



LEX L10i Mission Critical Handheld User Guide

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The Solution Support Center (SSC) is the primary Motorola Solutions support contact. Call:

- Before any software reload.
- To confirm troubleshooting results and analysis before removing and replacing a Field Replaceable Unit (FRU) and Field Replaceable Entity (FRE) to repair the system.

For...	Phone
United States Calls	800-221-7144
International Calls	302-444-9800

North America Parts Organization

For assistance in ordering replacement parts or identifying a part number, contact the Motorola Parts organization. Your first response when troubleshooting your system is to call the Motorola SSC.

For...	Phone
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	For help identifying an item or part number, select choice 3 from the menu.
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Document History

Version	Description	Date
MN003475A01-A	Initial release of the <i>LEX L10i Mission Critical Handheld User Guide</i> .	December 2016
MN003475A01-B	Second release of the <i>LEX L10i Mission Critical Handheld User Guide</i>. This update includes changes in the following topics and chapters: • Chapter Descriptions on page 26 • Regulatory Information on page 27 • Related Information on page 28 • Data Usage on page 142 • Powering Off on page 43 • Removing Widgets on page 71 • Creating Folders on page 78 • Collaboration with LMR Radios on page 105 • Features on page 31 • Charging Temperature on page 39 • Battery Charge Indicators on page 39 • Low Battery Notification on page 41 • Emergency Calling over Public Network on page 90 • Emergency IMS VoLTE Calls (Private Network) on page 91 • Removing microSD or CRYPTR Card on page 36 • Removing Public and Private SIM Cards on page 37 • LEX L10i PSX Home Screen on page 67 • Applications on page 119 • Troubleshooting on page 164 Added the following topics: • Switching Between PSX PTT App and LMR Radio for PTT Communications on page 105	February 2017

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Chapter 1

About this Guide

This guide provides information about using the LEX series Mission Critical Handheld and accessories.



NOTICE:

Screens and menu options may be changed or customized by your agency to show different information.

The *LEX L10i Mission Critical Handheld User Guide* is also available on the LEX device via Motorola TechDocs application. If you do not see this user guide in Motorola TechDocs, contact your device technician or device administrator.

1.1

Helpful Background Information

Motorola Solutions offers various courses designed to assist in learning about the system.

For more information on current course offerings and technology paths, visit <http://www.motorolasolutions.com/training>.

1.2

Versions

This guide covers various software configurations and references are made to operating system or software versions discussed in the following three subsections.

1.2.1

Operating System Version

The Operating System for the LEX device is the Android Operating System.

To determine the Operating System version, from the **Home** screen touch  →  → **About phone** → **Android Version**. The last line provides the Android version information. For example: 4.4.4.

1.2.2

Software Build Number

This topic has information on how to find the software build number of your LEX device.

To determine the software build number, from the **Home** screen, touch  →  → **About phone** → **Build Number**.

1.2.3

Kernel Version

The Kernel version can be found in the **Settings** application.

To determine the kernel version, from the **Home** screen, touch  →  → **About phone** → **Kernel version**.

1.3

Chapter Descriptions

This guide provides information on the features listed in the chapter descriptions below:

- [About this Guide on page 25](#) Chapter 1, presents contacts and general information related to this product.
- [Getting Started on page 31](#) Chapter 2, explains getting the LEX series device up and running for the first time.
- [Using the LEX Device on page 61](#) Chapter 3, is a reference to operating the LEX device.
- [Managing People Contacts on page 81](#) Chapter 4, provides information on adding, editing, and removing contacts.
- [Calling on page 83](#) Chapter 5, is a reference to making and receiving calls.
- [Emergency Services on page 89](#) Chapter 6, provides information on emergency services available on the device.
- [IMS VoLTE on page 93](#) Chapter 7, provides information on IMS VoLTE features on the LEX device.
- [Collaboration with LMR Radios on page 105](#) Chapter 8, is a reference to connecting the LEX device to a Land Mobile Radio for communicating on LTE and TETRA systems.
- [Messaging Application on page 115](#) Chapter 9, is a reference to sending text and multimedia messages.
- [Applications on page 119](#) Chapter 10, explains using basic applications installed on the LEX series device such as Camera, People, and File Browser.
- [Wireless on page 139](#) Chapter 11, explains configuring the LEX series device to operate on a personal, local, and wide area wireless network.
- [Accessories on page 157](#) Chapter 12, is a reference to available accessories and how to use them with the LEX device.
- [Maintenance and Troubleshooting on page 161](#) Chapter 13, is a reference to cleaning and storing the LEX device, and troubleshooting solutions for potential problems.
- [Technical Specifications on page 173](#) Chapter 14, provides technical specifications for the LEX device.

1.4

Notational Conventions

The following conventions are used in this document:

Italics are used to highlight the following:

- Icons on a screen
- Chapters and sections in this and related documents

Bold text is used to highlight the following:

- Dialog box, window, and screen names
- Drop-down list and list box names
- Check box and radio button names
- Key names on a keypad
- Button names on a screen

Bullets (•) indicate:

- Action items
- Lists of alternatives
- Lists of required steps that are not necessarily sequential

Sequential lists (for example, those that describe step-by-step procedures) appear as numbered lists.

1.5

Icon Conventions

The documentation set is designed to give the reader more visual clues.

The following graphic icons are used throughout the documentation set. These icons and their associated meanings are described below.



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



NOTICE: 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 located on the screen. There is no warning level associated with a note.

1.6

Regulatory Information

BEFORE USING THIS device, READ the Product Regulatory, Safety & RF Exposure Guide (PN MN002461A01-F) included with this package.

1.7

Service Information

If you have a problem with your equipment, contact Motorola Solutions Global Customer Support Center for your region.

Contact information is available at: <http://www.motorolasolutions.com/support>. You can also call 1-800-323-9949 for support and select option 6 for PS LTE infrastructure and devices. When contacting support, have the following information available:

- Serial number of the unit (found on manufacturing label)
- Model number or product name (found on manufacturing label)
- Software type and version number

Figure 1: Manufacturing Label



Motorola Solutions responds to calls by e-mail, telephone or fax within the time limits set forth in support agreements.

If your problem cannot be solved by Motorola Solutions Global Customer Support Center, you may need to return your equipment for servicing and will be given specific directions. Motorola Solutions is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty. Remove the CRYPTR card or microSD card and SIM card before shipping.

If you purchased your product from a Motorola Solutions business partner, contact that business partner for support.

1.8

Related Information

LEX Device Mission Critical Handheld User Guides are available at <https://motorolasolutions.com>. From <https://motorolasolutions.com>, search on the LEX model number to locate the corresponding LEX user guide. To access Public Safety LTE infrastructure manuals and other LEX device manuals, go to <https://businessonline.motorolasolutions.com>. If you are new to Motorola Online, follow the on-screen instructions to sign up for an account. Select **Resource Center** → **Product Information** → **Manuals** → **Private Broadband Solutions**.



NOTICE: Customers outside of the Americas can contact Motorola Solutions for documentation listed here.

The documentation includes:

- *LEX L10i Quick Start Guide* PN MN002346A01 describes how to get the device up and running.
- *LEX L10i Mission Critical Handheld User Guide* (this guide) MN003475A01-B describes how to use the device.
- *LEX L10i/LEX L10ig Regulatory Guide* MN002461A01-F describes how to safely use the device.

- *LEX L10i and LEX L10ig Service Provisioning Guide* MN003476A01-B provides technical instructions on how to activate, provision, and configure the device.
- PSX Push-to-Talk (PTT) Client Application *WAVE 7000 Push-to-Talk for Mobile Devices* manual describes how to use the WAVE PTT application that offers services over 4G, 3G, or WiFi network.



NOTICE: If this user guide is not accessible by the TechDocs app on your LEX, contact your device technician or system administrator who can obtain assistance from Motorola Solutions to load user guides to your LEX device.

- PSX Secure Calling Client Application *PSX Secure Calling User Guide*



NOTICE: If this user guide is not accessible by the TechDocs app on your LEX, contact your device technician or system administrator who can obtain assistance from Motorola Solutions to load user guides to your LEX.

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Chapter 2

Getting Started

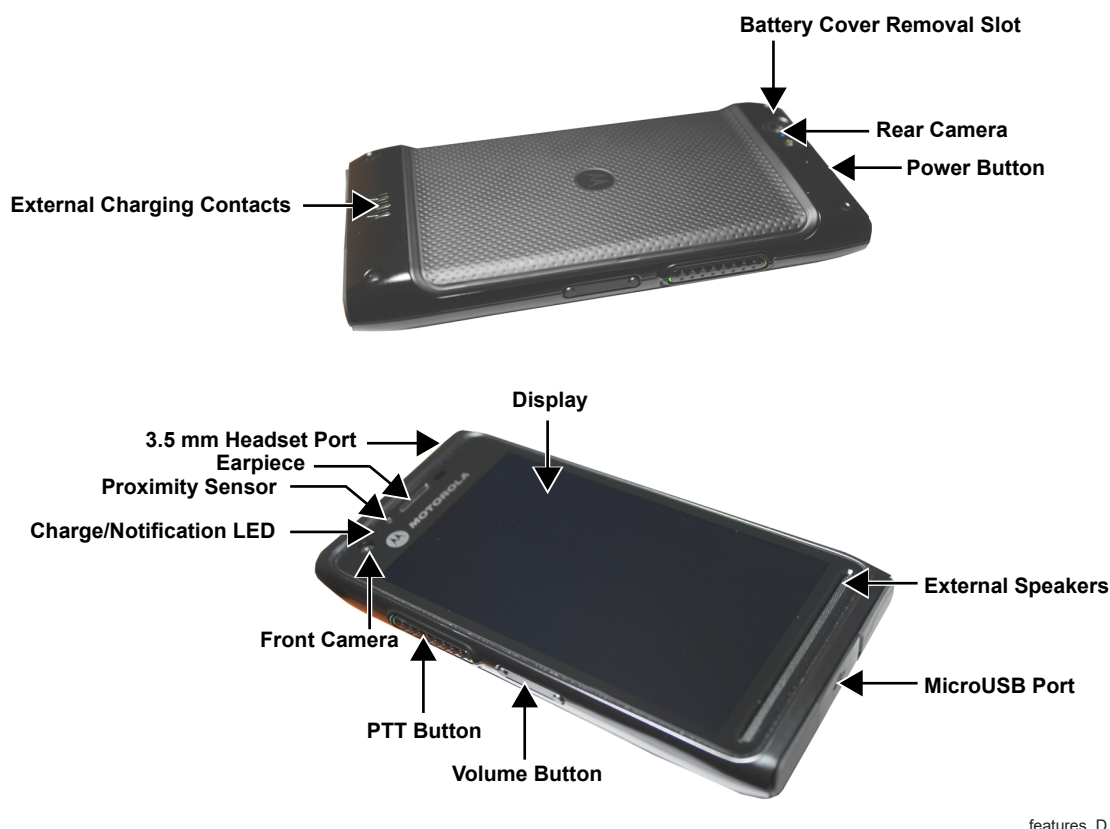
Use the information in this chapter to help you get started using the LEX device.

2.1

Features

The LEX device features are shown in the following figure and summarized in the following table.

Figure 2: LEX Device Features



features_D

Table 1: LEX Device Features

Item	Function
Charge/Notification LED	Solid Blue: New notification (New Voicemail, New Text messages, Missed Calls, Android App Notifications, and so on). Off: Battery is not charging. Solid Red: Battery is charging. Solid Green: Fully Charged. Blinking Green: Micro USB is connected.

Table continued...

Item	Function
Display/Screen	Tap screen displays all information to operate the device.
	Recent Apps key – Press to switch to, stop or manage applications currently running on the background of the device.
	Home key – Displays the Home screen with a single tap.
	Back key – Displays the previous screen. Closes the keyboard if the on-screen keyboard is open.
External Speakers	Use for communications in handset mode. Provides audio output for video and voice playback in speakerphone mode.
	Menu key – At any screen or application, press to see available options.
3.5 mm Headset Port	Connects to headsets (3.5 mm plug).  NOTICE: Do not use 2.5 mm to 3.5 mm adapters
Volume Up/Down Buttons	Increase and decrease audio volume.
PTT Button	Push-to-Talk (PTT) button enables Push-to-Talk services over a broadband network and can also be interconnected to Project 25 Land Mobile Radio (LMR) networks. The PTT application offers calls, alerts, group calls, Talk Group calls, and Talk Group monitoring and scanning. For PTT button and application operations, see <i>WAVE 7000 Push-to-Talk for Mobile Devices</i> manual.  IMPORTANT: The PTT is an optional feature that requires installation of software and system connection following the LEX device shipping. To verify if the PTT feature is enabled on the device, contact your technical support.
Power Button	Press and hold to turn on the device. Press to turn the screen on or off. Press and hold to select one of these options: • Power On/Off — Turn On/Off. • Airplane mode — Disables all wireless connections. • Service switch — Switches between public and Private carrier modes.

Table continued...

Item	Function
	• Covert mode — In covert mode, all sounds, and visual indications are turned off. See Covert Mode on page 44. • Vibrate mode  — Sets to vibrate only. • Speaker on  — Routes sound to the speaker. • Speaker off  — Mutes the device.
Front Camera	Used to capture live video for video calls.
Earpiece	Provides audio in handset mode.
External Charging Contacts	Provides power to the device from cradles.
Battery Cover Removal Slot	Assists in battery cover removal to provide access to the battery, SIM, CRYPTR, and microSD card holders.
microUSB Port	Provides USB client and host communications.
Rear Camera and Flash	Takes photos and video, and provides flash illumination for the camera.
Proximity Sensor	Used to switch off the LEX screen when you hold the device close to your face during a call.

2.2

Unpacking

Carefully remove all protective material from the LEX series device and save the shipping container for later storage and shipping.

Verify that the following were received:

- LEX device
- Battery Cover
- 2280 mAh Lithium-ion battery
- Charger
- USB Cable
- Regulatory Guide
- Quick Start Guide

Inspect the equipment for damage. If any equipment is missing or damaged, contact the Motorola Solutions Support Center immediately.

2.3

Setting Up

The initial setup of the LEX device requires that the battery and any cards be installed.



NOTICE: The device may be delivered to you with battery, SIM card, microSD card and/or CRYPTR cards already installed, activated, and ready for use. In this case, ignore steps 2 through 6 of the following section if they were already performed.

Before using for the first time, perform the following:

- 1 Remove the screen protection film from the screen, see [Removing Screen Protective Film on page 34](#).
- 2 Install the public and/or Private SIM cards, see [Installing Public and Private SIM Cards on page 36](#).
- 3 Install the microSD or CRYPTR card (optional), see [Installing a microSD or CRYPTR micro Encryption Card on page 35](#).
- 4 Install the battery, see [Installing Battery on page 37](#).
- 5 Install the battery cover.
- 6 Charge the device, see [Charging Information on page 38](#).

2.3.1

Removing Screen Protective Film

The device is provided with a screen protective film that protects the device during shipping.

To enable proper operation, the screen protector must be removed before use.

Figure 3: Removing the Screen Protective Film



2.3.2

Removing Battery Cover

This procedure explains how to remove the battery cover.

Procedure:

- 1 Hold the device firmly as shown.
- 2 Using the battery cover removal slot, gently lift the battery cover up and away.

Figure 4: Removing the Battery Cover



2.3.3

Installing a microSD or CRYPTR micro Encryption Card

The LEX device card holder can support either a microSD card or a CRYPTR micro encryption card. The microSD card is a removable flash memory used for storing media on the device. The device can support microSD cards with up to 64GB memory space. The CRYPTR micro encryption card is used for voice encryption in features such as data and phone over Virtual Private Network (VPN) and Push-to-Talk (PTT) communication. The CRYPTR micro provides FIPS 140-2 Level 3 storage for credentials/keys for Data At Rest (DAR) encryption and MVPN. The slot of the card is located under the battery.

When and where to use:



NOTICE: For powering up devices with CRYPTR micro cards, device technicians should follow instructions in *LEX L10i/L10ig Service Provisioning Guide*.

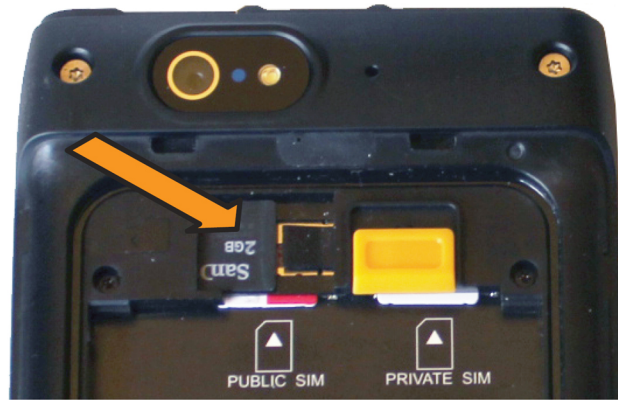


NOTICE: The LEX device may be delivered to you with battery, SIM card, and microSD or CRYPTR card already installed, activated, and ready for use. In case a CRYPTR is pre-installed in the device, you must change the CRYPTR password provided by your technical support. This is not a password to access the device but a password to protect Motorola Solutions secure applications. The CRYPTR password is required whenever the device is restarted.

Procedure:

- 1 Slide the card into the card holder slot with contacts facing down.
- 2 Push the card into the slot until it is fully seated and locked into place.

Figure 5: Installing the microSD or CRYPTR micro Encryption Card



2.3.4

Removing microSD or CRYPTR Card

This procedure explains how to remove a microSD or CRYPTR micro encryption card.

Procedure:

- 1 Press and hold the **Power** button for three seconds.
- 2 Touch **Power Off**.
- 3 Lift the battery cover.
- 4 Push the **Card Holder** lock down to release the card.
- 5 Remove the card from the holder.
- 6 Replace the battery cover.

2.3.5

Installing Public and Private SIM Cards

Public and private phone services require a Subscriber Identification Module (SIM) card.

Prerequisites: The SIM card can contain the following information:

- Mobile phone service provider account details.
- Information regarding service access and preferences.
- Contact information, which can be moved to the **People** application on the LEX device.
- Any additional subscribed services.



NOTICE: The LEX device requires activated SIM cards. Obtain activated SIM cards from your organization administrator.



CAUTION:

- Electrostatic discharge (ESD) precaution.
- For proper ESD precautions to avoid damaging the SIM card. Proper ESD precautions include, but not limited to, working on an ESD mat and ensuring that the user is properly grounded.

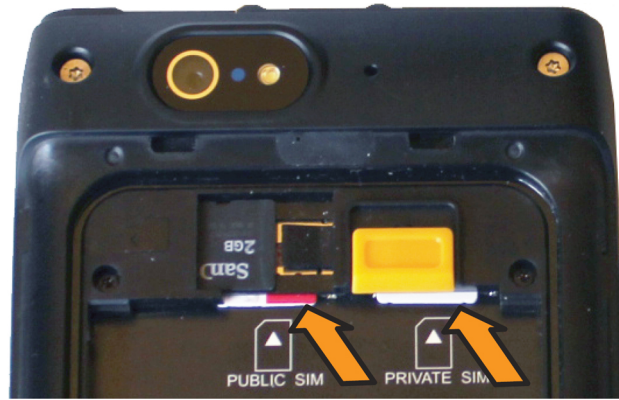
When and where to use: Use this procedure to install a SIM card:

Procedure:

- 1 If the battery is in place, remove the battery as described in [Removing Battery on page 38](#).

- 2 Slide the SIM card into the SIM card holder with the contacts facing down. Note the card notch position.
- 3 Push the SIM card into the holder until it is fully seated and flat.
You should hear a click when the SIM card is fully in place.

Figure 6: Installing the Public and Private SIM Cards



2.3.6

Removing Public and Private SIM Cards

When and where to use: Use this procedure to remove the public or private SIM cards.

Procedure:

- 1 Press and hold the **Power** button for three seconds.
- 2 Tap **Power Off**.
- 3 Lift the battery cover.
- 4 Slide the battery latch to **Unlock** position.
- 5 Lift the battery out of the device.
- 6 Push the SIM card to release it from the holder.
- 7 Remove the SIM card.
- 8 Place the battery back into the device.
- 9 Snap the battery cover back into place.

2.3.7

Installing Battery

When and where to use: Perform this procedure to install a battery.

Procedure:

- 1 Remove the battery from the packaging.
- 2 Insert the battery into the battery compartment with the battery contacts facing the bottom of the device.

Figure 7: Installing the Battery



- 3 Press the top of battery into place.
- 4 Place the battery cover into place.
- 5 Ensure that all battery cover snaps are fully engaged.

2.3.8

Removing Battery

When and where to use: Perform this procedure to remove the battery.

Procedure:

- 1 Slide a finger nail (preferably a thumb nail) into the Battery Cover removal slot and gently pull the Battery Cover away from the device.
- 2 Remove the battery cover.
- 3 Slide the Battery Lock up and hold it.
- 4 With the tip of your finger, lift up the battery from the side closest to the top side of the device.

2.4

Charging Information

Before using for the first time, charge the battery using the provided USB Charger and USB Cable or connect the USB Cable to the USB port of a personal computer. An unused battery fully charges in less than six hours.

The battery can also be charged by one of the optional charging cradles.

Figure 8: Charging the LEX Device



NOTICE:

Keep the USB cover closed when USB not in use.

For detailed description, installation and operation of the LEX device accessories, refer the quick start guides provided with each accessory.

2.4.1

Charging Temperature

Charge batteries in temperatures from 0°C to 40°C (32°F to 104°F). Note that charging is intelligently controlled by the device.

To accomplish this, for small periods of time, the device alternately enables and disables battery charging to keep the battery at acceptable temperatures.

2.4.2

Battery Charge Indicators

The Charge and Notification LED at the top front of the LEX device indicates the battery charging and power level.

Battery charging and power level are indicated also by a battery icon on the status bar.



NOTICE: Before checking the battery charge level, remove the device from any power source (cradle or USB cable connection).

Figure 9: Charge and Notification LED

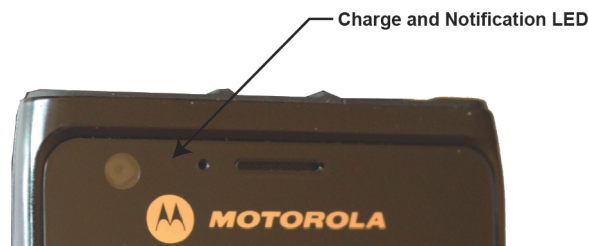


Table 2: Charge and Notification LED — Charging Indications

Status	Indications
Off	Battery is not charging. Could indicate that:

Table continued...

Status	Indications
	• Device is not inserted correctly in the cradle. • Device is not connected to a USB cable. • Charger or cradle is not powered.
Slowly blinking red (once every 2 seconds)	Battery power is low (less than 5% power left).
Solid red	Charging.
Fast blinking red (once every 0.5 second)	Charging error: • Temperature is too low or too high. • Charging has gone on too long without completion (typical charge is four hours).
Slowly blinking green (once every 2 seconds)	Battery is greater than 90% charged.
Solid green	Device is charged.
Slowly blinking blue (once every 4 seconds)	A new notification has been received.
Alternately blinking blue (1 second) and red (3 seconds)	Device is charging and a new notification is received.
Alternately blinking blue (1 second) and green (3 seconds)	Device is charged and a new notification is received.
Slowly blinking blue and red (every other second)	Battery power is low (less than 5% power left) and a new notification is received.
Alternately blinking blue (1 second) and fast blinking red (every 0.5 seconds for 3 seconds)	A new notification is received during a charging error.

When the battery power falls below a predetermined level, the icon indicates the status and a battery dialog box appears indicating the status of the battery. The message displays until you tap **Dismiss**.

To monitor battery usage, from the **Home** screen, tap  →  → **Battery**.

2.4.3

Battery Management

This topic explains how to check the status of your battery and what you can do to make your battery last longer.



NOTICE: Before checking the battery charge level, remove the device from any AC power source (cradle or cable).

To check the charge status of the main battery, tap  →  → **About Phone** → **Status**.

Battery status indicates that the battery is discharging and **Battery level** lists the battery charge (as a percentage of fully charged).

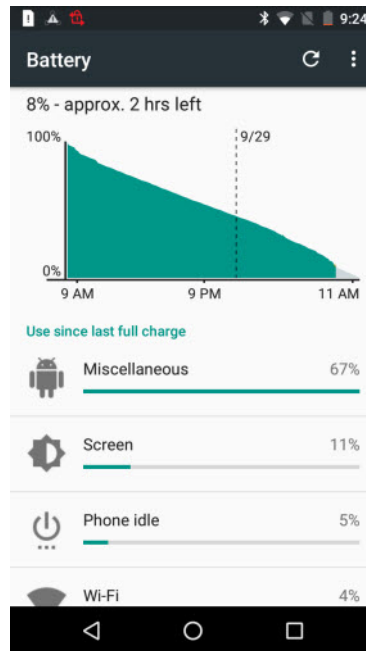
2.4.3.1

Battery Usage Monitor

The **Battery** screen lists applications and allows you to check how much energy they consume. You can turn off applications that consume too much energy.

Battery usage monitor can be accessed at  →  → **Battery**.

Figure 10: Battery Screen



The **Battery** screen lists the applications using the battery. The discharge graph at the top of the screen shows the rate of the battery discharge since last charged (short periods of time when connected to a charger are shown as thin green lines at the bottom of the chart), and how long it has been running on battery power.

Tap an application in the **Battery** screen to display details about its power consumption. Different applications display different information. Some applications include buttons that open screens with settings to adjust power use.

