



# WT6000



## Wearable Computer

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## User Guide





# **WT6000 Wearable Terminal User Guide**

MN-002698-03

Rev. A

February 2018

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## Revision History

Changes to the original manual are listed below:

Change	Date	Description
Rev. A	6/2016	Initial release.
-02	2/2017	Add RS5000 to supported devices.
-03	2/2018	Supported stylus is capacitive, not conductive.



# TABLE OF CONTENTS

Revision History .....	iii
------------------------	-----

## Table Of Contents

### About This Guide

Introduction .....	xi
Documentation Set .....	xi
Configurations .....	xii
Software Versions .....	xii
Chapter Descriptions .....	xii
Notational Conventions .....	xiii
Related Documents and Software .....	xiii
Service Information .....	xiv

### Chapter 1: Getting Started

Introduction .....	1-1
Unpacking .....	1-1
Removing the Screen Protection Film .....	1-1
Features .....	1-2
Setup .....	1-3
Installing the Battery .....	1-3
Charging the Battery .....	1-4
Starting the WT6000 .....	1-5
Installing the Wrist Mount .....	1-6
Connecting a Scanner .....	1-7
Replacing the Battery .....	1-8
Battery Management .....	1-9
Monitor Battery Usage .....	1-9
Low Battery Notification .....	1-10
Battery Optimization .....	1-10
Turning Off the Radios .....	1-10

Setting the Date and Time .....	1-10
Display Setting .....	1-11
Setting the Screen Brightness .....	1-11
Setting Screen Timeout Setting .....	1-11
Setting Key Light Timeout Setting .....	1-12
Setting Font Size .....	1-12
General Sound Setting .....	1-12

## Chapter 2: Using the WT6000

Introduction .....	2-1
Home Screen .....	2-1
Status Bar .....	2-2
Status Icons .....	2-2
Notification Icons .....	2-3
Managing Notifications .....	2-3
Quick Settings .....	2-4
Using the Touchscreen .....	2-5
Using the On-screen Keyboard .....	2-5
Editing Text .....	2-5
Entering Numbers, Symbols and Special Characters .....	2-5
Applications .....	2-6
Accessing Applications .....	2-8
Switching Between Recent Applications .....	2-9
Un-Locking the Screen .....	2-9
Suspend Mode .....	2-10
Resetting the WT6000 .....	2-11
Performing a Soft Reset .....	2-11
Performing a Hard Reset .....	2-11

## Chapter 3: Data Capture

Introduction .....	3-1
Laser Scanning .....	3-1
Scanning Bar Codes .....	3-1
Imaging .....	3-1
Operational Modes .....	3-2
Scanning Considerations .....	3-2
Bar Code Capture with RS4000 .....	3-2
Adaptive Scanning .....	3-3
Bar Code Capture with RS5000 Hands-Free Imager .....	3-4
Bar Code Capture with RS6000 Hands-Free Imager .....	3-4
Bar Code Capture with RS507 Hands-Free Imager .....	3-6
Pairing the RS507/RS6000 Hands-Free Imager .....	3-7
Pairing Using Near Field Communication .....	3-7
Pairing in HID Mode Using Near Field Communication .....	3-8
Pairing Using Simple Serial Interface .....	3-9
Pairing Using Bluetooth Human Interface Device .....	3-10

**Chapter 4: Wireless**

Wireless Local Area Networks .....	4-1
Scan and Connect to a Wi-Fi Network .....	4-2
Configuring a Wi-Fi Network .....	4-2
Manually Adding a Wi-Fi Network .....	4-3
Configuring for a Proxy Server .....	4-4
Configuring the Device to Use a Static IP Address .....	4-5
Advanced Wi-Fi Settings .....	4-6
Additional Settings .....	4-6
Remove a Wi-Fi Network .....	4-7
Modify or Edit a Wi-Fi Network .....	4-7
Wi-Fi Advanced Features .....	4-8
Bluetooth .....	4-8
Adaptive Frequency Hopping .....	4-9
Security .....	4-9
Bluetooth Profiles .....	4-10
Bluetooth Power States .....	4-10
Bluetooth Radio Power .....	4-10
Enabling Bluetooth .....	4-10
Disabling Bluetooth .....	4-11
Discovering Bluetooth Device(s) .....	4-11
Changing the Bluetooth Name .....	4-11
Connecting to a Bluetooth Device .....	4-12
Selecting Profiles on the Bluetooth Device .....	4-12
Unpairing a Bluetooth Device .....	4-12
Near Field Communications .....	4-12
Reading NFC Cards .....	4-13

**Chapter 5: Applications**

Introduction .....	5-1
Battery Manager .....	5-1
Device Central .....	5-4
Device Central Tabs .....	5-4
Paging an RS6000 Ring Scanner .....	5-4
File Browser .....	5-6
PTT Express Voice Client .....	5-8
PTT Audible Indicators .....	5-8
Notification Icons .....	5-9
Enabling PTT Communication .....	5-9
Selecting a Talk Group .....	5-9
PTT Communication .....	5-10
Creating a Group Call .....	5-10
Disabling PTT Express Voice Client Communication .....	5-10
DataWedge .....	5-11
DataWedge Demonstration .....	5-11
RxLogger .....	5-13
RxLogger Configuration .....	5-13
Configuration File .....	5-13
Enabling Logging .....	5-13

Disabling Logging .....	5-13
Extracting Log Files .....	5-14
Elemesz .....	5-15
Disabling Elemesz Data Collection .....	5-15
Enabling Elemesz Data Collection .....	5-15
Print Station .....	5-17
Printer Setup .....	5-18
Tap & Pair .....	5-19

## Chapter 6: Accessories

Accessories .....	6-1
1-Slot WT6000 USB Charging Cradle .....	6-4
Charging the Device .....	6-4
Charging the Spare Battery .....	6-5
Battery Charging .....	6-5
2-Slot WT6000/RS6000 Charging Cradle .....	6-7
Charging the WT6000 .....	6-7
Charging the RS6000 .....	6-8
Battery Charging .....	6-8
5-Slot WT6000 Charge Only Cradle .....	6-9
Charging the WT6000 .....	6-9
Charging the Spare Battery .....	6-10
Battery Charging .....	6-10
10-Slot WT6000/RS6000 Charge Only Cradle .....	6-11
Charging the WT6000 .....	6-11
Charging the RS6000 .....	6-12
Battery Charging .....	6-12
10-Slot WT6000 Charge Only Cradle .....	6-13
Charging the WT6000 .....	6-13
Battery Charging .....	6-14
5-Slot WT6000 Ethernet Cradle .....	6-15
Charging the WT6000 .....	6-15
Charging the Spare Battery .....	6-16
Battery Charging .....	6-16
Establishing Ethernet Communication .....	6-16
Ethernet LED Indicators .....	6-17
4-Slot Battery Charger .....	6-18
Battery Installation .....	6-18
Battery Removal .....	6-18
Battery Charging .....	6-19
Spare Battery Charging .....	6-19
20-Slot Battery Charger .....	6-20
Battery Installation .....	6-20
Battery Removal .....	6-21
Battery Charging .....	6-21
Spare Battery Charging .....	6-21
USB and Charging Cable .....	6-22
Attaching the USB and Charging Cable .....	6-22
Removing the USB and Charging Cable .....	6-23

Battery Charging .....	6-23
Main Battery Charging .....	6-23
Charging Temperature .....	6-23
Hip Mount .....	6-24
Routing an Extended Cable Scanner .....	6-26
Quick Disconnect Audio Cables .....	6-27
Attaching the Audio Adapter .....	6-27
Connecting the Audio Cable to a Headset .....	6-28
Removing the Audio Adapter .....	6-29
Vibrator Cable .....	6-30
RS4000 Scanner .....	6-31
RS5000 Imager .....	6-33

## Chapter 7: Maintenance and Troubleshooting

Introduction .....	7-1
Maintaining the WT6000 .....	7-1
Battery Safety Guidelines .....	7-1
Long Term Storage .....	7-2
Cleaning Instructions .....	7-2
Approved Cleanser Active Ingredients .....	7-2
Harmful Ingredients .....	7-2
Cleaning Instructions .....	7-3
Special Cleaning Notes .....	7-3
Cleaning Materials Required .....	7-3
Cleaning Frequency .....	7-3
Cleaning the WT6000 .....	7-3
Housing .....	7-3
Display .....	7-3
Power Connector .....	7-3
Cleaning Cradle Connectors .....	7-4
Cleaning the Wrist Mount .....	7-4
Troubleshooting .....	7-7
WT6000 .....	7-7

## Appendix A: Specifications

Technical Specifications .....	A-1
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## Index





# ABOUT THIS GUIDE

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## Introduction

This guide provides information about setting up and configuring WT6000 mobile computers with Android operating system and installing its accessories.



**NOTE** Some screens or windows shown in this guide may differ from the actual screens shown on the WT6000.

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## Documentation Set

The documentation set for the WT6000 is divided into guides that provide information for specific user needs.

WT6000 documentation includes:

- **WT6000 Quick Reference Guide** - describes basic set up and operation of the WT6000 and it's accessories.
- **WT6000 User Guide** (this guide) - describes how to set up, operate and program the WT6000 with Android operating system and it's accessories.
- **WT6000 Integrator Guide** - describes how to setup and configure WT6000 and accessories.

## Configurations



This guide covers the following configurations:

Configuration	Radios			Data Capture				Display	Memory		OS	Sensor s	
	802.11 abgn	Bluetooth 4.0	NFC	RS6000	RS4000	RS507	RS5000	3.2" WVGA Color	1G RAM/ 4 GB Flash	2G RAM/ 16 GB Flash	Android AOSP V5.1.1	Accelerometer	Gyroscope
<b>Standard</b>													
WT60A0-TS0LEWR	X	X	X	X	X	X	X	X	X		X	X	X

## Software Versions

To determine the current software versions, touch  >  **About device**.

- Model number - Displays the model number.
- Android version - Displays the operating system version.
- Kernel version - Displays the kernel version number.
- Build number - Displays the software build number.

To determine the device serial number, touch  >  **About device** > **Status**.

- Serial number - Displays the serial number.

## Chapter Descriptions

Topics covered in this guide are as follows:

- [Chapter 1, Getting Started](#), describes the features and basic operation of the WT6000, lists the accessories for the WT6000 and explains how to install and charge the batteries and start the WT6000 for the first time.
- [Chapter 2, Using the WT6000](#), provides instructions for connecting the WT6000 to a host computer and using the OS desktop of the WT6000.
- [Chapter 3, Data Capture](#), provides information for capturing bar code data.
- [Chapter 4, Wireless](#), provides information on the various wireless options.
- [Chapter 5, Applications](#), provides information on various applications pre-installed on the WT6000.
- [Chapter 6, Accessories](#), Accessories, provides information for using the accessories with the WT6000.
- [Chapter 7, Maintenance and Troubleshooting](#), includes instructions on cleaning and storing the WT6000, and provides troubleshooting solutions for potential problems during WT6000 operation.
- [Appendix A, Specifications](#), includes a table listing the technical specifications for the WT6000 and accessories.

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## Notational Conventions

The following conventions are used in this document:

- *Italics* are used to highlight the following:
  - Chapters and sections in this guide
  - Related documents
- **Bold** text is used to highlight the following:
  - Dialog box, window and screen names
  - Drop-down list and list box names
  - Check box and radio button names
  - 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.



**NOTE** This symbol indicates something of special interest or importance to the reader. Failure to read the note will not result in physical harm to the reader, equipment or data.



**CAUTION** This symbol indicates that if this information is ignored, the possibility of data or material damage may occur.



**WARNING!** This symbol indicates that if this information is ignored the possibility that serious personal injury may occur.

---

## Related Documents and Software

The following documents provide more information about the WT6000 touch computers.

- *WT6000 Quick Start Guide*, p/n MN-002700-xx
- *WT6000 Regulatory Guide*, p/n MN-002701-xx
- *WT6000 Integrator Guide*, p/n MN-002699-xx
- *WT6000 Accessory Regulatory Guide*, p/n MN-002702-xx

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

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## Service Information

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

When contacting Customer Support, please have the following information available:

- Serial number of the unit
- Model number or product name
- Software type and version number.

We respond to calls by E-mail, or telephone within the time limits set forth in support agreements.

If your problem cannot be solved by Zebra Support, you may need to return your equipment for servicing and will be given specific directions. Zebra is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty.

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

# CHAPTER 1 GETTING STARTED

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## Introduction

This chapter describes the features of the WT6000 and explains how to install and charge the battery and how to reset the WT6000.

## Unpacking

Carefully remove all protective material from the WT6000 and save the shipping container for later storage and shipping.

Verify that box contains all the equipment listed below:

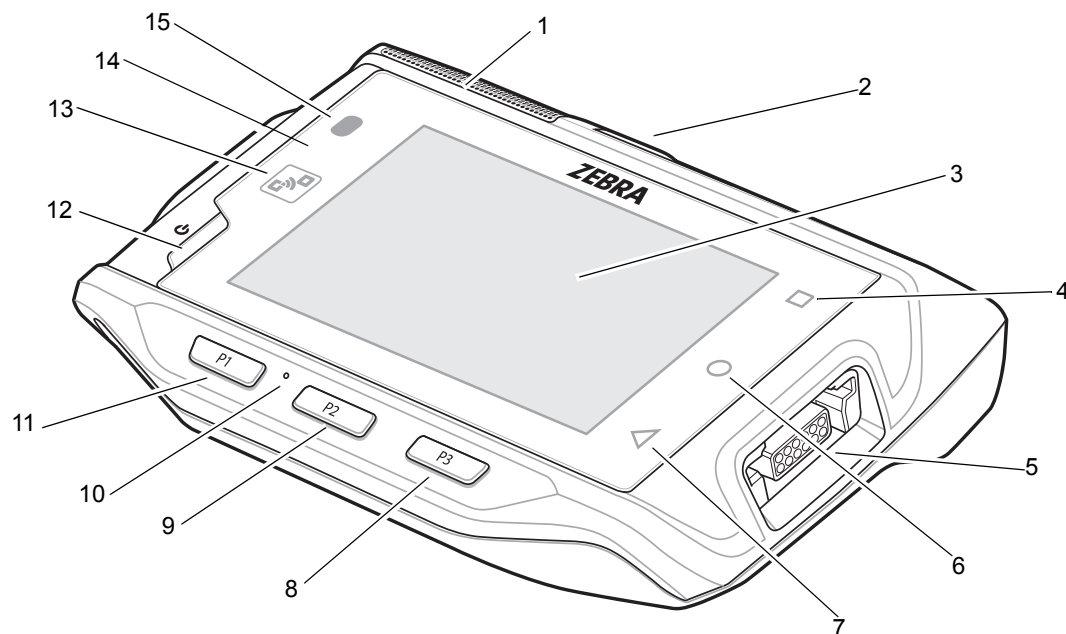
- WT6000
- Battery
- Regulatory Guide.

Inspect the equipment for damage. If you are missing any equipment or if you find any damaged equipment, contact Support immediately. See [Service Information on page xiv](#) for contact information.

## Removing the Screen Protection Film

A screen protection film is applied to the WT6000 screen to protect the screen during shipping. To remove the screen protector, carefully lift the thin film off the display.

## Features



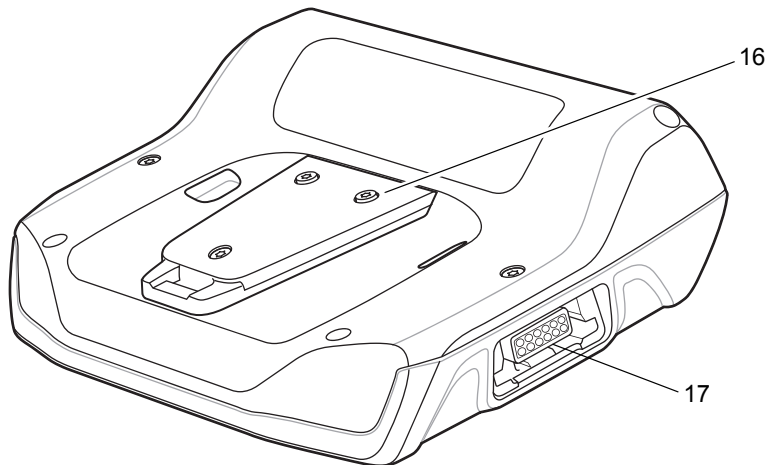
**Figure 1-1** Front View

**Table 1-1** Front View Descriptions

Number	Item	Function
1	Speakers	Provides audio output for video and music playback.
2	Battery	Provides power to the device.
3	Display	Displays all information needed to operate the WT6000.
4	Recent Button	Displays recently open applications.
5	Right Interface Connector	Provides USB host and client communication, audio and device charging via cables and accessories.
6	Home Button	Displays the Home screen.
7	Back Button	Displays the previous screen.
8	P3 Button	Initiates Push-To-Talk communication (programmable).
9	P2 Button	Increases volume.
10	Microphone	Use for communication in Headset mode.
11	P1 Button	Decreases volume.
12	Power Button	Turns the display on and off. Press and hold to reset the device and power off.
13	NFC Antenna	Provides communication with other NFC-enabled devices.

**Table 1-1** *Front View Descriptions (Continued)*

Number	Item	Function
14	Ambient Light Sensor	Determines ambient light for controlling display backlight intensity.
15	Notification/Charge LED	Indicates battery charging status while charging with USB Charge cable and provide notifications from applications.

**Figure 1-2** *Back View***Table 1-2** *Back View Descriptions*

Number	Item	Function
16	Cleat	Provides alignment and secures the WT6000 to the wrist mount.
17	Left Interface Connector	Provides USB host and client communication, audio and device charging via cables and accessories.

## Setup

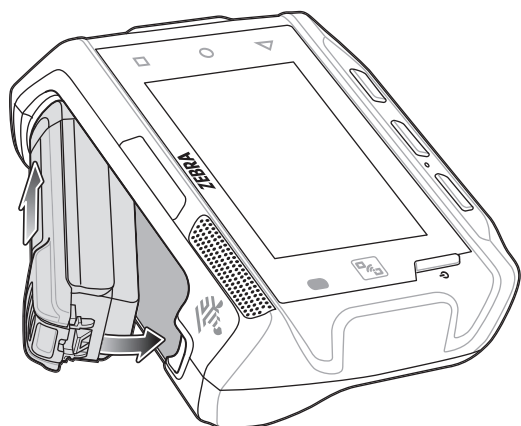
Perform these procedures to start using the WT6000 for the first time.

1. Install the battery.
2. Charge the WT6000.
3. Power on the WT6000.

### Installing the Battery

To install the battery:

1. Insert the silver end of the battery into the battery well.



**Figure 1-3** Battery Installation

2. Press the battery down until it snaps into place.

## Charging the Battery

Before using the WT6000 for the first time, charge the battery using a cable or a cradle with the appropriate power supply. For information about the accessories available for the WT6000, see [Chapter 6, Accessories](#).

The 3,350 mAh battery fully charges in approximately four hours at room temperature.

Charge batteries in temperatures from 0°C to 40°C (32°F to 104°F). The WT6000 or accessory always performs battery charging in a safe and intelligent manner. At higher temperatures (e.g. approximately +37°C (+98°F)) the WT6000 or accessory may for small periods of time alternately enable and disable battery charging to keep the battery at acceptable temperatures. The WT6000 or accessory indicates when charging is disabled due to abnormal temperatures via its red blinking LED.

1. To charge the main battery, connect the charging accessory to the appropriate power source.
2. Insert the WT6000 into a cradle or attach to a cable. The WT6000 turns on and begins charging.

When using the USB Charge cable, the Notification/Charge LED lights amber while charging, then turns solid green when fully charged.

When using a cradle, the cradle Charge LED lights amber while charging, then turns solid green when fully charged.

**Table 1-3** Charge LED Charging Indicators

State	Indication
Off	WT6000 is not charging. WT6000 is not inserted correctly in the cradle or connected to a power source. Charger/cradle is not powered.
Solid Amber	Healthy battery is charging.
Solid Green	Healthy battery charging is complete.
Fast Blinking Red (2 blinks/second)	Charging error, e.g.: - Temperature is too low or too high. - Charging has gone on too long without completion (typically eight hours).
Solid Red	Unhealthy battery is charging or fully charged.





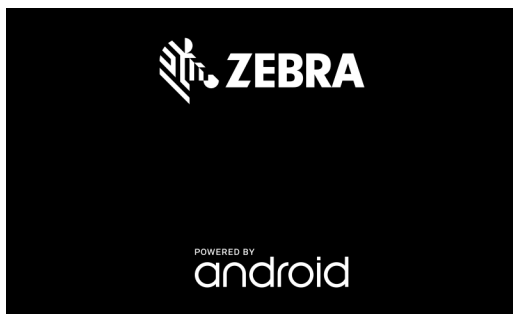
**IMPORTANT** When trying to power on the device, a quick red blink of the Charging LED indicates that it does not have enough battery power to turn on. Charge the battery or replace it.

## Starting the WT6000

When installed in a cradle, the WT6000 starts automatically as soon as power is applied.

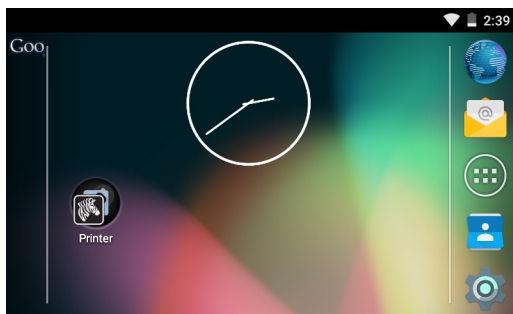
When a charged battery is installed and the WT6000 is turned off, press the Power button to turn on.

When the WT6000 is powered on for the first time, it initializes its system. The splash screen appears for a short period of time.



**Figure 1-4** *Splash Screen*

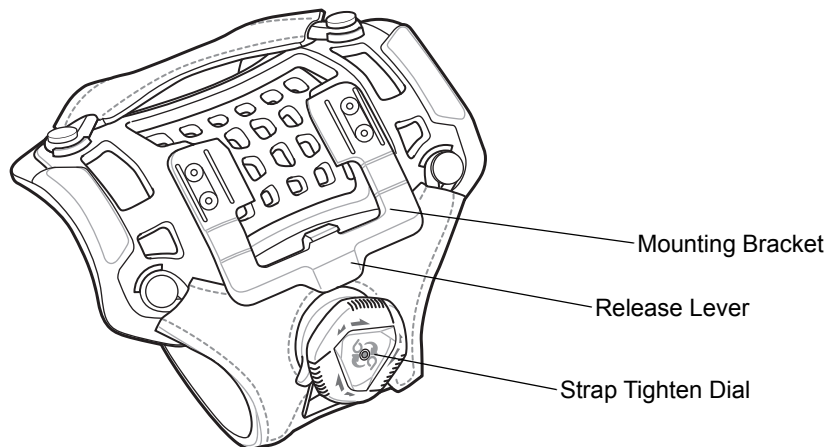
The splash screen is followed by the boot animation screen and then the **Home Screen**.



**Figure 1-5** *Home Screen*

## Installing the Wrist Mount

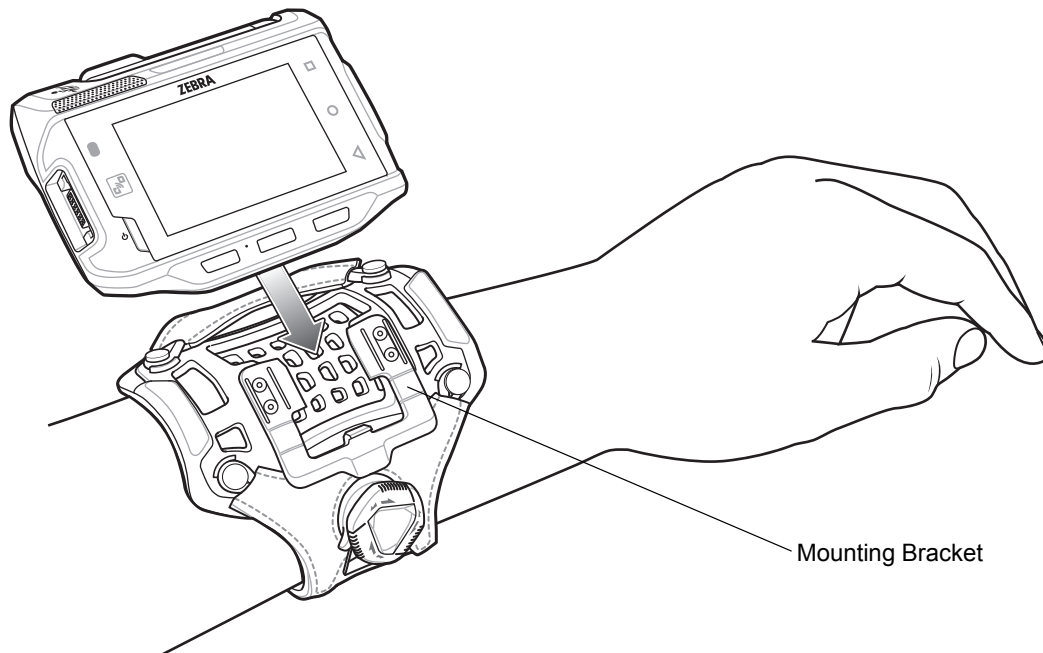
The wrist mount provides the mounting of the WT6000 on the forearm for hands-free applications. Refer to the *Wrist Mount Installation Guide* for information on the wrist mount.



**Figure 1-6** *Wrist Mount*

To install the wrist mount:

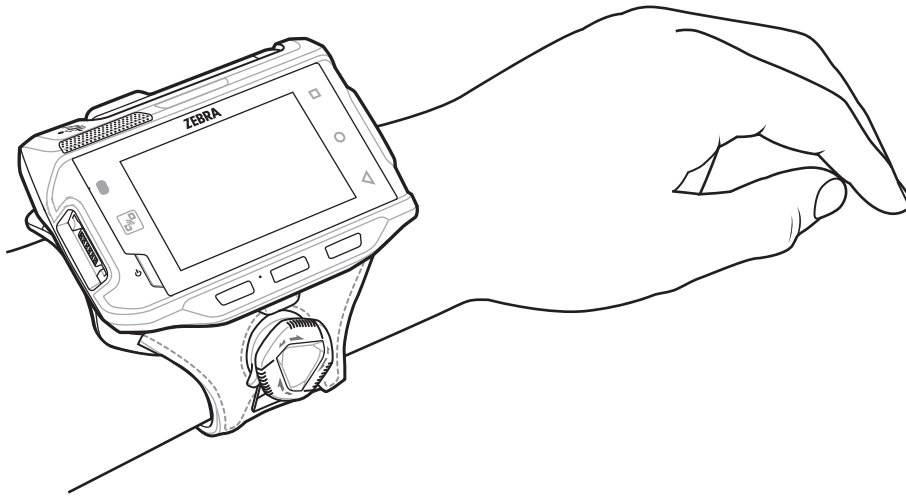
1. Slide the wrist mount onto arm.
2. Position the Install the short strap on the forearm.
3. Turn the dial clockwise to tighten. If too tight, turn counterclockwise to loose slightly.
4. Align the cleat on the back of the WT6000 with the mounting bracket on the wrist mount.



