CC600/CC6000 Customer Concierge





User Guide for Android ™ 8.1.0 Oreo

ᢤ. ZEBRA

Copyright

ZEBRA and the stylized Zebra head are trademarks of Zebra Technologies Corporation, registered in many jurisdictions worldwide. All other trademarks are the property of their respective owners. ©2019-2020 Zebra Technologies Corporation and/or its affiliates. All rights reserved. Google™, Android, Google Play™ and other marks are trademarks of Google LLC; Oreo is a trademark of Mondelez International, Inc. group. All other trademarks are the property of their respective owners.

COPYRIGHTS & TRADEMARKS: For complete copyright and trademark information, go to <u>www.zebra.com/copyright</u>.

WARRANTY: For complete warranty information, go to www.zebra.com/warranty.

END USER LICENSE AGREEMENT: For complete EULA information, go to www.zebra.com/eula.

Terms of Use

Proprietary Statement

This manual contains proprietary information of Zebra Technologies Corporation and its subsidiaries ("Zebra Technologies"). It is intended solely for the information and use of parties operating and maintaining the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without the express, written permission of Zebra Technologies.

Product Improvements

Continuous improvement of products is a policy of Zebra Technologies. All specifications and designs are subject to change without notice.

· Liability Disclaimer

Zebra Technologies takes steps to ensure that its published Engineering specifications and manuals are correct; however, errors do occur. Zebra Technologies reserves the right to correct any such errors and disclaims liability resulting therefrom.

Limitation of Liability

In no event shall Zebra Technologies or anyone else involved in the creation, production, or delivery of the accompanying product (including hardware and software) be liable for any damages whatsoever (including, without limitation, consequential damages including loss of business profits, business interruption, or loss of business information) arising out of the use of, the results of use of, or inability to use such product, even if Zebra Technologies has been advised of the possibility of such damages. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Revision History

Changes to the original guide are listed below:

Change	Date	Description
-01 Rev A	6/2019	Initial Release
-02EN Rev A	04/2020	- Labeled the proximity sensor in Figure 1.
		- Removed Setting Touch Panel Mode section.

Table of Contents

Copyright	. 2
Terms of Use	. 2
Revision History	. 2

About This Guide	8
Introduction	8
Configurations	
Software Versions	9
Chapter Descriptions	9
Notational Conventions	10
Related Documents	
Service Information	10
Provide Documentation Feedback	11

Getting Started 12	2
Introduction	2
Features 12	2
Accessing Device Settings	6
Setting the Date and Time	7
Display Settings	7
Setting the Screen Brightness 1	7
Setting Night Light	8
Setting Screen Timeout 18	8
Ambient Display	9
Setting Font Size 19	9
General Sound Settings	0
Wake-Up Sources	2

Using the Device 23	3
---------------------	---

Introduction	23
Google Mobile Services	23
Home Screen	23
Customizing the Home Screen	24
Status Bar	25
Managing Notifications	27
Setting App Notifications	28
Quick Access Panel	29
Editing Icons on Quick Settings	31
App Shortcuts and Widgets	31
Folders	32
Home Screen Wallpaper	33
Using the Touchscreen	33
Keyboards	34
Keyboard Configuration	34
Using the Enterprise Keyboard	34
Using the Android and Gboard Keyboards	36
Do Not Disturb Feature	37
Limit Sounds	37
Silence Sounds During Certain Times	38
Silence Sounds During Events and Meetings	39
Turn Sounds Back On	39
Override Do Not Disturb for Specific Apps	39
Apps	40
Accessing Apps	43
Switching Between Recent Apps	45
Un-Locking the Screen	46
Transferring Files with a Host Computer via USB	51
Transferring Files	51
Transferring Photos	52
Disconnect from the Host Computer	52

Applications	54
Introduction	54
Camera	54
Taking Photos	54
Recording Videos	55
Photo Settings	57
Adding a Contact	60
Editing Contacts	60
Deleting Contacts	60

DataWedge Demonstration	62
Scanner Selection	64
Diagnostic Tool	65
Settings	68
System Test Information	68
WLAN Test Information	68
Bluetooth Test Information	68
Files	69
Gallery	71
Working with Albums	73
Sharing an Album	73
Working with Photos	74
Working with Videos	76
Photos	78
Working with Albums	80
Working with Photos	81
Working with Videos	83
PTT Express Voice Client	84
PTT Express User Interface	84
PTT Audible Indicators	85
PTT Notification Icons	85
Enabling PTT Communication	85
Selecting a Talk Group	86
Creating a Group Call	86
RxLogger	87
RxLogger Utility	88
SimulScan Demo	89
Printing the Sample Forms	90
Using the Postal, Transportation and Logistics Example	91
Using the Manufacturing Example	93
Creating a Demo Customization	95
Default Templates	96
Settings	96
Advanced Settings	97
Sound Recorder	98

Wireless	100
Introduction	100
Sharing the Mobile Data Connection	100
Configuring the Access Point Name	102
Data Usage	102
-	

Setting Data Usage Warning 103
Wireless Local Area Networks 104
Scanning and Connecting to a Wi-Fi Network 104
Removing a Wi-Fi Network 106
Bluetooth
Adaptive Frequency Hopping 106
Security 107
Bluetooth Profiles 107
Bluetooth Power States 108
Bluetooth Radio Power 109
Discovering Bluetooth Device(s) 109
Changing the Bluetooth Name
Selecting Profiles on the Bluetooth Device
Unpairing a Bluetooth Device 110
Near Field Communications (CC6000 Only) 110
Reading NFC Cards 111

Accessories1	112
Introduction1	112
Accessories1	112
3.5 mm Audio Adapter (CC6000 Only)1	113
Connecting a Headset to the 3.5 mm Audio Adapter (CC6000 Only) 1	113
USB I/O Hub	114
Connect USB Cables 1	115
External USB Cable 1	117
Audio Headset Connection 1	117

18
18
18
18
19
19
19
19
19
20
20
20
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Table of Contents

Camera and Exit Window	120
Troubleshooting	121

Technical Specifications	123
Introduction	123
Technical Specifications	123
CC6000	123
CC600	125
Decode Distances	127
CC6000 - SE4710 Scan Engine	127
CC600 - SE2100 Scan Engine	128

Index

About This Guide

Introduction

This guide provides information about using the CC600 and CC6000 Customer Concierge interactive kiosk and accessories.



NOTE: Screens and windows pictured in this guide are samples and can differ from actual screens.

Configurations

This guide covers the configurations listed in Table 1 and Table 2.

Table 1	CC600 Device Configurations
---------	-----------------------------

Configuration	Description	Front Camera	Scan Engine
CC600-5-3200LNWW	5 inch, OS: Android ™ 8.1.0 Oreo, 32GB, Ethernet/Wi-Fi, Imager, Worldwide Configuration	No	SE2100
CC600-5-3200LNNA	5 inch, OS: Android ™ 8.1.0 Oreo, 32GB, Ethernet/Wi-Fi, Imager, North America Configuration	No	SE2100
CC600-5-3200LNEU	5 inch, OS: Android ™ 8.1.0 Oreo, 32GB, Ethernet/Wi-Fi, Imager, Europe Configuration	No	SE2100
CC600-5-3200LNIN	5 inch, OS: Android ™ 8.1.0 Oreo, 32GB, Ethernet/Wi-Fi, Imager, India Configuration	No	SE2100

Table 2	CC6000 Device Configurations
---------	------------------------------

Configuration	Description	Front Camera	Scan Engine
CC6000-10-3200LCWW	10 inch, OS: Android ™ 8.1.0 Oreo, 32GB, Landscape, Imager, Worldwide Configuration	No	SE4710
CC6000-10-3200PCWW	10 inch, OS: Android ™ 8.1.0 Oreo, 32GB, Portrait, Imager, Worldwide Configuration	Yes	SE4710
CC6000-10-3200LCNA	10 inch, OS: Android ™ 8.1.0 Oreo, 32GB, Portrait, Imager, North America Configuration	Yes	SE4710
CC6000-10-3200PCNA	10 inch, OS: Android ™ 8.1.0 Oreo, 32GB, Portrait, Imager, North America Configuration	Yes	SE4710
CC6000-10-3200LNNA	10 inch, OS: Android ™ 8.1.0 Oreo, 32GB, Landscape, Imager, North America Configuration	No	SE4710

Software Versions

To determine the current software versions:

- 1. Swipe down from the top to open Quick Settings.
- 2. Touch **\$ > System**.
- 3. Touch About phone.
- 4. The following information displays:
 - Status
 - SWComponents
 - Legal Information
 - Model
 - Android version
 - · Android security patch level
 - Kernel version
 - Build Fingerprint
 - Build number

To determine the device serial number, touch About phone > Status. Serial number displays.

Chapter Descriptions

Topics covered in this guide are as follows:

- · Getting Started provides information on getting the device up and running for the first time.
- Using the Device provides information for operating the device.
- Applications provides information on using applications installed on the device.
- · Wireless provides information on the various wireless options.

- Accessories provides information for using the accessories for the device.
- Maintenance and Troubleshooting includes instructions on cleaning and provides troubleshooting solutions for potential problems during device operation.
- Technical Specifications provides the technical specifications for the device.

Notational Conventions

The following conventions are used in this document:

- "Device" refers to all configurations of the CC600 Customer Concierge and CC6000 Customer Concierge.
- **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
- Icons on a screen
- · 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 (e.g., those that describe step-by-step procedures) appear as numbered lists.

Related Documents

- CC600/CC6000Customer Concierge Quick Start Guide for Android Version 8.1, p/n MN-003314-xx.
- CC600/CC6000 Customer Concierge Integrator Guide for Android Version 8.1, p/n MN-003411-xx.

For the latest version of this guide and all guides, go to: www.zebra.com/support.

Service Information

If you have a problem with your equipment, contact Customer Support for your region. Contact information is available at: <u>zebra.com/support</u>.

When contacting support, please 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
- IMEI number.

Customer Support responds to calls by email or telephone within the time limits set forth in support agreements.

If the problem cannot be solved by Customer Support, the user may need to return the equipment for servicing and will be given specific directions. We are 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 SIM card and/or microSD card from the device before shipping for service.

If the device was purchased from a business partner, contact that business partner for support.

Provide Documentation Feedback

If you have comments, questions, or suggestions about this guide, send an email to <u>EVM-Techdocs@zebra.com</u>.

Getting Started

Introduction

This chapter provides information to get the device up and running for the first time.

Features



NOTE: Although the orientations differ, the features on the CC6000 landscape and portrait devices are the same.





Getting Started





Figure 3 CC6000 Power and Cable Ports







Figure 5 CC600 Front Views















Table 3 Feature Description	Table 3	Feature	Descri	ptions
-----------------------------	---------	---------	--------	--------

ltem	Function
Touch Screen and Display	Displays all information needed to operate the device.
Exit Window	Provides data capture using the imager and reads a barcode.
(Scanner)	Note: To read a barcode, a scan-enabled app is required on the device.
Speaker	Provides audio output for video and music playback. Provides audio in speaker-phone mode.
NFC Antenna	Reads NFC tags. (CC6000 Only)
Proximity Sensor	Identifies the proximity of a user for turning up the display.
Microphone	Use for communications in Speakerphone mode.
Front Facing Camera	Captures still photos and videos.
	Note: Select CC6000 devices only.
Interface Connectors	See Figure 3 and Figure 7.
Volume Up/Down Button	Increase and decrease audio volume (programmable).
External Display	Designated for USB-C port utilization.

Accessing Device Settings

To access device settings:

1. Swipe up from the bottom of the screen to display the **App** screen.

2. From the App screen swipe up from the bottom of the screen and touch 2.

or

1. Swipe down from the top of the screen and touch 🍄.

Setting the Date and Time

The user is only required to set the time zone or set the date and time if the wireless LAN does not support Network Time Protocol (NTP).

To set the date and time:

- 1. Swipe down from the top to open Quick Settings and then touch **‡**.
- 2. Touch System > Date & time.
- 3. Touch Automatic date & time to disable automatic date and time synchronization.
- 4. Touch Set date.
- 5. In the calendar, set today's date.
- 6. Touch OK.
- 7. Touch Set time.
- 8. Touch the hour.
- 9. Touch the green circle, drag to the current hour and then release.
- 10. Touch the minutes.
- 11. Touch the green circle, drag to the current minute and then release.
- 12. Touch AM or PM.
- 13. Touch OK.
- 14. Touch Select time zone.
- 15. Select the current time zone from the list.
- 16. Touch () to return to the **Home** screen.

Display Settings

Use Display settings to change the screen brightness, enable night light, change the background image, set sleep time and change font size.

Setting the Screen Brightness

To manually set the screen brightness:

1. Swipe down with two fingers from the top to open the Quick Access panel.

2. Slide the icon to adjust the screen brightness level.





Setting Night Light

The Night Light setting tints the screen amber, making the screen easier to look at in low light.

To enable night light:

- 1. Swipe down from the top of the screen to open Quick Settings and then touch **\$**.
- 2. Touch Display.
- 3. Touch Night Light.
- 4. Touch Schedule.
- 5. Select one of the schedule values:
 - None (default)
 - Turns on at custom time
 - Turns on from sunset to sunrise.
- 6. Touch Status.

By default, Night Light is disabled. Toggle the switch to enable.

- 7. Adjust the tint using the Intensity slider.
- 8. Touch () to return to the **Home** screen.

Setting Screen Timeout

To set the screen sleep time:

- 1. Swipe down from the top to open the Quick Settings panel and then touch \clubsuit .
- 2. Touch **Display > Advanced > Sleep**.
- 3. Select one of the sleep values.
 - 15 seconds
 - 30 seconds
 - 1 minute (default)
 - 2 minutes
 - 5 minutes
 - 10 minutes
 - 30 minutes.
- 4. Touch () to return to the **Home** screen.

Ambient Display

The Ambient display setting wakes the screen when you receive notifications.

To disable ambient display:

- 1. Swipe down from the top to open the Quick Settings panel and then touch **\$**.
- 2. Touch **Display > Advanced**.
- 3. Touch Ambient display.
- 4. In the When to show section, touch New notifications to enable or disable.
- 5. Touch O to return to the **Home** screen.

Setting Font Size

To set the size of the font in system apps:

- 1. Swipe down from the top to open the Quick Settings panel and then touch **\$**.
- 2. Touch **Display > Advanced**.
- 3. Touch Font size.



÷	Font size
Sa	mple text
The	Wonderful Wizard of Oz
Cha Oz	oter 11: The Wonderful Emerald City of
Ever Doro the l were sam joine clos The sky i the s	with eyes protected by the green spectacles thy and her friends were at first dazzled by filiancy of the wonderful City. The streets lined with beautiful houses all built of green le and studded everywhere with sparkling alds. They walked over a pavement of the green marble, and where the blocks were d together were rows of emeralds, set ely, and glittering in the brightness of the sun window panes were of green glass, even the bove the City had a green tint, and the rays o un were green.
The	e were many people, men, women and chil-
P	review
	Default
А	• • • A

- 4. Touch the green dot and slide left or right to select a font size.
- 5. Touch () to return to the **Home** screen.

General Sound Settings

Use the Sound settings to configure media and alarm volumes.

To access sound settings:

- 1. Swipe down from the top to open the Quick Settings panel and then touch **\$**.
- 2. Touch Sound.
- 3. Touch an option to set sounds.