2.4.3.2

Low Battery Notification

When the battery charge level drops below 15%, the device displays a notice to connect to power. The user should charge the battery using one of the charging accessories.

When the battery charge drops below 5%, the device displays a notice to connect the device to power. The user must charge the battery using one of the charging accessories.

When the battery charge drops below 1%, the device turns off.

Charge using one of the charging accessories to retain data.

2.4.3.3

Battery Optimization

Observe the following battery saving tips:

- Leave inside a cradle connected to AC power at all times when not in use.
- Turn off Bluetooth if not needed.
- Turn off Wi-Fi if not needed.
- Change screen time-out to as short as possible.
- Charge when not in use.
- Set the screen to Suspend (Sleep) after a short period of non-use.

- Reduce screen brightness.
- Minimize use of applications that keep the device from suspending, for example, music or video applications.

2.4.3.3.1

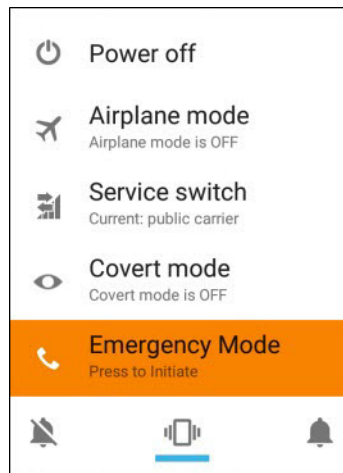
Turning Off the Radio

When and where to use: The Airplane Mode disables radio-frequency signal transmission by the LEX device. When enabled, the device cannot establish any Bluetooth, GPS, telephone, or Wi-Fi connections.

Procedure:

- 1 Press the **Power** button until the **Power Button** menu appears.

Figure 11: Power Button Menu — Airplane Mode



- 2 Go offline by tapping **Airplane Mode**.

The airplane icon  appears in the **Status** bar indicating that all radios are off.

2.5

Powering On the LEX device for the First Time

Press the **Power** button to turn on the LEX L10i. The device boot screen displays as the LEX device boots.



NOTICE: For powering up devices with CRYPTR micro cards, device technicians should follow instructions in *LEX L10i/L10ig Service Provisioning Guide*.

Figure 12: LEX L10i Boot Screen



2.6

Powering Off

When and where to use: Use this procedure to power off the LEX device.

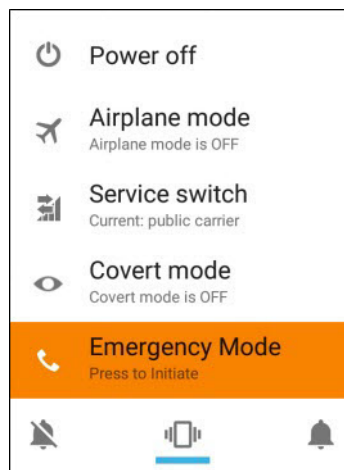
Procedure:

- 1 Press and hold the **Power** button until the **Power Button** menu appears.



NOTICE: If you keep pressing the **Power** button after the **Power Button** menu displays, the device will initiate Emergency Mode after 3 seconds. If you keep pressing the **Power** button for 10 seconds, the device restarts.

Figure 13: Selecting Power Off



- 2 Tap **Power off**.

2.7

Entering and Exiting the Suspend Mode

Suspend mode (also known as sleep mode) is a low-power mode of operation that helps reduce electrical power consumption by shutting down parts of the device that are not in use. The device goes into Suspend mode when the **Power** button is pressed or after a time out period of inactivity.

When and where to use: Use this procedure to enter and exit Suspend mode:

Procedure:

- 1 To enter Suspend mode, press and release the **Power** button.

The screen turns off.



NOTICE:

In Suspend mode, the following items continue to operate:

- **Power** button
- **PTT Button** (if set to be used)
- Notification LEDs
- Wireless communication.

- 2 To exit Suspend mode, press and release the **Power** button.

2.7.1

Setting Suspend Mode Timeout

When and where to use: Use this procedure to set the period of inactivity before suspend mode occurs.

Procedure:

- 1 From the **Home** screen, tap:  →  → **Display** → **Sleep**.
- 2 Select the inactivity duration before Suspend mode becomes active.

2.8

Covert Mode

In the **Covert Mode**, the device goes dark and quiet. All visible and audible alerts and notifications are shut down. This feature makes the LEX device effectively unnoticeable even in a silent and dark environment.

In **Covert Mode**, the following sounds, visual indications, and keys are disabled:

- Display brightness
- Touchscreen
- Keylight
- LED indications
- Vibration
- Speaker audio



NOTICE: In **Covert Mode**, sound is routed to a Bluetooth headset, if connected or sound is routed to a wired earpiece, if connected. Alternatively, sound is routed to the earpiece.

- Tone indications



NOTICE:

In **Covert Mode**, the following features remain active:

- **Power** button
- **PTT** button
- **Volume** button
- Audio or tone indications are available using a wired headset (through headset port) or a Bluetooth headset.



IMPORTANT: If a wired PTT headset not supporting full duplex is plugged in, the covert mode audio is blocked until **PTT** is pressed.

2.8.1

Turning On Covert Mode

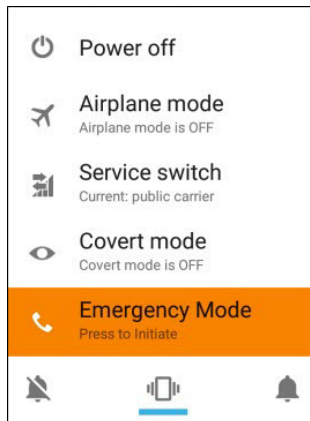
When and where to use: Use this procedure to turn on **Covert Mode**.

Procedure:

- 1 Press and hold the **Power** button for at least two seconds.

The following **Power Button** menu displays:

Figure 14: Power Button Menu



- 2 Tap **Covert mode**.

The screen goes blank.

2.8.2

Turning Off Covert Mode

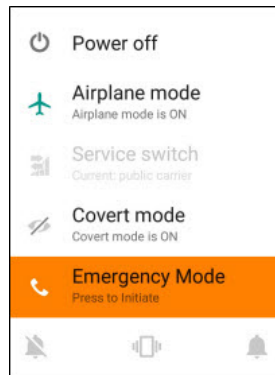
When and where to use: Use this procedure to turn off **Covert Mode**.

Procedure:

- 1 Press and hold the **Power** button for at least two seconds.

The following **Power Button** menu displays:

Figure 15: Power Button Menu



- 2 Tap **Covert mode**.
The **Home** screen appears.

2.9

LEX Series Device Lock

You can lock the LEX device screen manually, or by specifying a pattern, PIN, or password. The lock screen automatically displays after predefined time out to prevent unauthorized people from using the device. The device does not lock at the same time as it is suspended. The device can also be locked manually by the user to disable unwanted key presses or screen tap, or to keep data secured. To manually lock the device, press and release the **Power** button. When the device is locked and cellular network signal is available, phone calls, notification of new messages, missed calls and upcoming appointments still can be received. The device locks after a specified time.

2.9.1

Selecting a Locking Option

When and where to use: Security dictates a specific level of locking for the LEX device. User may protect the device by setting a password, PIN, or pattern as a locking option. User may also choose not to select any of the secure locking options.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap **Security**.
- 4 Tap **Screen lock**.

The following options are displayed:

- **None**.
- **Swipe** — User slides the lock to unlock the device.
- **Pattern** — User must replicate a specified pattern to unlock the device.
- **PIN** — User must enter a PIN to unlock the device.
- **Password** — User must enter a specified password to unlock the device.

- 5 Select an option.

If **None** or **Swipe** is selected, the **Security** screen is re-displayed. If **Pattern**, **PIN**, or **Password** is selected, a pattern, PIN or password must be specified. Then, the **Security** screen is re-displayed.

The device is set to lock.

Postrequisites: Specify a pattern as described in [Specifying a Pattern on page 47](#). Specify a PIN, or password as described in [Specifying a PIN or Password on page 47](#). Then, specify a timeout value as described in [Setting Timeout for Locking on page 48](#).

2.9.1.1

Specifying a Pattern

Setting a pattern as your screen lock helps you protect your device.

When and where to use: Use this procedure to specify a pattern to unlock your device:

Procedure:

- 1 From the **Home** screen, tap  →  → **Security** → **Screen lock**.
- 2 Select **Pattern**.
The **Secure start-up** window displays.
- 3 If you want to further protect your device by requiring your pattern before it starts up, select **Require pattern to start device** and tap **Continue**.
- 4 Using a finger, draw a pattern to unlock your device.
- 5 Tap **Continue**.
- 6 Draw the same pattern again.
- 7 Tap **Confirm**.
The **Notifications** screen displays.
- 8 From the **Notifications** screen, select how you want your notifications to show:
 - **Show all notification content.**
 - **Hide sensitive notification content.**
 - **Don't show notifications at all.**The **Security** screen is re-displayed.

A pattern must be entered to unlock the device.

2.9.1.2

Specifying a PIN or Password

Setting a PIN or password as your screen lock helps you protect your device.

When and where to use: Use this procedure to specify a PIN or password to unlock your LEX device:

Procedure:

- 1 From the **Home** screen, tap  →  → **Security** → **Screen lock**.
- 2 Select **PIN** or **Password**.
The **Secure start-up** window displays.

- 3 If you want to further protect your device by requiring your PIN or password before it starts up, select one of the following:
 - **Require PIN to start device.**
 - **Require password to start device.**
- 4 Tap **Continue**.
- 5 Enter a PIN or password and tap **Continue**.
- 6 Enter the PIN or password again and tap **OK**.
- 7 From the **Notifications** screen, select how you want your notifications to show:
 - **Show all notification content.**
 - **Hide sensitive notification content.**
 - **Don't show notifications at all.**

The **Security** screen is re-displayed.

A PIN or password must be entered to unlock the device.

2.9.1.3

Setting Timeout for Locking

User may specify the timeout for device locking. After the set amount of time, the device locks.

Prerequisites: Screen lock must be set to **Pattern**, **PIN**, or **Password**.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap **Security**.
- 4 Tap **Automatically lock**.

A list of timeout values is displayed.
- 5 Select a timeout value from the list.
- 6 The **Security** screen is re-displayed.

2.9.2

Device Unlock

When the LEX device is not used for a period of time and the user tries to access the device, the **Lock** screen displays.

Depending on which **Screen lock** option is active, the user does one of the following:

- Nothing.
- Swipe the screen.
- Enter a pattern, PIN, or password.

2.9.2.1

Unlocking the LEX Device Using a Pattern

When and where to use: Use this procedure to unlock the LEX Device with a pattern:

Procedure:

- 1 Press and release the **Power** button.
- 2 Swipe the screen from the bottom upwards.
- 3 Using a finger, draw the specified pattern on the screen.
Once the correct pattern is drawn, the device unlocks.

2.9.2.2

Unlocking the LEX Device Using a PIN or Password

When and where to use: Use this procedure to unlock the LEX Device with a PIN or password.

Procedure:

- 1 Press and release the **Power** button.
- 2 Swipe the screen from the bottom upwards.
- 3 In the text field, enter your pin or password.
- 4 Tap **Done**.

The device unlocks and the **Home** screen is shown.

2.9.3

Calling Emergency from a Locked LEX Device

You can make an emergency call even when the LEX device is locked and you do not remember your PIN, pattern, or password.

Procedure:

- 1 Press the **Power** button and swipe up from the bottom of the screen.
- 2 Tap **EMERGENCY** at the bottom of the lock screen.
The **Emergency Dialer** screen displays.
- 3 Enter the emergency number.

- 4 Tap .

2.10

Setting Date and Time

When the LEX device is connected to cellular network, date and time are automatically synchronized.

When and where to use: Perform this procedure to manually set the date and time:

Procedure:

- 1 Tap .
- 2 Tap .

- 3 Tap **Date & time**.
- 4 Disable automatic date and time synchronization by tapping **Automatic date & time**.
- 5 Disable automatic time zone synchronization by tapping **Automatic time zone**.
- 6 Tap **Set date**.
- 7 Slide your finger up and down to select the month, date and year.
- 8 Tap **Done**.
- 9 Tap **Set time**.
- 10 Select the hour, minutes and part of the day by sliding your finger up and down .
- 11 Tap **Done**.
- 12 Tap **Select time zone**.
- 13 Tap to select a time zone from the list.

2.11

Setting the Display

The following LEX device display features can be customized:

- Brightness level — Set the brightness of the display.
- Adaptive brightness — Optimize brightness level for available light.
- Wallpaper — Choose a background type on the Home and lock screens. Three options are available: Gallery, Live Wallpapers, and Wallpapers.
- Sleep — Set the time the device waits before turning off the backlight of the display.
- Press power button twice for camera — Quickly open camera without unlocking your screen.
- Daydream — Set the device to launch a screensaver when the device is docked inside a cradle or charging.
- Font size — Change the font size for display text.
- When device is rotated — Rotate the contents of the screen.
- Cast — Enable the device to project the screen to a TV or other device.

2.11.1

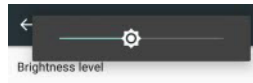
Setting Screen Brightness

Use this task to set the screen brightness.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap **Display**.
- 4 Tap **Brightness level**.

Figure 16: Brightness Level Slidebar



- 5 Set the brightness level by adjusting the **Brightness Level** sidebar.

2.11.2

Setting Adaptive Brightness

Optimize brightness level for available light.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap **Display**.
- 4 Adjust the **Adaptive brightness** sidebar.

Figure 17: Adaptive Brightness Sidebar



2.11.3

Setting Up Wallpapers

Wallpaper is the background on the Home and lock screens. You can change and set the image on the device.

When and where to use:

Choose between traditional or live (animated) types. Traditional wallpaper can be any image, such as a picture you have taken and stored in the Gallery app or an image provided by the manufacturer for wallpaper use.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap **Display**.
- 4 Tap **Wallpaper** and choose a wallpaper type. These options are available:

If...	Then...
For a still image from the Gallery app,	perform the following actions: - a Tap Gallery and browse the albums. - b Select an image by tapping it. - c Tap Set wallpaper.
For animated or interactive wallpaper,	perform the following actions: a Tap Live Wallpapers.

If...	Then...
	b Select a wallpaper to preview. c Tap Set wallpaper .
For a preinstalled image,	perform the following actions: a Tap Wallpaper . b Browse the scroll-bar and select an image. c Tap Set wallpaper .

2.11.4

Setting Up Sleep Mode

Use this procedure to set up sleep mode (screen time-out).

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap **Display**.
- 4 Tap **Sleep**.
- 5 Select one of the sleep values:
 - 15 seconds
 - 30 seconds (default)
 - 1 minutes
 - 2 minutes
 - 5 minutes
 - 10 minutes
 - 30 minutes

2.11.5

Setting Up Daydream

When and where to use: The Daydream application behaves as a screensaver when the LEX device is docked inside a cradle and/or in sleep mode. Use this procedure to set up a screensaver.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Tap **Display**.
- 4 Tap **Daydream**.
- 5 Select from **Clock**, **Colors**, **Photo Frame** or **Photo Table**.
- 6 Tap  to configure the item selected in the previous step.

- 7 Tap , tap **WHEN TO DAYDREAM** and select when you would like the feature to be active (While docked, while charging or either).
- 8 Preview and confirm your selection by tapping **START NOW**.

2.11.6

Setting Font Size

When and where to use: Use this procedure to change the font size.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap **Display**.
- 4 Tap **Font size**.
- 5 Select one of the font size values:
 - Small
 - Normal (default)
 - Large
 - Huge

2.11.7

Setting Screen Rotation

Screen rotation enables the LEX device to automatically determine the orientation of the screen to portrait or landscape.

When and where to use: Use this procedure when you want to set your screen to automatically rotate:

Procedure:

- 1  **NOTICE:** Some applications may not support screen rotation.

From the **Home** screen, tap .
- 2 Tap .
- 3 Tap **Display**.
- 4 Tap **When device is rotated** and select one of the following:
 - If you want the screen to rotate, select **Rotate the contents of the screen**.
 - If you do not want the screen to rotate, select **Stay in portrait view**.

2.11.8

Enabling Cast Screen

When and where to use: Use this procedure to enable the LEX device to project the screen to a TV or other device.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Tap **Display**.
- 4 Tap **Cast**.
- 5 Tap .
- 6 Select **Enable wireless display**.

2.11.8.1

Projecting the LEX Screen on Another Device

Prerequisites: **Cast screen** must be enabled. For more information, see [Enabling Cast Screen on page 54](#).

When and where to use: Use this procedure to project the device screen on another device.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Tap **Display**.
- 4 Tap **Cast**.
- 5 Select the device on which you want to show your device screen.
Your device should now display on the other device.
- 6 To stop projecting your device screen, swipe down from the **Status** bar and tap **Disconnect** under **Cast**.

2.12

Sound and Notification Settings

Sound and notification settings allow the user to configure default media, alarm, and ring volume levels and ringtones. The user can adjust notification settings.

2.12.1

Adjusting Sound Settings

Sound settings allow user to adjust media, alarm, and ring volume.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .

- 3 Tap **Sound & notification**.
- 4 Adjust the slidebars for media, alarm, and ring volume.
- 5 If you want your device to vibrate for calls, adjust the sidebar for **Also vibrate for calls**.

2.12.2

Setting Up Do Not Disturb

The Do not disturb setting allows the user to mute alarms, reminders, events, messages, and calls. The user can set a schedule so that Do not disturb is turned on and off automatically. The user can set exceptions on chosen elements.

Procedure:

- 1 Tap  →  → **Sound & notification** → **Do not disturb** → **Priority only allows**.
- 2 Set exceptions by doing the following:
 - a If you want to unmute Reminders, adjust the **Reminders** sidebar.
 - b If you want to unmute Events, adjust the **Events** sidebar.
 - c If you want to set exception on Messages, select **Messages** and choose from the list of available options.
 - d If you want to set exception on Calls, tap **Calls** and choose from the list of available options.
 - e If you want to repeat callers, adjust the **Repeat callers** sidebar.

2.12.2.1

Setting Automatic Rules

Automatic rules allow the user to set a schedule when Do not disturb turns on and off automatically.

Procedure:

- 1 From the **Home** screen, tap  →  → **Sound & notification** → **Do not disturb** → **Automatic rules**.
- 2 Choose from the following automatic rules:

If...	Then...
If you want to set automatic rules for weekends,	perform the following actions: - a Select Weekend and adjust the sidebar to the On position. - b Set the following: • Rule name • Days • Start time • End time • Do not disturb
If you want to set automatic rules for weeknights,	perform the following actions: a Select Weeknights and adjust the sidebar to the On position.

If...	Then...
	b Set the following: • Rule name • Days • Start time • End time • Do not disturb
If you want to set automatic rules for events,	perform the following actions: a Select Event and adjust the sidebar to the On position. b Set the following: • Rule name • Days • Start time • End time • Do not disturb
If you want to add a new rule,	perform the following actions: a Select Add rule . b Enter the rule name and set it to time rule or event rule . c Set During Events for , Where reply is , and Do not disturb .

2.13

Public and Private Carrier Modes

The device operates on both public and private carriers.

The user can manually switch modes to operate on the Private Mode LTE network or the Public Carrier Mode. When switching between public and private modes ensure the following:

- To verify you are on the private network, wi-fi settings must be turned off and 4G and private network icons are displayed in the status bar.
- To verify you are on the public network, confirm wi-fi settings are turned on and displayed in the status bar.

The LEX L10i Mission Critical LTE Handheld operates in:

- **4G LTE Bands:** 2, 3, 4, 5, 7, 8, 20, 26, 28
- **3G/UMTS Bands:** 1, 2, 4, 5, 8 Quad Band
- **GSM:** 850 MHz, 900 MHz, 1800 MHz, 1900 MHz
- **802.11 a/b/g/n Wi-Fi and Miracast**



NOTICE:

LEX Devices with a single SIM card will automatically configure themselves to use that SIM card.

The device has a different phone number for Private mode and for Public mode. For more information, see [Table 15: For LEX Devices with Dual SIMs \(Private Network and Public Network\) on page 166](#) in [Troubleshooting on page 164](#).

2.13.1

LEX Power Up on Private or Public SIM Slots

The LEX device, when powered up for the first time, or after a factory reset, connects to a predefined carrier. On all subsequent reboots, the device remembers the last used SIM slot. Refer to the following table to learn more about the behavior of the device when no SIM card, two SIM cards, or a single SIM card is inserted in the device SIM slots.

Table 3: LEX Power Up on Private or Public SIM Slots

Number of SIM Cards Present	LEX Behavior
No SIM card present	- If the device is powering up for the first time or after a factory reset, then the device boots up on Public slot by default. - All subsequent reboots are on the last used SIM slot.
Two SIM cards present	- If the device is powering up for the first time or after a factory reset, then the device boots up on Public slot by default. - All subsequent reboots are on the last used SIM slot.
A single SIM card is present (in either of the slots)	- If the device is powering up for the first time or after a factory reset, then the device boots up on Public slot by default. - All subsequent reboots are on the last used SIM slot.

2.13.2

Switching Modes Using the Power Button

When the LEX device is equipped with Private and Public SIM cards, the **Power** button can be used to switch modes.

Prerequisites: Ensure the device is equipped with Private and Public enabled SIM cards.

When and where to use: Use this procedure to switch modes using the power button.



NOTICE:

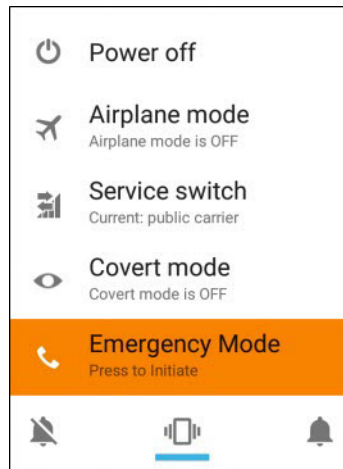
You may need to switch between private and public network modes when you want to use capabilities provided by one network that are not provided by the other. For example, if the phone is in private mode, switch to public mode before you can dial numbers that are not included in the private network.

When switching between private and public network modes, the device undergoes modem reset by default.

Procedure:

- 1 Press and hold the **Power** button until the **Power button** menu appears.

Figure 18: Service Switch

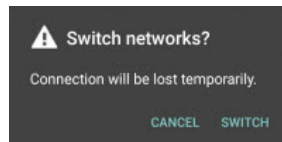


The current carrier mode is indicated under the **Service switch** option.

- 2 Tap **Service switch**.

A confirmation popup is displayed.

Figure 19: Switch Networks Confirmation Popup



- 3 Tap **Switch**.

2.13.3

Switching Modes Using the Settings App

When the LEX device is equipped with Private and Public SIM cards, the **Settings** application can be used to switch modes.

Prerequisites: The device is equipped with Private and Public enabled SIM cards.

When and where to use: Use this procedure to switch modes using the **Settings** application.



NOTICE: You may need to switch between private and public network modes when you want to use capabilities provided by one network that are not provided by the other. For example, if the phone is in private mode, switch to public mode before you can dial numbers that are not included in the private network.



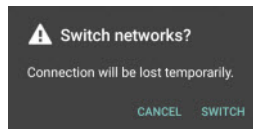
NOTICE: When switching between private and public network modes, the device undergoes modem reset by default.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Tap **More...** .
- 4 Tap **Cellular networks**.
- 5 Tap **Select network**.
- 6 Select **Public** or **Private**.

A confirmation popup is displayed.

Figure 20: Switch Networks Confirmation Popup



- 7 Tap **Switch**.

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Chapter 3

Using the LEX Device

This chapter explains the indicators, buttons, status icons, and controls on the device and provides basic instructions for using the device.

3.1

Touchscreen Navigation

The multi-tap sensitive screen enables the user to operate the LEX device.

Table 4: Using the Touchscreen

Action	Result
Tap	Tap to: - select items on the screen - type letters and symbols using the on-screen keyboard - press on-screen buttons
Tap and Hold	Tap and hold: - an item on the Home screen to move it to a new location or to the trash - an item in Apps to create a shortcut on the Home screen - an empty area on the Home screen until the menu appears
Drag	Tap and hold an item for a moment and then move finger on the screen until reaching the new position.
Swipe	Move finger up and down or left and right on the screen to: - unlock the screen - view additional Home screens - view additional application icons in the Launcher window - view more information on an application's screen
Double-tap	Tap twice on a webpage, map, or other screen to zoom in and out.
Pinch	In some applications, zoom in and out by placing two fingers on the screen and pinching them together (to zoom out) or spreading them apart (to zoom in).

3.2

On-Screen Keyboard

The on-screen keyboard is used to enter text in a text field.

Editing Text

User can edit entered text and use menu commands to cut, copy, and paste text within or across applications. Some applications do not support editing some or all of the text they display; others may offer their own way to select text.

Entering Numbers, Symbols and Special Characters

To enter numbers and symbols:

- Without switching to the **Numbers** or **Symbols** keyboard, it is possible to tap and hold one of the top-row keys until a menu appears then select a number. Keys with alternate characters display an ellipsis (...) below the character.
- By tapping the **Shift** key, the user enters a capital letter.
- When the user taps and holds the **Shift** key until it changes state (**Shift** key is underlined), the user enters two or more capital letters. By tapping the **Shift** key again, the user returns to the lowercase keyboard.
- By tapping , the user switches to the numbers and symbols keyboard.
- By tapping the  key on the numbers and symbols keyboard, the user views additional symbols.