**Figure 1-7** *Aligning the Cleat*

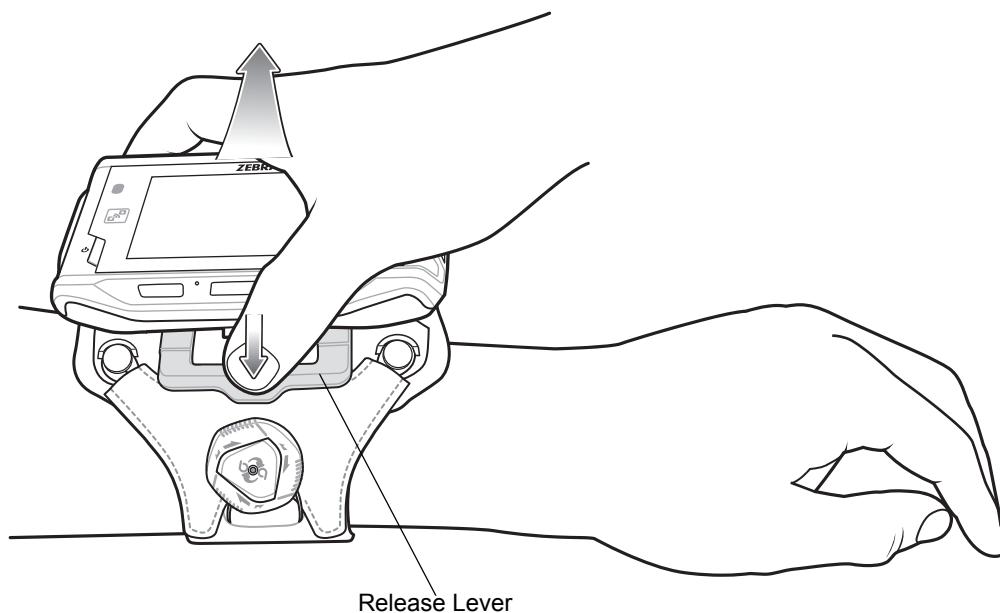
5. Slide the WT6000 onto the wrist mount until it clicks into place.

6. If necessary, use the dial to loosen and re-tighten the strap.



**Figure 1-8** *WT6000 and Wrist Mount*

To remove the WT6000 from the wrist mount, press down on the release lever and slide the WT6000 out.



**Figure 1-9** *WT6000 Removal*

---

## Connecting a Scanner

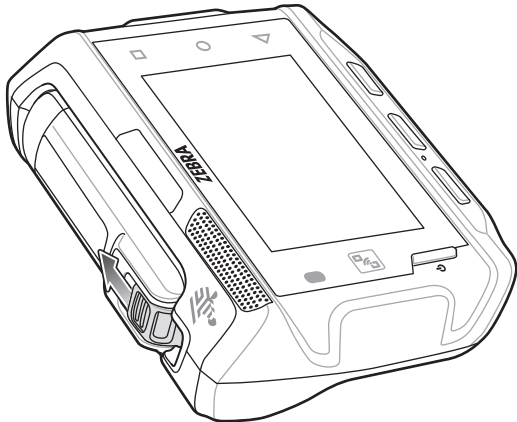
The RS4000 scanner and the RS5000 and RS6000 imagers can be used with the WT6000. See [RS4000 Scanner on page 6-31](#) for procedures for connecting the scanner to the WT6000. Refer to the RS5000 Quick Start Guide for procedures for connecting the RS5000 imager to the WT6000. Refer to the RS6000 Product Reference Guide for procedures for connecting the RS6000 imager to the WT6000.

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## Replacing the Battery

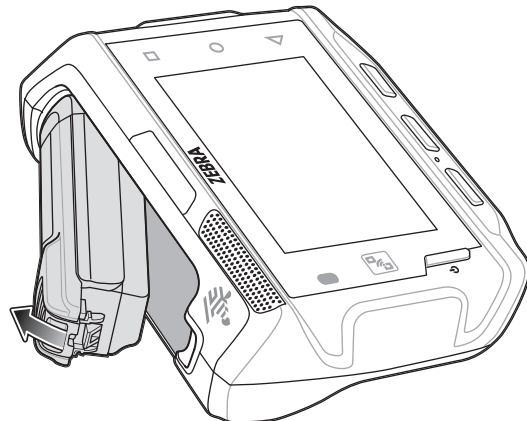
To remove the battery:

1. Press the Power button to place the WT6000 in suspend mode.
2. Using finger tip, press the battery release latch toward the silver end of the battery.



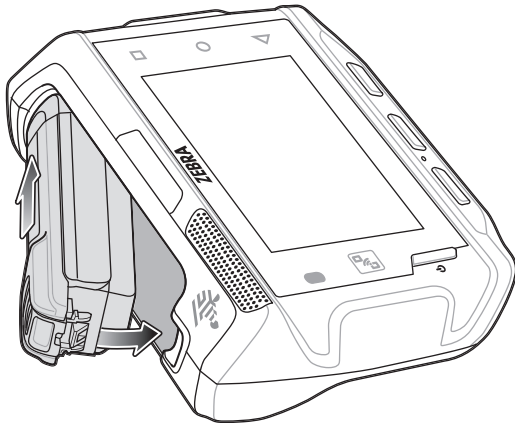
**Figure 1-10** *Pull Release Latch Back*

3. Lift the battery out of the battery well.



**Figure 1-11** *Battery Removal*


4. Insert the silver end of the battery into the battery well.



**Figure 1-12** *Battery Installation*

5. Press the battery down until it snaps into place.

## Battery Management

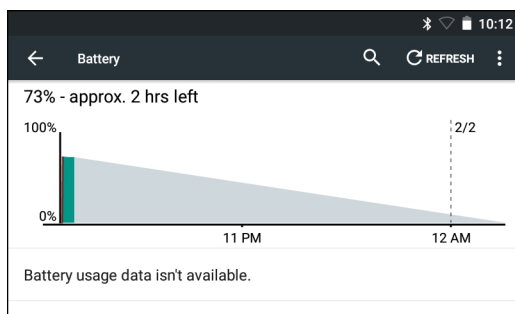
To check the charge status of the main battery, on the Home screen touch  >  >  **About device** > **Status**.

**Battery status** indicates that the battery is discharging (not charging) and **Battery level** lists the battery charge (as a percentage of fully charged).

### Monitor Battery Usage

The Battery screen lists which applications consume the most battery power. Also use it to turn off applications that were downloaded if they are consuming too much power.

Touch  >  >  **Battery**.



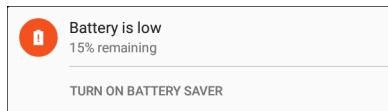
**Figure 1-13** *Battery Screen*

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

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

### Low Battery Notification

When the battery charge level drops below 15%, the WT6000 displays a notice to connect the WT6000 to power. Place the WT6000 into a cradle to charge the battery.



**Figure 1-14** Low Battery Notification

When the battery charge drops below 10%, the WT6000 displays a notice to connect the WT6000 to power. The user must charge the battery using one of the charging accessories.

When the battery charge drops below 5%, the WT6000 turns off. Place the WT6000 into a cradle to charge the battery.

### Battery Optimization

Observe the following battery saving tips:

- Set the screen to turn off after a short period of non-use. See [Setting Screen Timeout Setting on page 1-11](#).
- Reduce screen brightness. See [Setting the Screen Brightness on page 1-11](#).
- Turn off all wireless radios when not in use.
- Turn off automatic syncing for Email, Calendar, Contacts and other applications.
- Use the Power Control widget to check and control the status of radios, the screen brightness, and syncing.
- Minimize use of applications that keep the WT6000 from suspending, for example, music and video applications.

### Turning Off the Radios

To turn off all the radios:

✓ **NOTE** Alternately, you can place the device into **Airplane mode** using the **Quick Settings** option.


1. Press the power button until the menu appears.
2. Touch **Airplane mode**. The airplane icon ✈ appears in the Status bar indicating that all the radios are off.

---

## Setting the Date and Time

The date and time is automatically synchronized using a NTP server when the WT6000 is connected to a Wi-Fi network. To manually change the date and time:

1. Touch > > **Date & time**.
2. Touch **Automatic date & time** to disable automatic date and time synchronization.
3. Touch **Set date**.

4. Move the sliders up and down to select the month, date and year.
5. Touch **Done**.
6. Touch **Set time**.
7. Move the sliders up and down to select the hour, minutes and part of the day.
8. Touch **Done**.
9. Touch **Select time zone**.
10. Select the current time zone from the list.
11. Touch .

---

## Display Setting

Use Display settings to change the screen brightness, set sleep time and change font size.


### Setting the Screen Brightness

To manually set the screen brightness:




1. Touch  >  **Display**.
2. Touch **Brightness level**.



**Figure 1-15** *Brightness Dialog Box*



3. Use the slider to set a brightness level.
4. Touch .

To automatically set the screen brightness:

1. Touch  >  **Display**.
2. Touch **Adaptive brightness**. The control switch moves to the right and turns green indicating the option is enabled.
3. Touch .

### Setting Screen Timeout Setting

To set the screen sleep time:



1. Touch  >  **Display** > **Sleep**.
2. Select one of the sleep values.
  - **15 seconds**

- **30 seconds**
- **1 minute**
- **2 minutes**
- **5 minutes** (default)
- **10 minutes**
- **30 minutes.**

3. Touch .

### Setting Key Light Timeout Setting



To set the key light sleep time:

1. Touch  >  **Display** > **Key light timeout setting.**
2. Select one of the sleep values.
  - **Always on**
  - **6 seconds** (default)
  - **10 seconds**
  - **15 seconds**
  - **30 seconds**
  - **1 minute.**

3. Touch .

### Setting Font Size




To set the size of the font in system applications:

1. Touch  >  **Display** > **Font size.**
2. Select one of the font size values.
  - **Normal** (default)
  - **Large**
  - **Huge.**

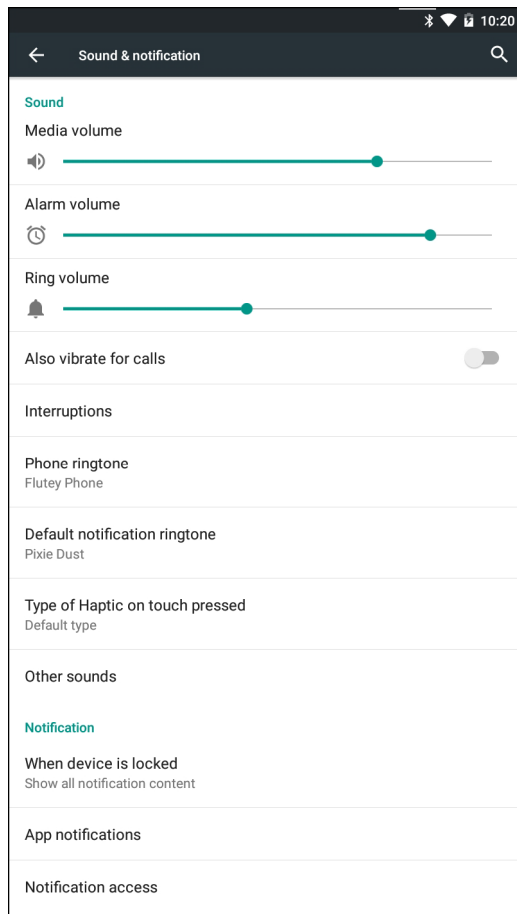
3. Touch .

---

## General Sound Setting

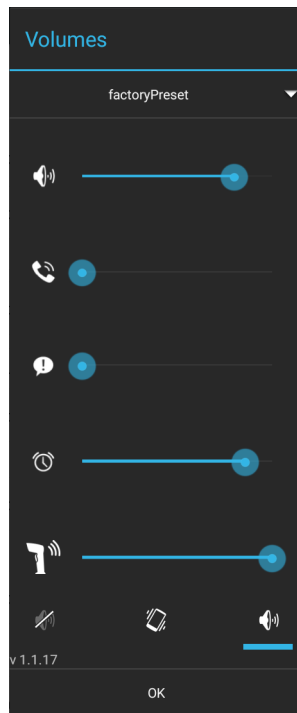
Use the **Sounds & notifications** settings to configure media and alarm volumes. On the Home screen, touch   
>  >  **Sounds.**













**Figure 1-16** *Sounds Screen*

- **Sound**
  - **Zebra Volume Control**



**Figure 1-17** Zebra Volume Control Dialog Box

-  - Controls the music and media volume.
-  - Controls the ringtone volume.
-  - Controls the system notification volume.
-  - Controls the alarm clock volume.
-  - Controls the scan good decode beep volume.
- Bottom row icons:
  -  - Places all sounds except media and alarms in silence mode.
  -  - Places all sounds except media and alarms in vibrate mode.
  -  - Places all sounds in sound mode.
- **Also vibrate for calls** - Touch to enable the WT6000 to also vibrate on incoming calls.
- **Interruptions** - Use to prioritize sound notifications. Touch the settings to turn call and message interruptions on or off.
 

If user turns Messages notifications on, touch **Calls/messages from** to specify from whom to accept notifications (**Anyone**, **Starred contacts only** or **Contacts Only**).

In **Downtime** section, select which days and times to allow for sound notifications.
- **Phone ringtone** - Touch to select a sound to play on incoming calls.
- **Default notification ringtone** - Touch to select a sound to play for all system notifications.
- **Type of Heptic on touch pressed** - Touch to select the type of haptic feedback when user touch the Back, Home and Recent buttons.
  - **Type2 25ms, 45ms, 10ms** - Long vibration.
  - **Type3 30ms, 260ms, 10ms** - Medium vibration.

- **Default type** - Short vibration.
  - **Other sounds**
    - **Dial pad tones** - (default – enabled)
    - **Screen locking sounds** - plays a sound when locking and unlocking the screen (default – enabled)
    - **Touch sounds** - Plays a sound when making screen selections (default – enabled).
    - **Vibrate on touch** - Vibrates when making screen selections (default – enabled).
  - **Notification**
    - **When device is locked** - Manage whether notifications can be seen when the WT6000 is locked.
      - **Show all notification content** -
      - **Don't show notifications at all** -
    - **App notification** - Modify the notification settings individually for an application. The setting under **When device is locked** always takes precedence over the setting for an individual application.
    - **Notification access** - Displays which applications can access notifications.
- When a notification arrives, its icon appears at the top of the screen. Icons for pending notifications appear on the left, and system icons on the right.



# CHAPTER 2 USING THE WT6000

---

## Introduction

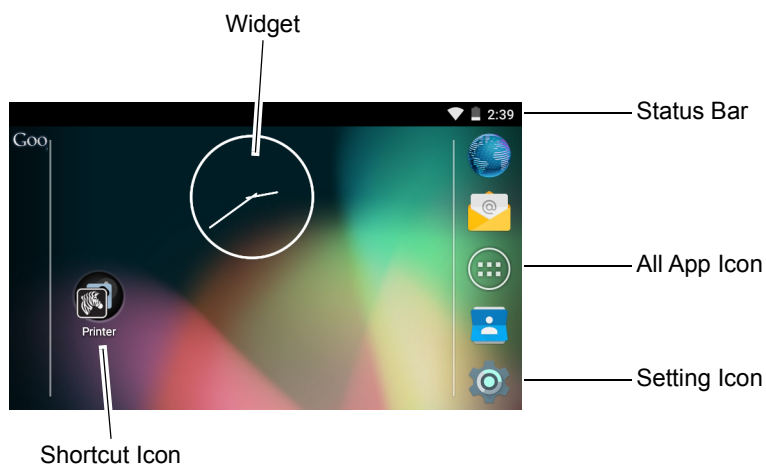
This chapter describes the screens, status and notification icons, and controls on the WT6000, and provides basic instructions for using the WT6000.

---

## Home Screen

The Home screen displays when the WT6000 turns on. Depending upon the configuration, the Home screen might appear different. Contact your system administrator for more information.

After a suspend or screen time-out, the Home screen displays with the lock sliders. Slide to the right toward to unlock the screen. For screen locking information see [Un-Locking the Screen on page 2-9](#).



**Figure 2-1** Home Screen



**NOTE** The Home screen icons can be configured by the user and may look different than shown.

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














## Status Bar

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

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

















### Status Icons

**Table 2-1** *Status Icons*

Icon	Description
	Indicates that the Alarm is active.
	Indicates that the ringer is silenced.
	Indicates that the battery is fully charged.
	Indicates that the battery is partially drained.
	Indicates that the battery charge is low.
	Indicates that the battery charge is very low.
	Indicates that the battery is charging.
	Indicates that the Airplane Mode is active. All radios are turned off.
	Indicates that Bluetooth is on.
	Connected to a Wi-Fi network.
	Not connected to a Wi-Fi network or no Wi-Fi signal.
	Connected to an Ethernet network.
	Headset audio cable is connected to the WT6000.

## Notification Icons

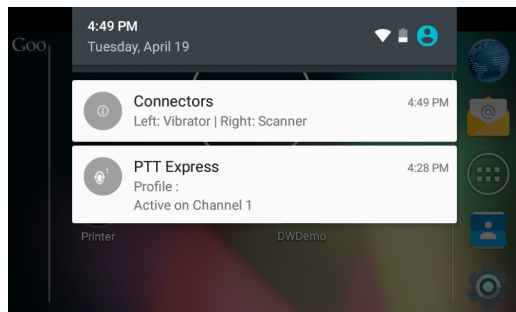
**Table 2-2** *Notification Icons*

Icon	Description
	Indicates battery is low.
	Indicates that more notifications are available for viewing.
	Indicates that data is syncing.
	Indicates an upcoming event.
	Indicates that an open Wi-Fi network is available.
	Indicates that a song is playing.
	Indicates that a problem with sign-in or sync has occurred.
	Indicates that the WT6000 is uploading data.
	Indicates that the WT6000 is downloading data when animated and download is complete when static.
	Indicates that the WT6000 is connected via USB cable.
	Indicates that the WT6000 is connected to or disconnected from virtual private network (VPN).
	Preparing Internal Storage.
	Indicates that USB debugging is enabled on the WT6000.
	Indicates that the WT6000 is connected to a cable or cradle.
	Indicates that the WT6000 is connected to a RS507 or RS6000.
	Indicates that the RxLogger application is running and capturing data.

## Managing Notifications

Notification icons report the arrival of new messages, calendar events, and alarms, as well as ongoing events. When a notification occurs, an icon may appear in the Status bar with a brief description. See [Notification Icons on page 2-3](#) for a list of possible notification icons and their description. Open the Notifications panel to view a list of all the notifications.


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



**Figure 2-2** Notification Panel

The WT6000 provides notifications when the user connects an accessory or cables into the interface connectors. The notification list the connector and the type of cable.

To respond to a notification, open the Notifications Panel and then touch a notification. The Notifications Panel closes and the subsequent activity is dependent on the notification.

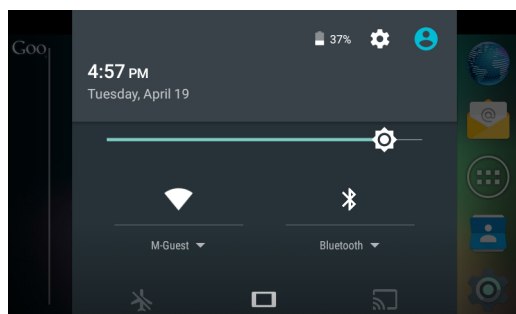
To clear all notifications, open the Notifications Panel and then touch . All event-based notifications are removed.

Ongoing notifications remain in the list.

To close the Notification Panel, swipe the Notifications Panel up.

## Quick Settings

Use Quick Settings to get to frequently used settings, like turning on airplane mode. To open Quick Settings, swipe down from the top of the screen with two fingers or twice with one finger.



**Figure 2-3** Quick Settings

To change a setting, just touch the icon:

- Display brightness: Slide to lower 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 the **Bluetooth**.
- Airplane mode: Turn airplane mode on or off. Airplane mode means device will not connect to Wi-Fi or Bluetooth.
- Auto-rotate: Lock the device's orientation in portrait or landscape mode or set to automatically rotate.





## 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.
- **Drag** - Tap and hold an item for a moment and then move finger on the screen until reaching the new position.
- **Swipe** - Move finger up and down or left and right on the screen to:
  - unlock the screen
  - view additional Home screens
  - view additional application icons in the Launcher window
  - view more information on an application's screen.
- **Double-tap** - Tap twice on a web page, map, or other screen to zoom in and out.
- **Pinch** - In some applications, zoom in and out by placing two fingers on the screen and pinching them together (to zoom out) or spreading them apart (to zoom in).

## Using the On-screen Keyboard



Use the on-screen keyboard 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 applications. Some applications do not support editing some or all of the text they display; others may offer their own way to select text.

## Entering Numbers, Symbols and Special Characters

To enter numbers and symbols:

- Touch and hold one of the top-row keys until a menu appears then select a number. Keys with alternate characters display an ellipsis ( ... ) below the character.
- Touch and hold the Shift key with one finger, touch one or more capital letters or symbols to enter them, and then lift both fingers to return to the lowercase keyboard.
- Touch  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.
- Keys with alternate characters display an ellipsis ( ... ) below the character.













## Applications

The APPS screen displays icons for all installed applications. The table below lists the applications installed on the WT6000. Refer to the *WT6000 Integrator Guide* for information on installing and uninstalling application.












**Table 2-3** *Applications*

Icon	Description
	<b>App Gallery</b> - Provides links to utilities and demonstration applications that can be installed on the WT6000.
	<b>Battery Manager</b> - Displays battery information, including charge level, status, health and wear level.
	<b>Bluetooth Pairing Utility</b> – Use to pair the RS6000 Hans-free Imager with the WT6000 by scanning a bar code.
	<b>Browser</b> - Use to access the Internet or intranet.
	<b>Calculator</b> - Provides the basic and scientific arithmetic functions.
	<b>Calendar</b> - Use to manage events and appointments.
	<b>Clock</b> - Use to schedule alarms for appointments or as a wake-up.
	<b>Contacts</b> - Use to manage contact information.
	<b>DataWedge</b> - Enables data capture using the imager.

**Table 2-3** Applications (Continued)


Icon	Description
	<b>Device Central</b> - Displays detailed information about the WT6000 and supported peripherals. See <a href="#">Device Central on page 5-4</a> for more information.
	<b>Downloads</b> - Lists all downloads files.
	<b>DWDemo</b> - Provides a way to demonstrate the data capture features using the imager. See <a href="#">DataWedge Demonstration on page 5-11</a> for more information.
	<b>elemez</b> - Use to provide diagnostic information. See <a href="#">Elemesz on page 5-15</a> for more information.
	<b>Email</b> - Use to send and receive email.
	<b>File Browser</b> - Organize and manage files on the WT6000. See <a href="#">File Browser on page 5-6</a> for more information.
	<b>Gallery</b> - Use to view photos stored on the device.
	<b>IST</b> - Use to configure sensor related features and view available sensors on the device, sensor information, and versions of each component in sensor subsystem.
	<b>MobiControl Stage</b> – Opens the <b>Mobi Control Stage</b> application to stage the device.
	<b>MSP Agent</b> - Enables management of the WT6000 from an MSP server. Requires the purchase of an appropriate MSP client license per device to suit the level of management functionality required.
	<b>Music</b> - Play music stored on the device.
	<b>Print Station</b> - Use to print labels and receipts directly to a Zebra ZPL printer via USB, Bluetooth or WLAN.

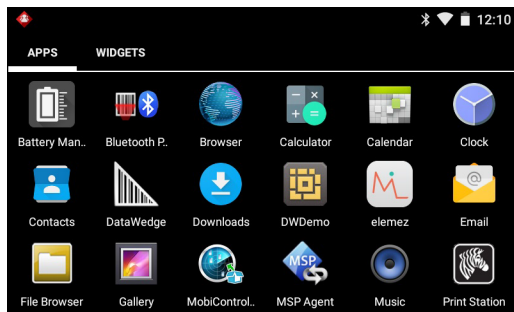
**Table 2-3** Applications (Continued)

Icon	Description
	<b>Printer Setup</b> - Use to connect to a Zebra printer.
	<b>PTT Express</b> - Use to launch PTT Express client for VoIP communication.
	<b>Rapid Deployment</b> - Allows the WT6000 to stage a device for initial use by initiating the deployment of settings, firmware and software. Requires the purchase of an MSP client license per device.
	<b>RxLogger</b> - Use to diagnose device and application issues. See the <i>WT6000 Integrator Guide</i> for more information.
	<b>Search</b> - Use the Google search engine to search the Internet and the WT6000.
	<b>Settings</b> - Use to configure the WT6000.
	<b>Sound Recorder</b> - Use to record audio.
	<b>StageNow</b> - Allows the WT6000 to stage a device for initial use by initiating the deployment of settings, firmware and software.
	<b>Tap &amp; Pair</b> - Use to pair the WT6000 with a Zebra Bluetooth printer.
	<b>Velocity</b> - Opens the Wavelink terminal emulation application.
	<b>Zebra Utilities</b> - enables printing of barcode labels and receipts directly to a Zebra printer via Bluetooth or WLAN.

## Accessing Applications

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


1. On the Home screen, touch .

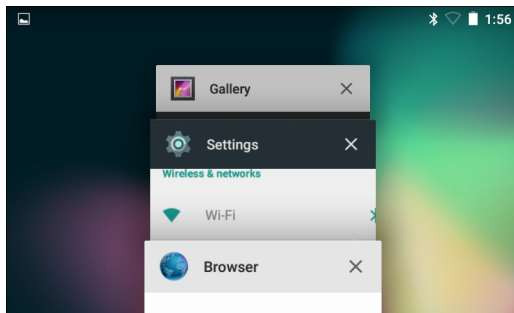


**Figure 2-4** APPS Window


2. Slide the **APPS** window left or right to view more application icons. Touch an icon to open the application.

### Switching Between Recent Applications

1. Touch and hold . A window appears on the screen with icons of recently used applications.



**Figure 2-5** Recently Used Applications


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

## Un-Locking the Screen

Use the Lock screen to protect access to data on the WT6000. Some email account require locking the screen. Refer to the *WT6000 Integrator Guide* for information on setting up the locking feature. The Locking feature functions differently in Single User mode or Multiple User mode.

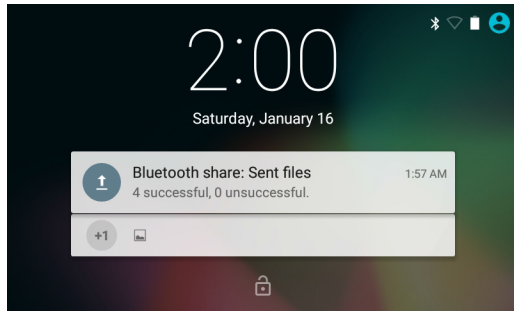
When locked, a pattern, PIN or password is required to unlock the device. Press the Power button to lock the screen. The device also locks after a pre-defined time-out.

Press and release the Power button to wake the device.

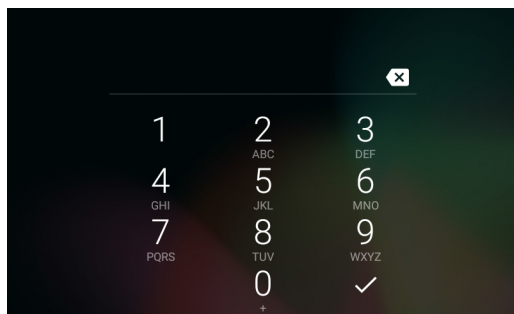
The Lock screen displays. Slide  up to unlock the screen.

If the Pattern screen unlock feature is enabled, the Pattern screen appears instead of the Lock screen.

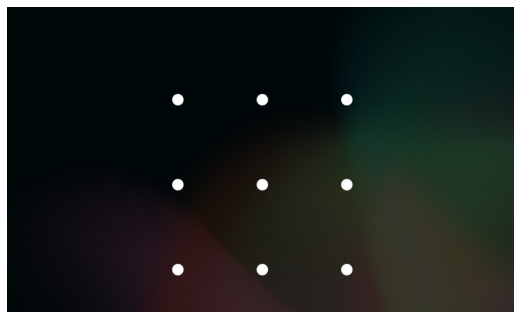
If the PIN or Password screen unlock feature is enabled, enter the PIN or password after unlocking the screen.



