WT5400/WT6400

Wearable Computer



Quick Start Guide

2024/08/29

ZEBRA and the stylized Zebra head are trademarks of Zebra Technologies Corporation, registered in many jurisdictions worldwide. All other trademarks are the property of their respective owners. ©2024 Zebra Technologies Corporation and/or its affiliates. All rights reserved.

Information in this document is subject to change without notice. The software described in this document is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of those agreements.

For further information regarding legal and proprietary statements, please go to:

SOFTWARE: zebra.com/informationpolicy. COPYRIGHTS: zebra.com/copyright. PATENTS: ip.zebra.com. WARRANTY: zebra.com/warranty. END USER LICENSE AGREEMENT: zebra.com/eula.

Terms of Use

Proprietary Statement

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

Product Improvements

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

Liability Disclaimer

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

Limitation of Liability

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

Model Number

This guide applies to the model number: WTO

Unpacking the Device

Unpacking the device from the box.

- **1.** Carefully remove all protective material from the device and save the shipping container for later storage and shipping.
- 2. Verify that the following items were received:
 - Wearable computer
 - Lithium-ion battery
 - Regulatory Guide
- **3.** Inspect the equipment for damage. If any equipment is missing or damaged, contact the Global Customer Support center immediately.
- **4.** Before using the device for the first time, remove the protective film that covers the screen.

Device Features

This section lists the features of the WT6400 touch only, WT6400 touch with keypad, and the WT5400 wearable computers.









Number	ltem	Function			
1	Touchscreen display	Displays all information needed to operate the device.			
2	Notification/ Charge LED (two locations)	Indicates charging status while charging with a USB charge cable or cradle, and provides notifications from applications.			
3	Ambient light sensor	Determines ambient light for controlling display backlight intensity.			
4	Charging contacts (four locations)	Connection points for charging the power source.			
5	Right interface connector	Provides USB host and client communication, audio and device charging via cables and accessories.			
6	Microphone	Use for voice communication.			
7	P3 button	Use as the Enter button. If programmed as PTT, initiates Push-To-Talk communication.			
8	P2 button	Increases volume. Programmable.			
9	P1 button	Decreases volume. Programmable.			
10	Speaker	Provides audio output for video and music playback.			
11	Power button	Turns the display on and off. Press and hold to reset the device and power off.			
12	NFC antenna	Provides communication with other NFC-enabled devices.			
13	Side-facing camera flash	LED light source for camera flash and illuminating low-light environments.			
14	Side-facing camera	Provides scanning and capturing photos or videos.			





Number	ltem	Function
15	Cleat	Provides alignment and secures the device to the wrist and hip mounts.
16	Left interface connector	Provides USB host and client communication, audio and device charging via cables and accessories.
17	Battery	Provides power to the device.

Figure 4 Top View - WT6400 Touch + Keypad







Number	ltem	Function				
1	Touchscreen display	Displays all information needed to operate the device.				
2	Notification/ Charge LED (two locations)	Indicates battery charging status while charging with a USB charge cable or cradle and provides notifications from applications.				
3	Ambient light sensor	Determines ambient light for controlling display backlight intensity.				
4	Charging contacts (four locations)	Connection points for charging the power source.				
5	Right interface connector	Provides USB host and client communication, audio and device charging via cables and accessories.				
6	Keypad	Allows for text input, navigating through the device interface, and executing commands.				
7	Enter button	Use as the Enter button. If programmed as PTT, initiates Push-To-Talk communication.				
8	P2 button	Increases volume. Programmable.				
9	P1 button	Decreases volume. Programmable.				
10	Speaker	Provides audio output for video and music playback.				
11	Power button	Turns the display on and off. Press and hold to reset the device and power off.				
12	NFC antenna	Provides communication with other NFC-enabled devices.				
13	Side-facing camera flash	LED light source for camera flash and illuminating low-light environments.				
14	Side-facing camera	Provides scanning and capturing photos or videos.				