To enter special characters, tap and hold a number or symbol key to open a menu of additional symbols.

- A larger version of the key displays briefly over the keyboard.
- Keys with alternate characters display an ellipsis (...) below the character.

3.2.1

Android Keyboard Settings

The Android Keyboard Settings may be personalized to meet your preferences.

Table 5: Android Keyboard Settings

Setting	Description
Languages	Selects the language used in the keyboard.
Preferences	
Auto-capitalization	Automatically capitalize the first letter after a period.
Double-space period	Double tap on spacebar inserts a period followed by a space.
Vibrate on keypress	Vibrates the device when a key is pressed.
Sound on keypress	Makes a sound on the device when a key is pressed.
Popup on keypress	Pops up a duplicate of the key pressed.

Table continued...

Setting	Description
Voice input key	Allows you to speak the name of the key to input a key.
Appearance & Layouts	
Theme	Allows you to select the theme: Material Light , Material Dark , Holo White , or Holo Blue .
Custom input styles	Allows you to select the input style: German (QWERTY) or French (QWERTZ) .
Gesture Typing	
Enable gesture typing	Allows the user to enter a word by sliding through the letters.
Dynamic floating preview	Allows you to see the suggested word while gesturing.
Show gesture trail	Allows you to see the trail of your gestures.
Text correction	
Personal Dictionary	Uses your personal dictionary when correcting words.
Add-on dictionaries	Allows you to add additional dictionaries to correct words.
Block offensive words	Blocks offensive words from being suggested to correct words.
Auto-correction	Sets the level of auto-correction to: Off , Modest , Aggressive , or Very aggressive .
Show correction suggestions	Displays a list of corrections so that you can select make a selection.
Personalized suggestions	Allows the device to learn from your typed data to improve suggestions.
Suggest contact names	Allows the device to use names from Contacts for suggestions and corrections.
Next-word suggestions	Anticipates the next word that you want to type based on the last word typed.
Advanced	
Key popup dismiss delay	Sets the delay of the popup which shows you which letter you pressed when typing text.
Keypress vibration duration	Allows you to increase or decrease the duration of vibration when a key is pressed.
Key long press delay	Allows you to set the duration of the long press popup.
Emoji for physical keyboard	Physical Alt key shows the emoji palette.
Show app icon	Displays application in the launcher.

3.2.1.1

Adjusting Android Keyboard Settings

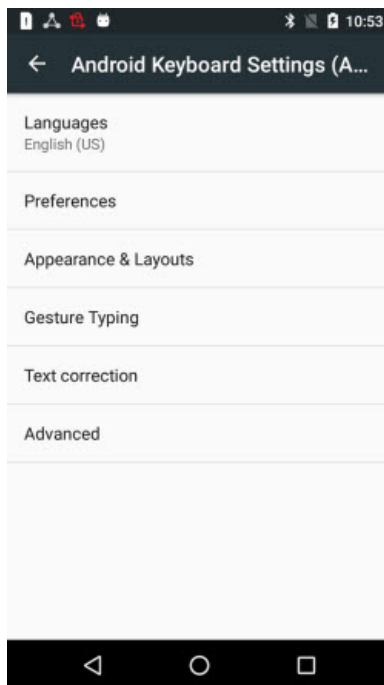
The Android on-screen keyboard is used to enter text in text fields.

Procedure:

- 1 Adjust the Android keyboard settings by performing one of the following: tapping  →  → **Language & input** → **Android Keyboard (AOSP)**.

If...	Then...
If you want to adjust keyboard settings from the Settings window,	perform the following actions: - a From the Home screen, tap  →  → Language & input. - b Select Android Keyboard (AOSP).
If you want to adjust keyboard settings while entering text in a text field,	perform the following actions: - a Tap and hold  (comma key). - b In the Input options window, select Android Keyboard Settings (AOSP).

Figure 21: Android Keyboard Settings



- 2 If you want to switch the keyboard to use another language, tap **Languages**.
- 3 If you want to change default input preferences, tap **Preferences**.
- 4 If you want to set theme and custom input styles, tap **Appearance & Layouts**.
- 5 If you want to enter text by sliding your finger on the screen, tap **Gesture Typing**.
- 6 If you want to configure text correction, tap **Text Correction**.
- 7 If you want to view and modify advanced keyboard options, tap **Advanced**.

Postrequisites:

 **NOTICE:** For more information on Android Keyboard Settings, see [Android Keyboard Settings on page 62](#).

3.2.1.1.1
Selecting Input Languages

The Languages setting allows you to configure your device input language. The input language can be the same as the device system language, or different.

Procedure:

- 1 From the **Home** screen, tap  →  → **Language & input** → **Android Keyboard (AOSP)** → **Languages**.
- 2 Select the input language by performing one of the following:

If...	Then...
If you want to use system language,	Adjust the Use system language sidebar.
If you want to select other language,	Perform the following: a Adjust the Use system language sidebar. b Tap the language you want to set and adjust the sidebar next to it.

 **NOTICE:** For more information on input languages, see [Android Keyboard Settings on page 62](#).

3.2.1.1.2
Setting Keyboard Preferences

You can set your keyboard preferences, such as auto-capitalization or vibrate on keypress.

Procedure:

- 1 From the **Home** screen, tap  →  → **Language & input** → **Android Keyboard (AOSP)** → **Preferences**.
- 2 If you want the device to capitalize the first word of each sentence, adjust the **Auto-capitalization** sidebar.
- 3 If you want to insert a period followed by a space by double-tapping on spacebar, adjust the **Double-space period** sidebar.
- 4 If you want the device to vibrate when a key is pressed, adjust the **Vibrate on keypress** sidebar.
- 5 If you want the device to make a sound when a key is pressed, adjust the **Sound on keypress** sidebar.
- 6 If you want a duplicate of the pressed key to pop up, adjust the **Popup on keypress** sidebar.
- 7 If you want to enter a key by saying it, adjust the **Voice input key** sidebar.

Postrequisites:

 **NOTICE:** For more information on keyboard preferences, see [Android Keyboard Settings on page 62](#).

3.2.1.1.3

Setting Appearance and Layouts

Appearance and layouts allow you to personalize your keyboard.

Procedure:

- 1 From the **Home** screen, tap  →  → **Language & input** → **Android Keyboard (AOSP)** → **Appearance & Layouts**.
- 2 Select the theme by tapping **Theme**.



NOTICE: For more information on themes, see [Android Keyboard Settings on page 62](#).

- 3 Tap .

- 4 Select input styles by tapping **Custom input styles**.



NOTICE: For more information on custom input styles, see [Android Keyboard Settings on page 62](#).

3.2.1.1.4

Setting Gesture Typing

Gesture typing allows the user to type, select, and delete text with gestures.

Procedure:

- 1 From the **Home** screen, tap  →  → **Language & input** → **Android Keyboard (AOSP)** → **Gesture Typing**.
- 2 Set your preferences by adjusting slidebars next to the available options.



NOTICE: For more information on gesture typing settings, see [Android Keyboard Settings on page 62](#).

3.2.1.1.5

Setting Up Text Correction

Text correction allows the user to set auto-correction and word suggestions.

Procedure:

- 1 From the **Home** screen, tap  →  → **Language & input** → **Android Keyboard (AOSP)** → **Text correction**.
- 2 Personalize the settings by adjusting the slidebars next to the options of your choice.



NOTICE: For more information on text correction settings, see [Android Keyboard Settings on page 62](#).

3.2.1.1.6

Adjusting Advanced Keyboard Settings

Advanced keyboard settings allow the user to personalize the Android Keyboard.

When and where to use:



NOTICE: Advanced settings should only be set by experts.

Procedure:

- 1 From the **Home** screen, tap  →  → **Language & input** → **Android Keyboard (AOSP)** → **Advanced**.
- 2 Set your preferences by tapping the available options.



NOTICE: For more information on text correction settings, see [Android Keyboard Settings on page 62](#).

3.3

PSX Home Screen

PSX Home Screen is a user interface available for the LEX L10i. Specifically, PSX Home Screen provides a unique experience for customizing the **Home** screen.

3.3.1

Setting PSX Home Screen as Application Launcher

The default LEX L10i launcher is Android (AOSP) Launcher. Switch to the PSX Home Screen launcher for a unique experience of customizing the **Home** screen.

Procedure:

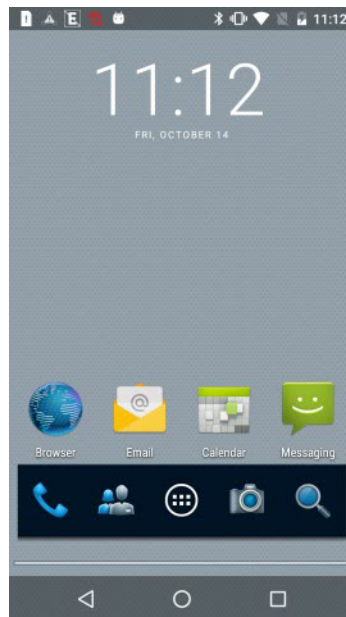
- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Tap **Home**.
- 4 Select **MHX**.

3.3.2

LEX L10i PSX Home Screen

The PSX Home screen displays after the device turns on and unlocks.

Figure 22: Default PSX Home Screen



The **Home** screen is completely customizable depending on the specifications for your agency. Each organization may have a different **Home** screen. The Radio Management (RM) Tool, described in the *LEX L10i and LEX L10ig Mission Critical Handheld Service Provisioning Guide*, can be used to stage the **Home** screen on your devices.



NOTICE: When CRYPTR Card is used, the device requires setting a password after initial boot and entering this password whenever the device restarts. This is not a password to access the device but a password to protect Motorola Solutions secure applications.

After suspend mode or screen time-out, the screen displays with the lock slider. Unlock the device by swiping the screen from the bottom upwards.



NOTICE: If you change the **Screen lock** option, depending on the selected option, you have to enter a pattern, PIN, or password to unlock the device.

The **Home** screen consists of the following items:

- PSX Core Apps Widget — Provides shortcuts such as:
 - Phone Dialer
 - Contacts
 - Application Launcher
 - Camera
 - Search Feature
- PSX Calendar Widget
- Email Widget
- PSX Messaging Widget
- PSX Search Widget
- PSX My Apps Widget
- Other Widgets determined by your agency

The **Home** screen provides screens for placement of widgets and shortcuts. You can view panels by swiping the screen to the left or to the right.

3.3.2.1

Home Screen Customization

The **Home** screen can be customized by adding various widgets.

This section describes how to:

- Add Widgets.
- Move Widgets.
- Remove Widgets.
- Configure **Home** screen settings.

3.3.2.1.1

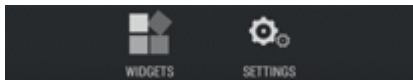
Adding Widgets

Widgets are applications that run on your **Home** screen.

When and where to use: Use this procedure to add one or more widgets to your **Home** screen.

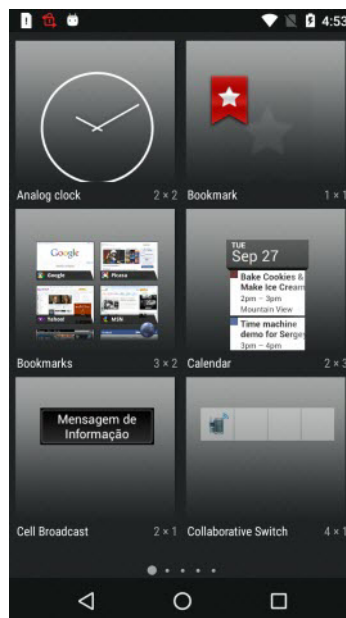
Procedure:

- 1 Swipe the **Home** screen left or right to locate the panel to which you want to add a widget.
- 2 Touch and hold the panel screen until you see the following icons near the bottom of the screen:



- 3 Tap the **Widgets** icon to reveal the widgets.

Figure 23: Widgets Screen



NOTICE: To identify Motorola Solutions Widgets, their names are preceded by **PSX**.

- 4 The **Widgets** screen contains multiple panels. Swipe the **Widgets** screen left or right to locate the widget that you want to add.
- 5 Touch and hold the widget; then, slide the widget down the screen and place it in the current panel.

If there is not enough room in the panel or you want to place the widget in a new panel, slide the widget to the right of the screen until a blank panel appears. Then, place the widget in the new panel.



NOTICE: Some widgets are re-sizable as soon as you place it in a panel. Press and hold the widget. If the re-size tool displays (four dots, one on each side of the widget), you can re-size the widget by dragging the dots on the re-size tool.

3.3.2.1.1.1

Adding Shortcuts to PSX My Apps Widget

The **PSX My Apps** widget is a special PSX Home widget where you can add shortcuts for quick access.

Prerequisites: Before adding shortcuts, the **PSX My Apps** widget must be added to the Home screen.

When and where to use: An empty **PSX My Apps** needs shortcuts to be functional. Use this procedure to add shortcuts to the My Apps widget.

Procedure:

- 1 Add **PSX My Apps** widget as described in [Adding Widgets on page 69](#).

An empty **PSX My Apps** widget displays.

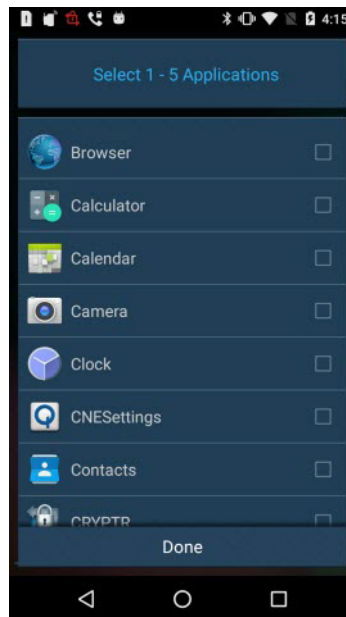
Figure 24: Empty PSX My Apps Widget



Tap to add Applications

- 2 Tap the **PSX My Apps** widget to add shortcuts to it.
A screen with a list of shortcuts is displayed.

Figure 25: List of Shortcuts for PSX My Apps Widgets



- 3 Select each shortcut that you want to add to the **PSX My Apps** widget.
You may add up to five shortcuts.

- 4 Tap **Done**.
Shortcuts are added to the **PSX My Apps** widget.

Figure 26: PSX My Apps Widget with Shortcuts Added



3.3.2.1.2

Moving Widgets

When and where to use: Use this procedure to move (relocate) widgets on the **Home** screen.

Procedure:

- 1 Navigate to the **Home** screen panel where the widget is located.
- 2 Touch and hold the widget; then, slide the widget to a new location.
If you want to move the widget to another panel, slide the widget left or right to that panel; then slide the widget to a location in the panel.

3.3.2.1.3

Removing Widgets

When and where to use: Use this procedure to remove or clear space on your **Home** screen.

Procedure:

- 1 Slide the **Home** screen panel until you locate the panel that holds the widget that you want to remove.

- 2 Touch and hold the widget.
- X Remove** appears near the bottom of the screen.
- 3 Slide the widget to **X Remove** until the widget turns red and your finger is directly above **X Remove**; then, release the widget.

The widget is removed from the panel.



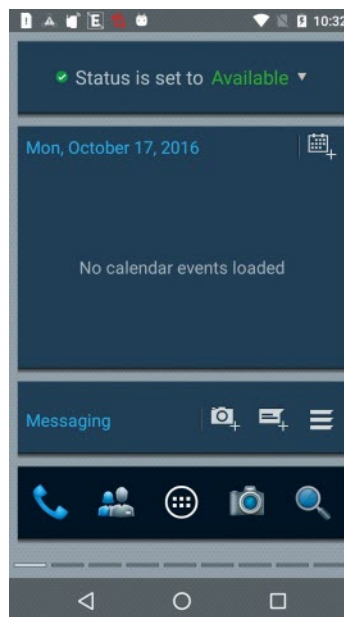
NOTICE: The widget is only removed from the panel. It is not deleted from the LEX device.

3.3.2.1.4

Example of a Customized Home Screen Panel

This topic shows you an example of a customized **Home** screen panel.

Figure 27: Example of a Customized Home Screen Panel



The figure shows a customized **Home** screen panel with the following widgets:

- **PSX My Status**
- **PSX Calendar**
- **PSX Messaging**
- **PSX Core Apps**

3.4

Status Bar

The **Status** bar displays the time, notification icons (left side) and status icons (right side).

Figure 28: Status Bar



If there are more notifications than can fit in the **Status** bar, it is indicated that more notifications exist. Open the **Notifications** panel to view all notifications and status.

3.5

Notification Icons

Notification icons alert you when a notification has been received.

Table 6: Notification Icons

Icon	Description
	Indicates that more notifications are available for viewing.
	Indicates that data is syncing.
	Indicates an incoming email.
	Indicates the device is searching for location data.
	Indicates an error or a warning that requires user action in the location application.
	Indicates an error or a warning that requires user action in the presence application.
	CRYPTR Manager indication that a certificate is nearing expiration.
	CRYPTR Manager indication that a certificate has expired.
	CRYPTR Manager indication that the CRYPTR micro is in a tampered state.
	CRYPTR Manager indication that MVPN is not connected.
	CRYPTR Manager indication that MVPN is connected.
	Indicates an upcoming event.
	Indicates an open Wi-Fi network is available.
	Radio Services application is on.
	Indicates a song is playing.
	Indicates a problem with sign-in or sync has occurred.
	Indicates the device is uploading data.

Table continued...

Icon	Description
	Indicates the microSD card is almost full.
	Indicates the device is downloading data when animated and download is complete when static.
	Indicates the device is connected via USB cable.
	Indicates the device is connected to or disconnected from virtual private network (VPN).
	Preparing SD card.
	Indicates no SIM is installed.
	Indicates the USB debugging is enabled on the LEX device.
	Indicates the device has received a text message.
	Indicates a missed call.
	Indicates tethering is active for Bluetooth or USB. Also used to indicate a Wi-Fi hotspot is active.
	Screenshot captured.
	Indicates that Wi-Fi hotspot is active.



NOTICE: * Contact Motorola Support to obtain the PSX Cockpit application.

3.6

Status Icons

Status icons give you status information on actions occurring on your LEX device.

Table 7: Status Icons

Icon	Description
	Indicates that GPS is in use.
	Indicates the device is searching location data.
	Indicates the Alarm is active.

Table continued...

Icon	Description
	Indicates all sounds except media and alarms are silenced and vibrate mode is active.
	Indicates the ringer is silenced.
	Microphone is muted during a call.
	Indicates the battery is fully charged.
	Indicates the battery charge is low.
	Indicates the battery charge is critical.
	Indicates the battery is charging.
	Indicates the Airplane Mode is active. All radios are turned off.
	Indicates Bluetooth is on.
	Set to operate on Private network.
	Connected to a Wi-Fi network.
	No Wi-Fi signal.
	Mobile network signal strength.
	No mobile network signal.
	Connected to a 4G network.
	Connected to a 3G network.
	Roaming from a network.
	No SIM card installed.

3.7

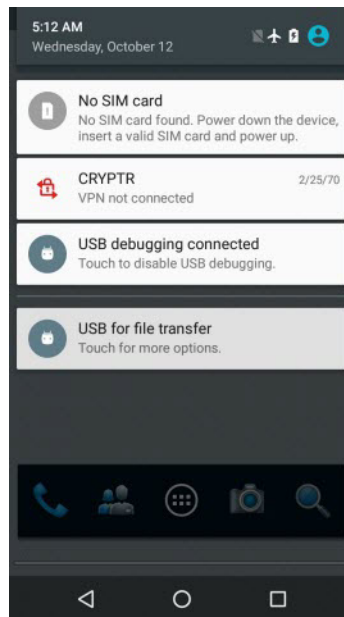
Managing Notifications

Notification icons report the arrival of new messages, calendar events, alarms, and ongoing events.

When a notification occurs, an icon appears in the **Status** bar with a brief description. See [Notification Icons on page 73](#) for a list of possible notification icons and their description. Open the **Notifications** panel to view a list of all the notifications.

To open the **Notification** panel, drag the **Status** bar down from the top of the screen.

Figure 29: Notification Panel



Respond to a notification by opening the **Notifications** panel and then tapping a notification. The **Notifications** panel closes and the subsequent activity is dependent on the notification.

Clear all notifications by opening the **Notifications** panel and by tapping . All event-based notifications are removed. Ongoing notifications remain in the list.

 **NOTICE:** Some notifications cannot be cleared.

Close the **Notifications** panel by dragging the bottom of the **Notifications** panel to the top of the screen or by tapping .

3.8

Quick Settings

The **Quick Settings** panel provides easy access to some frequently used settings.

You can use one of two methods:

- With two fingers, drag the **Status Bar** panel down to display the **Quick Settings** panel.
- Drag the **Status Bar** down from the top of the screen. The **Quick Settings** icon displays in the top right corner. Tap  to display the **Quick Settings** panel.

Figure 30: Quick Settings Panel

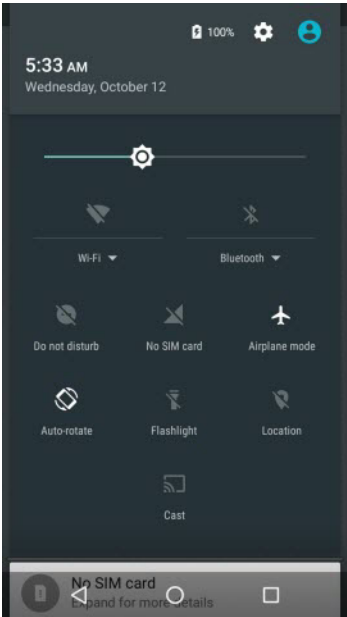


Table 8: Quick Settings Icons

Icon	Function
	Displays the current battery charge level. Allows you to monitor battery usage data.
	Opens the Settings screen.
	Displays the device owner contact image. Allows you to open the owner contact information or to add a guest or a user account.
	Allows you to set screen brightness.
	Displays the current Wi-Fi connection. Allows you to adjust Wi-Fi settings.
	Bluetooth — Displays the current state of the Bluetooth radio. Allows you to adjust Bluetooth settings.
	Displays your current Do not disturb settings. Allows you to modify Do not disturb settings.
	Service — Displays the current cellular service used: public or private.
	Displays your current airplane mode setting. Allows you to turn the airplane mode on or off.
	Displays whether your device is in auto rotate or portrait mode.
	Allows you to turn the flashlight on or off.

Table continued...

Icon	Function
	Allows you to enable or disable location setting.
	Allows you to cast LEX screen on other devices.

To close the **Quick Settings** panel, drag the bottom of the **Quick Settings** panel to the top of the screen or tap .

3.9

Folders

Use **Folders** to organize similar applications together. Tap the folder to open and display items in the folder.

3.9.1

Creating Folders

Organize the content of your **Home** screen by creating folders.



NOTICE: There must be a minimum of two app icons to create a folder.

Procedure:

- 1 Go to the desired **Home** screen.
- 2 Tap and hold on one application icon.
- 3 Drag the icon and stack on top of another icon.
- 4 Release the icon.

3.9.2

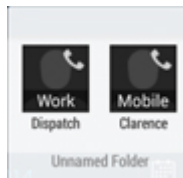
Naming Folders

Follow the procedure to name your folders.

Procedure:

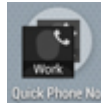
- 1 Tap the folder.

Figure 31: Opened Unnamed Folder



- 2 Tap the title area and enter a folder name using the keyboard.
- 3 Tap **Done**.
- 4 Tap anywhere on the **Home** screen to close the folder.
The folder name appears under the folder.

Figure 32: Named Folder



3.9.3

Removing Folders

Follow this procedure to remove a folder.

Procedure:

- 1 Tap and hold the folder until it enlarges and the device vibrates.
- 2 Drag the folder to **X Remove** until the folder turns red; then release.
The folder is removed from the screen.

3.10

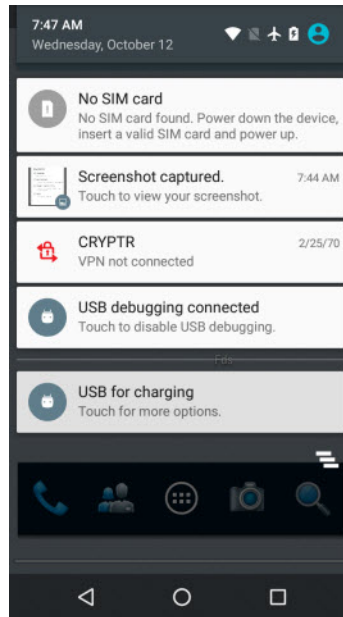
Accessing Files from a Computer

Follow this procedure to allow access to files from your computer using MTP (media device) or using PTP (camera software).

Procedure:

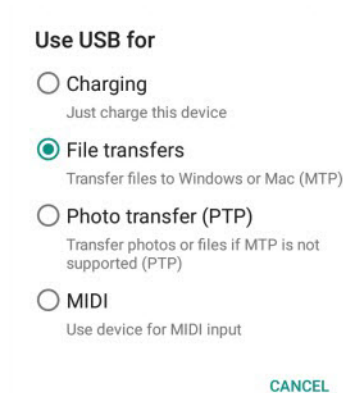
- 1 Connect the device to your computer using a USB cable.
If one of the following messages is displayed in the notification area (top of screen): **USB for file transfer**, **USB for photo transfer**, or **USB for MIDI**, you already have access to the files on your device.
- 2 Swipe down from the **Status Bar**.

Figure 33: Notifications Screen



- 3 Tap the **USB for...** notification.