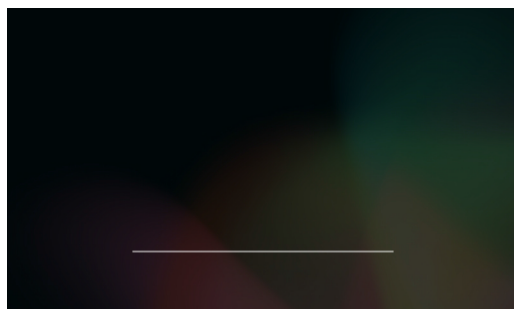
**Figure 2-6** *Lock Screen*



**Figure 2-7** *PIN Screen*



**Figure 2-8** *Pattern Screen*




**Figure 2-9** *Password Screen*

---

## Suspend Mode

The WT6000 goes into suspend mode when the user presses the Power button or after a period of inactivity (set in the Display settings).

To wake the WT6000 from Suspend mode, press the Power button. The Lock screen displays. Slide  up to unlock the screen. If the Pattern screen unlock feature is enabled, the Pattern screen appears instead of the Lock screen.



**NOTE** If the user enters the PIN, password or pattern incorrectly five times, they must wait 30 seconds before trying again.

If the user forgets the PIN, password or pattern contact the system administrator.

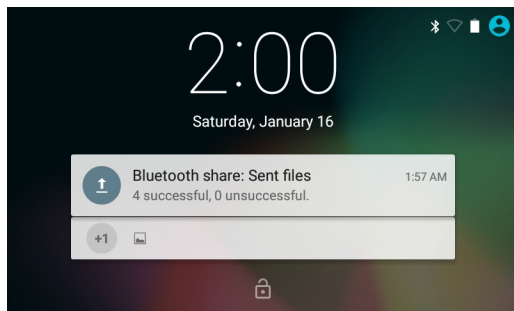


Figure 2-10 Lock Screen

## Resetting the WT6000

There are two reset functions:

- Soft reset
- Hard reset.

### Performing a Soft Reset

Perform a soft reset if applications stop responding.

1. Press the power button until the menu appears.
2. Touch **Reset**.
3. The device reboots.

### Performing a Hard Reset



**CAUTION** Perform a hard reset only if the WT6000 stops responding.

To perform a hard reset, simultaneously press and hold the power, P1 and P2 buttons for five seconds. When the device reboots, release the buttons.





# CHAPTER 3 DATA CAPTURE

---

## Introduction

The WT6000 can be used with the following optional data capture accessories:

- RS4000 laser scanner
- RS5000 Hands-free imager.
- RS6000 Hands-free imager
- RS507 Hands-free imager.

---

## Laser Scanning

WT6000 with an optional RS4000 laser scanner has the following features:

- Reading of a variety of bar code symbologies, including the most popular linear and 1D code types.
- Advanced intuitive laser aiming for easy point-and-shoot operation
- Adaptive scanning.

## Scanning Bar Codes



**NOTE** Scanning procedures depend on the application and WT6000 configuration. An application may use different scanning procedures from the one listed below.

---

## Imaging

The WT6000 with an optional RS507, RS5000 or RS6000 imager has the following features:

- Omnidirectional (360°) reading of a variety of bar code symbologies, including the most popular linear, postal, PDF417, and 2D matrix code types.
- Advanced intuitive laser aiming for easy point-and-shoot operation.

The imager uses imaging technology to take a picture of a bar code, stores the resulting image in its memory, and executes state-of-the-art software decoding algorithms to extract the bar code data from the image.

### Operational Modes

The optional imager supports two modes of operation. Activate each mode pressing the **Scan** button.

- **Decode Mode:** In this mode, the imager attempts to locate and decode bar codes within its field of view. The imager remains in this mode as long as the user holds the scan button, or until it decodes a bar code.



**NOTE** To enable Pick List Mode use **DataWedge**. Pick List can also be set in an application using a API command.

- **Pick List Mode:** This mode allows the user to selectively decode a bar code when more than one bar code is in the imager's field of view. To accomplish this, move the aiming crosshair center dot over the required bar code to decode only that bar code. This feature is ideal for pick lists containing multiple bar codes and manufacturing or transport labels containing more than one bar code (either 1D or 2D).

---

### Scanning Considerations

Typically, scanning is a simple matter of aim, scan/decode and a few quick trial efforts master it. However, two important considerations can be used to optimize any scanning performance:

- Range

Any scanning device decodes well over a particular working range — minimum and maximum distances from the bar code. This range varies according to bar code density and scanning device optics.

Scanning within range brings quick and constant decodes; scanning too close or too far away prevents decodes. Move the scanner closer and further away to find the right working range for the bar codes being scanned. However, the situation is complicated by the availability of various integrated scanning modules. The best way to specify the appropriate working range per bar code density is through a chart called a decode zone for each scan module. A decode zone simply plots working range as a function of minimum element widths of bar code symbols. Refer to the *WT6000 Integrator Guide* for decode zones for the optional data capture options.

- Angle

Scanning angle is important for promoting quick decodes. When laser beams reflect directly back into the scanner from the bar code, this specular reflection can “blind” the scanner.

To avoid this, scan the bar code so that the beam does not bounce directly back. But don't scan at too sharp an angle; the scanner needs to collect scattered reflections from the scan to make a successful decode. Practice quickly shows what tolerances to work within.



**NOTE** Contact the Zebra Global Support Center if chronic scanning difficulties develop. Decoding of properly printed bar codes should be quick and effortless.

---

### Bar Code Capture with RS4000

To read a bar code, a scan-enabled application is required. The WT6000 contains the **DataWedge** application that allows the user to enable the scanner to decode bar code data and display the bar code content. See [DataWedge on page 5-11](#) for information on enabling **DataWedge**.

1. Connect the RS4000 to the WT6000. See [RS4000 Scanner on page 6-31](#) for more information.
2. Ensure that a scan enabled application is loaded or DataWedge is enabled (see [DataWedge on page 5-11](#) for more information).
3. Press the trigger.
4. Aim the scan beam at the bar code.

Ensure the red scan beam covers the entire bar code. The Decode LED lights red to indicate that scanning is in process, then lights green and a beep sounds, by default, to indicate the bar code was decoded successfully.



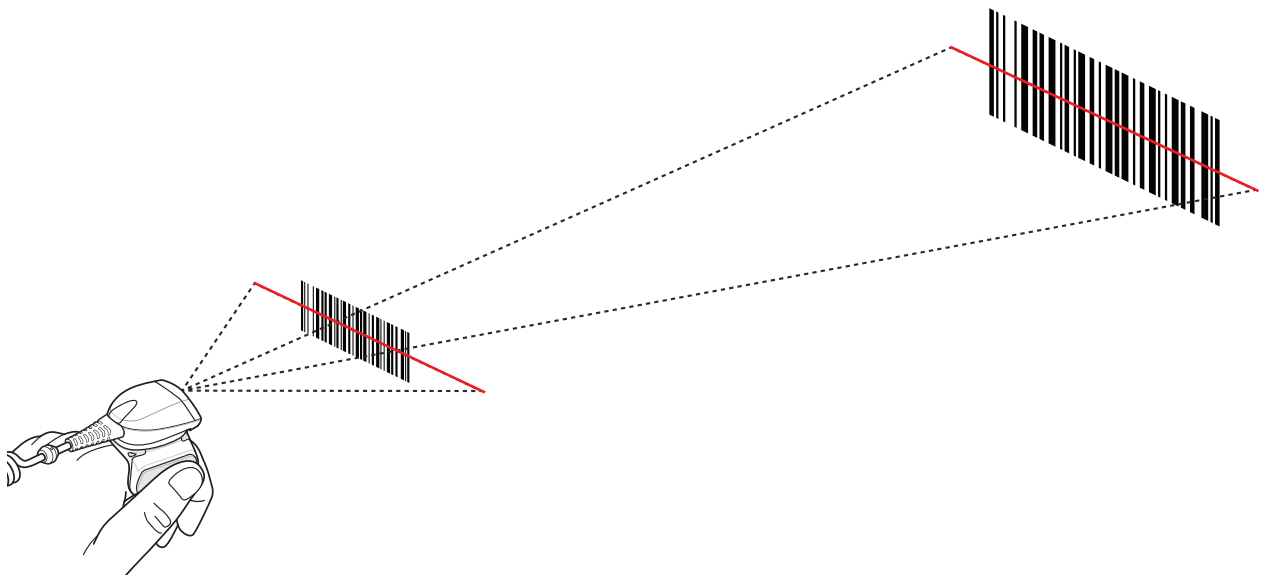
**Figure 3-1** *Laser Scanner Aiming Pattern*

5. Release the trigger.

### Adaptive Scanning

The RS4000 contains the adaptive scanning feature that automatically adjusts the scan beam width for rapid and easy scanning of bar codes from near contact to more than 200 inches away.

By default the RS4000 is set to wide scan beam width. When the user presses the trigger, the RS4000 determines the distance from the bar code. For close bar codes the RS4000 sets a wide beam width and for far bar codes it sets a narrow beam width. The RS4000 uses distance, bar code type and material to determine the correct scan beam width.



**Figure 3-2** *RS4000 Adaptive Scanning*

## Bar Code Capture with RS5000 Hands-Free Imager

To read a bar code, a scan-enabled application is required. The WT6000 contains the **DataWedge** application that allows the user to enable the scanner to decode bar code data and display the bar code content. See [DataWedge on page 5-11](#) for more information on launching DataWedge.

1. Connect the RS5000 to the WT6000. See [RS5000 Imager on page 6-33](#) for more information.
2. Press the scan trigger and aim the RS5000 at a bar code.
3. Ensure the bar code is within the area formed by the aiming pattern. The aiming dot is used for increased visibility in bright lighting conditions.



**Figure 4** *RS5000 Aiming Pattern*



**Figure 5** *RS5000 Pick List Mode with Multiple Bar Codes*

4. If the decode is successful the LED lights green. The terminal beeps if programmed accordingly.



**NOTE** Imager decoding usually occurs instantaneously. The RS5000 repeats the steps required to take a digital picture (image) of a poor or difficult bar code as long as the scan button remains pressed.

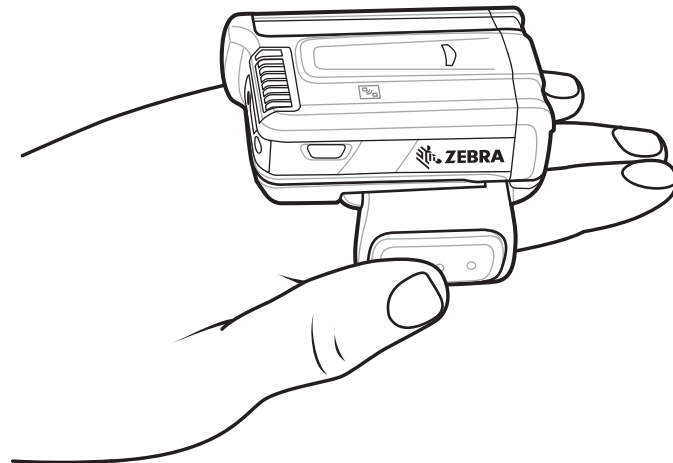
## Bar Code Capture with RS6000 Hands-Free Imager

To read a bar code, a scan-enabled application is required. The WT6000 contains the **DataWedge** application that allows the user to enable the scanner to decode bar code data and display the bar code content. See [DataWedge on page 5-11](#) for more information on launching DataWedge.

Pair the RS6000 with the WT6000. See [Pairing Using Simple Serial Interface on page 3-9](#) or [Pairing Using Bluetooth Human Interface Device on page 3-10](#) for more information.

1. Ensure that an application is open on the device and a text field is in focus (text cursor in text field).

2. Point the RS6000 at a bar code.

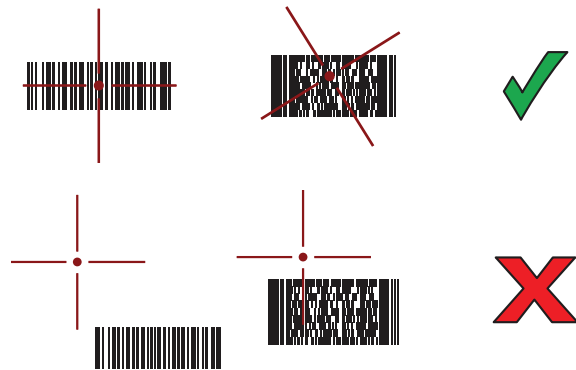


**Figure 3-1** Bar Code Scanning with RS6000

3. Press and hold the trigger.

The red laser aiming pattern turns on to assist in aiming. Ensure the bar code is within the area formed by the cross-hairs in the aiming pattern. The aiming dot is used for increased visibility in bright lighting conditions.

The RS6000 LEDs light green, a beep sounds to indicate the bar code was decoded successfully. Note that when the RS6000 is in Pick List Mode, the RS6000 does not decode the bar code until the center of the crosshair touches the bar code.



**Figure 3-2** Aiming Pattern



**Figure 3-3** Pick List Mode with Multiple Bar Codes in Aiming Pattern

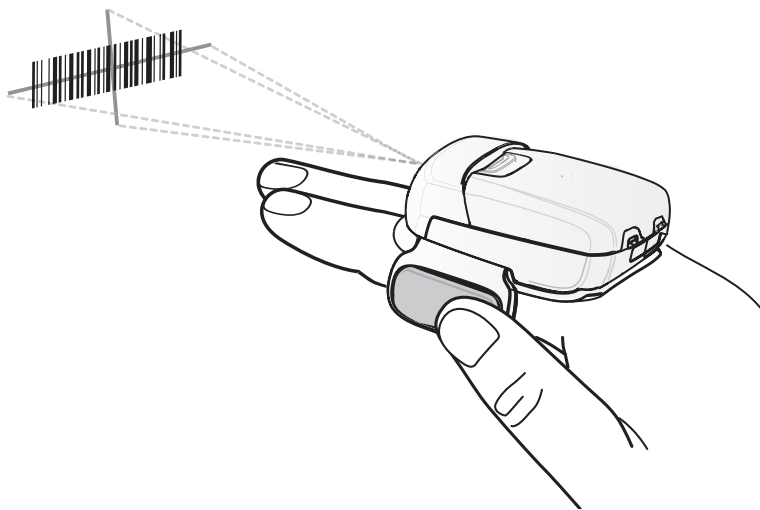
4. The captured data appears in the text field.

## Bar Code Capture with RS507 Hands-Free Imager

To read a bar code, a scan-enabled application is required. The WT6000 contains the **DataWedge** application that allows the user to enable the scanner to decode bar code data and display the bar code content. See [DataWedge on page 5-11](#) for more information on launching DataWedge.

Pair the RS507 with the WT6000. See [Pairing Using Simple Serial Interface on page 3-9](#) or [Pairing Using Bluetooth Human Interface Device on page 3-10](#) for more information.

1. Ensure that an application is open on the device and a text field is in focus (text cursor in text field).
2. Point the RS507 at a bar code.

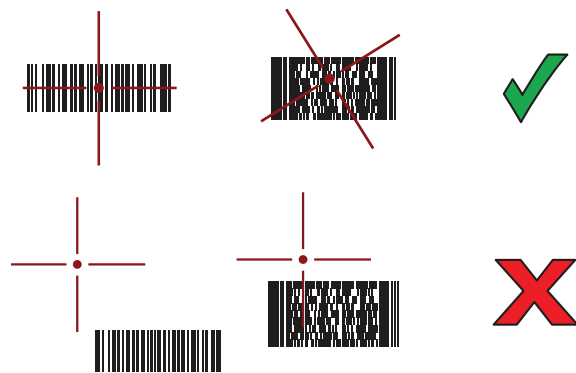


**Figure 3-4** Bar Code Scanning with RS507

3. Press and hold the trigger.

The red laser aiming pattern turns on to assist in aiming. Ensure the bar code is within the area formed by the cross-hairs in the aiming pattern. The aiming dot is used for increased visibility in bright lighting conditions.

The RS507 LEDs light green, a beep sounds to indicate the bar code was decoded successfully. Note that when the RS507 is in Pick List Mode, the RS507 does not decode the bar code until the center of the crosshair touches the bar code.



**Figure 3-5** Aiming Pattern



**Figure 3-6** *Pick List Mode with Multiple Bar Codes in Aiming Pattern*

4. The captured data appears in the text field.

## Pairing the RS507/RS6000 Hands-Free Imager

To connect the RS507 or RS6000 imagers to the WT6000, use one of the following methods:

- Near Field Communication (NFC)
- Simple Serial Interface (SSI)
- Bluetooth Human Interface Device (HID) Mode.

### Pairing Using Near Field Communication

The WT6000 provides the ability to pair the RS6000 using NFC.

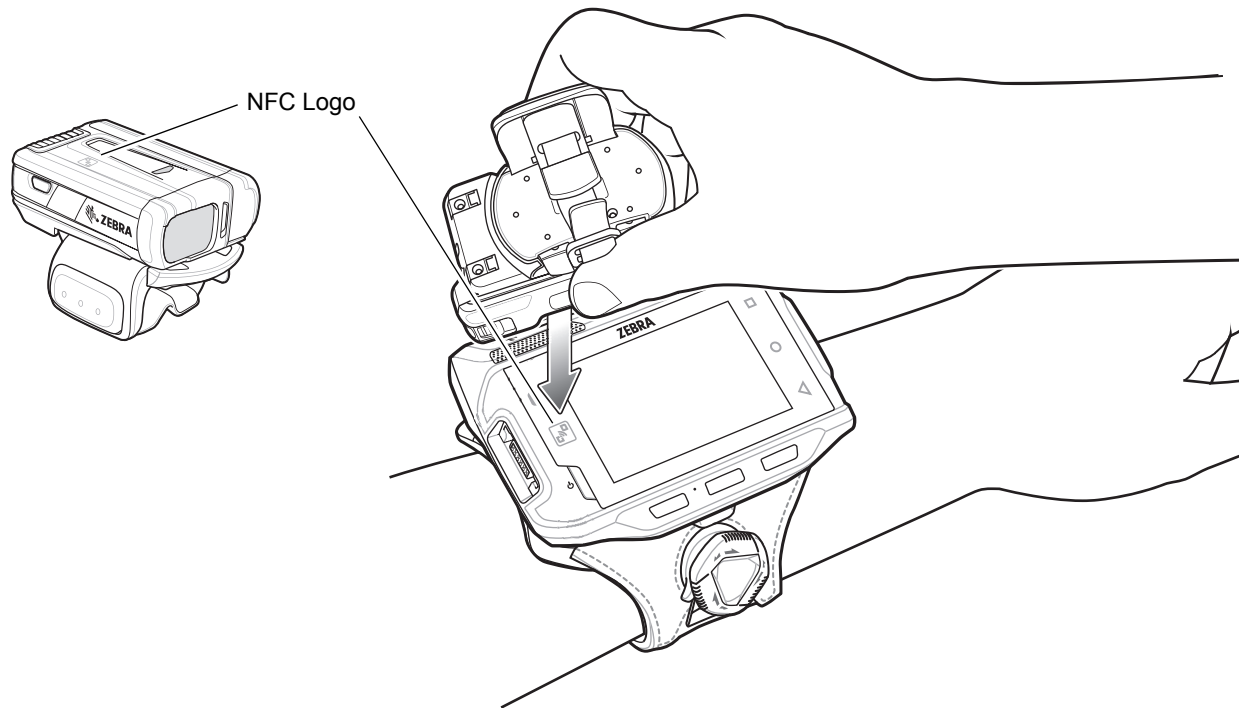
✓ **NOTE** RS6000 only.

1. Ensure that the RS6000 is in SSI mode. Refer to the *RS6000 User Guide* for more information.
2. Ensure that NFC is enabled on the WT6000.
3. Align the NFC icon on the RS6000 with the NFC icon on the WT6000.


The Status LED blinks blue indicating that the RS6000 is attempting to establish connection with the WT6000. When connection is established, the Status LED turns off and the RS6000 emits a single string of low/high beeps.

A notification appears on the WT6000 screen.

The  icon appears in the Status bar.



**Figure 3-7** *Align NFC Antennas*

The WT6000 pairs with the RS6000 and  appears in the Status bar.

✓ **NOTE** Not all Zebra device support NFC readers and the Tap-to-Pair feature.

### Pairing in HID Mode Using Near Field Communication

The WT6000 provides the ability to pair the RS6000 in HID Mode using NFC.

✓ **NOTE** RS6000 only.

1. Ensure that NFC is enabled on the WT6000.
2. Ensure that Bluetooth is enabled on both devices.
3. Ensure that the Bluetooth device to discover is in discoverable mode.
4. Ensure that the two devices are within 10 meters (32.8 feet) of one another.
5. Place the RS6000 in Human Interface Device (HID) mode. If the RS6000 is already in HID mode, skip to step 5.
  - a. Remove the battery from the RS6000.
  - b. Press and hold the Restore key.
  - c. Install the battery onto the RS6000.
  - d. Keep holding the Restore key for about five seconds until a chirp is heard and the Scan LEDs flash green.



- e. Scan the bar code below to place the RS6000 in HID mode.



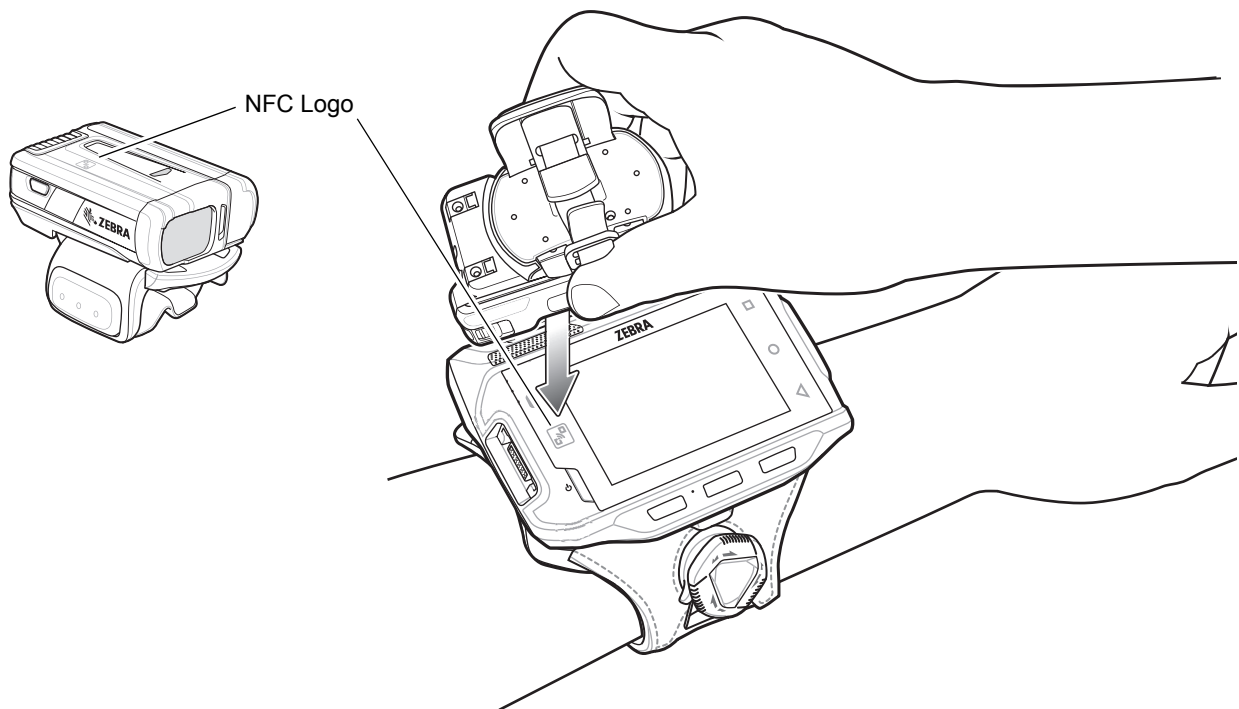
**Figure 3-8** Bluetooth HID Bar Code

6. Remove the battery from the RS6000.
7. Re-install the battery into the RS6000.
8. Align the NFC icon on the RS6000 with the NFC icon on the WT6000.


The Status LED blinks blue indicating that the RS6000 is attempting to establish connection with the WT6000. When connection is established, the Status LED turns off and the RS6000 emits a single string of low/high beeps.

A notification appears on the WT6000 screen.

The  icon appears in the Status bar.



**Figure 3-9** Align NFC Antennas



The WT6000 pairs with the RS6000 and  appears in the Status bar.

✓ **NOTE** Not all Zebra device support NFC readers and the Tap-to-Pair feature.

## Pairing Using Simple Serial Interface


To pair the RS507/RS6000 with the WT6000 using SSI:

1. Ensure that the two devices are within 10 meters (32.8 feet) of one another.

2. Install the battery into the RS6000.
3. On the WT6000, touch  > .



**Figure 3-10** *Bluetooth Pairing Utility*

4. Using the RS507/RS6000, scan the bar code on the screen.  
The RS507/RS6000 emits a high/low/high/low beeps. The Scan LED flashes green indicating that the RS507/RS6000 is attempting to establish connection with the WT6000. When connection is established, the Scan LED turns off and the RS6000 emits one string of low/high beeps.
5. On the WT6000, touch .



### Pairing Using Bluetooth Human Interface Device

To pair the RS507/RS6000 with the WT6000 using HID:

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. Place the RS507/RS6000 in Human Interface Device (HID) mode. If the RS507/RS6000 is already in HID mode, skip to step 5.
  - a. Remove the battery from the RS507/RS6000.
  - b. Press and hold the Restore key.
  - c. Install the battery onto the RS507/RS6000.
  - d. Keep holding the Restore key for about five seconds until a chirp is heard and the Scan LEDs flash green.
  - e. Scan the bar code below to place the RS507/RS6000 in HID mode.



**Figure 3-11** *Bluetooth HID Bar Code*

5. Remove the battery from the RS507/RS6000.
6. Re-install the battery into the RS507/RS6000.
7. Touch  >  **Bluetooth**.

8. Touch **SCAN FOR DEVICES**. The device begins searching for discoverable Bluetooth devices in the area and displays them under **AVAILABLE DEVICES**.
9. Scroll through the list and select RS507/RS6000.

The device connects to the RS507/RS6000 and **Connected** appears below the device name. The Bluetooth device is added to the **Bluetooth devices** list and a trusted ("paired") connection is established.



# CHAPTER 4 WIRELESS

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## Wireless Local Area Networks

Wireless local area networks (WLANs) allow the WT6000 to communicate wirelessly inside a building. Before using the WT6000 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 WT6000 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 to configure the WT6000 to match the security scheme.

The WT6000 supports the following WLAN security options:

- Open
- Wireless Equivalent Privacy (WEP).
- Wi-Fi Protected Access (WPA/WPA2) Personal (PSK).
- Extensible Authentication Protocol (EAP).
  - Protected Extensible Authentication Protocol (PEAP) - with MSCHAPV2 and GTC authentication.
  - Transport Layer Security (TLS)
  - TTLS - with Password Authentication Protocol (PAP), MSCHAP and MSCHAPv2 authentication.
  - LEAP
  - FAST - with MSCHAPV2 and GTC authentication.

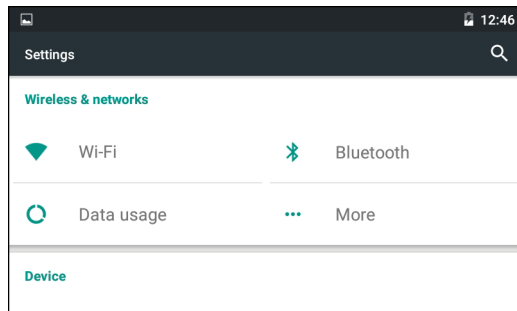
The **Status** bar displays icons that indicate Wi-Fi network availability and Wi-Fi status. See [Status Bar on page 2-2](#) for more information.