Number	ltem	Function		
15	Microphone	Jse for voice communication.		
16	Battery	Provides power to the device.		
17	Left interface connector	Provides USB host and client communication, audio and device charging via cables and accessories.		
18	Cleat	Provides alignment and secures the device to the wrist and hip mounts.		
19	Wrist mount release	Extended button used to release the device from the wrist mount.		

Figure 7 Top View - WT5400







Number	ltem	Function				
1	Touchscreen display	Displays all information needed to operate the device.				
2	Ambient light sensor	Determines ambient light for controlling display backlight intensity.				
3	Notification/ Charge LED (two locations)	ndicates charging status while charging with a USB charge cable or cradle and provides notifications from applications.				
4	Microphone	Use for voice communication.				
5	P3 button	Use as the Enter button. If programmed as PTT, initiates Push-To-Talk communication.				
6	P2 button	Increases volume. Programmable.				
7	P1 button	Decreases volume. Programmable.				
8	Speaker	Provides audio output for video and music playback.				
9	Charging contacts (four locations)	Connection points for charging the power source.				
10	Left USB connector with cover	Provides USB host and client communication, audio and device charging via cables and accessories. Cover provides dust-proof protection.				
11	Power button	Turns the display on and off. Press and hold to reset the device and power off.				
12	NFC antenna	Provides communication with other NFC-enabled devices.				





Number	ltem	Function		
13	Battery	Provides power to the device.		
14	Cleat	Provides alignment and secures the device to the wrist and hip mounts.		

Installing the Battery

How to install the battery into the device.

- **1.** Align the battery with the battery well.
 - Figure 10 Standard Battery Installation







2. Insert the battery fully until it snaps into place.





Figure 13 Extended Battery Installation



Replacing the Battery

How to replace the battery in the device.

1. Press the Power button to place the device in suspend mode.

2. Press the battery latches on both sides of the battery inward to release it.

Figure 14 Pressing Standard Battery Latches



Figure 15 Pressing Extended Battery Latches



3. Lift the battery out of the battery well.



Figure 17 Extended Battery Removal



4. Align the replacement battery with the battery well, and then insert the battery until it snaps into place. For more information, go to Installing the Battery on page 10.

Charging the Device

The device charges when placed into a charging cradle You can use it with either the standard or extended battery.

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



2. Ensure the device is seated properly.

The device Charge LED blinks indicating charging.

The cradle Charging LED lights amber while charging, then turns solid green when fully charged.

The standard battery fully charges in approximately 4 hours at room temperature. The extended battery fully charges in approximately 5 hours and 30 minutes at room temperature.

Charging the Spare Battery

You can use a charging cradle to charge the spare battery.

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

2. Gently press down on the battery until it snaps into place.









Charging Indicators

LEDs located beside each battery slot indicate the charge status of the battery.

Table 1 Charging Indicators

State	Indication				
Off	The battery is not charging. The battery 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. For example: Temperature is too low or too high. Charging has gone on too long without completion (typically 8 hours). 				
Solid Red	Unhealthy battery is charging or fully charged.				



NOTE: 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.

Charging Temperature

Charge batteries in temperatures from 0°C to 40°C (32°F to 104°F). The device or cradle always performs battery charging safely and intelligently: At higher temperatures (for example, approximately 37°C (98°F)), the device or cradle may alternately enable and disable battery charging to keep the battery at acceptable temperatures. The device and cradle indicate when charging is disabled due to abnormal temperatures via its LED.

Charging Accessories

Use one of the following accessories to charge the device and/or spare battery.

