ET6xW

Enterprise Tablet



ZEBRA

Product Reference Guide
for Windows

MN-005019-05EN Rev A

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Contents

About This Guide **9**
Notational Conventions 9
Icon Conventions 9
Service Information 10
Software Release Information 10

Getting Started **11**
Unpacking 11
Features 11
Setting Up the Device 18
Installing the nano SIM Card 18
Replacing the Battery 21
Device Charging 22
Charging Indicators 23
Class 1/Division 2 Compliant Tablet 23
Replacing the SIM Card 24
Turning Off the Display 27
Power Off the Device 27

Using the Device **28**
Windows Desktop 28
Sign-in Options 29
Setting Up a Windows Password 30
Setting Up a Windows PIN 30
Windows Hello Face 31

Fingerprint Reader....31
Zebra Control Hub....33
Battery Management....38
Optimizing Battery Life or Performance....38
Changing the Power Settings....38
Manually Changing the Display Brightness....38
Automatically Changing the Display Brightness....39
Remappable Buttons....39
Mapping Buttons....40
Multi-Touch Gestures....40
Configuring Touch Settings....40
Manually Activate Sleep Mode....41
Connecting External Cables to Expansion Module....41
Enabling Power to the RS-232 Connector....42
Replacing Expansion Module Access Door....44

Data Capture....46
123Scan....46
Imaging....48
Scanning Considerations....48
Scanning with the Internal Scanner....48
Connecting a USB Scanner....50
Pairing a Bluetooth Ring Scanner....51
Pairing a Bluetooth Scanner....51

Wireless....53
Wireless Local Area Networks....53
Connecting to a Wi-Fi Network....54
Viewing Network Information....55
Configuring Proxy Settings....55
Adding a Wi-Fi Network....56
Wireless Wide Area Networks....56
Activating an eSIM....56

Deactivating an eSIM....57
Erasing an eSIM Profile....57
Connecting to a Cellular Data Network....57
Adding an Internet APN....58
Removing a SIM PIN....58
Changing a SIM PIN....59
Unblocking a SIM PIN....59
Bluetooth....59
Adaptive Frequency Hopping....59
Security....60
Bluetooth Profiles....61
Pairing with a Bluetooth Device....61
Unpairing a Bluetooth Device....62
Turning on Airplane Mode....62
Near Field Communications....62
Reading NFC Cards....63

Accessories....64
Device Charging....67
Charging Temperature....67
Charging Indicators....67
Solid-State Drive....68
Removing and Replacing the Solid-State Drive....68
Vehicle Dock....73
Inserting the Tablet into the Vehicle Dock....76
Removing the Tablet from the Vehicle Dock....77
Desk Stand....79
Installing the Vehicle Dock on the Desk Stand....79
Setting Up the Desk Stand....80
USB-C to AC Adapter....81
2-Slot Battery Charger....82
Setup....83
Charging Spare Batteries....84
Spare Battery Charging....86

USB Keyboards ... 86
2-in-1 Keyboard ... 86
Attaching the Keyboard ... 88
Removing the Keyboard ... 89
Smart Card / CAC Reader ... 89
Installing the Smart Card / CAC Reader ... 90
Using the Smart Card / CAC Reader ... 91
Removing the Reader Door ... 93
Replacing the Smart Card / CAC Reader Hand Strap ... 94
RFID Reader ... 98
Installing the RFID Reader ... 99
Using the RFID Reader ... 100
Replacing the RFID Reader Hand Strap ... 102
Soft Handle ... 106
Attaching the Soft Handle ... 106
Attaching the Shoulder Strap to the Soft Handle ... 108
Removing the D-Clips ... 108
Shoulder Strap ... 109
Attaching the Shoulder Strap ... 109
Removing the D-Clips ... 111
Stylus Holder ... 111
Installing the Stylus Holder ... 112

Vehicle Dock Installation ... 113
Mounting Safety ... 113
Electrical Guidelines ... 114
Wiring Guidelines ... 114
Mounting the Vehicle Dock ... 115
Installing the Keyboard Mounting Bracket ... 115
Routing Cables ... 117
Power ... 119
Installing a CLA Cable ... 119
New Wired Installations ... 120
Replacing Legacy Installations ... 127

Installing an External Antenna....130
Installing the Screen Blanking Cable....132
Connecting an RS-232 Scanner....134
Connecting a USB Scanner....136
Installing the Keyboard Mounting Bracket....138
Installing the Keyboard Cable....139
Mounting the Keyboard....141
Installing a Keyboard on a RAM Mount....143
Keyboard Heater....143

Updating the Operating System....144
Initial Windows Setup....144
Creating an Installation 32GB USB Flash Drive....144
Creating an Installation USB Flash Drive Greater than 32GB....145
Reinstalling Windows....147

Maintenance and Troubleshooting....148
Maintaining the Device....148
Battery Safety Guidelines....149
Best Practices for Enterprise Mobile Computing Devices Operating in Hot Environments and Direct Sunlight....149
Connecting a USB-C Cable....150
Disconnecting a USB-C Cable....150
Properly Plugging and Unplugging a USB-C Cable....151
Connecting a USB-C Cable....152
Disconnecting a USB-C Cable....152
Approved Cleaning and Disinfectant Agents....153
Cleaning Instructions....153
Approved Cleanser Active Ingredients....153
Harmful Ingredients....154
Special Cleaning Notes....154
Cleaning Frequency....154
Device Cleaning Instructions....154

Troubleshooting....156
Resetting the Device....156
Troubleshooting the Device....157
Capturing System Information....159
Capturing Data Logger Information....160

Technical Specifications....161
SE55 Decode Distances....161
I/O Connector Pin-Outs....162
Expansion Module RS-232 Connector Pin-out....162
Vehicle Dock Technical Specifications....163

About This Guide

This guide provides information about using the ET60W and ET65W tablets and accessories.

NOTE: Some screens and windows shown in this guide are samples and can differ from actual screens.

Notational Conventions

The following conventions are used in this document.

- Tablet refers to the Zebra ET60W and ET65W tablets.
- **Bold** text is used to highlight the following:
  - Dialog box, window, and screen names
  - Dropdown list and list box names
  - Checkbox and radio button names
  - Icons on a screen
  - Key names on a keypad
  - Button names on a screen
- Bullets (•) indicate:
  - Action items
  - List of alternatives
  - Lists of required steps that are not necessarily sequential
- Sequential lists (for example, those that describe step-by-step procedures) appear as numbered lists.

Icon Conventions

The documentation set is designed to give the reader more visual clues. The following visual indicators are used throughout the documentation set.

NOTE: The text here indicates information that is supplemental for you to know and that is not required to complete a task.

IMPORTANT: The text here indicates information that is important for you to know.

CAUTION: If the precaution is not heeded, you could receive a minor or moderate injury.

WARNING: If danger is not avoided, you CAN be seriously injured or killed.

DANGER: If danger is not avoided, you WILL be seriously injured or killed.

Service Information

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

When contacting support, please have the following information available:

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

Zebra responds to calls by email, telephone, or fax within the time limits set forth in support agreements.

If your problem cannot be solved by Zebra Customer 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 Zebra business product from a Zebra business partner, contact that business partner for support.

Software Release Information

Locate the software release information to determine the software version.

1. In the taskbar, touch .
2. Touch .
3. Select **System** > **About**.
   - **Device Specifications** - Displays the device model number followed by the software release date and serial number.
   - **Windows Specifications** - Displays the OS version.

Getting Started

This section explains how to set up the device for the first time.

Unpacking

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 were received:
   - Tablet
   - Battery (installed)
   - Stylus
   - Regulatory Guide
3. Inspect the equipment for damage. If any equipment is missing or damaged, contact the Global Customer Support center immediately.
4. Prior to using the device for the first time, remove the protective shipping film that covers the scan window and display.

Features

This section lists the features of the ET60W and ET65W tablets.

NOTE: Some features may not be available on all configurations.

Figure 1 Front View

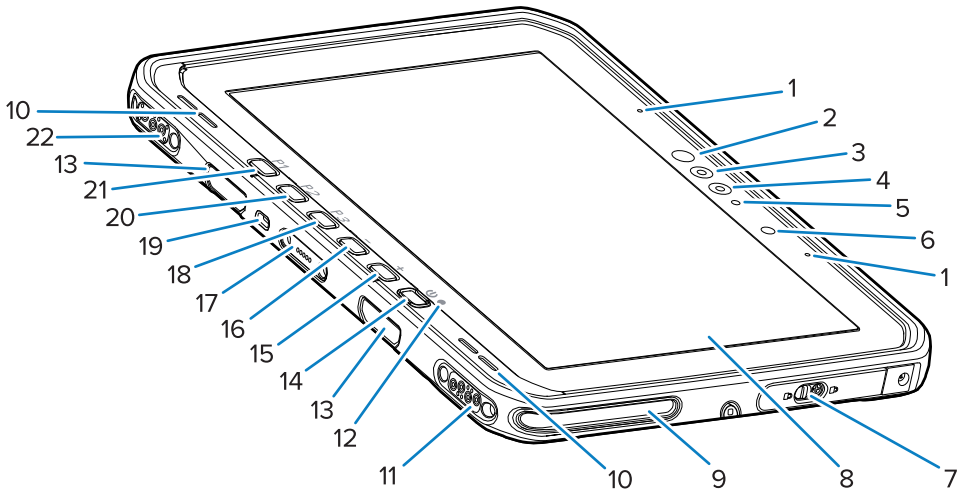


Table 1 Front View

Number	Item	Description
1	Front microphones	Use for voice communications or audio recordings.
2	Windows Hello infrared LED	Illuminates your face with infrared (IR) light during Windows Hello face authentication.
3	Windows Hello infrared camera	Captures your face during Windows Hello face authentication.
4	Front camera	Use for video conferencing.
5	Front camera LED	Illuminates when the front camera is active.
6	Light sensor	Determines ambient light for controlling display backlight intensity.
7	Right access door	Secure door for accessing USB ports.
8	Touch screen	Displays all information needed to operate the device.
9	Dock alignment slot	Assists in aligning the tablet with the dock.
10	Speakers	Provides audio output.
11	Dock USB connector	Provides USB communication through the dock.
12	Charging indicator	Indicates power state and battery charging status while charging and application-generated notifications.
13	Keyboard/shoulder strap mount slots	Provides alignment and mounting of keyboard and shoulder strap clips.
14	Power button	Turns the display on and off. Press and release to turn on the device. Press and hold to restart the device. Provides finger print biometric authentication (optional).
15	+ button	Programmable button (increase volume - default).

Table 1 Front View (Continued)

Number	Item	Description
16	**-** button	Programmable button (decrease volume - default).
17	Keyboard interface connector	Provides power and communication with the keyboard.
18	**P3** button	Programmable button (keyboard shortcut Ctrl+Alt +Del - default).
19	Kensington security slot	Provides mounting a security cable to prevent theft or unauthorized use of the tablet.
20	**P2** button	Programmable button (opens **Copilot** application - default).
21	**P1** button	Programmable button (open **Zebra Control Hub** application - default).
22	Dock power / antenna connector	Provides power and antenna connection through the dock.

Figure 2 Right Side View

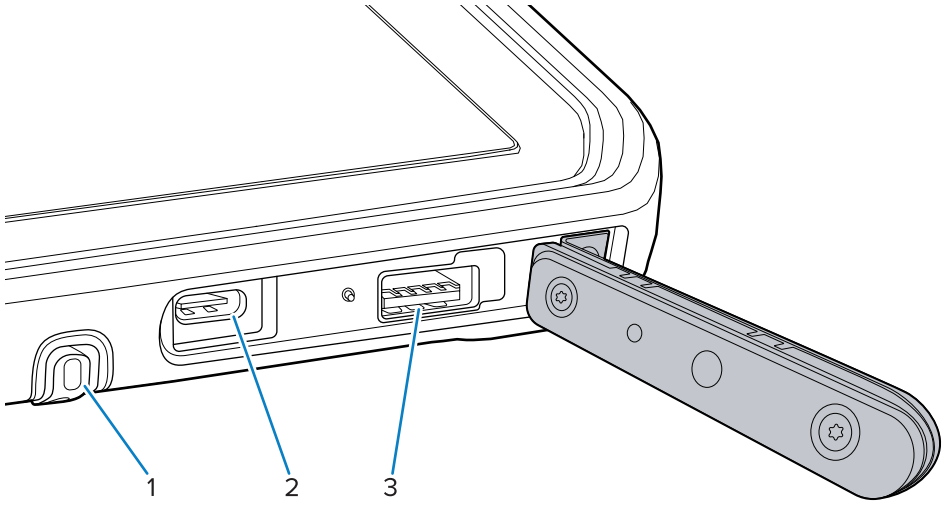


Table 2 Right Side

Number	Item	Description
1	Stylus garage	Provides a place for holding the stylus.
2	USB-C Thunderbolt 4 port	Provides communication with a host computer and accessories and charging.
3	USB-A 3.1 port	Provides communication with accessories such as scanners and wired headsets.

Figure 3 Left Side View

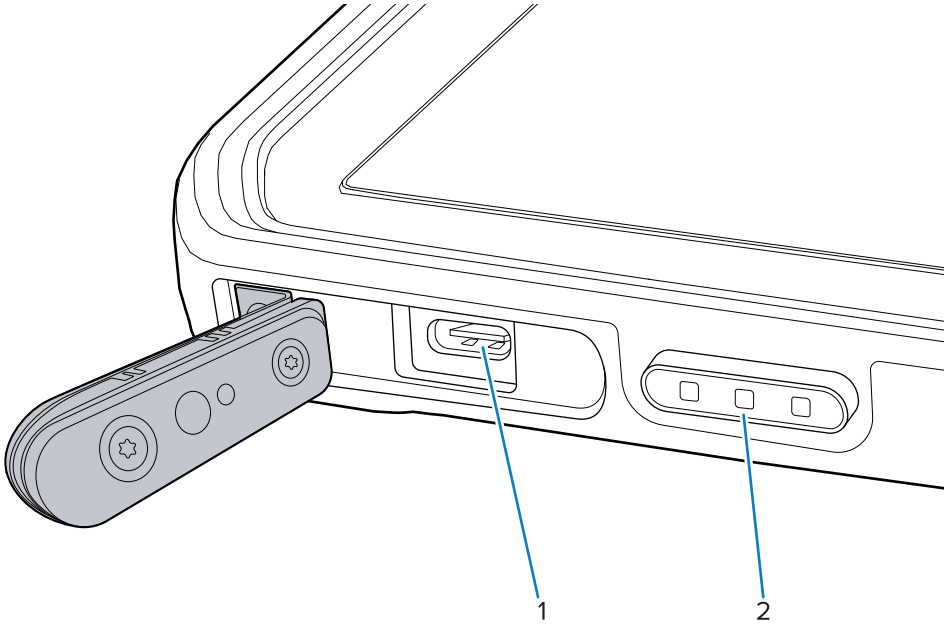


Table 3 Left Side

Number	Item	Description
1	USB-C Thunderbolt 4 port	Provides communication with a host computer and accessories and provides charging.
2	Scan button (on tablets with internal scanner) Programmable button (on tablets without internal scanner)	Initiates barcode data capture when a scan-enabled application is active. Programmable button - (no action - default)

Figure 4 Back View

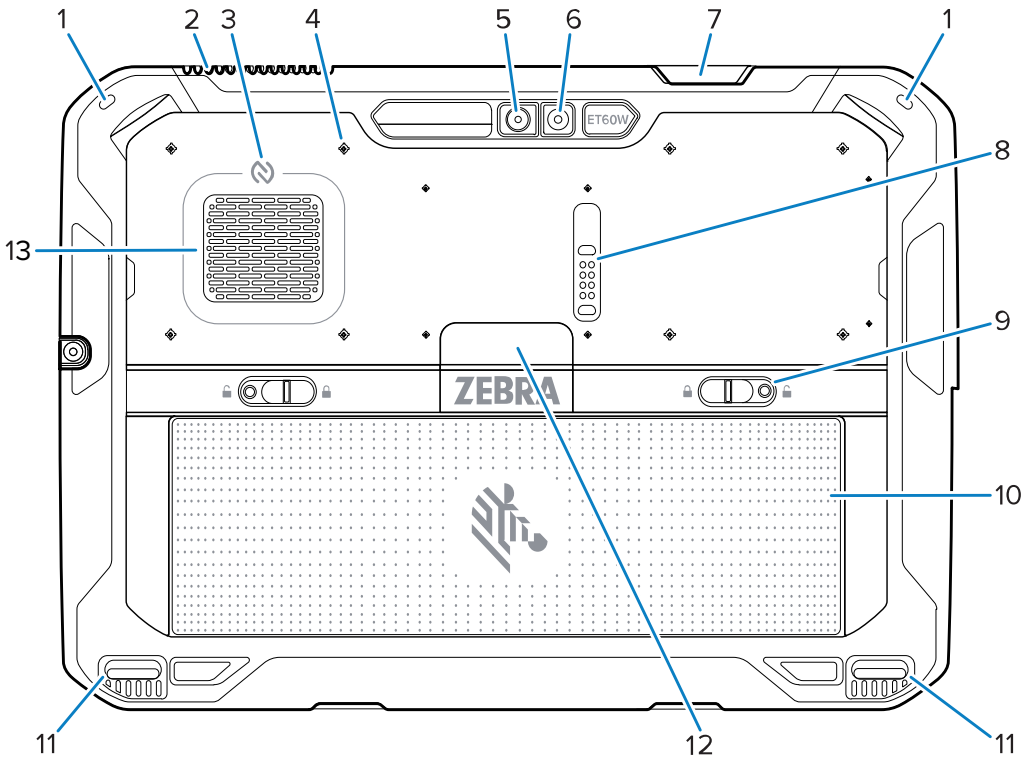


Table 4 Back View

Number	Item	Description
1	Stylus mount	Provides mounting for a stylus tether.
2	Exhaust vent	Provide airflow out of the tablet.
3	NFC antenna	Reads NFC cards.
4	Accessory mount point locations	Indicates mounting location points on polymer film for accessory captive screws. **CAUTION:** Do not remove the polymer film.
5	Rear camera	Autofocus camera that takes photos, and captures barcode data.
6	Rear camera LED flash	Provides illumination for the camera.
7	Scanner exit window	Provides data capture using the internal imager (optional).
8	Communication expansion port	Provides USB communication and power to an accessory.
9	Battery release latches	Releases the battery.

Table 4 Back View (Continued)

Number	Item	Description
10	Battery Blank Battery Pack (optional)	Provides power to the tablet. Provides water and dust sealing when used in fixed mount installation when a battery is not required.
11	Dock alignment slot	Assists in aligning the tablet with the dock.
12	Solid-state drive cover	Provides access to the internal solid-state drive.
13	Intake vent	Provides airflow into the tablet.

Figure 5 Back View with Expansion Module

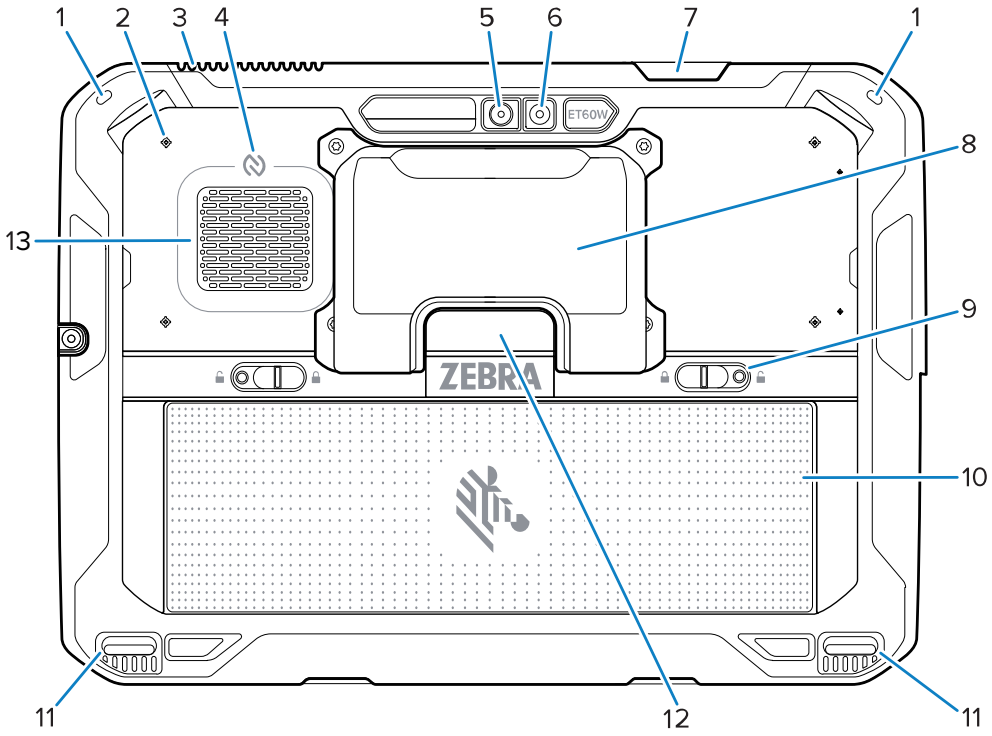


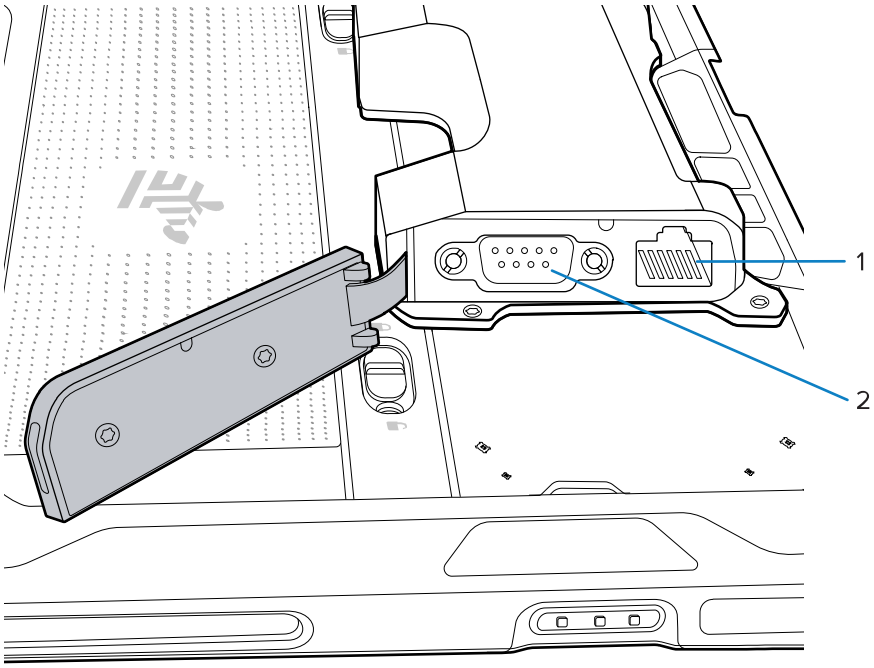
Table 5 Back View with Expansion Module

Number	Item	Description
1	Stylus mount	Provides mounting for a stylus tether.
2	Accessory mount point locations	Indicates mounting location points on polymer film for accessory captive screws. **CAUTION:** Do not remove the polymer film.
3	Exhaust vent	Provide airflow out of the tablet.

Table 5 Back View with Expansion Module (Continued)

Number	Item	Description
4	NFC antenna	Reads NFC cards.
5	Rear camera	Autofocus camera that takes photos, and captures barcode data.
6	Rear camera LED flash	Provides illumination for the camera.
7	Scanner exit window	Provides data capture using the internal imager (optional).
8	Expansion Module	Provides Ethernet and RS-232 Serial communication.
9	Battery release latches	Releases the battery.
10	Battery Blank Battery Pack (optional)	Provides power to the tablet. Provides water and dust sealing when used in fixed mount installation when a battery is not required.
11	Dock alignment slot	Assists in aligning the tablet with the dock.
12	Solid-state drive cover	Provides access to the internal solid-state drive.
13	Intake vent	Provides airflow into the tablet.

Figure 6 Expansion Module Connectors



Number	Item	Description
1	Ethernet port	Provides Ethernet connection to the tablet.

Number	Item	Description
2	RS-232 connector	Provides a serial RS-232 connection to the tablet. To enable the port, see Enabling Power to the RS-232 Connector

Setting Up the Device

To start using the device for the first time:

NOTE: The ET6xW with a battery ships in Ship Mode to prevent discharging during shipment and storage. To remove the tablet from Ship Mode, place the tablet in a powered Vehicle Dock, connect power with a USB cable, or press the Power button.

1. Install a nano SIM card (optional for ET65W only).
2. Install the battery.
3. Charge the device.

Installing the nano SIM Card

The nano SIM card is required for cellular data connectivity.

NOTE:

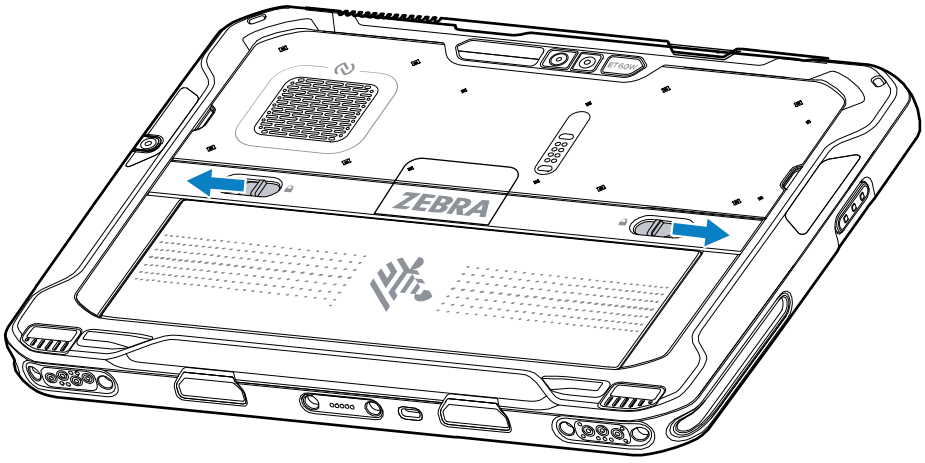
Only use a nano SIM card.

ET65W only.

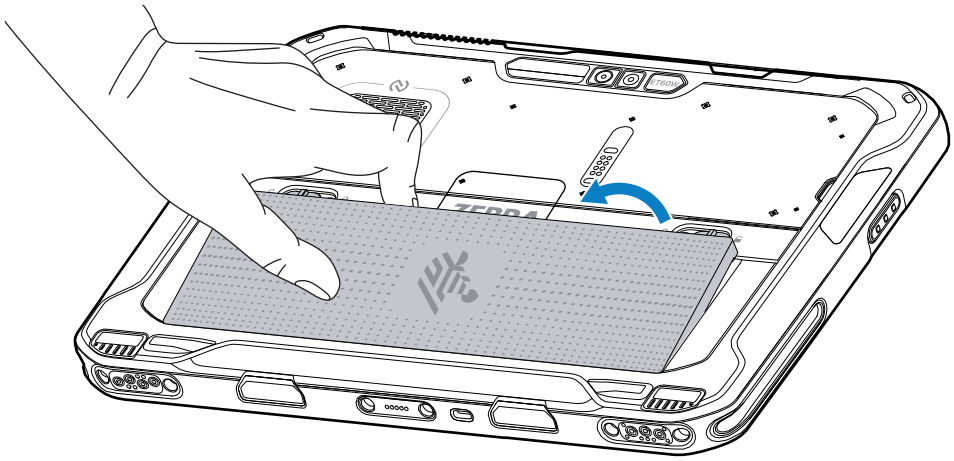
CAUTION: For proper electrostatic discharge (ESD) precautions to avoid damaging the SIM card. Proper ESD precautions include but are not limited to, working on an ESD mat and ensuring that the user is properly grounded.

1. Slide the battery release latches toward the sides of the tablet.

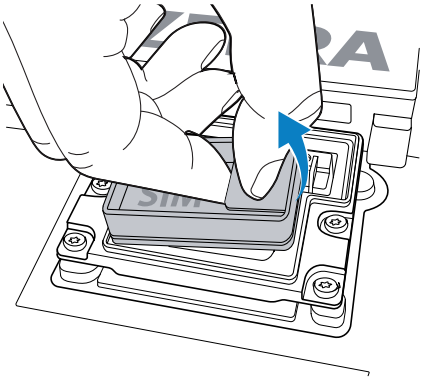
   The battery ejects slightly.



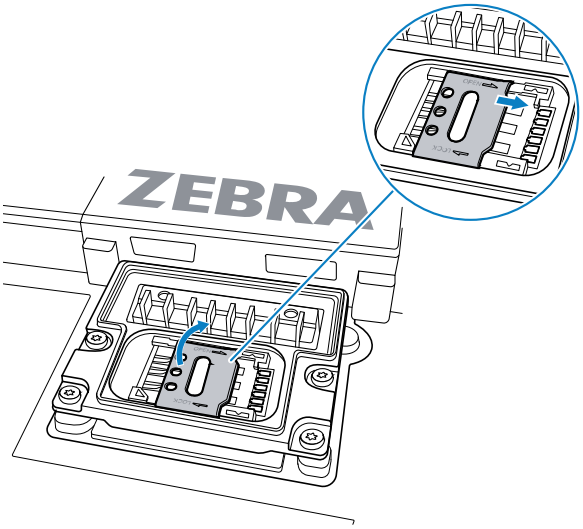
2. Lift the battery out of the tablet.



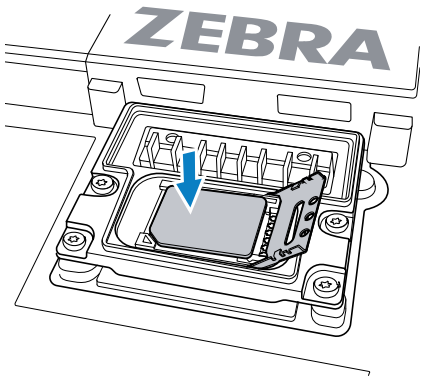
3. Lift the SIM cover.



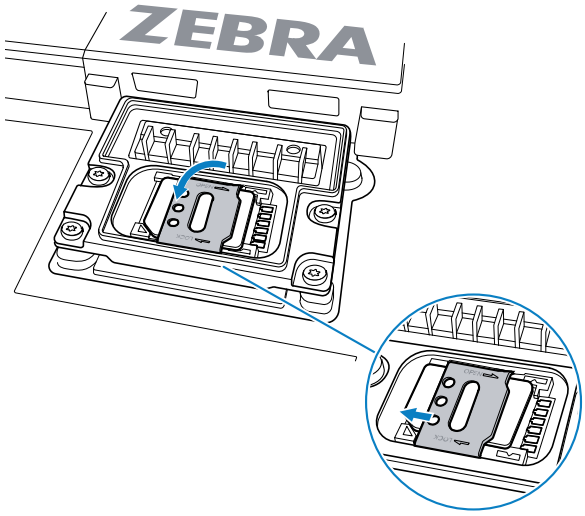
4. Slide the SIM holder to the unlock position.
5. Open the SIM holder.



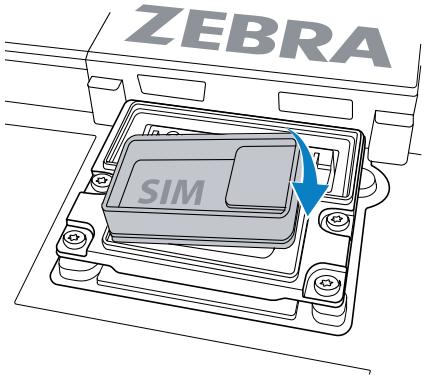
6. Place the SIM card face down.



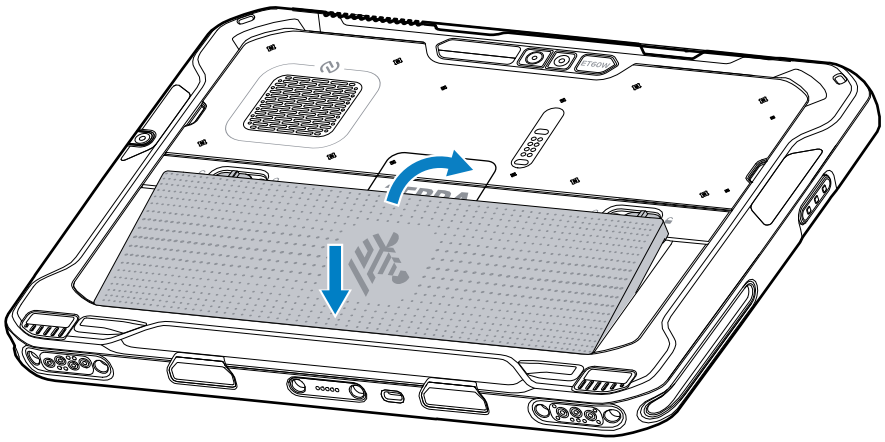
7. Close the SIM door.