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

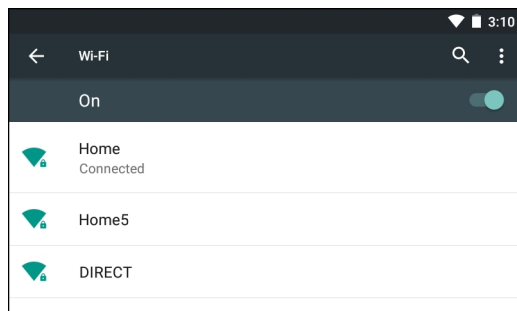
## Scan and Connect to a Wi-Fi Network

1. Touch .



**Figure 4-1** Settings Screen

2. Slide the **Wi-Fi** switch to the **ON** position.
3. Touch  **Wi-Fi**. The WT6000 searches for WLANs in the area and lists them.





**Figure 4-2** Wi-Fi Screen

4. Scroll through the list and select the desired WLAN network.
5. 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.
6. The WT6000 obtains a network address and other required information from the network using the dynamic host configuration protocol (DHCP) protocol. To configure the WT6000 with a fixed internet protocol (IP) address, See [Configuring the Device to Use a Static IP Address on page 4-5](#).
7. In the Wi-Fi setting field, **Connected** appears indicating that the WT6000 is connected to the WLAN.


## Configuring a Wi-Fi Network

To set up a Wi-Fi network:

1. Touch  >  **Wi-Fi**.
2. Slide the switch to the **ON** position.
3. The device searches for WLANs in the area and lists them on the screen.
4. Scroll through the list and select the desired WLAN network.



5. Touch the desired network. If the network security is **Open**, the device automatically connects to the network. For all other network security a dialog box appears.
6. If the network security is **WEP** or **WPA/WPS2 PSK**, enter the required password and then touch **Connect**.
7. If the network security is 802.1x EAP:
  - Touch the EAP method drop-down list and select **PEAP**, **TLS**, **TTLS**, **LEAP** or **FAST**.
  - Touch the **Phase 2 authentication** drop-down list and select an authentication method.
  - If required, touch **CA certificate** and select a Certification Authority (CA) certificate. Note: Certificates are installed using the **Security** settings or Wi-Fi Advanced settings.
  - If required, touch **User certificate** and select a user certificate. Note: User certificates are installed using the Location & security settings or Wi-Fi Advanced settings.
  - If required, in the **Identity** text box, enter the username credentials.
  - If desired, in the **Anonymous identity** text box, enter an anonymous identity username.
  - If required, in the **Password** text box, enter the password for then given identity.

✓ **NOTE** By default, the network Proxy is set to **None** and the IP settings is set to **DHCP**. See [Configuring for a Proxy Server on page 4-4](#) for setting connection to a proxy server and see [Configuring the Device to Use a Static IP Address on page 4-5](#) for setting the device to use a static IP address.

8. Touch **Connect**.
9. Touch .

## Manually Adding a Wi-Fi Network

Manually add a Wi-Fi network if the network does not broadcast its name (SSID) or to add a Wi-Fi network when out of range.

1. Touch  >  **Wi-Fi**.
2. Slide the Wi-Fi switch to the **On** position.
3. Touch **(three dots)** > **Add network**.
4. In the **Enter SSID** text box, enter the name of the Wi-Fi network.
5. In the **Security** drop-down list, select the type of security. Options:
  - **None**
  - **WEP**
  - **WPA/WPA2 PSK**
  - **802.1x EAP**.
6. If the network security is **None**, touch **Save**.
7. If the network security is **WEP** or **WPA/WPA2 PSK**, enter the required password and then touch **Save**.
8. If the network security is **802.1x EAP**:
  - Touch the **EAP method** drop-down list and select **PEAP**, **TLS**, **TTLS**, **LEAP** or **FAST**.

- Touch the **Phase 2 authentication** drop-down list and select an authentication method.
- If required, touch **CA certificate** and select a Certification Authority (CA) certificate. Note: Certificates are installed using the **Security** settings or Wi-Fi Advanced settings.
- If required, touch **User certificate** and select a user certificate. Note: User certificates are installed using the **Security** settings or Wi-Fi Advanced settings.
- If required, in the **Identity** text box, enter the username credentials.
- If desired, in the **Anonymous identity** text box, enter an anonymous identity username.
- If required, in the **Password** text box, enter the password for then given identity.



By default, the network Proxy is set to **None** and the IP settings is set to **DHCP**. See [Configuring for a Proxy Server on page 4-4](#) for setting connection to a proxy server and see [Configuring the Device to Use a Static IP Address on page 4-5](#) for setting the device to use a static IP address.

1. Touch **Connect**.

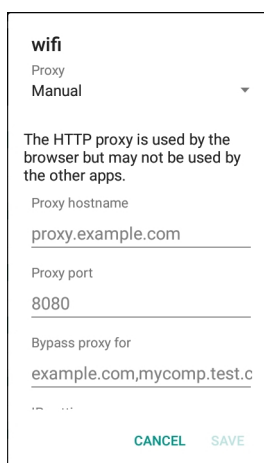
2. Touch .

## Configuring for a Proxy Server

A proxy server is a server that acts as an intermediary for requests from clients seeking resources from other servers. A client connects to the proxy server, requesting some service, such as a file, connection, web page, or other resource, available from a different server. The proxy server evaluates the request according to its filtering rules. For example, it may filter traffic by IP address or protocol. If the request is validated by the filter, the proxy provides the resource by connecting to the relevant server and requesting the service on behalf of the client.

It is important for enterprise customers to be able to set up secure computing environments within their companies, and proxy configuration is an essential part of doing that. Proxy configuration acts as a security barrier ensuring that the proxy server monitors all traffic between the Internet and the intranet. This is normally an integral part of security enforcement in corporate firewalls within intranets.

1. In the **Wi-Fi** list, touch a network.
2. Touch **Show Advanced options** checkbox.
3. Touch **Proxy settings** and select **Manual**.



wifi

Proxy

Manual

The HTTP proxy is used by the browser but may not be used by the other apps.

Proxy hostname

proxy.example.com

Proxy port

8080

Bypass proxy for

example.com,mycomp.test.c

CANCEL SAVE


**Figure 4-3** Proxy Settings



4. In the **Proxy hostname** text box, enter the address of the proxy server.
5. In the **Proxy port** text box, enter the port number for the proxy server.



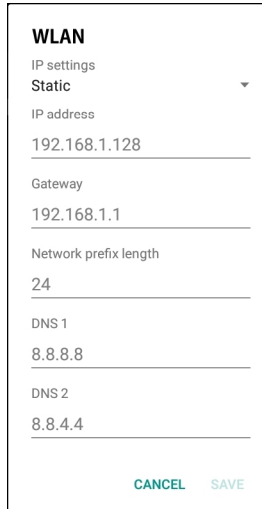
**NOTE** When entering proxy addresses the Bypass proxy for field, do not use spaces or carriage returns between addresses.

6. In the **Bypass proxy for** text box, enter addresses for web sites that do not require to go through the proxy server. Use the separator “|” between addresses.
7. Touch **Connect**.
8. Touch .

## Configuring the Device to Use a Static IP Address

By default, the device is configured to use Dynamic Host Configuration Protocol (DHCP) to assign an Internet protocol (IP) address when connecting to a wireless network. To configure the device to connect to a network using a static IP address:

1. In the **Wi-Fi** list, touch a network.
2. Touch **Show Advanced options** checkbox.
3. Touch **IP settings** and select **Static**.



**WLAN**

IP settings  
Static

IP address  
192.168.1.128

Gateway  
192.168.1.1


Network prefix length  
24

DNS 1  
8.8.8.8

DNS 2  
8.8.4.4

CANCEL SAVE

**Figure 4-4** Static IP Settings

4. In the **IP address** text box, enter an IP address for the device.
5. If required, in the **Gateway** text box, enter a gateway address for the device.
6. If required, in the **Network prefix length** text box, enter a the prefix length.
7. If required, in the **DNS 1** text box, enter a Domain Name System (DNS) address.
8. If required, in the **DNS 2** text box, enter a DNS address.
9. Touch **Connect**.
10. Touch .

## Advanced Wi-Fi Settings

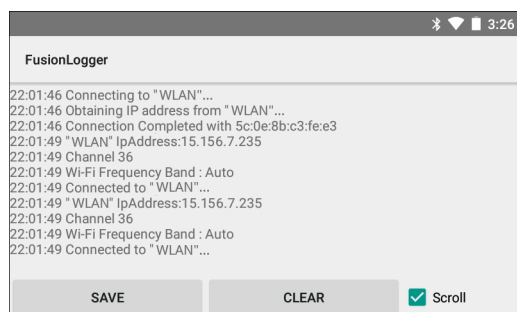


**NOTE** Advanced Wi-Fi settings are for the device not for a specific wireless network.

- **Network notification** - When enabled, notifies the user when an open network is available.
- **Scanning always available** - Select to let Google's location service and other applications scan for networks, even when Wi-Fi is off. Default - disabled.
- **Keep Wi-Fi on during sleep** - Opens a menu to set whether and when the Wi-Fi radio turns off.
  - **Always On** - The radio stays on when the device enters suspend mode.
  - **Only when plugged in** - The radio stays on while the device is connected to external power.
  - **Never** - The radio turns off when the device enters suspend mode (default).
- **Wi-Fi frequency band** - Options: **Automatic** (default), **5 GHz only** or **2.4 GHz only**.
- **Install Certificates** – Touch to install certificates.
- **MAC address** - Displays the Media Access Control (MAC) address of the device when connecting to Wi-Fi networks.
- **IP address** - Displays the IP address of the device.

## Additional Settings

- **Regulatory**
  - **Country selection** - Use to select the country of operation. Touch to select the country. If **Auto** is selected, the WT6000 will acquire country information from infrastructure if it is supported. Displays the acquired country if **Auto** is selected else displays the selected country. Default: Auto.
  - **Region code** - Displays the configured region code for the device.
- **Band and Channel Selection**
  - **Wi-Fi frequency band** - Use to select the frequency band. Options: **Auto** (default), **5 GHz only** or **2.4 GHz only**.
  - **Available channels (2.4 GHz)** - Use to select specific channels. Touch to display the **Available channels** menu. Select specific channels. Touch **OK**.
  - **Available channels (5 GHz)** - Use to select specific channels. Touch to display the **Available channels** menu. Select specific channels. Touch **OK**.
- **Logging**
  - **Advanced Logging** – Touch to enable advanced logging.
  - **Wireless logs** - Use to capture Wi-Fi log files.
    - **Fusion Logger** - Touch to open the **Fusion Logger** application. This application maintains a history of high level WLAN events which helps to understand the status of connectivity.



**Figure 4-5** Fusion Logger Screen

- **Fusion Status** - Touch to display live status of WLAN state. Also provides information of device and connected profile.






**Figure 4-6** Fusion Status Screen

- **About**
  - **Version** - Displays the current Fusion information. Touch to see component versions.



## Remove a Wi-Fi Network

To remove a remembered or connected network:

1. Touch  >  **Wi-Fi**.
2. In the **Wi-Fi networks** list, touch and hold the name of the network.
3. In the menu, touch **Forget network**.
4. Touch .

## Modify or Edit a Wi-Fi Network

To modify a remembered or connected network:

1. Touch  >  **Wi-Fi**.
2. In the **Wi-Fi networks** list, touch and hold the name of the network.
3. In the menu, touch **Modify network**.
4. Edit the network parameters.
5. Touch **SAVE**.

1. Touch .

---

## Wi-Fi Advanced Features

Some additional Wi-Fi settings cannot be accessed from the User Interface. They can be configured by using Wi-Fi CSP. Refer to EMDK documentation for the details on the Wi-Fi settings configuration using the Wi-Fi CSP.

- **Auto Time Config** - Using this feature, the device can sync up its time with Zebra WLAN infrastructure. This feature works only when the device is connected to Zebra WLAN infrastructure and the feature is enabled on the WLAN infrastructure side. Default: disabled.
- **PMKID Caching** - Allows the device to skip 802.1x authentication during roaming if it had previously connected to that AP with a full 802.1x authentication. Default: disabled. Note: disable OKC when enabling PMKID Caching.
- **Opportunistic Key Caching** - Use this feature to skip 802.1x authentication during roaming. The device will go for full 802.1x authentication for the first time it connects to the network. For subsequent roaming, the device skips 802.1x authentication. Default: enabled.
- **Cisco Centralized Key Management** - Allows the device to skip 802.1x and key-handshake phases during roaming. This feature is available only when the device is connected to a Cisco infrastructure that supports Cisco Centralized Key Management (CCKM). Default: enabled.
- **Fast Transition** - Fast Transition (FT) is the fast roaming standard, 802.11r. With this feature, the device can skip 802.1x and key-handshake phases during roam. Default: enabled.
- **Fast Transition Resource Information Container** - Allows the device to request TSPEC as part of reassociation frame exchange. This helps to avoid sending a separate resource request after roaming is completed. Default: disabled.
- **Power Save** - The device can be configured to work in different power save modes:
  - **Active** - Keeps the WLAN radio always in active mode (i.e. power save mode disabled).
  - **Power save using WMM-PS** - Device uses WMM-PS power save method if the AP is configured to use this. If the AP is not supporting WMM-PS, the device will use Null data power save method.
  - **Power save using PS-Poll** - In this method, the device will use PS-Poll frames to retrieve buffered frames from the AP.
  - **Null Data Power Save** - In Null Data Power Save (NDP), the device will stay awake for 100 ms after the last frame is sent or received. The device will send a Null Data packet with power management bit cleared to retrieve buffered frames from the AP. This is the default power save mode.
- **Band Preference** - The device can be configured to prefer one band over another. By default, Band Preference feature is disabled.
- **Subnet Roaming** - When the device roams between different sub networks, if it detects that it is roaming to a different subnet, the device will request a fresh IP address. Default: disabled.

---

## Bluetooth

Bluetooth-equipped devices can communicate without wires, using frequency-hopping spread spectrum (FHSS) radio frequency (RF) to transmit and receive data in the 2.4 GHz Industry Scientific and Medical (ISM) band (802.15.1). Bluetooth wireless technology is specifically designed for short-range (10 meters (32.8 feet)) 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.

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



**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 following Bluetooth services:

- **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.
- **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.
- **Human Interface Device Profile (HID)** - Allows Bluetooth keyboards, pointing devices, gaming devices and remote monitoring devices to connect to the device.
- **Object Push Profile (OPP)** - Allows the device to push and pull objects to and from a push server.
- **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.
- **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.
- **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.

### Bluetooth Power States

The Bluetooth radio is off by default.

- **Suspend** - When the WT6000 goes into suspend mode, the Bluetooth radio stays on.
- **Airplane Mode** - When the WT6000 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.





**NOTE** To achieve the best battery life turn off radios when not in use.

### Enabling Bluetooth

1. Touch  >  **Bluetooth**.
2. Slide the switch to the right. **ON** appears and  appears in the Status bar.



3. Touch .

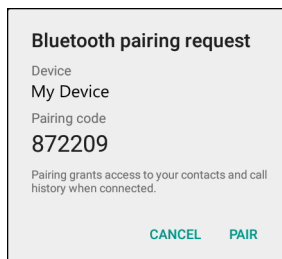
### Disabling Bluetooth

1. Touch  >  **Bluetooth**.
2. Slide the switch to the left. **OFF** appears.
3. Touch .

### Discovering Bluetooth Device(s)

The WT6000 can receive information from discovered devices without pairing. However, once paired, the WT6000 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. Touch  >  **Bluetooth**.
5. The WT6000 begins searching for discoverable Bluetooth devices in the area and displays them under **Available devices**.
6. Scroll through the list and select a device. The **Bluetooth pairing request** dialog box appears.







**Figure 4-7** Bluetooth Pairing - Smart Pairing

7. Enter a PIN in the text box and touch **OK**. Enter the same PIN on the other device.
8. For Simple Pairing, touch **Pair** on both devices.
9. The Bluetooth device is added to the **Paired devices** list and a trusted (“paired”) connection is established.

### Changing the Bluetooth Name



By default, the WT6000 has a generic Bluetooth name that is visible to other devices when connected.

1. Touch  >  **Bluetooth**.
2. If Bluetooth is not on, slide the switch to the **ON** position.
3. Touch .

4. Touch **Rename this device**.
5. Enter a name and touch **Rename**.
6. Touch .





### Connecting to a Bluetooth Device

Once paired, connect to a Bluetooth device.

1. Touch  >  **Bluetooth**.
2. If Bluetooth is not on, slide the switch to the **ON** position.
3. In the **Paired devices** list, touch and hold on a unconnected Bluetooth device until a menu appears.
4. Touch **Connect**. When connected, the device is displayed as connected in the list.





### Selecting Profiles on the Bluetooth Device

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

1. Touch  >  **Bluetooth**.
2. In the **Paired devices** list, touch  next to the device name.
3. Under **Use for**, check or uncheck a profile to allow the device to use that profile.
4. Touch **OK**.
5. Touch .

### Unpairing a Bluetooth Device

To unpair a Bluetooth device and erase all pairing information:

1. Touch  >  **Bluetooth**.
2. In the **Paired devices** list, touch  next to the device name.
3. Touch **FORGET**.
4. Touch .

---

## Near Field Communications

NFC/HF RFID is a short-range wireless connectivity technology standard that enables secure transaction between a reader and a contactless smart card. The technology is based on ISO/IEC 14443 type A and B (proximity), Felica and ISO/IEC 15693 (vicinity) standards, using the HF 13.56 MHz unlicensed band. The WT6000 supports three operating modes:

- Reader mode



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

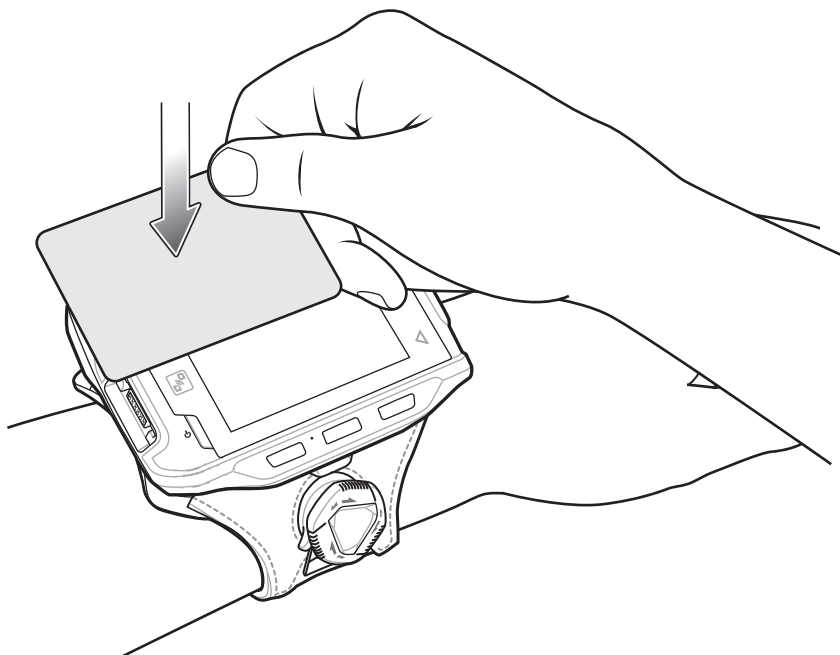
Using NFC, the WT6000 can:

- Read contactless cards such as contactless tickets, NFC labels, HF tokens or standard smart cards.
- 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 and headsets. See [Pairing Using Near Field Communication on page 3-7](#) for instruction on pairing the RS6000 Ring Scanner with the WT6000 using NFC.
- Exchange data with another NFC device.
- Emulate contactless card such as ticket or V-card.

The WT6000 NFC antenna is uniquely positioned to read NFC cards from the front of the device.

## Reading NFC Cards

1. Make sure NFC is turned on.
  - a. Touch **Settings > More**.
  - b. Ensure that the NFC switch is in the on (green) position.
  - c. Touch Home.
2. Launch an NFC enabled application or use a NFC NDEF formatted tag.
3. Hold device as shown.



**Figure 4-8** *Reading NFC Card*

4. Move NFC card until the WT6000 detects the card.
5. Hold the card steadily until the transaction is complete (usually indicated by the application).

# CHAPTER 5 APPLICATIONS

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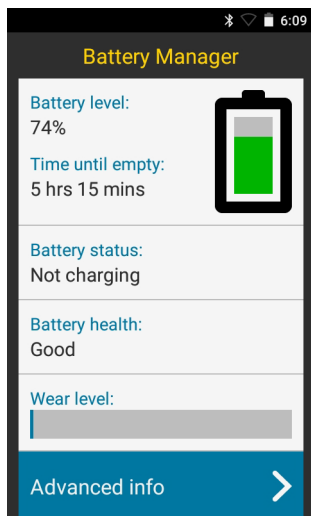
## Introduction

This chapter describes the applications installed on the device.

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## Battery Manager


The Battery Manager provides detailed information about the battery.



**Figure 5-1** *Battery Manager Screen*

Table 5-1 Battery Icon Description

Battery Icon	Description
	Indicates battery charge level.
	Indicates battery charging.
	Indicates battery charge level is below 20%.

- **Battery level** - Indicate the current battery charge level as a percentage. Displays -% when level is unknown.
- **Time until empty** - Indicates the amount of time before the battery is depleted based on current usage. Displays when the device is not on AC power.
- **Time until full** - Indicates the amount of time until the battery is fully charged based on charge rate. Displays when the device is on AC power.
- **Time since charging** - Indicates the amount of time since the battery started charging.
- **Battery status**
  - **Not charging** - Indicates that the device is not connected to AC power.
  - **Charging over AC** - Indicates that the device is connected to AC power and charging.
  - **Charging over USB** - Indicates that the device is connected to a host computer with a USB cable and charging.
  - **Discharging** - Indicates that the battery is discharging.
  - **Full** - Indicates that the battery is fully charged.
  - **Unknown** - Indicates that the battery status is unknown.
- **Battery health** - Indicates the health of the battery. If a critical error occurs,  appears. Touch to view error description.
  - Decommission\* - The battery is past it's useful life and should be replaced. See system administrator.
  - Good - The battery is good.
  - Charge error\* - An error occurred while charging. See system administrator.
  - Over Current - An overcurrent condition occurred. See system administrator.
  - Dead - The battery has no charge. Replace the battery.
  - Over Voltage - An overvoltage condition occurred. See system administrator.
  - Below Temperature - The battery temperature is below the
  - Failure Detected\* - A failure has been detected in the battery. See system administrator.
  - Unknown - See system administrator.
- **Wear level** - Indicates the health of the battery in graphical form. When the wear level exceeds 80%, the bar color changes to red.

- **Advanced info** - Touch to view additional battery information.
  - **Battery present status** - Indicates the maximum amount of charge (in mAh) that could be pulled from the battery under the present discharge conditions if the battery is fully charged.
  - **Battery level** - Indicates battery charge level as a percentage of scale.
  - **Battery scale** - Battery scale level used to determine battery level (100).
  - **Battery voltage** - Indicates current battery voltage in millivolts.
  - **Battery temperature** - Indicates current battery temperature in degrees Centigrade.
  - **Battery technology** - Lists the type of battery.
  - **Battery manufacture date** - Lists the date of manufacture.
  - **Battery serial number** - Lists the battery serial number. The number matches the serial number printed on the battery label.
  - **Battery part number** - Lists the battery part number.
  - **Backup battery voltage** - Indicates the backup battery voltage in millivolts.
  - **Backup battery level** - Indicates the current backup battery charge level as a percentage.
  - **Battery rated capacity** - Lists the rated capacity of the backup battery in mAh.
  - **Battery decommission status** - Indicates if the battery is past it's life span.
    - **Battery Good** - Battery is in good health.
    - **Decommissioned Battery** - Battery is past it's useful life and should be replaced.
  - **Base cumulative charge** - Indicates the total amount of charge applied to the battery.
  - **Battery usage number** - Indicates the number of charge cycles of the battery.
  - **Usage decommission threshold** - Lists the threshold charge cycle count. When the Battery usage number reaches this value the battery should be d
  - **App version** - Lists the application version number.

## Device Central

Device Central displays detailed information about the WT6000 and connected peripherals and supports the following Zebra devices:

- RS6000 Bluetooth Ring Scanner
- RS5000 Corded Ring Scanner
- HS3100 Bluetooth Headset

Device Central features include:

- Discovering and pairing with supported peripherals via Bluetooth or corded connection.
- Paging a connected RS6000 Ring Scanner.
- Updating the firmware of supported ring scanners. For information on updating ring scanner firmware using Device Central, refer to the *RS5000 Quick Start Guide* or *RS6000 User Guide*.
- Displaying the connection status of peripherals.
- Displaying information for a connected peripheral in the notification bar.

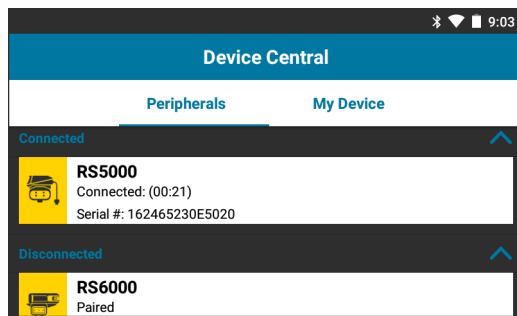


Figure 5-2 Device Central Screen

## Device Central Tabs

- **Peripherals** Tab - displays all currently connected and previously connected peripherals. Connected peripherals display the length of time (in minutes) that they have been connected. When an RS6000 is connected the **Page** button displays. See [Paging an RS6000 Ring Scanner on page 5-4](#).  
Touch the peripheral information to display the **Device Details** screen.
  - **Device Details** - displays detailed device information for the selected peripheral.
- **My Device** Tab - displays information about the WT6000 and the current version of Device Central.
  - **Device Details** - displays the **About device** screen.
  - **Device Battery Details** - displays the **Battery** screen.

## Paging an RS6000 Ring Scanner

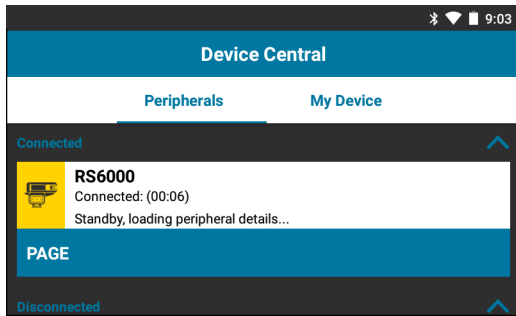
Use the **Page** button to easily locate the currently connected RS6000 Ring Scanner:

1. With the RS6000 Ring Scanner connected, touch  > .



**NOTE** The RS6000 Ring Scanner must be within 10 m (32 ft) of the WT6000.

2. Under the RS6000 peripheral information, touch **Page** to begin paging the RS6000. The paged RS6000 beeps and vibrates.



**Figure 5-3** *Page RS6000*

To stop paging, press the scan trigger of the RS6000. On a triggerless RS6000, stop paging by resetting the RS6000. See [Resetting the WT6000 on page 2-11](#).

## File Browser

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


To open **File Browser**, touch  > .





**Figure 5-4** File Browser Screen

The address bar (1) indicates the current folder path. Touch the current folder path to manually enter a path and folder name.

Use  (2) to select multiple files/folder.


Use  (3) to view the internal storage root folder.






Use  (4) to view the Internal Storage root folder.

Use  (5) to view the previous folder or to exit the application.



Touch and hold an item to perform an operation on that item. Select one of the options from the **File Operations** menu:

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

Touch  to open additional functionality:

- Touch  > **New Folder** to create a new folder in the current folder.
- Touch  > **Search** to search for a file or folder.
- Touch  > **Sort** to sort the list by name, by type, by size or by date.
- Touch  > **Refresh** to re-display the contents of the current folder.
- Touch  > **List View** to change the folder view from tile to list format.



- Touch  > **Change Size** to change the size of the icons: Large, Normal or Small.
- Touch  > **About File Browser** to view the application version information.

# PTT Express Voice Client

✓ **NOTE** PTT Express Voice Client creates Push-To-Talk (PTT) communication capability between disparate enterprise devices. Leveraging existing Wireless Local Area Network (WLAN) infrastructure, PTT Express delivers simple PTT communication without the need of a voice communication server.