Figure 11 Sound Screen - Zebra Volume Controls and Advanced Settings



Zebra Volume Controls

- Ring volume Controls the ringtone volume.
- Media volume Controls the music, games, and media volume.
- Alarm volume Controls the alarm clock volume.
- Notifications volume Controls the notification volume.
- Scanner volume Controls the scanner volume.
- · Volume presets
 - A nutes the ring, notifications, and scanner so that the device does not make sounds.
 - In All sounds except media and alarms are silenced.
 - **≜** Enables all sounds at the user defined levels.

Do Not Disturb Preferences

- Touch **Priority only allows** to set the priorities for the following:
 - Reminders Switch on or off.
 - Events Switch on or off.
 - Alarms This is always enabled.
 - Messages Choose to allow messages from anyone, contacts only, starred contacts only, or none. To star contacts, use the Contacts app.
 - Repeat callers Switch on or off.
- Touch Block visual disturbances:
 - Block when screen is on Switch on or off. This option prevents notifications from displaying over the screen (peeking) while you are actively using the device.
 - Block when screen is off Switch on or off. This option prevents notifications from turning on the screen or pulsing the LED light when a new notification is received while you are not using the device.
- Touch Automatic rules Switch on or off. This option allows you to choose when to automatically silence the device. Touch a default rule, such as Weekend or Weeknight, or create your own rule. To create your own rule tap Add more and then Time rule.

Advanced Sound Settings

• Touch **Default notification sound** to select a sound to play for all system notifications. Touch a sound in the list, then touch **OK**.

Figure 12 Default Notification Sounds

Def	ault notification sound
۲	Pixie Dust
0	Pizzicato
0	Plastic Pipe
0	Polaris
0	Pollux
0	Procyon
0	Proxima
0	Radon
0	Regulus
0	Rubidium
0	Selenium
0	Shaula
	CANCEL OK

• Touch **Default alarm sound** to select a sound to play for alarms. Touch a sound in the list, then touch **OK**.

Figure 13 Default Alarm Sounds

Def	ault alarm sound		
0	Buzzer Alarm		
0	Carbon		
۲	Cesium		
0	Hassium		
0	Krypton		
0	Neon		
0	Osmium		
0	Piezo Alarm		
0	Platinum		
0	Rooster Alarm		
0	Scandium		
+	Add ringtone		
		CANCEL	OK

Other sounds

- Screen locking sounds Switch on or off. Play a sound when locking and unlocking the screen.
- Touch sounds Switch on or off. Play a sound when making screen selections (enabled by default).

Wake-Up Sources

By default the device wakes from suspend mode when the user touches the display or scans an item.

Using the Device

Introduction

This chapter explains the buttons, status icons, and controls on the device, and provides basic instructions for using the device including resetting the device and entering data.

Google Mobile Services



NOTE: This section applies to Google Mobile Services (GMS) devices only.

Devices with GMS contain apps and services that provide additional functionality.

GMS includes:

- Apps GMS adds a variety of Google apps and associated widgets including Chrome, Gmail, Drive, and Maps.
- Services:
 - Speech to Text Allows for free format speech to text in many languages for both connected and disconnected network. Launch by touching the microphone icon on the keyboard.
 - TalkBack Service Provides spoken feedback on various parts of the user interface. To enable, go to Settings > Accessibility.
 - Network Location Provider Adds a location provider which uses mobile network tower information and Wi-Fi access point information to provide a location. To enable, go to Settings > Location access.
 - Widevine DRM Enables Digital Rights Management (DRM) so that protected streaming video content can be played. Enable DRM Info from the Google Play ™ store.
 - Google Cloud Messaging Allows the device to receive data from the server and other devices on the same connection.
 - Backup and Restore Allows the users settings and apps to be backed up to a Google server and subsequently restored from that server after a factory reset.
- Google Accounts Create and use a Google account to synchronize mail, files, music, photos, contacts and calendar events.

Home Screen

When the device powers on, the **Home** screen displays. Depending on the configuration, the **Home** screen may appear different. Contact your system administrator for more information.

Using the Device

After a suspend, screen time-out, or restart, the **Home** screen displays with the lock slider. Touch the screen and slide up to unlock. For screen locking information see Un-Locking the Screen on page 46.



NOTE: By default, non-GMS devices do not have icons on the **Home** screen. Icons are shown below for example only. **Home** screen icons can be configured by the user and may look different than shown.



Table 4 Home Screen Features

	Item	Description
1	Status Bar	Displays the time, status icons (right side), and notification icons (left side). For more information see Status Icons on page 26 and Managing Notifications on page 27.
2	Widgets	Launches stand-alone apps that run on the Home screen.
3	Shortcut Icons	Opens apps installed on the device.
4	Folder	Contains apps.
5	All Apps	Opens the APPS window.

The Home screen provides four additional screens to place widgets and shortcuts. Swipe the screen left or right to view the additional screens.

Customizing the Home Screen

To customize the Home screen:

1. Touch and hold anywhere on the **Home** screen until the options appear.

- 2. Touch HOME SETTINGS.
- 3. Touch the Allow Home screen rotation switch.
- 4. Touch O.
- 5. Rotate the device.

Figure 15 Rotated Home Screen



Status Bar

RA

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

NOTE: Some Status icons may not appear in the Status bar if there are too many icons to display.

Figure 16 Notification and Status Icons

Ŧ	<u>1</u>	0 ¹	Μ	\bigcirc	Rx		*	Θ	•		2:26 F	М
Notification Icons							Statu	is Ico	ons			

If there are more notifications than can fit in the Status bar, two dots display indicating that more notifications exist. Swipe down from the Status bar to open the Notification panel and view all notifications and status.

 Table 5
 Notification Icons

lcon	Description
••	More notifications are available for viewing.
ניַז	Data is syncing.
1	Indicates an upcoming event. Non-GMS devices only.
 31	Indicates an upcoming event. GMS devices only.
1 ?	Open Wi-Fi network is available.
0	Song is playing.

lcon	Description
<u>(</u> !)	Problem with sign-in or sync has occurred.
1	Device is uploading data.
₹	Device is downloading data when animated and download is complete when static.
Ŷ	Device is connected via USB cable.
От	Device is connected to or disconnected from virtual private network (VPN).
	Preparing internal storage by checking it for errors.
ALL	USB debugging is enabled on the device.
\mathbf{Q}	Headset is connected to the device.
↓ ¹)))	PTT Express Voice client status. See the PTT Express PTT Notification Icons on page 85 for a complete list.
₽ x	Indicates that RxLogger app is running.
	Indicates the RS6000 is connected to the device.
A.	Indicates the RS507 or RS6000 is connected to the device in HID mode.

Table 5 Notification Icons (Continued)

Status Icons

Table 6 Status Icons

lcon	Description
()	Alarm is active.
Ē	All sounds, except media and alarms, are silenced and vibrate mode is active.
0	Do Not Disturb mode active.
★	Airplane Mode is active. All radios are turned off.
*	Bluetooth is on.
*	The device is connected to a Bluetooth device.
	Connected to a Wi-Fi network.
¹ Cellul	ar network icon that appears is dependent upon the carrier/network.

Table 6Status Icons	(Continued)
---------------------	-------------

lcon	Description					
\bigtriangledown	Not connected to a Wi-Fi network or no Wi-Fi signal.					
< ··>	Connected to an Ethernet network.					
0	Speakerphone enabled.					
¹ Cellular network icon that appears is dependent upon the carrier/network.						

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 Table 5 on page 25 for a list of possible notification icons and their description. Open the Notification 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 17 Notification Panel



To respond to a notification, open the Notification panel and then touch a notification. The Notification panel closes and the corresponding app opens.

To clear all notifications, open the Notification panel and then touch **CLEAR ALL**. All event-based notifications are removed. Ongoing notifications remain in the list.

To close the Notification panel, swipe the Notification panel up.

Setting App Notifications

To set notification settings for a specific app:

- 1. Swipe down from the Status bar to open the Quick Settings bar and then touch **\$**.
- 2. Touch Apps & notifications > Notifications > App notifications.
- 3. Select an app.
- 4. Select an available option:
 - On / Off Select to turn all notifications from this app On (default) or Off.
 - Allow notification dot Do not allow this app to add a notification dot to the app icon.
 - Allow interruptions Do not allow notifications from this app to make sound, vibrate, or pop notifications on the screen.
 - Override Do Not Disturb Allow these notifications to interrupt when Do Not Disturb is set to Priority Only.
 - Categories Do not allow specific types of notifications from this app.
 - Additional settings in the app Open the app settings.



NOTE: To change the notification settings for an app, slide the notification slightly left or right and touch 🌣.

Viewing Notification Settings for All Apps

To view the notification settings for all apps:

- 1. Swipe down from the Status bar to open the Quick Settings bar and then touch \$\$
- 2. Touch Apps & Notifications.
- 3. Scroll down to Notifications to view how many apps have notifications turned off.
- 4. To set or view notifications settings for a specific app, see Setting App Notifications on page 28.

Controlling Lock Screen Notifications

To control whether notifications can be seen when the device is locked:

- 1. Swipe down from the Status bar to open the Quick Settings bar and then touch **\$**.
- 2. Touch Apps & notifications > Notifications.
- 3. Touch **On the lock screen** and select one of the following:
 - · Show all notification content (default)
 - Don't show notifications at all.

Blink Light

The Charging/Notification LED lights blue when an app, such as email and VoIP, generates a programmable notification or to indicate when the device is connected to a Bluetooth device. By default, LED notifications are enabled.

To change the notification setting:

- 1. Swipe down from the Status bar to open the Quick Settings bar and then touch **‡**.
- 2. Touch Apps & notifications > Notifications.
- 3. Touch **Blink light** to toggle the notification on or off.

Quick Access Panel

Use the Quick Access panel to access frequently used settings (for example, Airplane mode).

Figure 18 Quick Settings Bar



To see the full Quick Access panel:

- If the device is locked, swipe down once.
- If the device is unlocked, swipe down once with two fingers, or twice with one finger.
- If the Quick Settings bar is open, touch the Down arrow.

Figure 19 Quick Access Panel







NOTE: Not all icons are pictured. Icons may vary.

To change a setting, touch the icon:

- Display brightness Use the slider to decrease or increase the brightness of the screen.
- Wi-Fi network Turn Wi-Fi on or off. To open Wi-Fi settings, touch the Wi-Fi network name.
- Bluetooth settings Turn Bluetooth on or off. To open Bluetooth settings, touch Bluetooth.
- · Battery power Not applicable.
- Battery saver Not applicable.
- Invert colors Invert the display colors.
- Do not disturb Control how and when to receive notifications.
- Airplane mode Turn Airplane mode on or off. When Airplane mode is on the device does not connect to Wi-Fi or Bluetooth.
- · Auto-rotate Lock the device's orientation in portrait or landscape mode or set to automatically rotate.
- Flashlight Turn flashlight on or off. Turn camera flash on or off.

The thermal protection safety feature for the camera provides the following behavior if the temperature range is 40°C or above:

- If the flashlight is kept on for a certain period of time, it is automatically turned off and cannot be turned back on for a period of time until it has cooled off.
- During the cooling off period, the camera cannot be turned on. If the user attempts to use the camera, a message displays indicating to try again after a period of time.
- · Location Enable or disable locationing feature.
- Hotspot Turn on to share the device's mobile data connection with other devices.
- Data Saver Turn on to prevent some apps from sending or receiving data in the background.
- Night Light Tint the screen amber to make it easier to look at the screen in dim light. Set Night Light to turn
 on automatically from sunset to sunrise, or at other times.
- Nearby Helps find and interact with services and devices close to the device.
- Cast Share phone content on Chromecast or a television with Google Cast built-in. Touch cast screen to display a list of devices, then touch a device to begin casting.
- · Screenshot Takes a snapshot of the current screen.

Editing Icons on Quick Settings

The first several setting tiles from the Quick Access panel become the Quick Settings bar.

To move a setting tile:

- 1. Open the Quick Access panel.
- 2. Touch 🧨.
- 3. Touch and drag a setting tile to another location.
- 4. Release the tile.
- 5. Touch \leftarrow to save tiles and return to the Quick Access panel.

To add a setting tile:

- 1. Open the Quick Access panel.
- 2. Touch 🇨.
- 3. Slide the Quick Settings panel up to reveal additional tiles.
- 4. Touch and drag a setting tile from the Drag to add tiles area to the main area.
- 5. Release the tile.
- 6. Touch \leftarrow to save tiles and return to Quick Access panel.
- To remove a setting tile:
- 1. Open the Quick Access panel.
- 2. Touch 🖍.
- 3. Touch and drag a setting tile to the Drag here to remove area.
- 4. Release the tile.
- 5. Touch \leftarrow to save tiles and return to Quick Access panel.

App Shortcuts and Widgets

App shortcuts placed on the Home screen allow quick and easy access to apps. Widgets are self-contained apps placed on the Home screen to access frequently used features.

Adding an App Shortcut to the Home Screen

To add an app shortcut to the Home screen:

- 1. Go to the desired Home screen.
- 2. Swipe up from the bottom of the screen.
- 3. Scroll through the list to find the app icon.
- 4. Touch and hold the icon until the Home screen appears.
- 5. Position the icon on the screen and then release.

Adding a Widget to the Home Screen

To add a widget to the Home screen:

- 1. Go to the desired Home screen.
- 2. Touch and hold until the menu appears.
- 3. Touch WIDGETS.
- 4. Scroll through the list to find the widget.
- 5. Touch and hold the widget until the Home screen appears.
- 6. Position the widget on the screen and then release.

Moving Items on the Home Screen

To move app shortcuts or widgets on the Home screen:

- 1. Touch and hold the item until it floats on the screen.
- 2. Drag the item to a new location. Pause at the edge of the screen to drag the item onto an adjacent Home screen.
- 3. Lift finger to place the item on the Home screen.

Removing an App Shortcut or Widget from the Home Screen

To remove an app shortcut or widget from the Home screen:

- 1. Go to the desired Home screen.
- 2. Touch and hold the app shortcut or widget icon until it floats on the screen.
- 3. Drag the icon to **X Remove** at the top of the screen and then release.

Folders

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

Creating a Folder

There must be at least two app icons on the Home screen.

To create a folder:

- 1. Go to the desired Home screen.
- 2. Touch and hold one app icon.
- 3. Drag the icon and stack on top of another icon.
- 4. Lift and release.

Naming Folders

To name a folder:

1. Touch the folder.





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

Removing a Folder

To remove a folder:

- 1. Touch and hold the folder icon until it enlarges.
- 2. Drag the folder to **X Remove** and release.

Home Screen Wallpaper

To change the Home screen wallpaper:

- 1. Touch and hold the screen until the menu appears.
- 2. Touch WALLPAPERS.
- 3. Touch Photos or Gallery to select a photo or select one of the pre-installed wallpapers.
- 4. Touch Set wallpaper.

Using the Touchscreen

Use the multi-tap sensitive screen to operate the device.

- 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.
 - The Home screen to open a menu for customizing the Home screen.
 - An empty area on the Home screen until the menu appears.

Using the Device

- 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 app icons in the Launcher window.
 - View more information on an app's screen.
- Double-tap Tap twice on a web page, map, or other screen to zoom in and out.
- Pinch In some apps, 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).

Keyboards

The device provides the following types of keyboards:

- Android Keyboard Non-GMS devices only.
- Enterprise Keyboard.



NOTE: By default the Enterprise Keyboard is disabled.

Keyboard Configuration

Enabling Keyboards

To enable keyboards:

- 1. Swipe down from the Status bar to open the Quick Settings bar and then touch **\$**.
- 2. Touch System > Languages & input > Virtual keyboard > Manage keyboards.
- 3. Touch a keyboard to enable.