8. Slide the SIM holder to the lock position.
9. Replace the SIM cover.



10. Insert the battery, bottom first, into the battery compartment at the back of the device.



11. Press the battery down into the compartment until the release latches snap into place.

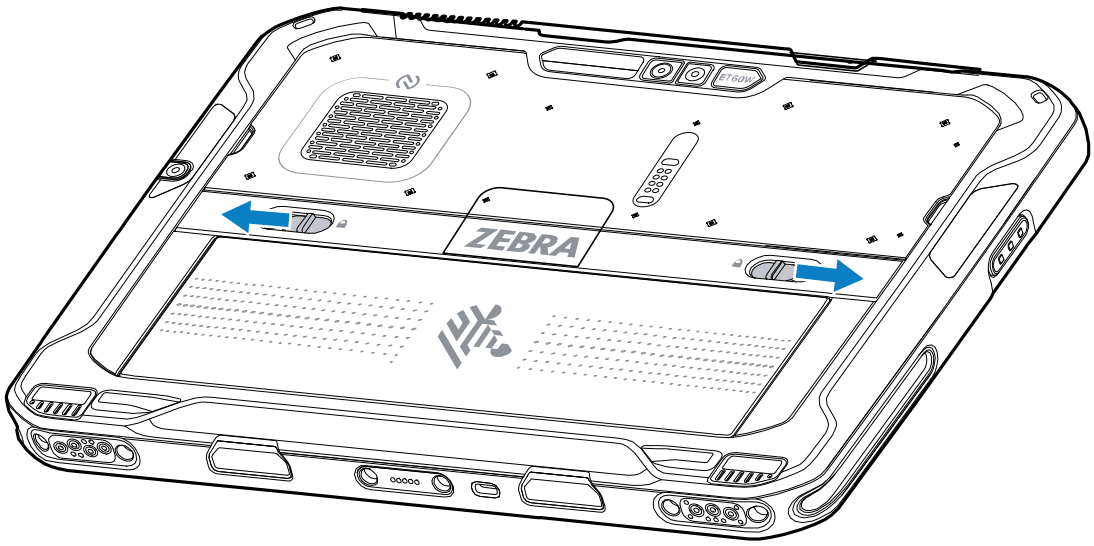
Replacing the Battery

This section describes how to replace the battery in the tablet.

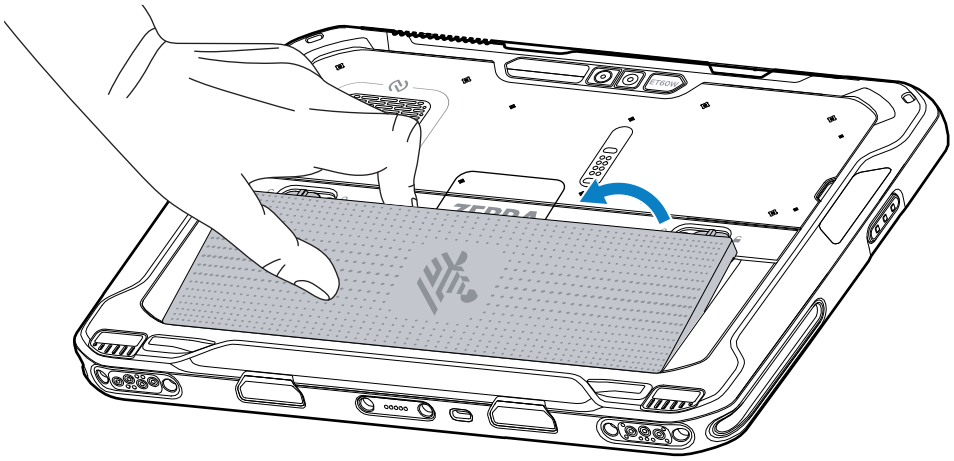
NOTE: User modification of the device, particularly in the battery well, such as labels, asset tags, engravings, stickers, etc., may compromise the intended performance of the device or accessories. Performance levels such as sealing (Ingress Protection (IP)), impact performance (drop and tumble), functionality, temperature resistance, etc. could be affected. DO NOT put any labels, asset tags, engravings, stickers, etc. in the battery well.

1. Slide the battery release latches toward the sides of the tablet.

   The battery ejects slightly.

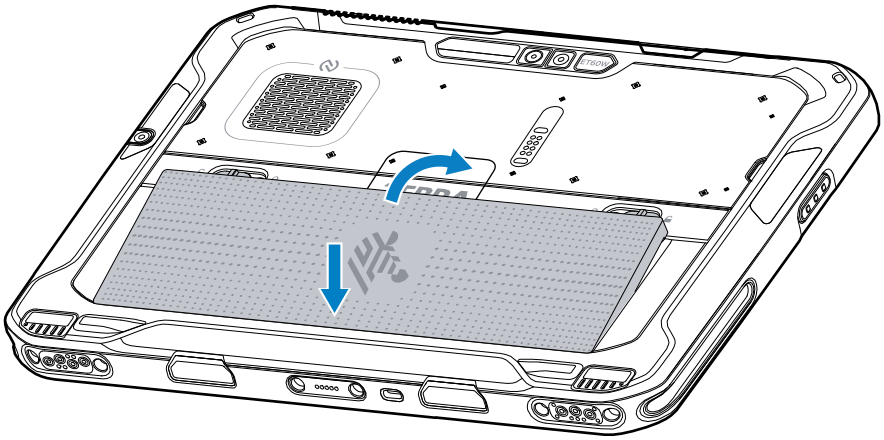


2. Lift the battery out of the tablet.



NOTE: With Hot Swap mode, when the user removes the battery, the display dims. Replace the battery within 60 seconds to preserve memory persistence.

3. Insert the replacement battery, bottom first, into the battery compartment at the back of the device.



4. Press the battery down into the compartment until the release latches snap into place.
5. Press the Power button.

Device Charging

Before using the tablet for the first time, connect it to an external power source to charge the battery.

NOTE: Battery-free tablets do not require charging.

Keep the tablet connected to the external power source until fully charged. The Charging Indicator LED turns green when the tablet is fully charged. You may use the tablet while it is charging.

To charge the main battery, connect the charging accessory to the appropriate power source.

Insert the device into the dock or attach the USB charger. The device turns on and begins charging. The Charging/Notification LED blinks amber while charging, then turns solid green when fully charged.

The standard battery charges from 4% to 80% in approximately 2.5 hours. The extended battery charges from 4% to 80% in 5.5 hours. To achieve optimal charging results, use only Zebra charging accessories and batteries. Charge batteries at room temperature with the device in sleep mode.

Charging Indicators

Charge the battery before using the device.

Table 6 Charging Indicators

LED	Indication
Off	Power is not supplied to the device.
Solid Amber	The device is charging.
Solid Red	The device is charging, but the battery is at the end of its useful life.
Solid Green	The device is fully charged.
Solid Blue	A Battery-free tablet is connected to external power.

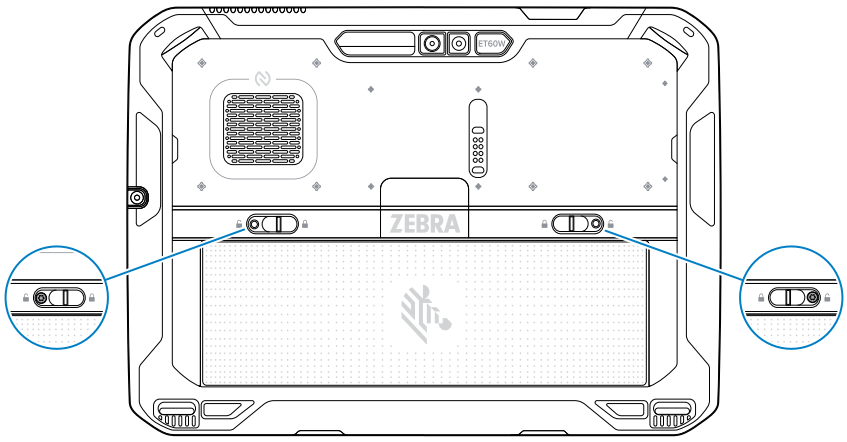
Class 1/Division 2 Compliant Tablet

ET6x devices that support Class 1/Division 2 requirements can be used in hazardous areas as long as the electronic parts are securely covered. A hazardous area is a location that has a higher risk of explosion and/or fire than a normal industrial area. This is due to the properties of the materials handled or stored there.

CAUTION: The ET6x comes with screws to secure the battery access and USB ports. Ensure that you install the screws before entering a hazardous area.

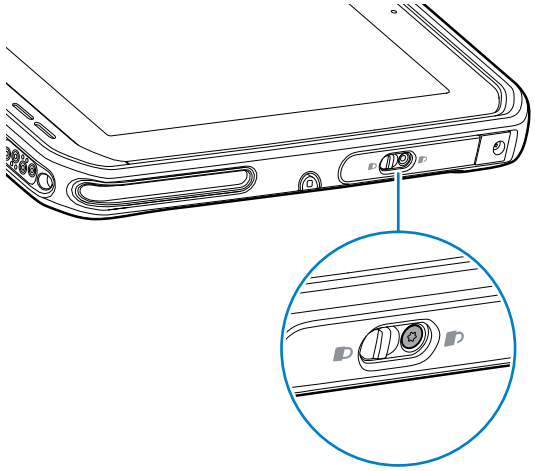
NOTE: Only the ET6x tablet or the ET6x tablet with the attached ET6x Keyboard can be used in hazardous locations.

1. Align two M2x3 Torx head screws with the battery release latches.



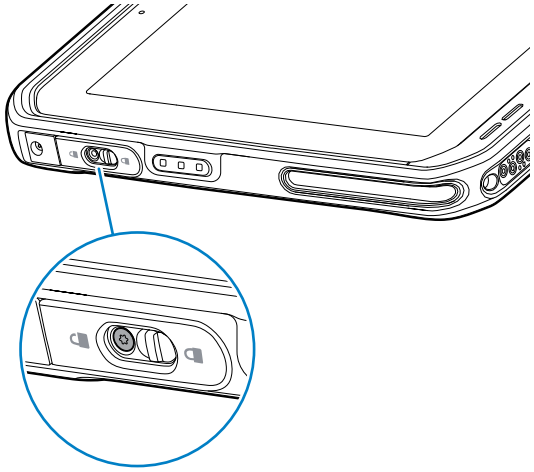
2. Using a Torx screwdriver, secure the screws to the latches, and torque to 2.5 kg-cm (2.2 lbf.in).

3. Align one M1x2 Torx head screw with the access door.



4. Using a Torx screwdriver, secure the screw to the access door, and torque to 2.5 kg-cm (2.2 lbf·in).

NOTE: Ensure to close the access door and move the latch to the locked position.



Replacing the SIM Card

When replacing the SIM card, follow the shutdown instructions to ensure that the data is not corrupted.

NOTE:

Only use a nano SIM card.

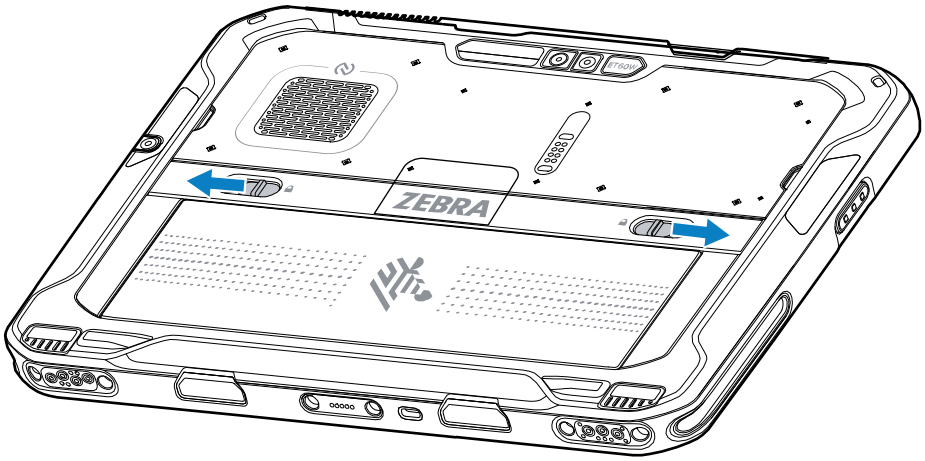
ET65W only.

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

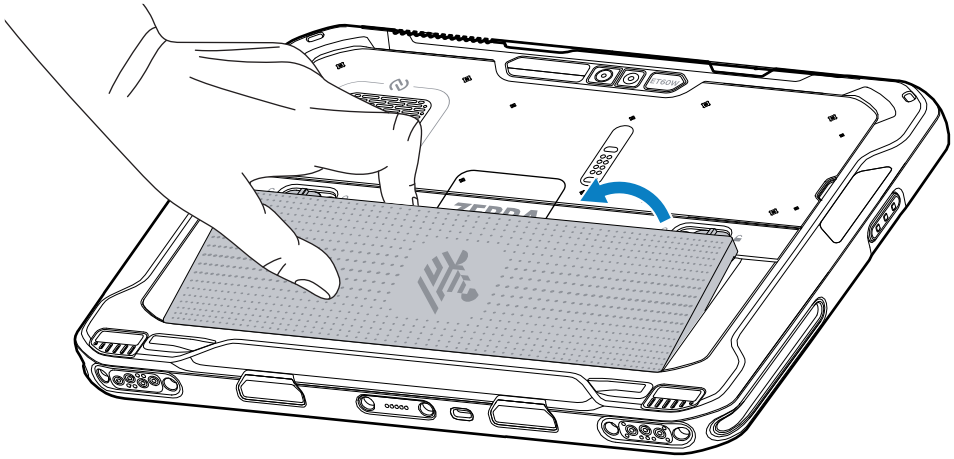
1. Touch .
2. Touch **Power** > **Shut down**.

3. Slide the battery release latches toward the sides of the tablet.

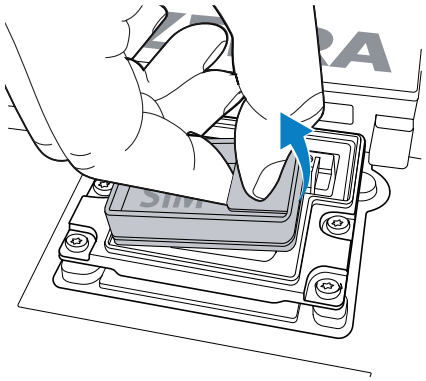
   The battery ejects slightly.



4. Lift the battery out of the tablet.

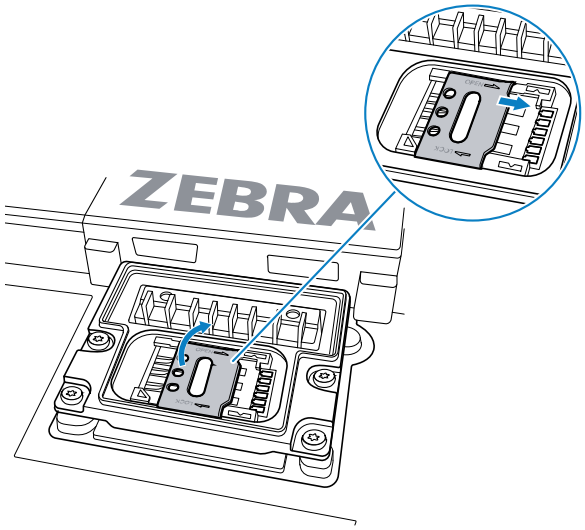


5. Lift the SIM cover.

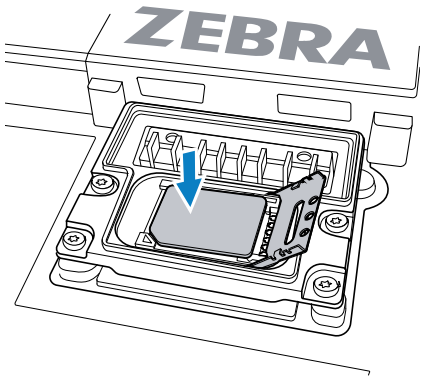


6. Slide the SIM holder to the unlock position.

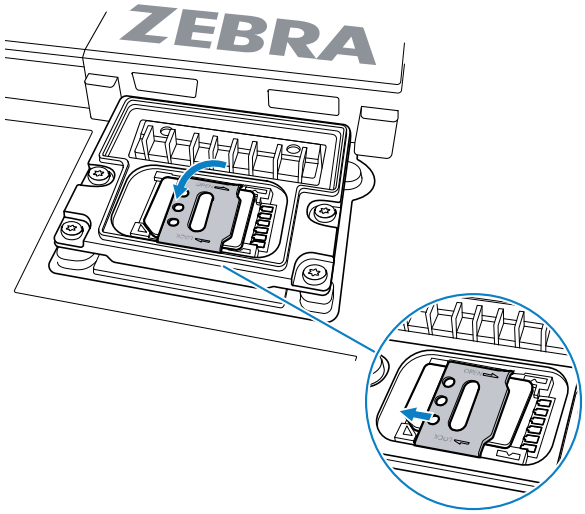
7. Open the SIM holder.



8. Lift the SIM card out of the SIM holder.
9. Place the replacement SIM card face down.

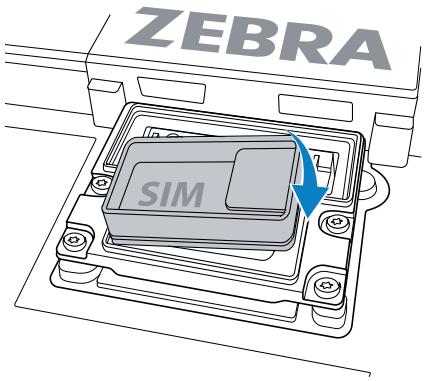


10. Close the SIM door.

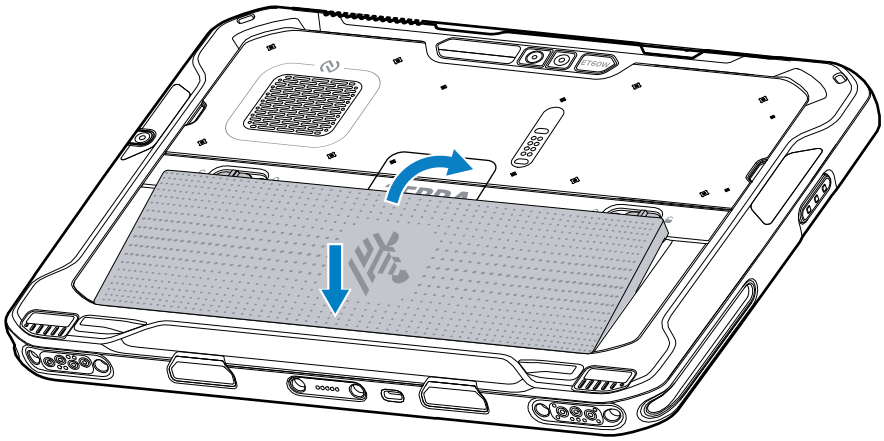


11. Slide the SIM holder to the lock position.

12. Replace the SIM cover.



13. Insert the battery, bottom first, into the battery compartment at the back of the device.



14. Press the battery down into the compartment until the release latches snap into place.
15. Press and hold the Power button to turn on the device.

Turning Off the Display

To turn off the display, press and release the Power button.

Power Off the Device

Turn off the device when not in use for a long period of time.

There are two ways to shut down the device:

- Touch > ⏻ > **Shut down**.
- Press and hold the Power button until the screen shows something and then swipe down.

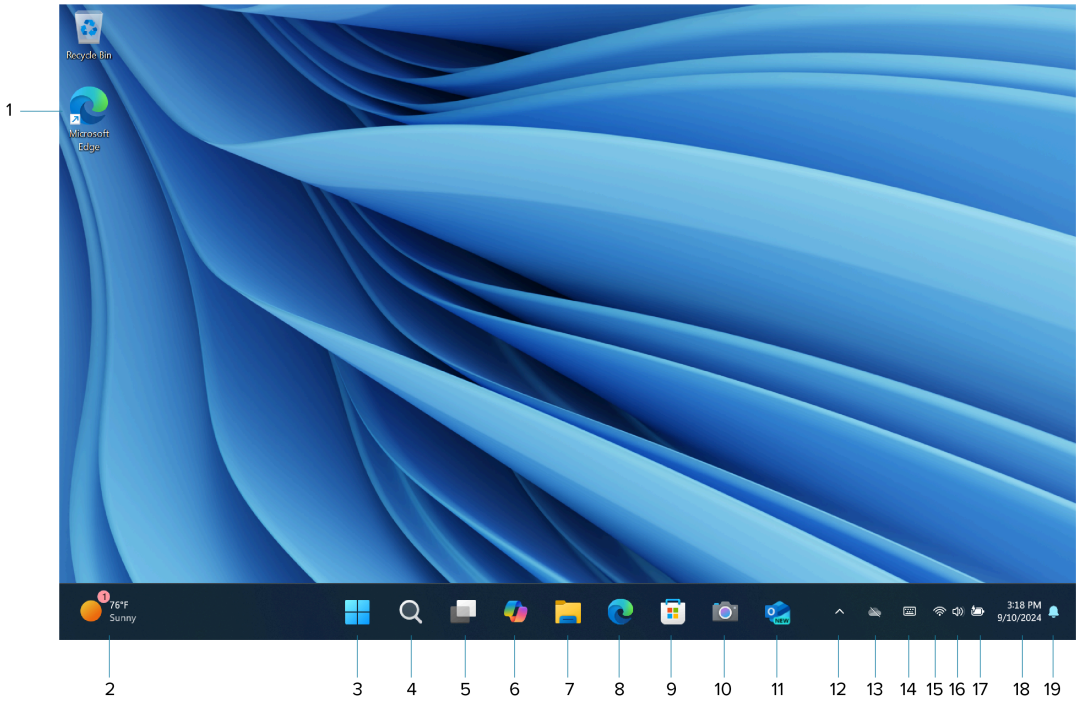
Using the Device

This section explains how to use your device.

Windows Desktop

Turn on the device to display the Windows desktop. Depending on how your system administrator configured your device, your desktop may display differently than the graphics in this section.

Figure 7 Desktop Screen



1	App Shortcut	Opens installed applications.
2	Widgets	Opens the widget container that displays text and graphics associated with an app installed on the device.
3	Start	Access the Start menu.

4	Search	Search apps, settings, and files on your tablet or perform a web search.
5	Task View	Allows you to add virtual desktops. Manage the view of your virtual desktop, move applications to different desktops, show windows on all desktops, or close pages on a selected desktop.
6	Copilot	Opens the Copilot app.
7	Document	Opens the documents folder.
8	Edge	Opens the Edge browser for accessing the internet.
9	Microsoft Store	Opens the Microsoft Store to purchase and install applications.
10	Camera	Opens the camera application.
11	Outlook	Opens the Outlook app.
12	Hidden icons	Displays additional taskbar icons.
13	One Drive	Opens the One Drive app.
14	Keyboard	Opens the virtual keyboard.
15	Wi-Fi	Indicate the signal strength of Wi-Fi or cellular connection.
16	Sound	Indicates if the device's sound is on or off.
17	Battery	Indicates the battery status.
18	Date/Time	Indicates the current date and time.
19	Notifications	Indicates if you have any system notifications.

Sign-in Options

The sign-in options in Windows serve various purposes to enhance your user account security and sign-in convenience.

- Password
- PIN (Windows Hello)
- Facial recognition (Windows Hello)
- Fingerprint reader (Windows Hello)

Setting Up a Windows Password

A Windows password is a login code that allows you to access your device and protect your data, email, and accounts from unauthorized access. It's important to keep your password secure and not share it with anyone.

Microsoft recommends using strong passwords that are at least 12 characters long and include uppercase letters, lowercase letters, numbers, and symbols. Passwords should not be dictionary words, names, or similar to previous passwords.

1. In the taskbar, touch .
2. Touch .
3. Touch **Accounts** > **Sign in options** > **Password**.
4. Touch **Add**.

   The **Create a password** dialog box displays.
5. In the **New password** text box, enter a password.
6. In the **Confirm password** text box, enter the password again.
7. In the **Password hint** text box, enter a hint so that you can remember the password.
8. Touch **Next**.
9. Touch **Finish**.

Setting Up a Windows PIN

A Windows PIN is a secret code that allows a user to sign in to their Windows device instead of a password. It is usually four or more digits long and consists of a set of numbers or a combination of numbers and letters.

NOTE: To use the fingerprint reader, you need to set up a PIN. If you already have a PIN, then you can skip these steps and go to Setting Up the Fingerprint Reader.

1. In the taskbar, touch .
2. Touch .
3. Touch **Accounts** > **Sign in options** > **PIN (Windows Hello)** > **Setup**.
4. Enter your password and then touch **OK**.
5. In the **New PIN** text box, enter a PIN.
6. In the **Confirm PIN** text box, enter the PIN again.
7. Touch **OK**.

You can now set up the fingerprint reader and face authentication.

Windows Hello Face

You can use the front camera to log on to your tablet using Windows Hello Face Authentication instead of entering a password.

Setting Up Windows Hello Face

To use Windows Hello Face, you need to set up a PIN.

For steps on how to set up a PIN, see Setting Up a Windows PIN.

1. In the taskbar, touch .
2. Touch .
3. Touch **Accounts**.
4. In the **Additional settings** section, touch **sign in with an external camera or fingerprint reader** switch to the **On** position.
5. Touch **Restart Now**.

   The device restarts.
6. In the taskbar, touch .
7. Touch .
8. Touch **Accounts**.
9. Touch **Sign-in options**.
10. Touch **Facial recognition (Windows Hello)**.
11. Touch **Set up**.
12. Enter your PIN.
13. Hold your face steady until the image is captured.

Logging In with Windows Hello Face

When you start the device or wake it up from sleep mode, make sure your face is in view of the front camera.

If your face is not recognized, the Sign-in screen displays. Log in with your PIN or touch **Sign-in options** for more options.

Fingerprint Reader

You can use the fingerprint reader built into the Power button to log on to the device by reading your fingerprint instead of entering a password, which provides an additional level of security.

NOTE: The fingerprint reader is available only in some configurations.

Setting Up the Fingerprint Reader

After you have a PIN, the Windows Hello section of the Sign-in Options is enabled, and you can set up your fingerprint.

NOTE: These instructions assume that you have a password for logging into the device.

NOTE: You can register more than one finger to use with this reader. Keep in mind which fingers you have established with the reader, and use only those fingers.

Fingerprint reader tips:

- Be consistent. Press the finger to the scanner, hold it there for a moment, and scan at the same angle each time. For example, if you register your finger with your hand open, hold your hand the same way each time you scan.
- Read the prompts carefully and ensure that you wait for the prompt before you swipe.
- When scanning, press hard enough to fully contact the sensor.
- Wipe dirt or debris off your finger before scanning it so nothing interferes with the scan. Rub your fingers together to stimulate the natural skin oils, making your fingerprint easier to detect.
- If you are having trouble registering a specific finger, try to register a different finger.
- If you are repeatedly having trouble getting a good scan, you might need to clean the sensor. See Cleaning the Fingerprint Reader.

1. In the taskbar, touch .
2. Touch .
3. Touch **Accounts**.
4. In the **Additional settings** section, touch **sign in with an external camera or fingerprint reader** switch to the **On** position.
5. Touch **Restart Now**.

   The device restarts.
6. In the taskbar, touch .
7. Touch .
8. Touch **Accounts**.
9. Touch **Sign-in options**.
10. Touch **Fingerprint recognition (Windows Hello)** > **Set up**.

    The **Windows Hello setup** displays.
11. Touch **Get started**.
12. Enter your PIN.
13. Decide which finger to use.
14. Follow the instructions as you are registering your fingerprint.

    The setup asks you to place your finger on the fingerprint reader (power button) a few times for it to map your finger. It prompts you to touch the sensor multiple times and from different angles.

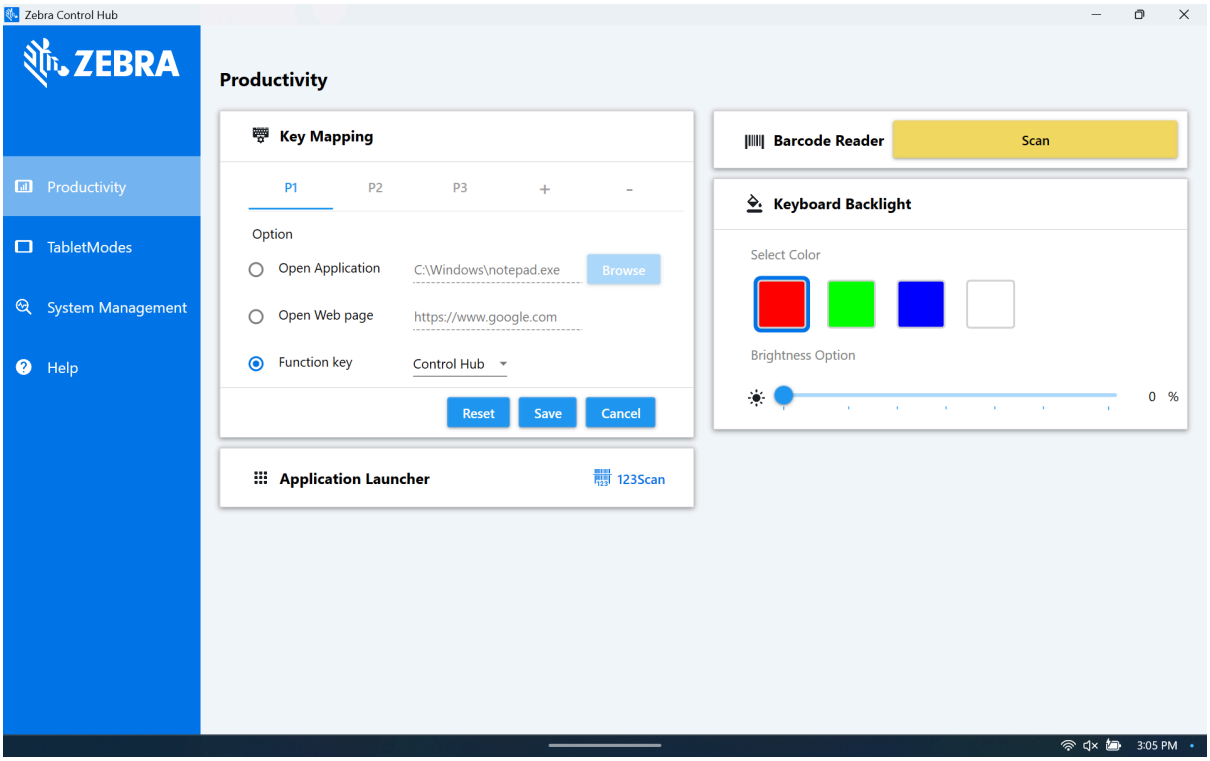
15. When successful, touch **Close**.

    Next time you log in, you can use your PIN or you can touch your finger on the fingerprint reader.

Zebra Control Hub

You can access information about your tablet by opening the **Zebra Control Hub** app from the Taskbar.

Figure 8 Zebra Control Hub

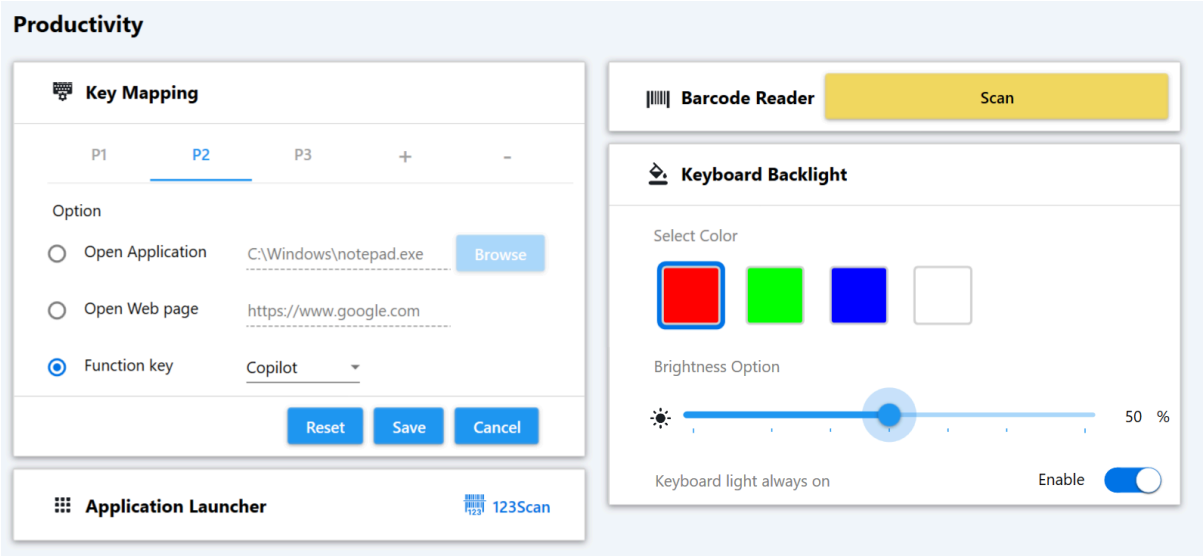


The **Zebra Control Hub** contains four tabs.