Figure 34: Use USB for Screen



- 4 In the **Use USB For** screen, select one of the following:
 - If you want to transfer files to Windows or Mac (MTP), select **File transfers**.
 - If you want to access photos or other files on a computer that does not support MTP, select **Photo transfer (PTP)**.
 - If you want to use LEX for MIDI input, select **MIDI**.
- 5 Tap  to return to the previous screen.

Chapter 4

Managing People Contacts

Use the **People** application to manage contacts.

From a **Home** or **Apps** screen, tap . The **People** application displays four tabs at the top of the screen: **Search**, **Groups**, **All contacts**, and **Favorites**. Tap the tabs to change how to view the contacts. Swipe up or down to scroll through the lists.

4.1

Adding People

When and where to use: Use this procedure to add contacts.

Procedure:

- 1 In the **People** application, tap .
- 2 If you have more than one account with contacts, tap the one to use.
- 3 Enter the contact name and other information.
Tap a field to start typing, and swipe down to view all categories.
- 4 Adding more than one entry for a category requires an additional step. For example:
 - To add a work address after typing a personal address, tap **Add new** for that field.
 - To open a menu with preset labels, such as **Home** or **Work** for an email address, tap the label to the right of the item of contact information.
 - To create your own label, tap **Custom** in the menu.
- 5 Tap **Done**.

4.2

Editing People

When and where to use: Use this procedure to edit contact information.

Procedure:

- 1 In the **People** application, tap the **All Contacts** tab.
- 2 Tap a name to edit.
- 3 Tap .
- 4 Edit the contact information.
- 5 Tap .

4.3

Deleting People

When and where to use: Use this procedure to delete contacts.

Procedure:

- 1** In the **People** application, tap the **All contacts** tab.
- 2** Tap a name to delete.
- 3** Tap .
- 4** Tap **Delete**.
- 5** Tap **OK** to confirm.

Chapter 5

Calling

Cellular networks calling allows your smartphone to place and receive various types of calls. Call applications are pre-loaded or can be post-loaded on your LEX device. Contact your device technician on your companies policies.

5.1

Making a Call

When and where to use: Use this procedure to make a call.

Procedure:

- 1 On the **Home** screen, tap .
- 2 In the **To** field, type a name or phone number. As you enter text, matching contacts appear. Tap from the contact list.

User can also initiate calls to contacts from the following actions:

If...	Then...
You want to call from the contact list,	Tap  .
You want to call a contact in your favorites,	Tap  .
You want to make a call with the dialer,	Tap  .

- 3 Tap  to initiate the call.

If...	Then...
You want to turn on the speakerphone,	Tap  .
You want to mute the call,	Tap  .

- 4 Tap  to end the call.

5.2

Making a Call Using a Dialer

When and where to use:

Use this procedure to make a call with the dialer .

Procedure:

- 1 On the **Home** screen, tap .
- 2 Tap the dialer .
- 3 Tap the keys to enter the phone number.
- 4 Tap  to initiate the call.

<i>If...</i>	<i>Then...</i>
You want to turn on the speakerphone,	Tap  .
You want to mute the call,	Tap  .

- 5 Tap  to end the call.

5.3

Making a Call Using Call History

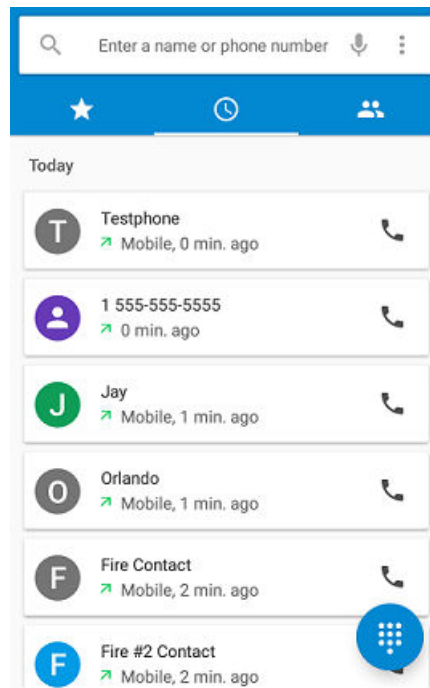
Use this procedure to make a call using call history.

When and where to use: Call History is a list of all the calls placed, received, or missed. Call History provides a convenient way to redial a number, return a call, or add a number to Contacts.

Procedure:

- 1 On the **Home** screen, tap .
- 2 Tap .

Figure 35: Call History Tab



3 Tap  next to the contact to initiate the call.

4 Tap  to end the call.

Example:

Arrow icons beside a call indicate the type of call. Multiple arrows indicate multiple calls:

-  — Missed incoming call
-  — Received incoming call
-  — Outgoing call

5.4

Making A Conference Call

Conference calling (Ad Call) is available if you want to talk to more than one user at a time.

When and where to use: Use this procedure to create a conference call with multiple people.



NOTICE: Conference calling may not be supported by your service provider. Check with your technical support for conference calling availability. The total number of conference call participants may be limited by your service provider. For the maximum number of participants in a conference call, contact technical support.

Procedure:

1 On the **Home** screen, tap .

- 2 In the **To** field, type a name or phone number. As you enter text, matching contacts appear. Tap from the contact list. User can also initiate calls to contacts from the following actions:

If...	Then...
You want to call from the contact list,	Tap  .
You want to call a contact in your favorites,	Tap  .
You want to call a contact in your history list,	Tap  .
You want to make a call with the dialer,	Tap  .

- 3 Tap  to initiate the call.

If...	Then...
You want to turn on the speakerphone,	Tap  .
You want to mute the call,	Tap  .

- 4 While in your call, tap . The first person is put on hold.
- 5 Dial the second person.
- 6 Tap  to join the two calls together. The device screen states **Conference Call** and everyone can talk and hear one another.
- 7 Tap  to end the call.

5.5

Answering Calls with a Bluetooth Headset

When you receive a phone call, the **Incoming Call** screen opens, displaying the caller ID and any additional information about the caller that is in the contact application.



NOTICE: To connect a Bluetooth headset to the LEX device, see [Discovering Bluetooth Devices on page 154](#).

- When a call arrives, tap the **Call** button on the Bluetooth headset to answer the call.
- To silence the ringer before answering the call, press the volume down button on the side of device.
- To end the call press the **Call** button on the Bluetooth headset.

All incoming calls are recorded in the  application call  tab. If you miss a call, you will receive a notification.

5.6

Call Settings

Use Call Settings to modify options related to the phone call feature.



NOTICE: Not all options are available for all configurations.

- **Sounds and Vibration**
 - **Phone Ringtone** — Tap to select a ringtone to sound when an incoming call is received.
 - **Also vibrate for calls** — Check to make the device vibrate when a call is received.
 - **Dialpad tones** — When enabled, pressing the numbers on the dial pad within the Dialer / Phone app plays tones.
- **Display options**
 - **Sort by**
 - **Name format**
- **Quick Responses** — Tap to edit quick responses to use instead of answering a call.
- **Calls**
 - **Calling Accounts** — Tap to configure account settings.
 - + **Use Internet calling** — Set internet calling options.
 - + **Receive Incoming Calls** — Set to enable/disable incoming calls.
 - + **Display Duration** — Set display duration ON.
 - + **Vibrating After Connected** — Enable vibration when answering calls.
 - **Voicemail** — Tap to configure voicemail settings:
 - + **Service** — Set the service provider or other provider for voicemail service.
 - + **Setup** — Tap to update the phone number used to access voicemail.
 - + **Sound** — Tap to select a sound when a voicemail is received.
 - + **Vibrate** — Tap to vibrate when a voicemail is received.
 - **Fixed Dialing Numbers** — Use Fixed Dialing to restrict the phone to dial only the phone number(s) or area code(s) specified in a **Fixed Dialing** list.
 - **Turn on Video Calling** - Enable video calling.
- **Accessibility**
 - **TTY mode** — Tap to set the **TTY** setting. Use an optional teletypewriter (TTY) device with the LEX device to send and receive calls. Plug the TTY device into the device headset jack and set the device to operate in one of the TTY modes.

NOTICE:
Use a TSB-121 compliant cable (provided by the TTY manufacturer) to connect the TTY device to the LEX device.

Set the device volume to a middle level setting for proper operation. If you experience a high number of incorrect characters, adjust the volume as needed to minimize the error rate.

For optimal performance, the device should be at least 30 cm (12 inches) from the TTY device. Placing the device too close to the TTY device may cause high error rates.

 - + **TTY Off** (default) — TTY is off.
 - + **TTY Full** — Transmit and receive TTY characters.

- + **TTY HCO** — Transmit TTY characters but receive by listening to earpiece.
- + **TTY VCO** — Receive TTY characters but transmit by speaking into microphone.
- **Additional Call Settings**
 - **Ringtone Settings** — When using a Bluetooth headset, select the path that the ring is heard.
Options: **Bluetooth** or **Speaker and Bluetooth** (default).
 -  **NOTICE:** Bluetooth headset connection is required to set this option.
 - **DTMF tones** — Set the length of the **DTMF tones**. Available options are: **Normal** or **Long**.
 - **CDMA Call Settings:**
 - + **Voice privacy** — Enable enhanced privacy mode.

Chapter 6

Emergency Services

Emergency Mode indicates a critical situation. The emergency alert signal overrides any other communication on the LEX device. You are able to initiate an Emergency at any time on any screen display even when there is activity on the current channel.

Enable Emergency Mode by pressing the power button on the LEX device. See [Enabling Emergency Mode on page 112](#).



NOTICE: Contact your System Administrator to set up other emergency alert notifications if required.

6.1

Emergency Notification Settings for LEX

Access to Emergency Notification settings may be available through the Emergency settings on the device. Preference settings allow the user to configure Emergency audio, visual, messaging, and location notifications on the device.



NOTICE: Additional applications provided from Motorola Solutions are required to configure Emergency Notifications for Emergency on the LEX device. If you are unable to configure Emergency audio notification settings on the LEX device, contact your device technician.

6.1.1

Enabling Emergency Covert Mode

When and where to use:

Follow this procedure to enable covert mode on the device. Device enters alert mode silently. This option is turned off as a default.

Procedure:

- 1 From the device screen, pull down the **Notification Bar** and tap **Emergency** icon.
- 2 To enable covert mode, tap checkbox **On** or **Off**.

6.1.2

Setting Emergency Audio Notification

Prerequisites: Additional applications provided from Motorola Solutions are required to configure Emergency Notifications on the LEX device. If you are unable to configure Emergency audio notification settings on the LEX device, contact your device technician.

When and where to use:

Follow this procedure to set emergency audio notifications on the device.

Procedure:

- 1 From the device screen, pull down the **Notification Bar** and tap **Emergency** icon.
- 2 To enable emergency audio notification settings, configure the following:
 - **Alert Sound On/Off** - tap check **On** or **Off**.
 - **Vibrate On/Off** - tap check **On** or **Off**.

- **Pre Alert Sound On/Off** - tap check **On** or **Off**.
- **Pre Alert Repeat** - tap check **On** or **Off**.
- **Pre Alert Interval** - slide the bar left or right. The pre-alert interval values are in the range of 1 to 10 seconds.

6.1.3

Setting Emergency Visual Notification

Prerequisites: Additional applications provided from Motorola Solutions are required to configure Emergency Notifications on the LEX device. If you are unable to configure Emergency audio notification settings on the LEX device, contact your device technician.

When and where to use:

Follow this procedure to set emergency visual notifications on the device.

Procedure:

- 1 From the device screen, pull down the **Notification Bar** and tap **Emergency** icon.
- 2 To enable visual notification settings, configure the following:
 - **Status Bar Icon** - tap check **On** or **Off**.
 - **Camera Flash** - tap check **On** or **Off**.
 - **Blink Display** - tap check **On** or **Off**.

6.2

Emergency Calling over Public Network

You can make an emergency call when the LEX device is on a public network from a locked phone or initiate emergency calling through the power button.

Prerequisites: The following must be configured to dial emergency numbers in a public network:

- Preconfigure **EMERGENCY** to initiate an emergency phone call only, if location is available send an SMS message, initiate a phone call and SMS, or no action at all. See [Emergency Notification Settings for LEX on page 89](#).
- You can use the PSX Push-to-Talk (PTT) application to manage Emergency calls. Contact your device technician for more information.

Emergency numbers vary by country. The pre-programmed emergency numbers may not work in all locations, and sometimes an emergency call cannot be placed due to network, environmental, or interference issues. For additional information, contact your system administrator.

When and where to use: Use this procedure to make an emergency call on the public network.

Procedure:

To make emergency calls on a locked phone:

If...	Then...
If you need to make an emergency call on the public network on a locked LEX device,	Complete the following actions: • On the Home screen, tap EMERGENCY to display the dialer. • Enter the emergency number (112 and 911 are always available).

If...	Then...
	Tap  to initiate the call.
If you need to make an emergency call on the public network on an unlocked LEX device,	Complete one of the following actions: a On the Home screen, tap . b Tap  to display the dialer. c Enter the emergency phone number. d Tap  to initiate the call. b Enable emergency from the Power button. See Enabling Emergency Mode on page 112.

6.3

Emergency IMS VoLTE Calls (Private Network)

You can make an emergency call when the LEX device is on a private IMS LTE network. The IMS server identifies dialing to any emergency call number stored on a SIM card or configured in the VoLTE emergency call application.

Prerequisites: The following must be configured to dial emergency numbers in a private IMS LTE network:

- Preconfigure **EMERGENCY** on the locked screen to initiate an emergency phone call only, if location is available send an SMS message, initiate a phone call and SMS, or no action at all. See [Emergency Notification Settings for LEX on page 89](#).
- Confirm Originating Identification Restriction (OIR) is disabled on the LEX device.



IMPORTANT: If user enables OIR on the LEX device, and an emergency call is placed on the IMS network from the LEX device, the emergency operator is unable to obtain the caller identification to assist. If enabling OIR, user will need to identify himself when talking to the PSAP.

For additional information, contact your device technician.

When and where to use: Follow this procedure to make an IMS VoLTE Emergency call.

Procedure:

- Complete one of the following actions for IMS VoLTE Emergency calls:

If...	Then...
If you need to make an emergency call on an unlocked LEX device,	a On the Home screen, tap . b Tap  to display the dialer. c Enter the preconfigured emergency phone number.

If...	Then...
	d Tap  to initiate the call.  NOTICE: During IMS VoLTE emergency call, there is no Call Waiting, Call Hold, 3-Way Calling, or Call Forwarding.  NOTICE: If there is a PSX PTT emergency call in progress you cannot make an emergency phone call with the dialer.
If you need to make an emergency call on a locked LEX device,	a On the Home screen, tap EMERGENCY to display the dialer. b Enter the preconfigured emergency phone number. c Tap  to initiate the call.

When IMS VoLTE Emergency call is active, the device is placed in Emergency CallBack mode (no data can be transmitted for example, call waiting, call forwarding, text messaging) for two minutes or until the following exit actions are taken:

- LEX device power cycles.
 - User selects **Exit callback** from the device screen.
- 2 To clear emergency calls, press and hold down the power button until menu appears and tap **Clear Emergency** to exit emergency.

6.4

Emergency Call for LMR Paired Devices

When Land Mobile Radio (LMR) is paired with a LEX device and the power button is pressed (on any device where LMR is present), the LEX device reacts based on what LMR channel the user is on and what Emergency Mode that channel is assigned. See [Emergency Calling on LEX Device Paired with LMR on page 111](#) for details on emergency calling when paired with LMR radios.

Chapter 7

IMS VoLTE

The IP Multimedia Core Network Subsystem (IMS) is an architectural framework for delivering IP multimedia services on a private network. IMS provides support for the delivery of multimedia applications and voice service over IP transport. The IP transport is the key in that it allows IMS to communicate over any network that supports IP.

IMS provides Voice over LTE (VoLTE) solution on a private network, that supports audio, video, and conference calling between users. VoLTE calls use the standard Android dialer and contact application.

Based on the customer's needs, it is possible to install and configure the following options:

- ClearTone - An optional feature enabled by the agency to notify the user that they are on a clear call (non-secure). To enable this feature, contact your system administrator.



NOTICE: If your Organization must make calls in a secure (encrypted) environment, see [Public Safety Experience Applications on page 137](#) and contact your Motorola Solutions representative for details.

If the IMS option is implemented in your private network, your LEX device, if enabled, will support the following features:

- IMS VoLTE:
 - IMS VoLTE/ViLTE (video) Calls
 - IMS ClearTone
 - IMS Conference Call
 - IMS Voice Mail
 - IMS Supplementary Services
- IMS Messaging
- Emergency Calling - see [Emergency IMS VoLTE Calls \(Private Network\) on page 91](#).

Additional PSX applications are available on your private system and LEX devices, see [Public Safety Experience Applications on page 137](#).

IMS is not supported in the Public mode. To verify IMS and multimedia communication options are enabled on the device, contact your System Administrator.



IMPORTANT: If your LEX device does not have a public SIM card available then Messaging, PTT Calls, and Secure VoIP are not available in the public network and only work in the private network.

If you are unable to make a phone call with the LEX device, contact your system administrator.

7.1

Making IMS VoLTE Calls

If your system supports VoLTE calling, users can make and receive calls to, and from other users, over an LTE IMS network.

Prerequisites:

When and where to use: Use this procedure to make a VoLTE (voice) call.

Procedure:

- 1 On the **Home** screen, tap .
- 2 In the **To** field, type a name or phone number. As you enter text, matching contacts appear. Tap from the contact list.

User can also initiate calls to contacts from the following actions:

If...	Then...
You want to call a contact,	Tap  .
You want to call a contact in your favorites,	Tap  .
You want to make a call with the dialer,	Tap  .

- 3 Tap  to initiate the call.

If...	Then...
You want to turn on the speakerphone,	Tap  .
You want to mute the call,	Tap  .

- 4 Tap  to end the call.

7.2

Making IMS Video Calls

If your system supports VoLTE, users can make and receive video calls to, and from other users, over an LTE IMS network.

Prerequisites: If you are making video calls, user must enable the Video Calling setting. See [Enabling IMS Video Calling on page 96](#).

When and where to use: Use this procedure to perform video calls.

Procedure:

- 1 On the **Home** screen, tap .
- 2 In the **To** field, type a name or phone number. As you enter text, matching contacts appear. User can also initiate calls to contacts from the following actions:

If...	Then...
You want to call a contact in your favorites,	Tap Favorites  .

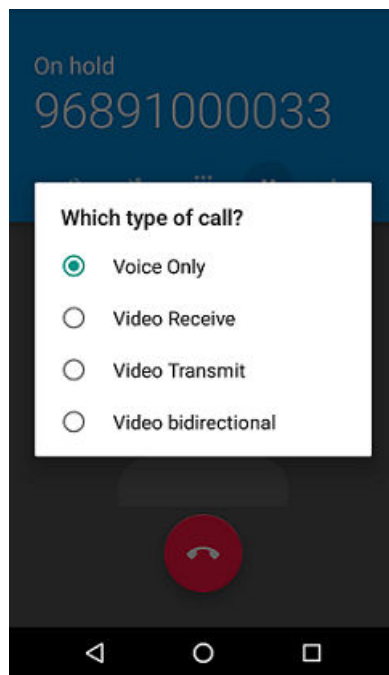
Table continued...

If...	Then...
You want to call a contact in your history list,	Tap History 
You want to make a call with the dialer,	Tap 
You want to call a contact,	Tap 

- 3 Tap  to initiate the call.

If...	Then...
You want to turn on the speakerphone,	Tap 
You want to mute the call,	Tap 

- 4 Tap  → **Video Call**. The call is placed on hold.
- 5 From the **Which type of call** window, select a call type.



- 

NOTICE: While ViLTE call in progress, each user will see video on their respective device for full duplex video. In case of send only or receive only, the contact picture displays.

 - Voice Only** - Audio Only
 - Video Transmit** - Video Send only
 - Video Receive** - Video Receive only
 - VT** - Video send/receive

- 6 Tap  to end the call.

7.2.1

Receiving IMS Video Calls

If your private system supports VoLTE calls, users can receive a video call from another user.

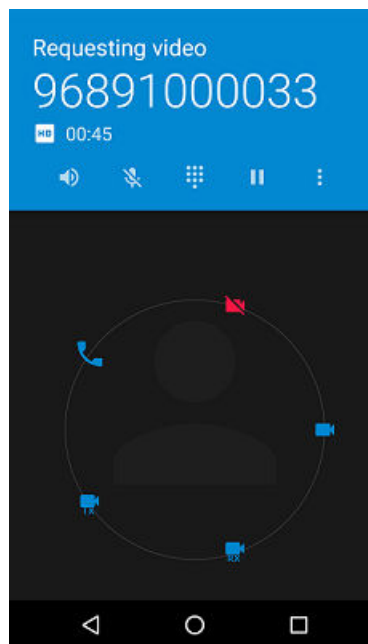
When and where to use:

Use this procedure to receive a video call on the LEX device.

Procedure:

- 1 When callee receives a video call, user swipes one of the following choices from the device screen:
 - **Voice Only** - Audio Only
 - **Video Transmit** - Video Send only
 - **Video Receive** - Video Receive only
 - **VT** - Video send/receive

Figure 36: Receiving Video Call



NOTICE: While ViLTE call in progress, each user will see video on their respective device for full duplex video. In case of send only or receive only, the contact picture displays.

- 2 Tap  to end the call.

7.2.2

Enabling IMS Video Calling

Video Calling allows the user to send and receive Video Calls.

When and where to use:

Use this procedure to configure Video Calling. If you are unable to configure Video Call settings on the LEX device, contact your system administrator.

Procedure:

- 1 Tap .
- 2 From drop-down menu , select → **Settings** → **Calls**.
- 3 Tap **Turn on Video Calling** to enable.

7.3

Making IMS Multi-Party Conference Calls

If your private system supports VoLTE calls, users can make and receive conference calls to, and from other users. If you are unable to use Multi-Party Conference calling, contact your system administrator.

When and where to use: Use this procedure to create a conference phone session with up to three people on the LEX device.

Procedure:

- 1 On the **Home** screen, tap .
- 2 In the **To** field, type a name or phone number to add recipients. As you enter text, matching contacts appear. Tap from the contact list.

User can also initiate calls to contacts from the following actions:

If...	Then...
You want to call a contact,	Tap  .
You want to call a contact in your favorites,	Tap Favorites  .
You want to call a contact in your history list,	Tap History  .
You want to make a call with the dialer,	Tap  .

- 3 Tap  to initiate the call.

If...	Then...
You want to turn on the speakerphone,	Tap  .
You want to mute the call,	Tap  .

- 4 When the call connects, tap  → **Add Call**.
The first call is placed on hold.
- 5 Tap the keys to enter the second phone number.
- 6 Tap  below the dialer to initiate the call.

- 7 When the call connects, the first call is placed on hold and the second call is active.
- 8 Tap  to create a conference call with three people.
- 9 Tap  → **Add Call** to add another call.
The conference is placed on hold.
- 10 Tap the keys to enter the second phone number.
- 11 Tap  below the dialer to initiate the call.
- 12 Tap  to add the third call to the conference.
- 13 Tap to rotate between the individual calls.
Calls are rotated starting with the first call. This allows you to speak privately to one party. Tap  to rotate to the next party. When the rotation is complete, you are placed back into conference mode and all calls are active.

7.4

IMS Voicemail

This section provides information on VoiceMail Services where LEX device users can receive VoiceMail messages from another PS LTE user, over the private LTE IMS network. If you are unable to use VoiceMail services on the LEX device, contact your system administrator.

Voicemail is a method of storing voice messages electronically for later retrieval by intended recipients. Your system administrator enables voice mail services and configures the voicemail number. Users cannot change the assigned voicemail number on the LEX device. If VoiceMail is enabled, the user can configure settings in the LEX device that may affect the way VoiceMail will operate.



NOTICE: When switching between public and private modes, your LEX device phone number is not the same. Contact your system administrator for further details.

Users can initiate the following actions:

- Leave a voicemail message.
- Retrieve a voicemail message.
- Select, play, and manage (create/modify greeting/delete messages).
- Receive a voicemail notification.
- Configure message sound and vibrate. See [Enabling IMS VoiceMail Notification Sounds on page 98](#).
- Manage voicemail settings. See [Enabling IMS Call Forwarding on page 100](#).



IMPORTANT: If the user changes the **Call Forwarding** setting on the LEX device to a number different from the voicemail number received from the device management, the calls will no longer route to the voicemail server.

7.4.1

Enabling IMS VoiceMail Notification Sounds

VoiceMail allows the user to send and receive voice messages with notification sounds.

When and where to use:

Use this procedure to configure VoiceMail notification sounds. If you are unable to configure VoiceMail settings on the LEX device, contact your system administrator.

Procedure:

- 1 Tap .
- 2 From drop-down menu , select → **Settings** → **Calls** → **VoiceMail**.
- 3 Complete the following actions:
 - Tap **Sound** and select a notification sound.
 - Tap **Vibrate** to enable vibration on received voicemail messages.

7.5

IMS Supplementary Services

This section provides information on Supplementary Services over IMS for the LEX device on a private network. Supplementary services are available on IMS networks and provides the user with configurable device settings to manage calling capabilities on the LEX device.

All supplementary service configurations managed from the device are not saved on the server. If a LEX device requires a reset the configured settings default to the system configuration. If unable to configure supplementary services on the LEX device, contact your system administrator.