Switching Between Keyboards

To switch between keyboards, touch in a text box to display the current keyboard.

- On the Android or Gboard keyboards, touch and hold .
- On the Enterprise keyboard, touch (3).

Using the Enterprise Keyboard

The Enterprise Keyboard contains the following keyboards:

- Numeric
- Alpha
- Special characters
- Data capture.

Numeric Tab

To access the numeric keyboard, touch the **123** tab. The keys displayed vary on the app being used. For example, an arrow displays in **Contacts**, however **Done** displays in **Email** account setup.

Figure 21 Numeric Keyboard

123	B EN	4 4	#*/	Inni
7	1	2	3	÷
	4	5	6	
#	7	8	9	×
\$		0		Next

1	123		EN			JIII	
1		1	2		3	-	
:		4	5		6	,	
#		7	8		9	×	
\$		_	0			Go	

Alpha Tab

To access the alpha keyboard, touch the EN tab.





123			EN	(#	*/		l linil		
q	w	e	r ⁴	t	у ⁶	U U	i ⁸	• •		
a		* c	s I f	g	h	j	* (1		
Ŷ	z	. ×	c	v	b	n	m	×		
TAB	0	0	Ð	<u>.</u>	-1			Go		

Additional Character Tab

To access additional characters, touch the #*/ tab.







Touch (2) to enter emoji icons in a text message.





Touch **ABC** to return to the Symbols keyboard.

Scan Tab

The Scan tab provides an easy data capture feature for scanning barcodes.





Using the Android and Gboard Keyboards

Use the Android or Gboard keyboards to enter text in a text field. To configure the keyboard settings, touch and hold , (comma) and then select **Android keyboard settings**.

Editing Text

Edit entered text and use menu commands to cut, copy, and paste text within or across apps. Some apps 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:

- Touch and hold one of the top-row keys until a menu appears then select a number or special character.
- Touch the Shift key once for a single capital letter. Touch the Shift key twice to lock in uppercase. Touch the Shift key a third time to unlock Capslock.
- Touch ?123 to switch to the numbers and symbols keyboard.
- Touch the =\< key on the numbers and symbols keyboard to view additional symbols.

To enter special characters, touch 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.
Do Not Disturb Feature

This mode mutes the device so that it does not make sounds or vibrate.

For example, use Do Not Disturb to:

- · Automatically limit sounds at night or during events
- Mute interruptions other than alarms
- Get alerted to messages only from favorite contacts.

Limit Sounds

Mute the device completely, or let through the important alarms or important calls.

Total Silence

To completely mute the device so that it does not make a sound or vibrate, choose **Total silence**.

In Total silence mode:

- Alarms do not make noise.
- Device does not vibrate or make sounds when receiving a message, or notification.
- Sounds from music, videos, games, and other media are muted.



NOTE: All alarms are silenced in Total silence mode.

- 1. Swipe down with two fingers from the Status bar to open the Quick Access panel.
- 2. Touch Do not disturb > Total silence.
- 3. Choose Until you turn it off or select a time period.
- 4. Touch Done.

When Total Silence is on,
appears in the quick access panel and the Status bar.

To turn off Total Silence, open quick access panel and touch Total silence.

Alarms Only

To mute the device so that the user hears alarms, choose **Alarms only**. This option does not mute sounds from music, videos, games, or other media.

- 1. Swipe down with two fingers from the status bar to open the quick access panel.
- 2. Touch **Do not disturb > Alarms only**.
- 3. Choose Until you turn it off or select a time period.
- 4. Touch Done.

When Alarms Only is on, O appears in the quick access panel and the Status Bar.

To turn off Alarms Only, open the Quick Access panel and touch Alarms only.



NOTE: To quickly turn on Alarms Only, with the screen on, press and hold the Volume Down button until the volume is all the way down. Then, press Volume Down again to turn on Alarms Only.

To turn off Alarms Only, press either the Volume Up or Volume Down button and the touch **END NOW** in the alert message.

Priority Notifications Only

To only be interrupted by important notifications, choose **Priority only**. This option does not mute sounds from music, videos, games, or other media.

Before turning on Priority Only mode, set the notification priorities:

- 1. Swipe down from the status bar to open the quick settings bar and then touch **\$**.
- Touch
 Sound > Do not disturb > Priority only allows.
- 3. Set priorities.
 - Alarms: Disabled by default.
 - Reminders and Events: Switch on or off.
 - Messages and Calls: Choose From anyone, From contacts only, From starred contacts only, or none. To star contacts, use the Contacts applications.
 - Repeat callers: Choose whether to let the device ring if the same person calls again within 15 minutes.

After setting notification priorities, turn on Priority Only mode to limit interruptions. The priority notifications make a sound or vibrate based on the current ringer volume, but other notifications will be silenced.

- 1. Swipe down with two fingers from the status bar to open the quick access panel.
- 2. Touch **Do not disturb > Priority only**.
- 3. Choose Until you turn it off or select a time period.
- 4. Tap Done.

When Priority Only is on, **e** appears in the quick access panel and the Status Bar.

To turn off Priority Only, open quick access panel and touch Priority only.

Automatically Block Sounds

Automatically silence the device during certain times or events, turn sounds back on, and override Do Not Disturb mode.

Silence Sounds During Certain Times

To automatically silence the device during certain times, like at night or on weekends:

- 1. Swipe down from the Status bar to open the Quick Settings bar and then touch **\$**.
- 2. Touch Sound > Do Not Disturb preferences.
- 3. Touch a default **Weekend** or **Weeknight**. Or, to make a new rule, touch **Add more > Time rule**.
- 4. Enter a rule name.
- 5. Touch OK.

- 6. Edit the new rule:
 - Rule name Rename the rule.
 - Days, Start time, and End time Set the rule's schedule.
 - Do Not Disturb preferences Choose whether the rule uses Alarms only, Priority only, or Total silence.
 - Alarm can override end time Allow the alarm to continue to make sound until the next alarm begins.
- 7. Touch the On/Off switch at the top to turn on the rule.

Silence Sounds During Events and Meetings

To automatically silence the device during events or meetings, set an event rules.

- 1. Swipe down from the Status bar to open the Quick Settings bar and then touch \$\$
- 2. Touch Sound > Do Not Disturb preferences.
- 3. To edit the default rule, touch Event. Or, to create a new rule, touch Add rule > Event rule.
- 4. Edit the rule settings.
 - Rule name Rename the rule.
 - **During events for -** Select which Google Calendar events the rule uses.
 - Where reply is Set to: Yes, Maybe, or Not replied, Yes or Maybe, or Yes.
 - Do Not Disturb preferences Choose whether the rule uses Priority only, Alarms only, or Total silence.
- 5. Touch the On/Off switch at the top to turn on the rule.

Turn Sounds Back On

When the device is in Do Not Disturb mode, Alarms only or Priority only display as \bigcirc , or Total silence displays as \bigcirc .

To turn off Do Not Disturb, either:

- In the Quick Access panel, touch Alarms only, Priority only, or Total silence.
- Press the Volume Down button and touch End Now.

Override Do Not Disturb for Specific Apps

To let through notifications from specific apps:

- 1. Swipe down from the Status bar to open the Quick Settings bar and then touch **\$**.
- 2. Touch Apps & notifications > Notifications > App notifications.
- 3. Touch an app.
- 4. Touch Override Do Not Disturb.

Apps

The **APPS** screen displays icons for all installed apps. The table below lists the apps installed on the device. Refer to the device Integrator Guide for Android Version 8.1 for information on installing and uninstalling apps.

Table / Apps	Та	ble	7	Apps
--------------	----	-----	---	------

lcon	Description
	Battery Manager - Not applicable.
-	Battery Swap – Not applicable.
	Bluetooth Pairing Utility – Use to pair the RS507 Hands-free Imager with the device by scanning a barcode.
- +	Calculator - Provides the basic and scientific arithmetic functions.
31	Calendar - Use to manage events and appointments. GMS devices onlyGMS/GMS-Restricted only.
3 7	Calendar - Use to manage events and appointments. Non-GMS devices onlyAOSP only.
	Camera - Take photos or record videos. For more information see Camera on page 54.
0	Chrome - Use to access the Internet or intranet. GMS devices onlyGMS/GMS-Restricted only.
0	Chromium - Use to access the Internet or intranet. AOSP only.
Y	Clock - Use to schedule alarms for appointments or as a wake-up.
-	Contacts - Use to manage contact information. See Contacts on page 60 for more information.
]	DataWedge - Enables data capture using the imager.
	Device Central - Use to display detailed information about the device and connected peripherals.

Table 7	Apps	(Continued)
---------	------	-------------

lcon	Description
	Diagnostic Tool - Use to diagnose the device.
	Drive - Upload photos, videos, documents, and other files to personal storage site. GMS/GMS-Restricted only.
Ö	DWDemo - Provides a way to demonstrate the data capture features using the imager. See DataWedge Demonstration on page 62 for more information.
0	Email - Use to send and receive email. Non-GMS devices only.AOSP only.
······································	Enterprise Browser - Industrial browser that provides everything needed to quickly build device apps for barcode scanning, signature capture, payment processing, printing and most other enterprise applications. For more information, refer to techdocs.zebra.com/enterprise-browser/.
	ET5X User Guide - Opens the on-device User Guide for the device.
0	Files - Organize and manage files on the device. See Files on page 69 for more information.
	Gallery - Use to view photos stored on the devicemicroSD card. For more information, see Gallery on page 71 for more information. Non-GMS devices onlyAOSP only.
M	Gmail - Use to send and receive email using a Google email account. GMS devices onlyGMS/GMS-Restricted only.
G	Google - Launches Google search app. GMS devices onlyGMS/GMS-Restricted only.
9	Hangouts - Use to communicate with friends using text messages and photos. GMS devices onlyGMS/GMS-Restricted only.
0	Keep - Use to create, edit, and share notes. GMS devices onlyGMS/GMS-Restricted only.
9 -1	License Manager - Use to manage software licenses on the device.
G	Maps - Use to see your location on a map (with public transit, traffic, or satellite overlays). Search for any business or place of interest. Provides turn-by-turn navigation with voice guidance, traffic-avoidance, and alternate routes, for drivers, cyclists, walkers, and users of public transportation. GMS devices onlyGMS/GMS-Restricted only.

Table 7	Apps	(Continued)
---------	------	-------------

lcon	Description
4	MSRN - Use to verify authenticity of the paired Snap-on MSR and to provision the Snap-on MSR. See device Touch Computer Integrator Guide for Android Version 8.1 for more information.
\bigcirc	Music - Play music stored on the devicemicroSD card. Non-GMS devices onlyAOSP only.
	Notes - Use to take and save notes.Non-GMS devices onlyAOSP only
+	Photos - Use to sync photos with Google account. For more information, see Photos on page 78 for more information. GMS devices onlyGMS/GMS-Restricted only.
	Play Movies & TV - View movies and video on your device. GMS devices onlyGMS/GMS-Restricted only.
Ø	Play Music - Use to listen to music. GMS devices onlyGMS/GMS-Restricted only.
	Play Store - Download music, movies, books, and Android apps and games from the Google Play Store. GMS devices onlyGMS/GMS-Restricted only.
	Print Station - Use to print labels and receipts directly to a Zebra ZPL printer via USB, Bluetooth, or WLAN.
()))	PTT Express - Use to launch PTT Express client for VoIP communication.
R	RxLogger - Use to diagnose device and app issues. See the device Integrator Guide for Android Version 8.1 for more information.
R	RxLogger Utility - Use to view, backup, and archive RxLogger data.
	Search - Use to search the Web. Requires an Internet connection. Non-GMS devices onlyAOSP only.
\$	Settings - Use to configure the device.
	SimulScan Demo - Use to demonstrate the document capture feature of the device.

lcon	Description
	Sound Recorder - Use to record audio.
Q	StageNow - Allows the device to stage a device for initial use by initiating the deployment of settings, firmware, and software.
S	Tap & Pair - Use to pair the device with a Zebra Bluetooth printer.
	Velocity - Opens the Ivanti (formerly Wavelink) terminal emulation app.
V	Voice Search - Use to perform searches by asking questions. GMS devices onlyGMS/GMS-Restricted only.
Ì	Worry Free Wifi Analyzer - A diagnostic intelligent app. Use to diagnose surrounding area and display network stats, such as coverage hole detection, or AP in vicinity. Refer to the Worry Free Wi-Fi Analyzer Administrator Guide for Android.
Þ	YouTube - Use to view videos on the YouTube [™] web site. GMS devices onlyGMS/GMS-Restricted only.
*	Zebra Bluetooth - Use to configure Bluetooth logging.
	Zebra Utilities - Use to print barcode labels and receipts directly to a Zebra printer via Bluetooth or WLAN.

Accessing Apps

All apps installed on the device are accessed using the **APPS** window.

1. On the Home screen, swipe up from the bottom of the screen.





					🕈 🖠 9:29 AM
		Q Sear	ch apps		
			31	O	
Battery Manager	Bluetooth Pairing Utility	Calculator	Calendar	Chrome	Clock
-			Q		
Contacts	DataWedge	Device Central	Diagnostic Tool	Drive	DWDemo
		Μ	G		<mark>€⊅</mark>
Email	Files	Gmail	Google	Hangouts	Heater Control
0		2		-	
Keep	License Manager	Maps	Notes	Photos	Play Movies & TV
🧑			R	R	\bigcirc
Play Music	Play Store	PTT Express	RxLogger	RxLoggerUtility	Settings
etter -	1				
Sound Recorder	StageNow	Update Package Test	VC Settings	Velocity	WorryFree WiFi

2. Slide the **APPS** window up or down to view more app icons. Touch an icon to open the app.

Switching Between Recent Apps

To switch between recent apps:

1. Touch . A window appears on the screen with icons of recently used apps.

Figure 27 Recently Used Apps

Contacts	×
DataWedge	×
Profile0 (default)	
Launcher	
DWDemo	

<u>t</u> • E			
	🚸 Photos		×
	Today		
	Settings		×
	a.	Media volume	
	Ö	Alarm volume	
	վ_ի	Notification volume	
	Battery Mana	ger	×
	Battery level: 77%		

- 2. Slide the window up and down to view all recently used apps.
- 3. Swipe left or right to remove app from the list and force close the app.
- 4. Touch an icon to open it or touch \triangleleft to return to the current screen.

Un-Locking the Screen

Use the Lock screen to protect access to data on the device. Some email accounts require locking the screen. Refer to the device Integrator Guide for Android Version 8.1 for information on setting up the locking feature.

When locked, a pattern, PIN, or password is required to unlock the device. Press the Power button to lock the screen. The device also locks after a pre-defined time-out.

Using the Device

Press and release the Power button to wake the device. The Lock screen displays. Swipe the screen up to unlock. If the Pattern screen unlock feature is enabled, the Pattern screen appears instead of the Lock screen. If the PIN or Password screen unlock feature is enabled, enter the PIN or password after unlocking the screen.











Using the Device



Figure 30 Pattern Screen





Figure 31 Password Screen



Using the Device



Transferring Files with a Host Computer via USB

Connect the device to a host computer using a USB cable or a USB cradle to transfer files between the device and the host computer.

When connecting the device to a host computer, follow the host computer's instructions for connecting and disconnecting USB devices, to avoid damaging or corrupting files.

Transferring Files

M

NOTE: Use Transfer files to copy files between the device (internal memory or microSD card) and the host computer.