- **Productivity**
- **Tablet Modes**
- **System Management**
- **Help**

Productivity Tab

Figure 9 Productivity Tab

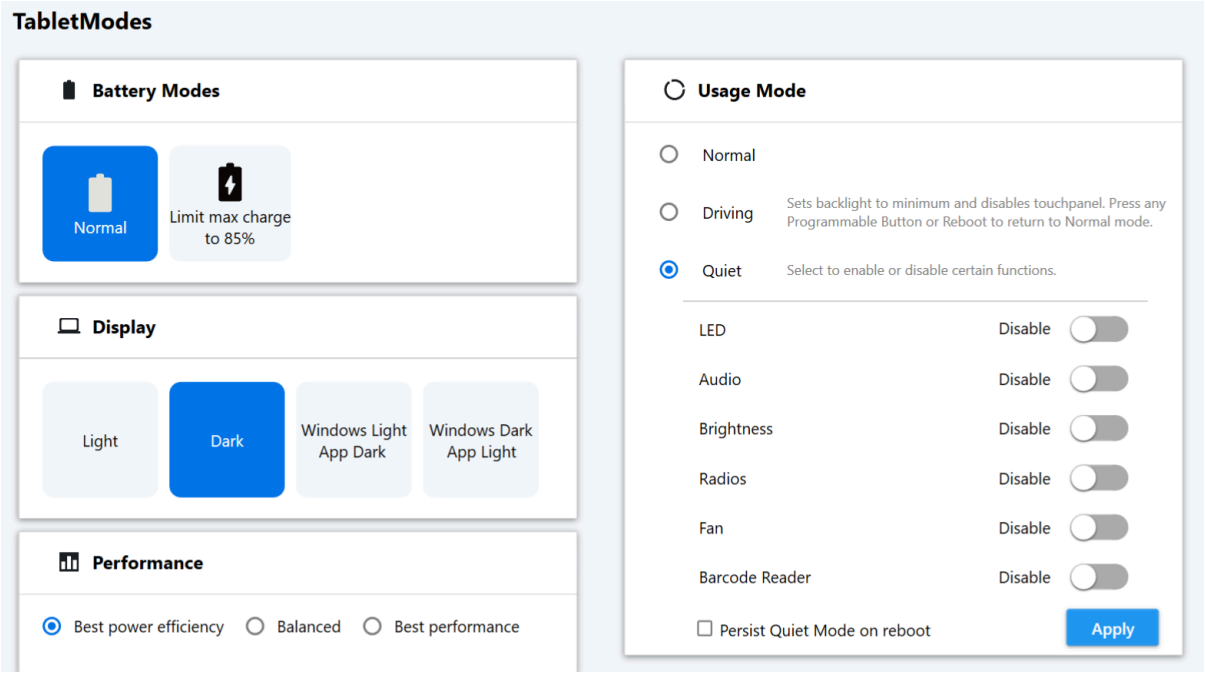


The **Productivity** tab contains four modules.

- **Key Mapping** - map the buttons to an application, web page, or function. See Remappable Buttons.
- **Application Launcher** - opens the Zebra 123Scan app if it is installed. If it is not installed, open the 123Scan Utility for Windows Support page to download the app.
- **Barcode Reader** - initiates a barcode scanning demonstration using the internal imager. The barcode data is not captured. This module is only available on devices with an internal scanner.
- **Keyboard Backlight** - changes the color, brightness, and always-on feature of the keyboard backlight when the tablet is installed on the optional 2-in-1 keyboard. This module only displays when the tablet is installed on the Keyboard. See 2-in-1 Keyboard for more information.

Tablet Modes

Figure 10 Tablet Modes Tab

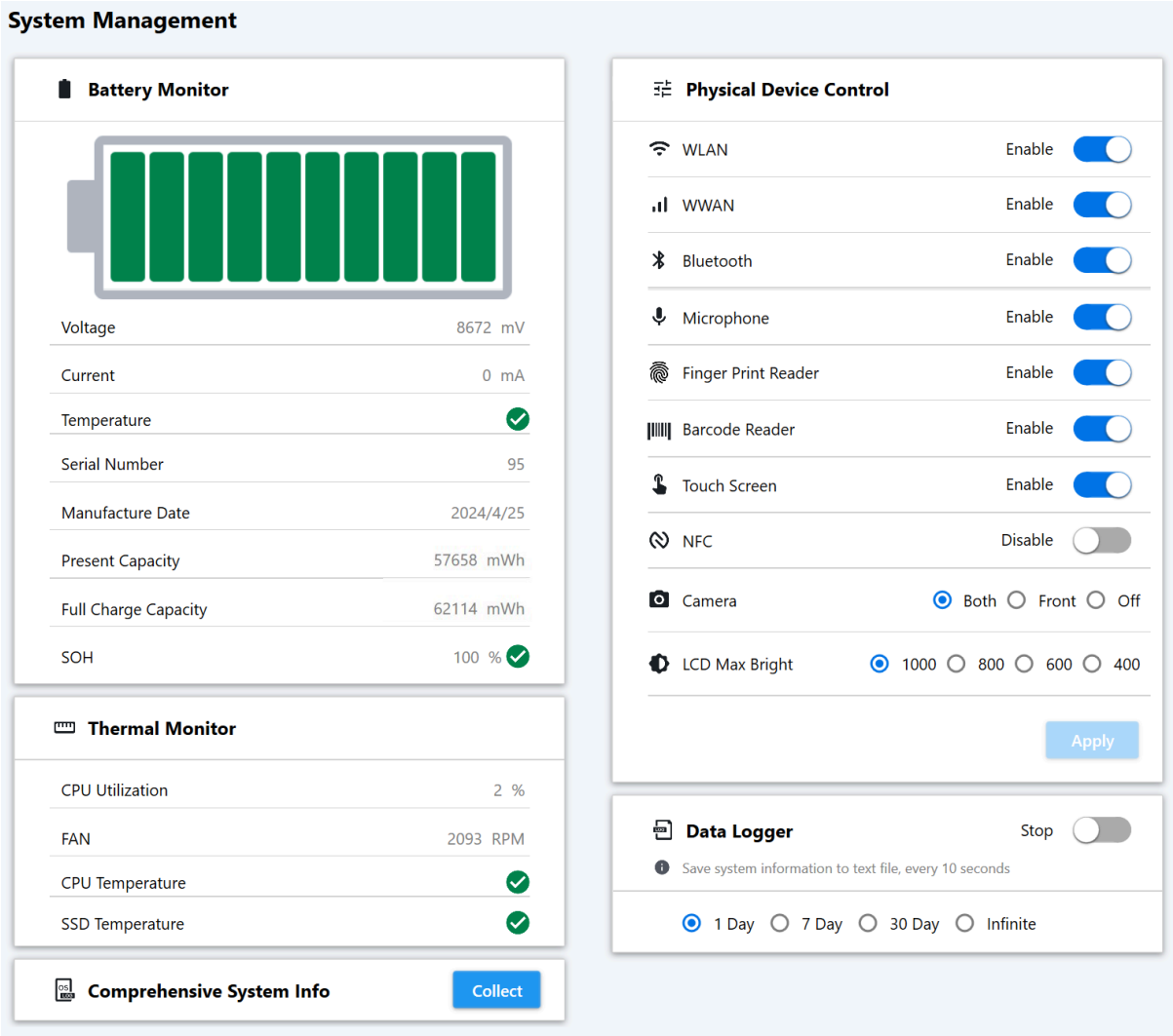


The **Tablet Modes** tab contains four modules:

- **Battery Modes** -
  - **Normal** - allows the battery to charge up to 100%.
  - **Limit max charge to 85%** - limits the battery to charge up to 85%. This reduces charge life but extends the life of the battery. Use this setting when the tablet is always on AC power.
- **Display** - provides options for changing the display theme.
- **Performance** - provides power options for the device:
  - **Best power efficiency** - decreases battery power consumption with less performance
  - **Balanced** - automatically balances performance and energy conservation.
  - **Best performance** - increases performance with higher battery usage
- **Usage Mode** - controls device usage based on user profiles.
  - **Normal** - the device operates in standard settings.
  - **Driving** - sets the display to turn off and disables the touch screen. Touching any P button, shutting down the device, or rebooting the device to return to Normal mode.
  - **Quiet** - allows the user to enable or disable certain functions. Check the **Persist Quiet mode on reboot** checkbox to allow the settings to remain after rebooting the device.

System Management

Figure 11 System Management Tab



The **System Management** tab contains five modules:

- **Battery Monitor** - provides information about the installed battery and displays a graphical representation of the battery charge level.

	The battery charge level is between 31% and 100%
	The battery charge level is between 11% and 30%
	The battery charge level is less than 10%

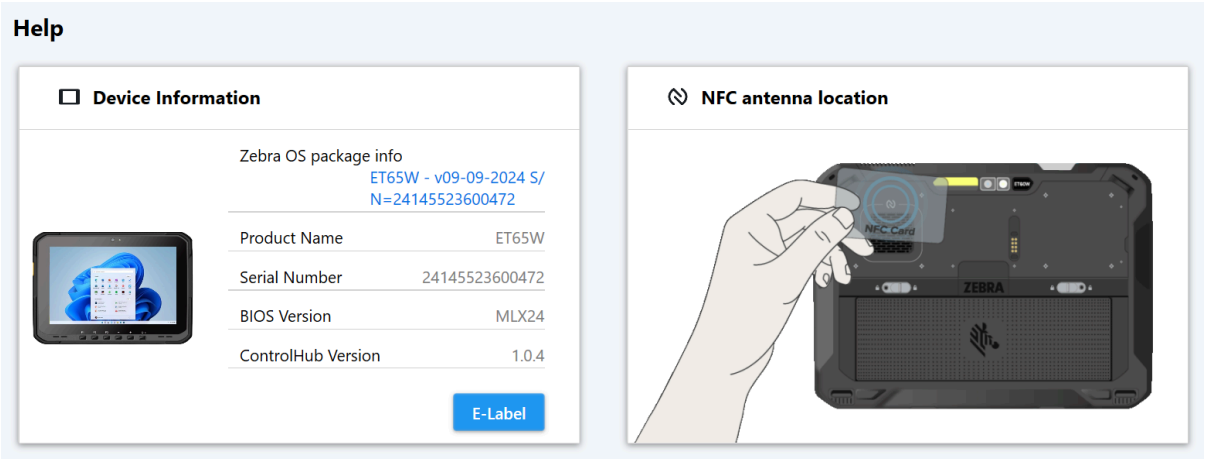
	The battery charge level is at 0%, or there is no battery installed.

- **Voltage** - indicates the voltage of the battery.
- **Current** - indicates the current of the battery.
- **Temperature** - indicate the temperature of the battery. Green icon (normal), yellow icon (warning), and red icon (critical).
- **Serial Number** - indicates the serial number of the battery.
- **Manufacture Date** - indicates the manufacturer's date for the battery.
- **Present Capacity** - indicates the current charge level in milliwatt hours.
- **Full Charge Capacity** - indicates the battery capacity in milliwatt hours.
- **SOH** - indicates the battery's state of health (SOH). Green icon (normal), yellow icon (warning), and red icon (critical).

- **Thermal Monitor** - provides temperature information on the CPU and SSD.
  - **CPU Utilization** - indicates how much work the CPU is handling. It varies based on the type and amount of tasks being processed.
  - **FAN** - indicates the fan speed in rotations per minute (RPM).
  - **CPU Temperature** - indicates the CPU temperature. Green icon (normal), yellow icon (warning), and red icon (critical).
  - **SDD Temperature** - indicates the solid-state drive (SSD) temperature. Green icon (normal), yellow icon (warning), and red icon (critical).
- **Comprehensive System Info** - allows the user to collect system information for troubleshooting. See Capturing System Information.
- **Physical Device Control** - allows the user to enable or disable features of the device.
- **Data Logger** - records battery and thermal information. See Capturing Data Logger Information.

Help

Figure 12 Help Tab



The **Help** tab contains two modules:

- **Device Information** - displays information about the Zebra operating system, product name, serial number, bios version, and Control Hub app version. The **E-Label** button opens a window that lists the Regulatory approval for the tablet.
- **NFC antenna location** - provides an animation showing how to read an NFC card.

Battery Management

Follow these tips to optimize battery life.

- Set the device to turn off after a short period of non-use.
- Set the display to turn off or dim the backlight.
- Turn off all wireless radio activity when not in use.

Optimizing Battery Life or Performance

Optimize battery life when running the device on battery power or performance when the device is connected to a power source.

1. In the taskbar, open the **Zebra Control Hub** app.
2. Touch the **Tablet Modes** tab.
3. In the **Performance** tab, select one of the performance options.

Changing the Power Settings

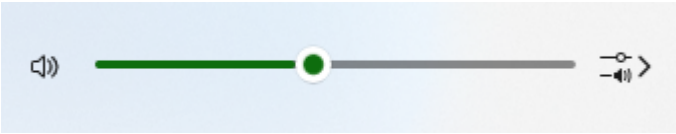
Set the device or display to turn off after a short period of non-use.

1. In the taskbar, touch .
2. Touch .
3. In **Recommended settings**, touch **Power & battery**.
4. Touch **Screen, sleep, & hibernate timeouts**.
5. Choose when you want the device/screen to go to sleep (on battery power and when plugged in).

Manually Changing the Display Brightness

Disable the automatic display brightness and manually change the brightness.

1. In the taskbar, touch .
2. Move the slider to adjust the brightness.



Automatically Changing the Display Brightness

You can set the device to change the display brightness depending on the current environment automatically.

1. In the taskbar, touch .
2. Touch .
3. Touch **System** > **Display** > **Brightness**.
4. Turn on the **Change brightness automatically when lighting changes** switch.

Remappable Buttons

Remap device buttons to perform various functions.

Figure 13 Remappable Buttons

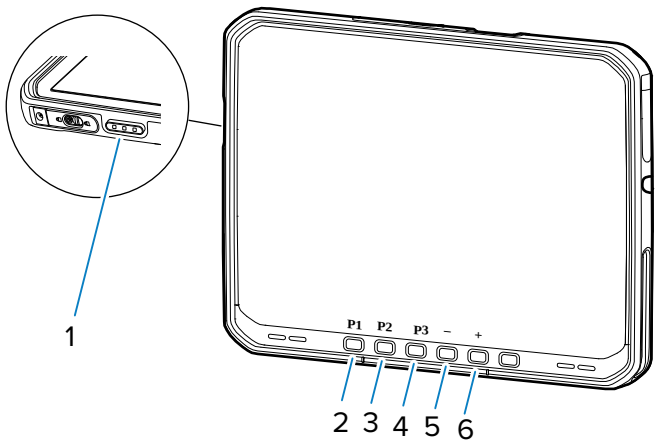


Table 7 Default Button Settings

Item	Button	Default Action
1	Scan key (devices without a scanner)	No action
2	**P1**	Opens the Zebra Control Hub app.
3	**P2**	Opens Microsoft Copilot application.
4	**P3**	Launches Task Manager.
5	-	Decrease volume.
6	+	Increases volume.

Mapping Buttons

Buttons on the device can be programmed to perform different functions or as shortcuts to installed apps or web pages.

1. Open the **Zebra Control Hub**.
2. Touch **Productivity**.
3. In the **Key Mapping** tile, select a button.
   - **P1**
   - **P2**
   - **P3**
   - + (volume up)
   - - (volume down)
   - **Scan key** (only on devices without an internal imager).
4. Select one of the options:
   - **Open Application** - Opens a Windows application. Touch **Browse** to search for the application on the device.
   - **Open Web page** - Opens a web page. Enter the URL for the web page.
   - **Function key** - Performs a specific function. Select the function from the drop-down list.
5. Touch **Save**.

Multi-Touch Gestures

Depending on the application, some gestures might not be available.

- Touch: Open an application or perform an action on an open application, such as copying, saving, or deleting, depending on the application.
- Touch and hold: Open a menu.
- Slide: Scroll through items, such as lists, pages, and photos.
- Drag: Move an object.
- Move two fingers closer together: Zoom out.
- Move two fingers farther apart: Zoom in.
- Put two or more fingers on an item and rotate them clockwise or counterclockwise.
- Swipe in from the right edge: Display the Action Center.
- Swipe in from the left edge: Displays open applications.
- Swipe in from the top edge to the bottom on an open application. Close the current application.

Configuring Touch Settings

1. Touch the Search icon.
2. In the search box, enter `Control Panel`.

3. Touch **Control Panel**.
4. Touch **Hardware and Sound** > **Pen and Touch**.
5. Select**Touch action**and then **Settings**.
6. After making changes, touch **Apply**.

Manually Activate Sleep Mode

Manually activate sleep mode to conserve battery power when not using the tablet.

NOTE: It is recommended to first save your files before performing these steps.

1. Touch > .
2. Touch **Sleep**.

   The screen goes dark, and the computer enters sleep mode.

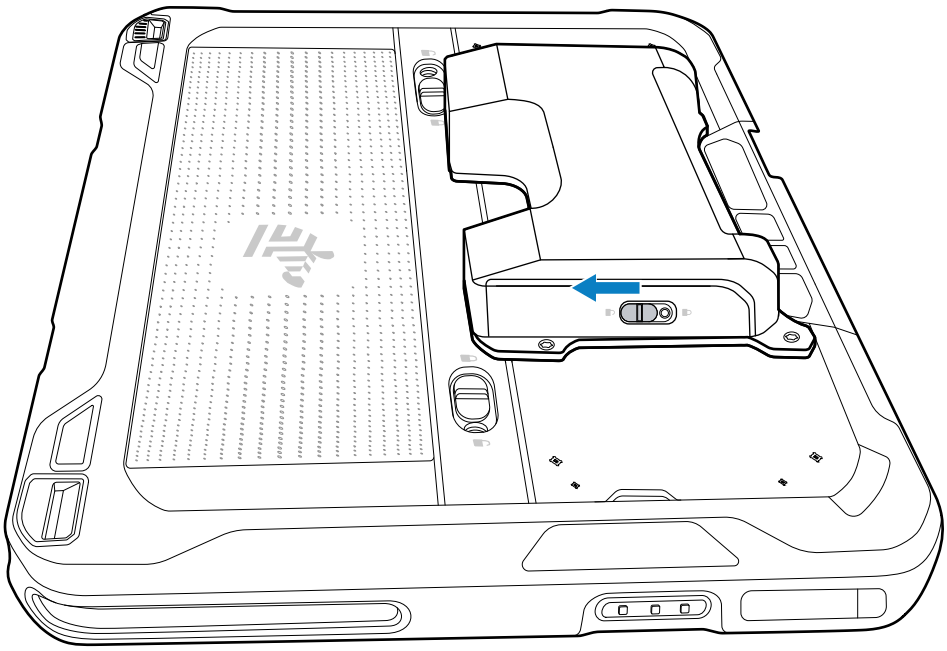
You can wake up the tablet by pressing the Power button.

Connecting External Cables to Expansion Module

The expansion module provides serial RS-232 and Ethernet connections.

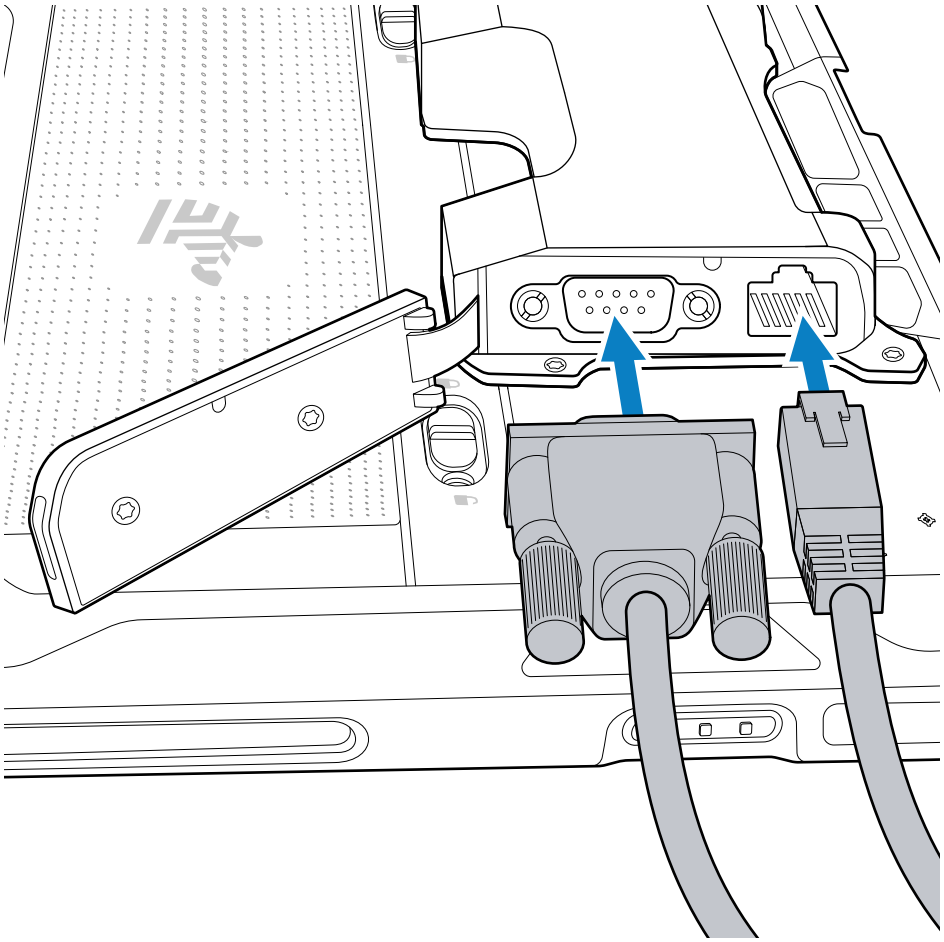
NOTE: Ensure that power to the RS-232 connector has been enabled in the BIOS. SeeEnabling Power to the RS-232 Connector.

1. Slide the access door switch to the down position.



2. Open the access door.

3. Insert the cable connector into the connector port. For RS-232 connector, tighten the thumb screws.



Enabling Power to the RS-232 Connector

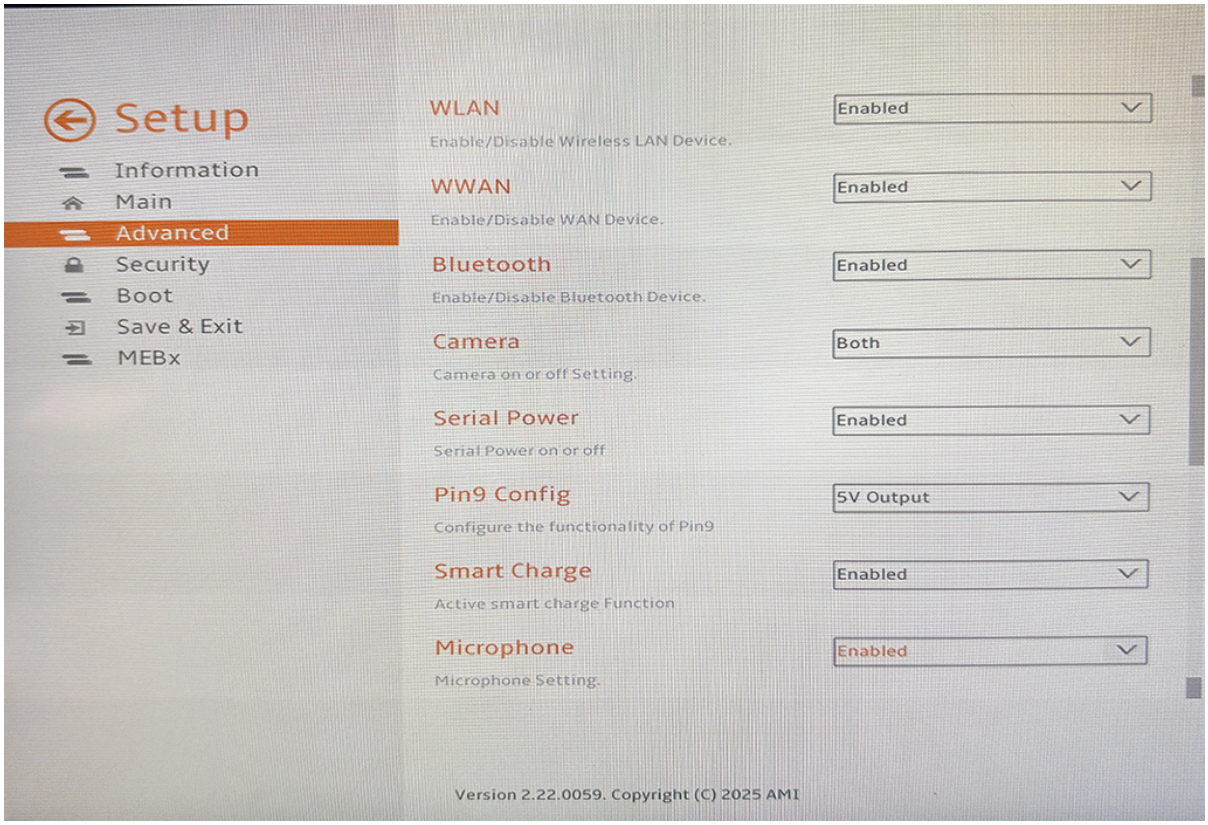
Before using the Expansion Module RS-232 connector, you must enable power to the port.

NOTE: You can access the BIOS settings in two ways. Connect a physical keyboard to the device or tap the screen when the Zebra logo displays.

1. Connect the ET6x keyboard or any standard USB keyboard to the device (optional).
2. Reboot the device.

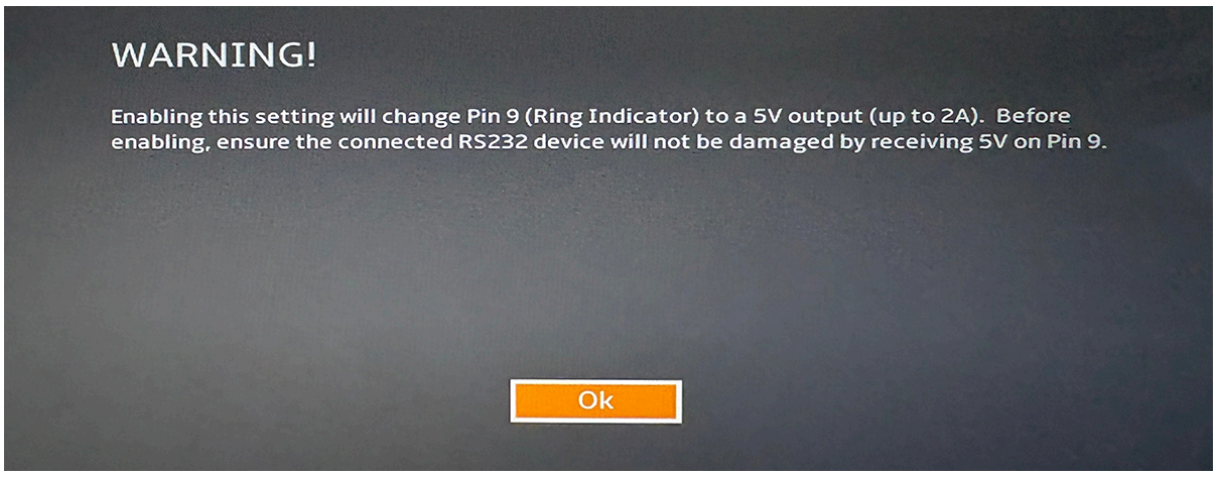
3. When the Zebra logo displays, tap the Zebra logo on the screen or repeatedly press the **F2** (on a standard keyboard) or **FN** + **F2** on the ET6x keyboard until a chime sounds.

   The BIOS screen displays.



4. Select **Advanced**.
5. In the **Serial Power** drop-down, select **Enable**.
6. In the **Pin9 Config** drop-down, select **5V Output**.

   A warning message displays.



7. Press Enter.

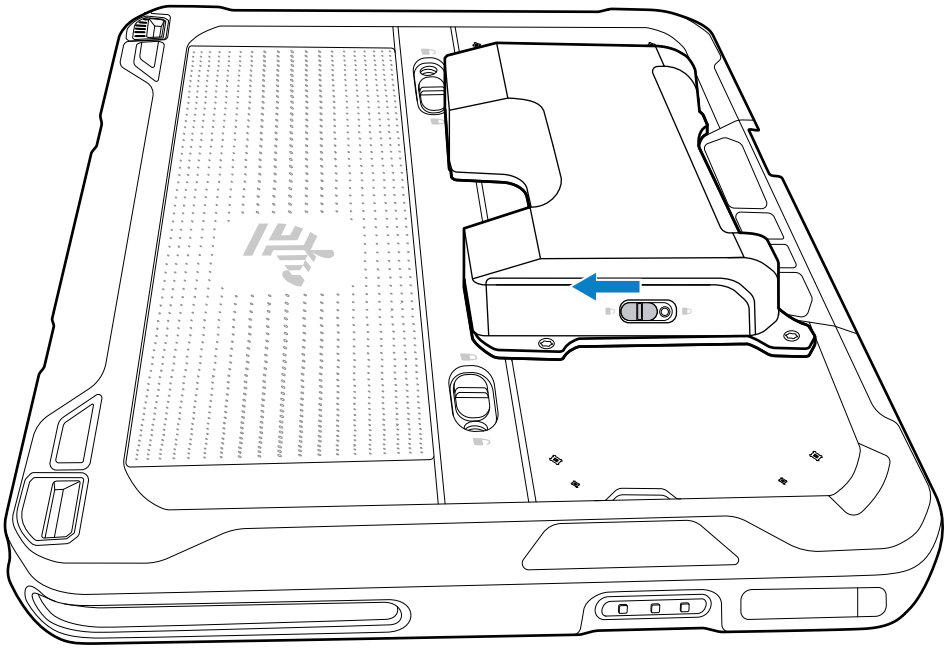
8. Select **Save & Exit**.
9. Select **OK** to save the changes and exit the BIOS setup.

   The device reboots.

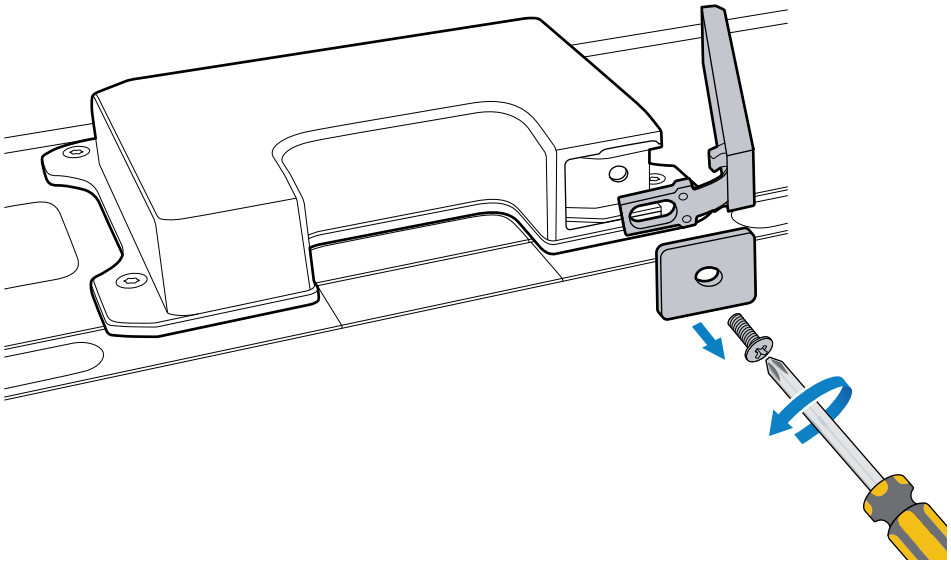
Replacing Expansion Module Access Door

When connecting an Ethernet cable or an RS-232 cable to the expansion module, you can remove the access door.

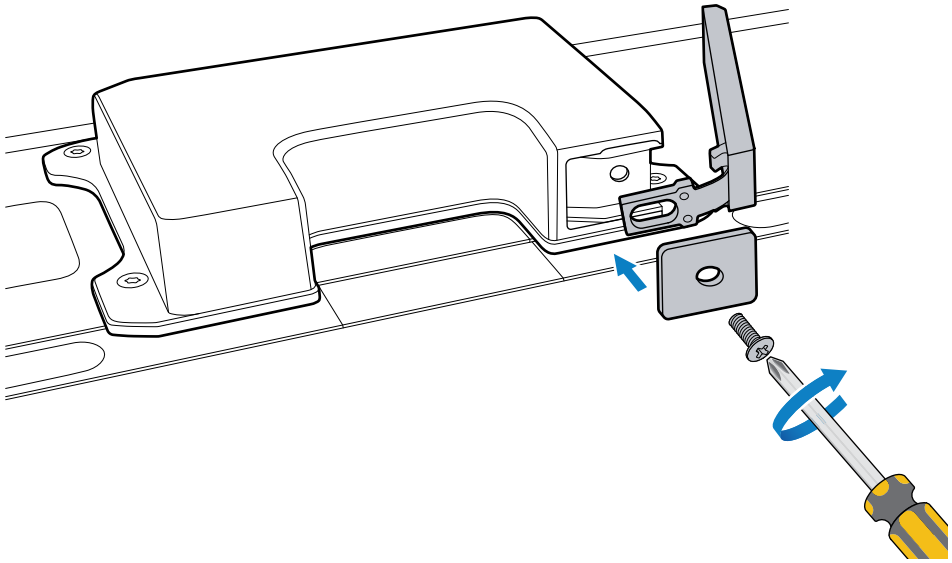
1. Slide the access door switch to the down position.



2. Using a Phillips screwdriver, remove the screw securing the bracket to the expansion module.



3. Remove access door.
4. Align access door with expansion module and bracket.
5. Using a Phillips screwdriver, secure the access door to the expansion module.



6. Close the access door and slide the switch to the lock position.

Data Capture

This section provides information for capturing barcode data using various scanning options.