- Group Call: Press and hold the PTT (Talk) button to start communicating with other voice client users.

## 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 has acquired the WLAN connection and the service is enabled.
  - Three decreasing pitch beeps. Plays when PTT Express has lost the WLAN connection or the service is disabled.

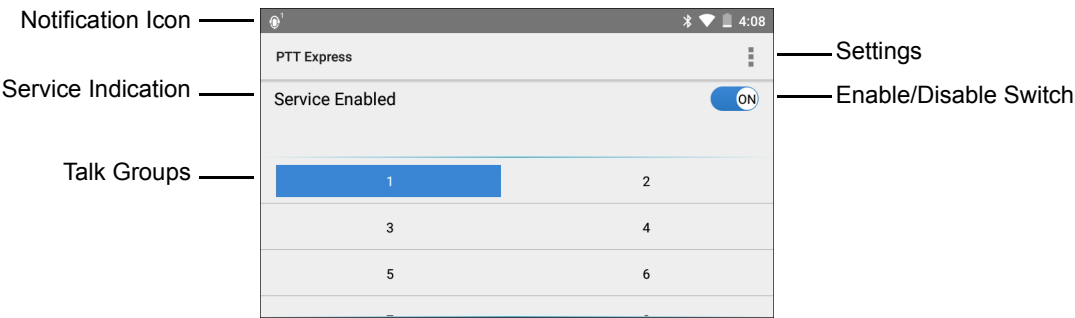


Figure 5-5 PTT Express Default User Interface

Table 5-2 PTT Express Default User Interface 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.








**Table 5-2** PTT Express Default User Interface Descriptions (Continued)

Item	Description
Settings	Opens the PTT Express Settings screen.
Enable/Disable Switch	Turns the PTT service on and off.

## Notification Icons

Indicates the current state of the PTT Express Voice client.

**Table 5-3** PTT Express Default User Interface Descriptions

Status Icon	Description
	Indicates that PTT Express Voice client is disabled.
	Indicates that PTT Express Voice client is enabled but not connected to a WLAN.
	Indicates that PTT Express Voice client is enabled, connected to a WLAN and listening on the Talk Group indicated by the number next to the icon.
	Indicates that PTT Express Voice client is enabled, connected to a WLAN and communicating on the Talk Group indicated by the number next to the icon.
	Indicates that PTT Express Voice client is enabled, connected to a WLAN and in a private response.
	Indicates that PTT Express Voice client is enabled and muted.
	Indicates that the PTT Express Voice client is enabled but it is not able to communicate due to a VoIP telephony call is in progress.

## Enabling PTT Communication

1. Touch  > .
2. Slide the **Enable/Disable Switch** to the **ON** position. The button changes to an **ON** button.

## 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.

## PTT Communication

✓ **NOTE** This section describes the default PTT Express client configuration. See the *PTT Express V1.2 User Guide* for detailed information on using the client.

PTT communication may be established as a Group Call. When PTT Express is enabled, the P3 button is assigned for PTT communication.

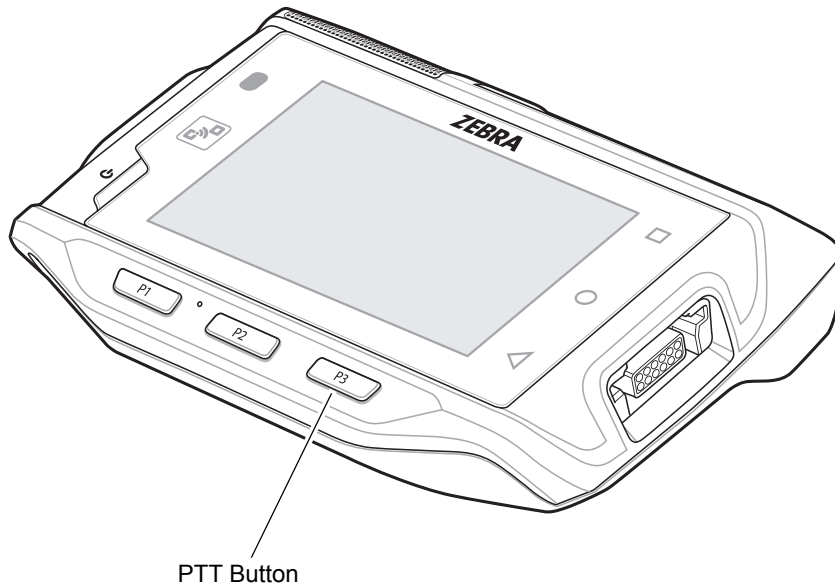


Figure 5-6 PTT Button

## Creating a Group Call

To create a group call:

1. Press and hold the PTT button and listen for the talk tone to play.  
If a busy tone is heard, release the button and wait a moment before making another attempt. Ensure that PTT Express and the WLAN are enabled.
2. Start talking after the talk tone is heard.

✓ **NOTE** If the user holds the button for more than 60 seconds (default), the call is dropped allowing others to make Group calls. The user should release the button when finished talking to allow others to make calls.

3. Release the button when finished talking.

## Disabling PTT Express Voice Client Communication

1. Touch  > .
2. Slide the **Enable/Disable Switch** to the **OFF** position. The button changes to **OFF**.
3. Touch .

# DataWedge

Refer to the *WT6000 Integrator Guide* for detailed information on configuring DataWedge.

## DataWedge Demonstration

Use **DataWedge Demonstration** to demonstrate data capture functionality.

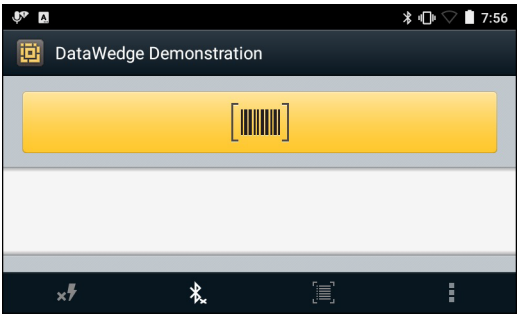











Figure 5-7 DataWedge Demonstration Window

Table 5-4 DataWedge Demonstration Icons

Feature	Icon	Description
Illumination		Select to disable imager illumination (RS507, RS5000 and RS6000 only).
		Select to enable imager illumination (RS507, RS5000 and RS6000 only).
Connection		Indicates that an RS507 or RS6000 Bluetooth imager is not connected to the WT6000.
		Indicates that an RS507 or RS6000 Bluetooth imager is connected to the WT6000.
		Indicates that an RS4000 laser scanner or RS5000 imager is not connected to the WT6000.
		Indicates that an RS4000 laser scanner or RS5000 imager is connected to the WT6000.
Scan Mode		Select to enable picklist mode (RS507, RS5000 and RS6000 only).
		Select to enable normal scan mode (RS507, RS5000 and RS6000 only).
Menu		Opens a menu to view the application information or to set the application DataWedge profile.

✓ **NOTE** See *WT6000 Integrator Guide* for information on DataWedge configuration.

Either press the device Scan key or touch the yellow scan button in the application to enable data capture. The captured data appears in the text field below the yellow button.

## RxLogger

RxLogger is a comprehensive diagnostic tool that provides application and system metrics. It allows for custom plug-ins to be created and work seamlessly with this tool. RxLogger is used to diagnose device and application issues. Its information tracking includes the following: CPU load, memory load, memory snapshots, battery consumption, power states, wireless logging, cellular logging, TCP dumps, Bluetooth logging, GPS logging, logcat, FTP push/pull, ANR dumps, etc. All logs and files generated are saved onto flash storage on the device (internal or external).

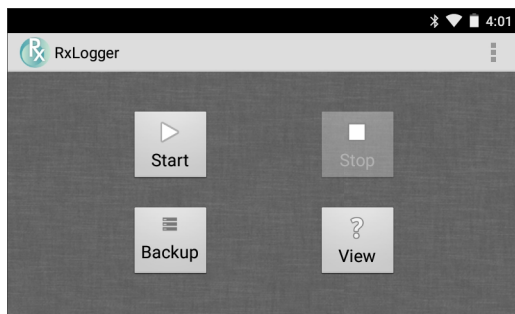


Figure 5-8 RxLogger

## RxLogger Configuration

RxLogger is built with an extensible plug-in architecture and comes packaged with a number of plugins already built-in. The included plug-ins are described below. Touch > **Settings** to open the configuration screen.

### Configuration File

RxLogger configuration can be set using an XML file. The *config.xml* configuration file is located on the **Enterprise storage** in the **RxLogger\config** folder. Copy the file from the device to a host computer using a USB connection. Edit the configuration file and then replace the .XML file on the device. There is no need to stop and restart the RxLogger service since the file change is automatically detected.

## Enabling Logging

1. Touch > .
2. Touch **Start**.
3. Touch .

## Disabling Logging

1. Touch > .
2. Touch **Stop**.
3. Touch .

## Extracting Log Files

1. Connect the device to a host computer using an USB connection.
2. Using a file explorer, navigate to the **Internal Storage** in the **/RxLogger** folder.
3. Copy the file from the device to the host computer.
4. Disconnect the device from the host computer.



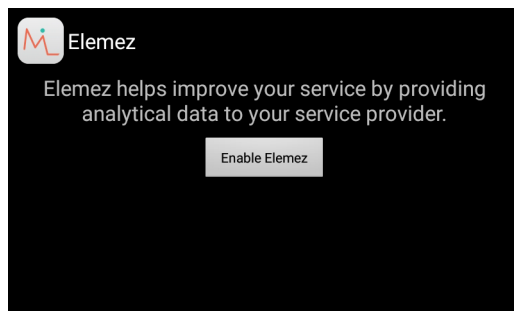
## Elemesz



**NOTE** Elemesz collects specific device information in the background and sends this information to us to help improve product functionality. This feature can be disabled.

See Disabling Elemesz Data Collection. Ensure that the date, time and time zone are set correctly prior to using Elemesz.




Use **Elemesz** to provide diagnostics information to us. Touch **Submit Diagnostics** button to send the data.



**Figure 5-9** Elemesz Application





## Disabling Elemesz Data Collection

The user can disable the Elemesz application from collection specific data in the background and sending it to Zebra Technologies.

1. From the Home screen, touch  >  > **Apps**.
2. Swipe left or right until the **ALL** tab displays.
3. Scroll through the list and touch **Elemesz**.
4. In the **App info** screen, touch **Uninstall updates**.
5. In the **Uninstall updates** dialog box, touch **OK**.
6. Touch **OK**.
7. After uninstall is complete, touch **OK**.
8. In the **All** tab, scroll through the list and touch **Elemesz**.
9. Touch **Disable**.
10. In the **Disable built-in app?** dialog box, touch **OK**.
11. Touch .

## Enabling Elemesz Data Collection

The user can re-enable the Elemesz application for collection specific data in the background and sending it to Zebra Technologies.

1. From the Home screen, touch .
2. Touch **Manage Apps**.
3. Swipe left or right until the **ALL** tab displays.
4. Scroll through the list and touch **Elemesz**.
5. In the **App info** screen, touch **Enable**.
6. Touch  >  > .
7. Touch **Enable Elemesz**.

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## Print Station

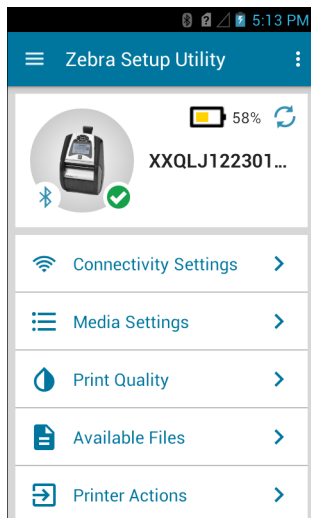
Use the **Print Station** application to print labels and receipts directly to a Zebra ZPL printer via USB, Bluetooth or WLAN.

Features include:

- Discovering and pairing with Zebra printers via a Bluetooth, WLAN or USB connection.
- Retrieving and displaying a list of document templates stored on the device and on the printer.
- Using document templates to generate on-screen prompts allowing data entry at print time.
- Using the camera on the device to scan bar codes for data entry.
- Supports multiple Zebra printer models using the ZPL command language.

## Printer Setup

Use the **Printer Setup** utility to configure select Zebra industrial, mobile and desktop printers. Wizards quickly guide user through the printer setup utility, whether adding a new printer, moving an existing printer to a new location or adding new capabilities.








**Figure 5-10** *Printer Setup Screen*

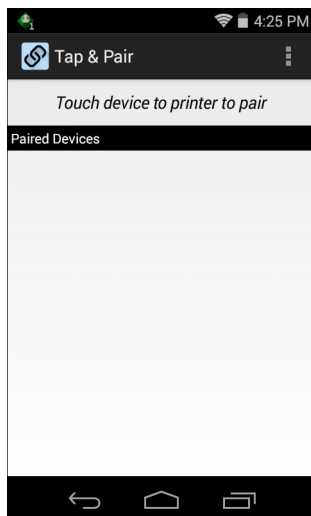
## Tap & Pair

Use the **Tap & Pair** application to easily connect to a Zebra printer.

1. Enable Bluetooth and NFC:

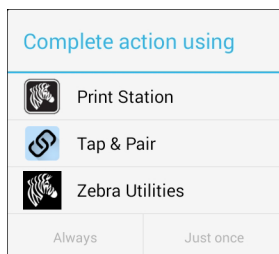
- a. Touch  > .
- b. Slide the **Bluetooth** switch to the ON position.
- c. Touch **More...**.
- d. Touch **NFC** checkbox. A blue check mark appears indicating that NFC is enabled.
- e. Touch .

2. Touch  > .



**Figure 5-11** Tap & Pair Application

3. Touch the back of the WT6000 to the NFC logo on the Zebra printer.



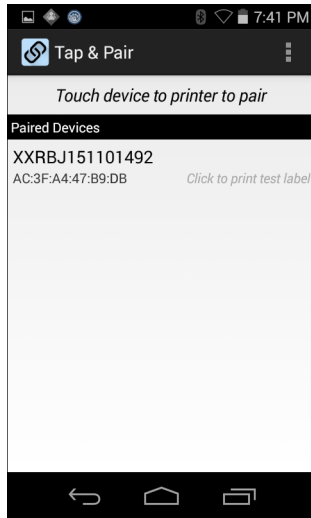
**Figure 5-12** Complete Action Dialog Box

4. Tap **Tap & Pair** and then tap **Just once**.

The printer displays the pair code on the display. Verify that this code matches the code shown on the WT6000.

5. Tap **PAIR**.

6. Verify that the Zebra printer is in the list of paired devices.



**Figure 5-13** *Paired Printer List*

7. Tap the Zebra printer in the **Paired Devices** list to print a test page.
8. Tap **OK** to print the test page.

# CHAPTER 6 ACCESSORIES

## Accessories

**Table 6-1** *Accessories*

Accessory	Part Number	Description
<b>Cradles</b>		
1-Slot WT6000 Charging Cradle	CRD-NGWT-1S1BU-01	Provides WT6000 and spare battery charging and USB communication with a host computer. Use with power supply, p/n PWRS-14000-148R and country specific grounded AC line cord.
2-Slot WT6000/RS6000 Charging Cradle	CRD-NWTRS-2SUCH-01	Provides WT6000 and RS6000 charging and USB communication with a host computer. Use with power supply, p/n PWRS-14000-148R and country specific grounded AC line cord.
5-Slot WT6000 Charge Only Cradle	CRD-NGWT-5S5BC-01	Charges up to five WT6000 devices and five spare batteries. Use with power supply, p/n PWRS-14000-241R, DC line cord, p/n 50-16002-029R and country specific grounded AC line cord.
10-Slot WT6000/RS6000 Charge Only Cradle	CRD-NWTRS-10SCH-01	Charges up to five WT6000 devices and up to five RS6000 scanners. Use with power supply, p/n PWRS-14000-241R, DC line cord, p/n 50-16002-029R and country specific grounded AC line cord.
10-Slot WT6000 Charge Only Cradle	CRD-NGWT-10SCH-01	Charges up to 10 WT6000 devices. Use with power supply, p/n PWRS-14000-241R, DC line cord, p/n 50-16002-029R and country specific grounded AC line cord.

**Table 6-1** Accessories (Continued)

Accessory	Part Number	Description
5-Slot WT6000 Ethernet Cradle	CRD-NGWT-5S5BE-01	Charges up to five WT6000 devices and five spare batteries and provides Ethernet communication. Use with power supply, p/n PWRS-14000-241R, DC line cord, p/n 50-16002-029R and country specific grounded AC line cord.
<b>Batteries and Chargers</b>		
Replacement Battery	BTRY-NWTRS-33MA-01	Replacement battery for WT6000 and RS6000 (single pack).
4-Slot Battery Charger	SAC-NWTRS-4SCH-01	Charges up to four spare batteries. Requires power supply, p/n PWRS-14000-148R and country specific grounded AC line cord.
20-Slot Battery Charger	SAC-NWTRS-20SCH-01	Charges up to 20 spare batteries. Use with power supply, p/n PWRS-14000-241R, DC line cord, p/n 50-16002-029R and country specific grounded AC line cord.
<b>Mounting Brackets</b>		
Rack Mount Bracket	BRKT-SCRD-SMRK-01	Use for mounting a 5-Slot cradle or four 4-Slot Battery Chargers on a rack.
<b>Cables</b>		
Headset Adapter Cable with Quick Disconnect (Long)	CBL-NGWT-AUQDLG-01	Connects a wired headset to the WT6000 on a Hip Mount.
Headset Adapter Cable with Quick Disconnect (Short)	CBL-NGWT-AUQDST-01	Connects a wired headset to the WT6000 on a Wrist Mount.
USB/Charge Cable	CBL-NGWT-USBCHG-01	Provides USB communication and power to the WT6000. Requires power supply PWRS-14000-249R and country specific un-grounded AC line cord.
Vibrating Cable	CBL-NGWT-HDVBAP-01	Provides haptic notification feedback.
DC Y Cable	25-122026-02R	Provides power from the PWRS-14000-148R power supply to two 4-Slot Battery Chargers.
DC 4-way Cable	25-85992-01R	Provides power from the PWRS-14000-241R power supply to four 4-Slot Battery Chargers.
DC Line Cord	50-16002-029R	Provides power from the power supply to the 5-Slot Charge Only Cradle, 5-Slot Ethernet Cradle, 5-Slot Charge Only Cradle with Battery Charge and 5-Slot Ethernet Cradle with Battery Charger.
<b>Power Supplies</b>		
Power Supply	PWRS-14000-249R	Provides power to the device using the USB and Charging Cable. Requires country specific un-grounded AC line cord.



**Table 6-1** Accessories (Continued)

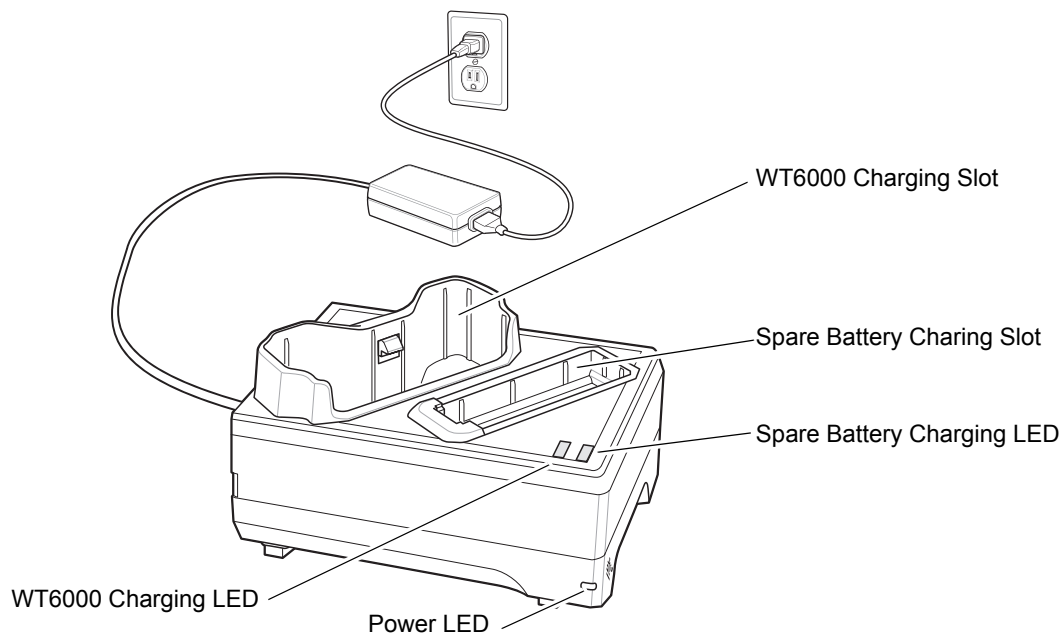
Accessory	Part Number	Description
Power Supply	PWRS-14000-148R	Provides power to the 2-Slot cradles and 4-Slot Spare Battery Charger. Requires country specific grounded AC line cord.
Power Supply	PWRS-14000-241R	Provides power to the 5-Slot Charge Only Cradle, 5-Slot Ethernet Cradle, 5-Slot Charge Only Cradle with Battery Charger and the 5-Slot Ethernet Cradle with Battery Charger. Requires DC Line Cord, p/n 50-16002-029R and country specific grounded AC line cord.
<b>Miscellaneous</b>		
Screen Protectors	MISC-WT6X-SCRN-01	Provides additional protection for display (5-pack).
<b>Soft Goods</b>		
WT6000 Hip Mount	SG-NGWT-HPMNT-01	Provides mounting the WT6000 on a belt.
WT6000 Wrist Mount (Small/Medium)	SG-NGWT-WRMTS-01	Replacement strap.
WT6000 Wrist Mount (Medium/Large)	SG-NGWT-WRMTL-01	Replacement strap.
WT6000 Spare Straps (Small/Medium)	SG-NGWT-WSTPST-01	Replacement strap.
WT6000 Spare Straps (Medium/Large)	SG-NGWT-WSTPLN-01	Replacement strap.
WT6000 Spare Comfort Pad	SG-NGWT-CMPD-01	Replacement Comfort Pad for the Wrist Mount.

## 1-Slot WT6000 USB Charging Cradle

✓ **NOTE** Ensure that you follow the guidelines for battery safety described in [Battery Safety Guidelines on page 7-1](#).

The 1-Slot WT6000 Charging Cradle:

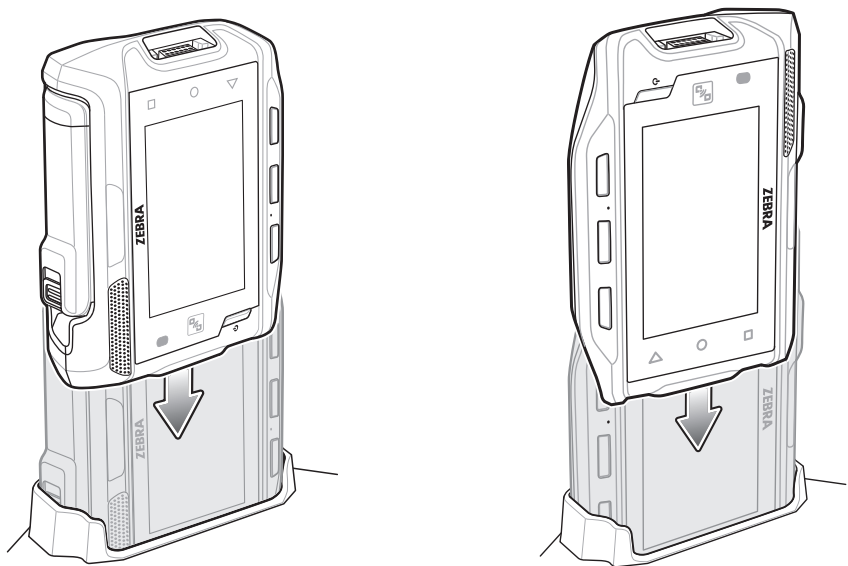
- provides 5.4 VDC (nominal) power for operating the WT6000
- provides USB communication with a host computer
- charges a spare battery.



**Figure 6-1** 1-Slot WT6000 Charging Cradle

### Charging the Device

1. Insert either end of the WT6000 into the WT6000 charging slot.

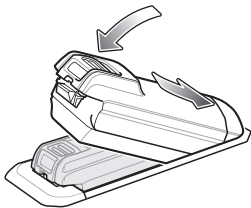


**Figure 6-2** *Insert WT6000 into Cradle*

- 2. Ensure the WT6000 is seated properly. The WT6000 Charge LED blinks indicating charging.

**Charging the Spare Battery**

- 1. Insert a spare battery into the spare battery slot.



**Figure 6-3** *Insert Battery into Cradle*

- 2. Ensure the battery is seated properly. The Spare Battery Charging LED blinks indicating charging.

**Battery Charging**

The WT6000 Charging LED indicates the charging status of the battery in the WT6000 and the Spare Battery Charging LED indicates the charging status of the spare battery. See [Table 6-2 on page 6-5](#). The 3,350 mAh battery fully charges in less than four hours at room temperature.

**Table 6-2** *Charging LED Indicators*

State	Indication
Off	The battery is not charging. The battery is not inserted correctly in the cradle or connected to a power source. Cradle is not powered.
Solid Amber	Battery is charging.
Solid Green	Battery charging is complete.

**Table 6-2** *Charging LED Indicators (Continued)*

State	Indication
Fast Blinking Red (2 blinks/second)	Charging error, e.g.: <ul style="list-style-type: none"><li>- Temperature is too low or too high.</li><li>- Charging has gone on too long without completion (typically eight hours).</li></ul>
Solid Red	Unhealthy battery is charging or fully charged.

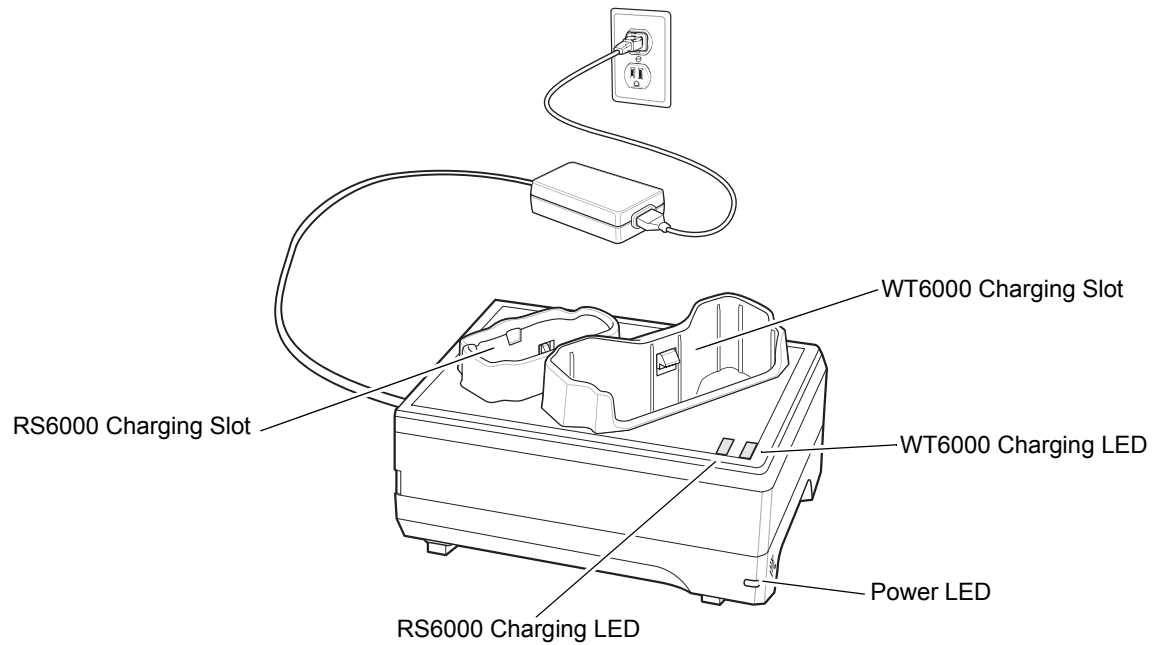
Charge batteries in temperatures from 0°C to 40°C (32°F to 104°F). The device or cradle always performs battery charging in a safe and intelligent manner. At higher temperatures (e.g. approximately +37°C (+98°F)) the device or cradle may for small periods of time alternately enable and disable battery charging to keep the battery at acceptable temperatures. The device and cradle indicates when charging is disabled due to abnormal temperatures via its LED.