1. Connect a USB cable to the device or place the device into a USB cradle.

 Pull down the Notification panel and touch USB charging this device. By default, Charge this device is selected.





- 3. Touch Transfer files.
- 4. On the host computer, open a file explorer application.
- 5. Locate the **device** as a portable device.
- 6. Open the SD card or the Internal storage folder.
- 7. Copy files to and from the device or delete files as required.

Transferring Photos

To transfer photos using Photo Transfer Protocol:



NOTE: Use Photo Transfer Protocol (PTP) to copy photos from either the microSD card or internal memory to the host computer.

- 1. Connect USB cable to the device or place the device into a USB cradle. See Accessories for setup information.
- 2. Pull down the Notification panel and touch USB charging this device.
- 3. Touch Transfer photos (PTP).
- 4. On the host computer, open a file explorer application.
- 5. Open the SD card or the Internal storage folder.
- 6. Copy or delete photos as required.

Disconnect from the Host Computer

To disconnect the device from the host computer:



CAUTION: Carefully follow the host computer's instructions to unmount the microSD card and disconnect USB devices correctly to avoid losing information.

- 1. On the host computer, unmount the device.
- 2. Remove the USB cable from the device or remove the device from the cradle.

Applications

Introduction

This section describes the applications installed on the device.

Camera

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



NOTE: The device saves photos and videos on the microSD card, if installed and the storage path is changed manually. By default, or if a microSD card is not installed, the device saves photos and videos on the internal storage.

Taking Photos



NOTE: See Photo Settings on page 57 for camera setting descriptions.

1. Swipe up from the bottom of the Home screen and touch Camera.



Figure 33 Camera Mode

- 2. If necessary, touch the Camera Mode icon and touch **o**.
- 3. To switch between the rear camera and front camera (if available), touch .
- 4. Frame the subject on the 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.
- 6. Touch an area on the screen to focus. The focus circle appears. The two bars turn green when in focus.
- 7. Touch (a).

The camera takes a photo and a shutter sound plays.

The photo momentarily displays as a thumbnail in the lower left corner.

Recording Videos

1. Swipe up from the bottom of the Home screen and touch Camera.

2. Touch the camera mode menu and touch \blacksquare .





Applications



Shutter Button

- 3. To switch between the rear camera and front camera (if available), touch .
- 4. Point the camera and frame the scene.
- 5. To zoom in or out, press two fingers on the display and pinch or expand fingers. The zoom controls appear on the screen.
- Touch

 to start recording.

 The video time remaining appears in the top left of the screen.
- Touch

 to the end recording.

 The video momentarily displays as a thumbnail in the lower left corner.

Photo Settings

In Photo mode, photo settings appear on screen. Touch 🏟 to display the photo settings options.

Applications

Rear Camera

- Flash Select whether the camera relies on its light meter to decide whether a flash is necessary, or to turn it on or off for all shots.
 - X Off Disable flash.
 - **F**^A Auto Adjust flash automatically depending upon light meter (default).
 - **7** On Enable flash upon taking a photo.
 - **Torch** Turn flash on continuously.
- Picture size The size (in pixels) of the photo to: 13M pixels (default), 8M pixels, 5M pixels, 3M pixels, HD 1080, 2M pixels, 1.3M pixels, HD720, 1M pixels, WVGA, VGA or QVGA.
- Picture quality Set the picture quality setting to: Low, Standard (default) or High.
- Countdown timer Select Off (default), 2 seconds, 5 seconds or 10 seconds.
- Storage Set the location to store the photo to: Phone or SD Card.
- Face Detection Select to turn face detection Off (default) or On.
- ISO Set camera sensitivity to light to: Auto (default), ISO Auto (HJR), ISO100, ISO200, ISO400, ISO800 or ISO1600.
- Exposure Set the exposure settings to: +2, +1, 0(default), -1 or -2.
- White balance Select how the camera adjusts colors in different kinds of light, to achieve the most natural-looking colors:
 - **Incandescent** Adjust the white balance for incandescent lighting.
 - # Fluorescent Adjust the white balance for florescent lighting.
 - **5**^A Auto Adjust the white balance automatically (default).
 - **Daylight** Adjust the white balance for daylight.
 - Cloudy Adjust the white balance for a cloudy environment.
- Chroma Flash Sets the camera to take two pictures, one with flash and one without flash. The two
 images are combined to produce a final image with the sharpness and clarity and bright color tones from a
 picture with the flash, coupled with the natural colors of a picture without a flash. Options: Off (default) or
 On.
- Redeye reduction Helps eliminate redeye effect. Options: Disabled (default), or Enable.
- Focus mode Set the camera focus to CAF (Continuous Auto Focus).
- Focus mode Touch to select the camera focus setting. Options: Auto, Infinity, Macro or CAF (Continuous Auto Focus) (default). ZSL option must be set to Off.
- ZSL Set the camera to immediately take a picture when the button is pressed (default enabled).
- Anti Banding Allows the camera to avoid problems caused by artificial light sources that are not constant. These sources cycle (flicker) fast enough to go unnoticed to the human eye, appearing continuous. The camera's eye (its sensor) can still see this flicker. Options: Auto (default), 60 Hz, 50 Hz, or Off.

Front Camera

- Selfie Flash Turns screen white to help produce a little extra light in dimmer settings. Options: Off (default), or On.
- Picture size Set the size (in pixels) of the photo to: 5M pixels (default), HD720, 1M pixels, WVGA, VGA, or QVGA.
- Picture quality Set picture quality setting to: Low, Standard (default) or High.

- Countdown timer Set to: Off (default), 2 seconds, 5 seconds or 10 seconds.
- Storage Set location to store the photo to: Phone or SD Card.
- Face Detection Select to turn face detection Off (default) or On.
- ISO Set how sensitive the camera is to light. Options: Auto (default), ISO Auto (HJR), ISO100, ISO200, ISO400, ISO800 or ISO1600.
- Exposure Touch to adjust the exposure settings. Options: +2, +1, 0 (default), -1 or -2.
- White balance Select how the camera adjusts colors in different kinds of light, to achieve the most natural-looking colors:
 - **a Incandescent** Adjust the white balance for incandescent lighting.
 - # Fluorescent Adjust the white balance for florescent lighting.
 - **^C** Auto Adjust the white balance automatically (default).
 - Daylight Adjust the white balance for daylight.
 - Cloudy Adjust the white balance for a cloudy environment.
- Redeye reduction Helps eliminate redeye effect. Options: Disabled (default), or Enable.
- ZSL Set the camera to immediately take a picture when the button is pressed (default enabled)
- Selfie Mirror Options: Disable (default), or Enable.
- Anti Banding Allows the camera to avoid problems caused by artificial light sources that are not constant. These sources cycle (flicker) fast enough to go unnoticed to the human eye, appearing continuous. The camera's eye (its sensor) can still see this flicker. Options: Auto (default), 60 Hz, 50 Hz, or Off.

Video Settings

In Video mode, video settings appear on screen. Touch 🏟 to display the video settings options.

Rear Camera

- Flash Select whether Rear-facing Camera relies on its light meter to decide whether a flash is necessary, or to turn it on or off for all shots.
 - X Off Disable flash (default).
 - **Torch** Turn flash on continuously.
- Video quality Set video quality to: HD 1080p (default), HD 720p, or SD 480p.
- Video duration Set to: 30 seconds (MMS), or 30 minutes (default).
- Storage Set the location to store the photo to: Phone (default) or SD Card.
- White balance Select how the camera adjusts colors in different kinds of light, to achieve the most natural-looking colors.
 - **Incandescent** Adjust the white balance for incandescent lighting.
 - # Fluorescent Adjust the white balance for florescent lighting.
 - **⁶ Auto** Adjust the white balance automatically (default).
 - Daylight Adjust the white balance for daylight.
 - **Cloudy** Adjust the white balance for a cloudy environment.
- Image Stabilization Set to reduce blurry videos due to device movement. Options: On or Off (default).

Front Camera

- Video quality Set video quality to: HD1080HD 720p (default), HD720, or SD 480p.
- Video duration Set to: 30 seconds (MMS) or 30 minutes (default).
- Storage Set the location to store the photo to: Phone (default) or SD Card.
- White balance Select how the camera adjusts colors in different kinds of light, to achieve the most natural-looking colors.
 - **Incandescent** Adjust the white balance for incandescent lighting.
 - # Fluorescent Adjust the white balance for florescent lighting.
 - **J**^A Auto Adjust the white balance automatically (default).
 - Taylight Adjust the white balance for daylight.
 - **Cloudy** Adjust the white balance for a cloudy environment.
- Image Stabilization Set to reduce blurry videos due to device movement. Options: On or Off (default).

Contacts

Use the **Contacts** app to manage contacts.

From a Home or Apps screen, touch **Contacts** to open to the main list of contacts. Contacts are listed in alphabetical order. Swipe up or down to scroll through the list.

Adding a Contact

- 1. In the **Contacts** app, touch 😶.
- 2. If there are more than one account with contacts, touch the one to use.
- 3. Type the contact's name and other information. Touch a field to start typing, and swipe down to view all categories.
- 4. To open a menu with preset labels, such as Home or Work for an email address, touch the label to the right of the item of contact information. Or, to create your own label, touch **Custom** in the menu.
- 5. Touch the check mark next to Add New Contact.

Editing Contacts

- 1. In the Contacts app, touch a contact name to edit.
- 2. Touch 🆍.
- 3. Edit the contact information.
- 4. Touch SAVE.

Deleting Contacts

- 1. In the **Contacts** app, touch a contact name to delete.
- 2. Touch .

- 3. Touch Delete.
- 4. Touch **DELETE** to confirm.

DataWedge Demonstration



NOTE: DataWedge is enabled on the Home screen. To disable this feature, go to the DataWedge settings and disable the **Launcher** profile.

Use DataWedge Demonstration to demonstrate data capture functionality.

Figure 35 DataWedge Demonstration Window



Applications

				🕈 💙 🗎 2:05 РМ
📴 DataWedge	Demonstration			
× 7		*		
		\triangleleft	0	

Table 8 DataWedge Demonstration Icons

	lcon	Description
Illumination	4	Imager illumination is on. Touch to turn illumination off.
	×	Imager illumination is off. Touch to turn illumination on.
Data Capture		The data capture function is through the internal imager.
Data Capture		Indicates a USB scanner is connected to the device.
	₩.	Indicates a USB scanner is not connected to the device.

Table 8	DataWedge	Demonstration	Icons ((Continued)
---------	-----------	---------------	---------	-------------

	lcon	Description
	*	An RS507 or RS6000 Bluetooth imagerBluetooth scanner is connected.
	*	An RS507 or RS6000 Bluetooth imagerBluetooth scanner is not connected.
	Ō	The data capture function is through the rear camera.
Scan Mode		Imager is in picklist mode. Touch to change to normal scan mode.
		Imager is in normal scan mode. Touch to change to picklist mode.
		Opens a menu to view the application information or to set the application DataWedge profile.



NOTE: See the device Integrator Guide for Android Version 8.1 for information on DataWedge configuration.

Scanner Selection

To select a scanner, touch > Settings > Scanner selection.

Either press the programmable button or touch the yellow scan button to capture data. The data appears in the text field below the yellow button. Touch the Data Capture icon to select the data capture mode.

Press the scanner trigger button or touch the on-screen yellow scan button to capture data. The data appears in the text field below the yellow button.

Diagnostic Tool

The **Diagnostic Tool** is a utility that determines the health of the device. Use the Diagnostic Tool to troubleshoot the device.

1. Swipe up from the bottom of the Home screen and touch Q.

Figure 36 Diagnostic Tool

	:
TEST NOT RUN	
DUNITOT	1.
RUN TEST	~

2. Touch **RUN TEST**. The app tests all enabled subsystems (by default, only System tests). See Settings on page 68 to enable subsystem tests.

Figure 37 Test Passed Screen

Diagnostic Tool	:
×	
CONGRATULATIONSI YOUR DEVICE IS READY TO USE!	
RUN TEST	
SUBSYSTEM TESTS	>

Figure 38 Test Failed Screen



3. To view each subsystem test, touch **Subsystem Tests**.

Figure 39	Subsystem Screer
-----------	------------------

← Diagnostic Tool		
Subsystems		
Subsystem	R	esult
BATTERY	>	$ \checkmark $
GPS	>	×
SYSTEM	>	~
WLAN	>	×
WWAN	>	×
BLUETOOTH	>	×

Table 9 Subsystem Test Result Indicators

Status Icon	Description
 Image: A start of the start of	Test passed.
×	Test failed.
×	Test not supported or not enabled.

4. Touch one of the subsystems to view details.

Settings

By default only System tests are enabled. To enable other tests:

- 1. Touch > Settings.
- 2. Touch to the left of the test name. A green box with a checkmark appears.
- 3. Touch SAVE.
- 4. Touch Yes to confirm.
- 5. Touch

System Test Information

Use the System Test to determine if the CPU or memory loads are too high, there are too many processes running on the device, or storage on the device is almost full.

The System Test obtains the following information:

- CPU Load Amount of CPU being used
- · Free Physical Memory Amount of RAM available
- · Free Storage Amount of internal Flash memory available
- Process Count Number of processes currently running.

WLAN Test Information

If the WiFi radio is not present or disabled, skip this test. This test determines if the device's WLAN configuration is correct or whether there is any connection with an access point or network.

The WLAN test obtains the following information:

- WLAN Enabled WLAN radio is enabled or disabled
- · WLAN Status Current status of association with the access point
- ESSID Name of the wireless network
- BSSID MAC address of the connected access point
- MAC Address Device's MAC address
- Signal Strength of the Wi-Fi signal (in dBm)
- **IP Address** IP address of the device.

Bluetooth Test Information

The Bluetooth Test obtains the following information:

- Enabled Whether the Bluetooth radio is enabled or disabled
- Status Whether the device is paired to another Bluetooth device
- Connectable/Discoverable Whether the device is discoverable or able to connect
- Address Bluetooth radio MAC address
- **Name** Bluetooth name for the device.

Files

Use the **Files** app to view and manage files on the device.

To open **Files**, swipe up from the bottom of the screen and touch **O**.

Figure 40 Files Screen



Applications

Touch and hold an item to open the File Operations menu. Select an option:

						9:3	BO AM
Dowr	loads				۹		
	Images				Мо	dified	~
	Videos						
0	Audio						
0	Recent						
±	Downloads			-			
	VC80x 22.20 GB free			-			
ψ	General USB drive						
4	Drive jczebrav80@gmail.com						
6-	Zebra Folders			No itama			
				No items			
		\bigtriangledown	0				

- < Share the file with other devices.
- 📋 Delete the file.
- • View additional options.
 - Open with Select which app is used to open the file.
 - Select all Select all folders and files.
 - Copy to... Copy the file.
 - Move to... Move the file or folder to a new location.
 - Compress Compress the selected file(s) into a ZIP file.
 - **Rename** Rename the file.
- Touch the Sort drop-down to sort files by name, type, size, or date.
- ____ View all file locations.
- Q Search for a specific file on the device.
- ■ / - Change the folder to display items as a list / grid.
- • Open the options menu.
 - New Window Create a new Files window.
 - New Folder Create a new folder.
 - Select all Select all folders and files.
 - Show/Hide internal storage Show or hide internal storage.

Gallery



NOTE: The device supports the following image formats: jpeg, gif, png and bmp. The device supports the following video formats: H.263, H.264 and MPEG4 Simple Profile. Available on device with AOSP only.