The user may configure some of the following supplementary services on the LEX device:

- **Call Hold** - During an active call, the LEX user can place the active call on hold. To configure call hold on your LEX device, see [Placing IMS VoLTE Call on Hold on page 99](#).
- **Communication Waiting** - During an active call, if another caller calls your LEX device, the user has the option to **Answer** or **Decline** the incoming call. To configure Call Waiting on the LEX device, see [Enabling IMS Call Waiting on page 100](#).
- **Call Forwarding** - User can forward incoming calls to the LEX device to a different number. To configure Call Forwarding on the LEX device, see [Enabling IMS Call Forwarding on page 100](#).
- **Call Barring** - User can prevent incoming, outgoing, or both types of calls from calling your phone. To configure Call Barring on the LEX device, see [Enabling IMS Call Barring on page 101](#).
- **Originating Identification Restriction (OIR)** - User can withhold their identity (ID) from being displayed to another LEX device when making a call over IMS, see [Enabling Originating Identification Restriction Over IMS on page 102](#).

7.5.1

Placing IMS VoLTE Call on Hold

When and where to use:

Use this procedure to place an active IMS VoLTE call on hold. If you are unable to place calls on hold on the LEX device, contact your system administrator.

Procedure:

- 1 During an active call, tap the **Hold**  icon to place the call on hold.
- 2 To resume the active call, tap the **Hold**  icon again.



NOTICE: The **Hold** button is not available during an Emergency call.

7.5.2

Enabling IMS Call Waiting

When and where to use:

Use this procedure to enable or disable Call Waiting settings. If you are unable to configure call waiting on your LEX device, contact your system administrator.

Procedure:

- 1 Tap .
- 2 From drop-down menu , select → **Settings** → **Calls** → **Additional Settings**.
- 3 Tap to enable **Call Waiting**.

7.5.3

Enabling IMS Call Forwarding

Follow this procedure to enable IMS Call Forwarding. Call Forwarding immediately redirects calls intended for your LEX device to another number. You can still make outgoing calls when this feature is turned on. If the user turns off all Call Forwarding features, the device sets all conditional call forwarding to the voicemail number and the calls will route to the voicemail server.

When and where to use:

Use this procedure to configure call forwarding on the LEX device. If you are unable to configure Call Forwarding settings on the LEX device, contact your system administrator.



NOTICE: The default call forwarding number is preconfigured to the voicemail number. If the user changes the Call Forwarding setting to a number different from the voicemail number received from the device management, the calls will no longer route to the voicemail server.

Procedure:

- 1 Tap .
- 2 From drop-down menu , select **Settings** → **Calls** → **Call Forwarding** → **Voice**.

Figure 37: Call Forwarding Settings

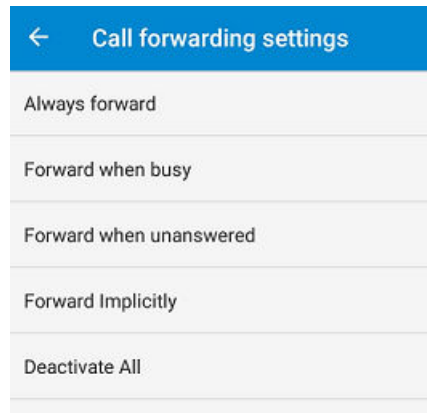


Table 9: Calling Accounts Setting

Setting	Description
Always Forward - All incoming calls are sent to the number you specify; your phone will not ring. This option overrides all other forwarding options.	Tap and select Enable or Disable and set the device number.
Forward Implicitly - Calls are forwarded when you are on the phone.	
Deactivate All - All call forwarding options are disabled. All calls are sent to the voicemail number.	Tap slider On or Off .

7.5.4

Enabling IMS Call Barring

Call Barring allows the user to restrict certain types of incoming and outgoing calls from your LEX device.

When and where to use: Use this procedure to configure Call Barring. If you are unable to configure Call Barring settings on the LEX device, contact your system administrator.



NOTICE: Barring of only video or only audio is not supported.

Procedure:

- 1 Tap .
- 2 From drop-down menu , select → **Settings** → **Calls** → **Call Barring**.

Figure 38: Call Barring Settings

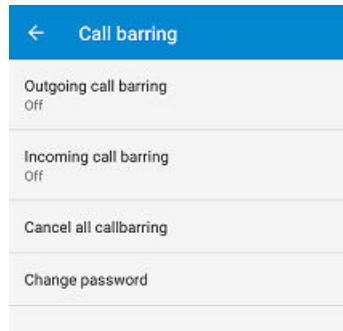


Table 10: Calling Barring Setting

Setting	Description
Outgoing call barring - allows user to bar outgoing International and Roaming audio and video calls.	1 Tap Outgoing call barring and select one of the following: • Off • International roam call • International call • Outgoing call 2 From the Input Password window, enter call barring password and tap OK.
Incoming call barring - allows user to bar incoming Roaming audio and video calls.	1 Tap Incoming call barring, enter password, and select one of the following: • Off • Roaming • All 2 From the Input Password window, enter call barring password and tap OK.

7.5.5

Enabling Originating Identification Restriction Over IMS

Origination Identification Restriction (OIR) allows the user to restrict the user identity on outgoing calls to other callers directly from the LEX device.

When and where to use:

Use this procedure to configure OIR on the LEX device. If you are unable to configure OIR settings on the LEX device, contact your system administrator.



IMPORTANT: When enabling OIR on the LEX device, if an emergency call is placed on the IMS network by the LEX device, the emergency operator is unable to obtain the caller identification to assist. Disable OIR after each call.

Procedure:

- 1 Tap .

- 2 From drop-down menu , select → **Settings** → **Calls** → **Additional Settings**.
- 3 Tap **Caller ID** and tap to disable.

7.6

IMS Messaging

If your system and LEX device support text messaging, users can make and receive text messages to, and from other users, over an LTE IMS private network. If you are unable to text messages on the LEX device, contact your system administrator.

Prerequisites: Users can install messaging apps from the Google Play Store to use on the IMS private network. If you are sending to multiple users, configure the Group Messaging setting before sending a text. See [Enabling IMS Group Messaging on page 104](#).



NOTICE: For IMS messaging, use the Messaging app on the device.

When and where to use: Use this procedure to send and receive text messages.



NOTICE: Multi-media messages (camera, recorded voice, images, and so on) are not supported in the IMS network.

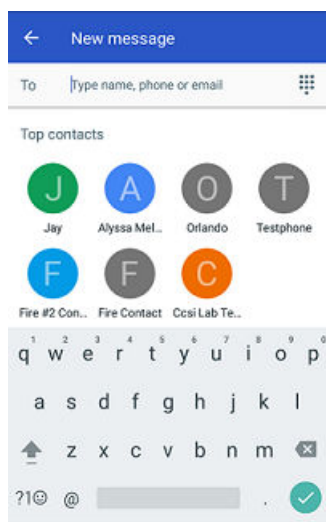
Procedure:

- 1 From **Home** or **Apps** screen, tap .
- 2 In the bottom-right, tap .
- 3 In the **To** field, type a name or phone number. As you enter text in the field, matching contacts appear. Tap the contact from the list.



NOTICE: If Group Messaging is enabled, tap **Top Contacts** to add a contact or multiple contacts.

Figure 39: Text Message Screen



- 4 Tap .
- 5 Tap the **Send message** box and type a message.

Messages are limited to 160 characters. When the limit is approached, a counter displays, above the **Send** icon, showing how many characters are left. If the limit is reached and the user keeps typing, a new message is created, which is joined with its predecessors when received.

- 6 Tap  to send the message.

7.6.1

Enabling IMS Group Messaging

Access to the SMS settings are available through the SMS settings on the device. Preference settings allow the user to configure Notifications and Group Messaging options on the device.

When and where to use:

Follow this procedure to enable group messaging on the device. This option is turned off as a default.

Procedure:

- 1 Tap .
- 2 From drop-down menu , select → **Settings** → **Advanced** → **Group Messaging**.
- 3 Tap **Sending to Multiple Users as SMS** to enable.

Chapter 8

Collaboration with LMR Radios

Radio Services is a free application available on the device that enables the LEX device to connect with a Land Mobile Radio (LMR).

Bluetooth-equipped devices can communicate without wires, using frequency-hopping spread spectrum (FHSS) radio frequency (RF) to transmit and receive data in the 2.4 GHz Industry Scientific and Medical (ISM) band (802.15.1).

Bluetooth operates within a range of 10 meters (32 feet) line of sight. This is an unobstructed path between your radio and your Bluetooth enabled device.

The user can connect the LEX device with a Land Mobile Radio (LMR). The supported radios are:

TETRA MTP3000 series radios

TETRA MTP6000 series radios.

When in collaborative mode with a TETRA radio, the LEX device supports both half-duplex private calls and group PTT calls sent to and from the TETRA radio.



NOTICE: If you cannot access features described in this chapter, contact your device technician for more information.

8.1

Switching Between PSX PTT App and LMR Radio for PTT Communications

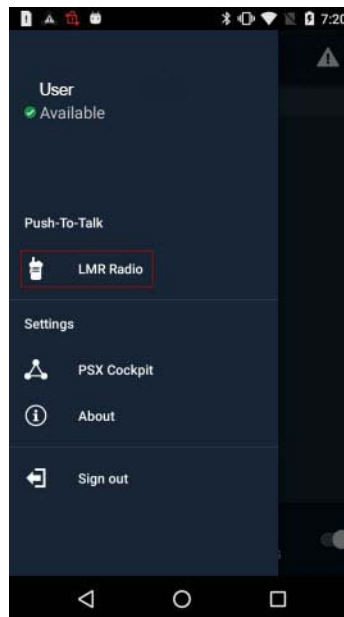
The LEX device supports Push-To-Talk (PTT) communications in two different modes – PTT via Land Mobile Radio (LMR), or Broadband PTT via PSX PTT solution. The LEX device can operate in only one of these modes at a time. You can switch between the two modes using the PSX Cockpit application.

Prerequisites: Obtain the PSX Cockpit application from Motorola Support.

Procedure:

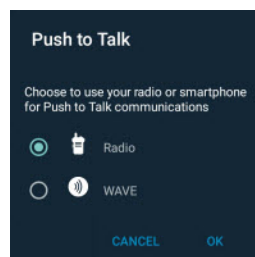
- 1 From the **Home** screen, tap  → .
- 2 Display the **PSX Cockpit** sidebar menu by tapping .
- 3 In the **PSX Cockpit** sidebar menu, tap the PTT that you currently use.

Figure 40: PSX Cockpit Sidebar Menu



- 4 In the **Push to Talk** screen, choose the PTT that you want to use:
- If you want to use the LMR radio for PTT communications, select **Radio**.
 - If you want to make Broadband PTT calls via the PSX PTT application, select **WAVE**.

Figure 41: Push to Talk Screen



Choosing LMR or WAVE not only sets your choice for PTT functionality, but configures the emergency button priority when initiated with the power button.

Selecting **Radio** enables the Radio Services application and disables the PSX PTT application automatically.

Selecting **WAVE** enables the PSX PTT application and disables the Radio Services application automatically.

- 5 Tap **OK**.

8.2

Pairing Radio with the LEX Device

You can pair the LEX device with a Land Mobile Radio (LMR) to send and receive PTT calls. The devices remember each other and automatically resume connection when they are on and within connection range.

Prerequisites:

Verify whether your LMR radio is supported for pairing with the LEX device. For the list of supported radios, see [Collaboration with LMR Radios on page 105](#).

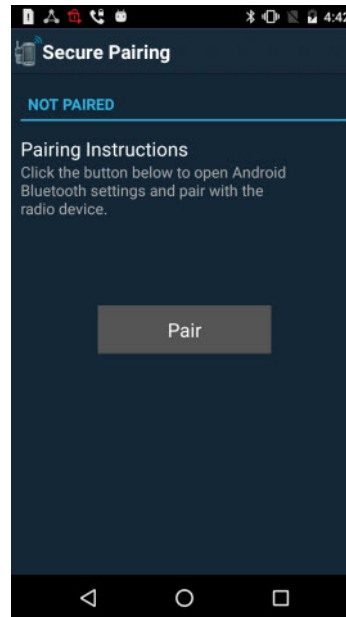
Turn on Bluetooth on the LEX device and on the radio. For more information, see [Enabling Bluetooth on page 153](#).

Ensure the LEX device is not paired with any previously paired Bluetooth devices. For more information, see [Unpairing LEX from Bluetooth Accessories on page 154](#).

Procedure:

- 1 From the **Home** screen, tap  → .

Figure 42: Secure Pairing Screen



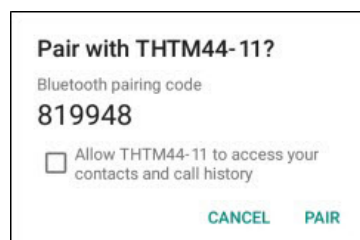
- 2 In the **Secure Pairing** window, tap **Pair**.
- 3 In the **Bluetooth** window, set the **Bluetooth** sidebar to the ON position.
- 4 Tap  → **Refresh** and select the radio from the list of available devices.



NOTICE: Ensure the LMR Radio is in discoverable mode.

The Bluetooth pairing code prompt appears.

Figure 43: Bluetooth Pairing Code Prompt



- 5 Compare the pairing code on the LEX device with the code on the LMR radio and tap **Pair**.

- 6 On the LMR radio, select **Accept**.
The LMR radio is paired with your LEX device.

8.3

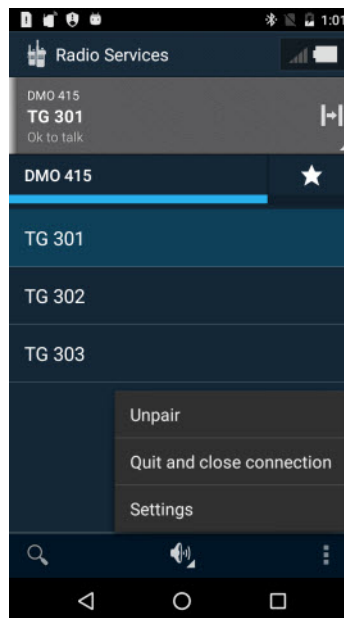
Unpairing Radio from the LEX Device

The user can follow this procedure to unpair the LEX device from the Land Mobile Radio (LMR).

Procedure:

- 1 From the **Home** screen, tap  → .
- 2 In the **Radio Services** window, tap  → **Unpair**.

Figure 44: Radio Services Overflow Menu



- 3 Confirm by tapping **OK**.

8.4

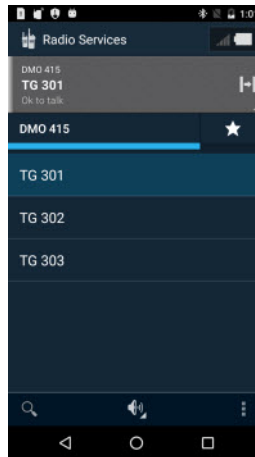
Selecting Zones and Channels

The user can select zones and channels to communicate with other users.

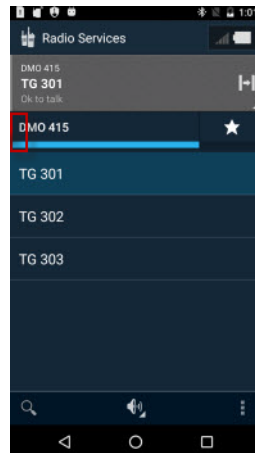
Prerequisites: Ensure your Land Mobile Radio (LMR) is successfully paired with the LEX device.

Procedure:

- 1 From the **Home** screen, tap  → .
- 2 Select a zone by tapping a zone of your choice.
The **Channel selection** screen appears, displaying a list of channels available for that zone.

Figure 45: Channel Selection Screen

- 3 Navigate to the parent folder by tapping on the left corner of the current folder name.

Figure 46: Navigation in the Channel Selection Screen

- 4 Select a channel by tapping a channel of your choice.

8.5

Sending PTT Audio

The **PTT** button serves to send audio.

When and where to use: Follow this procedure to start and stop sending PTT audio on the LEX device.



NOTICE: The user can also send audio by pressing and holding the **PTT** button on the Land Mobile Radio (LMR). In that case, the LEX microphone is used to send audio.

Procedure:

- 1 On the LEX device, press and hold the **PTT** button.



NOTICE: For the image of the **PTT** button, see [Features on page 31](#).

The LEX device transmits audio as long as the user presses the PTT button.

8.6

Selecting Audio Routing Options

The PTT audio can be routed to different sound outputs for the incoming and outgoing audio. The user can select loudspeaker, headset, or earpiece to route audio.

Prerequisites: Ensure that the Land Mobile Radio (LMR) is successfully paired with the LEX device.



NOTICE: The LEX loudspeaker is the default audio output.

Procedure:

- 1 From the **Home** screen, tap  → .
- 2 Choose the way of audio routing:



NOTICE:

You can only select headset if the wired 3.5 mm headset is plugged in.

You can only select earpiece if the wired 3.5 mm headset is not plugged in.

If...	Then...
If you want to select loudspeaker,	perform the following actions: a Tap  . b Select  .
If you want to select a normal handheld speaker/earpiece,	perform the following actions: a Tap  . b Select  .
If you want to select headset,	plug in the 3.5 mm jack of a wired headset.  NOTICE: Unplugging the 3.5mm jack automatically selects the output used before the headset was plugged in (loudspeaker or earpiece).

8.6.1

Adjusting Sound Volume

The user can perform this procedure to adjust radio sound settings on the LEX device. The user can choose different audio routing options.



NOTICE: The user can also modify sound settings from the Land Mobile Radio (LMR). For more information, see the respective LMR user manual.

Prerequisites: Ensure that your LMR radio is successfully paired with the LEX device.

Procedure:

- 1 Adjust the sound volume by performing one of the following:

If...	Then...
If you want to adjust volume using the Volume button* on the device,	perform the following actions: • If you want to increase volume, press the upper part of the Volume button. • If you want to decrease volume, press the lower part of the Volume button.
If you want to adjust sound volume in the Radio Services application,	perform the following actions: - From the Home screen, tap  → . - In the Radio Services window, tap . - Set the radio volume by adjusting the Radio volume slider. Figure 47: Radio Volume Slider 



NOTICE: *See the **Volume** button in [Features on page 31](#).

8.7

Emergency Calling on LEX Device Paired with LMR

When Land Mobile Radio (LMR) is paired with a LEX device and the Emergency power button is pressed (on any device where LMR is present), the LEX device reacts based on what LMR channel the user is on and what Emergency Mode that channel is assigned.

The LEX device initiates an emergency by pressing the power button on the LEX device. See [Enabling Emergency Mode on page 112](#).

The following types of Emergency Modes are available and are configurable from your technician:

- **Emergency Alert** - A LEX device that is on a channel provisioned with this Emergency Mode, will send an alert over the channel.
- **Emergency Call** - A LEX device on a channel provisioned with this Emergency Mode, gives the user that pressed the Emergency power button (the initiator) the top priority on the channel.
- **Emergency Alert with LMR Emergency call** - A LEX device that is on channel provisioned with this Emergency Mode will send an alert and give the user top priority on the channel.
- **Silent Emergency Alert** - A LEX device that is on a channel provisioned with this Emergency Mode will silently send an alert over the channel.

When the LEX device is paired with an LMR radio and an emergency is activated, it is equivalent to pressing the LMR emergency button. If you are not paired with an LMR radio or the emergency fails (for example out of range), the LEX device can be programmed for Backup Emergency. In either case, if available, a text message with basic information can be sent to pre-provisioned numbers.



IMPORTANT: If a user has access to both Land Mobile Radio (LMR) and Broadband, Emergency Mode is initiated first through the LMR. If the LMR network is not available or a user has paired a LMR device but is not connected to Emergency, then the user is notified that Emergency Mode has failed. Backup Emergency will then be initiated (if it is configured).

8.7.1

Enabling Emergency Mode

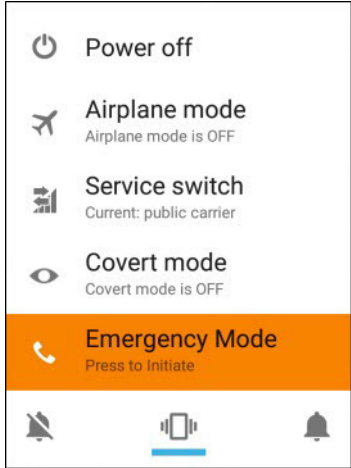
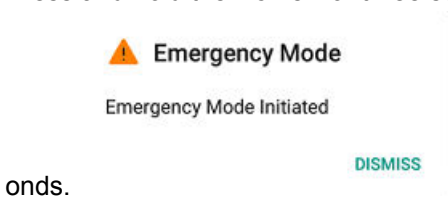
Emergency Mode indicates a critical situation. The emergency alert signal overrides any other communication over the selected channel of the radio.

Prerequisites: If your device supports both PSX PTT application and the LEX device is paired to a Land Mobile Radio (LMR), you must set the Push-to-Talk setting in the PSX Cockpit application to the preferred PTT setting. The **Power** button can only support one emergency application at a time.

When and where to use: Follow this procedure to enable Emergency Mode with the LEX device.

Procedure:

Select the method you want to use to initiate emergency mode on your device, and perform one of the following actions:

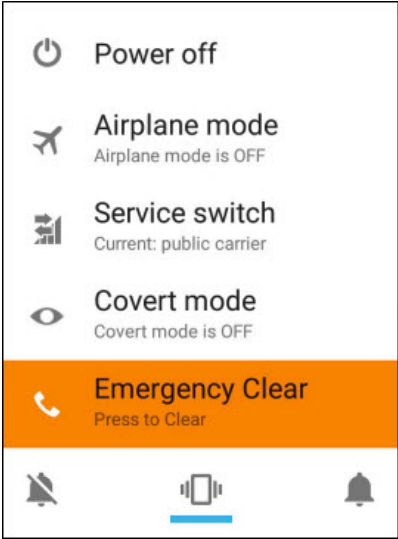
If...	Then...
If you want to make an Emergency call using the power button (soft button press),	Complete the following actions: a Press and hold the Power button until the Power button menu appears.  b Tap Emergency Mode. After 3 seconds, Emergency Mode is enabled.
If you want to make an Emergency call using the power button (hard button press),	Complete the following actions: a Press and hold the Power for three seconds.  Vibrations occur at each second, with a long vibration when emergency is initiated from the long press.

8.7.2
Disabling Emergency Mode

Emergency Mode indicates a critical situation. The user can follow this procedure if sending the emergency alert is no longer necessary.

Procedure:

Select the method you want to use to disable emergency mode on your device, and perform one of the following actions:

If...	Then...
If you want to disable making an Emergency call using the Emergency soft button,	perform the following actions: a Press and hold the Power button until the Power button menu appears. Figure 48: Emergency Clear  b Tap Emergency Clear. c Continue by clicking Clear.
If you want to disable making an Emergency call using the Emergency hard button,	perform the following actions: a Press and hold the Emergency Power for three seconds. Vibrations occur at each second, with a long vibration when emergency is cleared.

8.8
Adding Favorite Talkgroups

The user can create a list of favorite talkgroups to facilitate contact with other users.

Prerequisites: Ensure the Land Mobile Radio (LMR) is successfully paired with the LEX device.

Procedure:

- 1 From the **Home** screen, tap  → .

- 2 In the **Radio Services** window, tap .
- 3 Tap  and select **Edit favorites**.
- 4 Tap **+** and add a talkgroup by performing one of the following:
 - Scroll through the list and select the checkbox next to the talkgroup you want to add to Favorites.
 - Search for a talkgroup by entering its name in the search field at the top of the screen and select the checkbox next to the talkgroup.
- 5 Return to the **Radio Services** main screen by tapping .

8.9

Removing Favorite Talkgroups

Prerequisites: Ensure the Land Mobile Radio (LMR) is successfully paired with the LEX device.

Procedure:

- 1 From the **Home** screen, tap  → .
- 2 Tap  and select **Edit favorites**.
- 3 Delete favorite talkgroups by tapping **X** next to the chosen element.
- 4 Return to the **Radio Services** main screen by tapping .

Chapter 9

Messaging Application

Use Messaging to send and receive SMS and MMS messages.

9.1

Sending a Text Message

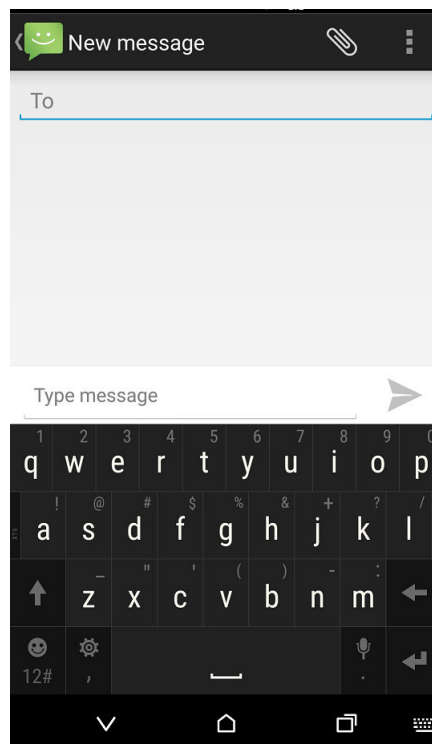
When and where to use:

Use this procedure to send text messages.

Procedure:

- 1 From **Home** or **All Apps** screen, tap .
- 2 In the main **Messaging** screen, tap .

Figure 49: New Message Screen



- 3 In the **To** field, enter a name or a mobile phone number.
- 4 In the **Type** message field, enter the text message.

Messages are limited to 160 characters. When the limit is approached, a counter displays, above the Send control, showing how many characters are left. If the limit is reached and the user keeps typing, a new message is created, which is joined with its predecessors when received.

