for top priorities features. The third slot will be for **More** options.

More will bring down an overlay screen that will have up to 24 slots for programmed feature menu options.
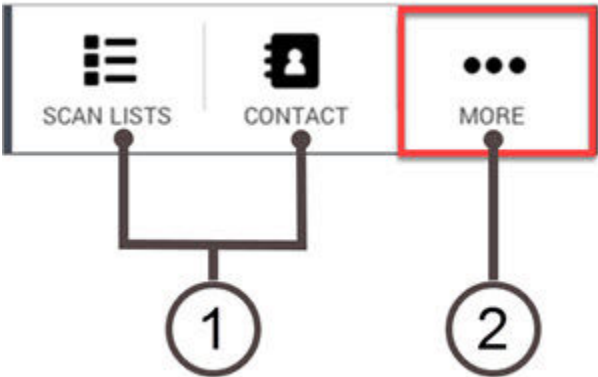
1	First two top priority features.
2	View more programmed feature menu options.

NOTICE:
The programmed features and order will be specified in CPS. Once enabled, features will show in Menu Feature Launcher.

Utilities

This chapter explains the operations of the utility functions available in your radio.

Seamless Update

The Seamless Update feature is a cloud management solution for your radio. This feature supports firmware (full and delta), radio configuration, and security management through Wi-Fi or LTE.

With Seamless Update, you can purchase a software feature on your radio while on-the-go and a provisioning job is scheduled to enable the feature through Wi-Fi or LTE. Your service provider can also schedule a software update for your radio. When an update is available, your radio automatically downloads the update package. After the package is downloaded, you can decide to install it immediately or later.

Besides, you or your service provider can reset your radio to factory settings with the support of this feature.

SmartConnect

SmartConnect allows user to have voice communication by switching the device to LTE when LMR is out of range.

When a channel is SmartConnect enabled and goes out of range, the Radio Control Widget displays **Out of Range** and SmartConnect capable icon ⟩⟩.

Once the device is connected to the LTE, the Radio Control Widget displays **Backup On** and SmartConnect connected icon ⟩⟩.

Accessories

Not all accessories are FCC certified to operate with all radio models and/or bandsplits. Refer to the radio price pages for a list of FCC certified accessories or contact your sales representative for accessory compatibility.

Visit http://www.motorolasolutions.com to know more about the accessories supported by this radio.

Limited Warranty

MOTOROLA SOLUTIONS COMMUNICATION PRODUCTS

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

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

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

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

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

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

MOTOROLA SOLUTIONS offers the following optional extended service contracts.

SERVICE FROM THE START (SfS) COMPREHENSIVE

Provides for extended hardware repair coverage INCLUDING CHEMICAL, LIQUID, FIRE, AND OTHER PHYSICAL DAMAGE. Comprehensive coverage is available in conjunction with MOTOROLA SOLUTIONS'S standard Commercial Warranty and starts from the FIRST DAY the radio is put into use. Service performed under this plan consists of repair or replacement of the covered equipment as set forth in the terms and conditions. Repairs will be made only at the designated MOTOROLA SOLUTIONS repair depot. Local services are not included. MOTOROLA SOLUTIONS will pay the inbound shipping charges only with use of the MOTOROLA SOLUTIONS designated delivery service. MOTOROLA SOLUTIONS will pay for outbound shipping via MOTOROLA SOLUTIONS'S normal shipping methods.

SERVICE FROM THE START (SfS) LITE

Provides extended hardware normal wear and tear repair coverage beginning AFTER MOTOROLA SOLUTIONS'S standard Commercial Warranty period expires. Service performed under this plan consists of repair of the covered equipment as set forth in the terms and conditions. Repairs will be made only at the designated MOTOROLA SOLUTIONS repair depot. Local services are not included. MOTOROLA SOLUTIONS will pay for outbound shipping via MOTOROLA SOLUTIONS'S normal shipping methods.

II. GENERAL PROVISIONS:

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

III. STATE LAW RIGHTS:

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL

DAMAGES OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION OR EXCLUSIONS MAY NOT APPLY.

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

IV. HOW TO GET WARRANTY SERVICE:

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

V. WHAT THIS WARRANTY DOES NOT COVER:

1 Defects or damage resulting from use of the Product in other than its normal and customary manner.

2 Defects or damage from misuse, accident, water, or neglect.

3 Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.

4 Breakage or damage to antennas unless caused directly by defects in material workmanship.

5 A Product subjected to unauthorized Product modifications, disassembles or repairs (including, without limitation, the addition to the Product of non-MOTOROLA SOLUTIONS supplied equipment) which adversely affect performance of the Product or interfere with MOTOROLA SOLUTIONS's normal warranty inspection and testing of the Product to verify any warranty claim.

6 Product which has had the serial number removed or made illegible.

7 Rechargeable batteries if:

- any of the seals on the battery enclosure of cells are broken or show evidence of tampering.

- the damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.

8 Freight costs to the repair depot.

9 A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with MOTOROLA SOLUTIONS's published specifications or the FCC certification labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA SOLUTIONS.

10 Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.

11 Normal and customary wear and tear.

VI. PATENT AND SOFTWARE PROVISIONS:

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

1 that MOTOROLA SOLUTIONS will be notified promptly in writing by such purchaser of any notice of such claim,

2 that MOTOROLA SOLUTIONS will have sole control of the defense of such suit and all negotiations for its settlement or compromise, and

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

MOTOROLA SOLUTIONS will have no liability with respect to any claim of patent infringement which is based upon the combination of the Product or parts furnished hereunder

with software, apparatus or devices not furnished by MOTOROLA SOLUTIONS, nor will MOTOROLA SOLUTIONS have any liability for the use of ancillary equipment or software not furnished by MOTOROLA SOLUTIONS which is attached to or used in connection with the Product. The foregoing states the entire liability of MOTOROLA SOLUTIONS with respect to infringement of patents by the Product or any parts thereof.

Laws in the United States and other countries preserve for MOTOROLA SOLUTIONS certain exclusive rights for copyrighted MOTOROLA SOLUTIONS software such as the exclusive rights to reproduce in copies and distribute copies of such MOTOROLA SOLUTIONS software. MOTOROLA SOLUTIONS software may be used in only the Product in which the software was originally embodied and such software in such Product may not be replaced, copied, distributed, modified in any way, or used to produce any derivative thereof. No other use including, without limitation, alteration, modification, reproduction, distribution, or reverse engineering of such MOTOROLA SOLUTIONS software or exercise of rights in such MOTOROLA SOLUTIONS software is permitted. No license is granted by implication, estoppel or otherwise under MOTOROLA SOLUTIONS patent rights or copyrights.

VII. GOVERNING LAW:

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