Use 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.

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

To open **Gallery**, swipe up from the bottom of the Home screen and touch **Gallery**, or in the camera app touch the thumbnail image at the bottom left.

By default, **Gallery** opens to the **Timeline** view.

Figure 41 Gallery - Timeline View



Touch \equiv > Albums to view photos sorted by albums or \equiv > Videos to view only videos.

Figure 42 Gallery — Albums View



- Touch an album to open it and view its contents. The photos and videos in the album are displayed in chronological order.
- Touch a photo or video in an album to view it.
- Touch = > Timeline to return to the default Gallery screen.
Working with Albums

Albums are groups of images and videos in folders. Touch 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.

Figure 43 Photos Inside an Album



Swipe up or down to scroll through the images.

Sharing an Album

- 1. Swipe up from the bottom of the Home screen and touch **Gallery**.
- 2. Touch and hold an album to highlight it.
- 3. Touch other albums as required.
- 4. Touch <. The Share menu opens.
- 5. Touch the app to use to share the selected albums.
- 6. Follow the instructions within the selected app.

Getting Album Information

- 1. Swipe up from the bottom of the Home screen and touch Gallery.
- 2. Touch and hold an album to highlight it.
- 3. Touch .
- 4. Touch Details.

Deleting an Album

To delete an album and its contents:

- 1. Swipe up from the bottom of the Home screen and touch **Gallery**.
- 2. Touch and hold an album to highlight it.
- 3. Check other albums to delete.
- 4. Touch 📋.
- 5. In the **Delete selected item?** menu, touch **OK** to delete the album.

Working with Photos

Use Gallery to view photos on the device and edit and share photos.

Viewing and Browsing Photos

To view a photo:

- 1. Swipe up from the bottom of the Home screen and touch **Gallery**.
- 2. Touch an album to open it.
- 3. Touch a photo.

Figure 44 Photo Example



- 4. Swipe left or right to view the next or previous photo in the album.
- 5. Turn the device to view the photo in upright (portrait) or sideways (landscape) orientation. The photo is displayed (but not saved) in the new orientation.
- 6. Touch the photo to view the controls.

Applications

- 7. Double-tap the screen to zoom in or pinch two fingers together or spread them apart to zoom in or out.
- 8. Drag the photo to view parts that are not in view.

Cropping a Photo

- 1. In Gallery, touch a photo to view the controls.
- 2. Touch ✓ > ↓ > ↓. The cropping tool appears.
- 3. Use the cropping tool to select the portion of the photo to crop.
 - Drag from the inside of the cropping tool to move it.
 - Drag an edge of the cropping tool to resize it to any proportion.

Figure 45 Cropping Tool



4. Touch \checkmark > **SAVE** to save a copy of the cropped photo. The original version is retained.

Setting a Photo as a Contact Icon

- 1. Swipe up from the bottom of the Home screen and touch Gallery.
- 2. Touch an album to open it.
- 3. Touch a photo to open it.
- 4. Touch .
- 5. Touch Set picture as.
- 6. Touch Contact photo.
- 7. In Contacts, touch a contact.
- 8. Touch the white box and crop the photo accordingly.

9. Touch SAVE.

Sharing a Photo

- 1. Swipe up from the bottom of the Home screen and touch Gallery.
- 2. Touch an album to open it.
- 3. Touch a photo to open it.
- 4. Touch <
- 5. Touch the app to use to share the selected photo.
- 6. Follow the instructions within the selected app.

Deleting a Photo

- 1. Swipe up from the bottom of the Home screen and touch Gallery.
- 2. Touch an album to open it.
- 3. Touch a photo to open it.
- 4. Touch 📋.
- 5. Touch **OK** to delete the photo.

Working with Videos

Use Gallery to view and share videos.

Watching Videos

- 1. Swipe up from the bottom of the Home screen and touch Gallery.
- 2. Touch an album to open it.
- 3. Touch a video.
- 4. Touch 💽 to play.
- 5. Touch the screen to view the playback controls.

Sharing a Video

- 1. Swipe up from the bottom of the Home screen and touch Gallery.
- 2. Touch an album to open it.
- 3. Touch a video to open it.
- 4. Touch <. The Share menu appears.
- 5. Touch the app to use to share the selected video.
- 6. Follow the instructions within the selected app.

Deleting a Video

- 1. Swipe up from the bottom of the Home screen and touch **Gallery**.
- 2. Touch an album to open it.
- 3. Touch a video to open it.
- 4. Touch 📋.
- 5. Touch OK.

Photos



NOTE: The device supports the following image formats: jpeg, gif, png, and bmp.

The device supports the following video formats: H.263, H.264, and MPEG4 Simple Profile.

Available on device with GMS only.

Use Photos to:

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

Photos presents all photos and videos stored on the microSD card and internal memory.

To open **Photos**, swipe up from the bottom of the Home screen and touch **Photos**.

By default, **Photos** opens to the photos view.

Figure 46 Photos View



Touch **Albums** to view photos sorted by albums.



Ξ	Search	your pho	tos	2	כ	:
			all			24
People		Place	s		Thin	gs
	. Mary	the star				
Camera						

- Touch an album to view its contents. The photos and videos in the album appear in chronological order.
- Touch a photo or video in an album to view it.
- Touch \leftarrow to return to the main screen.

Working with Albums

Albums are groups of images and videos in folders. Touch 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.

Figure 48 Photos Inside an Album



Swipe up to scroll through the images.

Sharing an Album

- 1. Swipe up from the bottom of the Home screen and touch **Photos**.
- 2. Touch Albums.
- 3. Touch an album.
- 4. Touch > Select.
- 5. Select all photos in the album.
- 6. Touch <. The Share menu opens.
- 7. Touch an app to share the selected albums.
- 8. Follow the instructions within the selected app.

Deleting an Album

To delete an album and its contents:

- 1. Swipe up from the bottom of the Home screen and touch **Photos**.
- 2. Touch Albums.
- 3. Touch an album.

- 4. Touch > Select.
- 5. Select all photos in the album.
- 6. Touch 📋.
- 7. Touch Move to trash to delete the album.

Working with Photos

Use Photos to view photos on the internal memory and the microSD card.

Viewing and Browsing Photos

- 1. Swipe up from the bottom of the Home screen and touch **Photos**.
- 2. Touch a photo.

Figure 49 Photo Example



- 3. Swipe left or right to view the next or previous photo in the album.
- 4. Turn the device to view the photo in upright (portrait) or sideways (landscape) orientation. The photo is displayed (but not saved) in the new orientation.
- 5. Touch the photo to view the controls.
- 6. Double-tap the screen to zoom in, or pinch two fingers together or spread them apart to zoom in or out.
- 7. Drag the photo to view parts that are not in view.

Cropping a Photo

- 1. Swipe up from the bottom of the Home screen and touch **Photos**.
- 2. Touch a photo to view the controls.

3. Touch \neq > U. The cropping tool appears.



- 4. Use the cropping tool to select the portion of the photo to crop.
 - Drag from the inside of the cropping area to move it.
 - Drag an edge of the cropping area to resize it to any proportion.
- 5. Touch DONE.
- 6. Touch **SAVE** to save a copy of the cropped photo. The original version is retained.

Setting a Photo as a Contact Icon

- 1. Swipe up from the bottom of the Home screen and touch **Photos**.
- 2. Touch the photo to open it.
- 3. Touch > Use as.
- 4. Touch Contact photo.
- 5. In the **Contacts** app, touch a contact.
- 6. Touch the white box and crop the photo accordingly.
- 7. Touch Done.

Sharing a Photo

- 1. Swipe up from the bottom of the Home screen and touch **Photos**.
- 2. Touch an album to open it.
- 3. Touch a photo to open it.

- 4. Touch <
- 5. Touch the app to use to share the selected photo.
- 6. Follow the instructions within the selected app.

Deleting a Photo

- 1. Swipe up from the bottom of the Home screen and touch Photos.
- 2. Touch a photo to open it.
- 3. Touch 🔳.
- 4. Touch **MOVE TO TRASH**.

Working with Videos

Use **Photos** to view and share videos.

Watching a Video

- 1. Swipe up from the bottom of the Home screen and touch Photos.
- 2. Touch a video to play.
- 3. Touch the screen to view the playback controls.

Sharing a Video

- 1. Swipe up from the bottom of the Home screen and touch Photos.
- 2. Touch a video to open it.
- 3. Touch <. The Share menu appears.
- 4. Touch the app to use to share the selected video.
- 5. Follow the instructions within the selected app.

Deleting a Video

- 1. Swipe up from the bottom of the Home screen and touch Photos.
- 2. Touch a video to open it.
- 3. Touch 👕.
- 4. Touch MOVE TO TRASH to delete the video.

PTT Express Voice Client



NOTE: PTT Express Voice Client enables Push-To-Talk (PTT) communication between disparate enterprise devices. Leveraging existing Wireless Local Area Network (WLAN) infrastructure, PTT Express delivers simple PTT communication without requiring voice communication server.

- Group Call: Press and hold the PTT (Talk) button to start communicating with other voice client users.
- **Private Response**: Double-press the PTT button to respond to the originator of the last broadcast or to make a Private Response.

PTT Express User Interface

	2.48 PM	
PTT Express		— Settings
Service Enabled		 Enable/Disable Switch
1	2	
3	4	
5	6	
7	8	
9	10	
11	12	
13	14	
15	16	
17	18	
19	20	
	PTT Express Service Enabled 1 3 3 5 7 7 9 7 9 11 13 13 15 15 17 17 19	PTT Express Service Enabled Image: Comparison of the compa

Figure 51 PTT Express Default User Interface

Table 10	PTT Express Default User Interfa	ace Descriptions
----------	----------------------------------	------------------

Item	Description
Notification Icon	Indicates the current state of the PTT Express client.
Service Indication	Indicates the status of the PTT Express client. Options: Service Enabled, Service Disabled or Service Unavailable.
Talk Groups	Lists all 32 Talk Groups available for PTT communication.
Settings	Opens the PTT Express Settings screen.
Enable/Disable Switch	Turns the PTT service on and off.

PTT Audible Indicators

The following tones provide helpful cues when using the voice client.

- **Talk Tone**: Double chirp. Plays when the Talk button is depressed. This is a prompt for the user to start talking.
- Access Tone: Single beep. Plays when another user just finished a broadcast or response. The user is now able to initiate a Group Broadcast or Private Response.
- **Busy Tone**: Continuous tone. Plays when the Talk button is depressed and another user is already communicating on the same talkgroup. Plays after the maximum allowed talk time is reached (60 seconds).
- Network Tone:
 - Three increasing pitch beeps. Plays when PTT Express acquires the WLAN connection and the service is enabled.
 - Three decreasing pitch beeps. Plays when PTT Express loses the WLAN connection or the service is disabled.

PTT Notification Icons

Notification icons indicate the current state of the PTT Express Voice client.

Status Icon	Description
Ż	The PTT Express Voice client is disabled.
₽	The PTT Express Voice client is enabled but not connected to a WLAN.
() ¹	The PTT Express Voice client is enabled, connected to a WLAN, and listening on the Talk Group indicated by the number next to the icon.
,∎¹)))	The PTT Express Voice client is enabled, connected to a WLAN, and communicating on the Talk Group indicated by the number next to the icon.
	The PTT Express Voice client is enabled, connected to a WLAN, and in a private response.
Š	The PTT Express Voice client is enabled and muted.
<u> </u>	The PTT Express Voice client is enabled but it is not able to communicate due to a VoIP telephony call in progress.

Table 11 PTT Express Icon Descriptions

Enabling PTT Communication

1. Swipe up from the bottom of the Home screen and touch **M**.

2. Slide the Enable/Disable Switch to the ON position. The button changes to ON.

Selecting a Talk Group

One of 32 Talk Groups can be selected by PTT Express users. However, only one talk group may be enabled at a time on the device. Touch one of the 32 Talk Groups. The selected Talk Group is highlighted.

Creating a Group Call

1. Press and hold the PTT button (or the Talk button on the headset) and listen for the talk tone.

If you hear a busy tone, release the button and wait a moment before making another attempt. Ensure that PTT Express and the WLAN are enabled.

2. Start talking after hearing the talk tone.



NOTE: Holding the button for more than 60 seconds (default) drops the call, allowing others to make Group calls. Release the button when finished talking to allow others to make calls.

Responding with a Private Response

The Private Response can only be initiated once a Group Call has been established. The initial Private Response is made to the originator of the Group Call.

- 1. Wait for an access tone.
- 2. Within 10 seconds, double-press the PTT button, and listen for the talk tone.
- 3. If you hear a busy tone, release the button and wait a moment before making another attempt. Ensure that PTT Express and the WLAN are enabled.
- 4. Start talking after the talk tone plays.
- 5. Release the button when finished talking.

Disabling PTT Communication

- 1. Swipe up from the bottom of the Home screen and touch 暴.
- 2. Slide the Enable/Disable Switch to the OFF position. The button changes to OFF.
- 3. Touch O.

RxLogger

RxLogger is a comprehensive diagnostic tool that provides app and system metrics. Create custom plug-ins that work seamlessly with this tool. RxLogger diagnoses device and application issues, and tracks information for: CPU load, memory load, memory snapshots, power states, wireless logging, cellular logging, TCP dumps, Bluetooth logging, logcat, ANR dumps, etc. All logs and files generated are saved in flash storage on the device (internal or external).

Figure 52 RxLogger



RxLogger Utility

RxLogger Utility is a data monitoring application for viewing logs in the device while RxLogger is running. Access the logs and RxLogger Utility features in the App View or the Overlay View.

In the App View, view logs in the RxLogger Utility.

Figure 53 RxLogger Utility App View



Refer to the device Integrator Guide for detailed information on the RxLogger Utility.

SimulScan Demo

The SimulScan Demo app is an out of the box demonstration app, included on devices that support SimulScan.

The SimulScan Demo app includes the following:

- Postal, Transportation and Logistics Example Demonstrate the Optical Character Recognition (OCR) and Optical Mark Recognition (OMR) features.
- Manufacturing Example Demonstrate the MultiCode 20 feature.
- Demo Customization Create a template using the Template Builder or use a default template. Test templates on the device.

Figure 54 SimulScan Demo Home Screen



Printing the Sample Forms

In order to perform the Postal, Transportation & Logistics or Manufacturing demonstrations, print the example forms stored on the device.

- 1. Launch SimulScan Demo application.
- 2. On the SimulScan Demo home screen, touch HOW TO USE THIS DEMO.
- 3. Scroll down and touch **Export sample forms** button. The device copies the forms to the \si mul scan\samples folder in Internal Storage.
- 4. Connect the device to a computer using the USB Charging cable.
- 5. Copy the files from the \si mul scan\samples folder in Internal Storage to the computer.
- 6. Print the forms.