## 2-Slot WT6000/RS6000 Charging Cradle

✓ **NOTE** Ensure that you follow the guidelines for battery safety described in [Battery Safety Guidelines on page 7-1](#).

The 2-Slot WT6000/RS6000 Charging Cradle:

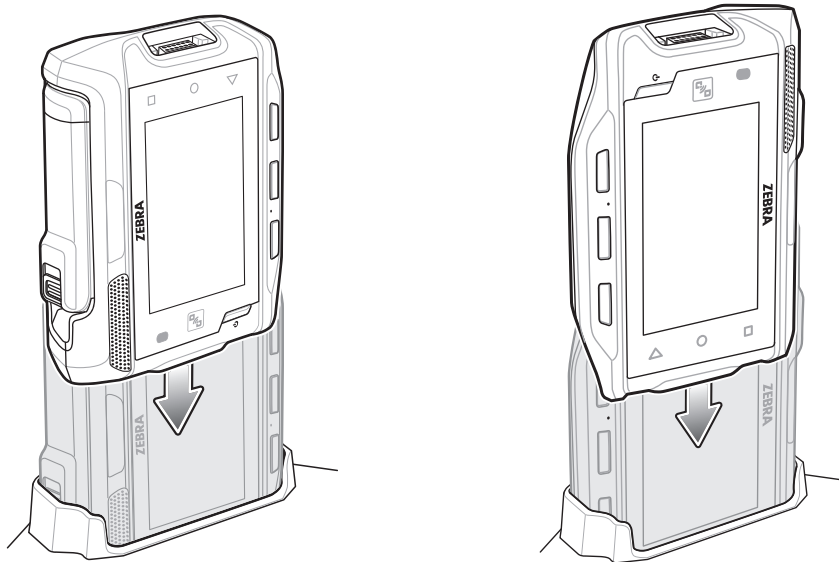
- provides 5.4 VDC (nominal) power for operating the WT6000 and RS6000.



**Figure 6-4** 2-Slot WT6000/RS6000 Charging Cradle

### Charging the WT6000

1. Insert the WT6000 into the WT6000 charging slot.

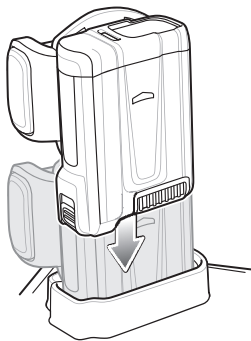


**Figure 6-5** *Insert WT6000 into Cradle*

2. Ensure the WT6000 is seated properly. The WT6000 Charging LED blinks indicating charging.

## Charging the RS6000

1. Insert the RS6000 into the RS6000 charging slot.



**Figure 6-6** *Insert RS6000 into Cradle*

2. Ensure the RS6000 is seated properly. The RS6000 Charging LED blinks indicating charging.

## Battery Charging

The WT6000 Charging LED indicates the charging status of the battery in the WT6000 and the RS6000 Charging LED indicates the charging status of the battery in the RS6000. See [Table 6-2 on page 6-5](#). The 3,350 mAh battery fully charges in less than four hours at room temperature.

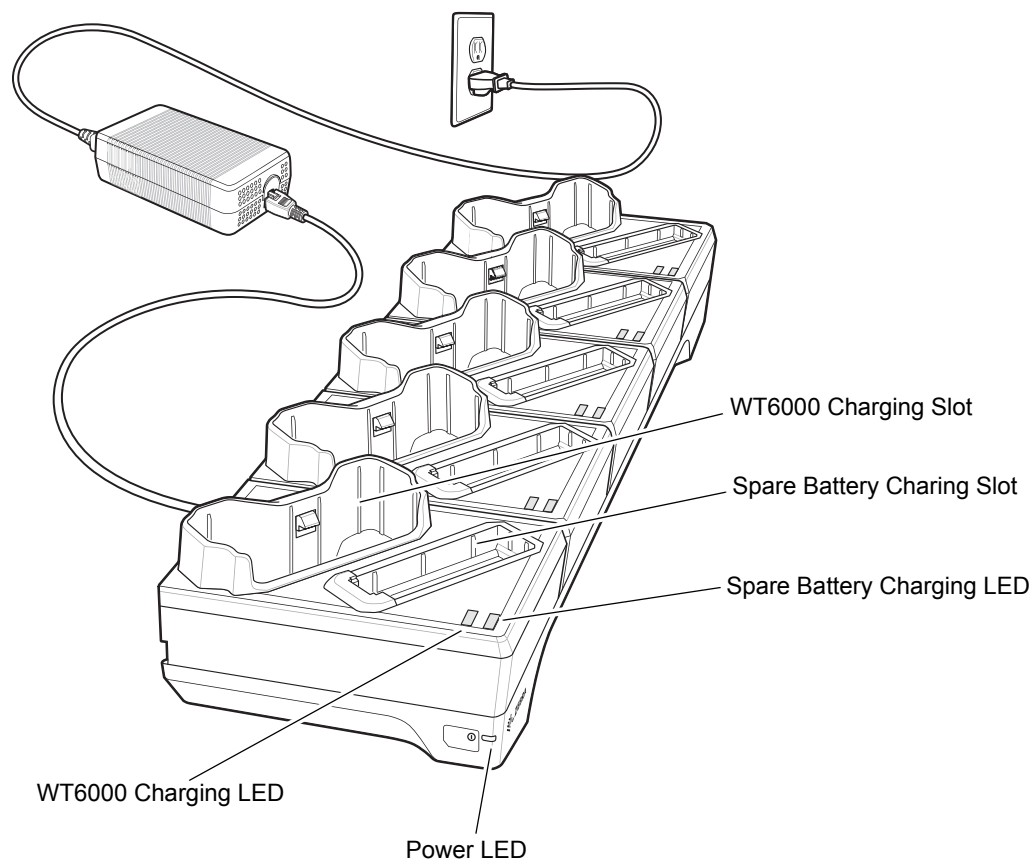
Charge batteries in temperatures from 0 °C to 40 °C (32 °F to 104 °F). The device or cradle always performs battery charging in a safe and intelligent manner. At higher temperatures (e.g. approximately +37 °C (+98 °F)) the device or cradle may for small periods of time alternately enable and disable battery charging to keep the battery at acceptable temperatures. The device and cradle indicates when charging is disabled due to abnormal temperatures via its LED.

## 5-Slot WT6000 Charge Only Cradle

✓ **NOTE** Ensure that you follow the guidelines for battery safety described in [Battery Safety Guidelines on page 7-1](#).

The 5-Slot Charge Only Cradle:

- Provides 5.4 VDC (nominal) power for operating up to five WT6000 devices.
- Simultaneously charges up to five WT6000 devices.
- Simultaneously charges up to five spare batteries.

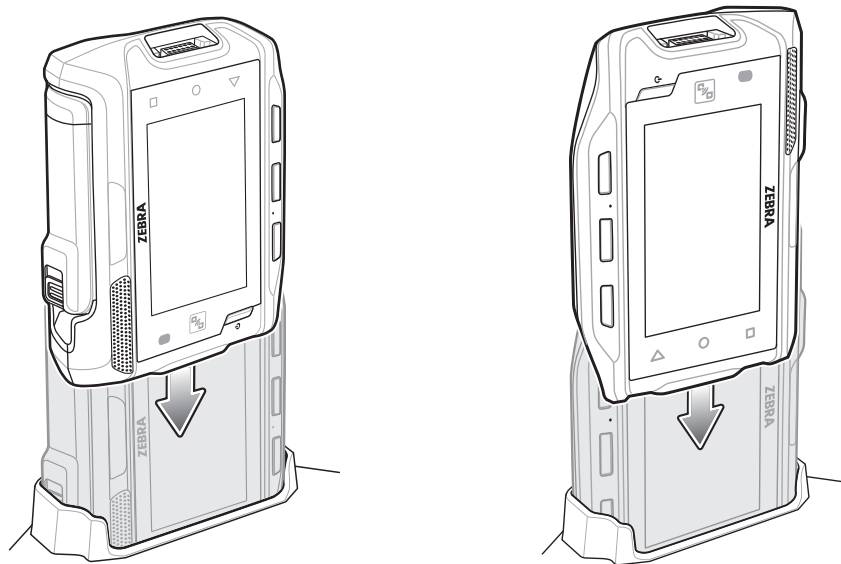


**Figure 6-7** 5-Slot WT6000 Charge Only Cradle

### Charging the WT6000

To Charge the WT6000:

1. Insert the WT6000 in a WT6000 charging slot.

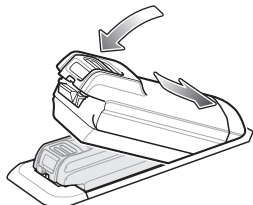


**Figure 6-8** *Insert WT6000 into Cradle*

2. Ensure that the WT6000 is properly seated in the charging slot.

## Charging the Spare Battery

1. Insert a spare battery into the spare battery slot.



**Figure 6-9** *Insert Battery into Cradle*

2. Ensure the battery is seated properly. The Spare Battery Charging LED blinks indicating charging.

## Battery Charging

The WT6000 Charging LED indicates the charging status of the battery in the WT6000 and the Spare Battery Charging LED indicates the charging status of the spare battery. See [Table 6-2 on page 6-5](#). The 3,350 mAh battery fully charges in less than four hours at room temperature.

Charge batteries in temperatures from 0 °C to 40 °C (32 °F to 104 °F). The device or cradle always performs battery charging in a safe and intelligent manner. At higher temperatures (e.g. approximately +37 °C (+98 °F)) the device or cradle may for small periods of time alternately enable and disable battery charging to keep the battery at acceptable temperatures. The device and cradle indicates when charging is disabled due to abnormal temperatures via its LED.

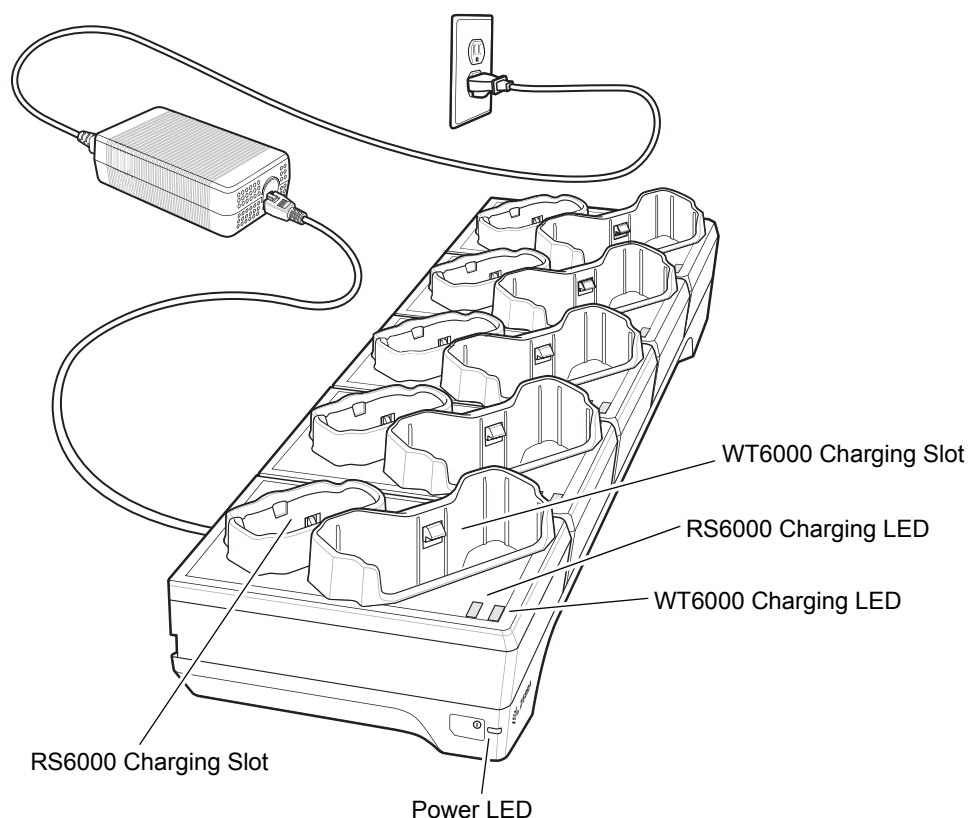


## 10-Slot WT6000/RS6000 Charge Only Cradle

✓ **NOTE** Ensure that you follow the guidelines for battery safety described in [Battery Safety Guidelines on page 7-1](#).

The 10-Slot Charge Only Cradle:

- Provides 5.4 VDC (nominal) power for operating the WT6000 and RS6000.
- Simultaneously charges up to five WT6000 devices.
- Simultaneously charges up to five RS6000 devices.

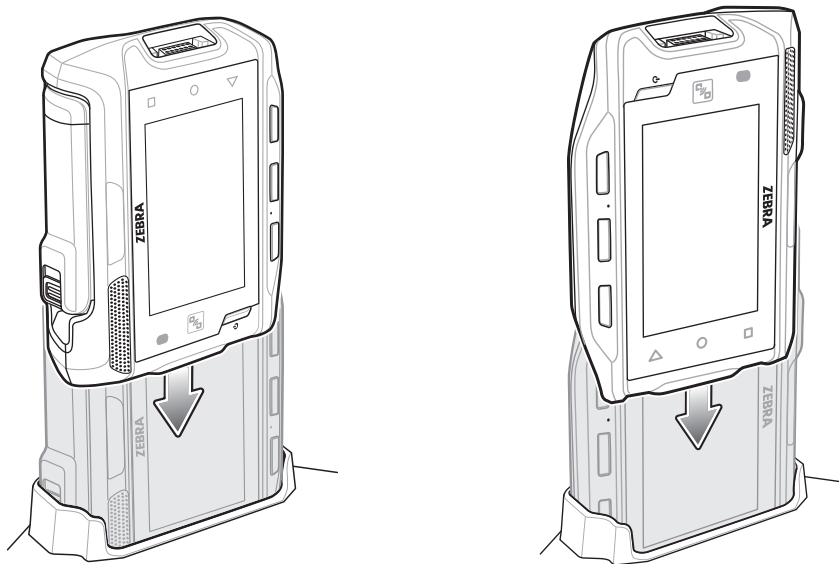


**Figure 6-10** 10-Slot WT6000/RS6000 Charge Only Cradle

### Charging the WT6000

To Charge the WT6000:

1. Insert the WT6000 in the WT6000 charging slot.



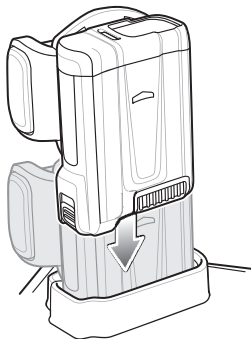
**Figure 6-11** *Insert WT6000 into Cradle*

2. Ensure that the WT6000 is properly seated in the charging slot.

## Charging the RS6000

To Charge the RS6000:

1. Insert the RS6000 in the RS6000 charging slot.



**Figure 6-12** *Insert RS6000 into Cradle*

2. Ensure that the RS6000 is properly seated in the charging slot.

## Battery Charging

The WT6000 Charging LED indicates the charging status of the battery in the WT6000 and the RS6000 Charging LED indicates the charging status of the battery in the RS6000. See [Table 6-2 on page 6-5](#). The 3,350 mAh battery fully charges in less than four hours at room temperature.

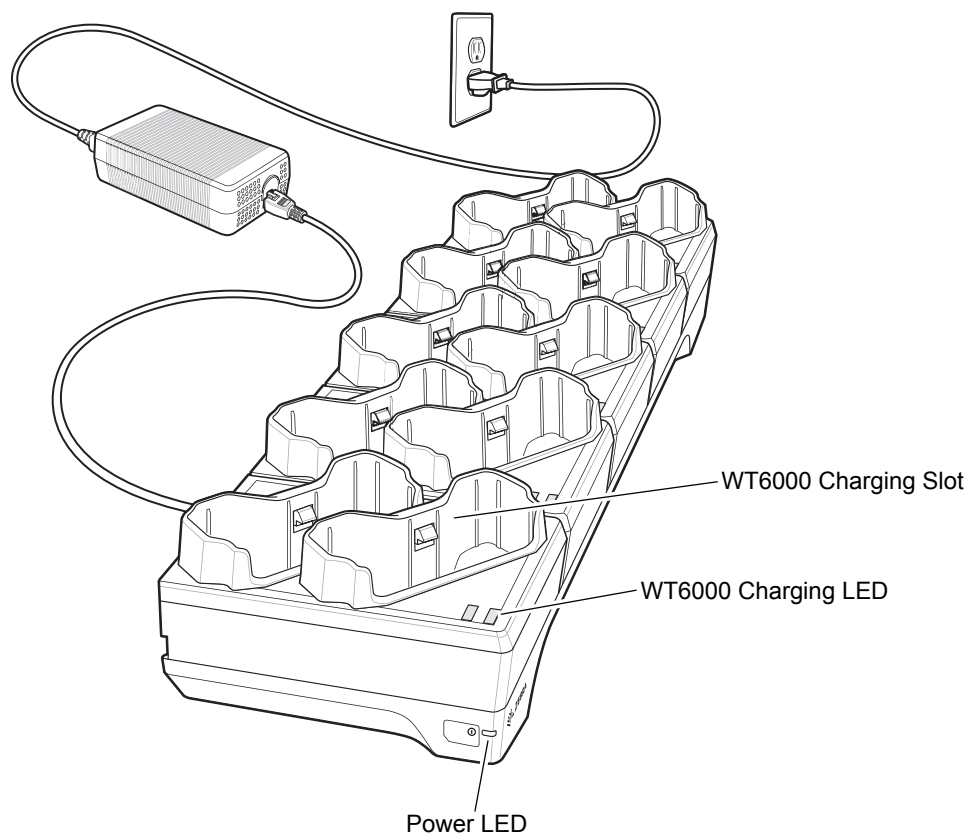
Charge batteries in temperatures from 0°C to 40°C (32°F to 104°F). The battery charger always performs battery charging in a safe and intelligent manner. At higher temperatures (e.g. approximately +37°C (+98°F)) the battery charger may for small periods of time alternately enable and disable battery charging to keep the battery at acceptable temperatures. The battery charger indicates when charging is disabled due to abnormal temperatures via its LED.

## 10-Slot WT6000 Charge Only Cradle

✓ **NOTE** Ensure that you follow the guidelines for battery safety described in [Battery Safety Guidelines on page 7-1](#).

The 10-Slot WT6000 Charge Only Cradle:

- Provides 5.4 VDC (nominal) power for operating the WT6000.
- Simultaneously charges up to 10 WT6000 devices.

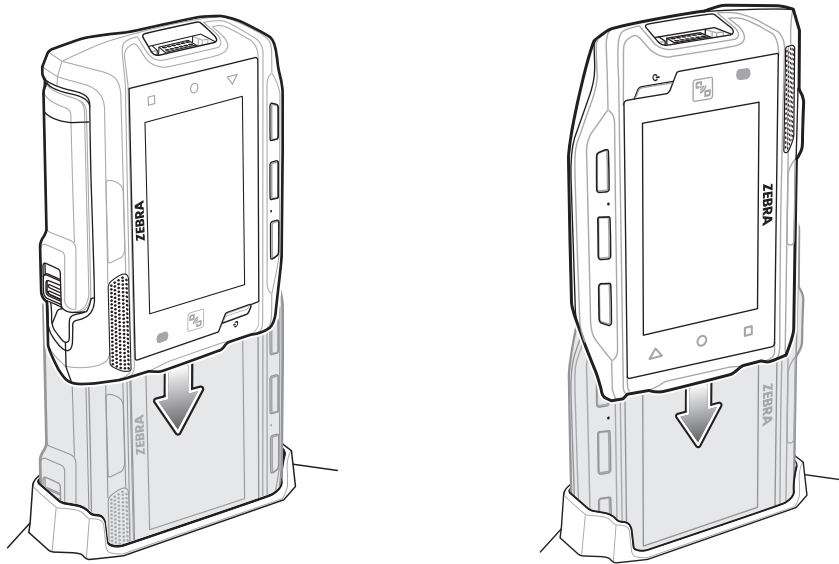


**Figure 6-13** 10-Slot WT6000 Charge Only Cradle

### Charging the WT6000

To Charge the WT6000:

1. Insert the WT6000 in the charging slot.



**Figure 6-14** *Insert WT6000 into Cradle*

2. Ensure that the WT6000 is properly seated in the charging slot.

## Battery Charging

The WT6000 Charging LED indicates the charging status of the battery in the WT6000. See [Table 6-2 on page 6-5](#). The 3,350 mAh battery fully charges in less than four hours at room temperature.

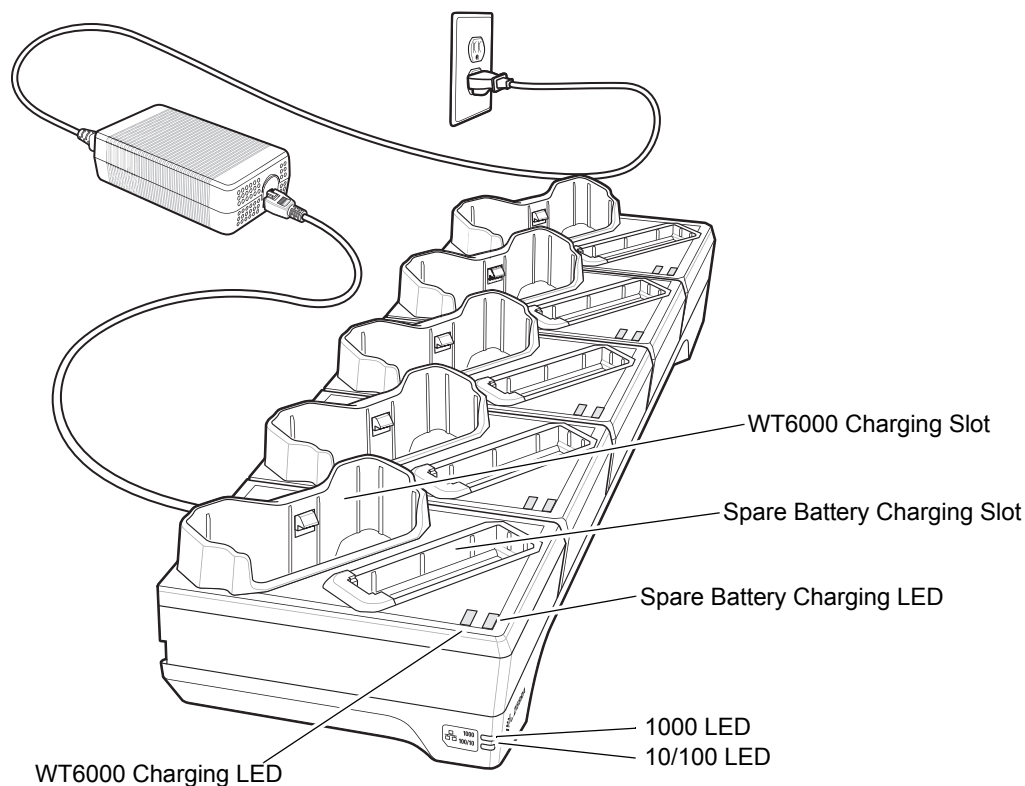
Charge batteries in temperatures from 0 °C to 40 °C (32 °F to 104 °F). The battery charger always performs battery charging in a safe and intelligent manner. At higher temperatures (e.g. approximately +37 °C (+98 °F)) the battery charger may for small periods of time alternately enable and disable battery charging to keep the battery at acceptable temperatures. The battery charger indicates when charging is disabled due to abnormal temperatures via its LED.

## 5-Slot WT6000 Ethernet Cradle

✓ **NOTE** Ensure that you follow the guidelines for battery safety described in [Battery Safety Guidelines on page 7-1](#).

The 5-Slot WT6000 Ethernet Cradle:

- Provides 5.4 VDC (nominal) power for operating the WT6000.
- Connects up to five WT6000 devices to an Ethernet network.
- Simultaneously charges up to five WT6000 devices.
- Simultaneously charges up to five spare batteries.

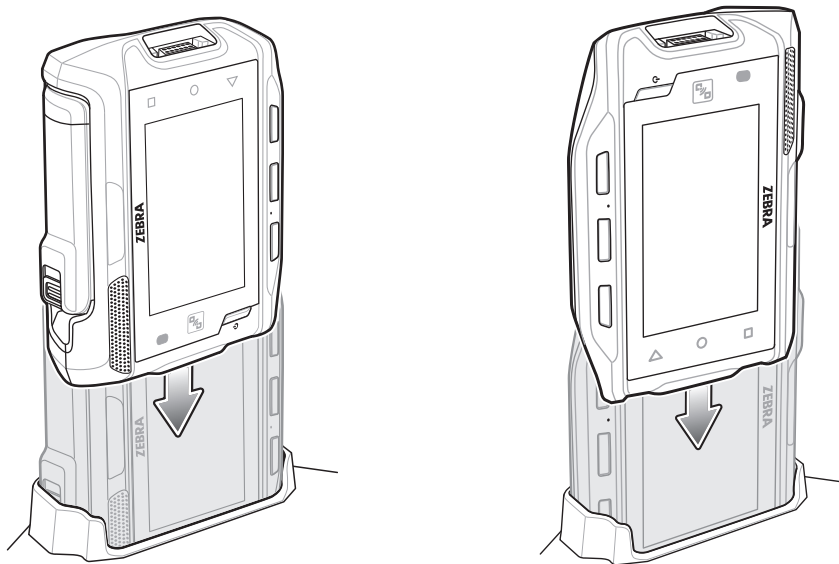


**Figure 6-15** 5-Slot WT6000 Ethernet Cradle

### Charging the WT6000

To charge the WT6000:

1. Insert the WT6000 in the WT6000 charging slot.

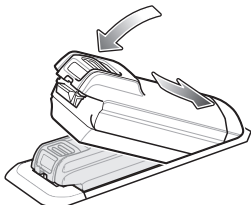


**Figure 6-16** *Insert WT6000 into Cradle*

2. Ensure that the WT6000 is properly seated in the charging slot.

## Charging the Spare Battery

1. Insert a spare battery into the spare battery slot.



**Figure 6-17** *Insert Battery into Cradle*

2. Ensure the battery is seated properly. The Spare Battery Charging LED blinks indicating charging.

## Battery Charging



The WT6000 Charging LED indicates the charging status of the battery in the WT6000 and the Spare Battery Charging LED indicates the charging status of the spare battery. See [Table 6-2 on page 6-5](#). The 3,350 mAh battery fully charges in less than four hours at room temperature.

Charge batteries in temperatures from 0 °C to 40 °C (32 °F to 104 °F). The battery charger always performs battery charging in a safe and intelligent manner. At higher temperatures (e.g. approximately +37 °C (+98 °F)) the battery charger may for small periods of time alternately enable and disable battery charging to keep the battery at acceptable temperatures. The battery charger indicates when charging is disabled due to abnormal temperatures via its LED.

## Establishing Ethernet Communication



**NOTE** Refer to the WT6000 Integrator Guide for information on configuring the Ethernet settings.

- 1. Touch .
- 2. Touch **Ethernet**.
- 3. Slide the Ethernet switch to the **ON** position.
- 4. Insert the device into a slot.
- 5. The  icon appears in the Status bar.
- 6. Touch **Eth0** to view Ethernet connection details.