If the user presses the Back button while composing a message, it is saved as a draft in the Messaging screen. Tap the conversation to resume composing it.

- 5 Tap  to send the message.

9.2

Sending a Multimedia Message

When and where to use:

Use this procedure to send multimedia messages.

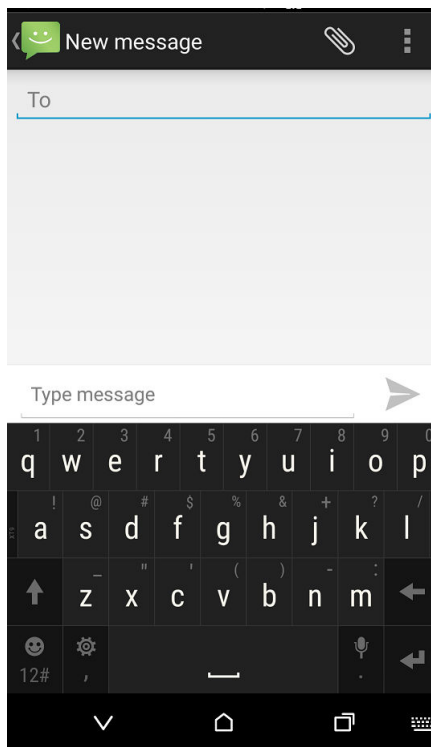


NOTICE: Multimedia messaging is only supported when the LEX L10i is in Public network mode.

Procedure:

- 1 From **Home** or **All Apps** screen, tap .
- 2 In the main **Messaging** screen, tap .

Figure 50: New Multimedia Message Screen



- 3 In the **To** field, enter a name or a mobile phone number.
- 4 Tap  to attach the media file of your choice:
 - **Pictures**— Select a picture to attach.
 - **Capture picture** — Camera opens to take a picture and attach it.
 - **Videos** — Select a video to attach.
 - **Capture video** — Camcorder opens to record a video and attach it to the message.

- **Audio** — Choose a sound file to attach.
- **Record audio** — Sound Recorder opens to record a spoken message and attach it to the message.
- **Slideshow** — Opens a screen to assemble text, photos, videos, and recordings into a slideshow of up to ten slides to attach to the message.

5 Tap  to send the message.

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Chapter 10

Applications

This chapter describes the applications installed on the LEX device.

Normally, you access the applications from the **Home** screen by clicking the  icon.



NOTICE: Runtime Permissions: User can now directly manage application permissions at runtime.

10.1

Applications

The **Apps** screen displays icons for all installed applications.

Table 11: Applications

Icon	Description
	AOSP Browser — Use to access the Internet or agency intranet.
	Calendar — Use to manage events and appointments.
	Calculator — Provides the basic and scientific arithmetic functions.
	Camera / Video Recorder — Take photos or record videos. For more information, see Camera on page 122 .
	Clock / Alarms — Use to set an alarm, stopwatch, or timer.
	CRYPTR — The CRYPTR micro encryption card is used for voice encryption in features such as data and phone over Virtual Private Network (VPN) and Push-to-Talk (PTT) communication.
	Downloads — Lists all downloads files.
	Email — Use to send and receive email.
	File Browser — Use to view and manage files.
	Gallery — Use to view photos stored on the device. For more information, see Gallery on page 128 .
	Messaging — Send SMS and MMS messages. See Messaging Application on page 115 for more information.

Table continued...

Icon	Description
	Motorola Device Management — Enables staging and management of the device for initial use by initiating the deployment of settings, firmware, and software from a server. For more information, see the <i>LEX L10i and LEX L10ig Mission Critical Handheld Service Provisioning Guide</i> .
	Motorola TechDocs — Use to view device on-device documentation.
	Music — Use to play music.
	MVPN — Enables the Motorola Solutions Mobile VPN (MVPN).
	People* — Use to manage contact information with PSX Home Screen application.
	Phone — Use to make phone calls. See Calling on page 83 for more information.
	Protection Log — Displays security violations that have been logged on this device.
	PSX Mapping* — Use to view maps and establish location.
	PSX Messenger* — Use to send SMS and MMS messages.
	PSX Push-to-Talk (PTT) Client* — The PSX PTT application offers WAVE PTT services over 4G, 3G, or WiFi network.
	PSX Secure Calling Application* — provides secure VoIP full duplex encrypted user-to-user communication on a Public Safety LTE network with IDM authentication and Common Address Book access.
	Radio Services — Use to pair the LEX device with Land Mobile Radio (LMR). See Collaboration with LMR Radios on page 105 .
	Radio Management Link Client (RM Link) — Enables connecting the device to a remote host computer for staging, firmware installation, application installation, and application removal by technical support. See the <i>Radio Management Online Help</i> for more information on the RM Tool.
	Settings — Use to configure the device.

Table continued...

Icon	Description
	Software Licensing — Licensing for software installed on the device.
	Sound Recorder — Use to record sound.



NOTICE: * If these applications do not appear, and you are using the native **Android Apps** screen, contact your device technician to see if these applications will be implemented for your LEX device. If you are using the PSX Home Screen application, you may need to select these widgets. See [PSX Home Screen on page 67](#) of this user guide. If widgets for these applications are not available, contact your device technician to see if these applications will be implemented for your LEX device.

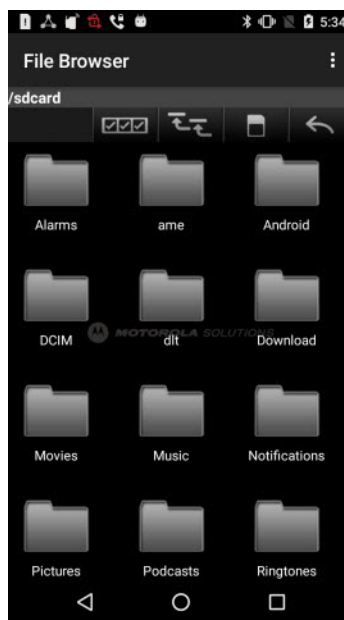
10.2

Using File Browser

Use the **File Browser** application to view and manage files on the device.

To open **File Browser**, tap  → .

Figure 51: File Browser Screen



The address bar indicates the current folder path. Tap the current folder path to manually enter a path and folder name.

To select multiple files/folder, tap .

To view the internal storage root folder, tap .

To view the microSD card root folder, tap .

To view the previous folder or to exit the application, tap .

Perform an operation on an item by tapping and holding that item. Select one of the options from the **File Operations** menu:

- **Information** — View detailed information about the file or folder.
- **Move** — Move the file or folder to a new location.
- **Copy** — Copy the select file.
- **Delete** — Delete the selected file.
- **Rename** — Rename the select file.
- **Open as** — Open the selected file as a specific file type.
- **Share** — Share the file with other devices.

Tap  to open additional functionality:

- To create a new folder in the current folder, tap the  key → **New Folder**.
- To search for a file or folder, tap the  key → **Search**.
- To sort the list by name, by type, by size or by date, tap the  key → **Sort**.
- To re-display the contents of the current folder, tap the  key → **Refresh**.
- To change the folder view from tile to list format, tap the  key → **List View**.
- To change the size of the icons: Large, Normal or Small, tap the  key → **Change Size**.
- To view the application version information, tap the  key → **About File Browser**.

10.3

Camera

This section provides information for taking photos and recording videos using the integrated digital cameras.



NOTICE: The LEX device saves photos and videos on the internal storage by default.

Figure 52: Camera Photo Screen



Table 12: Camera Icons and Actions

Call Out	Icon	Action
1	Camera Options	Tap to select Camera, Video, or Panorama mode.
2	Shutter	Tap to take a photo, a panoramic photo, or to record a video.
3	Photo Settings	Tap to select camera settings.

10.3.1

Taking Photos

When and where to use: Use this procedure to take photos.



NOTICE: For camera settings, see [Camera Settings on page 127](#).

Procedure:

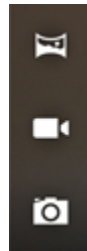
- 1 From the **Home** screen, tap .
The **Camera** screen is displayed.

Figure 53: Camera Screen



- 2 If necessary, tap  to open the **Camera Option** bar and select **Camera** icon.

Figure 54: Camera Option Bar



- 3 Tap  for settings.
- 4 Frame the subject on screen.
- 5 To zoom in or out, press two fingers on the display and pinch or expand fingers.
The zoom controls appear on the screen.

Figure 55: Camera Zoom



- 6 Tap .

The camera brings the image into focus. When the image is in focus, the focus indicators (top and bottom of screen) turn green and the camera takes a photo.

10.3.2

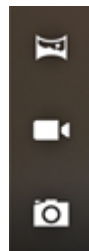
Taking Panoramic Photos

When and where to use: Use this procedure to create a single wide image by panning slowly across a scene.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap the **Camera Options** bar and tap .

Figure 56: Panoramic Mode



- 3 Frame one side of the scene to capture.

Figure 57: Panoramic Frame



- 4 Tap  and slowly start panning across the area to capture. A small white square appears inside the button the shot is in progress.
If panning too quickly, the message **Too fast** displays.
- 5 Tap  to end the shot. The panorama is displayed and a progress indicator displays while it saves the image.

10.3.3

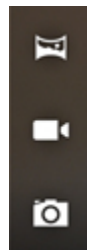
Recording Videos

When and where to use: Use this procedure to record videos.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap the **Camera Options** bar and tap .

Figure 58: Video Mode



- 3 To zoom in or out, press two fingers on the display and pinch or expand fingers.



NOTICE: Video zoom works the same as camera zoom.

4 Point the camera and frame the scene.

5 Tap  to start recording.

The device starts recording the video. The video time remaining appears in the top left of the screen.

6 Tap  to end recording.

10.3.4

Camera Settings

Camera settings allow the user to adjust photo features, such as picture quality, contrast, time of exposure, and many more.

When in **Camera** mode, camera settings are displayed on screen.

Tap  to display the photo settings options.

Figure 59: Camera Settings



The available photo settings are (from left icon to right icon):

- Turn High Dynamic Range (**HDR**) on or off.
- Three screens of **More Options**. Settings for each option depend on the selected option. Click these icons to display more options. Some options require selecting a setting from a menu. Set these options accordingly.



NOTICE: These options are similar to the camera options seen on most cameras. Set accordingly.

- Switch from front to rear camera or from rear to front camera.

10.3.5

Video Settings

Video settings allow the user to modify video features, such as video quality, color effect, white balance, and many more.

When in **Video** mode, video settings are displayed on screen.

Tap  to display the video settings options.

Figure 60: Video Settings



The available video settings are (from left icon to right icon):

- Two screens of **More Options**. Settings for each option depend on the selected option. You can select an item from a menu or you select an option by clicking it.



NOTICE: These options are similar to the video options seen on most cameras. Set the video options accordingly.

- Switch from front to rear video or from rear to front video.

10.4

Gallery

The **Gallery** is used to manage your photos and videos.



NOTICE: The device supports the following image formats: JPEG, GIF, PNG, and BMP.

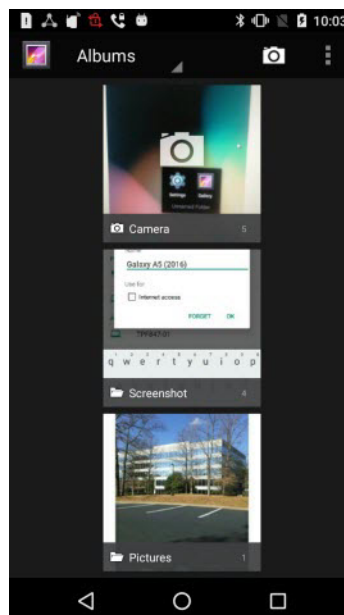
Use the **Gallery** to:

- View photos
- Play videos
- Perform basic editing of photos
- Set photos as wallpaper
- Set photos as a contact photo
- Share photos and videos

To open the **Gallery** application, tap  → .

The **Gallery** presents all photos and videos stored on the microSD card and internal memory.

Figure 61: Gallery — Albums



- Tap an album to open it and view its contents. The photos and videos in the album are displayed in chronological order.
- Tap a photo or video in an album to view it.
- Tap  icon (top left corner) to return to the main **Gallery** screen.

- Tap  to return to the main **Gallery** screen.

10.4.1

Working with Albums

Albums are groups of images and videos in folders.

Tap an album to open it. The photos and videos are listed in a chronologically ordered grid. The name of the album displays at the top of the screen.

Swipe left or right to scroll images across the screen.

10.4.1.1

Sharing Albums

When and where to use: Use this procedure to share an album in your **Gallery**.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Tap and hold an album until it highlights.
- 4 Tap other albums as required.
- 5 Tap .
- Share applications are displayed.
- 6 Select the application that you want to use.
- 7 Follow the instructions within the selected application.

10.4.1.2

Getting Album Information

When and where to use: Use this procedure to view information about an album.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Tap and hold an album until it highlights.
- 4 Tap .
- 5 Tap **Details**.

10.4.1.3

Deleting Albums

When and where to use: Use this procedure to delete an album that you no longer need.

Procedure:

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

- 2 Tap .
- 3 Tap and hold an album until it highlights.
- 4 Tap .
- 5 Tap **OK** to delete the album.

10.4.2

Working with Photos

In the **Gallery** window, user may edit the photos located in the Gallery. User may view, rotate, crop, share, and delete photos.

10.4.2.1

Viewing and Browsing Photos

When and where to use: Use this procedure to view or browse photos.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Tap an album of your choice.
- 4 Tap a photo.

Figure 62: Photo Example



- 5 Swipe left or right to view the next or previous photo in the album.

- 6 Turn the LEX device to view the photo in upright (portrait) or sideways (landscape) orientation. The photo is displayed (but not saved) in the new orientation.
- 7 Tap the photo to view the controls.
- 8 Double-tap the screen to zoom in or pinch two fingers together or spread them apart to zoom in or out.
- 9 Drag the photo to view parts that are not in view.

10.4.2.2

Rotating Photos

When and where to use: Use this procedure to rotate a photo.

Procedure:

- 1 Tap .
 - 2 Tap .
 - 3 Tap the album that contains the photo you want to rotate.
 - 4 Tap the photo to view the controls.
 - 5 Tap .
 - 6 In the **Choose an action** window, select **Photo Editor**.
 - 7 Tap .
 - 8 Tap .
- The photo rotates 90° clockwise. Each tap rotates the photo another 90°. The photo is automatically saved with the new orientation.
- 9 Save changes by tapping .

10.4.2.3

Cropping Photos

When and where to use: Use this procedure to crop a photo.

Procedure:

- 1 Tap .
 - 2 Tap .
 - 3 Tap the album that contains the photo you want to crop.
 - 4 Tap a photo to view the controls.
 - 5 Tap .
 - 6 In the **Choose an action** window, select **Photo Editor**.
 - 7 Tap .
 - 8 Tap .
- The cropping grid displays.

Figure 63: Cropping Grid



- 9 To crop the photo, perform one of the following actions:

If...	Then...
If you want to crop the photo manually,	adjust the endpoints to select the portion of the photo to crop.
If you want to choose automatic cropping dimensions,	perform the following actions: - a Tap CROP. - b From the list of cropping dimensions, select one of the following: 1:1, 4:3, 3:4, 5:7, or 7:5. - c If you want to view the original photo, tap Original. - d Confirm by tapping . - e Save changes by tapping .

10.4.2.4

Setting Photos as Contact Icons

When and where to use: Use this procedure to set a photo as a contact icon.

Procedure:

- 1 Tap .
- 2 Tap .

- 3 Tap the album that contains the photo you want to set as a contact icon.
- 4 Tap the photo.
- 5 Tap .
- 6 Tap **Set picture as**.
- 7 Select a contact.
- 8 Crop the photo accordingly as described in [Cropping Photos on page 131](#).
- 9 Tap .

10.4.2.5

Sharing Photos

When and where to use: Use this procedure to share a photo.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap the album that contains the photo you want to share.
- 4 Tap the photo.
- 5 Tap .
- 6 Tap the application to use for sharing the selected photo (for example **Bluetooth**).

10.4.2.6

Deleting Photos

When and where to use: Use this procedure to delete a photo.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap the album that contains the photo you want to delete.
- 4 Tap the photo.
- 5 Tap .
- 6 Tap **Delete**.
- 7 Delete by tapping **OK**.

10.4.3

Working with Videos

Use the **Gallery** to view videos on the microSD card and share videos.

10.4.3.1

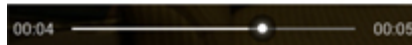
Watching Videos

When and where to use: Use this procedure to watch a video.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap the album that contains the video you want to watch.
- 4 Tap the video you want to watch.
- 5 Tap .
- The video begins to play.
- 6 Tap the screen to view the playback controls.

Figure 64: Video Playback Controls



- 7 Tap the **Pause** control.
- 8 Return to the previous screen by double-tapping .

10.4.3.2

Sharing Videos

When and where to use: Use this procedure to share a video.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap the album that contains the video you want to share.
- 4 Tap the video.
- 5 Tap .
- The **Share** menu appears.

- 6 Tap the application to use to share the selected video.

The selected application opens with the video attached to a new message.

10.4.3.3

Deleting Videos

When and where to use: Use this procedure to delete a video.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap the album that contains the video you want to delete.
- 4 Tap the video.
- 5 Tap .
- 6 Tap **Delete**.
- 7 Delete by tapping **OK**.

10.4.4

Using Sound Recorder

Use **Sound Recorder** to record audio messages.

Recordings are saved on the microSD card (if installed) or the Internal Storage and available in the **Music** application playlist titled **My Recordings**.

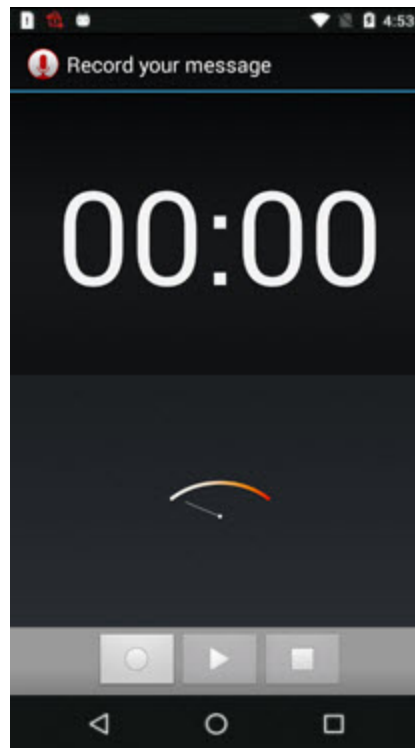
The recording process is done in four stages.

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

- 2 Tap .

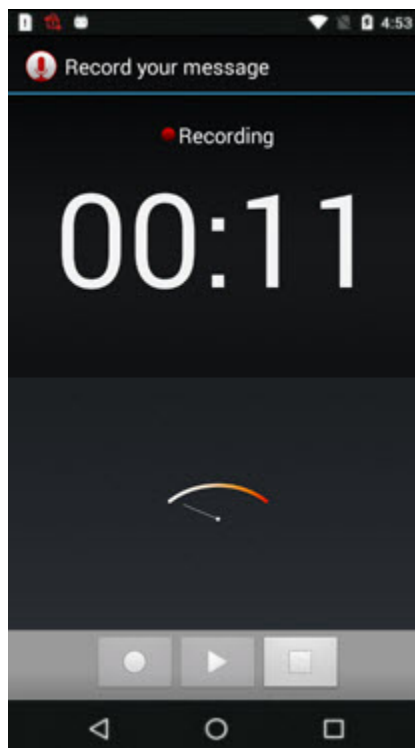
- 3 Tap  to start recording.

Figure 65: Start Recording



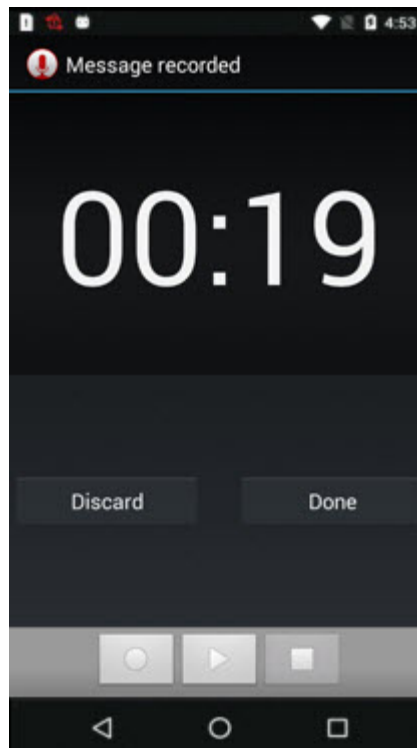
- 4 Record your message.

Figure 66: Record Your Message



- 5 Tap  to stop recording.
- 6 Tap **Done** to save the recording.

Figure 67: Finish Recording



10.5

Public Safety Experience Applications

Access to Public Safety Experience (PSX) applications is available and may require license and/or servers to manage contacts, security, and settings. If your organization requires a Public Safety Experience solution, contact your Motorola Solutions representative for client application details on installation, configuration, and operation.

The following PSX applications are available from Motorola Solutions:

PSX Mapping

A mapping application that integrates with PSX Messenger. Allows you to locate yourself and your group members on a map. You can search for particular people, display information on your group members, navigate to their location, call them, send them a message, or mark them as favorite so that you can easily find them later. You can also create new groups by selecting an area on the map, and send group messages. A map view and a satellite view are available.

PSX Messenger

A messaging application that integrates with PSX Home Screen and PSX Mapping. Allows you to send text messages to individuals and groups. You can attach photos, video and audio recordings, and maps showing your current location or another selected location. Taking photos, recording audio, viewing maps or using other applications is possible without closing the Messenger.

PSX Home

A Home Experience that integrates with PSX applications. Allows you to customize a set of application widgets on the home screen of an Android device. You can use the widgets to obtain summary information from multiple applications, or to launch their full versions. For information on setting and customizing PSX Home screens, refer to [PSX Home Screen on page 67](#).

PSX Cockpit

PSX Cockpit mobile app client that bundles multiple Intelligent MiddleWare (IMW) functions for Public Safety LTE devices. For information about configuring IMW parameters on these applications.

PSX PTT

Turns your LEX device into a multi-channel push-to-talk handset for fully secure, real-time Push-to-Talk (PTT) voice communications anywhere you have a network connection. PTT application requires a PTT server to manage PTT calling.

PSX Secure Calling

Allows you to make and receive secure calls. Secure calling requires a Voice over IP (VoIP) server to manage contacts and secure calling.



NOTICE: To obtain the PSX Messenger, PSX Cockpit, PSX PTT, and PSX Secure Calling applications, contact Motorola Solutions Support.

Chapter 11

Wireless

This section provides information on the wireless features of the LEX device.

- Wireless Wide Area Network (WWAN)
- Wireless Local Area Network (WLAN)
- Bluetooth

11.1

Wireless Wide Area Networks

Use Wireless Wide Area Networks (WWANs) to access data over a cellular network.

This section provides information on:

- [Sharing Mobile Data Connection on page 139](#)
- [Disabling Data When Roaming on page 143](#)
- [Data Usage on page 142](#)
- [Limiting Data Connection to a Network on page 143](#)
- [Editing Access Point Names on page 144](#)
- [Adding a Virtual Private Network \(VPN\) on page 144](#)
- [Emergency Broadcasts on page 145](#)

11.1.1

Sharing Mobile Data Connection

The **Tethering & portable hotspot** settings allow you to share your data connection. You can share the LEX device mobile data connection with a single computer via USB tethering or Bluetooth tethering. You can also share the data connection with up to eight devices at once, by turning it into a portable Wi-Fi hotspot. While the device is sharing its data connection, an icon appears at the top of the screen and a corresponding message appears in the notification list.

11.1.1.1

Configuring USB Tethering

Use this procedure to share a data connection with a host computer.



NOTICE:

USB tethering is not supported on computers running Mac OS. If your computer is running Windows 7 or a recent version of Linux (such as Ubuntu), follow these instructions without any special preparation. If running a version of Windows that precedes Windows 7, or some other operating system, you may need to prepare the computer to establish a network connection via USB.

After connecting to a computer using USB tethering, the computer disconnects from the network connection, for a short time, and does not have access to the Internet (the LEX device becomes the primary network adapter).

Procedure:

- 1 Connect the LEX device to a host computer with the USB cable.

Figure 68: USB Cable Connection to Host Computer



A USB icon  appears at the top of the screen, and the notification **Connected as a media device** appears briefly at the top of the screen.

- 2 Tap .
- 3 Tap .
- 4 Tap **More ...**.
- 5 Tap **Tethering & portable hotspot**.
- 6 Check **USB tethering**.

The host computer is now sharing the LEX device data connection.

Postrequisites: To stop sharing the data connection, uncheck USB tethering or disconnect the USB cable.



NOTICE: The USB cover needs to be fully seated after use.

11.1.1.2

Configuring Bluetooth Tethering

Prerequisites: Configure the host computer to obtain its network connection using Bluetooth. For more information, see the host computer documentation.

When and where to use: Use this procedure to tether Bluetooth to share the data connection with a host computer.

Procedure:

- 1 Pair the LEX device with the host computer.



NOTICE: For more information on Bluetooth pairing, see [Discovering Bluetooth Devices on page 154](#).

- 2 Tap .
- 3 Tap .
- 4 Tap **More ...**.

- 5 Tap **Tethering & portable hotspot**.
- 6 Adjust the **Bluetooth tethering** sidebar.