Using the Postal, Transportation and Logistics Example

1. Print the Postal, Transportation and Logistics form. See Printing the Sample Forms on page 90.

Figure 55 Postal, Transportation and Logistics Form

POSTAL/T&L.	Shipment Air Waybill (Non negotiable)		
1 Payer account number and insurance details	2 Non-Document Shipmen	ts Only (Customs Requirements)	123456-789A
Charge of Shipper Roceiver 3rd party Not all payment options are available in all countries. Payer Account No. 001-12349876	Shipper's VAT/GST number 564451112	Receiver's VAT/GST or Shipper's EIN/SSN 1111577738	Harmonised Commodity Code if applicable
Shipment Insurance see reverse If Yes Insurance value (in local currency) 1400	Destination duties/taxes If left blank receiver pays duties/taxes Peosiver Shipper Other specify approval account number		Declared Value for Customs (bis an commercial/proforms invoice) an uniter
3 From (Shipper)	4 To (Beceiver)	00	5 Shinner's anreement
	and the second s		a complete a signation of the
Shipper's account number 155–22263	Company name TFW Sc	olutions	Signature required; Unless otherwise agreed in writing, Iwe agree to I Terms and Conditions of Carriage between makes
Shipper's account number 155-22263 Campany name Pure Theory Ltd	Company name TFW Sc Delivery address Solva	We cannot deliver to a PO Box	Signature required Signature required Unless of threwes approach is writing, Jew agree fo th Terms and Contributes of Carriage between makes and (1) such Roma and Conditions and, where applicable, the Convention Arrits and/or exclusions ababity for Arise, dumaing or dialy and (2) this shipment does not contain cash or dengenous goods tips or versue).
Shipper's account number 155-22263 Company name Pure Theory Ltd Address 163B Landsdown Drive	Company name TFW So Delivery address Solva Travban 12A 64 Bi	We cannot deliver to a PO Box Illa eplan romma	Complex or signed with the second sec
Shipper's account number 155-22263 Company name Pure Theory Ltd Address 163B Landsdown Drive Piterrovia, London England WC2 1AB	Company name TFW Sc Delivery address Solva Travban 12A 64 Br Postcode/Zip Code (required) 286 32	Vecanot deliver to a POBox Illa eplan roomma Country Sweden	Compare drag economic Compare drag economic Compare and the setting care age of the Compare drag economic of the setting care age of the compared of the setting care age of the compared of the setting care age of the compared of the setting care age compared of the setting

- 2. Place the form on a flat surface.
- 3. On the device, launch SimulScan Demo app.
- 4. Touch the Menu icon in the top right corner of the screen.
- 5. Touch Postal, Transportation & Logistics.
- 6. Touch Start SimulScan.

7. Use the image control at the bottom of the screen to control the flash, audio and zoom level.





- 8. Position the camera over the form. Ensure that the complete border of the form is visible on the screen.
- 9. Hold the device steady.
- 10. Once the device detects the form Tap Screen to Scan appears on the screen.
- 11. Tap the screen to start the data capture. When completed, the device beeps and the data from the form displays.





12. Touch the text boxes to correct any errors. Note: if there are too many errors, touch **Rescan** to perform the capture again.

13. Touch Accept to confirm the data is correct. The Results summary screen appears.

14. Touch OK.

Using the Manufacturing Example

1. Print the Manufacturing form. See Printing the Sample Forms on page 90.

Figure 58 Manufacturing Form

.o	MSI reader	<5 kgs MV unit
	261-69	SUPPLIER (M) V4305156059
QUANTITY (Q) 000128	PKG1D/SERIAL NUMBER (15) 1 SX 1000 1 1 4	MADE IN MEXICO
		MANUFACTURING LTD

- 2. Place the form on a flat surface.
- 3. On the device, launch SimulScan Demo app.
- 4. Touch the **Menu** icon in the top right corner of the screen.
- 5. Touch Manufacturing.
- 6. Touch Start SimulScan.
- 7. Point the top of the device at the document and center the target on the document.
- 8. Hold the device steady.

9. The device starts the data capture. When completed, the device beeps and the data from the document displays.

Figure 59 Manufacturing Data

Field	Parsed Data
Part Number	P5290261-69
🗒 Supplier	V4305156059
📕 Quantity	Q000128
Serial Number	1SX1000114
- Country	

- 10. Touch the text boxes to correct any errors. If there are too many errors, touch **Rescan** to perform the capture again.
- 11. Touch Accept to confirm the data is correct. The Results summary screen appears.

12. Touch OK.

Creating a Demo Customization

Before creating a customized demo, first:

- Create a template using the Template Builder tool.
- Copy a company logo and image to the device storage location.
- 1. Touch Menu icon.
- 2. Touch Setup Custom Demo.

Figure 60 C	ustom Demo	Setup	Screen
-------------	------------	-------	--------

Title	\star 🗎 4:17
Name	
Custom Demo	
Custom Demo Setu	p
Custom Demo	
lmage	Logo
Image.jpg	Logo.jpg
Introduction	
Whether capturin delivery sheets, or inventory tabl Document Captu	ng multiple barcodes, distribution manifests les, SimulScan ıre saves you hours.
Header Color	icon color
Cancel	Done

- 3. In the Name text box, enter a name for the custom demo that appears in the drop-down menu.
- 4. In the **Custom Demo Setup** text box, enter a title for the demo that appears in the demo screen title box.
- 5. Touch the **Image** field to select an image from the SD card.
- 6. Touch the Logo field to select the logo image from the SD card.
- 7. In the Introduction text box, enter text that appears on the demo screen.
- 8. In the **Header color** text box, enter the hex color value for the header.
- 9. In the Icon color text box, enter the hex color value for Menu icon and button text.
- 10. In the Key Features text box, enter text that appears in bullet format under the Key Feature heading.
- 11. Touch one of the SimulScan Document Capture Template fields to select a template
 - a. Browse external storage select a template loaded on the device.
 - b. Default templates select one of the default templates.
 - c. Select from server select a template from the SimulScan server.
- 12. Touch **Done**. The customized example appears on the screen.
- 13. Touch Start SimulScan to begin the demonstration.

Default Templates

The following templates are available:

- **Default BankCheck.xml** Reads the MICR E-13B font (length between 19 and 40 characters) on bank checks.
- **Default Barcode 1.xml** Reads a single supported bar code.
- Default Barcode 10.xml Reads up to 10 supported bar codes.
- Default Barcode 2.xml Reads two supported bar codes.
- Default Barcode 4.xml Reads up to supported four bar codes.
- **Default Barcode 5.xml** Reads up to supported five bar codes.
- Default BookNumber.xml Reads the OCR-B ISBN 10 or 13 digit book numbers.
- **Default DocCap + Optional Barcode** Captures a full page image and decode any supported bar codes that are in the form. The captured area is the largest rectangular region in the field of view defined by the solid border or contrast of background. Any OCR or OMR content will not be decoded in this mode. The captured area is further processed to correct, de-skew and sharpen and returned as a picture.
- **Default DocCap + Required Barcode** Captures a full page image and decode of any supported bar codes that are present in the form. The captured area is the largest rectangular region in the field of view defined by the solid border or contrast of background. Any OCR or OMR content will not be decoded in this mode. The captured area is further processed to correct, de-skew and sharpen and returned as a picture.
- Default TravelDoc.xml Reads passport and Visa travel documents with OCR-B types A and B fonts.
- Default Unstructured Multi-Line Reads up to seven lines of text.
- Default Unstructured Single Line Reads a single line of text.

Settings

To set the settings for the SimulScan Demo application touch Menu icon > Settings.

Settings	
Volume on	
Haptic ON	
Debug mode OFF	
Template server log	gin credentials
Username	
Password	
Cancel	Save

Figure 61 Settings Screen

- Volume Toggle switch to turn audible notification on and off.
- **Debug mode** Toggle switch to enable or disable debug mode.
- Template server login credentials enter credentials for accessing the template server.

Advanced Settings

Use the Advanced setting to configure data capture options. In the data capture screen, touch 📃 in the bottom right corner of the screen.

Figure 62 Advanced Settings Screen



- Identification Timeout Set the amount of time to wait before timing out identifying the target document. Options: 2 seconds, 5 seconds, 10 seconds, 15 seconds, 20 seconds or 25 seconds.
- **Processing Timeout** Once the target document is identified, amount of time to wait before timing out processing.
- Audio Feedback Turn on or off audio feedback on successful parse.
- LED Feedback Turn on or off LED feedback on successful parse.
- **Debug Mode** If enabled, allows a session to write form capture, region images, region values, and other data to storage. Use only when directed by administrator.
- Auto Capture Set to On to automatically capture forms when detected. Set to Off to manually capture forms when user taps screen or presses a trigger button.
- Image Correction Turn on when document is crumpled or curved and requires advanced image correction.
- Capture Sensitivity Increase sensitivity for increased document identification accuracy before processing.
- About Displays the SimulScan Engine version number.
- Quit Scanner Exit Advanced Settings screen.

Sound Recorder

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

Recordings are saved on the microSD card (if installed) or the internal storage and are available in the Music application (non-GMS devices) or the Play Music application (GMS devices).



Record your message	I
00:00 Press Record	
Record your message	
00:00 Press Record	

Touch to open options menu.

Applications

- File type Select the file type for the recording file.
 - AMR
 - 3GPP
 - AAC
 - WAV
 - AMR-WR
 - AMR-WB-3GPP.
- Storage location Select the location for the recording file.
 - Phone storage
 - SD card.

Wireless

Introduction

This section provides information on the wireless features:

- Wireless Local Area Network (WLAN)
- Bluetooth
- Near Field Communications (NFC CC6000 Only)

Sharing the Mobile Data Connection

The **tethering & portable hotspot** settings allows sharing the mobile data connection with a single computer via USB tethering or Bluetooth tethering. 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 displays at the top of the screen and a corresponding message appears in the notification list.

Enabling Bluetooth Tethering

Use Bluetooth tethering to share the data connection with a host computer.

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

- 1. Pair the device with the host computer.
- 2. Swipe down from the Status bar to open the Quick Access panel and then touch **\$**.
- 3. Touch Networking & Internet.
- 4. Touch Hotspot & tethering.
- 5. Touch the Bluetooth tethering switch to enable.

The host computer is now sharing the device's data connection.

To stop sharing the data connection, touch the **Bluetooth tethering** switch again.

Enabling Wi-Fi Hotspot

To enable the Wi-Fi Hotspot:

- 1. Swipe down from the Status bar to open the Quick Access panel and then touch **\$**.
- 2. Touch Network & Internet.

- 3. Touch Hotspot & tethering.
- 4. Touch the Wi-Fi hotspot switch to enable.

After a moment, the device starts broadcasting its Wi-Fi network name (SSID). Connect to it with up to eight computers or other devices. The Hotspot icon appears in the Status bar.

 \bigcirc

To stop sharing the data connection, touch the Portable Wi-Fi hotspot switch again.

Configuring the Wi-Fi Hotspot

- 1. Swipe down from the Status bar to open the Quick Access panel and then touch **\$**.
- 2. Touch Network & Internet.
- 3. Touch Hotspot & tethering.
- 4. Touch Set up Wi-Fi hotspot.

Figure 64	Set up	Wi-Fi	Hotspot	Dialog	Box

Set up Wi-Fi hotspot		
Network name		
AndroidAP_7412		
Security		
WPA2 PSK		*
Password		
The password must have at least 8 characters.		
Show password		
Select AP Band		
2.4 GHz Band		*
Select Hotspot timeout		
		*
	CANCEL	SAVE

- 5. In the Network name text field, edit the name for the hotspot.
- 6. Touch the Security option and select a security method from the drop-down list.
 - None
 - WPA2 PSK.



NOTE: If None is selected in the Security option, a password is not required.

- 7. In the **Password** text field, enter a password, if required.
- 8. In the Select AP Band drop-down list, select 2.4 GHz Band or 5 GHz Band.
- 9. Touch Save.

Configuring the Access Point Name



NOTE: Many service provider Access Point Name (APN) data are pre-configured in the device. The APN information for all other service provides must be obtained from the wireless service provider.

To use the data on a network, configure the APN information:

- 1. Swipe down with two fingers from the status bar to open the quick access panel and then touch **\$**.
- 2. Touch Network & Internet > Mobile network > Advanced.
- 3. Touch Access Point Names.
- 4. Touch an APN name in the list to edit an existing APN or touch + to create a new APN.
- 5. Touch each APN setting and enter the appropriate data obtained from the wireless service provider.
- 6. When finished, touch **> Save**.
- 7. Touch the radio button next to the APN name to start using it.
- 8. Touch O.

Data Usage

Data usage refers to the amount of data uploaded or downloaded by the device during a given period. Depending on the wireless plan, you may be charged additional fees when your data usage exceeds your plan's limit.

To monitor your data usage:

- 1. Swipe down from the Status bar to open the Quick Access panel and then touch **\$**.
- 2. Touch Mobile network > Data usage > Data saver.



CAUTION: The usage displayed on the data usage settings screen is measured by your device. Your carrier's data usage accounting may differ. Usage in excess of your carrier plan's data limits can result in steep overage charges. The feature described here can help you track your usage, but is not guaranteed to prevent additional charges.

Data usage settings allow:

- · Set the data usage warning level.
- 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, the data usage settings screen displays the mobile data settings. That is, the data network or networks provided by your carrier.

Figure 65 Data Usage Screen

Data usag	ge			
	CELLULAR		WI-FI	
Cellular da	ta	A.		
Set cellula	r data limit			
May 3 – Ju	in 2 👻			3.04 MB
4.0 cm				
2.0 @				
2.0 cs _ warning		May 18		Jun 3
2.0 ca waming May 3 Carrier data App usage	accounting may differ from your device.	May 18		Jun 3
May 3 Carrier data App usage	accounting may differ from your device. ogle Services	May 18		Jun 3 1.73 MB
App usage	accounting may differ from your device. ogle Services pGallery	May 18		Jun 3 1.73 MB . 700 KB

Setting Data Usage Warning

To set a warning alert when the device has used a certain amount of mobile data:

- 1. Swipe down from the Status bar to open the Quick Access panel and then touch **\$**.
- 2. Touch Data usage.
- 3. Touch Mobile data usage > 🌣 > Set data warning.
- 4. Touch Data warning.
- 5. Enter a number. To switch between megabytes (MB) and gigabytes (GB), touch the down arrow.
- 6. Touch SET.

When the usage reaches the set level, a notification appears.

Setting Data Limit

- 1. Swipe down from the Status bar to open the Quick Access panel and then touch **\$**.
- 2. Touch Data usage.
- 3. Touch Mobile data usage > 🏟 > Set data limit.
- 4. Touch OK.

- 5. Touch Data limit.
- 6. Enter a number. To switch between megabytes (MB) and gigabytes (GB), touch the down arrow.
- 7. Touch Set.

When the limit is reached, data automatically turns off and a notification appears.

Wireless Local Area Networks

Wireless local area networks (WLANs) allow the device to communicate wirelessly inside a building. Before using the 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 device must both be properly configured to enable this communication.

Refer to the documentation provided with the infrastructure (access points (APs), access ports, switches, Radius servers, etc.) 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 configure the 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).
 - EAP-FAST with MSCHAPV2 and GTC authentication.

The **Status** bar displays icons that indicate Wi-Fi network availability and Wi-Fi status. See <u>Status Bar on page</u> 25 for more information.

Scanning and Connecting to a Wi-Fi Network

To scan and connect to a Wi-Fi network:

1. Swipe down from the Status bar to open the Quick Access panel.



		100 % 🛢 4:43 PM
	ø	
14	×	۲
Wi-Fi 🔹	Bluetooth 👻	Total silence 🔹
) The	Ø	â
Flashlight	Auto-rotate	Battery saver
	••	
Wed, Jul 11		· • •

2. Touch Wi-Fi to open the Wi-Fi screen. The device searches for WLANs in the area and lists them.

Figure 67	Wi-Fi Screen
-----------	--------------

Wi-Fi		
	On	
Ŧ	WLAN1 Connected	۵
•	WLAN2	â
	WLAN3	â
	WLAN4	â
•	WLAN5	â
•	WLAN6	â
Ŧ	WLAN7	â
		۵

VII-I I					
On				••	
₹.	WLAN1 Connected				
-	WLAN2				
▼.	WLAN3				
-	WLAN 4				
-	WLAN 5				
	WLAN 6				
₹.	WLAN 7				
₹.	WLAN 8				
₹.	WLAN 9				
V .	WLAN10				
	WLAN11				
		\bigtriangledown	0		

- 3. Scroll through the list and select the desired WLAN network.
- For open networks, touch profile once or press and hold and then select Connect to network or for secure networks enter the required password or other credentials then touch Connect. See the system administrator for more information.