The device supports data capture using:

- SE55 internal imager (optional)
- Zebra Bluetooth scanners:
  - RS2100 Bluetooth Ring Scanner
  - RS5100 Bluetooth Ring Scanner
  - RS6100 Bluetooth Ring Scanner
  - DS2278 Digital Scanner
  - DS3678 Digital Scanner
  - DS8178 Digital Scanner
  - LI3678 Linear Scanner
- Zebra wired scanners:
  - DS2208 Digital Scanner
  - DS3608 Digital Scanner
  - DS4608 Digital Scanner
  - DS8108 Digital Scanner
  - DS9308 Digital Scanner
  - DS9908 Digital Scanner
  - LI3608 Linear Scanner

123Scan

123Scan is a software tool from Zebra Technologies that simplifies scanner setup and more.

Intuitive enough for first-time users, the 123Scan wizard guides users through a streamlined setup process. Settings are saved in a configuration file that can be printed as a single programming barcode for scanning, emailed to a smart phone for scanning from its screen or downloaded to the scanner using a USB cable.

Through 123Scan a user can:

- Configure a scanner using a wizard.
  - Program the following scanner settings.
    - Beeper tone/volume settings.
    - Enable/disable symbologies.
    - Communication settings.
  - Modify data before transmission to a host using:
    - Advanced Data Formatting (ADF) - Scans one barcode at a time.
    - Preferred Symbol - Single out one barcode on a label of many (select scanners).
- Load parameter settings to a scanner via the following:
  - Barcode scanning.
    - Scan a paper barcode.
    - Scan a barcode from a PC screen.
    - Scan a barcode from a smart phone screen.
  - Download over a USB cable.
    - Load settings to one scanner.
    - Stage up to 10 scanners simultaneously (Powered USB Hub recommended with 0.5 amp / port).
- Validate scanner setup.
  - View scanned data within the utility's Data view screen.
  - Capture an image and save it to a PC within the utility's Data view screen.
  - Review settings using the Parameter Report.
  - Clone settings from an already deployed scanner from the Start screen.
- Upgrade scanner firmware.
  - Load settings to one scanner.
  - Stage up to 10 scanners simultaneously (Powered USB Hub recommended with 0.5 amp/port).
- View statistics, such as:
  - Asset tracking information.
  - Time and usage information.
  - Barcodes scanned by symbology.
- Generate the following reports.
  - Barcode Report - Programming barcode, relevant parameter settings, and supported scanner models.
  - Parameter Report - Parameters programmed within a configuration file.
  - Inventory Report - Scanner asset tracking information.
  - Validation Report - Scanned data from the Data view.
  - Statistics Report - All statistics retrieved from the scanner.

For more information, go to zebra.com/123Scan.

Imaging

The device with an integrated 2D imager has the following features:

- Omnidirectional reading of a variety of barcode symbologies, including the most popular linear, postal, PDF417, Digimarc, and 2D matrix code types.
- The ability to capture and download images to a host for a variety of imaging applications.
- Advanced intuitive laser aiming cross-hair and dot aiming for easy point-and-shoot operation.

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

Scanning Considerations

Typically, scanning is a simple matter of aim, scan, and decode, with a few quick trial efforts to master it.

However, consider the following to optimize scanning performance:

- Range — Scanners decode optimally over a particular working range — minimum and maximum distances from the barcode. This range varies according to barcode density and scanning device optics. Scan within range for 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 barcodes being scanned.
- Angle — Scanning angle is important for quick decodes. When the illumination/flash reflects directly back into the imager, the specular reflection can blind/saturate the imager. To avoid this, scan the barcode so that the beam does not bounce directly back. Do not 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.
- Hold the device farther away for larger symbols.
- Move the device closer for symbols with bars that are close together.

NOTE: Scanning procedures depend on the app and device configuration. An app may use different scanning procedures from the one listed above.

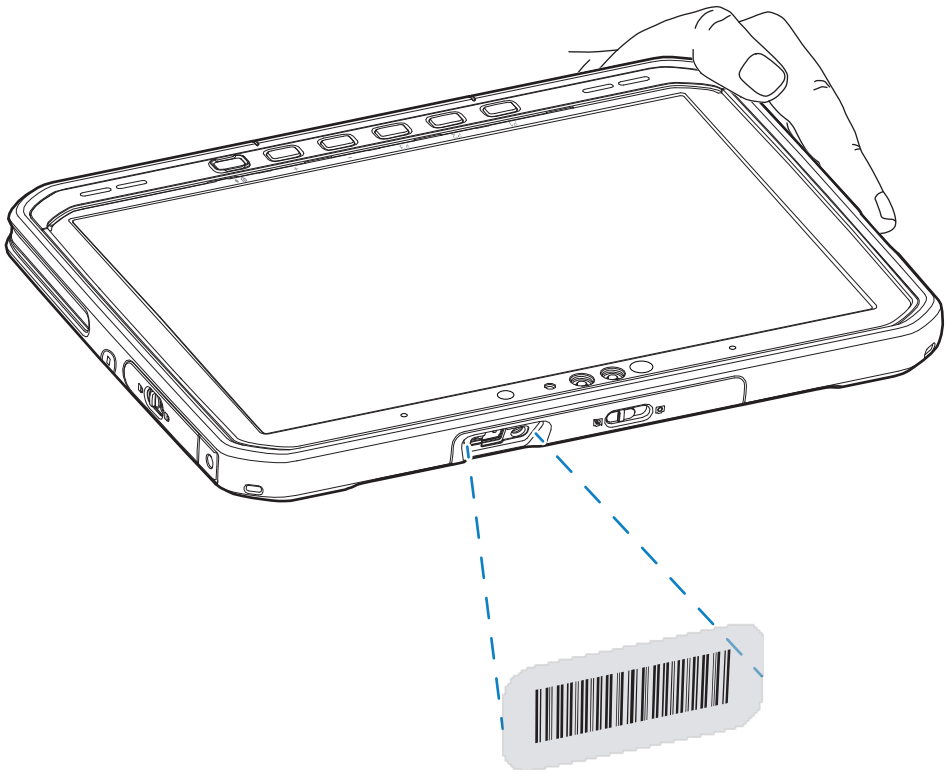
Scanning with the Internal Scanner

Use the internal imager to capture barcode data.

NOTE: Use the Zebra 123Scan utility to configure the scanner. Go to zebra.com/us/en/support-downloads/software/scanner-software/123scan-utility.html.

1. Ensure that an app is open on the device, and a text field is in focus (the text cursor is in the text field).
2. Point the exit window of the device at a barcode.

3. Press and hold the scan button.



The aiming dot with illumination turns on to assist in aiming.

4. Ensure the barcode is within the area formed by the aiming pattern. The aiming dot is used for increased visibility in bright lighting conditions.

Figure 14 SE55 Aiming Pattern

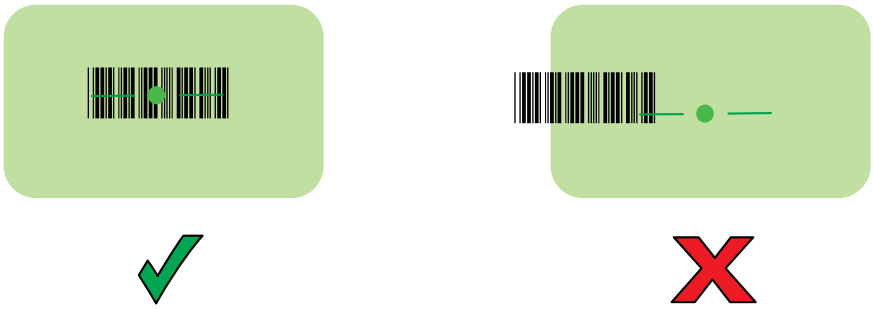
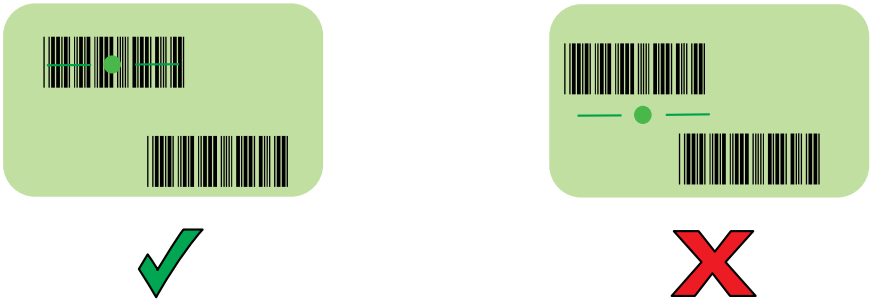


Figure 15 SE55 Aiming for Pick List Mode with Multiple Barcodes



NOTE: When the device is in Pick List Mode, the device does not decode the barcode until the center of the crosshair touches the barcode.

A beep sounds, by default, to indicate the barcode was decoded successfully.

5. Release the scan button.

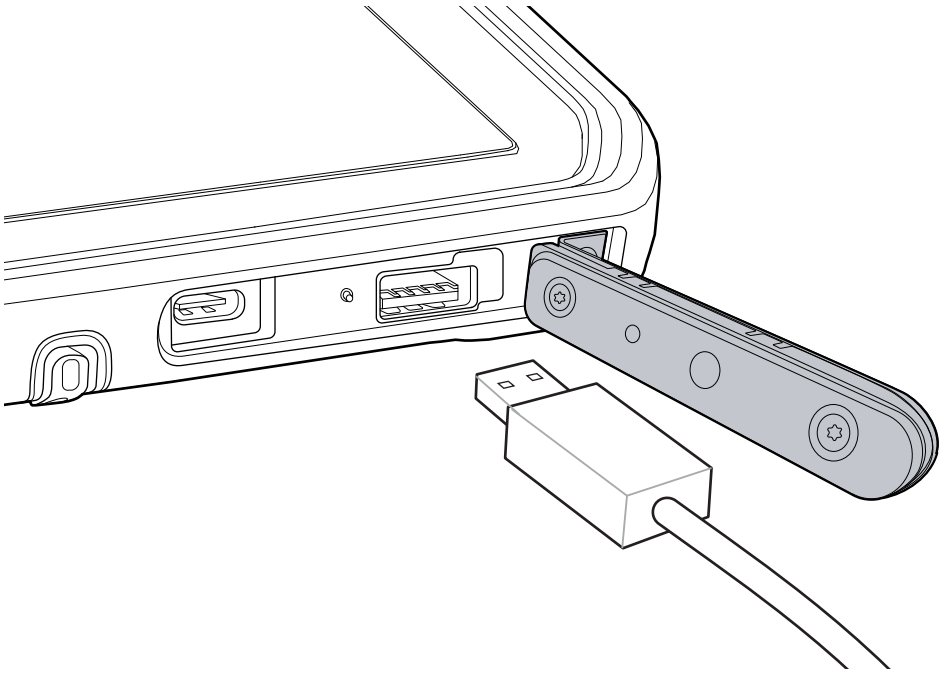
The captured data displays in the text field.

Connecting a USB Scanner

A Zebra USB Scanner connects to the device using the USB-A port under the right access door.

1. Open the right access door.
2. Connect the USB cable into the scanner.

3. Plug the USB-A connector of the cable into the USB-A port on the device.



Pairing a Bluetooth Ring Scanner

Before using a Bluetooth Ring Scanner, you must first pair the scanner with the device.

1. Place the Bluetooth scanner in SSI or HID Mode. See the scanner's Product Reference Guide for instructions.
2. In the taskbar, touch ^ > icon.
3. Touch **Add a Bluetooth device**.
4. Touch **Add device**.

   The **Add a device** dialog window displays.
5. Touch **Bluetooth**.

   The device searches for Bluetooth devices in the area.
6. Click the scanner name.

   The scanner beeps and displays in the list.
7. Touch **Done**.

Pairing a Bluetooth Scanner

A wireless Bluetooth scanner can be connected to the device.

Download the Zebra Scan-To-Connect software utility. Go to: zebra.com/us/en/support-downloads/software/scanner-software/cordless-scantoconnect.html.

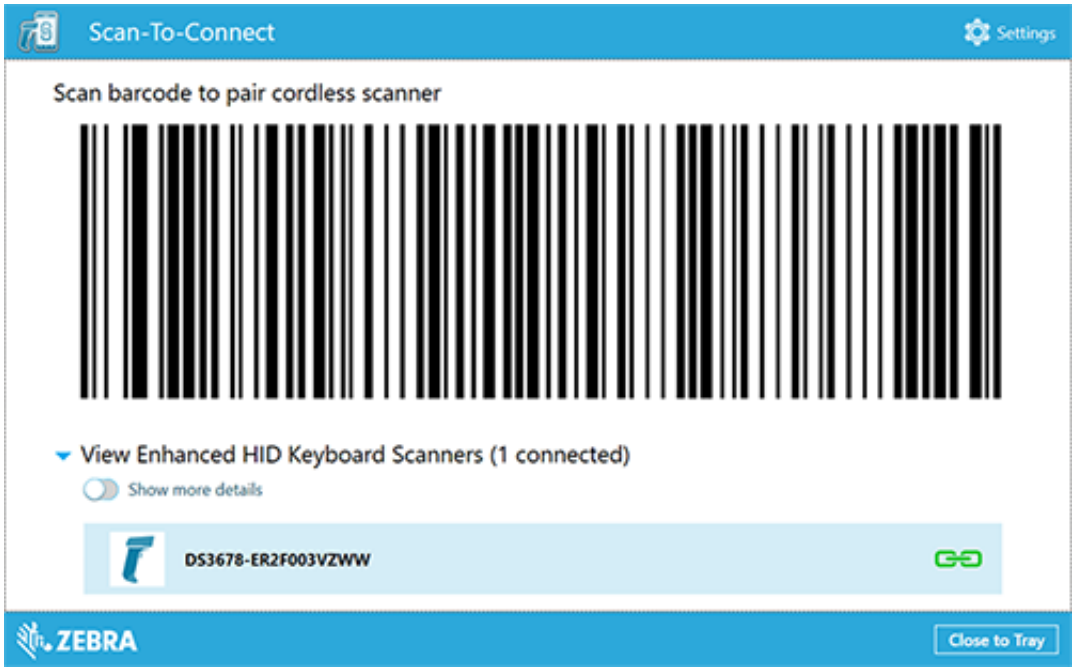
NOTE: Ensure that the Bluetooth scanner is fully charged.

1. Launch the **Scan-To-Connect** application.



2. Point the scanner at the display and press the Scan button.

   The scanner beeps indicating that the scanner is connected to the device.



Wireless

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

Wireless Local Area Networks

Wireless local area networks (WLANs) allow devices to communicate wirelessly inside a building with the appropriate WLAN infrastructure. The infrastructure and the device must be configured properly to enable this communication.

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

NOTE: To extend the battery, turn off Wi-Fi when not in use.

The device supports the following WLAN security options:

Table 8 WLAN Security Options

Security Type	Encryption	EAP Method	Authentication Method
Open Network	None/WEP	N/A	N/A
WPA2-Personal WPA3-Personal	AES	N/A	N/A
WPA2-Enterprise WPA3-Enterprise	AES	Protected EAP (PEAP)	Secured password (EAP-MSCHAPv2) Smart card or other certificate
		Smart Card or other Certificate	

Table 8 WLAN Security Options (Continued)

Security Type	Encryption	EAP Method	Authentication Method
		EAP-TTLS	Unencrypted password (PAP) CHAP Microsoft CHAP (MS-CHAP) Microsoft CHAP v2 (MS-CHAPv2) Smart card or other certificate Secured password (EAP-MSCHAPv2)
		EAP-SIM	N/A
		EAP-AKA	N/A
		EAP-AKA'	N/A
		Tunnel EAP (TEAP)	N/A
WPA3-Enterprise	192-bit mode	Smart Card or other Certificate	
802.1x	WEP	PEAP	Secured password (EAP-MSCHAPv2) Smart Card or other Certificate
		EAP-TTLS	Unencrypted password (PAP) CHAP MS-CHAP MS-CHAPv2 Smart Card or other Certificate Secured password (EAP-MSCHAPv2)
		EAP-SIM	N/A
		EAP-AKA	N/A
		EAP-AKA’	N/A

Connecting to a Wi-Fi Network

Use a Wi-Fi network to connect to for internet access.

1. In the taskbar, touch .

2. Touch the arrow next to the Wi-Fi icon.

   A list of available Wi-Fi networks displays.

3. Touch the network to connect.
4. Touch the **Connect automatically** checkbox to allow the tablet to connect automatically to this network whenever the device is on.
5. Touch **Connect**.
6. If required, enter the security key and then touch **Next**.
7. Touch **Yes** to find PCs and devices on the network or **No** to not find these devices.

   Once connected, **Connected** displays under the network name.

Viewing Network Information

The user can view information about the connected Wi-Fi network.

1. In the taskbar, touch .
2. Touch the arrow next to the Wi-Fi icon.

   A list of available Wi-Fi networks displays.

3. Touch the Wi-Fi network name.
4. Touch .

   The network properties window displays.

Configuring Proxy Settings

The device supports the proxy feature for Wi-Fi connections. The proxy feature enables access to more web-based sources and allows users to browse the internet more securely.

1. In the taskbar, touch .
2. Touch .
3. Touch **Network & internet**.
4. Touch **Proxy**.
5. In the **Manual proxy setup** section, touch **Set up**.
6. Touch the **Use proxy server** switch to turn on.
7. In the **Proxy IP address** text box, enter the address of the proxy server.
8. In the **Port** text box, enter the port number for the proxy server.
9. In the text box, enter addresses for websites that are not required to go through the proxy server. Use the semicolons between addresses but no spaces, and do not use the carriage return.
10. Touch **Save**.

Adding a Wi-Fi Network

To access a Wi-Fi network that does not broadcast its network name (SSID), you must add that Wi-Fi network before you can connect to it.

1. In the taskbar, touch .
2. Touch the arrow next to the Wi-Fi icon.

   A list of available Wi-Fi networks displays.
3. Scroll to the bottom of the list and touch **Hidden network**.
4. Follow the instructions on the screen to add a Wi-Fi network.

Wireless Wide Area Networks

A Wireless wide area network (WLAN) is a mobile cellular network that allows you to browse the Internet, check email, or connect to a virtual private network (VPN) from anywhere within the cellular service's regional boundaries.

NOTE:

A micro SIM card or eSIM is required to connect to a mobile network.

ET65W only.

Activating an eSIM

The ET65W can use a SIM card, an eSIM, or both. You can choose which SIM to use for which action, such as messaging or calling. Before using it, you must activate the eSIM.

NOTE: Prior to adding an eSIM, contact your carrier to obtain the eSIM service and its activation code or QR code.

1. On the device, establish an internet connection via Wi-Fi or cellular data with an installed SIM card.
2. Touch .
3. Touch .
4. Touch **Network & internet** > **Cellular**.
5. In the **Use the SIM for cellular data** section, select **SIM2**.
6. In **More cellular settings** touch **eSIM profiles**.
7. Touch **Add profile**.

   The **How do you want to add new profile?** dialog box displays.
8. Touch **Let me enter an activation code I have from my mobile operator**.
9. Touch **Next**.
10. If you have a QR code to scan for the activation code, choose which camera to use on the device and then scan the QR code. After the activation code displays in the corresponding Activation code box, select **Next**. For the **Do you want to download this profile?** dialog box, enter the confirmation code from your mobile operator into the corresponding box and then select **Download**.
11. Touch **Close**.

Deactivating an eSIM

An eSIM on an ET65W can be turned off temporarily and re-activated later.

1. On the device, establish an internet connection via Wi-Fi or cellular data with an installed SIM card.
2. Touch **Network & internet** > **SIMs**.
3. In the **Download SIM** section, touch the eSIM to deactivate.
4. Touch **Use SIM** switch to turn off the eSIM.
5. Touch **Yes**.

   The eSIM is deactivated.

Erasing an eSIM Profile

Erasing an eSIM profile removes it completely from the ET65W device.

NOTE: After erasing an eSIM from the device, you cannot use it again.

1. On the device, establish an internet connection via Wi-Fi or cellular data with an installed SIM card.
2. Touch **Network & internet** > **SIMs**.
3. In the **Download SIM** section, touch the eSim to erase.
4. Touch **Erase**.

   The **Erase this downloaded SIM?** message displays.
5. Touch **Erase**.

   The eSIM profile is erased from the device.

Connecting to a Cellular Data Network

The ET65W can have a SIM card or eSIM that lets you connect to a cellular data network, so you can get online in more places by using a cellular signal. You must have a data plan from a mobile operator to connect.

Determines which SIM slot to use for your cellular connection—physical SIM card slot or your eSIM. You can choose the cellular network connection to use for cellular data. For example, you might use one profile for work and a different one for personal use. Or you might choose a different profile if you're traveling to a new country.

This setting only appears on Windows 11 devices that have both a SIM and an eSIM. For more about using an eSIM, see Use an eSIM to get a cellular data connection on your Windows PC.

1. Install an activated SIM card or configure an eSIM profile.
2. In the taskbar, touch .
3. Touch the **Cellular** option to turn on the WAN radio if required.
4. Touch the Cellular network in the list.
5. Touch **Let Windows keep me connected** to automatically connect to the cellular data network when it is available. Clear the check box to manually connect each time you want to use the cellular data connection.

6. Touch **Allow roaming** to allow the cellular data connection to stay on when outside of the mobile operator's network. Leaving the check box cleared can help prevent data roaming charges.
7. Touch **Connect**.
8. The name of the mobile operator appears below the Cellular network icon.
9. If prompted, type your user name and password and the access point name (APN).

Adding an Internet APN

The Internet access point name (APN) is the address the tablet uses to connect to the Internet when using a cellular data connection. Usually, the Internet APN is set automatically. If your cellular data connection is not working, try entering a new Internet APN based on the mobile operator.

To add an Internet APN, type an address in the APN box. The other settings are optional and depend on the mobile operator.

1. In the taskbar, touch .
2. Touch .
3. Touch **Network & Internet** > **Cellular**.
4. Touch **Mobile operator settings**.
5. Under the APN settings section, touch **Add an APN**.
6. Update one or more of the following:
   - In the **Profile name** box, type a name for the APN profile.
   - In the **APN** box, type the address for the APN to use.
   - In the **User name** box, type the user name for your mobile account.
   - In the **Password** box, type the password for your mobile account.
   - Select **Type of sign-in info** drop-down list and then select the authentication method.
   - Select **IP type** drop-down list and then select the type of IP address.
7. Touch the **Apply this profile** checkbox if you want the APN profile to be used right after you save it.
8. Touch **Save**.

Removing a SIM PIN

If you do not want to enter the SIM PIN code each time you start your device, remove the PIN.

1. In the taskbar, touch .
2. Touch .
3. Touch **Network & Internet** > **Cellular**.
4. Under the **Security** section, touch **Remove SIM PIN**.
5. Enter the current SIM PIN.
6. Touch **OK**.

Changing a SIM PIN

A pin is used to protect the SIM from unauthorized use. It is asked when the device is turned on. Note a SIM does not protect when the device is on. The device display lock does that. Without the PIN someone could put the SIM in another device and use it. If you enter the SIM incorrectly three times, it locks up. To open it, you must enter a PUK code. It is a much longer code that you get from the carrier or which was provided when bought the SIM. If you enter that ten times wrong the SIM is permanently disabled. The setting to change the SIM pin is in the security setting of the phone.

1. In the taskbar, touch .
2. Touch .
3. Touch **Network & Internet** > **Cellular**.
4. In the **Security** section, touch **Change SIM PIN**.
5. In the **Current SIM PIN** text box, enter the current SIM PIN.
6. In the **New SIM PIN** text box, enter a new SIM PIN.
7. In the **Confirm new SIM PIN** text box, enter the same new SIM PIN.
8. Touch **OK**.

Unblocking a SIM PIN

If you enter an incorrect SIM PIN, the SIM is blocked, and you cannot use it until you unblock it.

Contact your mobile operator for the PIN Unblocking Key (PUK).

1. In the taskbar, touch .
2. Touch .
3. Touch **Network & Internet** > **Cellular**.
4. Touch **Mobile operator settings**.
5. In the **Security** section, touch **Unblock SIM PIN**.
6. Type the PUK code. If you enter an incorrect PUK code too many times, your SIM card will be blocked permanently, and you will need to obtain a new SIM card from your mobile operator.

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 (100 meters (328 feet)) communication and low power consumption.

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

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 Bluetooth network (piconet) 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 and other 2.4G WLAN 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 and other 2.4G WLAN high-rate channels. AFH coexistence allows Enterprise devices to operate in any infrastructure.

The Bluetooth radio in this device operates as a Class 1 device power class. The maximum output power is 9mW and the expected range is 100 meters (328 feet). 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: Use of Bluetooth wireless technology is not recommended when high rate 802.11b operation using 2.4G channel 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 needs. 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 you 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, the limited range and fast frequency hopping of the Bluetooth radios make 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 ET60W/ET65W supports a variety of Bluetooth services.

Table 9 Bluetooth Profiles

Profile	Description
Service Discovery Protocol (SDP)	Handles the search for known and specific services as well as general services.
Serial Port Profile (SPP)	Allows use of RFCOMM protocol to emulate serial cable connection between two Bluetooth peer devices. For example, connecting the device to a printer.
Object Push Profile (OPP)	Allows the device to push and pull objects to and from a push server.
Advanced Audio Distribution Profile (A2DP)	Allows the device to stream stereo-quality audio to a wireless headset or wireless stereo speakers.
Audio/Video Remote Control Profile (AVRCP)	Allows the device to control A/V equipment to which a user has access. It may be used in concert with A2DP.
Personal Area Network (PAN)	Allows the use of Bluetooth Network Encapsulation Protocol to provide L3 networking capabilities over a Bluetooth link. Only PANU role is supported.
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.
Generic Attribute Profile (GATT)	Provides profile discovery and description services for Bluetooth Low Energy protocol. It defines how attributes are grouped together into sets to form services.
HID Over GATT Profile (HOGP)	Defines the procedures and features used by Bluetooth low energy HID Devices using GATT and Bluetooth HID Hosts using GATT.
Generic Access Profile (GAP)	Use for device discovery and authentication.
Out of Band (OOB) and Near Field Communications (NFC)	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.
HID over GATT Profile (HOGP)	Defines the procedures and features used by Bluetooth low energy HID Devices using GATT and Bluetooth HID Hosts using GATT.
Hardcopy Cable Replacement Profile (HCRP)	Provides a simple wireless alternative to a cable connection between a device and a printer.
Device ID Profile (DIP)	Allows a device to be identified above and beyond the limitations of the Device Class already available in Bluetooth. It enables identification of the manufacturer, product id, product version, and the version of the Device ID specification being met.

Pairing with a Bluetooth Device

Connect and exchange data with another Bluetooth device.

1. In the taskbar, touch .
2. Touch .

3. Touch **Bluetooth & devices**.
4. Slide the control to the right to turn it on.
5. In **Devices** section, touch **Add device**.
6. Touch **Bluetooth**.

   The **Add a Device** window, displays discoverable Bluetooth devices.
7. In the **Add a Device** window, touch a discovered Bluetooth device.

   After a few minutes a notification displays that the devices are paired.

Unpairing a Bluetooth Device

Unpairing a Bluetooth device erases all pairing information.

1. In the taskbar, touch .
2. Touch .
3. Touch **Bluetooth & devices**.
4. Touch the ID of the Bluetooth device to unpair.
5. Touch **Remove device**.

Turning on Airplane Mode

When Airplane mode is on, the Wi-Fi, Bluetooth, Global Navigation Satellite System (GNSS), and Near-field communication (NFC) radios are turned off. This is useful when traveling on an airplane or when you do not need Wi-Fi or Bluetooth for a while. Airplane mode extends the amount of time before the battery needs recharging.

1. In the taskbar, touch .
2. Touch **Airplane mode**. The option box turns bright, and the airplane icon appears in the taskbar.

To turn on radios in Airplane Mode (without turning on WAN), touch **Wi-Fi** or **Bluetooth**. The option box turns bright, indicating that the radio is on.

Near Field Communications

NFC/HF RFID is a short-range wireless connectivity technology standard that enables a secure transaction between the ET60W/ET65W and a contactless smart card.

The technology is based on ISO/IEC 14443 type A and B (proximity), Mifare, Type F (FeliCa), and ISO/IEC 15693 (vicinity) standards, using the HF 13.56 MHz unlicensed band.

The device supports the following operating modes:

- Reader mode.

Using NFC, the device can:

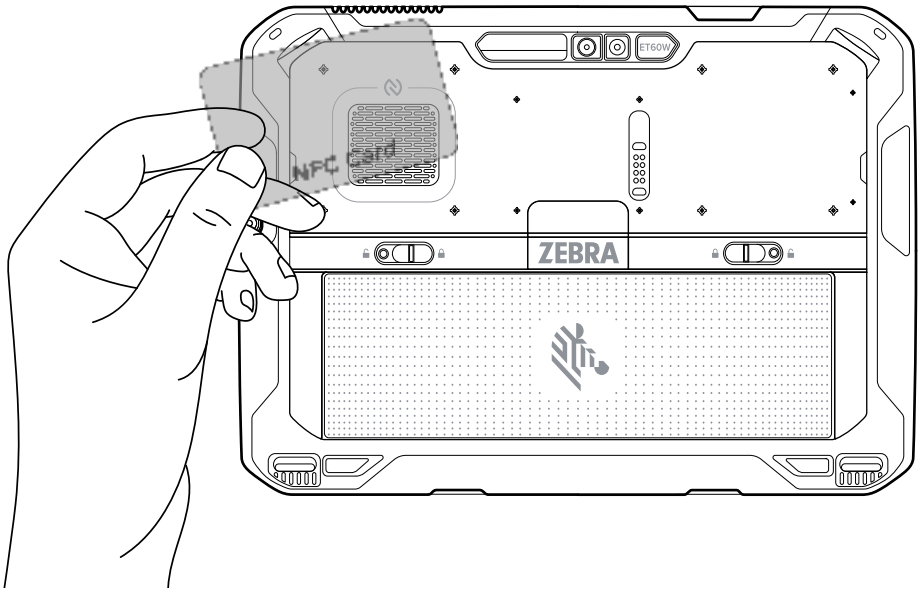
- Read contactless cards, such as contactless tickets, ID cards, and ePassport.
- Read and write information to contactless cards, such as SmartPosters and tickets, as well as devices with an NFC interface, such as vending machines.
- Read information from supported medical sensors.

- Pair with supported Bluetooth devices such as printers, ring scanners (for example, RS6000), and headsets (for example, HS3100).
- Emulate a contactless card such as a ticket.

Reading NFC Cards

The tablet supports reading NFC cards. The NFC antenna is located on the back of the tablet under the NFC logo.

1. Launch an NFC-enabled application.
2. Align the card with the NFC antenna on the back of the device.



3. Hold the card steadily until the transaction is complete (usually indicated by the application).

Accessories

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

The following table lists the accessories available for the device.

Table 10 ET6xW Accessories

Accessory	Part Number	Description
Chargers		
2-slot Battery Charger	SAC-ET6X-2SCHG-01	Charges up to two standard or extended capacity batteries. Requires power supply (PWR-BGA12V50W0WW), DC line cord (CBL-DC-388A1-01), and country-specific AC line cord.
Vehicle Dock		
Vehicle Charging Dock	CRD-ET6X-VEHDK-CON-1	Provides tablet charging, USB communication, and RS-232 serial communication. Includes set of 10-32 nuts (4), screws (4), washers (4), and cable ties. Mount not included. Supports VESA 100 x 100, 100 x 50, and 75 x 75.
Vehicle Charging Dock with Antenna Pass Through	CRD-ET6X-VEHDK-PTA-01	Provides tablet charging, USB communication, RS-232 serial communication and antenna pass through. Includes set of 10-32 nuts (4), screws (4), washers (4), and cable ties. Supports VESA 100 x 100, 100 x 50, and 75 x 75.
Desk Stand for Vehicle Dock	STND-ET-DESK-01	Provides mounting the Vehicle Dock for use on a desk or tablet.
DC/DC Power Supply	PS1370	Powers a Vehicle Dock and an ET60 from a 19 to 90 VDC power source. Must be used with the ET60 with installed Touch Screen Heater.
DC/DC Power Supply (9 VDC to 60 VDC)	450083	Accepts 9V to 60V (9A maximum) vehicle power and converts it to 13.2V output. Requires Direct Wire Power Cable Kit (300039).
DC/DC Power Supply (50 VDC to 150 VDC)	450084	Accepts 50V to 150V (2A maximum) vehicle power and converts it to 13.2V output. Requires Direct Wire Power Cable Kit (300039).
DC Power Adapter Cable	CBL-ET-ADP1-1	For powering the Vehicle Dock from an existing VC80 installation.
DC Power Adapter	CBL-ET6-ADPA2-1	Connects the DC/DC Power Supply (PS1370) to the Vehicle Dock.