Description	Part Number	Charging		Communication	
		Battery (In Device)	Spare Battery	USB	Ethernet
1-Slot Charging Cradle	CRD-WT5X6-1S1BC-01	Yes	Yes	No	No
5-Slot Charge Only Cradle	CRD-WT5X6-5S5BC-01	Yes	Yes	No	No
5-Slot Ethernet Cradle	CRD-WT64-5S5BE-01	Yes	Yes	No	Yes
10-Slot Charge Only Cradle	CRD-WT5X6-10SC-01	Yes	No	No	No
4-Slot Battery Charger	SAC-WT5X6-4SC-01	No	Yes	No	No
20-Slot Battery Charger	SAC-WT5X6-20SC-01	No	Yes	No	No

Table O	Charaina	ام مر م	Communication
i able z	Charging	and	Communication

Table 2 Charging and Communication (Continued)

Description	Part Number	Charging		Communication	
		Battery (In Device)	Spare Battery	USB	Ethernet
USB-C to USB-C Communications and Charge Cable (WT5400)	CBL-EC5X-USBC3A-01	Yes	No	Yes	No
USB-A to USB-C Communications and Charge Cable (WT5400)	CBL-TC5X-USBC2A-01	Yes	No	Yes	No
USB Charging Cable (WT6400)	CBL-NGWT-USBCHG-01	Yes	No	Yes	No

1-Slot Charging Cradle

This cradle provides power to the device.



CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

The 1-Slot Charging Cradle:

- Provides 5.4 VDC (nominal) power for operating the device.
- Charges a spare battery.





1	Device charging slot
2	Spare battery charging slot
3	Spare battery LED
4	Power LED

5-Slot Charge Only Cradle

Use the 5-Slot Charge Only Cradle to charge up to five devices and five batteries.



CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

The 5-Slot Charge Only Cradle:

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





1	Device charging slot
2	Spare battery charging slot
3	Spare battery LED
4	Power LED

10-Slot Charge Only Cradle

Use the 10-Slot Charge Only Cradle to charge up to ten devices.



CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

The 10-Slot Charge Only Cradle:

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





1	Device charging slot
2	Power LED

5-Slot Ethernet Cradle

Use the 5-Slot Ethernet Cradle to charge up to five devices and and five batteries.



NOTE: The 5-Slot Ethernet Cradle can only be used with the WT6400 and is not compatible with the WT5400.



CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.

The 5-Slot Ethernet Cradle:

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





1	Device charging slot
2	Spare battery charging slot
3	Spare battery charging LED
4	1000 LED
5	100/100 LED

4-Slot Battery Charger

Use the 4-Slot Battery Charger to charge up to four device batteries.



CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.





1	Spare battery charging slot
2	Battery charging LEDs (4)
3	Power LED

20-Slot Battery Charger

Use the 20-Slot Battery Charger to charge up to 20 spare batteries.



CAUTION: Ensure that you follow the guidelines for battery safety described in the Product Reference Guide.





1	Spare battery charging slot (20)
2	Battery charging LEDs (20)
3	Power LED

USB/Charge Cable

The USB/Charging cables connect to the interface connector on the device. When attached to the device, it provides power for charging and allows the device to transfer data to a host computer.

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





1	Plug adapter
2	USB/Charge cable
3	Interface connector





1	Plug adapter
2	USB-A to USB-C communications and charge cable
3	Interface connector

Ergonomic Considerations

To avoid or minimize risk of ergonomic injury, follow these recommendations:

- Ensure that users are trained in proper mounting of the device.
- Ensure that the device is not worn near the wrist joint.
- Ensure that the device is mounted so that the display is oriented towards the user.
- Ensure proper use and maintenance of the adjustable strap.
- Match strap selection to user forearm Use white coded BOA strap for small to medium forearm size, and use black coded BOA strap for medium to large forearm size.
- Maintain and clean wearable components such as straps and soft goods.
- Reduce or eliminate unnecessary repetitive motion and activation.
- Maintain a neutral posture.
- Reduce or eliminate elevated or raised arm and shoulder postures.
- Reduce or eliminate excessive force.
- Keep objects that are used frequently within easy reach.
- Perform tasks at correct heights.
- Reduce or eliminate direct pressure.
- Provide adequate clearance.
- Provide a suitable working environment.



www.zebra.com