The device obtains a network address and other required information from the network using the dynamic host configuration protocol (DHCP) protocol. To configure the device with a fixed internet protocol (IP) address, Refer to the device Integrator Guide for more information.

5. In the Wi-Fi setting field, **Connected** appears indicating that the device is connected to the WLAN.

Removing a Wi-Fi Network

To remove a remembered or connected network:

- 1. Swipe down from the status bar to open the quick access panel and then touch **\$**.
- 2. Touch Network & Internet > W-Fi.
- 3. Scroll down to the bottom of the list and touch **Saved networks**.
- 4. Touch the name of the network.
- 5. In the dialog box, touch **FORGET**.
- 6. Touch O.

Bluetooth

Bluetooth 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 wireless technology is specifically designed for short-range (10 m (32.8 ft)) communication and low power consumption.

Devices with Bluetooth capabilities can exchange information (e.g., files, appointments, and tasks) with other Bluetooth enabled devices such as printers, access points, and other mobile devices.

The device supports Bluetooth Low Energy. Bluetooth Low Energy is targeted at applications in the healthcare, fitness, security, and home entertainment industries. It provides reduced power consumption and cost while maintaining standard Bluetooth range.

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.

When AFH is enabled, the Bluetooth radio "hops around" (instead of through) the 802.11b high-rate channels. AFH coexistence allows enterprise devices to operate in any infrastructure.

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 m (32.8 ft). A definition of ranges based on power class is difficult to obtain due to power and device differences, and whether in open space or closed office space.



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

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.

Bluetooth Profiles

The device supports the Bluetooth services listed in the table below:

Profile	Description
Service Discovery Protocol (SDP)	Handles the search for known and specific services as well as general services.
Serial Port Profile (SPP)	Allows use of RFCOMM protocol to emulate serial cable connection between two Bluetooth peer devices. For example, connecting the device to a printer.
Object Push Profile (OPP)	Allows the device to push and pull objects to and from a push server.
Advanced Audio Distribution Profile (A2DP)	Allows the device to stream stereo-quality audio to a wireless headset or wireless stereo speakers.
Audio/Video Remote Control Profile (AVRCP)	Allows the device to control A/V equipment to which a user has access. It may be used in concert with A2DP.
Personal Area Network (PAN)	Allows the use of Bluetooth Network Encapsulation Protocol to provide L3 networking capabilities over a Bluetooth link. Only PANU role is supported.
Human Interface Device Profile (HID)	Allows Bluetooth keyboards, pointing devices, gaming devices and remote monitoring devices to connect to the device.
Headset Profile (HSP)	Allows a hands-free device, such as a Bluetooth headset, to place and receive calls on the device.
Hands-Free Profile (HFP)	Allows car hands-free kits to communicate with the device in the car.

Table 12 Bluetooth Profiles

Table 12	Bluetooth Profiles (Continued)
----------	--------------------------------

Profile	Description
Phone Book Access Profile (PBAP)	Allows exchange of Phone Book Objects between a car kit and a mobile device 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.
Out of Band (OOB)	Allows exchange of information used in the pairing process. Pairing is completed using the Bluetooth radio, but requires information from the OOB mechanism. Using OOB with NFC enables pairing when devices simply get close, rather than requiring a lengthy discovery process.
Out of Band (OOB)	Allows exchange of information used in the pairing process. Pairing is completed using the Bluetooth radio, but requires information from the OOB mechanism.
Symbol Serial Interface (SSI)	Allows for communication with Bluetooth Imager.
File Transfer Profile (FTP)	Provides the capability to browse, manipulate and transfer files in file system of another system. Uses GOEP as a basis.
Generic Attribute Profile (GATT)	Provides profile discovery and description services for Bluetooth Low Energy protocol. It defines how attributes are grouped together into sets to form services.
HID Over GATT Profile (HOGP)	Defines the procedures and features used by Bluetooth low energy HID Devices using GATT and Bluetooth HID Hosts using GATT.
Scan Parameters Profile (ScPP)	Provides devices with information to assist them in managing their connection idle timeout and advertising parameters to optimize for power consumption and/or reconnection latency.
Message Access Profile (MAP)	Defines the features and procedures used by devices that exchange message objects.
Dial Up Networking (DUN)	Provides a standard to access the Internet and other dial-up services over Bluetooth.
Generic Access Profile (GAP)	Use for device discovery and authentication.
OBject EXchange (OBEX)	Facilitates the exchange of binary objects between devices.
Generic Object Exchange Profile (GOEP)	Provides a basis for other data profiles. Based on OBEX.
Generic Audio/Video Distribution Profile (GAVDP)	Provides the basis for A2DP and VDP, the basis of the systems designed for distributing video and audio streams using Bluetooth technology.

Bluetooth Power States

The Bluetooth radio is off by default:

- 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.
Bluetooth Radio Power

Turn off the Bluetooth radio to save power or if entering an area with radio restrictions (e.g., 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.

Enabling Bluetooth

To enable Bluetooth:

- 1. Swipe down from the Status bar to open the Quick Access panel.
- 2. Touch to turn Bluetooth on.
- 3. Touch O.

Disabling Bluetooth

To disable Bluetooth:

- 1. Swipe down from the Status bar to open the Quick Access panel.
- 2. Touch **\$** to turn Bluetooth off.
- 3. Touch O.

Discovering Bluetooth Device(s)

The 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. To find Bluetooth devices in the area:

- 1. Ensure that Bluetooth is enabled on both devices.
- 2. Ensure that the Bluetooth device to discover is in discoverable mode.
- 3. Ensure that the two devices are within 10 meters (32.8 feet) of one another.
- 4. Swipe down from the Status bar to open the Quick Access panel.
- 5. Touch Bluetooth.
- 6. Touch MORE SETTINGS. The Bluetooth screen appears.
- 7. Touch **Pair new device**. The device begins searching for discoverable Bluetooth devices in the area and displays them under **Available devices**.
- 8. Scroll through the list and select a device. The Bluetooth pairing request dialog box appears.
- 9. Touch Pair on both devices.

10. The Bluetooth device is added to the **Paired devices** list and a trusted ("paired") connection is established.

Changing the Bluetooth Name

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

Wireless

- 1. Swipe down from the Status bar to open the Quick Access panel and then touch **\$**.
- 2. Touch Connected devices > Bluetooth.
- 3. If Bluetooth is not on, move the switch to turn Bluetooth on.
- 4. Touch Device name.
- 5. Enter a name and touch **RENAME**.
- 6. Touch O.

Connecting to a Bluetooth Device

Once paired, connect to a Bluetooth device.

- 1. Swipe down from the Status bar to open the Quick Access panel and then touch **\$**.
- 2. Touch Connected device > Bluetooth.
- In the list, touch the unconnected Bluetooth device.
 When connected, **Connected** appears below the device name.

Selecting Profiles on the Bluetooth Device

Some Bluetooth devices have multiple profiles. To select a profile:

- 1. Swipe down from the Status bar to open the Quick Access panel and then touch **\$**.
- 2. Touch Connected Devices > Bluetooth.
- 3. In the **Paired Devices** list, touch **\$** next to the device name.
- 4. Turn on or off a profile to allow the device to use that profile.
- Touch O.

Unpairing a Bluetooth Device

To unpair a Bluetooth device and erase all pairing information:

- 1. Swipe down from the Status bar to open the Quick Access panel and then touch \$\$
- 2. Touch Connected devices > Bluetooth.
- 3. In the **Paired Devices** list, touch **\$** next to the device name.
- 4. Touch FORGET.
- 5. Touch O.

Near Field Communications (CC6000 Only)

NFC/HF RFID is a short-range wireless connectivity technology standard that enables secure transaction between a reader and a contactless smartcard. The technology is based on ISO/IEC 14443 type A and B (proximity) and ISO/IEC 15693 (vicinity) standards, using the HF 13.56 MHz unlicensed band. The device supports the following operating modes:

- Reader mode
- Peer-to-Peer communication
- Card Emulation mode.

Using NFC, the device can:

- Read contactless cards such as contactless tickets, ID cards and ePassport.
- Read and write information to contactless cards such as SmartPosters and tickets, as well as devices with NFC interface such as vending machines.
- Read information from supported medical sensors.
- Pair with supported Bluetooth devices such as printers, ring scanners (ex. RS6000), and headsets (ex. HS3100).
- Exchange data with another NFC device.
- Emulate contactless card such as payment, ticket, or SmartPoster.

The device NFC antenna is positioned to read NFC cards from the top of the device while the device is being held.

The device NFC antenna is located on the back of the device, near the Interface Connector.

Reading NFC Cards

To read NFC cards:

- 1. Launch an NFC enabled application.
- 2. Hold device as shown.

Figure 68 Reading Cards



Accessories

Introduction

This chapter provides information for using the accessories for the device.

Accessories

This table lists the accessories available for the device.

Table 13 Accessories

Accessory	Part Number	Description
Mounting Plates		
CC600 Wall Mount	21-118517-01R	CC600 Wall Mounting Kit
CC600 Pole Mount	21-118517-02R	CC600 Pole Mounting Kit
CC6000 Wall Mounting Kit	KT-152097-03	CC6000 Wall Mounting Kit with Power Supply Storage
CC6000 Wall Mounting Kit	KT-152097-01	100mm VESA
CC6000 Wall Mounting Kit	KT-152098-03	Slimmer, CC6000 specific mount
CC6000 Pole Mounting	KT-152096-03	100mm VESA
Kit		Includes additional storage shelf to hold power supply
		Modified over KT0152096-02 to better hold Level VI power supply.
CC6000 Pole Mounting Kit	KT-152096-01	100mm VESA
Charge and Communication Cables		
USB-C Cable	CBL-TC2X-USBC-01	Used to communicate with CC6000 via the USB OTG port.
USB-C Cable	CBL-TC5X-USBC2A-01	Used to communicate with CC6000 via the USB OTG port.
Power Supplies		

Accessory	Part Number	Description
DC Line Cord	CBL-DC-383A1-01	Used with Power Supply (PWR-BUA5V16W0WW)
		Cable length is 6 ft
Power Supply	PWR-BUA5V16W0WW	100-240VAC, 5.4V, 3A, 16W
		Meets US DOE Level VI efficiency standard
		Replaces PWRS-14000-249R
AC Line Cord	50-16000-182R	Used with 50-14000-147R/50-14000-249R?PWRS-1 4000-249R/PWR-BUA5V16W0WW

Table 13	Accessories	(Continued)
----------	-------------	-------------

3.5 mm Audio Adapter (CC6000 Only)

The 3.5 mm Audio Adapter snaps onto the back of the device and removes easily when not in use. When attached to the device the 3.5 mm Audio Adapter allows a user to connect a wired headset to the device.

Connecting a Headset to the 3.5 mm Audio Adapter (CC6000 Only)

1. Connect the Quick Disconnect connect of the headset to the Quick Disconnect connector of the 3.5 mm Quick Disconnect Adapter Cable.

Figure 69	Connect Headset to Adapter Cable
-----------	----------------------------------



2. Connect the audio jack of the 3.5 mm Quick Disconnect Adapter Cable to the 3.5 mm Audio Adapter.





USB I/O Hub

The USB I/O Hub:

- · provides power to a vehicle cradle
- provides USB hub for three USB devices (such as printers)
- provides a powered USB port for charging another device.

The cradle is powered by the vehicle's 12V or 24V electrical system. The operating voltage range is 9V to 32V and supplies a maximum current of 3A to the vehicle cradle and 1.5 A to the four USB ports simultaneously.

Refer to the device Integrator Guide for Android 8.1 Oreo for information on installing the USB I/O Hub.





Connect USB Cables

The USB I/O Hub provides three USB ports for connecting devices such as printers to a device in the vehicle cradle. To connect USB cables:

1. Slide the cable cover down and remove.

Figure 72 Remove Cover



2. Insert the USB cable connector into one of the USB ports.

3. Place each cable into the cable holder.





4. Align the cable cover onto the USB I/O Hub. Ensure that the cables are within the cover opening.

Figure 74 Replace Cover



5. Slide cable cover up to lock into place.

External USB Cable

The USB I/O Hub provides a USB port for charging external devices such as cell phones. This port is for charging only.

- 1. Open the USB Access Cover.
- 2. Insert the USB cable connector into the USB port.





Audio Headset Connection

The USB I/O Hub provides audio connection to the device in a vehicle cradle.

Depending upon the headset, connect the headset and audio adapter to the Headset connector.



Figure 76 Connect Audio Headset

Maintenance and Troubleshooting

Introduction

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

Maintaining the Device

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

- In order to avoid scratching the screen, use plastic-tipped pens intended for use with a touch-sensitive screen. Never use an actual pen or pencil or other sharp object on the surface of the device screen.
- The touch-sensitive screen of the device is glass. Do not drop the device or subject it to strong impact.
- Protect the device from temperature extremes. Do not leave it on the dashboard of a car on a hot day, and keep it away from heat sources.
- · Do not store the device in any location that is dusty, damp, or wet.
- Use a soft lens cloth to clean the device. If the surface of the device screen becomes soiled, clean it with a soft cloth moistened with an approved cleanser.

Cleaning Instructions



CAUTION: Always wear eye protection.

Read warning label on alcohol product before using.

If you have to use any other solution for medical reasons please contact the Global Customer Support Center for more information.



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.

Approved Cleanser Active Ingredients

100% of the active ingredients in any cleaner must consist of one or some combination of the following: isopropyl alcohol, bleach/sodium hypochlorite¹ (see important note below), hydrogen peroxide, ammonium chloride or mild dish soap.



IMPORTANT: Use pre-moistened wipes and do not allow liquid cleaner to pool.

¹When using sodium hypochlorite (bleach) based products always follow the manufacturer's recommended instructions: use gloves during application and remove the residue afterwards with a damp alcohol cloth or a cotton swab to avoid prolonged skin contact while handling the device.

Due to the powerful oxidizing nature of sodium hypochlorite the metal surfaces on the device are prone to oxidation (corrosion) when exposed to this chemical in the liquid form (including wipes). In the event that these type of disinfectants come in contact with metal on the device, prompt removal with an alcohol-dampened cloth or cotton swab after the cleaning step is critical.

Harmful Ingredients

The following chemicals are known to damage the plastics on the device and should not come in contact with the device: acetone; ketones; ethers; aromatic and chlorinated hydrocarbons; acqueous or alcoholic alkaline solutions; ethanolamine; toluene; trichloroethylene; benzene; carbolic acid and TB-lysoform.

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.

Device Cleaning Instructions

Do not apply liquid 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. Be careful not to let liquid pool around the display window or other places. Allow the unit to air dry before use.



NOTE: For thorough cleaning, it is recommended to first remove all accessory attachments, if applicable.

Special Cleaning Notes

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 any of the harmful ingredients listed above are used prior to handling the device, such as hand sanitizer that contain ethanolamine, hands must be completely dry before handling the device to prevent damage to the device.