The host computer is now sharing the LEX device data connection.

Postrequisites: To stop sharing the data connection, uncheck **Bluetooth tethering** .

11.1.1.3

Configuring Portable Wi-Fi Hotspot Settings

Prerequisites: Configure the **Wi-Fi Hotspot** settings.

When and where to use: Use this procedure to turn your LEX device into a portable Wi-Fi hotspot.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap **More ...** .
- 4 Tap **Tethering & portable hotspot**.
- 5 Select **Portable Wi-Fi hotspot**.

After a moment, the LEX device starts broadcasting its Wi-Fi network name (SSID), so you can connect to it with up to eight computers or other devices.

Postrequisites: To stop sharing the data connection, uncheck **Portable Wi-Fi hotspot**.

11.1.1.3.1

Configuring Wi-Fi Hotspots

The LEX device can serve as a portable Wi-Fi hotspot, which allows the user to connect other devices to the wireless Internet provided by the LEX device.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Tap **More ...** .
- 4 Tap **Tethering & portable hotspot**.
- 5 Tap **Set up Wi-Fi hotspot**.

The **Set up Wi-Fi hotspot** screen displays.

Figure 69: Set up Wi-Fi Hotspot Dialog Box

A screenshot of the 'Set up Wi-Fi hotspot' dialog box. It has a title bar 'Set up Wi-Fi hotspot'. Below it are four fields: 'Network name' with the text 'AndroidAP', 'Security' with a dropdown menu showing 'WPA2 PSK', 'Password' with a masked field of dots, and 'Select AP Band' with a dropdown menu showing '2.4 GHz Band'. A note below the password field says 'The password must have at least 8 characters.' Below that is a checkbox labeled 'Show password'. At the bottom right are two buttons: 'CANCEL' and 'SAVE'.

- 6 In the **Network Name** text field, edit the network name.
- 7 Tap the **Security** option and select a security method from the drop-down list:
 - **Open**
 - **WPA2 PSK.**
- 8 In the **Password** text field, enter a password.
 **NOTICE:** If **Open** is selected in the **Security** field, a password is not required.
- 9 Tap **Save**.

11.1.2

Data Usage

Data usage refers to the amount of data uploaded or downloaded by the LEX device during a given period.



NOTICE: Depending on the wireless plan, you may be charged additional fees when your data usage exceeds the limit. To monitor your data usage, go to  → **Data usage**



CAUTION: The usage displayed on the **Data Usage Settings** screen is measured by your device. Depending on your carrier, the data usage accounting may differ. Excessive usage of data may result in steep overage charges. The feature described here can help you track your usage, but does not guarantee to prevent you from being additionally charged.

Data usage settings allow you to:

- Set the data usage level (when you reach that level, the device sends you an alert).
- Set a data usage limit.
- View or restrict data usage by app.
- Identify mobile hotspots and restrict background downloads that may result in extra charges.

By default, when you open the data usage settings screen you see the settings for mobile data: that is, the data network or networks provided by your carrier.

In the **Data usage** window, note the data usage cycle. You can tap it to choose a different cycle. This date range is the time span for which the graph displays data usage.

The vertical green line on the graph shows a period of time within the data usage cycle. This range determines the usage amount displayed just above the graph, next to the data usage cycle.

11.1.2.1

Setting Data Usage Warning

When and where to use: Data usage warning alerts you when you reach a set amount of mobile data per month.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap **Data usage**.
- 4 Check **Set mobile data limit**.
- 5 Drag the red line up/down to the level where you want to limit.
- 6 Drag the orange line up/down to the level where you want to receive a warning. When your data usage reaches this level, a notification displays.

11.1.3

Disabling Data When Roaming

When and where to use: Use this procedure to prevent the LEX device from transmitting data over other mobile networks when leaving an area that is covered by your regular carrier. This is useful for controlling expenses if the service plan does not include data roaming.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Tap **More...**
- 4 Tap **Cellular networks**.
- 5 Un-check **Data roaming**.

11.1.4

Limiting Data Connection to a Network

You can limit the device Private or Public services or extend the battery life by limiting the data connections to Global networks, LTE networks, or GSM/UMTS networks.



NOTICE: This feature is only available on some networks. Check with your service provider.

When and where to use: Use this procedure to limit data connection to a network.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Tap **More ...**

- 4 Tap **Cellular networks**.
- 5 Tap **Network Mode**.
- 6 Select **Global mode**, **LTE only**, or **GSM/UMTS only**.

11.1.5

Editing Access Point Names

When and where to use: When network information needs to change, the user can edit the Access Point Name (APN) information. The user can follow this procedure if a new SIM card is added that does not have the required APN configured.



NOTICE:

Many service provider Access Point Names (APNs) are pre-configured in the LEX device.

If a SIM card has the required APNs configured already, see [Switching Modes Using the Power Button on page 57](#).

Note that APN edits using the local User Interface (UI) will be overwritten by your agency administrator. APNs created in the local UI are non-secure. If you misconfigure or not enter APN for one of the SIM cards (private or public), switching to that SIM card will cause problems due to failed registration attempts.

The user is responsible for possible APN definitions errors, including possible incorrect emergency settings. If APN definitions are incorrect and the device cannot attach to LTE upon UI APN update, the user may use the **Reset to default** option, located at **Settings** → **More** → **Cellular networks** → **APNs** → **Reset to default**, which reverts the device to the staging APN configuration.

Procedure:

- 1 Tap
- 2 Tap
- 3 Tap **More ...**
- 4 Tap **Cellular networks**.
- 5 Tap **Access Point Names**.
- 6 Tap
- 7 Enter the values according to your network requirements.
- 8 When finished, tap → **Save**.
- 9 Tap the radio button next to the new APN name to start using it.

11.1.6

Adding a Virtual Private Network (VPN)

VPN enables the LEX device to communicate data across a public network while benefiting from the functionality and security of a private network. A virtual private network (VPN) extends a private network across a public network. When connected by VPN, the LEX device establishes a virtual point-to-point connection through a dedicated virtual tunneling protocols or data encryption. The LEX device enables connection to Basic VPN to communicate through any VPN and to Motorola Solutions Mobile VPN (MVPN) to communicate through Motorola Solutions mobile VPN. This section describes adding a

basic VPN. Motorola Mobile VPN is added and configured by your technical support and requires license certification for use.

When and where to use: Use this procedure to add a virtual private network to the LEX device (not including the Motorola Mobile VPN).

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap **More...**.
- 4 Tap **VPN**.
- 5 Under **Gateway**, enter *<IP address or domain name>*.



NOTICE: Domain name is the Fully Qualified Domain Name (FQDN) of VPN Gateway Server.

- 6 Adjust the **VPN** sidebar.

11.1.7

Emergency Broadcasts

Emergency Broadcasts allows emergency alert messages to be broadcast simultaneously from a service provider to multiple users in within a designated geographical area. Broadcasts are often used for weather updates, regional events, traffic conditions and other services.

When and where to use: Use this procedure to enable emergency alert messages by cell broadcasts on the LEX device.

Procedure:

- 1 Tap .
- 2 Tap .
- 3 Tap **More...**.
- 4 Tap **Emergency Broadcasts**.
- 5 Check the emergency alert types you want to receive.

11.2

Wireless Local Area Networks

Wireless local area networks (WLANs) allow the LEX device to communicate wirelessly inside a building.

Before using the LEX device on a WLAN, the facility must be set up with the required hardware to run the WLAN (sometimes known as infrastructure). The infrastructure and the LEX device must both be properly configured to enable this communication.

See the documentation provided with the infrastructure (access points (APs), access ports, switches, Radius servers) for instructions on how to set up the infrastructure.

Once the infrastructure is set up to enforce the chosen WLAN security scheme, use the **Wireless & networks settings** to configure the LEX device to match the security scheme.

The device supports the following WLAN security options:

- Open

- Wireless Equivalent Privacy (WEP)
- Wi-Fi Protected Access (WPA)/WPA2 Personal (PSK)
- Extensible Authentication Protocol (EAP)
 - Protected Extensible Authentication Protocol (PEAP) — with Microsoft Challenge-Handshake Authentication Protocol version 2 (MSCHAPv2) and Generic Token Card (GTC) authentication.
 - EAP-Transport Layer Security (TLS)
 - EAP-TTLS - with Password Authentication Protocol (PAP), MSCHAP and MSCHAPv2 authentication

The **Status** bar displays icons that indicate Wi-Fi network availability and Wi-Fi status.



NOTICE: Turn off Wi-Fi when not using it, to extend the life of the battery.

11.2.1

Connecting to Wi-Fi Networks

Connecting to a Wi-Fi network allows you to establish a wireless Internet connection on your device.



NOTICE: Your device remembers Wi-Fi networks to which it connects, and resumes the connection automatically when in range.

Procedure:

- 1 From the **Home** screen, tap  →  → **Wi-Fi**.
- 2 Adjust the **Wi-Fi** sidebar.
The device searches for WLANs in the area and lists them.
- 3 Scroll through the list and select the desired WLAN network.
- 4 Connect to the network by performing one of the following:

If...	Then...
If you want to connect to an open network,	tap the network and select Connect to network .
If you want to connect to a secure network,	perform the following actions: - a Tap the network name. - b Enter password or other necessary credentials. - c Tap Connect.



NOTICE: For more information on connecting to secure Wi-Fi networks, see [Connecting to Secure Wi-Fi Networks on page 147](#).

The LEX device obtains a network address and other required information from the network using the dynamic host configuration protocol (DHCP).

- 5 Verify whether the network displays as *Connected*.

11.2.1.1

Connecting to Secure Wi-Fi Networks

Connecting to secure wireless networks allows you to securely send and receive data via wireless Internet connection.

Procedure:

- 1 Tap  →  → **Wi-Fi**.
- 2 Adjust the **Wi-Fi** sidebar.
The device searches for WLANs in the area and lists them.
- 3 Scroll through the list and select the desired WLAN network.
- 4 Tap the desired network.
 **NOTICE:** By default, the network Proxy is set to **None** and the IP settings is set to **DHCP**.
- 5 If the network security is **WEP** or **WPA/WPA2 PSK**, enter the required password and then tap **Connect**.
- 6 If the network security is **802.1x EAP**, enter the information below and then tap **Connect**:
 - Tap the **EAP method** drop-down list and select **PEAP**, **TLS**, or **TTLS**.
 - Tap the **Phase 2 authentication** drop-down list and select an authentication method.
 - If required, tap **CA certificate** and select a **Certification Authority (CA)** certificate. Note: Certificates are installed using the Security settings.
 - If required, tap **User certificate** and select a user certificate. Note: User certificates are installed using the **Location & security** settings.
 - If required, in the **Identity** text box, enter the username credentials.
 - If desired, in the **Anonymous identity** text box, enter an anonymous identity username.
 - If required, in the **Password** text box, enter the password.

11.2.2

Adding Wi-Fi Networks

You can add a Wi-Fi Network that does not broadcast its name (SSID), or is currently out of range.

Procedure:

- 1 Tap  →  → **Wi-Fi**.
- 2 Adjust the **Wi-Fi** sidebar.
- 3 Tap  → **Add network**.
- 4 In the **Network name** field, enter the network *<SSID>*.
- 5 Choose one of the following:

If...	Then...
If you want to add an open network,	perform the following actions: a Expand the Security drop-down list and select None.

If...	Then...
	b Expand the Advanced options drop-down list and set the Proxy settings. c Tap Save.
If you want to add a WEP-secured network,	perform the following actions: a Expand the Security drop-down list and select WEP. b Set password. c Expand the Advanced options drop-down list and set Proxy and IP settings. d Tap Save.
If you want to add a WPA/WPA2 PSK-secured network,	perform the following actions: a Expand the Security drop-down list and select WPA/WPA2 PSK b Set password. c Expand the Advanced options drop-down list and set Proxy and IP settings. d Tap Save.
If you want to add a 802.1x EAP-secured network,	perform the following actions: a Expand the Security drop-down list and select 802.1x EAP b Expand the EAP method drop-down list and select PEAP, TLS, or TTLS. c Expand the Phase 2 authentication drop-down list and select an authentication method. d Tap CA certificate and select a Certification Authority (CA) certificate.  NOTICE: Certificates are installed using the Security settings. e Enter the username credentials by tapping Identity. f Enter an anonymous identity username by tapping Anonymous identity. g Enter password by tapping Password. h Expand the Advanced options drop-down list and set Proxy and IP settings. i Tap Save.

The device connects to the wireless network.

11.2.3

Advanced Wi-Fi Settings

Use the **Advanced** settings to configure additional Wi-Fi settings.



NOTICE: Advanced Wi-Fi settings are for the device not for a specific wireless network.

From the **Wi-Fi** screen, tap  → **Advanced** to view the advanced settings.

- **Network notification** — When enabled, notifies the user when an open network is available.
- **Keep Wi-Fi on during sleep** — Opens a menu to set whether and when the Wi-Fi radio turns off.
 - **Always** — The radio stays on when the device enters suspend mode.
 - **Only when plugged in** — The radio stays on while the device is connected to external power.
 - **Never (increases data usage)** — The radio turns off when the device enters suspend mode (default).
- **Wi-Fi frequency band** — Several bands can be used for carrying Wi-Fi:
 - Automatic
 - 5 GHz only - provides additional bandwidth.
 - 2.4 GHz only - the most widely used frequency band.
- **Install certificates** — Allows installing Wi-Fi certificates.
- **Wi-Fi Direct** — Allows devices to connect without requiring a wireless access point.
- **MAC address** — Displays the Media Access Control (MAC) address of the device when connecting to Wi-Fi networks.
- **IP address** — Displays the IP address of the device when connecting to Wi-Fi networks.

11.2.4

WLAN Configuration

Use the WLAN Configuration settings to configure additional WLAN settings.

From the **Wi-Fi** screen, tap  → **Advanced** to view the settings. The following settings are used to configure WLAN:

- **Network notification**— Adjust the sidebar to receive notification whenever a public network is available.
- **Wi-Fi frequency band**
 - **Auto (2.4GHz and 5GHz)** —Use both the 2.4 GHz and 5 GHz bands (default).
 - **5GHz Only** — Use only the 5 GHz band.
 - **2.4GHz Only** —Use only the 2.4 GHz band.
- **Keep Wi-Fi on during sleep**
 - **Always** — Wi-Fi is always enabled even in sleep mode.
 - **Only when plugged in** — Wi-Fi is enabled only when the device is plugged in. If the device is not plugged in, the device will not enter the sleep mode.
 - **Never (increases data usage)** — Wi-Fi is never disabled.
- **Install certificates**— Allows you to install certificates for Wi-Fi network access.
- **Wi-Fi direct**— The device may serve as an access-point and other Wi-Fi-enabled devices may directly connect to it.

11.2.5

Modifying Wi-Fi Networks

The user may modify the default Wi-Fi network settings, for example set a new password or modify security settings.

Procedure:

- 1 Tap  →  → **Wi-Fi**.
- 2 From the list of available networks, tap and hold the network you want to modify.
- 3 Tap **Modify network**.
- 4 Modify the network settings and tap **Save**.

11.2.6

Removing Wi-Fi Networks

Wi-Fi networks, when no longer in use, may be removed from the device.

Procedure:

- 1 Tap  →  → **Wi-Fi**.
- 2 From the list of available networks, tap and hold the network you want to remove from your device.
- 3 Tap **Forget network**.

11.3

Bluetooth Device

The LEX L10i supports Motorola Operations Critical Wireless (OCW) Push-to-talk Pod (NNTN8127) and Bluetooth-enabled device (accessory) through a wireless Bluetooth connection. Devices with Bluetooth capabilities can exchange information such as files, appointments, and tasks with other Bluetooth enabled devices such as printers, access points, and other mobile devices.

The LEX L10i supports remote radio control over following Land Mobile Radios:

- TETRA MTP3000 series radios,
- TETRA MTP6000 series radios.



NOTICE: To pair a LEX device with a Land Mobile Radio (LMR), follow the instructions in [Collaboration with LMR Radios on page 105](#).

11.3.1

Adaptive Frequency Hopping

Adaptive Frequency Hopping (AFH) is a method of avoiding fixed frequency interferers, and can be used with Bluetooth voice. All devices in the piconet (Bluetooth network) must be AFH-capable in order for AFH to work. There is no AFH when connecting and discovering devices. Avoid making Bluetooth connections and discoveries during critical 802.11b communications.

AFH for Bluetooth consists of four main sections:

- Channel Classification - A method of detecting an interference on a channel-by-channel basis, or pre-defined channel mask.
- Link Management - Coordinates and distributes the AFH information to the rest of the Bluetooth network.

- Hop Sequence Modification - Avoids interference by selectively reducing the number of hopping channels.
- Channel Maintenance - A method for periodically re-evaluating the channels.

The Bluetooth radio in this device operates as a Class 2 device power class. The maximum output power is 2.5 mW and the expected range is 10 meters (32.8 ft.). A definition of ranges based on power class is difficult to obtain due to power and device differences, and whether one measures open space or closed office space.



NOTICE: It is not recommended to perform Bluetooth wireless technology inquiry when high rate 802.11b operation is required.

11.3.2

Bluetooth Security

This section describes Bluetooth security. The current Bluetooth specification defines security at the link level. Application-level security is not specified. This allows application developers to define security mechanisms tailored to their specific need. Link-level security occurs between devices, not users, while application-level security can be implemented on a per-user basis. The Bluetooth specification defines security algorithms and procedures required to authenticate devices, and if needed, encrypt the data flowing on the link between the devices. Device authentication is a mandatory feature of Bluetooth while link encryption is optional.

Pairing of Bluetooth devices is accomplished by creating an initialization key used to authenticate the devices and create a link key for them. Entering a common personal identification number (PIN) in the devices being paired generates the initialization key. The PIN is never sent over the air. By default, the Bluetooth stack responds with no key when a key is requested (it is up to user to respond to the key request event). Authentication of Bluetooth devices is based-upon a challenge-response transaction. Bluetooth allows for a PIN or passkey used to create other 128-bit keys used for security and encryption. The encryption key is derived from the link key used to authenticate the pairing devices. Also worthy of note is the limited range and fast frequency hopping of the Bluetooth radios that makes long distance eavesdropping difficult.

Recommendations are:

- Perform pairing in a secure environment
- Keep PIN codes private and do not store the PIN codes in the device
- Implement application-level security

11.3.3

Bluetooth Profiles

The LEX device supports a wide range of Bluetooth services.

Table 13: Bluetooth Profiles

Bluetooth Profile	Description
Headset Profile (HSP AG)	Provides support for the popular Bluetooth headsets to be used with mobile phones with ability to ring, answer a call, hang up, and adjust the volume.
Serial Port Profile (SPP Dev A, Dev B)	Sets up a virtual serial port and connects two Bluetooth enabled devices. For example, connecting the device to a printer.

Table continued...

Bluetooth Profile	Description
File Transfer Profile (FTP Server)	Provides the capability to expose local file system to remote devices which can manipulate and transfer files.
Audio/Video Remote Control Profile (AVRCP TG)	Allows remote devices to control audio playback on local device (for example: play, pause, stop, adjust volume).
Dial-up Networking (DUN GW) Profile	Allows the device to share Internet connection with another device.
Object Push Profile (OPP Client/Server)	Allows the device to push and pull objects to and from a push server.
Personal Area Network (PAN NAP/PANU)	Allows the device to share Internet connection with another device (for example a laptop) and to access the Internet shared by another device (for example a Bluetooth enabled phone).
Human Interface Device Profile (HID Host)	Allows Bluetooth keyboards, pointing devices, gaming devices, and remote monitoring devices to connect to the device.
Advanced Audio Distribution Profile (A2DP SRC)	Allows the device to stream stereo-quality audio to a wireless headset or wireless stereo speakers.
Handsfree Profile (HFP AG)	Provides the capability for carkits and Bluetooth headset to be used for phone calls and control them (initiate, answer, terminate, and other).
Phone Book Access Profile (PBAP PSE)	Allows exchange of Phone Book Objects between a car kit and a mobile phone to allow the car kit to display the name of the incoming caller; allow the car kit to download the phone book so the user can initiate a call from the car display.
Message Access Profile (MAP MSE)	Allows exchange of messages between devices.
Health Thermometer profile (HTP Collector)	Enables transmission and reception of medical device data.
Find Me Profile (FMP Locator)	Allows the device to locate other Bluetooth-enabled devices paired with your device.
Proximity profile (PXP Monitor)	Enables proximity monitoring between two devices.
Heart Rate Profile (HRP Collector)	Enables transmission and reception of medical device data.
HID over GATT Profile (HOGP Host)	Defines how a device with Bluetooth low energy (LE) wireless communications can support HID services over the Bluetooth LE protocol stack using the Generic Attribute Profile.

11.3.4

Bluetooth Power States

The Bluetooth radio is off by default.

The following modes are available:

- **Suspend** — When the device goes into suspend mode, the Bluetooth radio stays on.
- **Airplane Mode** — When the device is placed in **Airplane Mode**, the Bluetooth radio turns off. When **Airplane Mode** is disabled, the Bluetooth radio returns to the prior state. When in **Airplane Mode**, the Bluetooth radio can be turned back on if desired.

11.3.5

Bluetooth Radio Power for Android

Bluetooth allows your LEX device to wirelessly connect to other Bluetooth-enabled devices.

Turn off the Bluetooth radio to save power or if entering an area with radio restrictions (for example, an airplane). When the radio is off, other Bluetooth devices cannot see or connect to the device. Turn on the Bluetooth radio to exchange information with other Bluetooth devices (within range). Communicate only with Bluetooth radios in close proximity.



NOTICE: To achieve the best battery life, turn off radios when not in use.

11.3.5.1

Enabling Bluetooth

When and where to use: Bluetooth allows you to send to and receive data from other Bluetooth-enabled devices paired with your LEX device.

Procedure:

- 1 From the **Home** screen, tap  →  → **Bluetooth**.
- 2 Switch the **Bluetooth** sidebar to the **On** position.

11.3.5.2

Disabling Bluetooth

Use this procedure to disable Bluetooth.

Procedure:

- 1 Tap  →  → **Bluetooth**.
- 2 Switch the **Bluetooth** sidebar to the **Off** position.

11.3.6

Renaming the Device

By default, the LEX device has a generic Bluetooth name visible to other devices when connected.

Procedure:

- 1 From the main screen, tap  →  → **Bluetooth**.
- 2 If Bluetooth is not on, adjust the **Bluetooth** sidebar.

- 3 Tap  and select **Rename this device**.
- 4 Enter a new device name and tap **Rename**.

11.3.7

Discovering Bluetooth Devices

The LEX device can receive information from discovered devices without pairing. However, once paired, the device and a paired device exchange information automatically when the Bluetooth radio is on.

Prerequisites: Ensure that Bluetooth is enabled on both devices. Ensure that the Bluetooth device to discover is in discoverable mode. Ensure that the two devices are within 10 meters (32.8 feet) from one another.

Procedure:

- 1 From the **Home** screen, tap  →  → **Bluetooth**.
- 2 Adjust the **Bluetooth** sidebar.
The device searches for available Bluetooth-enabled devices and lists them.
- 3 Scroll through the list and tap a device name.

The **Bluetooth pairing request** dialog box displays.

 **NOTICE:** When pairing with Low Energy (LE) Bluetooth Devices, such as consumer grade accessories, the pairing request prompt only displays if the device is configured for secure Bluetooth. This prompt always displays when pairing with Mission Critical Wireless Bluetooth (non-LE) accessories, such as Remote Speaker Microphones (RSM).

- 4 Compare the pairing codes and tap **Pair** on both devices.

 **NOTICE:** You may also be prompted to enter the pairing code on the device you want to pair with LEX. In that case, follow the instructions on the display.

The Bluetooth device is added to the **Bluetooth devices** list and a trusted (“paired”) connection is established.

11.3.8

Unpairing LEX from Bluetooth Accessories

Procedure:

- 1 From the **Home** screen, tap  →  → **Bluetooth**.
- 2 From the **Bluetooth** screen, tap  next to the device paired with your LEX.
- 3 Tap **Forget**.

11.3.9

Enabling Profiles on Bluetooth Devices

Some Bluetooth devices have multiple profiles for different connections.

Prerequisites: Ensure Bluetooth is on.

When and where to use: Use this procedure to select a profile on the Bluetooth device that connects to the LEX device.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Tap  **Bluetooth**.
- 4 In the **Available devices** list, tap  next to the device name.
- 5 Select a profile to use and tap **OK**.

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Chapter 12

Accessories

This chapter provides information for using the accessories associated with the LEX series device.

12.1

Accessories

This section lists the LEX device accessories along with specifications.

General Accessories:

- Replaceable Standard Battery Li-Ion 2280 mAh 3.7V
- Replaceable High-capacity Battery Pack Li-Ion 4560 mAh 3.7V
- Handheld Standard Battery Door
- Handheld Extended Battery Door
- LEX device Vehicle Power Adapter
- Power Supply
- Carry Accessory Glove LEX device Rubber Sleeve
- Desktop Cradle
- Vehicle Cradle
- USB Cable
- Holster

12.2

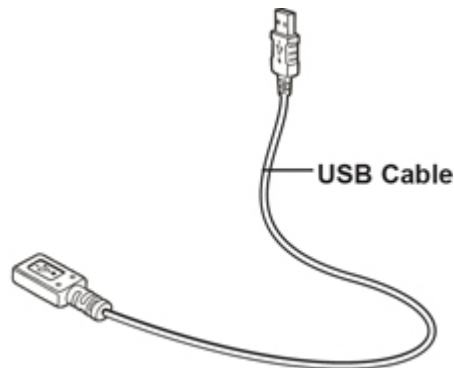
USB Cable

A USB cable is necessary to connect your LEX device to a charger.