Table 10 ET6xW Accessories (Continued)

Accessory	Part Number	Description
LXE/Honeywell Power Adapter Cable	ACC-PWRCBL01	Allows ET6X Vehicle Dock to be powered from a legacy LXE/Honeywell power cable. Requires DC/DC Power Supply (450083/84) and Direct Wire Power Cable Kit (300039).
Dire Wire Kit	300039	Powers the Vehicle Dock for new installations. Contains: DC power cord, fuse holder cable, fuse, two butt splice connectors, and two ring terminals.
Cigarette Lighter Adapter (CLA) cable	450143	Provides power to the vehicle dock from a vehicle cigarette lighter port.
Keyboard Mounting Bracket	KT-KYBDTRAY-ET6X-01	Mounts a USB keyboard to the Vehicle Dock.
Keyboards		
USB Warehouse QWERTY Keyboard	KYBD-QW-VC-01	USB Warehouse Keyboard with QWERTY key layout.
USB Warehouse AZERTY Keyboard	KYBD-AZ-VC-01	USB Warehouse Keyboard with AZERTY key layout.
USB Warehouse Keyboard with USB-A Cable	KYBD-QW-ET-S-1	USB Warehouse Keyboard QWERTY with USB Type-A Cable
USB Keyboard Cable	CBL-ET-KBUSB1-01	Connects USB Warehouse keyboard to the Vehicle Dock.
USB/RS-232 Keyboard Cable	CBL-ET-KBUSB2-01	Connects USB Warehouse keyboard with a heater to Vehicle Dock.
US English 2-in1 Attachable Rugged Keyboard	KYB-ET6X-2IN1-US1-01	Convert the tablet into a laptop with a US-English keyboard configuration.
UK English 2-in-1 Attachable Rugged Keyboard	KYB-ET6X-2IN1-UK1-01	Convert the tablet into a laptop with a UK English keyboard configuration.
French 2-in-1 Attachable Rugged Keyboard	KYB-ET6X-2IN1-FR1-01	Convert the tablet into a laptop with a French keyboard configuration.
Spanish 2-in-1 Attachable Rugged Keyboard	KYB-ET6X-2IN1-ES1-01	Convert the tablet into a laptop with a Spanish keyboard configuration.
German 2-in-1 Attachable Rugged Keyboard	KYB-ET6X-2IN1-DE1-01	Convert the tablet into a laptop with a German keyboard configuration.
Soft Goods		
Carry Handle with Stylus Slot and Coiled Stylus Tether	SG-ET8X-HANDLE1-01	Allows users to carry the tablet. Requires ET6x Attachment Clips.
Detachable Shoulder Strap	SG-ET8X-SHLDR1-01	Allows users to carry the tablet. Requires ET6x Attachment Clips.
ET6x Attachment Clips for Straps	SG-ET6X-DCLIPS-01	Provides mounting of the Carry Handle or Shoulder Strap to the tablet.
Power Supplies and Batteries		
Standard 9.3 Ah Battery	BTRY-ET6XW-5AH-01	Replacement standard battery.

Table 10 ET6xW Accessories (Continued)

Accessory	Part Number	Description
Extended 18.7 Ah Battery	BTRY-ET6XW-9AH-01	Replacement extended battery.
No Cells Battery	BTRY-ET6XW-0AH-01	Replacement no cell battery.
12 VDC 6 A Power Supply	PWR-BGA15V45W-UC2-WW	Provide power to the tablet. Provides power to the tablet. Requires country-specific AC line cord.
Stylus		
Passive Stylus	SG-STYLUS-TCX-MTL-03	Passive stylus for use with the tablet (3-pack).
Tether for Passive Stylus	SG-TC5NGTC7NG-TETHR-03	Connects a Passive Stylus to the tablet.
Active Stylus and Stylus Holder	SG-ET8X-STYLUS1-01	Provides easy writing, drawing, navigation, and accuracy with the thin tip and hovering capabilities.
Stylus Holder.	SG-ET8X-PENLOOP1-01	Secures a stylus to the tablet.
Stylus Coil Tether	SG-ET5X-SLTETR-01	Secures a stylus to the hand strap.
Miscellaneous		
USB Port Door	MISC-ET6X-USB-DOOR	Replacement USB port door.
Smart Card / CAC Reader	XBK-ET6X-SMCARD-01	Reads smart cards and common access cards (CAC) for rapid authentication and enhanced security access.
Smart Card / CAC Reader with Hand Strap	XBK-ET6X-SMCARD-HS-01	Reads smart cards and common access cards (CAC) for rapid authentication and enhanced security access. Includes a hand strap.
RFID Reader (North America)	XBK-ET6X-RFID-N-01	Reads UHF RFID tags.
RFID Reader (European Union)	XBK-ET6X-RFID-E-01	Reads UHF RFID tags.
RFID Reader (Australia/ New Zealand)	XBK-ET6X-RFID-A-01	Reads UHF RFID tags.
ET6x Kickstand	XBK-ET6X-KCKSTD-01	Provides working comfort for the tablet in the field and at a desk. The kickstand closes tightly when you are on the move, and it provides good ergonomics when the tablet is on flat surfaces.
Replacement Hand Strap for Kick Stand	SG-ET5X-RHTP1-01	Replacement hand strap for Kick Stand

Device Charging

Before using the tablet for the first time, connect it to an external power source to charge the battery.

NOTE: Battery-free tablets do not require charging.

Keep the tablet connected to the external power source until fully charged. The Charging Indicator LED turns green when the tablet is fully charged. You may use the tablet while it is charging.

To charge the main battery, connect the charging accessory to the appropriate power source.

Insert the device into the dock or attach the USB charger. The device turns on and begins charging. The Charging/Notification LED blinks amber while charging, then turns solid green when fully charged.

The standard battery charges from 4% to 80% in approximately 2.5 hours. The extended battery charges from 4% to 80% in 5.5 hours. To achieve optimal charging results, use only Zebra charging accessories and batteries. Charge batteries at room temperature with the device in sleep mode.

Charging Temperature

Charge batteries in ambient temperatures.

Charge batteries in ambient temperatures from 0°C to 45°C (32°F to 113°F). The device always performs battery charging in a safe and intelligent manner. At higher temperatures (for example, approximately +37°C (+98°F)), the device may, for small periods of time, alternately enable and disable battery charging to keep the battery at acceptable temperatures. The device indicates when charging is disabled due to abnormal temperatures via its LED.

Charging Indicators

Charge the battery before using the device.

Table 11 Charging Indicators

LED	Indication
Off	Power is not supplied to the device. The device uses the no cell battery.
Slow blinking orange (1 blink every 4 seconds)	The device is charging.
Slow blinking red (1 blink every 4 seconds)	The device is charging, but the battery is at the end of its useful life.
Fast blinking orange (2 blinks/second)	Charging error. Possible charging errors include: • Temperature is too low or too high. • Charging has gone on too long without completion (typically eight hours).

Table 11 Charging Indicators (Continued)

LED	Indication
Fast blinking red (2 blinks/second)	Charging error and the battery is at the end of its useful life. Possible charging errors include: • Temperature is too low or too high. • Charging has gone on too long without completion (typically eight hours).
Solid Green	Charging complete.
Solid Red	Charging is complete, but the battery is at the end of useful life.
Blinking red (1 blink/second)	A Battery-free tablet is connected to external power.

Solid-State Drive

The device's replaceable solid-state drive (SSD) stores its operating system and data files. A qualified technician can replace the SSD.

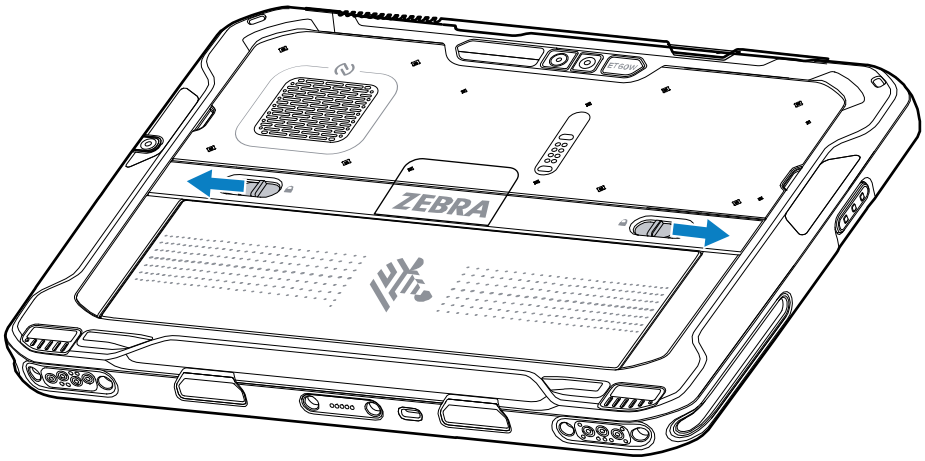
Removing and Replacing the Solid-State Drive

Remove the SSD to protect data and replace it or replace it, with a new SSD.

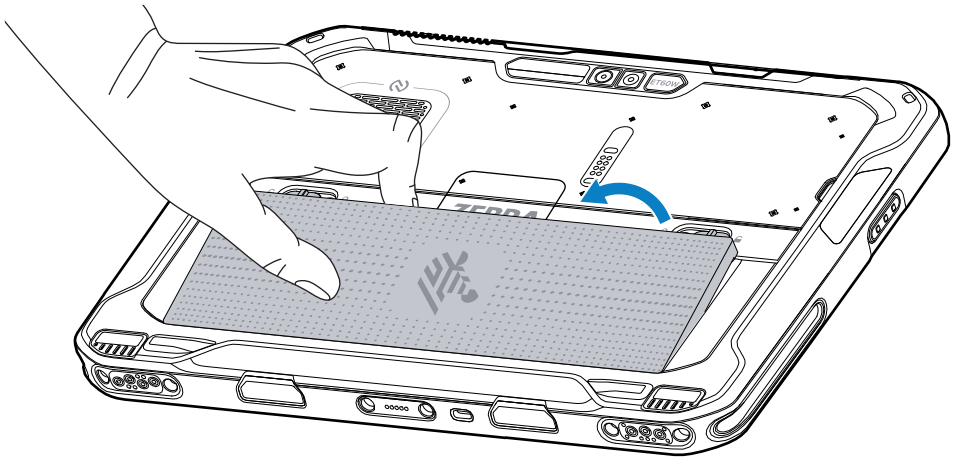
CAUTION: For proper electrostatic discharge (ESD) precautions to avoid damaging the SSD. Proper ESD precautions include but are not limited to, working on an ESD mat and ensuring that the user is properly grounded.

1. Power off the tablet.
2. Place the tablet on a mat or cloth to protect the display.
3. Slide the battery release latches toward the sides of the tablet.

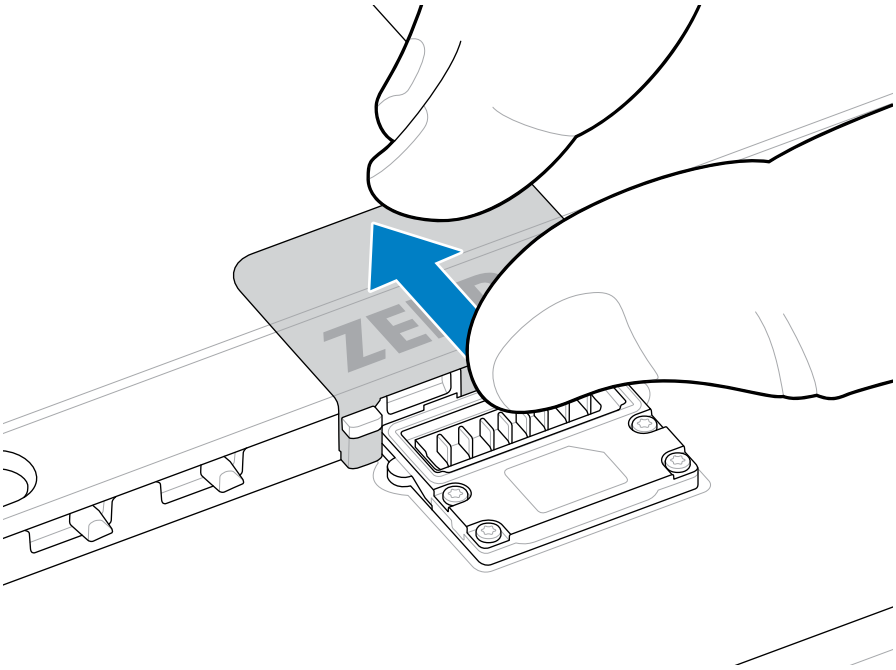
   The battery ejects slightly.



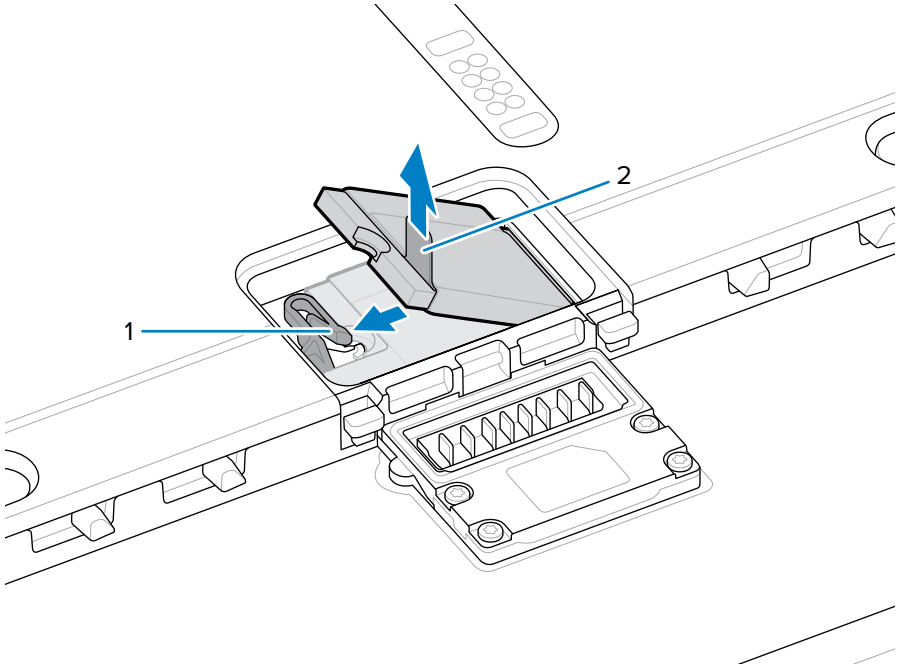
4. Lift the battery out of the tablet.



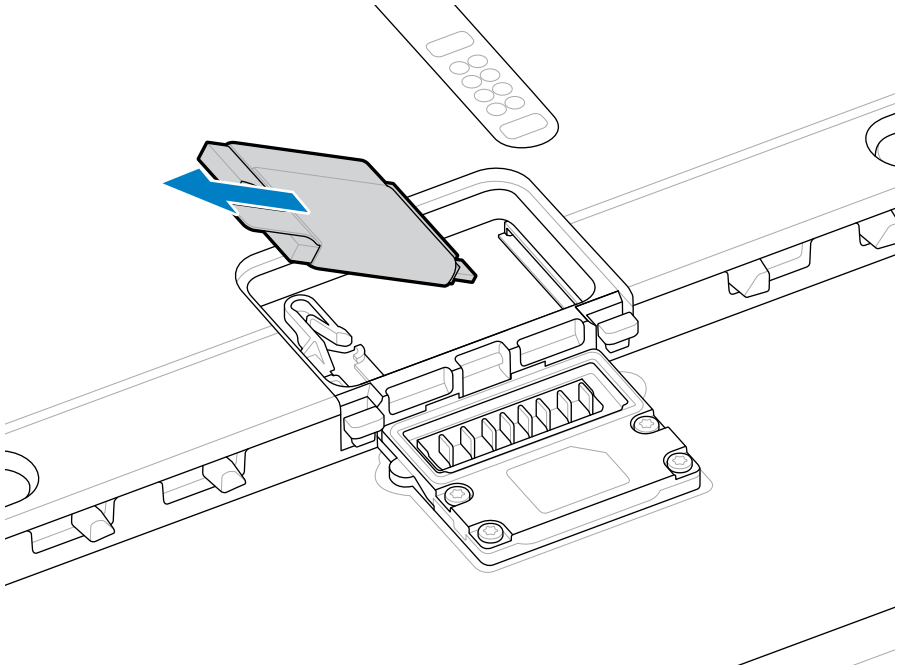
5. Using your thumbs, push up on the SSD cover.



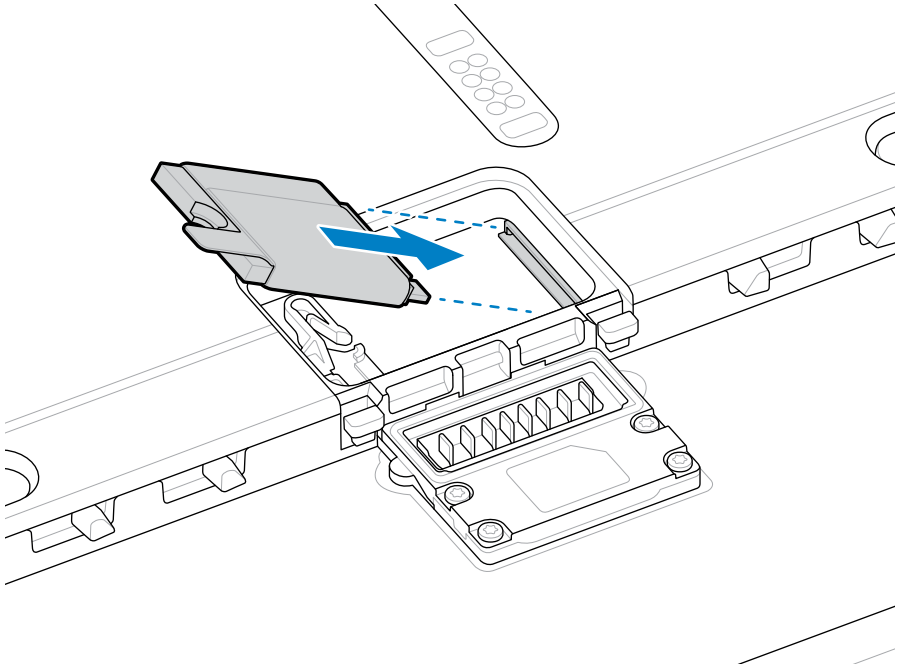
6. Push the locking tab (1) up and gently lift the SSD tab (2).



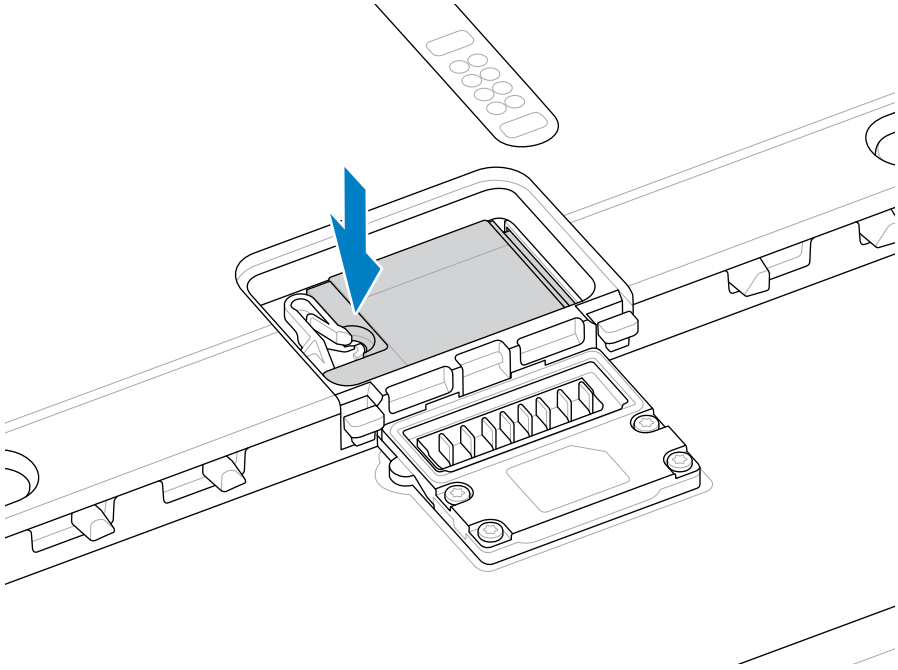
7. Remove the SSD from the connector on the board.



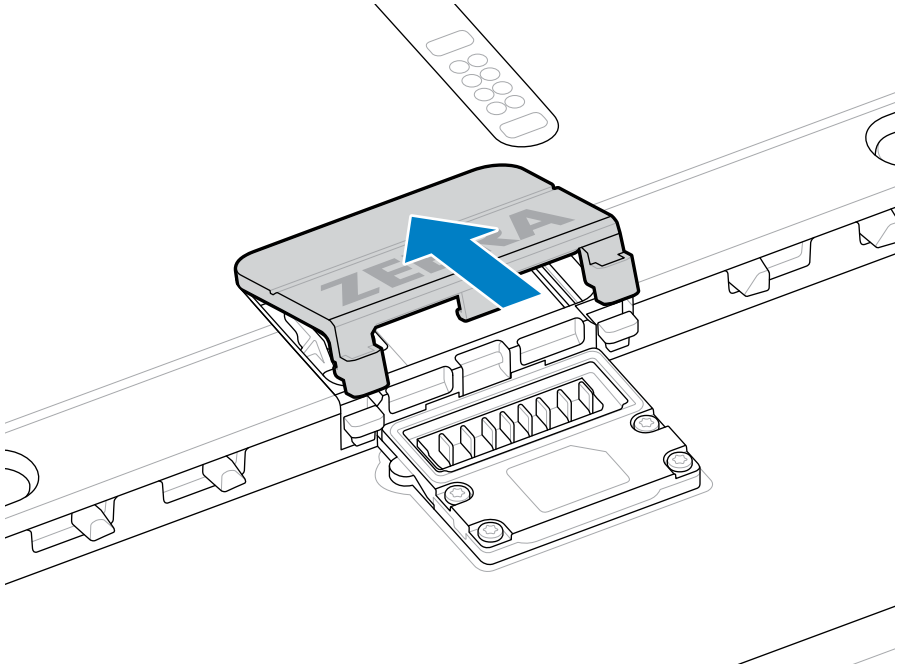
8. Align the replacement SSD with the connector on the board.



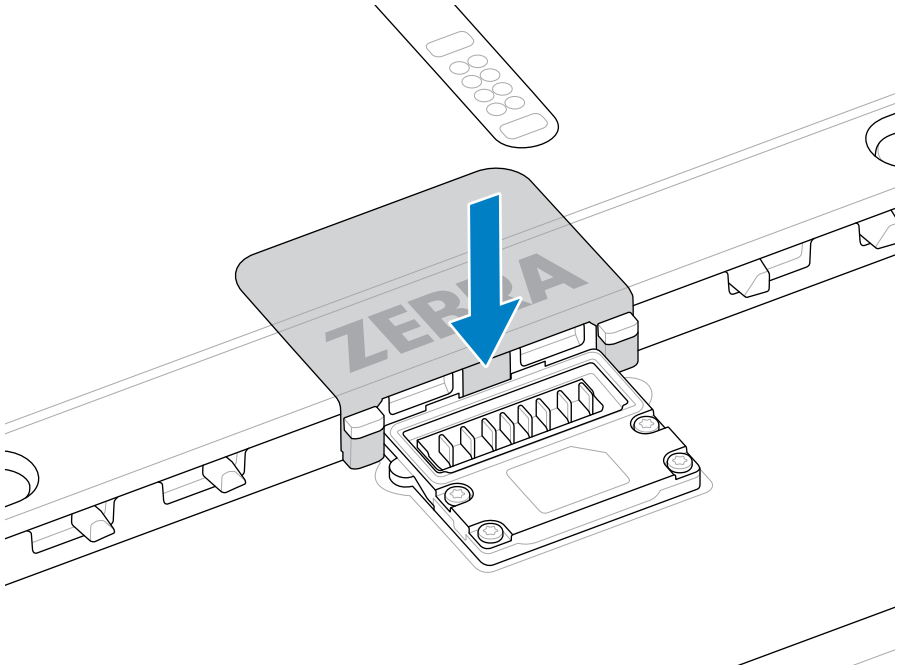
9. Push the SSD into the connector.
10. Press the SSD down until it snaps into place.



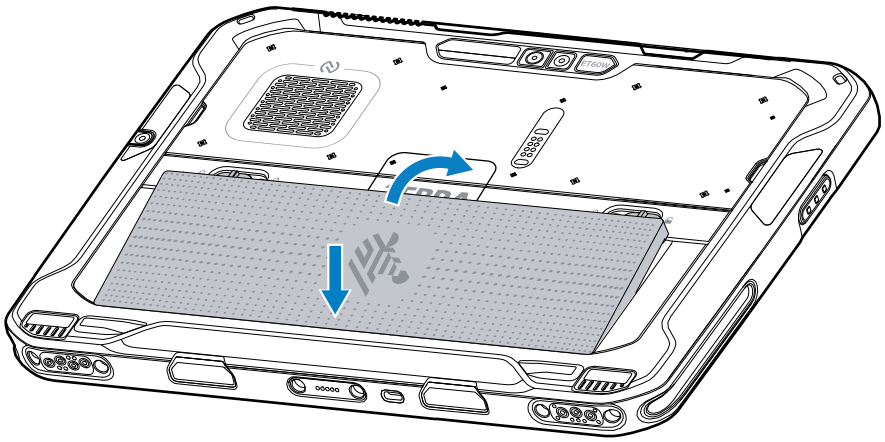
11. Align the SSD cover with the back of the tablet.



12. Press the SSD cover down.



13. Insert the battery, bottom first, into the battery compartment at the back of the device.



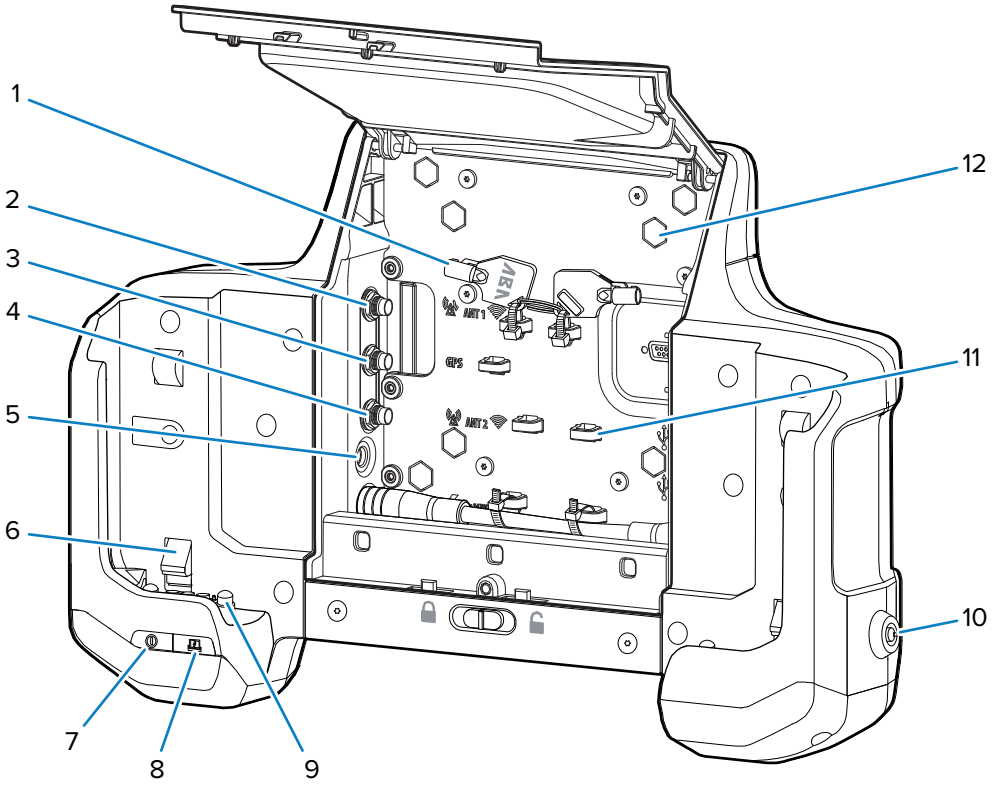
14. Press the battery down into the compartment until the release latches snap into place.
15. Press the Power button.

Vehicle Dock

The Vehicle Dock provides tablet charging, data communication, and antenna pass through (on specific configurations).

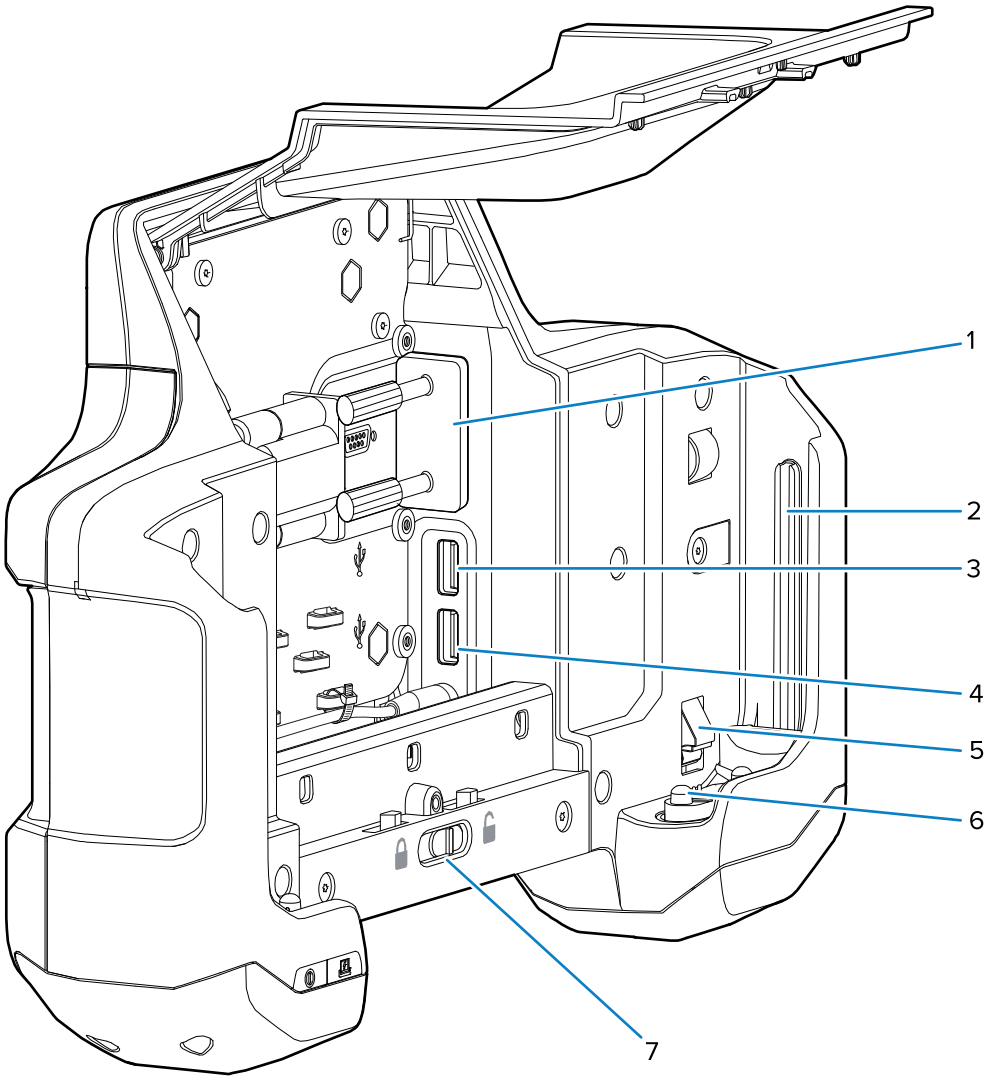
NOTE: Ensure that you follow the guidelines for battery safety described in the Battery Safety Guidelines.

Figure 16 Vehicle Dock Right View



1	Keys (remove prior to use)
2	ANT 1 SMA pass-through connector
3	GPS SMA pass-through connector
4	ANT 2 SMA pass-through connector
5	12 -15 VDC Power port
6	Tablet retention
7	Vehicle Dock Power LED
8	Tablet connection LED
9	Power and pass through antenna pogo pins
10	Security lock
11	Cable mounting tabs
12	Mounting bolt holes (8) for VESA 75 x 75 mm or 100 x 100 mm pattern

Figure 17 Vehicle Dock Left View



1	RS-232 port (The Vehicle Dock ships with an RS-232 cover. Keep the cover in place at all times to prevent corrosion and preserve the water seal in RS232 connector)
2	Tablet alignment rail
3	USB-A port
4	USB-A port
5	Tablet retention
6	USB pogo pins
7	Access door release latch

LED Indicators

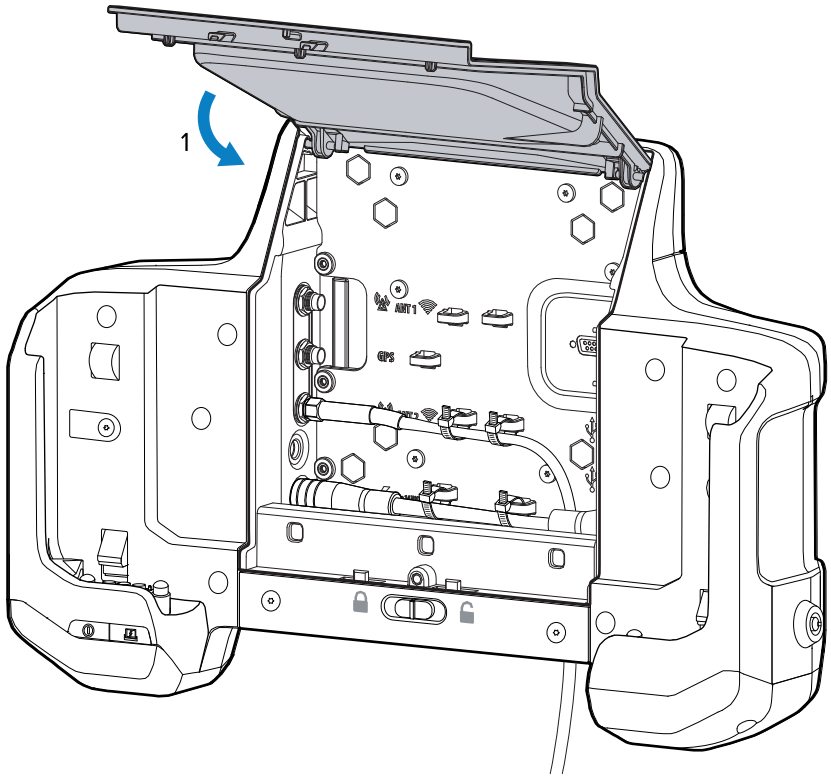
Table 12 Vehicle Dock LED Indicators

LED	Status	Description
Vehicle Dock Power LED	Green	Power is applied to the Vehicle Dock.
	Off	No power applied to the Vehicle Dock.
Tablet Connection LED	Green	Tablet is properly seated in the Vehicle Dock.
	Flashing red	Tablet is in the Vehicle Dock but is not seated properly.
	Off	Tablet is not in the Vehicle Dock.