IMPORTANT: When using cleaning/disinfectant agents on the device, it is important to follow the directions prescribed by the cleaning/disinfectant agent manufacturer.

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 at the customer's discretion due to the varied environments in which the mobile devices are used and may be cleaned as frequently as required. When dirt is visible, it is recommended to clean the mobile device to avoid build up of particles which make the device more difficult to clean later on.

For consistency and optimum image capture, it is recommended to clean the camera window periodically especially when used in environments prone to dirt or dust.

Cleaning the Device

Housing

Thoroughly wipe the housing, including all buttons and triggers, using an approved alcohol wipe.

Display

The display can be wiped down with an approved alcohol wipe, 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 and Exit Window

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

Troubleshooting

The following tables provides typical problems that might arise and the solution for correcting the problem.

Problem	Cause	Solution
During data communication with a host computer, no	Device disconnected from host computer during communication.	Reattach the communication cable and re-transmit.
data transmitted, or transmitted data was incomplete	Incorrect cable configuration.	See the system administrator.
	Communication software was incorrectly installed or configured.	Perform setup.
During data	Wi-Fi radio is not on.	Turn on the Wi-Fi radio.
communication over Wi-Fi, no data transmitted, or transmitted data was incomplete.	You moved out of range of an access point.	Move closer to an access point.
During data communication over	Bluetooth radio is not on.	Turn on the Bluetooth radio.
Bluetooth, no data transmitted, or transmitted data was incomplete.	You moved out of range of another Bluetooth device.	Move within 10 meters (32.8 feet) of the other device.
No sound.	Volume setting is low or turned off.	Adjust the volume.
Device shuts 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.
Tapping the window buttons or icons does not activate the corresponding feature.	The device is not responding.	Reset the device.
A message appears stating that the device memory is full.	Too many files stored on the device.	Delete unused memos and records. If necessary, save these records on the host computer (or use an SD card for additional memory).
	Too many applications installed on the device.	Remove user-installed applications on the device to recover memory. Select \$ > Storage > FREE UP SPACE > REVIEW RECENT ITEMS . Select the unused program(s) and tap FREE UP .

 Table 14
 Troubleshooting the Device

Problem	Cause	Solution
The device does not decode with reading	Scanning application is not loaded.	Load a scanning application on the device or enable DataWedge. See the system administrator.
barcode.	Unreadable barcode.	Ensure the symbol is not defaced.
	Distance between exit window and barcode is incorrect.	Place the device within proper scanning range.
	Device is not programmed for the barcode.	Program the device to accept the type of barcode being scanned. Refer to the EMDK or DataWedge application.
	Device is not programmed to generate a beep.	If the device does not beep on a good decode, set the application to generate a beep on good decode.
Device cannot find any Bluetooth	Too far from other Bluetooth devices.	Move closer to the other Bluetooth device(s), within a range of 10 meters (32.8 feet).
devices nearby.	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 the device's user documentation for help.
Cannot unlock device.	User enters incorrect password.	If the user enters an incorrect password eight times, the user is requested to enter a code before trying again.
		If the user forgot the password, contact system administrator.

Table 14	Troubleshooting the Device	(Continued)
----------	----------------------------	------------	---

Technical Specifications

Introduction

This chapter provides technical specifications and decode distances for the CC600 and CC6000.

Technical Specifications

CC6000

Table 15	CC6000	Technical	Specifications
----------	--------	-----------	----------------

Item	Description
Physical Characteristics	
Dimensions	Landscape: 10.9 in. x 7.9 in. x 1.4 in.
	27.8 cm x 20.1 cm x 3.6 cm
	Portrait: 7.2 in. x 11.6 in. x 1.4 in.
	18.3 cm x 29.6 cm x 3.6 cm
Weight	2.16 lbs./980g
Display	10.1 inch PCAP multi-touch
Active Screen Area	217 mm W x 136 mm H
Aspect Ratio	16:10
Resolution	1280x800 at 60 Hz
Keypad	Virtual
Connectivity	USB host: 2 Full Size USB 2.0 Type A ports for accessory
	USB OTG: 1 USB-C OTG
	Ethernet Gigabit compatible: RJ45
	External Audio In: 3.5 mm connector
Audio	Audio Two microphones; two front firing speakers (2W total)
Expansion Capabilities	Micro SD card slot, supports class 2 to class 10 and UHS-1 SD cards
Power	Enterprise grade power supply: 5.4VDC/3A; 110/220V
	Support for integrated 802.3at Power-over-Ethernet (PoE)

Table 15 CC6000 Technical Specifications (Continued)

Item	Description	
Performance Characteristic	S	
Display Brightness	300 nits	
CPU	Qualcomm Snapdragon ™ 660	
OS	Android Oreo, Google GMS	
Memory	RAM: 4GB	
	Internal Storage: 32GB	
User Environment		
Operating Temperature	0°C to 40°C (32°F to 104°F)	
Storage Temperature	-40°C to 70°C (-40°F to 158°F)	
Humidity	5% to 95% non-condensing	
Management		
Management Tools	Integrates with industry standard Mobile Device Management (MDM) solutions to configure settings and provide remote software updates	
Data Capture/Output	1	
Integrated Scanner	1D/2D Zebra SE4710 decoded scanner	
Front Camera	5 MP	
Video	1080p	
Networks	1	
WLAN	Dual band 802.11 a/b/g/n/ac/d/h/r/k/w/i (2.4 GHz and 5.2 GHz support)	
WPAN	Bluetooth 5.0; integrated antenna	
Ethernet	Gigabit Ethernet on RJ45 interface, with activity LEDs	
Peripherals and Accessorie	es	
Accessories	Country specific AC line cord.	
	Additional accessories can be integrated using USB and Bluetooth interface	
Mounting Options	Integrated standard VESA mount; conforms to the VESA 100 mm x 100 mm mounting standard for attachment of third party, off-the-shelf mounting solutions; four (4) M4 x 8 mm max insert distance	
2D Imager Engine (SE4710) Specifications		
Field of View	Horizontal - 42.0°	
	Vertical - 28.0°	
Image Resolution	1280 horizontal X 800 vertical pixels	
Roll	360°	
Pitch Angle	+/- 60° from normal	
Skew Tolerance	+/- 60° from normal	
Ambient Light	Sunlight: 1,000 ft. candles (10,764 lux)	
Focal Distance	From front of engine: 19.4 cm (7.6 in.)	
Aiming Element	610 nm amber LED dot	
Illumination System	Red LED	

CC600

ltem	Description
Physical Characteristics	
Dimensions	6.6 in. x 4.6 in. x 1.4 in.
	16.9 cm x 11.6 cm x 3.5 cm
Weight	0.70 lbs./320 g
Display	5.0 inch PCAP multi-touch
Active Screen Area	110 mm W x 62 mm H
Aspect Ratio	16:10
Resolution	1280x720 at 60 Hz
Keypad	Virtual
Connectivity	USB OTG: 1 USB-C OTG
	Ethernet Gigabit compatible: RJ45
Audio	Two microphones, one front firing speaker (2W total)
Expansion Capabilities	Micro SD card slot, supports class 2 to class 10 and UHS-1 SD cards
Power	Enterprise grade power supply: 5.4VDC/3A; 110/220V
	Support for integrated 802.3at Power-over-Ethernet (PoE)
Performance Characteristic	S
Display Brightness	480 nits
CPU	Qualcomm Snapdragon ™ 660
OS	Android Oreo, Google GMS
Memory	RAM: 4GB
	Internal Storage: 32GB
User Environment	
Operating Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Humidity	5% to 95% non-condensing
Management	
Management Tools	Integrates with industry standard Mobile Device Management (MDM) solutions to configure settings and provide remote software updates
Data Capture/Output	
Integrated Scanner	1D/2D Zebra SE2100 scanner
Networks	
WLAN	Dual band 802.11 a/b/g/n/ac/d/h/r/k/w/i (2.4 GHz and 5.2 GHz support)
WPAN	Bluetooth 5.0; integrated antenna
Ethernet	Gigabit Ethernet on RJ45 interface, with activity LEDs

Table 16 CC600 Technical Specifications

Item	Description
Peripherals and Accessorie	S
Accessories	Additional accessories can be integrated using USB and Bluetooth interface
Mounting Options	Integrated standard VESA mount; conforms to the VESA 75 mm x 75 mm mounting standard for attachment of third party, off-the-shelf mounting solutions; four (4) M4 x 8 mm max insert distance
2D Imager Engine (SE2100)	Specifications
Field of View	Horizontal - 41.5°
	Vertical - 31.7°
Image Resolution	640 horizontal x 480 vertical pixels
Roll	360°
Pitch Angle	+/- 60° from normal
Skew Tolerance	+/- 60° from normal
Ambient Light	Sunlight: 1,000 ft. candles (10,764 lux)
Focal Distance	From front of engine: 10.7 cm (4.2 inches)
Aiming Element	None
Illumination System	Ultra white LED

d)
C

Table 17	Data Capture Supported Symbologies
----------	------------------------------------

ltem	Description
1D Barcodes	Code 128, EAN-8, EAN-13, GS1 DataBar Expanded, GS1 128, GS1 DataBar Coupon, UPCA, Interleaved 2 of 5, UPC Coupon Code
2D Barcodes	PDF-417, QR Code, Digimarc, DotCode (CC6000 only)

Decode Distances

CC6000 - SE4710 Scan Engine

Table 18 lists the typical distances for selected barcode densities when scanning with the CC6000. The minimum element width (or "symbol density") is the width in mils of the narrowest element (bar or space) in the symbol.\

Percedo Turo	Near Distance	Far Distance
barcode Type	Typical	Typical
4 mil	3.3 in / 8.4 cm	8.8 in / 22.4 cm
Code 39		
5 mil	2.8 in / 7.1 cm	8.2 in / 20.8 cm
Code 128		
5 mil	2.0 in / 5.08 cm	13.5 in / 34.3 cm
Code 39		
5mil	3.1 in / 7.9 cm	7.5 in / 19.0 cm
PDF417		
10 mil	2.9 in / 7.4 cm	10.1 in / 25.7 cm
Data Matrix		
100% UPCA	1.8 in / 4.6 cm*	24.0 in / 60.9 cm
20.0mil	2.0 in / 5.08 cm*	26 in / 66.0 cm
Code 39		
*Limited by width of barcode in field of view.		

Table 18	CC6000 - SE4710 Decode Rar	iges
----------	----------------------------	------

Note: Photographic quality barcode at 15° tilt pitch angle under 30 fcd ambient illumination.

CC600 - SE2100 Scan Engine

Table 19 lists the typical distances for selected barcode densities when scanning with the CC600. The minimum element width (or "symbol density") is the width in mils of the narrowest element (bar or space) in the symbol.\

Table 19	CC600 - SE2100 Decode Ranges
----------	------------------------------

Baraada Turaa	Near Distance	Far Distance
Barcoue Type	Typical	Typical
5 mil	2.0 in / 51mm	4.8 in / 122 mm
Code 128		
5 mil	1.7 in / 43 mm	5.8 in / 147 mm
Code 39		
6.6 mil	1.6 in / 41 mm	4.9 in / 124 mm
PDF417		
10 mil	1.2 in / 30 mm	4.9 in / 124 mm
Data Matrix		
100% UPCA	2.0 in / 51 mm	10.6 in / 269 mm
20.0 mil	2.1 in / 53 mm*	13.6 in / 345 mm
Code 39		
10.0 mil	1.1 in / 28 mm	5.2 in / 132 mm
QR Code		
*Limited by width of barcode in field of view.		
Note: Photographic quality barcode at 15° tilt pitch angle under 30 fcd ambient illumination.		

Index

Α

adaptive frequency hopping
alarms only
albums
deleting 74.80
aetting information 73
sharing 73 80
working with 72.90
working with
apn
approved cleanser
approved cleanser active ingredients
apps
accessing
adding shortcuts
Camera
DataWedge Demonstration
Diagnostic Tool
Files
Gallery
Photos
PTT Express
RxLogger 87
RxLogger Litility 88
shortcuts 31
SimulScan Demo 80
Sund Boorder
outomatically black counds

В

Bluetooth	100, 106
change name	109
disabling	109
discovering devices	109
enabling	109
PIN	107
power states	108
profiles	107
security	107
bluetooth	106

С

camera
front camera photo settings
front camera video settings
photo settings
rear camera photo settings 58
rear camera video settings
recording videos
taking photos
video settings
comera settings
cleaning
display
frequency
housing
instructions 118
materials 119
cleaning instructions 119
connect to WLAN 104
contacts
adding
deleting
editing
~

D

DataWedge Demonstration 6 decode ranges 127, 12 Diagnostic Tool 6 bluetooth test information 6 settings 6 system test information 6 wlan test information 6)2 28 35 38 38 38 38
diagnostic tool settings	58)9 52)9 17

Index

do not disturb feature .		37
--------------------------	--	----

Е

EAP	. 104
edit apn	. 102
enable Bluetooth	. 109

F

feature descriptions
touch screen
file transfer
Files
folders
creating
naming
removing
font size

G

Gallery
cropping photos
deleting albums74
deleting photos
deleting videos
getting album information
setting photos as contact icons
sharing albums
sharing photos
sharing videos
viewing photos
watching videos
working with albums
working with photos
working with videos
general sound setting
Google
mobile services

Η

harmful ingredients	9 3
home screen	
moving items	2
home screen wallpaper3	3

Κ

keyb	oards	34
á	additional character tab	35
á	alpha tab	35
C	configuration	34

editing text
entering numbers, symbols, and special characters .
36
numeric tab

L

lock screen notifications	
---------------------------	--

Μ

maintenance
approved cleanser active ingredients
clean camera and exit window
clean display
clean housing
cleaning frequency
cleaning instructions
cleaning materials required
device cleaning instructions
harmful ingredients
maintaining the device
special cleaning notes
managing notifications

Ν

near field communication	. 100
near field communications	.110
NFC	.110
reading cards	.111
notational conventions	10
notifications	
lock screen	28
managing	27
priority notifications only	38

Ρ

photo transfer
Photos
cropping
deleting
deleting albums80
deleting videos
setting as contact icons
sharing
sharing albums80
sharing videos
viewing and browsing
watching videos
working with
working with albums
working with videos
photos
photos

camera settings
cropping
deleting
setting as contact icons75
sharing
taking
viewing
working with74
PTT Express
audible indicators85
disabling communication
enabling communication
group calls
notification icons85
private response86
talk groups86
user interface84
Voice Client

Q

quick access panel										 	. 29
quick settings											
edit icons		 								 	. 31

R

reading NFC cards														111	
remove wi-fi														106	;
RxLogger														. 87	,
RxLogger Utility														. 88	3

S

screen font size
contributes
ambient diaplay 10
automatically block sounds
camera photos57
camera videos
display
do not disturb
general sound
home screen wallpaper
limit sounds
override do not disturb for specific apps 39
priority potifications only
SimulScan Demo
advanaed pottings
creating a demo customization
default templates

printing sample forms
settings
using the manugacturing example
using the postal, transportation and logistics example
software version9
software versions9
Sound Recorder
status bar
symbologies

Т

touch screen	6
transferring files using USB5	1
troubleshooting12	1

U

USB	 	 	 51

V

vehicle cradle
camera settings
deleting
recording
sharing
watching
working with

W

WEP	104
widgets	31
adding	
wi-fi network	104
wireless local area network	100
WLAN	100
WPA	104



www.zebra.com