The USB cable:

- Connects the device to a USB charger to charge the LEX device.
- Provides USB communication with a host computer. When the LEX device is connected to a host computer, the device appears as a removable disk on the host computer.

Figure 70: USB Cable



12.3

Desktop Cradle

A desktop cradle provides an alternative method to charge your LEX device.

The desktop cradle:

- Provides power for charging and operating the device.
- Enables connecting a mouse to the device.

Figure 71: Desktop Cradle



Charging the LEX Device

To charge the device, insert the units by placing the bottom of the device, at a slight forward angle, into the cradle.

The LED shows the status of the battery charging. See Battery Charge LED Status for charging status indications. The 2280 mAh battery charges in approximately four hours.

Charge the LEX device in temperatures from 0°C to +45°C (32°F to 113°F). Note that charging is intelligently controlled by the device. To accomplish this, for small periods of time, the LEX device alternately enables and disables battery charging to keep the battery at acceptable temperatures. The device indicates when charging is disabled due to abnormal temperatures via its notification LED.

12.4

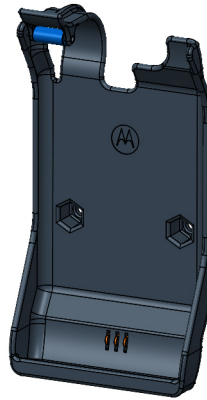
Vehicle Cradle

Install the vehicle mount on the surface of the vehicle that is reasonably flat and free of dirt and oil. Clean the mounting surface with a glass cleaner and a clean cotton cloth. Install the vehicle mount on the windshield or other flat car surface.



CAUTION: Some states prohibit the mounting of any electronic device in any location on the vehicle dashboard. Be sure to check with local laws acceptable mounting areas before installing the auto mounting kit.

Figure 72: Vehicle Cradle

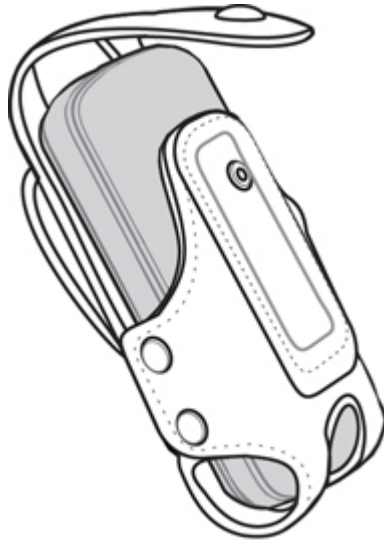


12.5

Holster

Use the holster to securely carry the LEX device when working. The holster is threaded through a belt and stores the device when not in use or when using a headset.

Figure 73: Holster



Insert the device into the holster with the screen facing in or out.

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Chapter 13

Maintenance and Troubleshooting

This chapter includes instructions on cleaning and storing the device, and provides troubleshooting solutions for potential problems during device operation.

13.1

Maintaining LEX Device

For trouble-free service, observe the following tips when using the LEX device:

- Do not scratch or use a pen or a pencil or other sharp object on the surface of the screen.
- The touch-sensitive screen is made of polycarbonate. Do not drop or subject the device to strong impact.
- Protect from extreme temperatures. Do not leave device on the dashboard of a car on a hot day, and keep it away from heat sources.
- Do not store in any location that is dusty, damp, or wet.
- Use a soft lens cloth to clean the device. If the surface of the screen becomes soiled, clean it with a soft cloth moistened with isopropyl alcohol.
- Periodically replace the rechargeable battery to ensure maximum battery life and product performance. Battery life depends on individual usage patterns.

13.2

Battery Safety Guidelines

Adhere to the following guidelines for battery safety:

- The area where the units are charged should be clear of debris and combustible materials or chemicals.
- Follow battery usage, storage, and charging guidelines found in this guide.
- Improper battery use may result in a fire, explosion, or other hazard.
- To charge the battery, the battery and charger temperatures must be between +32 °F and +113 °F (0 °C and +45 °C).
- Do not use incompatible batteries and chargers. Use of an incompatible battery or charger may present a risk of fire, explosion, leakage, or other hazard. If you have any questions about the compatibility of a battery or a charger, contact Motorola Solution support.
- If charging through a USB port, the device shall only be connected to products that bear the USB-IF logo or have completed the USB-IF compliance program.
- To enable authentication of an approved battery, as required by IEEE1725 clause 10.2.1, all batteries will carry a Motorola hologram. Do not fit any battery without checking it has the Motorola authentication hologram.
- Do not disassemble or open, crush, bend or deform, puncture, or shred.
- Severe impact from dropping any battery-operated device on a hard surface could cause the battery to overheat.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, or expose to fire, explosion, or other hazard.

- Do not leave or store the equipment in or near areas that might get very hot, such as in a parked vehicle or near a radiator or other heat source. Do not place battery into a microwave oven or dryer.
- Battery usage by children should be supervised.
- Follow local regulations to properly dispose of used rechargeable batteries.
- Do not dispose of batteries in fire.
- In the event of a battery leak, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with large amounts of water and seek medical advice.
- If you suspect damage to your equipment or battery, contact Motorola Solutions support to arrange for inspection.

13.3

Cleaning Guidelines

This section includes cleaning guidelines for the LEX device.



WARNING: Avoid exposing this product to contact with hot oil or other flammable liquids. If such exposure occurs, unplug the device and clean the product immediately in accordance with these guidelines. Avoid exposing this product to contact with hot oil or other flammable liquids. If such exposure occurs, unplug the device and clean the product immediately in accordance with these guidelines.



CAUTION:

Always wear eye protection.

Read the warning labels on compressed air and alcohol products before use.

If you have to use any other solution for medical reasons, contact Motorola Solutions for more information.

Approved Cleanser Active Ingredients

100% of the active ingredients in any cleaner must consist of one or a combination of the following: isopropyl alcohol, or mild dish soap.

Cleaning Instructions

Do not apply liquids directly to the device. Dampen a soft cloth or use pre-moistened wipes. Do not wrap the device in the cloth or wipe, but gently wipe the unit.

Harmful Ingredients

Many vinyl gloves contain phthalate additives, which are often not recommended for medical use and are known to be harmful to the housing of the device. The device should not be handled while wearing vinyl gloves containing phthalates, or before hands are washed to remove contaminant residue after gloves are removed. If products containing the harmful ingredients are used before handling the device, such as hand sanitizers containing ethanolamine, hands must be completely dry before handling the device to prevent damage to the plastics.

Cleaning Materials Required

- Alcohol wipes
- Lens tissue
- Cotton-tipped applicators

- Isopropyl alcohol
- Can of compressed air with a tube

Cleaning Frequency

The cleaning frequency is up to your discretion due to the varied environments in which the mobile devices are used. They may be cleaned as frequently as required, but it is advisable to clean the camera window periodically when used in dirty environments to ensure optimum performance.

13.4

Cleaning LEX Device

This section includes instructions on how the LEX device should be cleaned.

Housing

Using the alcohol wipes, wipe the housing including buttons.

Display

The display can be wiped down with the alcohol wipes, but care should be taken not to allow any pooling of liquid around the edges of the display. Immediately dry the display with a soft, non-abrasive cloth to prevent streaking.

Camera Window

Wipe the camera window periodically with a lens tissue or other material suitable for cleaning optical material such as eyeglasses.

13.5

Cleaning Interface Connector

When and where to use: Use this procedure to clean the contacts of the interface connector on LEX device.

Procedure:

- 1 Power off the device.
- 2 Dip the cotton portion of the cotton-tipped applicator in isopropyl alcohol.
- 3 Rub the cotton portion of the cotton-tipped applicator along the contacts of the interface connector. Slowly move the applicator back-and-forth from one side of the connector to the other.
- 4 If grease and other dirt can be found on other areas of the cradle, remove using a lint-free cloth and alcohol.
- 5 Allow few minutes (depending on ambient temperature and humidity) for the alcohol to air dry before powering on the device.

13.6

Cleaning Battery Contacts

When and where to use: Perform this procedure to clean the battery connectors.

Procedure:

- 1 Remove the main battery from device.

- 2 Dip the cotton portion of the cotton-tipped applicator in isopropyl alcohol.
 - 3 Gently, rub the cotton portion of the cotton-tipped applicator back-and-forth across the contacts. Do not leave any cotton residue on the contacts.
 - 4 Use the cotton-tipped applicator dipped in alcohol to remove any grease and dirt near the contacts area.
 - 5 Use a dry cotton-tipped applicator and repeat steps 4 and 5 at least three times.
-  **CAUTION:** Do not point nozzle at yourself and others. Ensure that the nozzle or tube is away from your face.
- 6 Spray compressed air on the connector area by pointing the tube/nozzle about ½ inch away from the surface.
 - 7 Inspect the area for any grease or dirt, repeat if required.

13.7

Troubleshooting

This section lists common problems and solutions to fix the problems.

Table 14: Troubleshooting the LEX Series Device

Problem	Cause	Solution
After pressing the Power button, the device does not turn on.	Battery is completely discharged.	Re-charge or replace the battery.
	Battery not installed properly.	Install the battery properly. See Installing the Battery .
	Power button not held down long enough.	Press the Power button until the Motorola Solutions splash screen is displayed.
	Device not responding.	Reset the device.
After pressing the Power button, the device does not turn on but a charge battery icon Appears.	Battery charge level is very low.	Re-charge or replace the battery.
After connecting the device to a Cable, a battery charging icon Appears.	Battery is depleted but is charging.	Press and hold the Power button to turn on.
When charging, the LED slowly blinks red.	The device is at an extremely low-power state.	Charge the device for a few minutes. The LED changes to flashing green then press the Power button to turn on the device. If LED continuously blinks red, check power connections. Disconnect and reconnect connections.

Table continued...

Problem	Cause	Solution
Battery did not charge.	Battery failed.	Replace battery. If the device still does not operate, perform a hardware reset.
	Device was removed from power while battery was charging.	Insert device in cradle or attach Charge Cable. The 2280 mAh battery fully charges in approximately four hours.
	Extreme battery temperature.	Battery does not charge if ambient temperature is below 0 °C (32 °F) or above 45 °C (113 °F).
During data communication with a host computer, no data transmitted, or transmitted data was incomplete.	Device removed from USB cable or disconnected from host computer during communication.	Reattach the communication cable and re-transmit.
	Incorrect cable configuration.	Contact technical support.
During data communication over Wi-Fi, no data transmitted, or transmitted data was incomplete.	Wi-Fi radio is not on.	Turn on the Wi-Fi radio.
	You moved out of range of an access point.	Move closer to an access point.
During data communication over Bluetooth, no data transmitted, or transmitted data was incomplete.	Bluetooth radio is not on.	Turn on the Bluetooth radio.
	You moved out of range of another Bluetooth device.	Move within 10 m (32.8 ft.) of the other device.
During data communication over Public / Private, no data transmitted, or transmitted data was incomplete.	You are in an area of poor cellular service.	Move into an area that has better service.
	VPN is not set up correctly.	Contact technical support for VPN setup information.
	SIM card not installed properly.	Remove and re-install the SIM cards.

Table continued...

Problem	Cause	Solution
	Data plan not activated.	Contact your service provider and ensure that your data plan is enabled.
No sound.	Volume setting is low or turned off.	Adjust the volume.
Device turns off.	Device is inactive.	The display turns off after a period of inactivity. Set this period to 15 seconds, 30 seconds, 1, 2, 5, 10, or 30 minutes.
	Battery is depleted.	Recharge or replace the battery.
	Extreme battery temperature.	Move device to an area where the ambient temperature is between 0 °C (32 °F) or above 45 °C (113 °F).
A message appears stating not enough storage memory.	Too many applications installed on the device.	Remove user-installed applications on the device to recover memory. Select  →  → Apps → Downloaded . Select the unused programs and tap Uninstall .
Device cannot find any Bluetooth devices nearby.	Too far from other Bluetooth devices.	Move closer to the other Bluetooth device(s), within a range of 10 meters (32.8 feet).
	The Bluetooth device(s) nearby are not turned on.	Turn on the Bluetooth device(s) to find.
	The Bluetooth device(s) are not in discoverable mode.	Set the Bluetooth device(s) to discoverable mode. If needed, refer to respective Bluetooth-enabled device (accessory) user manual..
Cannot access All Apps screen.	The PSX Core Apps widget was removed.	Add the PSX Core Apps widget by performing the procedure described in Adding Widgets on page 69 .
The screen does not turn off when you hold the device close to your face during a call.	Dirty device screen impairs the proximity sensor reading.	Clean the device screen with a piece of cloth, paying special attention to the proximity sensor area. For more information on cleaning the LEX display, see Cleaning LEX Device on page 163 . To check the exact location of the proximity sensor on the LEX device, see Features on page 31 .

Table 15: For LEX Devices with Dual SIMs (Private Network and Public Network)

Problem	Cause	Solution
When the LEX device is in private mode:	Interconnection is not implemented between private network and public network.	If there is no connection between private network and public network in your system,

Table continued...

Problem	Cause	Solution
• Calls and messages fail to phone numbers in a public network, or • Calls and messages are not received from phone numbers in a public network.		then the LEX needs to be in public mode to call and answer calls from a public network. To switch modes, see Public and Private Carrier Modes on page 56.  NOTICE: Emergency calling is available when the LEX is in private mode, based on emergency settings in the private SIM card. For more information, see Emergency Services on page 89.
When the LEX device is in private mode: • Calls and messages are not received from phone numbers in a public network.	The caller might be using the public network phone number for the LEX.	If there is no connection between private network and public network in your system, the LEX needs to be in public mode to answer calls to your public network number and to check voice mails for your public network phone number. To switch modes, see Public and Private Carrier Modes on page 56. If you prefer to keep the LEX in private mode, then you have the option of providing your private network phone number to the caller, if allowed by your organization's policies.
When the LEX device is in private mode: • Messages and voice mails to your private network phone number are not received.	SMS and voicemail are not implemented in your private network.	If SMS messages and voicemail are only available on the public network, callers must use your public network phone number to leave messages and voice mails. Also, the LEX must be in private mode to access those messages and voice mails. To switch modes, see Public and Private Carrier Modes on page 56.
When the LEX device is in public mode:	Interconnection is not implemented between private network and public network.	If there is no connection between private network and public network in your system, then the LEX must be in pri-

Table continued...

Problem	Cause	Solution
• Calls and messages fail to phone numbers in the private network, or • Calls and messages are not received from phone numbers in the private network.		vate mode to call, and to answer calls from, the private network. To switch modes, see Public and Private Carrier Modes on page 56 .
When the LEX device is in public mode: • Calls and messages are not received from phone numbers in the private network.	The caller might be using the private network phone number for the LEX.	If there is no connection between private network and public network in your system, the LEX must be in private mode to answer calls and messages to your private network number and, if voice mail is enabled, to check voice mails for your private network phone number. For more information, and to switch modes, see Public and Private Carrier Modes on page 56 . If you prefer to keep the LEX in public mode, you have the option of providing your public network phone number to the caller.

13.8

Back Up or Restore Data on Your Device

Back up data on LEX L10i manually or by exporting VC files, or restore data on your device by managing Android settings.

13.8.1

Backing Up LEX Manually

Backing up the LEX device must be done manually.

Prerequisites: Make sure you have a USB cable to connect the device to a computer.

When and where to use: Use this procedure anytime a backup is necessary.

Procedure:

- 1 Connect the device to a computer using the supplied USB cable.
The first time you connect to a computer the following message is displayed:
`Installing Device Driver Software`
After the driver software is installed, the following message is displayed:
`Your device is ready to use`
- 2 Click the **Start** button and then select **Computer**.
- 3 Select the LEX L10i Portable Device.

- 4 Select **Internal storage**.
- 5 Navigate to the files that you want to back up.
- 6 Copy the files/folders to a secure location on your computer.

13.8.2

Backing up Contacts with Android

To back up contacts, the contacts must be exported to a VCF file which must be copied to a secure location.

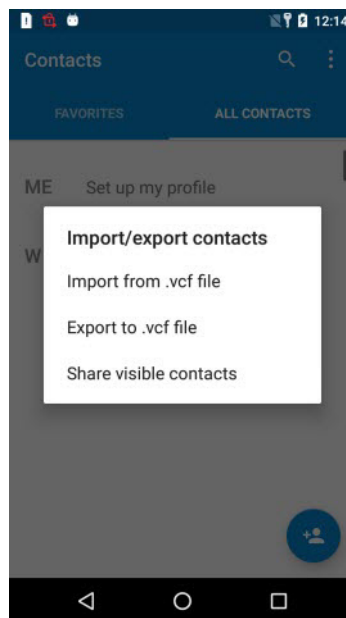
Prerequisites: Contacts must exist in the contact list.

When and where to use: Use this procedure to periodically back up your contacts.

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Select **Import/export**.

Figure 74: Import/Export Contacts Popup



- 4 Select **Export to .vcf file**.
- 5 In the popup window, tap **Allow**.
The **Save to** sidebar menu appears.

Figure 75: Save to Sidebar Menu



- 6 In the **Save to** sidebar menu, select the folder to which you want to export the file with contacts.
- 7 In the text box, personalize the `.vcf` file name and tap **Save**.
- 8 Follow the procedure under [Backing Up LEX Manually on page 168](#) to complete the contacts backup.

13.8.3

Restoring Data

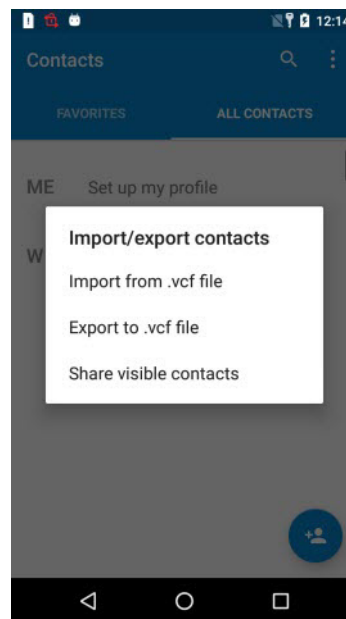
You can restore backed-up information to your device. Follow this procedure to import contacts to your LEX device.



NOTICE: For restoring other user data, see [Accessing Files from a Computer on page 79](#).

Procedure:

- 1 From the **Home** screen, tap .
- 2 Tap .
- 3 Select **Import/export**.

Figure 76: Import/Export Contacts Popup

- 4 Select **Import from .vcf file**.
- 5 In the popup window, tap **Allow**.
- 6 In the folder that opens, select the `.vcf` file with contacts.

13.9

Resetting the LEX Device

Use this procedure to reset the LEX device.

When and where to use: If the device does not operate properly, perform the following procedure.

Procedure:

- 1 Power off and on the device and verify if the problem is gone.

The device restarts. If the problem remains, perform Step 2.



CAUTION: To avoid erasing important data from your device, do not press any of the buttons during power up.

- 2 Press the **Power** button and hold it for 10 seconds.

The device restarts.

- 3 Remove the battery, reinsert it, and verify if the problem is gone.

The device restarts. If the problem remains, contact technical support.

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Chapter 14

Technical Specifications

The following table summarizes the LEX series operating, environment, and technical hardware specifications.

Table 16: Technical Specifications

Item	Specification
Physical	
Dimensions (H x W x D)	5.62 x 2.85 x 0.547 in 143 x 72.6 x 15 mm
Weight	195 g (6.88 Oz) including standard battery
Durability	Continues to run after multiple drops to concrete from a height of 48 inches (121 cm) Drop tested using MIL-STD-810G Method 516.6, Procedure IV IP67 (1 meter water immersion for 30 minutes)
Display	4.7" 720p HD (720 x 1280) Capacitive touch screen
Operating Temperature	14°F to 131°F (-10°C to +55°C)
Storage Temperature	-22°F to 149°F (-30°C to +65°C)
Hardware	
Processor	2.3 GHz Quad Core Processor Qualcomm MSM8974AA
Display	4.7" 720p HD (720X1280) Capacitive, touch screen
Memory	2 GB RAM 16 GB eMMC Expandable to 64GB with microSD™ card
Camera	Rear 8MP Camera Auto Focus High-Output LED Flash Digital Zoom Front 2MP Camera
Sensors	Proximity Sensor Ambient Light Sensor Accelerometer Sensor

Table continued...

Item	Specification
	Barometer Sensor E-Compass
Ports	USB 2.0 High-Speed 3.5 mm Audio Jack (stereo) Accessory/Charging Port
Battery	Standard - 2280 mAh, Li Ion High Capacity - 4560 mAh, Li Ion
Software	
Operating System	Android™ Marshmallow 6.0
User Interface	Public Safety Experience (PSX) Software
Messaging	SMS/MMS Email (Corporate Sync, POP3, IMAP, Push Email)
Web	Standard AOSP Browser
4G/LTE	
Release	3GPP Release 9
Band Class	2, 3, 4, 5, 7, 8, 20, 26, 28
Output Power	23 dBm +/- 2 dB (UE power class 3)
Bandwidth	Up to 20 MHz Broadband data throughput depends on network conditions
3G	
Standards	HSPA +/-UMTS
Bands	1,2,4,5,8
2G	
Standards	GSM/GPRS/EDGE
Frequencies	850 MHz, 900 MHz, 1800 MHz, 1900 MHz
Wi-Fi	
Operating Band	2.4 GHz, 5 GHz
Standards	802.11 a/b/g/n
Personal Area Networks	
Bluetooth	BT Core 4.1 BR/EDR Secure Connections BT Core 4.2 LE Secure Connections Profiles: HSP AG SPP FTP AVRCP

Table continued...

Item	Specification
	DUN GW OPP Client/Server GAVDP Acceptor/Initiator/Source PAN NAP/PANU HID Host A2DP HFP AG PBAP PSE MAP MSE HTP Client FMP Client PXP Client HRP Client HOGP Client Custom API: BT-MPP API
GPS	
Location Services	Standalone GPS Assisted GPS (aGPS)
Device Management	
Remote Management and Configuration	Supports OMA-DM (Open Mobile Alliance Device Management)
Video and Imaging	
Supported Formats	H.263, H.264, MPEG-4 SP, VP8, JPEG (.jpg), GIF (.gif), PNG (.png), BMP (.bmp), WebP (.webp) Formats supported for playback, streaming and recording
Supported File Types	3GPP (.3gp), MPEG-4 (.mp4), WebM (.webm), (.mkv)
Video Recording Quality	1080p HD up to 30 frames per second (fps)
 NOTICE:	Video and images are time stamped for evidence documentation.
Audio	
Supported Formats	MP3, WAVE, AAC, AMR-NB, AMR-WB, FLAC, MIDI, Vorbis
Supported File Types	MP3 (.mp3), WAVE (.wav), 3GPP (.3gp), MPEG-4 (.mp4, m4a), ATDS raw AAC (.aac), MPEG-TS (.ts) FLAC (.flac), MIDI (.mid, .xmf, .mxmf), RTTTL/RTX (.rtttl, rtx), OTA (.ota), iMelody (imy), Ogg (.ogg), Matroska (.mkv)
Output	Dual 1 Watt Front-Facing Speakers, 106 dB Sound Pressure Level (SPL)

Table continued...

Item	Specification
	3.5 mm audio jack (stereo) Bluetooth (A2DP stereo)
Input	Triple Noise and Echo Cancelling Microphones
Quick Access Leather Holster	
Dimensions (H x W x D)	5.7 x 3.5 x 2.0 in (145 x 90 x 50 mm)

Specifications subject to change.

Table 17: General Accessories

Item	Desktop Cradle	Impact-Rated Vehicle Cradle
Physical		
Dimensions (H x W x D)	6.0 x 5.0 x 3.5 in (152 x 128 x 89 mm)	6.1 x 3.0 x 2.2 in (155 x 76 x 56 mm)
Weight	12.8 Oz (363 g)	4.8 Oz (135 g)
Environmental Specification		
Operating Temperature	32°F to 113°F (0°C to +45°C)	-4°F to 131°F (-20°C to +55°C)
Storage Temperature	-40° F to 158°F (-40°C to 70°C)	-40° F to 185°F (-40°C to +85°C)
Humidity	95% at 113°F (45°C) for 8 hours (non-condensing)	95% at 131°F (55°C) for 8 hours (non-condensing)
Durability		
Salt Fog	Yes	Yes
Vibration	Yes	Yes
Drop	Yes	Yes
Shock (Functional)	Yes	Yes
Shock (Crash Hazard)		Yes, MIL-STD-810G, 75G impact
ESD	Yes	Yes
Solar Radiation		Yes
Liquid Resistance	Yes	Yes
Safety Regulatory		
Electrical Safety	US: UL60950	US: UL60950
EMI/RFI	FCC part 15, Subpart B, Class B28a	
ANSI C63.4 2009	FCC part 15, Subpart B, Class B28b	

Table continued...

Item	Desktop Cradle	Impact-Rated Vehicle Cradle
Flammability	ANSI/UL-94 and ASTM Standards	ANSI/UL-94 and ASTM Standards
Electrical		
Power Supply	External power supply input 100- 240VAC output 5.0VDC 1.2A	12V-24V, 5.0VDC, 1.2A
Power Input	5.0 VDC, 1.2A	5.0 VDC, 1.2A
DC Output	5.0VDC	5.0VDC
Power On	With device insertion	With device insertion
Optional Accessories		
Vehicle Ram® Mount Kit		

Specifications subject to change.

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