Inserting the Tablet into the Vehicle Dock

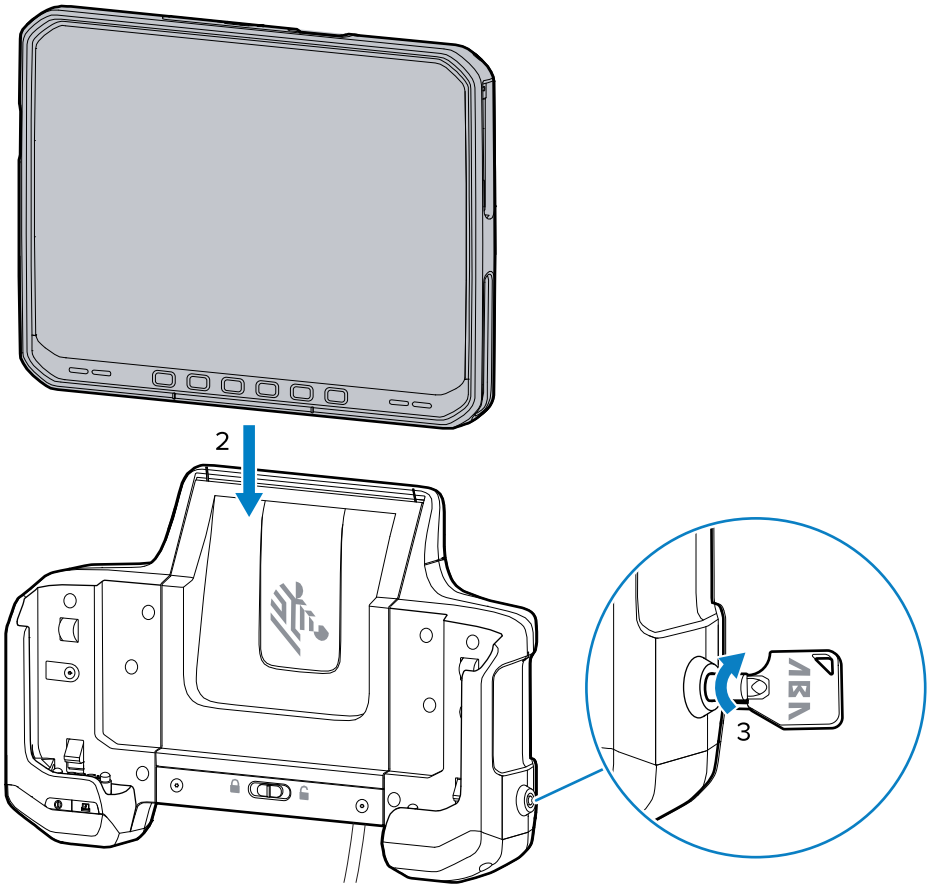
The Vehicle Dock secures the tablet and provides power and communication connections.

1. Close the Access Door.



2. Align the tablet with the dock alignment rails. Push the tablet down until it clicks into place.

3. Turn the key to the lock position.

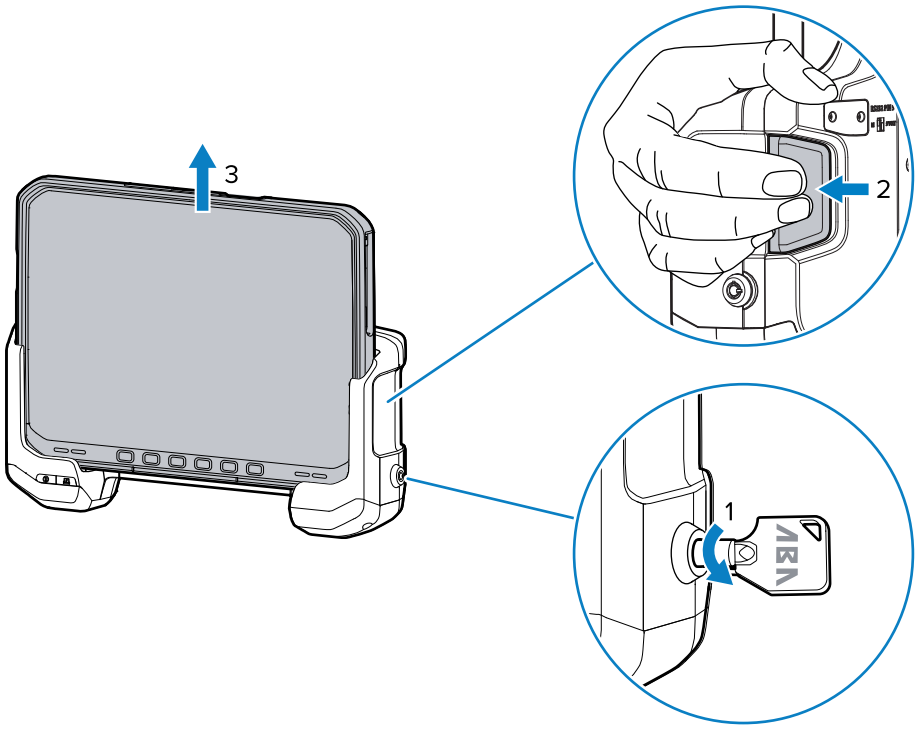


Removing the Tablet from the Vehicle Dock

After using the tablet in the Vehicle Dock, remove it to use as a mobile device.

If the Vehicle Dock is locked, use the key to unlock the dock before removing the tablet.

1. Turn the key to the unlock position.



2. Press the tablet release latches.

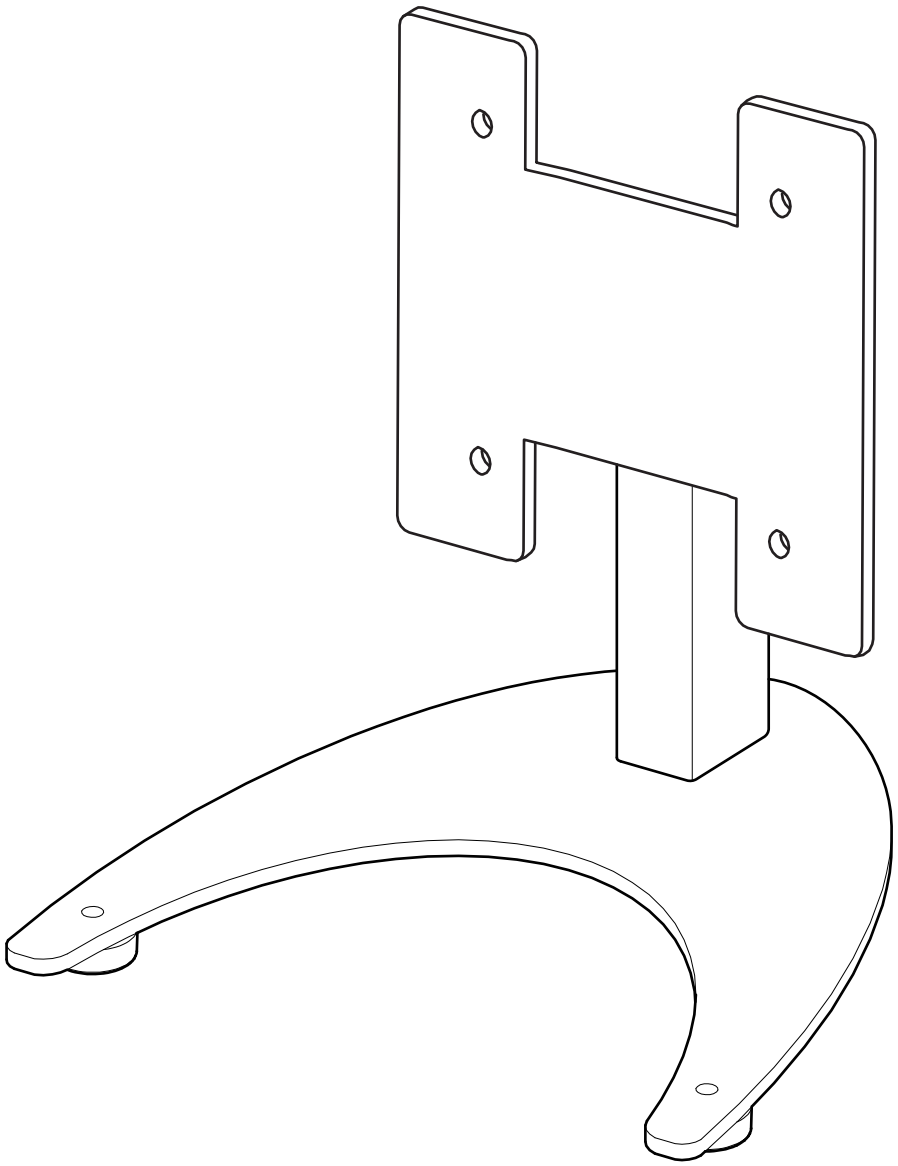
   The tablet ejects slightly.

3. Lift the table out of the Vehicle Dock.

Desk Stand

The Desk Stand provides a method for using the Vehicle Dock on a desk.

Figure 18 Desk Stand



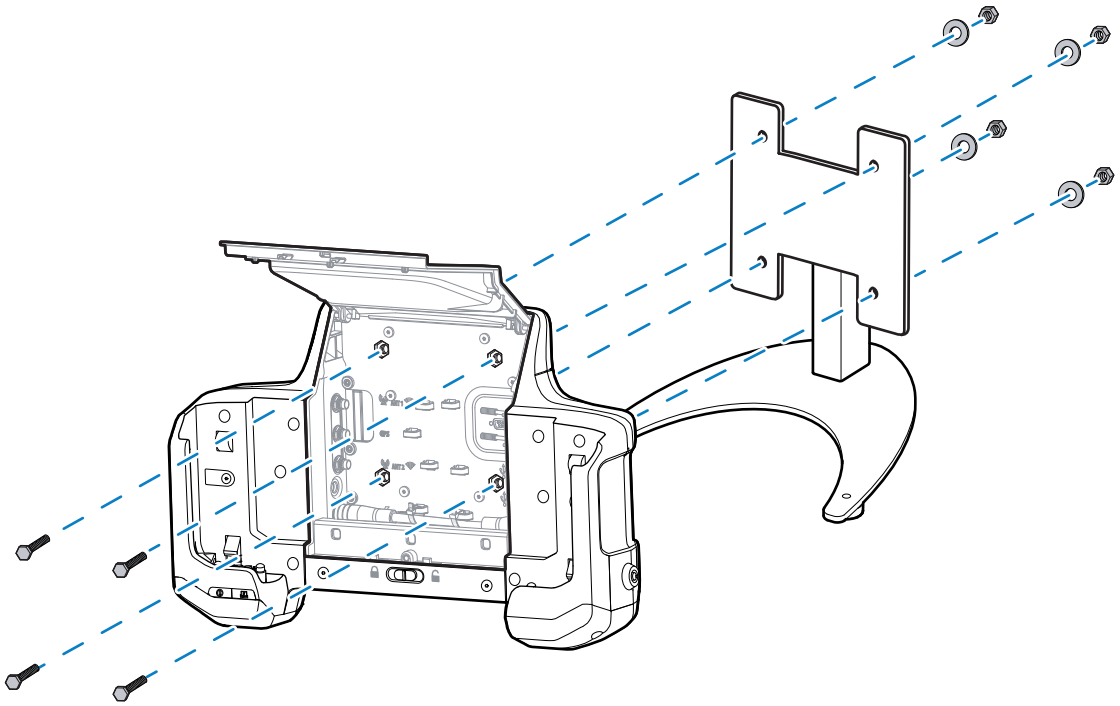
Installing the Vehicle Dock on the Desk Stand

Mount the Vehicle Dock onto the Desk Stand to use the Vehicle Dock on a desk or flat surface.

NOTE: The Vehicle Dock contains all required mounting hardware.

1. Open the access door.
2. Align the mounting screw holes with the screw holes on the Desk Stand.

3. Insert four bolts into the appropriate screw holes.



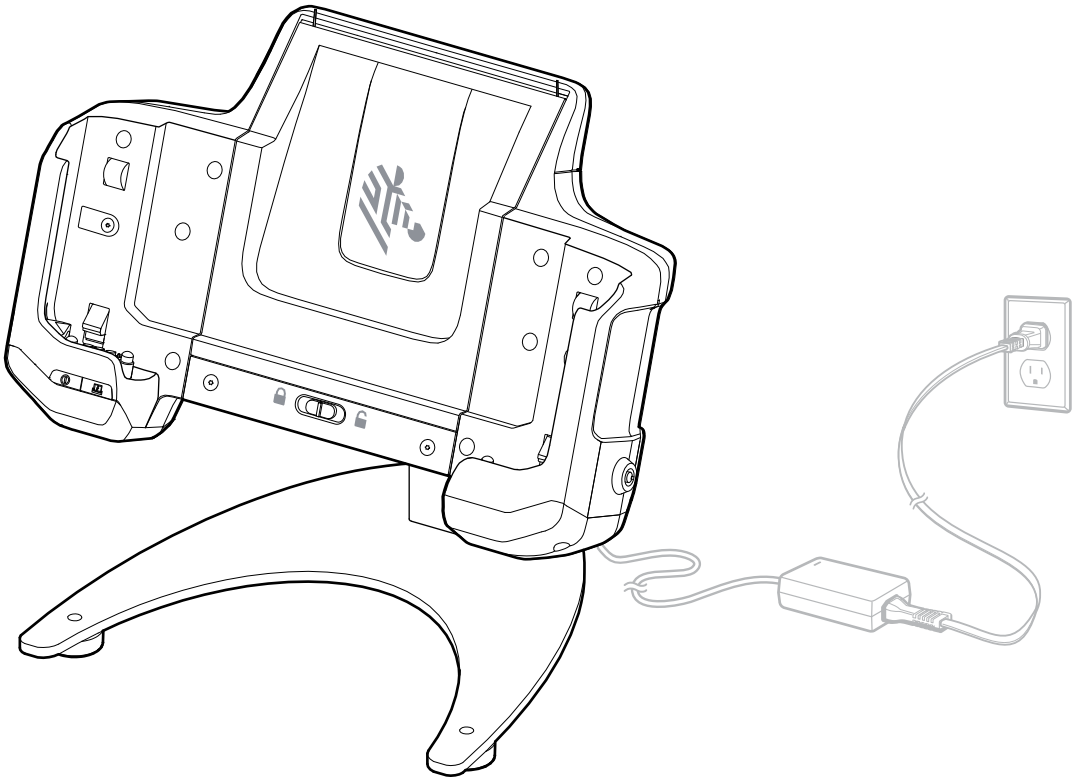
4. Insert the washers onto the bolts.
5. Secure using the four lock washers.

Setting Up the Desk Stand

With the Vehicle Dock installed on the Desk Stand, attach the power supply and optional keyboards.

1. Open the Access Door.
2. Route the power supply cable up through the bottom of the Vehicle Dock.
3. Plug the connector into the power port.
4. Route keyboard USB cable through the bottom of the Vehicle Dock.
5. Plug the USB cable into one of the USB ports.
6. Secure cables using the cable ties.
7. Close the Access Door.

8. Power the power supply into an AC outline.

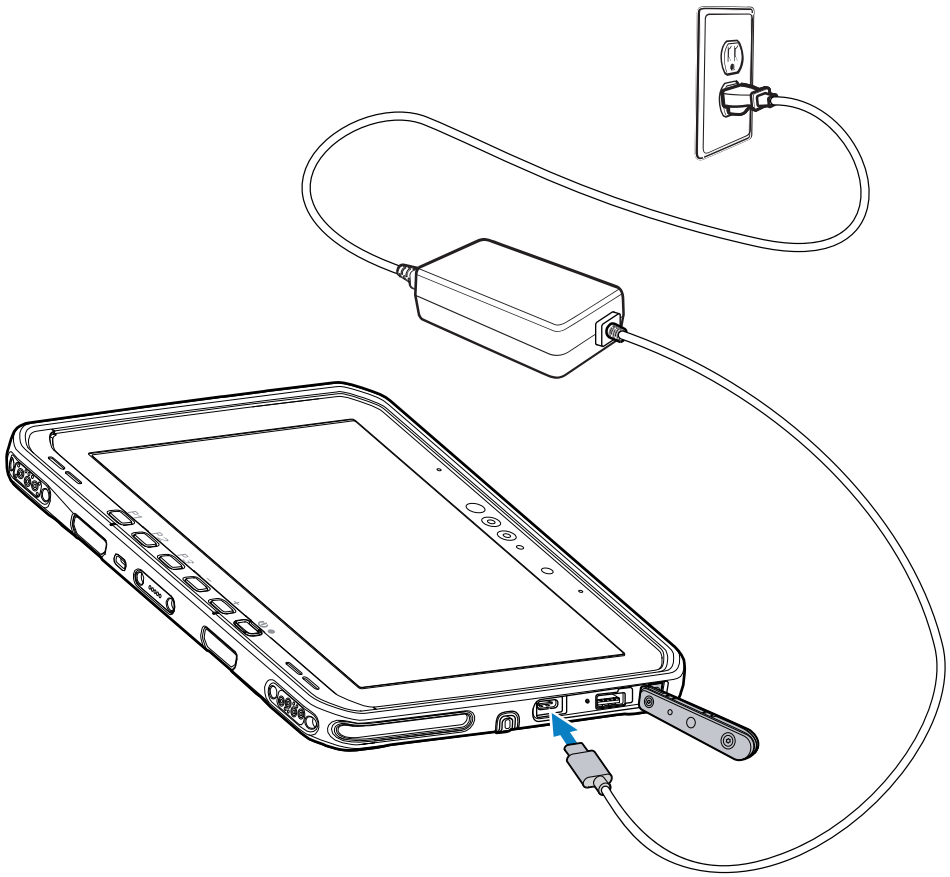


USB-C to AC Adapter

The USB-C to AC Adapter provides power to the tablet.

CAUTION: Ensure that you follow the guidelines for battery safety described in the ET6x Product Reference Guide.

NOTE: Ensure that you follow the guidelines for battery safety

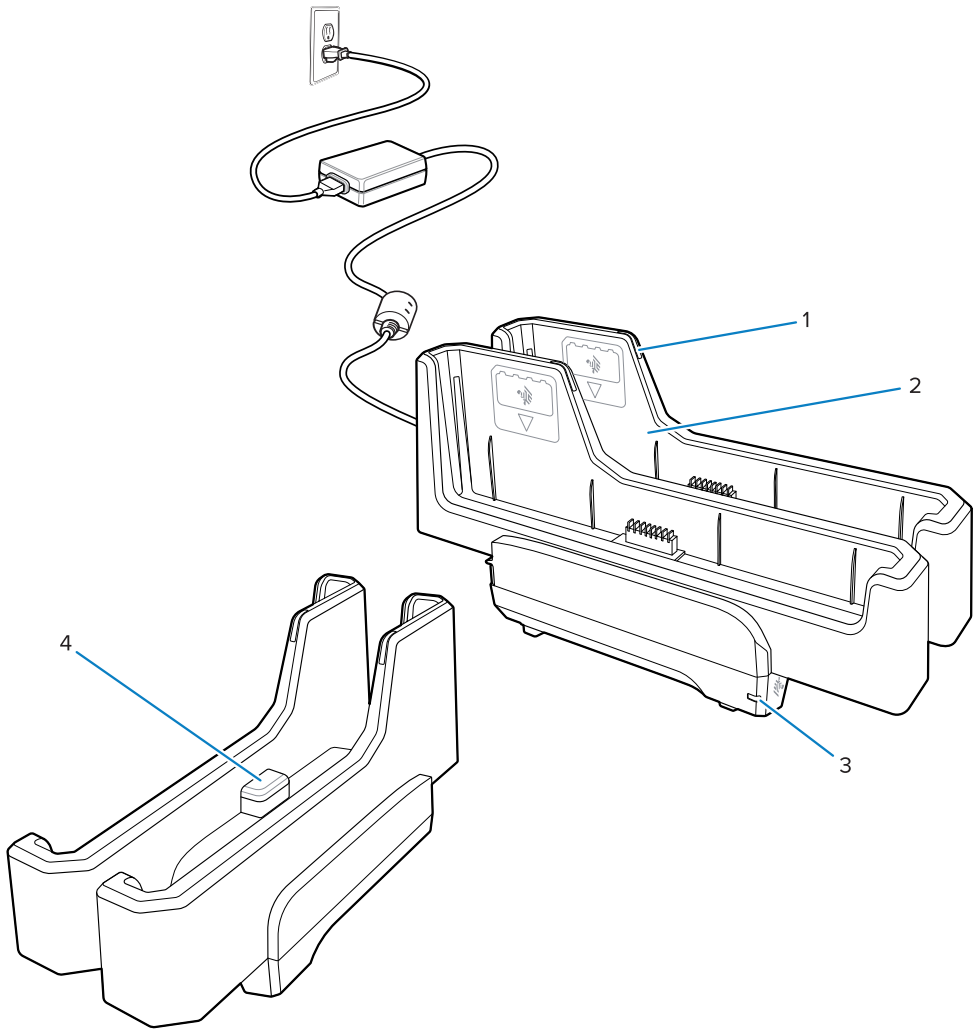


2-Slot Battery Charger

Use the 2-slot Battery Charger to charge up to two standard or extended batteries.

CAUTION: Ensure that you follow the guidelines for battery safety described in Battery Safety Guidelines.

Figure 19 2-Slot Battery Charger



1	Battery Charge LED
2	Battery slot
3	Power LED
4	USB-C port The USB-C port is a service connector only for firmware upgrades and is not intended for power charging.

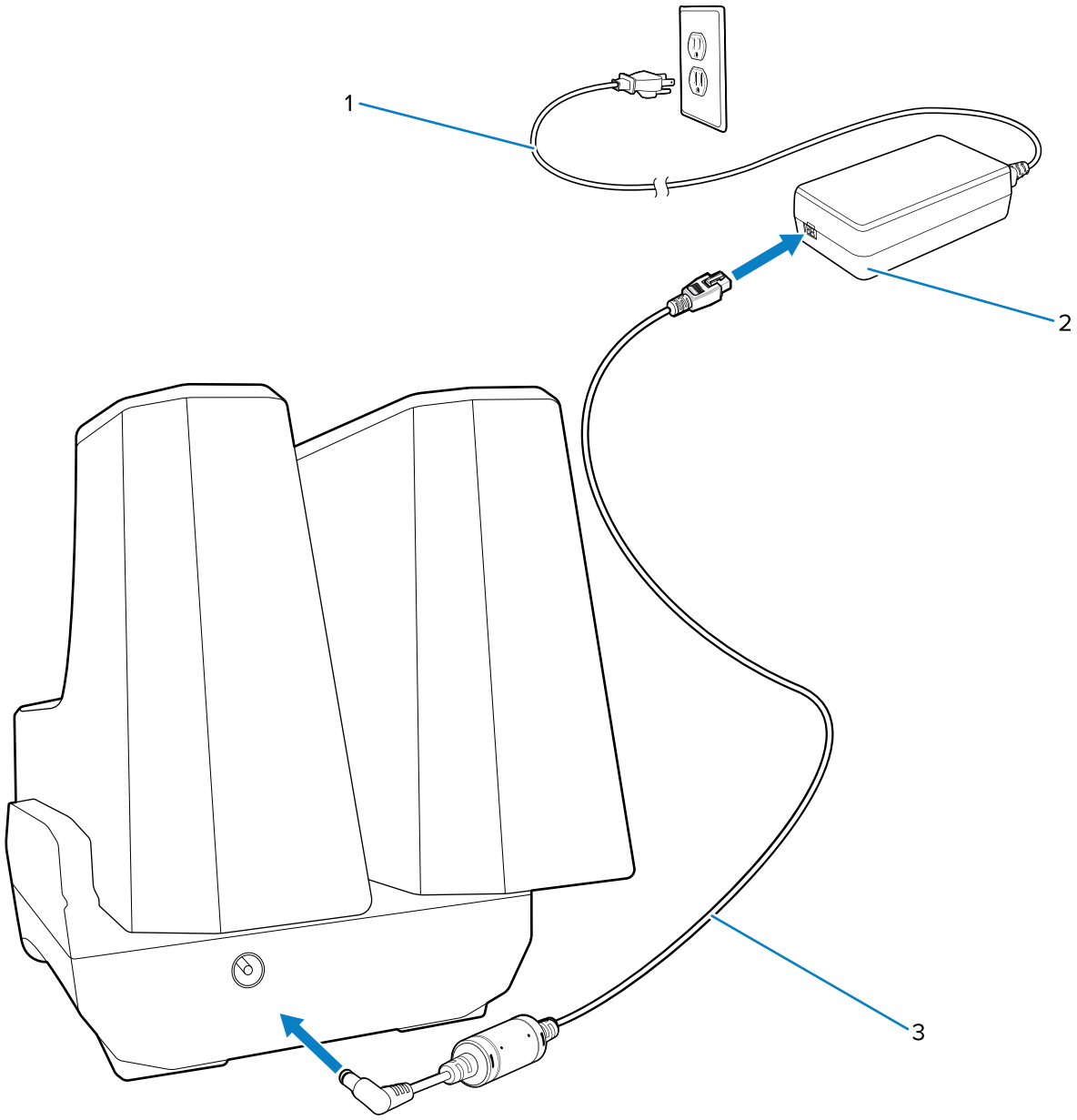
See Spare Battery Charging for more information.

Setup

Before using the charger, connect it to power.

1. Plug the power supply plug into the power port on the back of the charger.

2. Plug the AC line cord into the power supply.
3. Plug the AC line cord into an AC outlet.



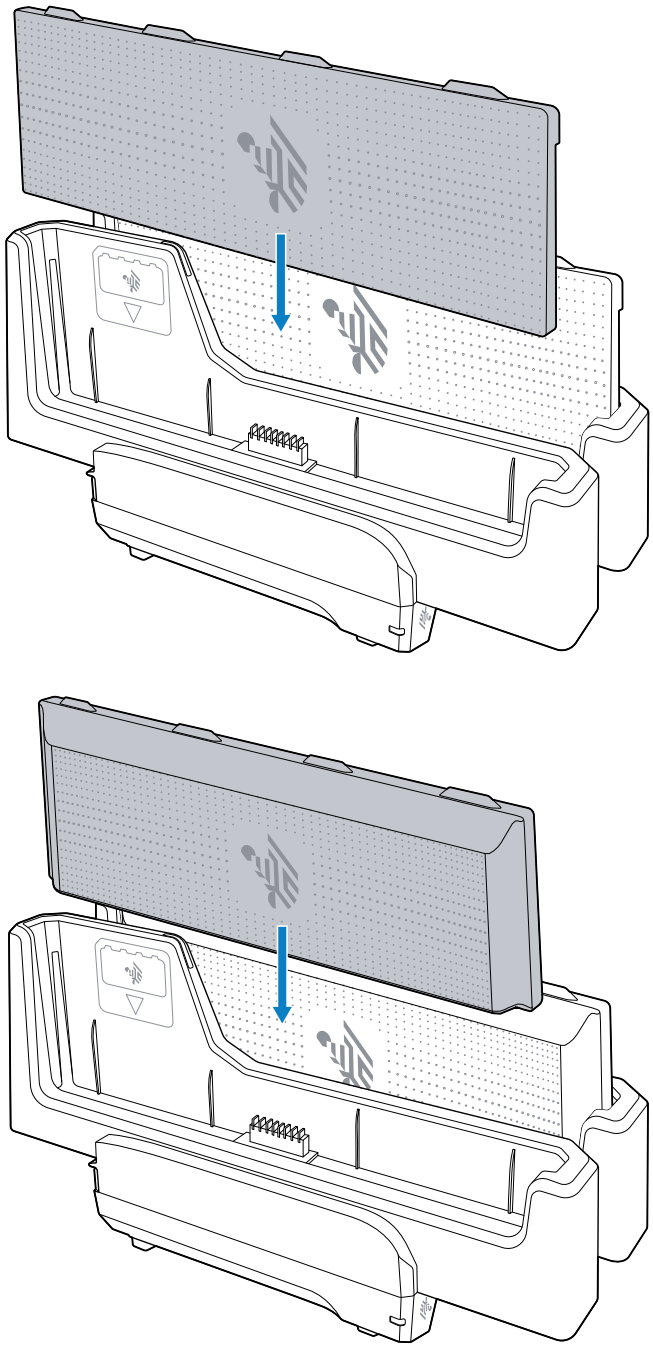
1	AC line cord
2	Power supply
3	DC line cord

Charging Spare Batteries

Charge the ET6x standard or extended batteries in the 2-slot Battery Charger.

1. Connect the charger to a power source.

2. Insert the battery into a battery charging slot with the Zebra logo facing down.



3. Gently press down on the battery to ensure proper contact.

Each Battery Charging LED indicates the status of the battery charging in each slot. See Spare Battery Charging for spare battery charging indicator descriptions.

Spare Battery Charging

The Spare Battery Charging LED on the cup indicates the status of the spare battery charging. The standard battery charges from 4% to 80% in 2.5 hours. The extended battery charges from 4% to 80% in 5.5 hours.

To achieve optimal fast charging results, use only Zebra charging accessories and batteries.

Table 13 Spare Battery LED Charging Indicators

Indication	Description
Solid Amber	The spare battery is charging.
Solid Green	The spare battery charging is complete.
Solid Red	The spare battery is charging, and the battery is at the end of its useful life. Charging is complete, and the battery is at the end of its useful life.
Fast Blinking Red (2 blinks/second)	Error in charging; check the placement of the spare battery and battery at the end of its useful life.
Off	No spare battery in the slot. The spare battery is not placed in the slot correctly. The charger is not powered.

USB Keyboards

Use the USB keyboards with the tablet.

- QWERTY keyboard - Requires USB cable (CBL-ET-KBUSB1-01) or USB/RS232 Y-Cable (CBL-ET-KBUSB2-01)
- AZERTY keyboard - Requires USB cable (CBL-ET-KBUSB1-01) or USB/RS232 Y-Cable (CBL-ET-KBUSB2-01)
- USB QWERTY Keyboard (KYBD-QW-ET-S-1) - QWERTY style keyboard with USB cable.

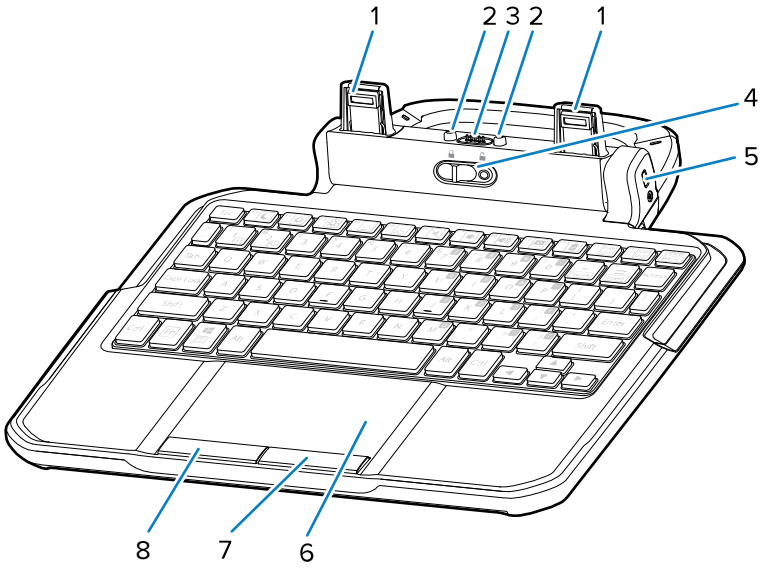
The keyboard can be mounted on the Vehicle Dock Keyboard Mount or on an external RAM mount.

2-in-1 Keyboard

Use the 78-key 2-in-1 keyboard to convert the tablet into a laptop.

The 78-key keyboard comes in English, Spanish, and French keyboard configurations.

Figure 20 2-in-1 Keyboard



1	Keyboard latch	Connects keyboard to the tablet.
2	Keyboard alignment pins	Aligns the tablet to the keyboard during installation.
3	Tablet interface connector	Interface to the tablet.
4	Locking switch	Locks the keyboard to the tablet. Use provided M2x3 Philips head screws to prevent unlocking the keyboard from the tablet in hazardous locations.
5	Kensington lock slot	Pairs with a standard security cable lock. Secures both the tablet and keyboard.
6	Touchpad	Moves the cursor and selects items on the screen.
7	Right touchpad button	Functions as a left button on an external mouse.
8	Left touchpad button	Functions as a right button on an external mouse.

Setting the Tablet Display Brightness

Use **F4** (decrease) or **F5** (increase) to change the tablet display brightness.