**Ethernet LED Indicators**

There are two green LEDs on the side of the cradle. These green LEDs light and blink to indicate the data transfer rate.

**Table 6-3** *LED Data Rate Indicators*

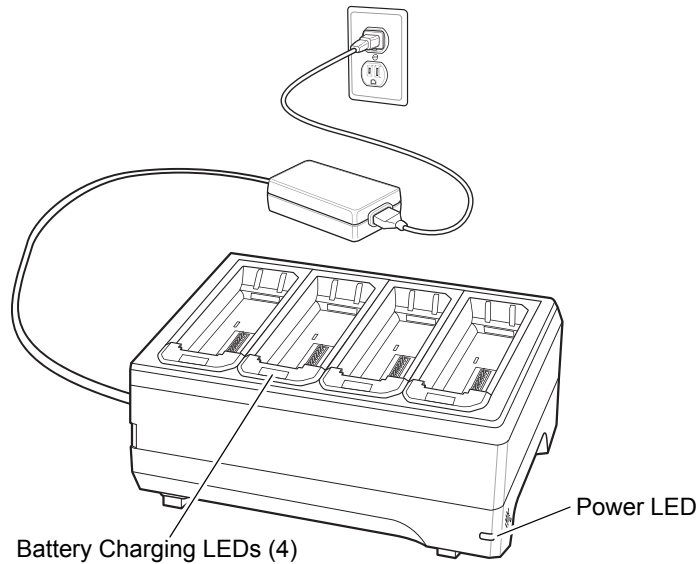
Data Rate	1000 LED	100/10 LED
1 Gbps	On/Blink	Off
100 Mbps	Off	On/Blink
10 Mbps	Off	On/Blink

## 4-Slot Battery Charger



**NOTE** Ensure that you follow the guidelines for battery safety described in [Battery Safety Guidelines on page 7-1](#).

The 4-Slot Battery Charger charges up to four spare batteries.

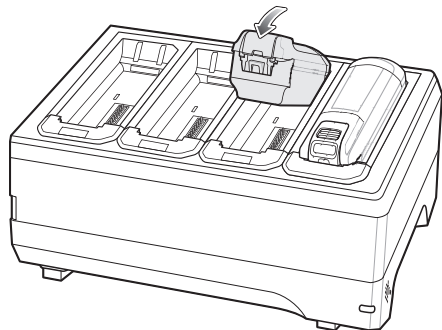


**Figure 6-18** 4-Slot Battery Charger

## Battery Installation

To install the battery:

1. Insert the battery into a battery slot.
2. Gently press down on the battery until it snaps into place.



**Figure 6-19** Insert Battery into Slot

## Battery Removal

To remove the battery, press the two release latches on each side of the battery and lift the battery out of the battery slot.



## Battery Charging

### Spare Battery Charging

Each Battery Charging LED indicates the status of the battery charging in each slot. See [Table 6-2 on page 6-5](#). The 3,350 mAh battery fully charges in less than four hours at room temperature.

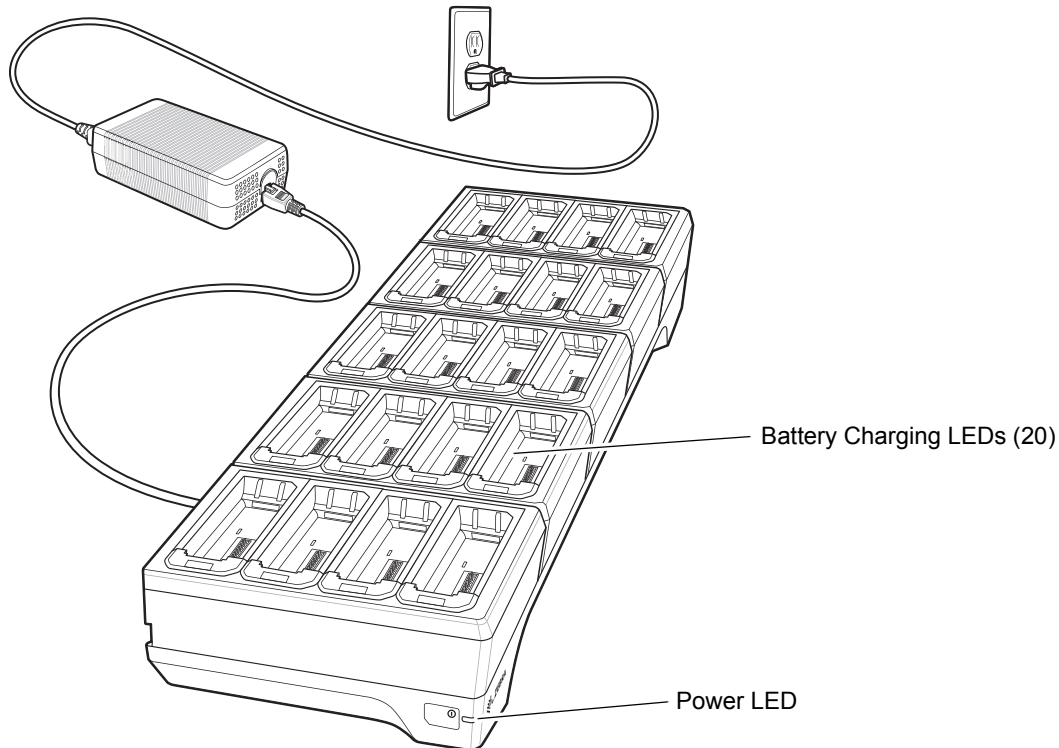
Charge batteries in temperatures from 0 °C to 40 °C (32 °F to 104 °F). The battery charger always performs battery charging in a safe and intelligent manner. At higher temperatures (e.g. approximately +37 °C (+98 °F)) the battery charger may for small periods of time alternately enable and disable battery charging to keep the battery at acceptable temperatures. The battery charger indicates when charging is disabled due to abnormal temperatures via its LED.

## 20-Slot Battery Charger



**NOTE** Ensure that you follow the guidelines for battery safety described in [Battery Safety Guidelines on page 7-1](#).

The 20-Slot Battery Charger charges up to 20 spare batteries.

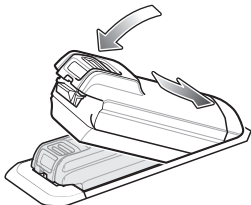


**Figure 6-20** 20-Slot Battery Charger

## Battery Installation

To install the battery:

1. Insert the battery into a battery slot.
2. Gently press down on the battery until it snaps into place.



**Figure 6-21** Insert Battery into Slot

## Battery Removal

To remove the battery, press the two release latches on each side of the battery and lift the battery out of the battery slot.

## Battery Charging

### Spare Battery Charging

Each Battery Charging LED indicates the status of the battery charging in each slot. See [Table 6-2 on page 6-5](#). The 3,350 mAh battery fully charges in less than four hours at room temperature.

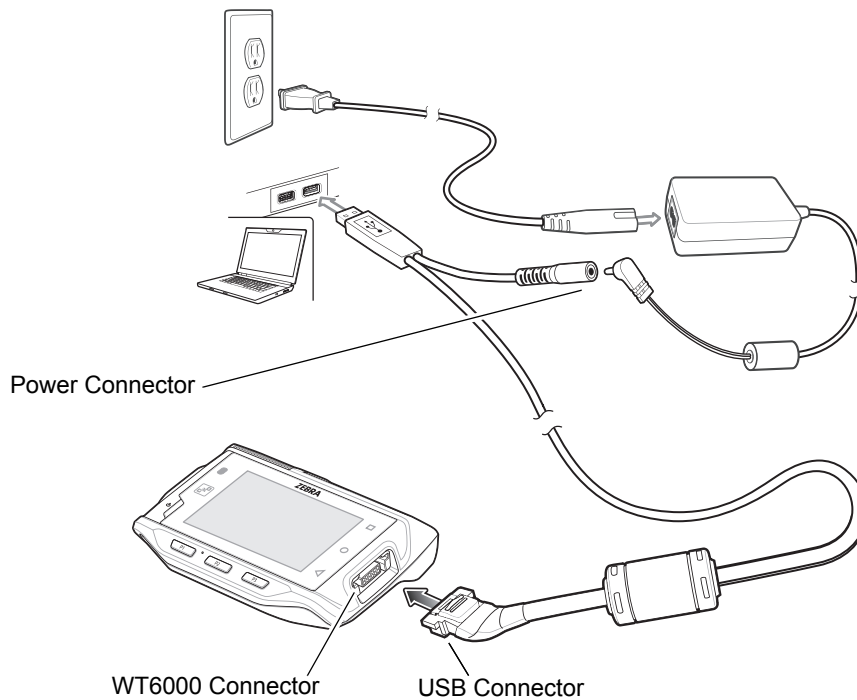
Charge batteries in temperatures from 0°C to 40°C (32°F to 104°F). The battery charger always performs battery charging in a safe and intelligent manner. At higher temperatures (e.g. approximately +37°C (+98°F)) the battery charger may for small periods of time alternately enable and disable battery charging to keep the battery at acceptable temperatures. The battery charger indicates when charging is disabled due to abnormal temperatures via its LED.

## USB and Charging Cable



**NOTE** Ensure that you follow the guidelines for battery safety described in [Battery Safety Guidelines on page 7-1](#).

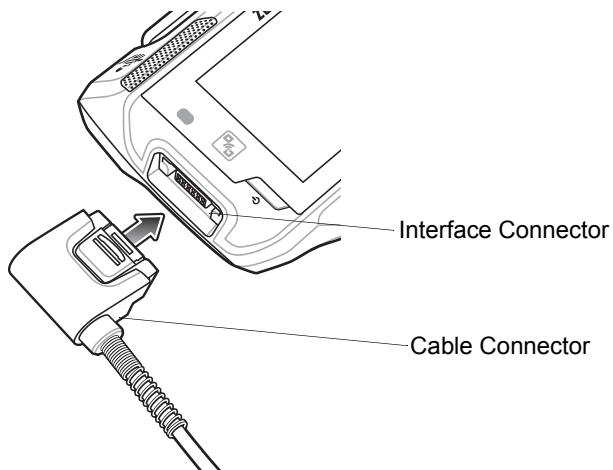
The USB and Charging cable connects to either interface connector on the WT6000. When attached to the WT6000, allows the WT6000 to transfer data to a host computer and provide power for charging the WT6000.



**Figure 6-22** *USB and Charging Cable*

### Attaching the USB and Charging Cable

1. Connect the connector to the WT6000 interface connector.



**Figure 6-23** *Connecting Scanner to WT6000*

2. Attach the USB connection to the host computer.

## Removing the USB and Charging Cable

To remove the USB and Charging cable:

1. Press the release level toward the cable.
2. Rotate the adapter toward the front of the device and remove.

## Battery Charging

To charge the WT6000, attached the power cable to the Power Connection on the USB and Charging Cable.

### Main Battery Charging

The WT6000 Charging/Scan LED indicates the status of the battery charging in the device. See [Table 1-3 on page 1-4](#). The 3,350 mAh battery fully charges in less than four hours at room temperature.

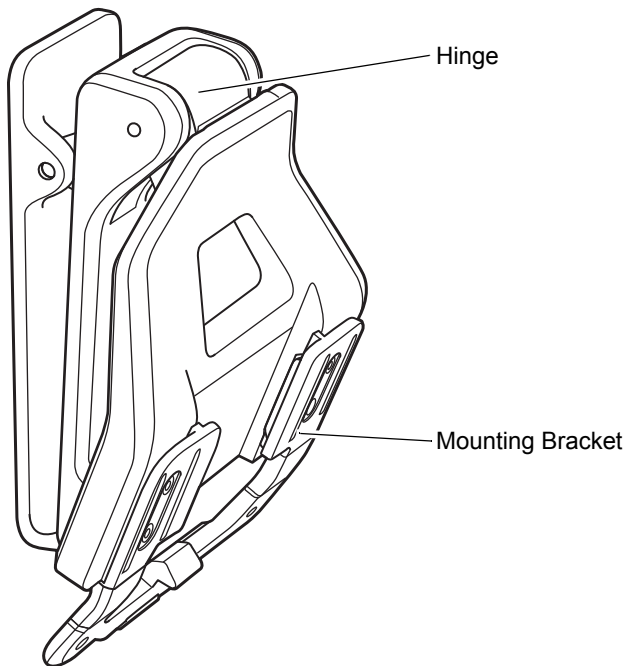
## Charging Temperature

Charge batteries in temperatures from 0°C to 40°C (32°F to 104°F). The battery charger always performs battery charging in a safe and intelligent manner. At higher temperatures (e.g. approximately +37°C (+98°F)) the battery charger may for small periods of time alternately enable and disable battery charging to keep the battery at acceptable temperatures. The battery charger indicates when charging is disabled due to abnormal temperatures via its LED.

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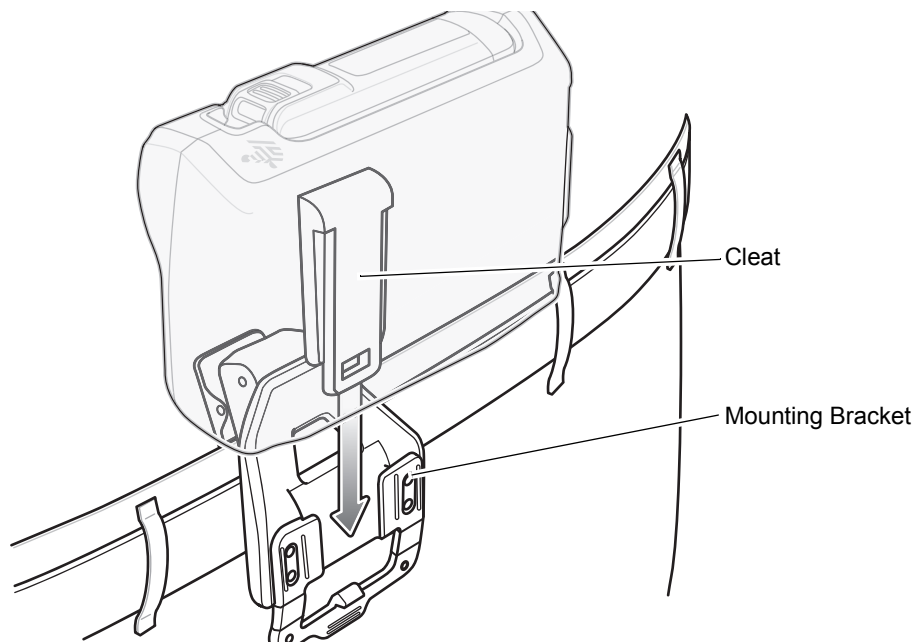
## Hip Mount

The hip mount allows the user to mount the WT6000 on the belt for use in voice picking applications. An RS4000 or RS5000 scanner with an extended cable, a wired headset or the RS6000 Hands-free Bluetooth Imager is required when using the hip mount.



**Figure 6-24** *Hip Mount*

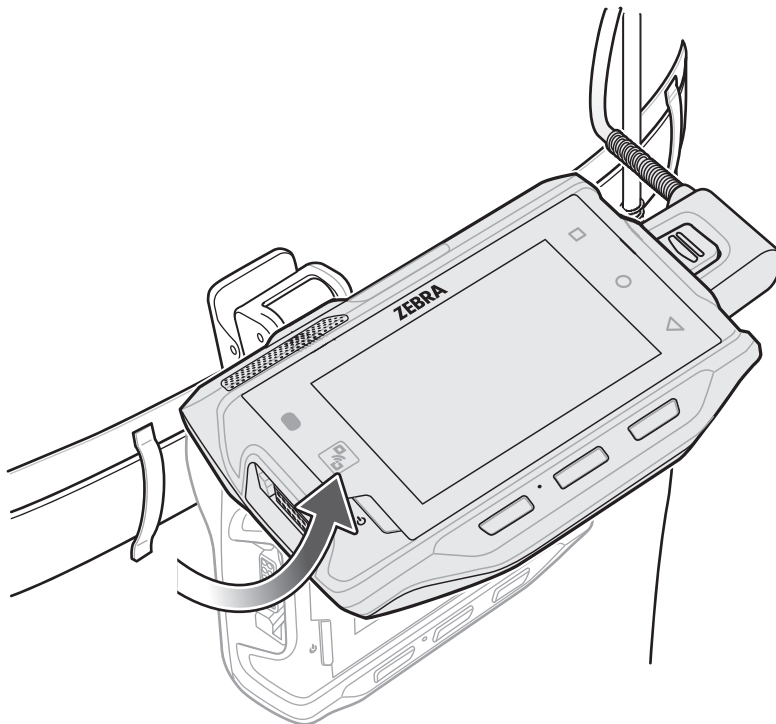
1. Attach the Hip Mount to belt.
2. Align the cleat on the WT6000 with the mounting bracket on the Hip Mount.
3. Slide the WT6000 into the hip mount.



**Figure 6-25** *Insert WT6000 onto Hip Mount*

4. Connect RS4000, RS5000 or headset to the WT6000.

The Hip Mount provides a hinged bracket so the user can easily view the display by lifting the WT6000.

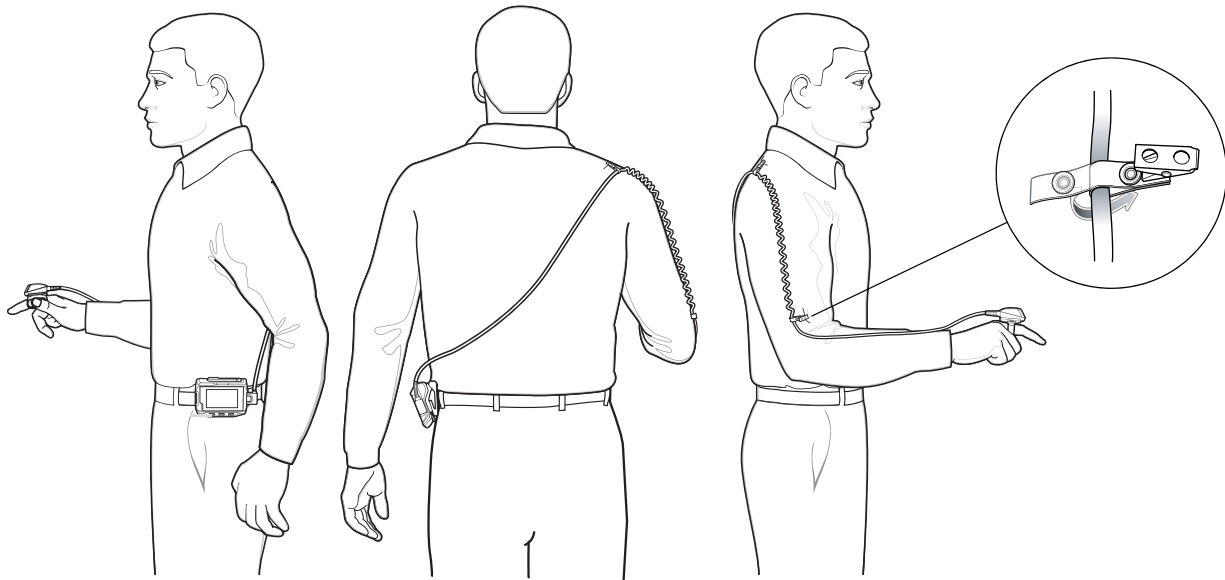


**Figure 6-26** *Lift WT6000 to View Display*

## Routing an Extended Cable Scanner

When using an RS4000 or RS5000 scanner with the WT6000 mounted on the hip, the extended cable version is required.

Zebra offers for sale cable clips, which attach to clothing and hold the scanner cable so that the cable does not interfere with the user. The cable clips are similar to badge clips and can be purchased at any office supply store as well.



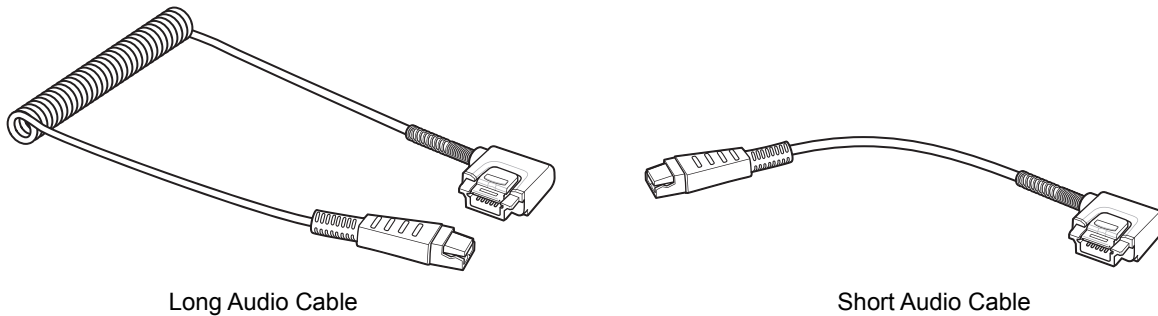
**Figure 6-27** *Routing RS4000 Scanner Cable from Hip to Hand*



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## Quick Disconnect Audio Cables

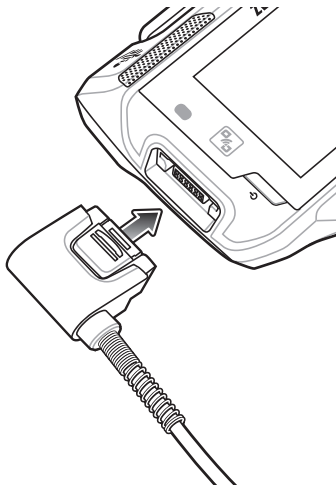
The Quick Disconnect Audio Adapter snaps into either interface connector. When attached to the WT6000, the Quick Disconnect Audio Adapter allows a user to connect a wired headset to the WT6000.



**Figure 6-28** *Audio Cables*

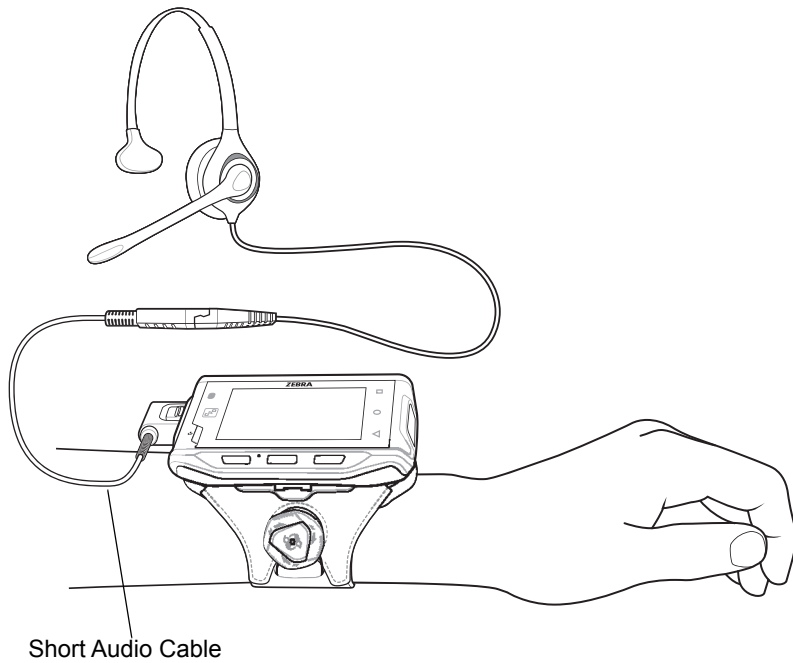
## Attaching the Audio Adapter

1. Align the tabs on the Audio Adapter with the slots on the device.
2. Rotate the Adapter toward the back of the device until the Adapter snaps onto the device.



**Figure 6-29** *Attach Cable to WT6000*

## Connecting the Audio Cable to a Headset



**Figure 6-30** Short Quick Disconnect Audio Cable Connection to Headset



**Figure 6-31** Long Quick Disconnect Audio Cable Connection to Headset

## Removing the Audio Adapter

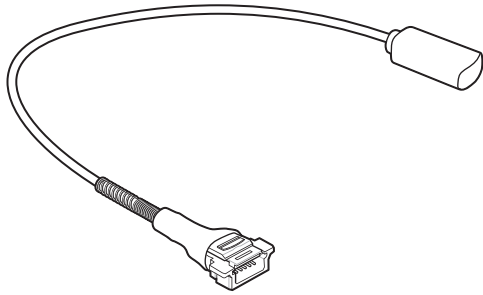
To remove the Audio Adapter:

1. Press the release level toward the cable.
2. Rotate the adapter toward the front of the device and remove.

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## Vibrator Cable

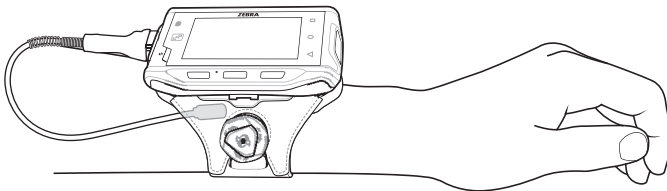
Use the Vibrator cable to provide a touch notification to a user to in noisy environments.



**Figure 6-32** *Vibrator Cable*

Connect the cable to the Interface connector on the WT6000.

Slide the vibrator end between the Wrist Mount strap and arm.



**Figure 6-33** *Connecting Vibrator Cable to WT6000*

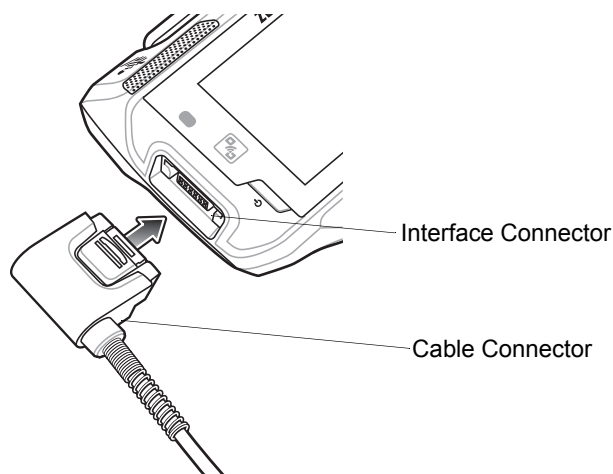
When an application generates a notification, the vibrator vibrates notifying the user.

## RS4000 Scanner

To connect the RS4000 scanner to the WT6000:

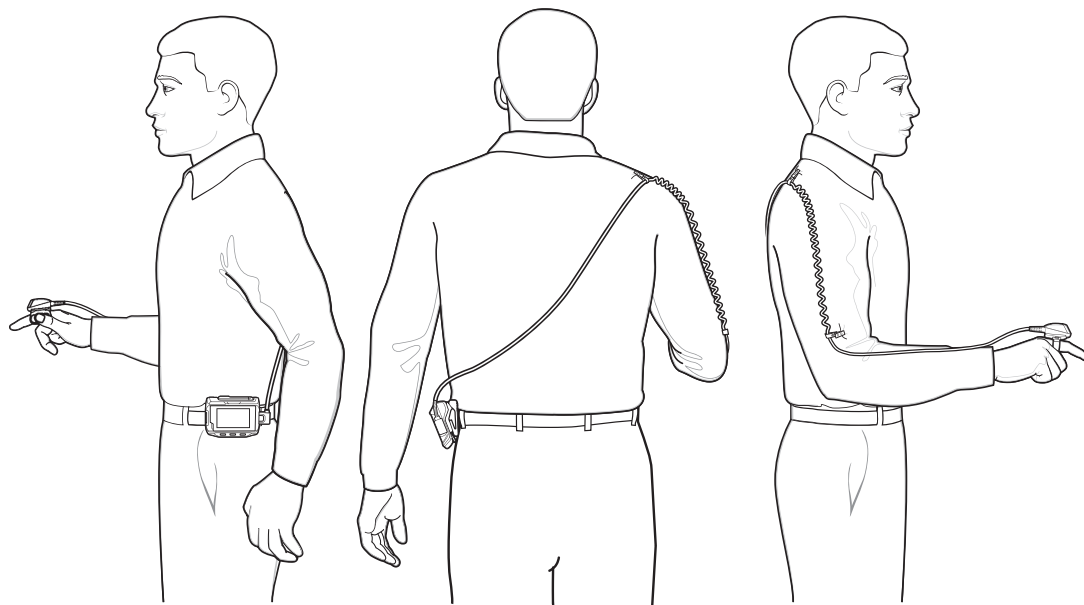
- ✓ **NOTE** There are two scanner configurations available. The short cable configuration connects the scanner to the WT6000 mounted on the arm. The extended cable configuration connects the scanner to the WT6000 mounted on the hip.

1. Connect the scanner interface cable to the WT6000 interface connector. If the WT6000 is mounted on the arm, connect the cable to the interface connector closest to the wrist.



**Figure 6-34** Connecting Scanner to WT6000

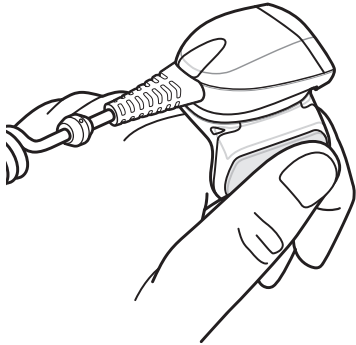
2. If using the extended cable configuration, route the scanner cable up to the shoulder and down to the hand that the scanner mounts on. Attach two cable clips to clothing and secure cable to cable clip.



**Figure 6-35** Cable Clip Installation

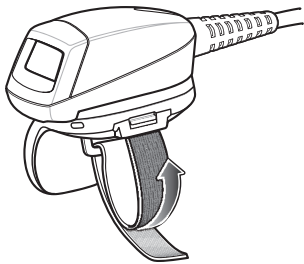
3. Rotate the trigger assembly to the correct position for the hand that the scanner mounts to.

4. Slide the scanner onto the index finger with the scan trigger next to the thumb.



**Figure 6-36** *Place the Scanner on Index Finger*

5. Tighten the finger strap.



**Figure 6-37** *Tightening Straps*

6. If required, cut excess finger strap material.

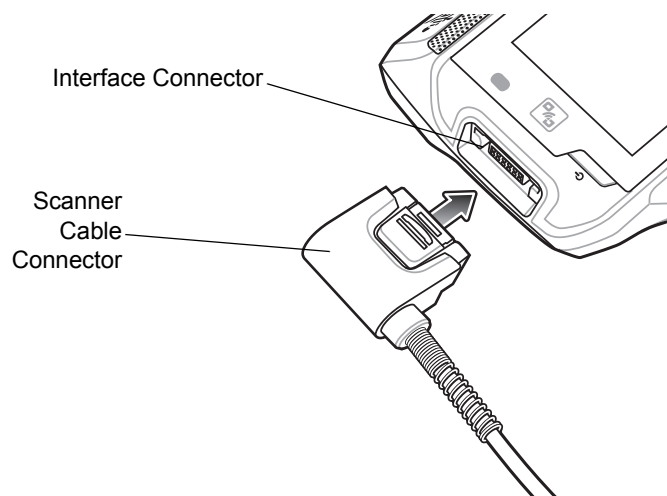
After connecting the scanner, warm boot the WT6000. See [Resetting the WT6000 on page 2-11](#) for information on performing a warm boot.

## RS5000 Imager

✓ **NOTE** For optimal performance of the RS5000 ring scanner, it is recommended to update the WT6000 to OS version 03.07.04 or later.

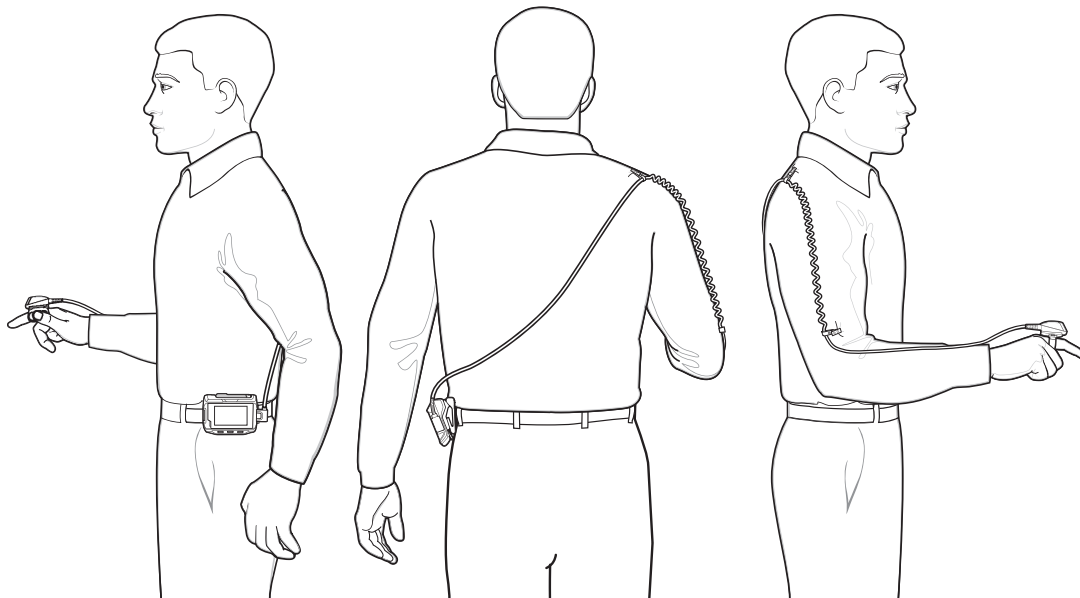
To connect the RS5000 imager to the wearable terminal:

1. If using the WT6000 wearable terminal, remove the connector cap.
2. Connect the RS5000 interface cable to the wearable terminal interface connector. If connecting to a wrist mounted wearable terminal, connect to the interface connector closest to the wrist.



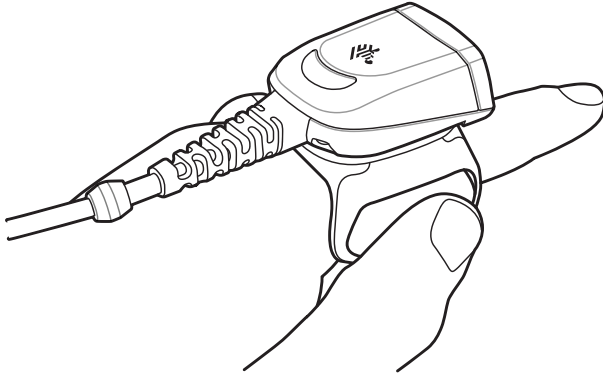
**Figure 6-38** Connect RS5000 to WT6000 Wearable Terminal

3. If using the extended cable configuration, route the scanner cable up to the shoulder and down to the hand that the scanner mounts on. Attach two cable clips to clothing and secure cable to cable clip.



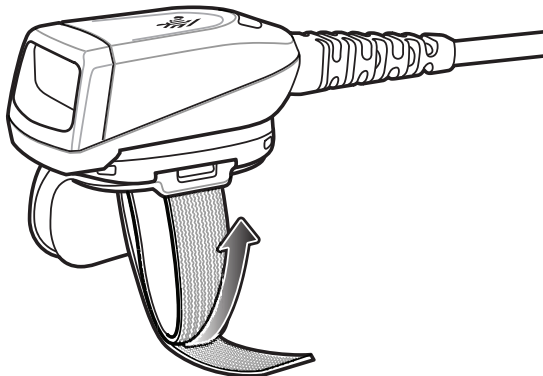
**Figure 6-39** Cable Clip Installation

4. Rotate the trigger assembly to the correct position for the hand that the imager mounts to.
5. Slide the RS5000 onto the index finger with the scan trigger next to the thumb.



**Figure 6-40** *Wearing the RS5000*

6. Tighten the finger strap.



**Figure 7** *Wearing the RS5000*

7. If required, cut excess finger strap material.
8. Soft boot the wearable terminal. See [Resetting the WT6000 on page 2-11](#) for information on performing a soft boot.



# CHAPTER 7 MAINTENANCE AND TROUBLESHOOTING

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## Introduction

This chapter includes instructions on cleaning and storing the WT6000, battery maintenance and provides troubleshooting solutions for potential problems during WT6000 operations.

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## Maintaining the WT6000

For trouble-free service, observe the following tips when using the WT6000:

- Protect the WT6000 from temperature extremes.
- Do not store or use the WT6000 in any location that is extremely dusty, damp, or wet.
- If the surface of the WT6000 screen becomes soiled, clean it with a soft cloth moistened with a diluted window-cleaning solution. Do not use bleach, ammonia or hydrogen peroxide products.
- Take care not to scratch the screen of the WT6000.
- The display of the WT6000 contains glass. Take care not to drop the WT6000 or subject it to strong impact.

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## Battery Safety Guidelines

- The area in which the WT6000 units are charged should be clear of debris and combustible materials or chemicals. Particular care should be taken where the device is charged in a non-commercial environment.
- Do not use incompatible batteries and chargers. If you have any questions about the compatibility of a battery or a charger, contact Zebra Support. See [Service Information on page xiv](#) for contact information.
- Do not crush, puncture, or place a high degree of pressure on the battery.
- Follow battery usage, storage, and charging guidelines.
- Improper battery use may result in a fire, explosion, or other hazard.
- To charge the mobile device battery, the battery and charger temperatures must be between +32°F and +104°F (0°C and +40°C)

- Do not disassemble or open, crush, bend or deform, puncture, or shred.
- Severe impact from dropping any battery-operated device on a hard surface could cause the battery to overheat.
- Do not short circuit a battery or allow metallic or conductive objects to contact the battery terminals.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, or expose to fire, explosion, or other hazard.
- Do not leave or store the equipment in or near areas that might get very hot, such as in a parked vehicle or near a radiator or other heat source. Do not place battery into a microwave oven or dryer.
- Battery usage by children should be supervised.
- Please follow local regulations to promptly dispose of used re-chargeable batteries.
- Do not dispose of batteries in fire.
- Seek medical advice immediately if a battery has been swallowed.
- In the event of a battery leak, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with large amounts of water and seek medical advice.
- If you suspect damage to your equipment or battery, call Customer Support to arrange for inspection. See [Service Information on page xiv](#) for contact information.

---

## Long Term Storage

When storing the WT6000 for a long period of time, it is recommended to remove the battery. When returning the WT6000 to everyday operation, install a fully charged battery.

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## Cleaning Instructions



**CAUTION** Always wear eye protection.

Read warning label on compressed air and alcohol product before using.

If you have to use any other solution for medical reasons please contact Zebra 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, or mild dish soap.

## Harmful Ingredients

The following chemicals are known to damage the plastics on the device and should not come in contact with the device: ammonia solutions, compounds of amines or ammonia; acetone; ketones; ethers; aromatic and chlorinated

hydrocarbons; aqueous or alcoholic alkaline solutions; ethanolamine; toluene; trichloroethylene; benzene; carbolic acid, TB-lysoform, bleach products and hydrogen peroxide.

## 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.

## Special Cleaning Notes

Many vinyl gloves contain phthalate additives, which are often not recommended for medical use and are known to be harmful to the housing of the device. The device should not be handled while wearing vinyl gloves containing phthalates, or before hands are washed to remove contaminant residue after gloves are removed. If products containing 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 plastics.

## Cleaning Materials Required

- Alcohol wipes
- Lens tissue
- Cotton tipped applicators
- Isopropyl alcohol
- Can of compressed air with a tube.

## Cleaning Frequency

The cleaning frequency is up to the customer's discretion due to the varied environments in which the WT6000 units are used. They may be cleaned as frequently as required. However when used in dirty environments it may be advisable to periodically clean the scanner exit window to ensure optimum scanning performance.

## Cleaning the WT6000

### Housing

Using the alcohol wipes, wipe the housing.

### Display

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

### Power Connector

1. Remove the battery from WT6000.
2. Dip the cotton portion of the cotton tipped applicator in isopropyl alcohol.
3. Rub the cotton portion of the cotton tipped applicator back-and-forth across the connector inside the handle of the WT6000. Do not leave any cotton residue on the connector.

4. Repeat at least three times.
5. Use the cotton tipped applicator dipped in alcohol to remove any grease and dirt near the connector area.
6. Use a dry cotton tipped applicator and repeat steps 3 through 5.
7. Spray compressed air on the connector area by pointing the tube/nozzle about ½ inch away from the surface.



**CAUTION** Do not point nozzle at yourself and others, ensure the nozzle or tube is away from your face.

8. Inspect the area for any grease or dirt, repeat if required.

### Cleaning Cradle Connectors

Use this procedure to clean the connectors on a cradle:

1. Remove power from the cradle.
2. Dip the cotton portion of the cotton tipped applicator in isopropyl alcohol.
3. Rub the cotton portion of the cotton tipped applicator along the pins of the connector. Slowly move the applicator back-and-forth from one side of the connector to the other. Do not let any cotton residue on the connector.
4. All sides of the connector should also be rubbed with the cotton tipped applicator.
5. Spray compressed air in the connector area by pointing the tube/nozzle about ½ inch away from the surface.



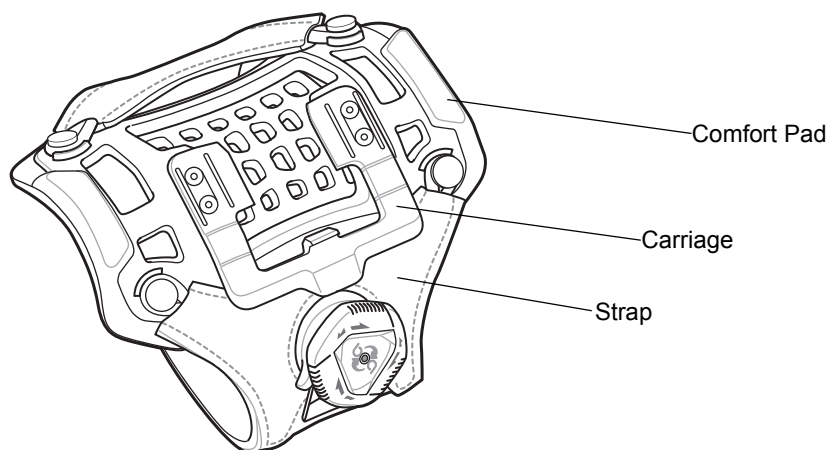
**CAUTION** Do not point nozzle at yourself and others, ensure the nozzle or tube is pointed away from your face.

6. Ensure that there is no lint left by the cotton tipped applicator, remove lint if found.
7. If grease and other dirt can be found on other areas of the cradle, use lint free cloth and alcohol to remove.
8. Allow at least 10 to 30 minutes (depending on ambient temperature and humidity) for the alcohol to air dry before applying power to cradle.

If the temperature is low and humidity is high, longer drying time is required. Warm temperature and dry humidity requires less drying time.

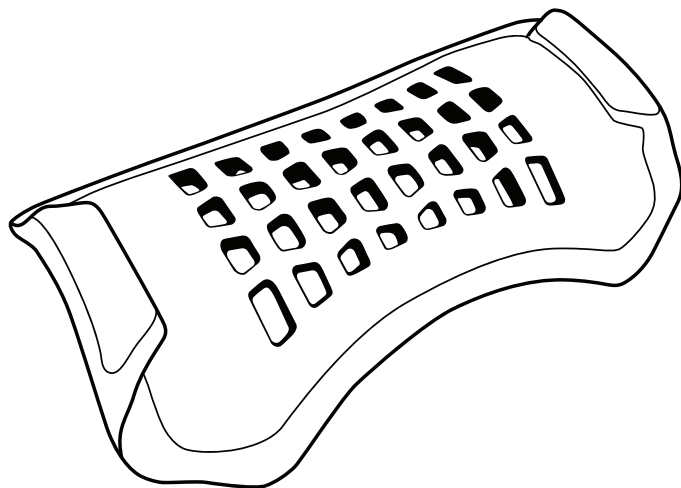
### Cleaning the Wrist Mount

It may be necessary to wash the wrist mount strap and replaceable comfort pad when they become soiled.

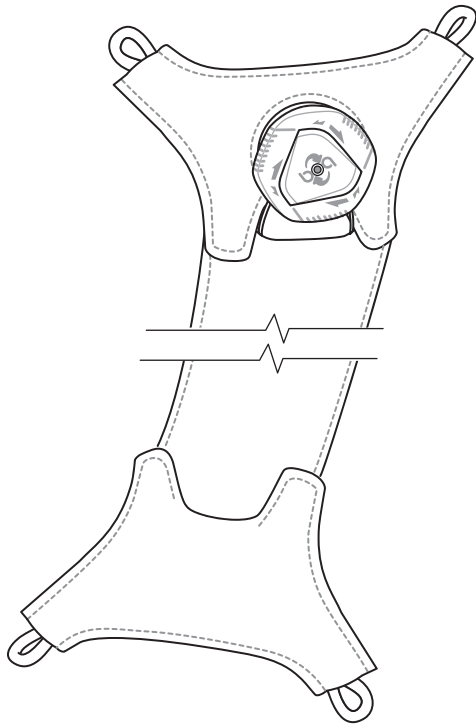


**Figure 7-1** *Wrist Mount*

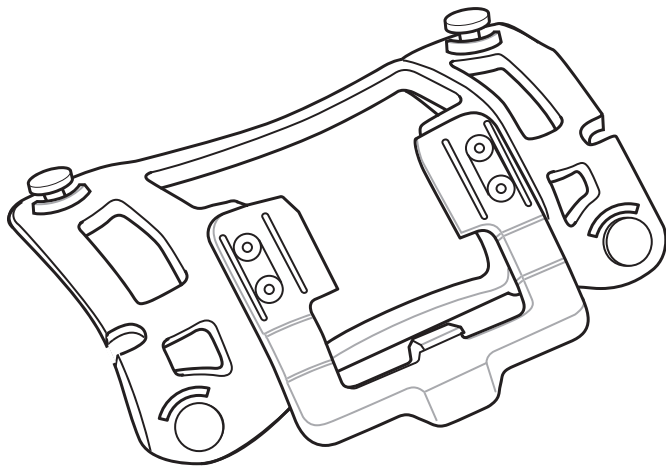
Remove the strap and comfort pad from the wrist mount. Hand wash in cold water with a mild detergent (such as Woolite®). Do not use bleach. Air dry. Do not use a dryer.



**Figure 7-2** *Comfort Pad*



**Figure 7-3** *Strap*



**Figure 7-4** *Carriage*

## Troubleshooting

### WT6000

**Table 7-1** *Troubleshooting the WT6000*

Problem	Cause	Solution
WT6000 does not turn on.	Battery not charged.	Charge or replace the battery in the WT6000.
	Battery not installed properly.	Ensure battery is installed properly. See <a href="#">Installing the Battery on page 1-3</a> .
	System crash.	Perform a soft reset. If the WT6000 still does not turn on, perform a hard reset. See <a href="#">Resetting the WT6000 on page 2-11</a> .
Battery did not charge.	Battery failed.	Replace battery. If the WT6000 still does not operate, try a soft reset, then a hard reset. See <a href="#">Resetting the WT6000 on page 2-11</a> .
	WT6000 removed from cradle before charging completed.	Insert the WT6000 into the cradle and begin charging. The battery fully charges in less than four hours.
	Ambient temperature of the cradle is too warm or too cold.	The ambient temperature must be between 0°C and 40°C (32°F and 104°F).
During data communication, no data was transmitted, or transmitted data was incomplete.	WT6000 unplugged from host computer during communication.	Reconnect the programming cable to the host computer and re-transmit.
	Communication software was incorrectly installed or configured.	See system administrator.
WT6000 turns itself off.	WT6000 is inactive.	The WT6000 turns off after a period of inactivity. If the WT6000 is running on battery power, this period can be set to 15 seconds, 30 seconds, 1 minute, 2 minutes, 5 minutes, 10 minutes, or 30 minutes. Change the setting if you need a longer delay before the automatic shutoff feature activates.
	Battery is depleted.	Place the WT6000 in the cradle to re-charge the battery.
	The WT6000's battery is low and it powers down to protect memory content.	Place the WT6000 in the cradle to re-charge the battery.

**Table 7-1** Troubleshooting the WT6000 (Continued)

Problem	Cause	Solution
A message appears stating that the WT6000 memory is full.	Too many files stored on the WT6000.	Delete unused memos and records. You can save these records on the host computer.
	Too many applications installed on the WT6000.	If you have installed additional applications on the WT6000, remove them to recover memory.
The WT6000 does not accept scan input.	Unreadable bar code.	Ensure the symbol is not defaced.
	Distance between scanner exit window and bar code is incorrect.	Move the WT6000 closer or further from the bar code to the proper scanning range.
	WT6000 is not programmed for the bar code.	Verify that the WT6000 can read the type of bar code being scanned (See <a href="#">Technical Specifications</a> ). Ensure that the bar code parameters are set properly for the bar code being scanned.
	WT6000 is not programmed to generate a beep.	Verify that a beep on a good decode is used.
During USB data communications, no data was transmitted, or transmitted data was incomplete.	Incorrect cable connection.	See <a href="#">Chapter 6, Accessories</a> .
	Communications software is not installed or configured properly.	Perform setup as described in <a href="#">Chapter 6, Accessories</a> .



# APPENDIX A SPECIFICATIONS

## Technical Specifications

The following tables summarize the WT6000's intended operating environment and general technical hardware specifications.

**Table A-1** *Technical Specifications*

Item	Description
<b>Physical and Environmental Characteristics</b>	
Dimensions (H x L x W)	121 mm (4.8 in.) x 89mm (3.5 in.) x 34 mm (1.3 in.)
Weight	245 g (8.7 oz.)
Display	Color Transflective LCD Display and IPS Technology, 3.2 in. diagonal, WVGA (800 x 480 pixels), 24 bits (16 million pixels), 400+ Nits
Touch Panel	Multi-Touch projected capacitive; fingertip (bare or gloved) input; capacitive stylus supported (sold separately); Corning® Gorilla® Glass
Backlight	Configurable LED backlight control
Battery	PowerPrecision+ rechargeable 3.7 VDC 3,350 mAh Lithium-Ion battery.
Backup Power	SuperCap technology
Notification	Vibration, Audible tone, Multi - color LEDs
Voice and Audio	Integrated Speaker, Mono wired headsets with a microphone and push-to-talk button and Bluetooth wireless headset support.
<b>Performance Characteristics</b>	
CPU	Quad-Core 1.0 GHz processor
Operating System	Android AOSP 5.1 (Lollipop) with Mobility Extensions (Mx), for true enterprise class operating system.

**Table A-1** Technical Specifications (Continued)

Item	Description
Memory	1 GB RAM, 4 GB Flash (pSLC)
Application Development	Zebra Android EMDK
<b>User Environment</b>	
Operating Temperature	-30°C to 50°C (-22°F to 122°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Battery Charging Temperature	0°C to +40°C (32°F to 104°F) ambient temperature range.
Humidity	5% - 95% non-condensing
Drop Specification	1.2 m (4 ft.) drop to concrete (36 drops, over temperature range)
Tumble	1,000 tumbles @ 0.5 m (1.6 ft.) (room temperature)
Vibration	Sine 5-2000 Hz, 4g peak, 1 hour per axis Random 20-2000 Hz, 6g RMS or 0.04g <sup>2</sup> /Hz, 1 hour per axis
ESD	± 20k VDC air discharge ± 10k VDC contact discharge ± 10k VDC indirect discharge
<b>Wireless LAN Data Communications</b>	
Radio	IEEE ® 802.11a/b/g/n/ac
Data Rates	5 GHz: 802.11a/n - up to 135 Mbps; 802.11ac - Single-stream and dual-stream solution with data rates up to 433.3 and 866.7 Mbps 2.4 GHz: 802.11b/g/n - up to 72.2 Mbps (one stream) 144.4 Mbps (dual stream)
Operating Channels	Channels 36 - 165 (5180 - 5835 MHz) Channels 1 - 13 (2412 - 2472 MHz) Actual operating channels/frequencies depend on regulatory rules and certification agency
Security and Encryption	WEP, WPA - TKIP, WPA2- TKIP, WPA2-AES EAP-TTLS/PAP, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, TTLS-MSCHAP, EAP-TLS, EAP-FAST (MSCHAPv2 and GTC), LEAP VPN functionality (L2TP, PPTP and IPSec)
Multimedia	Wi-Fi Multimedia™ (WMM)
Certifications	802.11n, 802.11ac, CCXv4, Wi-Fi Direct
Fast Roam	PMKID Caching, Opportunistic Key Caching (OKC), Cisco CCKM, 802.11r.
<b>Wireless PAN Data Communications</b>	
Bluetooth	Bluetooth 4.1 (Bluetooth Smart Technology)

**Table A-1** *Technical Specifications (Continued)*

Item	Description
<b>Data Capture</b>	
Laser Scanning	Optional RS4000 laser scanner.
Imager	Optional RS507, RS5000 and RS6000 ring scanners.
NFC	Multi-Protocol NFC.



# INDEX

## Numerics

### Numerics

1-D bar codes	3-1
2-D bar codes	3-1

## A

accessories	6-1
airplane mode	1-10
android version	xii

## B

bar codes	
one dimensional	3-1
two dimensional	3-1
battery charging temperature	A-2
battery usage	1-9
browser	2-6
build number	xii
bullets	xiii

## C

calculator	2-6
calendar	2-6
clock	2-6
configuration	xii
contacts	2-6
conventions	
notational	xiii
CPU	A-1

## D

data capture	
imager operational modes	
decode mode	3-2
pick list mode	3-2
imaging	3-1
laser scanning	3-1
one dimensional bar codes	3-1
scan angle	3-2
scan range	3-2
scanning	3-1
two dimensional bar codes	3-1
datawedge	2-6
diagnostics	5-15
dimensions	A-1
display	.xii, A-1
downloads	2-7
drop specification	A-2
DWDEmo	2-7

## E

EAP	4-1
Elemex	5-15
email	2-7

## F

file browser	2-7, 5-6
--------------	----------

## H

humidity	A-2
----------	-----

### I

imager. See data capture, imaging  
imaging ..... 3-2  
information, service .....xiv

### K

keyboard ..... 2-5

### L

laser scanning  
    See data capture ..... 3-1  
LEDs  
    scan and decode ..... 3-3  
lithium-ion battery ..... 1-1  
low battery notification ..... 1-10

### M

maintenance ..... 7-1  
memory ..... A-2  
mobile computer  
    starting ..... 1-5  
model number ..... xii

### O

operating system ..... A-1  
operating temperature ..... A-2

### P

PEAP-GTC ..... 4-1  
PEAP-MSCHAPv2 ..... 4-1

### R

RS5000 scanning ..... 3-4  
RS507 scanning ..... 3-6  
RS6000 scanning ..... 3-4

### S

scanning  
    bar codes ..... 3-1  
    imaging ..... 3-1  
    RS5000 ..... 3-4  
    RS507 ..... 3-6  
    RS6000 ..... 3-4  
    See data capture ..... 3-1  
screen  
    Zebra splash screen ..... 1-5

screen timeout ..... 1-11, 1-12  
serial number ..... xii  
service information ..... xiv  
set date ..... 1-10  
set time ..... 1-10  
set time zone ..... 1-10  
settings ..... 2-8  
sound recorder ..... 2-8  
starting the mobile computer ..... 1-5  
storage temperature ..... A-2

### T

TLS ..... 4-1  
troubleshooting ..... 7-7  
TTLS  
    TTLS-MSCHAP ..... 4-1  
    TTLS-MSCHAPv2 ..... 4-1  
    TTLS-PAP ..... 4-1

### U

unpacking ..... 1-1

### W

weight ..... A-1  
WEP ..... 4-1  
WLAN radio ..... A-2  
WPA ..... 4-1

### Z

Zebra tap and pair ..... 2-8





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