Setting the Keyboard Backlight Brightness

Use **F6** (decrease) or **F7** (increase) to change the keyboard backlight brightness.

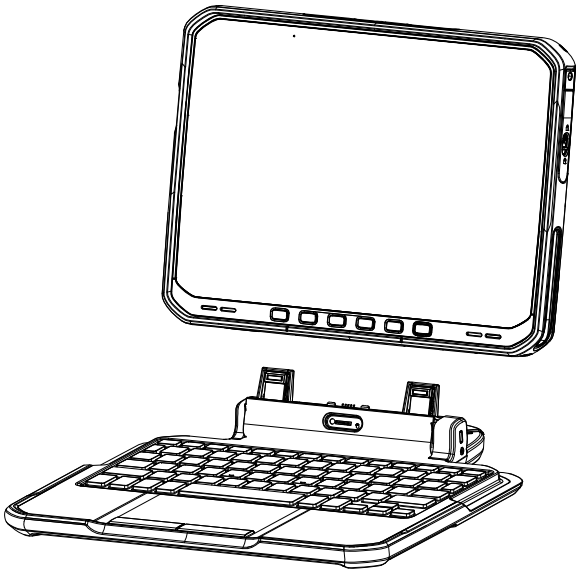
Setting the Keyboard Backlight Color

The user can change the keyboard backlight color (red (default), blue, green, or white). Use **F8** to cycle through the keyboard backlight colors.

Attaching the Keyboard

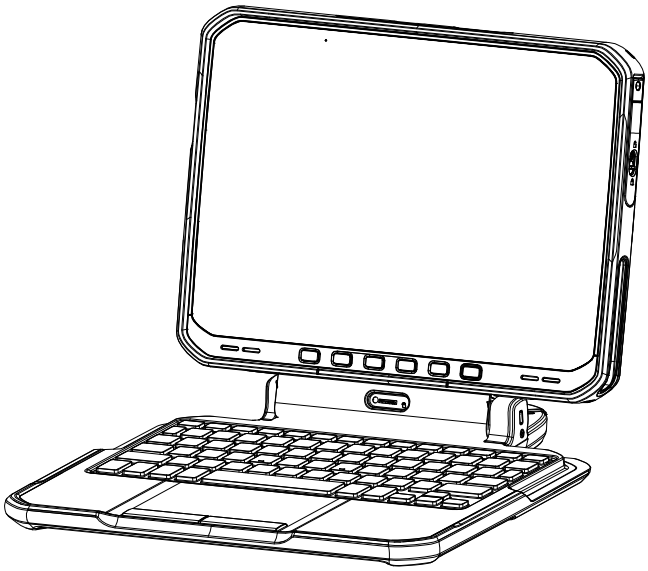
The keyboard attaches to the tablet.

1. Place the keyboard on a flat and level surface.
2. Align the keyboard alignment markings on the tablet and keyboard.

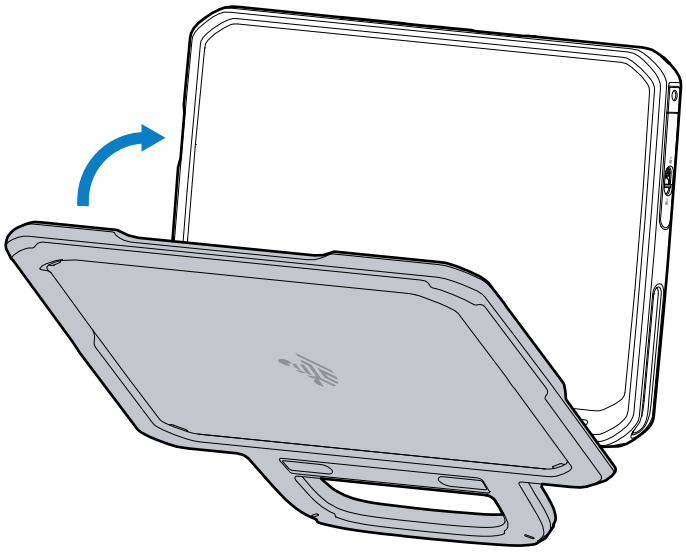


3. Gently press the tablet down onto the keyboard until you hear a click.

   When the keyboard is correctly installed, the keyboard locking switch automatically clicks into the lock position, and the orange indicator is hidden under the switch.



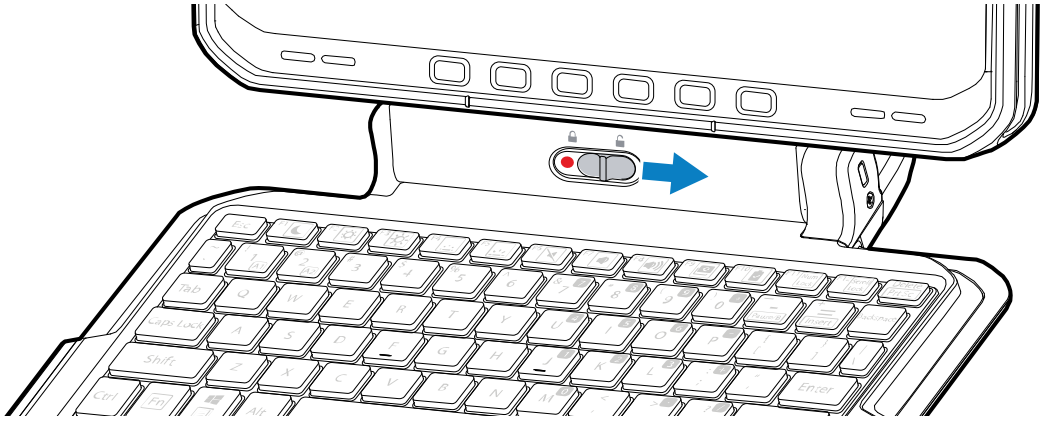
To close the keyboard, rotate the keyboard up.



Removing the Keyboard

Separate the keyboard from the tablet to use in tablet mode.

1. Place the tablet on a flat and level surface.
2. Ensure the keyboard and tablet are in the open position.
3. Move the keyboard locking switch to the Unlock position.



When in the unlock position, the orange indicator is visible to the left of the switch.

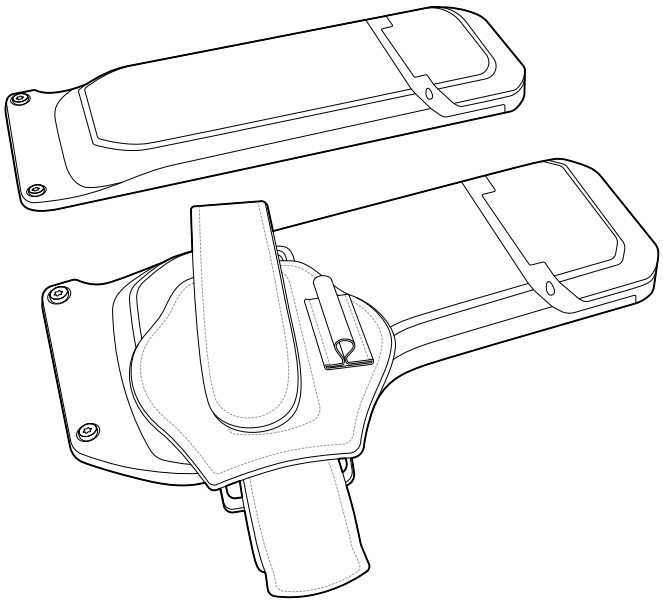
4. Lift the tablet from the keyboard.

Smart Card / CAC Reader

Use the Smart Card / CAC Reader to read smart cards and common access cards (CAC). These cards are used for identification, accessing data, and secure transactions.

NOTE: The reader is available with and without a hand strap.

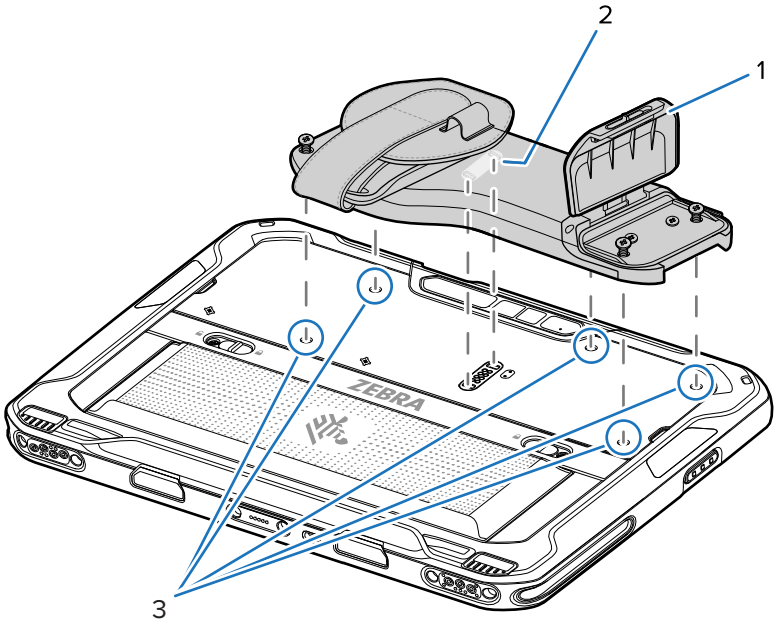
Figure 21 Smart Card / CAC Reader



Installing the Smart Card / CAC Reader

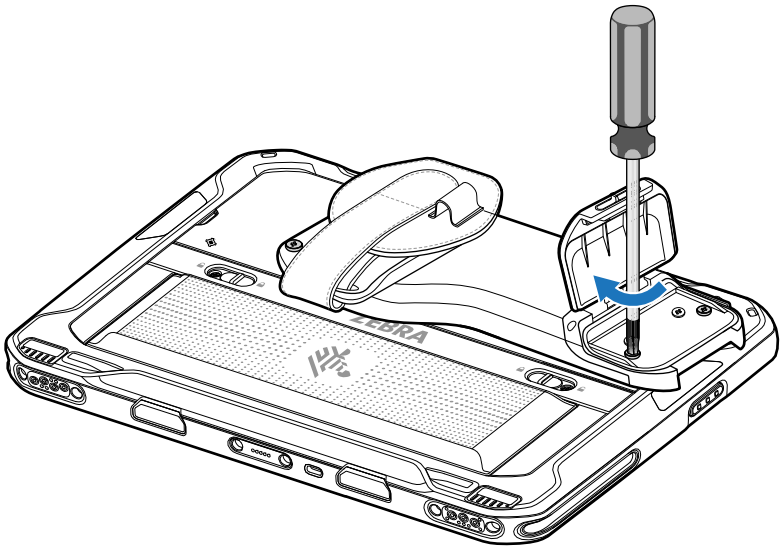
The optional Smart Card / CAC Reader attaches to the back of the device.

1. Open the reader door (1).



2. Align the two tabs (2) on the reader with the connector on the device.
3. Press down on each screw to puncture the mylar (3).

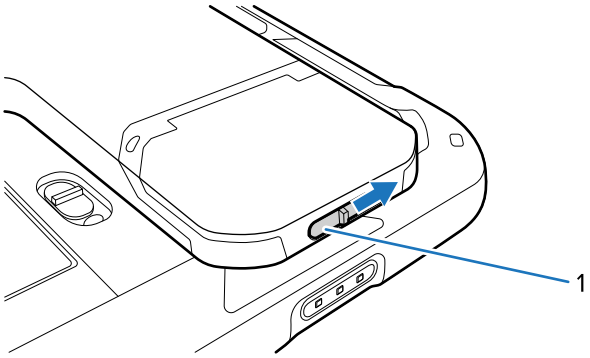
4. Secure the reader to the device using five captive screws. Torque to 4.5 kgf-cm (3.9 lbf-in.).



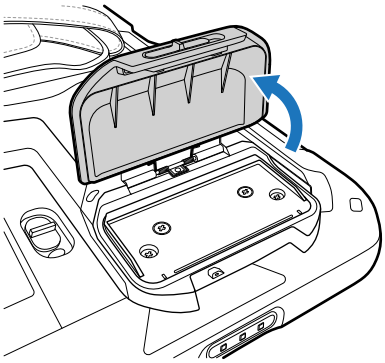
Using the Smart Card / CAC Reader

Inserts the card into the reader for identification and access to the device.

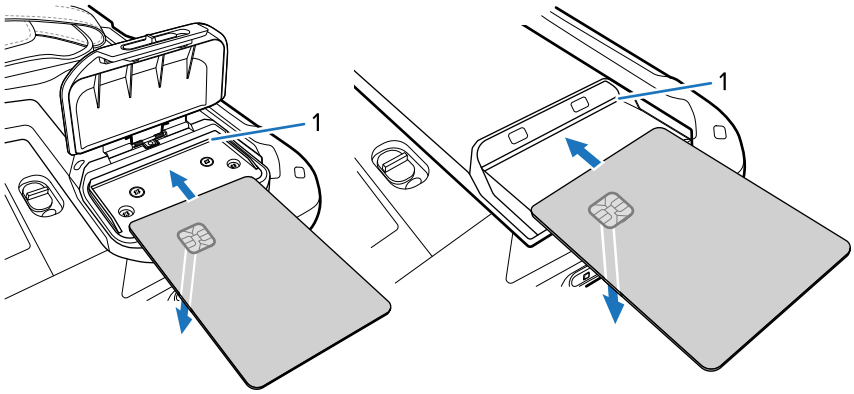
1. If the reader door is installed, slide the door latch (1) to open the reader door.



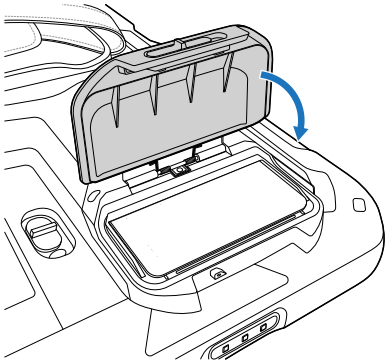
2. Lift the reader door (if installed).



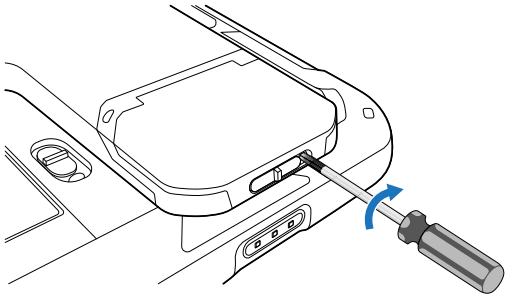
3. Insert the card (chip facing down) into the card slot (1).



4. Close reader door (if installed).



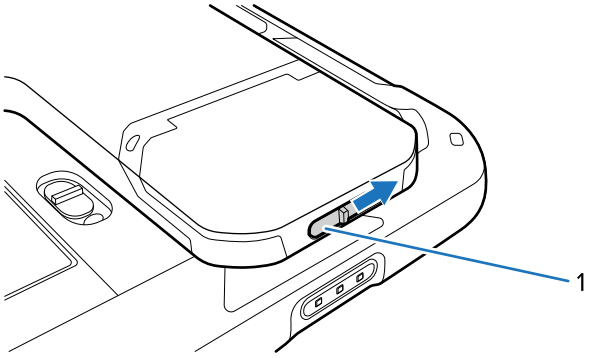
5. If required, secure the door with a M1.6 screw. Torque to 1.5 kgf-cm (1.3 lbf-in.).



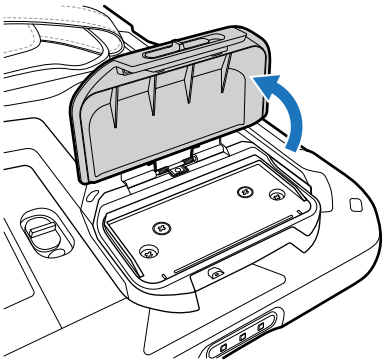
Removing the Reader Door

The reader door provides security for an installed card. If this security is not required, remove the door.

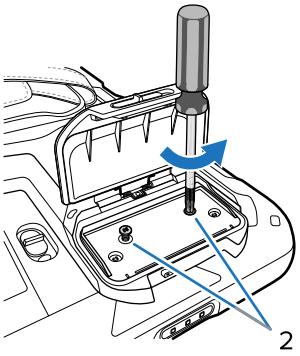
1. If the reader door is installed, slide the door latch (1) to open the reader door.



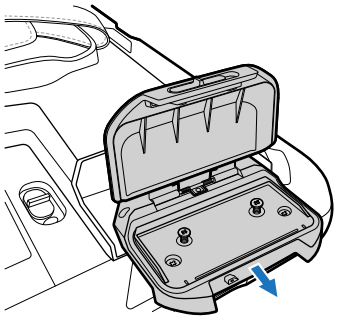
2. Open the reader door.



3. Loosen two captive screws (2).



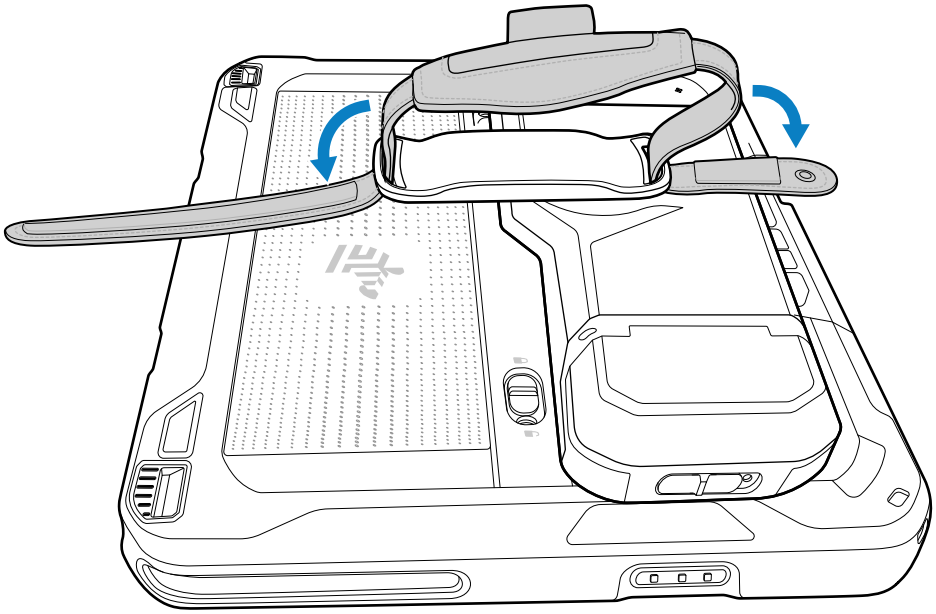
4. Pull the reader door out of the reader.



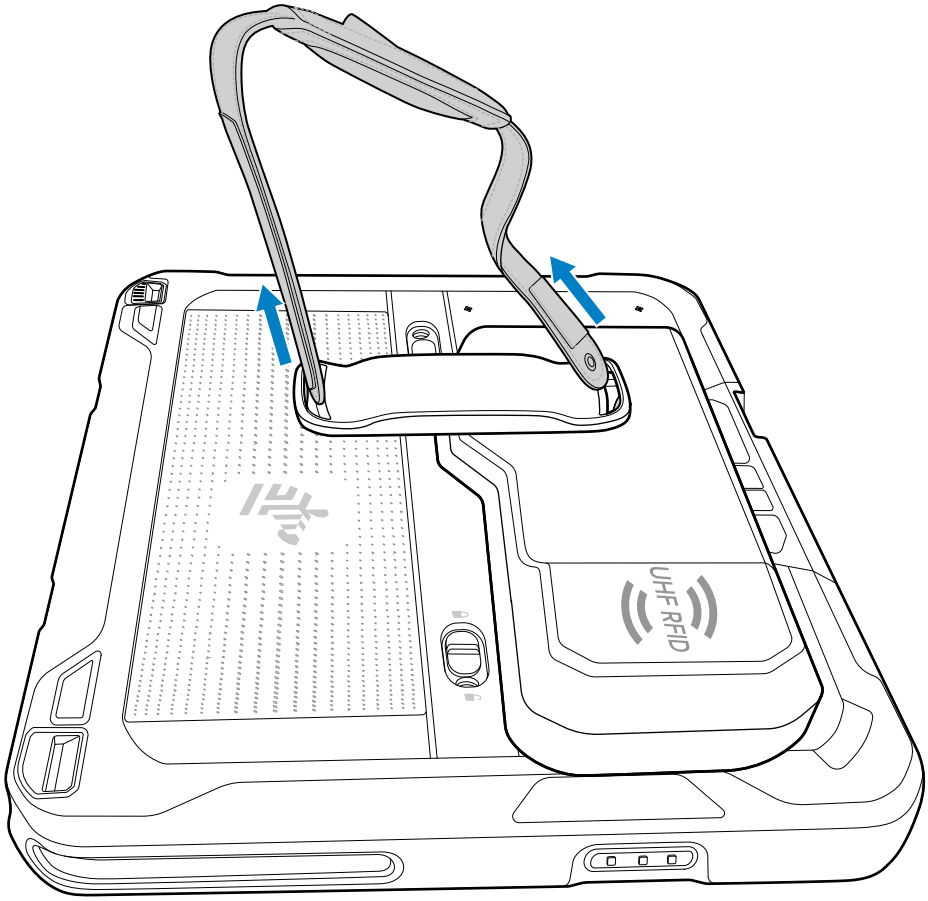
Replacing the Smart Card / CAC Reader Hand Strap

The reader comes with a hand strap installed. If the hand strap becomes damaged, replace it.

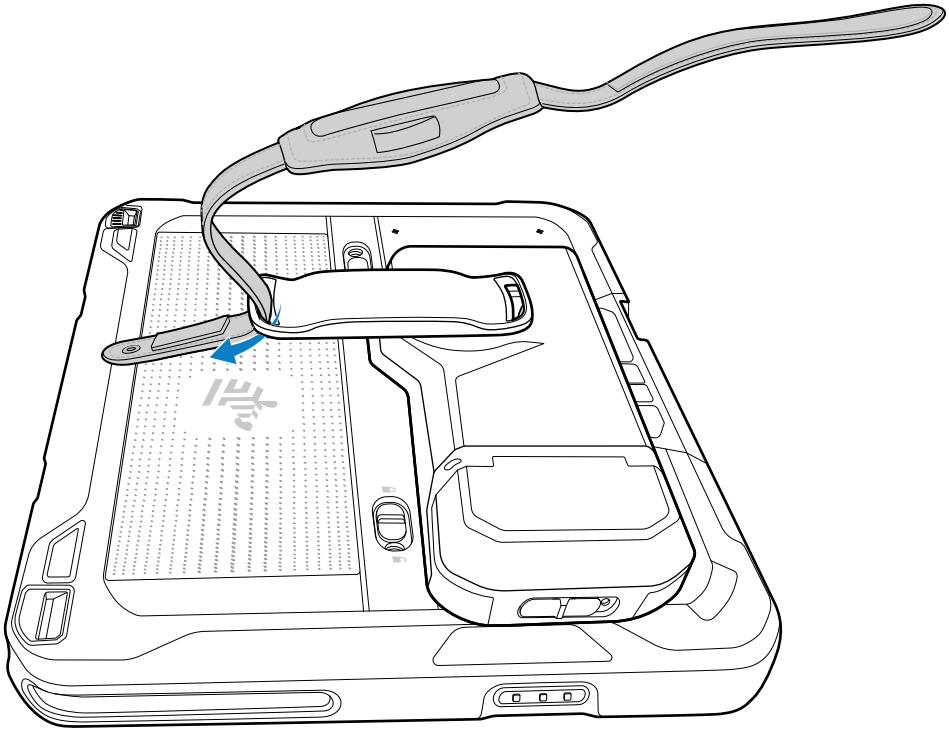
1. Open both ends of the hand strap.



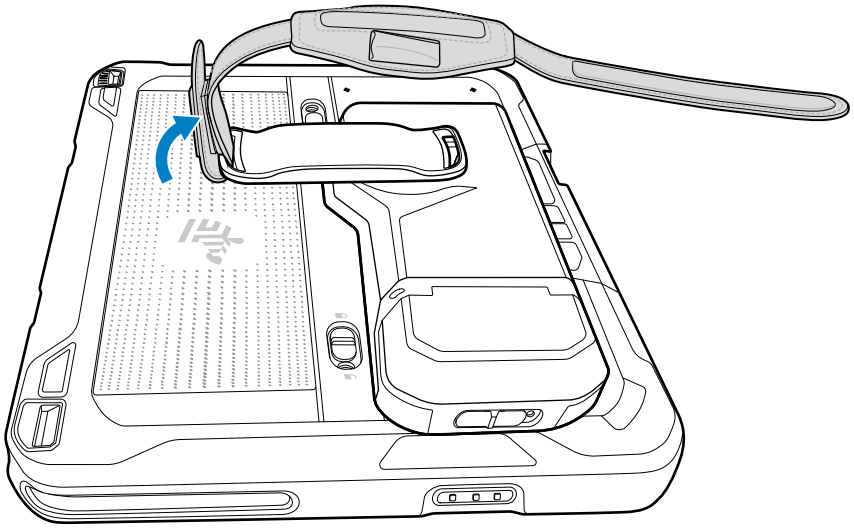
2. Pull both ends of the hand strap through the slots in the reader.



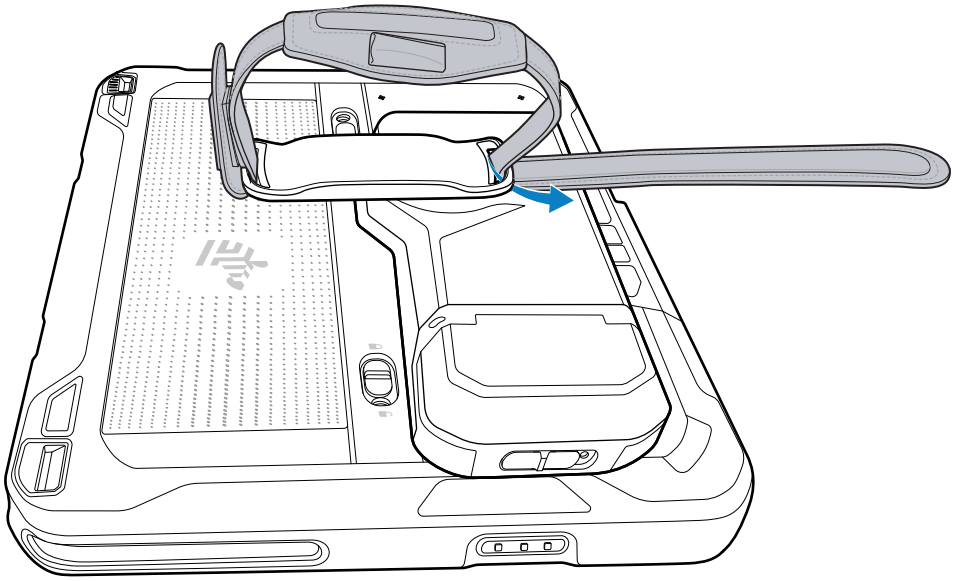
3. Insert the eyelet end of the replacement hand strap into the slot.



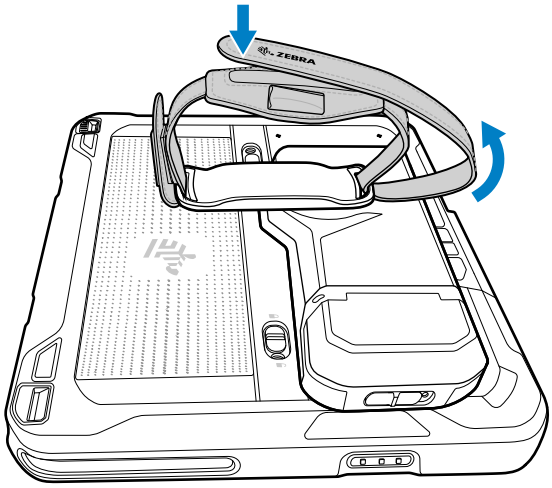
4. Fold the end up and press against the hook and loop material.



5. Insert the other end into the slot.



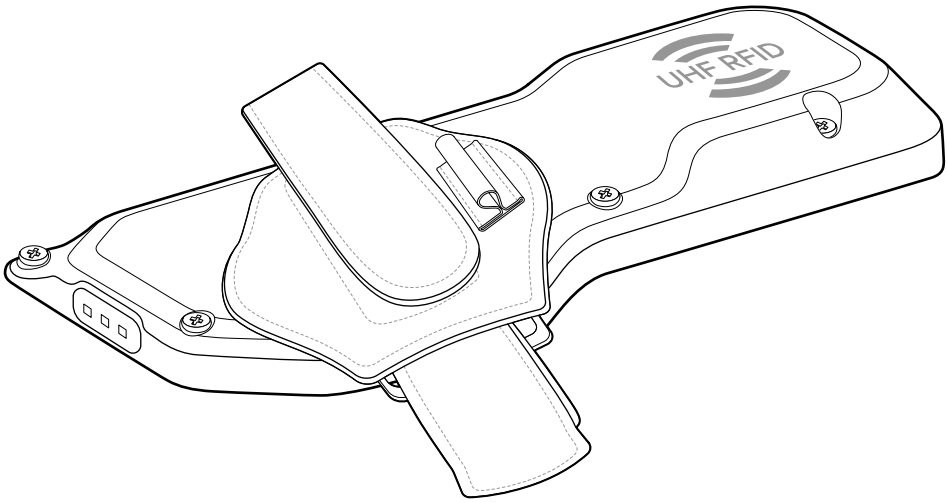
6. Fold the end up and press against the hook and loop material.



RFID Reader

The optional RFID Reader adds RFID reading capability to the device.

Figure 22 RFID Reader

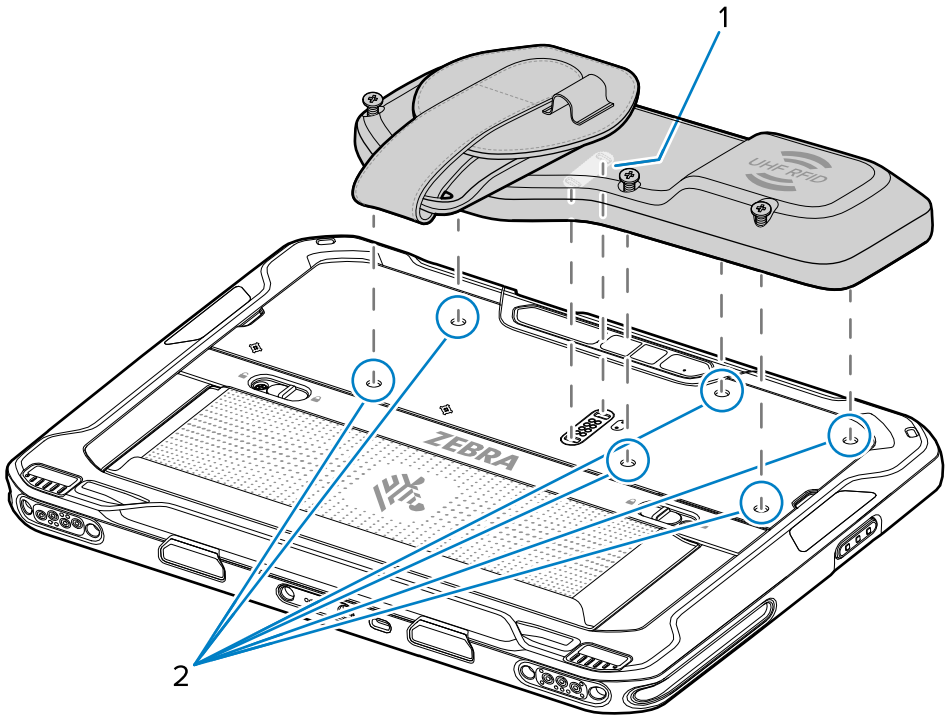


The reader must be installed on the device before using it.

Installing the RFID Reader

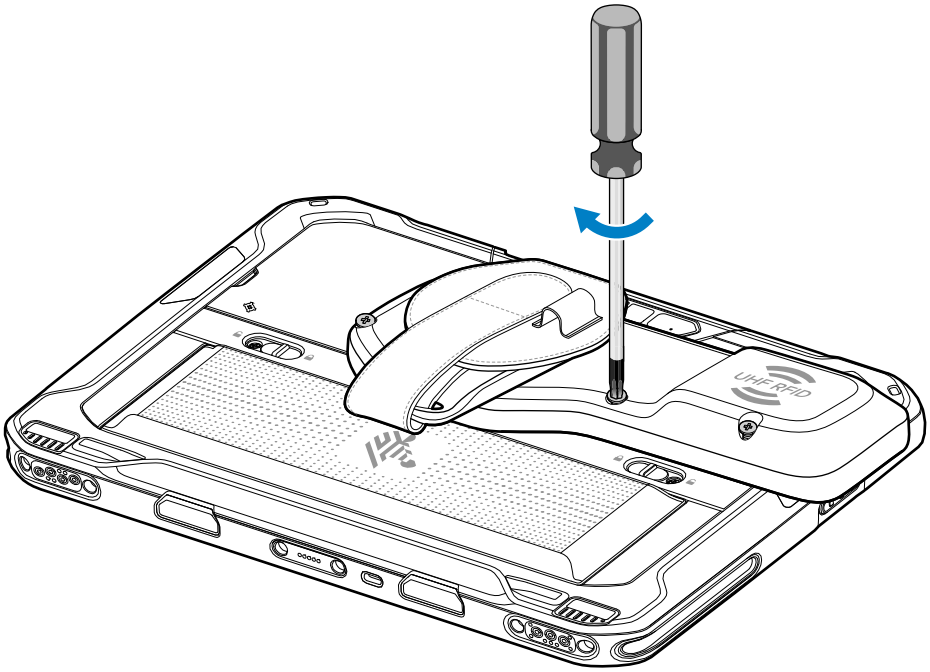
The optional RFID Reader attaches to the back of the device.

1. Align the two tabs (1) on the Reader with the connector on the device.



2. Press down on each screw to puncture the mylar (2).

3. Secure the Reader to the device using six captive screws. Torque to 4.5 kgf-cm (3.9 lbf-in.).



Using the RFID Reader

Use the RFID reader to capture RFID tag information.

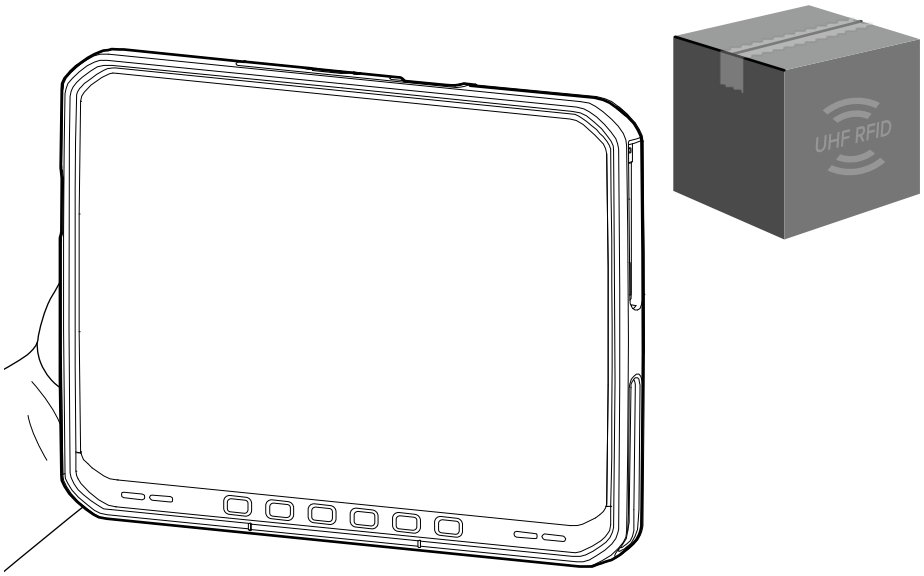
NOTE:

Download the 123RFID demo app before using the RFID Reader. Go to zebra.com/support.

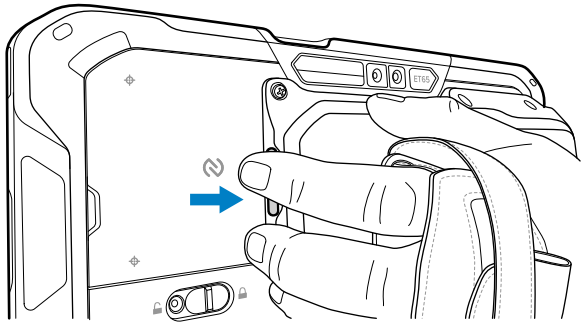
For RFID SDK, go to techdocs.zebra.com.

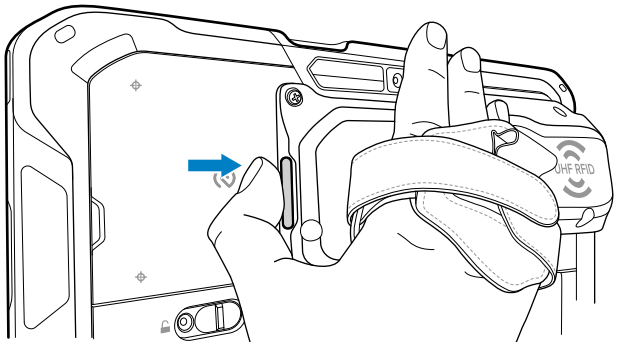
1. On the ET6xW, open an RFID reader app.

2. Point the RFID antenna in the direction of the RFID tags. The tags should be no more than 1 m (39.37 in.) from the RFID Reader.



3. Press the Read button to initiate the reading of RFID tags.

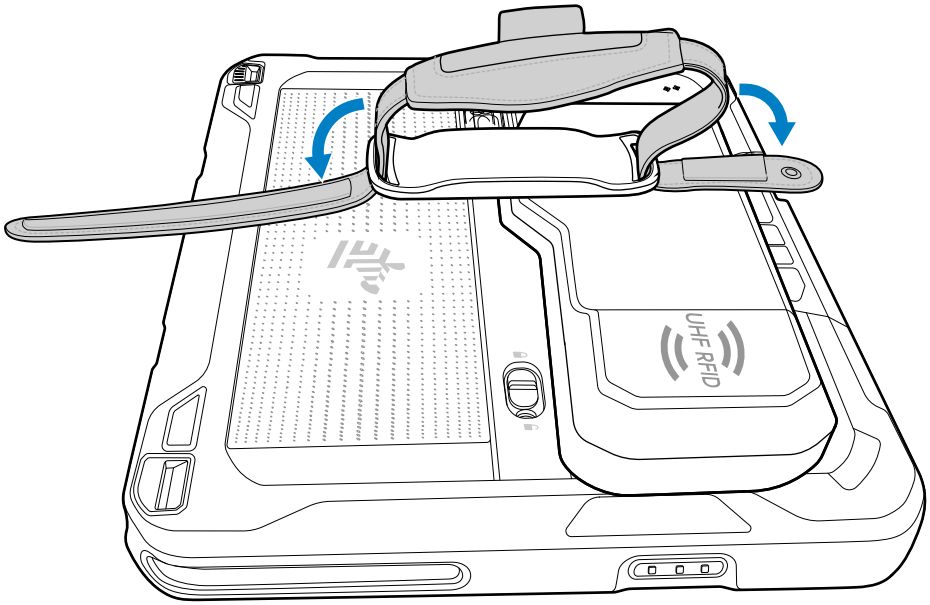




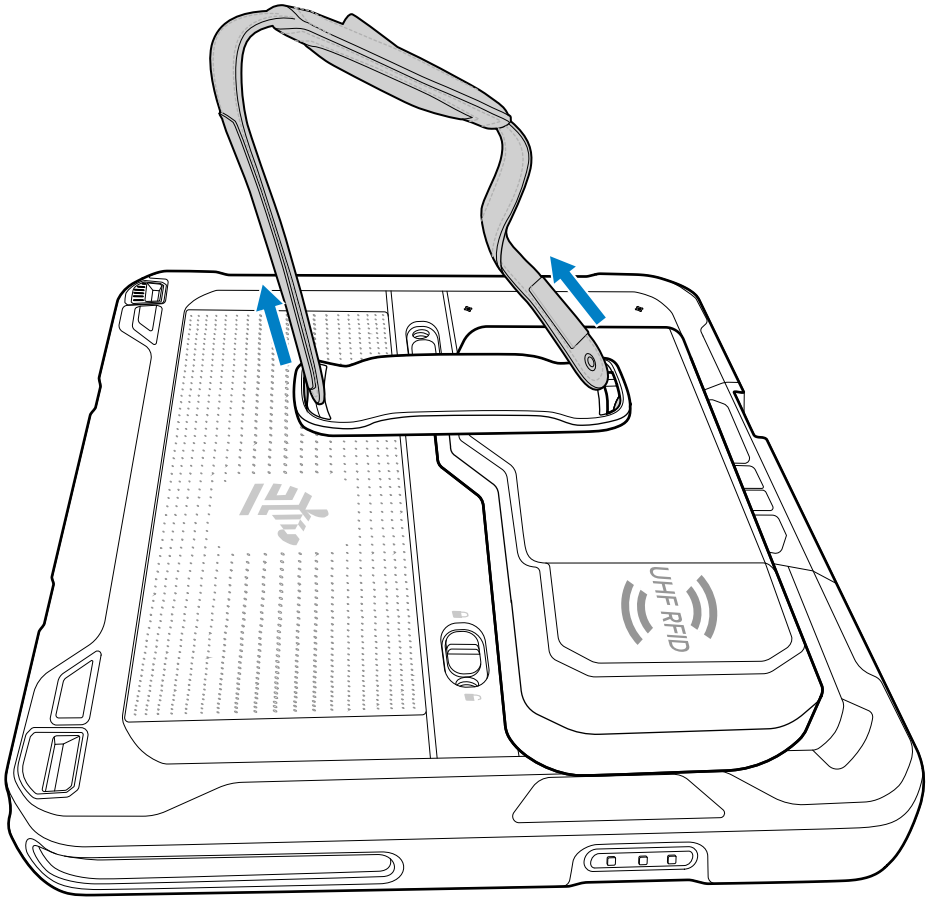
Replacing the RFID Reader Hand Strap

The reader comes with a hand strap installed. If the hand strap becomes damaged, you can replace it.

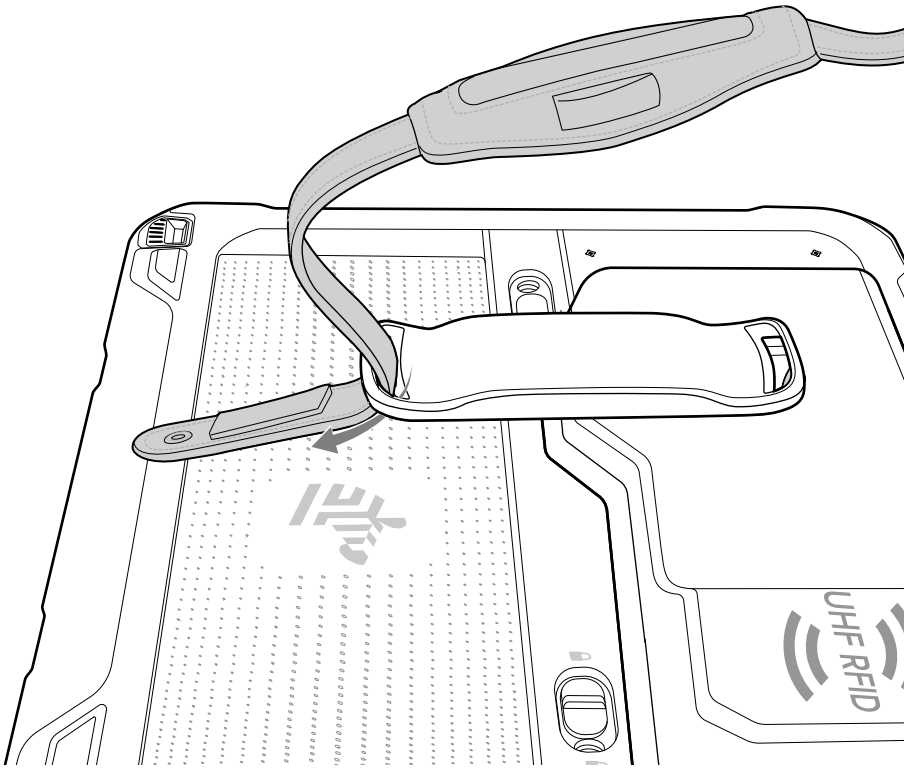
1. Open both ends of the hand strap.



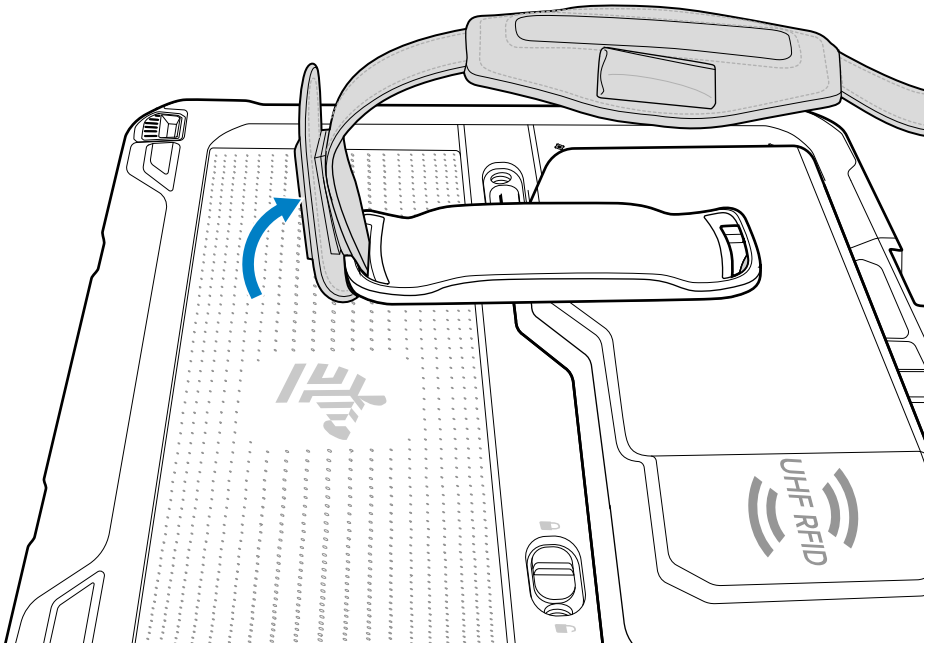
2. Pull both ends of the hand strap through the slots in the reader.



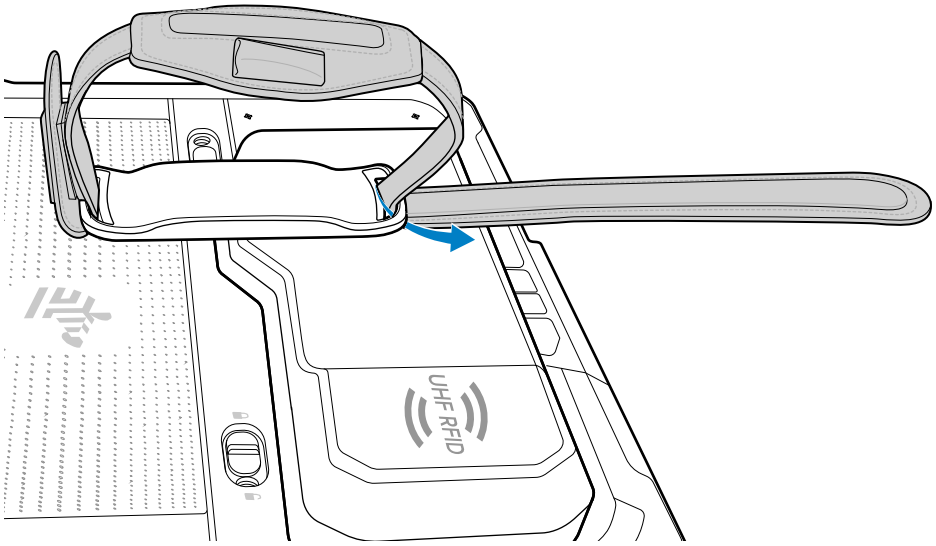
3. Insert the eyelet end of the replacement hand strap into the slot.



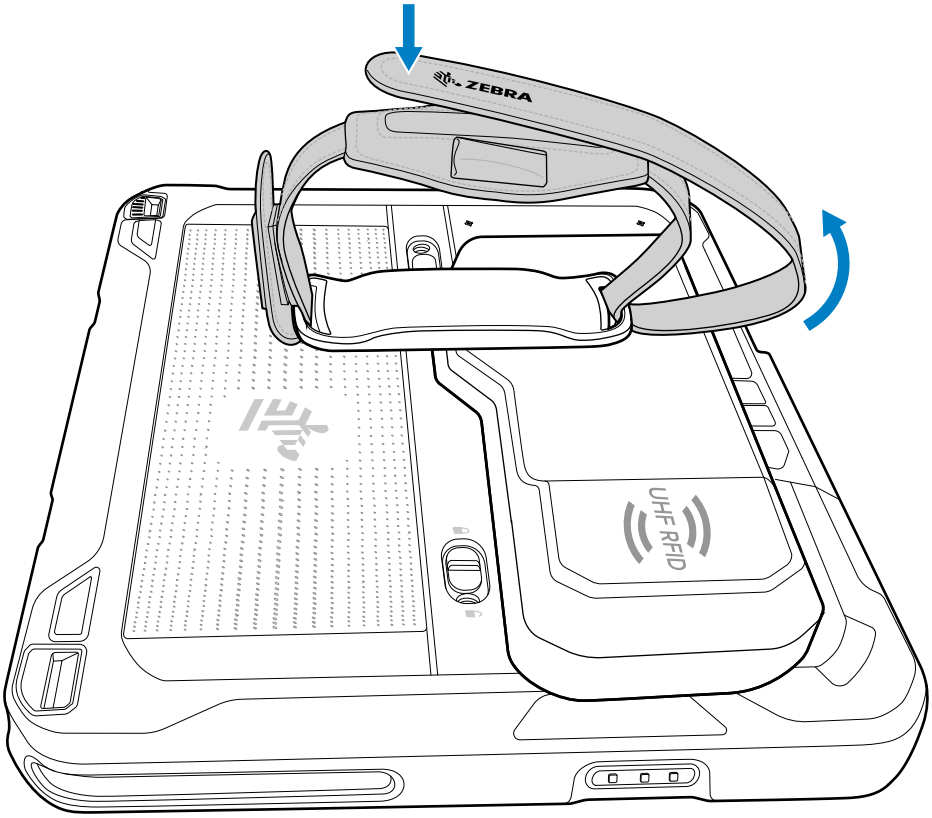
4. Fold the end up and press against the hook and loop material.



5. Insert the other end into the slot.



6. Fold the end up and press against the hook and loop material.

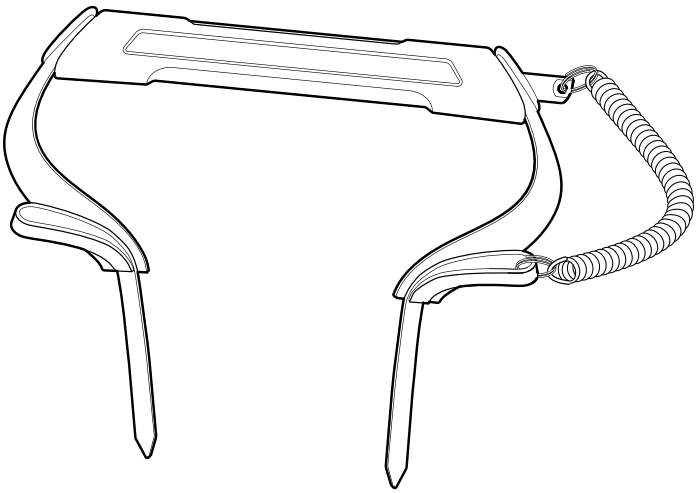


Soft Handle

Attach the Soft Handle to carry the tablet.

The Soft Handle comes with a Stylus Slot and a Coiled Stylus Tether.

Figure 23 Soft Handle

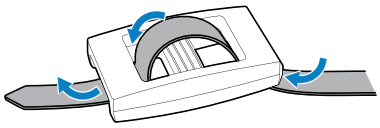


Attaching the Soft Handle

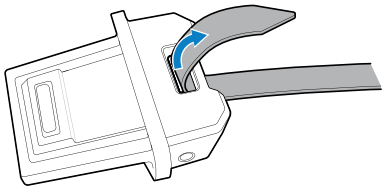
The Soft Handle requires the D-Clips to attach to the tablet.

NOTE: To install the Soft Handle, the ET60/ET65 D-Clips are required. The D-Clips and Soft Handle are each sold separately.

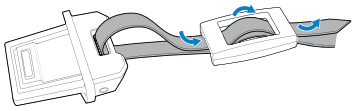
1. Feed Soft Handle strap through buckle.



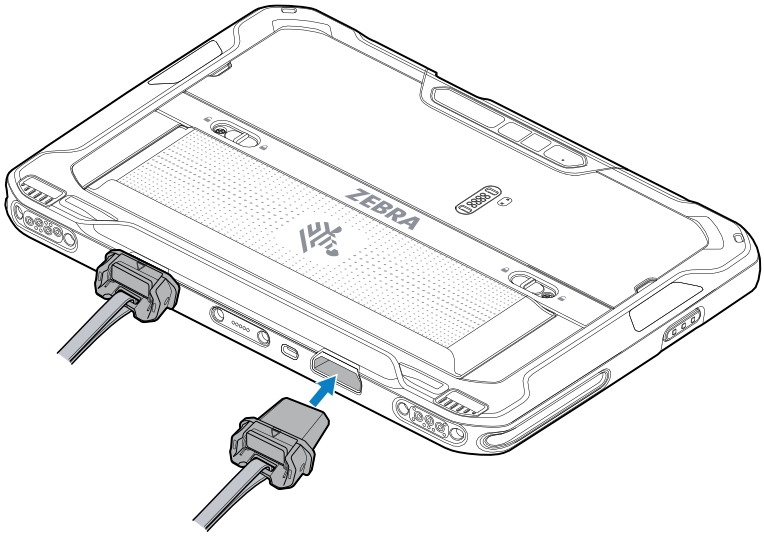
2. Feed the Soft Handle strap through D-Clip.



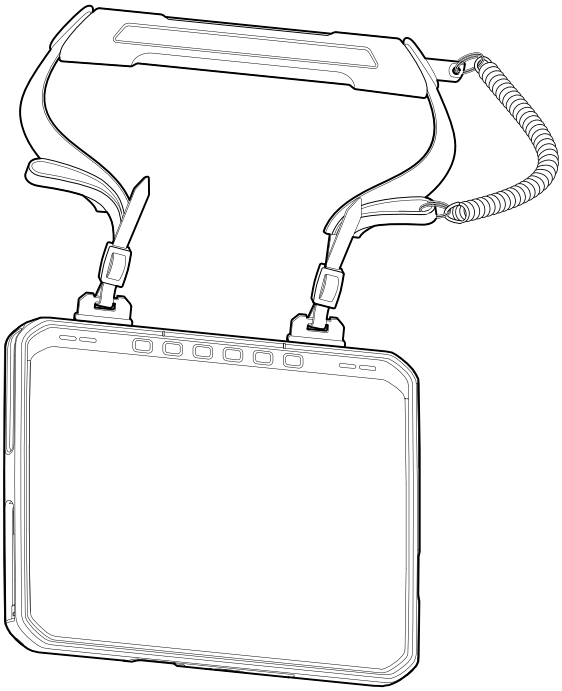
3. Feed the Soft Handle strap through buckle.



4. Insert the D-Clips into the bottom of the tablet.



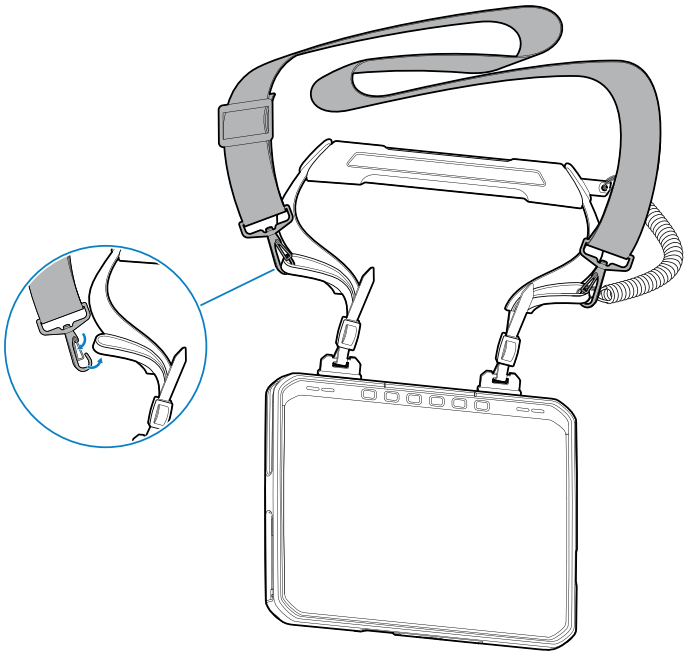
Use the Soft Handle to carry the tablet.



Attaching the Shoulder Strap to the Soft Handle

Attach the Shoulder Strap to the Soft Handle for additional carrying options.

1. Attach the clips of the Shoulder Strap to the loops on the Soft Handle.

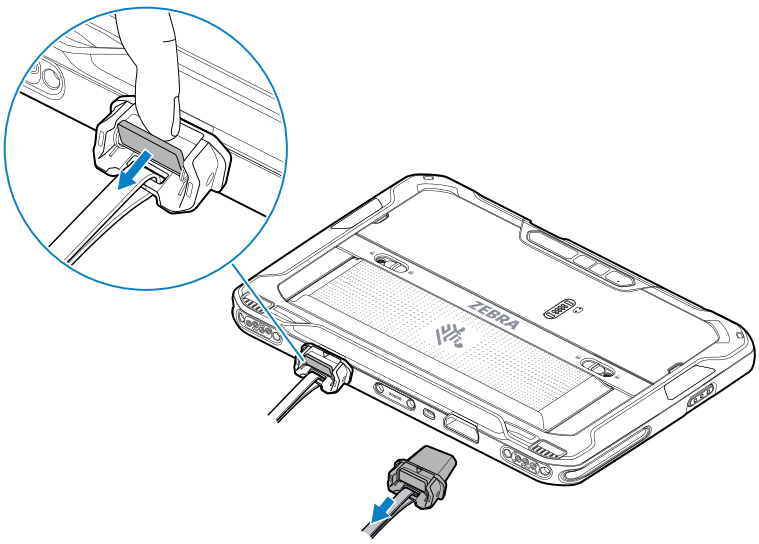


2. Ensure that the clips are closed properly.

Removing the D-Clips

Remove the D-Clips to detach the Soft Handle or Shoulder Strap from the tablet.

1. Lift the release latch.



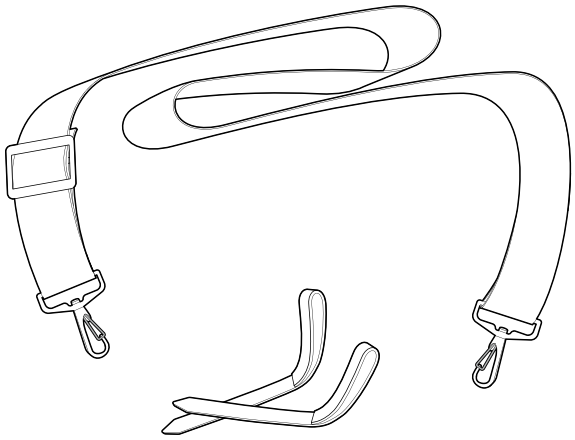
2. Pull the D-Clip out of the tablet.

Shoulder Strap

Use the Shoulder Strap to carry the tablet.

NOTE: The Shoulder Strap requires ET60/ET65 D-Clips. The D-Clips are sold separately.

Figure 24 Shoulder Strap

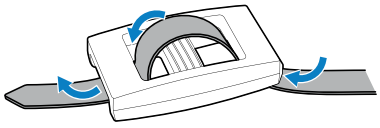


Attaching the Shoulder Strap

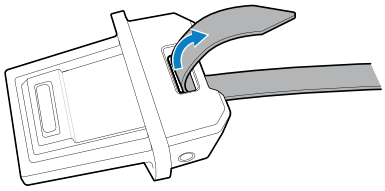
The Shoulder Strap requires the D-Clips to attach to the tablet.

NOTE: To install the Shoulder Strap, the ET60W/ET65W D-Clips are required. The D-Clips and Shoulder Strap are each sold separately.

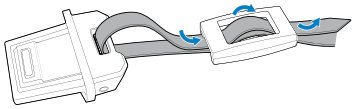
1. Feed small strap through buckle.



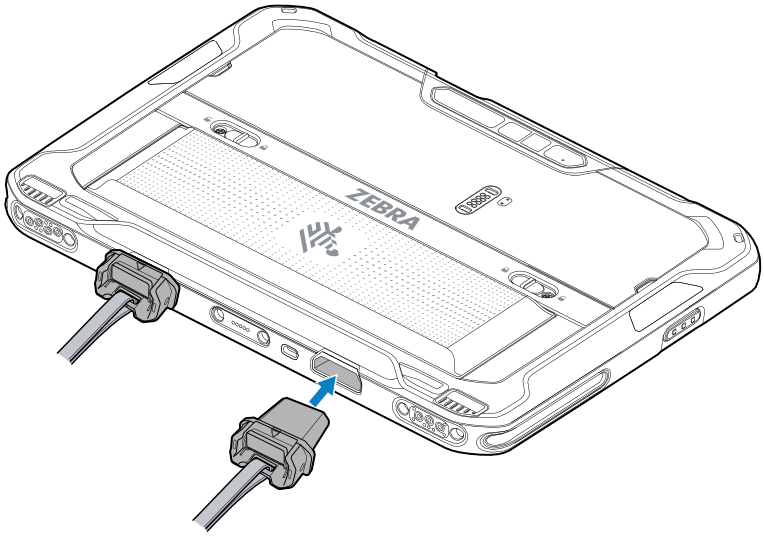
2. Feed the Soft Handle strap through D-Clip.



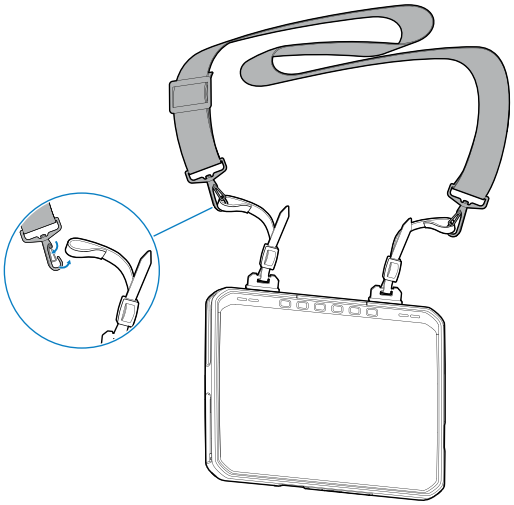
3. Feed the Soft Handle strap through buckle.



4. Insert the D-Clips into the bottom of the tablet.



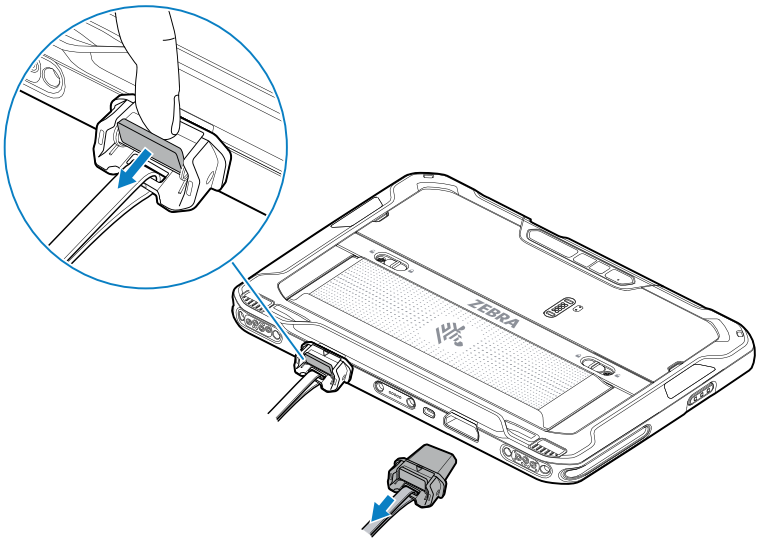
5. Attach the Shoulder Strap clips to the loop in the small strap.



Removing the D-Clips

Remove the D-Clips to detach the Soft Handle or Shoulder Strap from the tablet.

1. Lift the release latch.



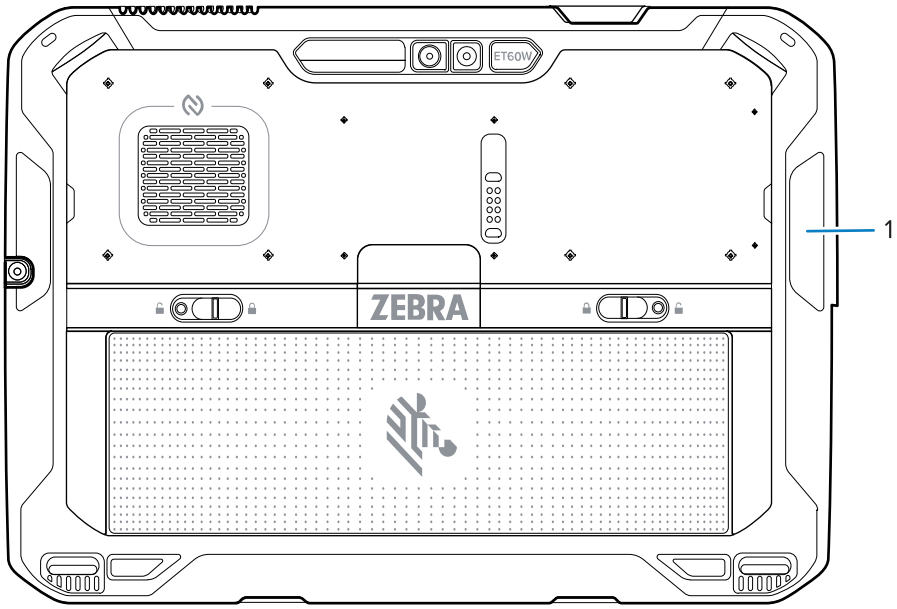
2. Pull the D-Clip out of the tablet.

Stylus Holder

The Stylus Holder mounts on the device and holds a stylus for easy availability.

NOTE: The Stylus Holder must be applied to the right trapezoid area (1) on the back of the tablet.

Figure 25 Stylus Holder Mounting Locations



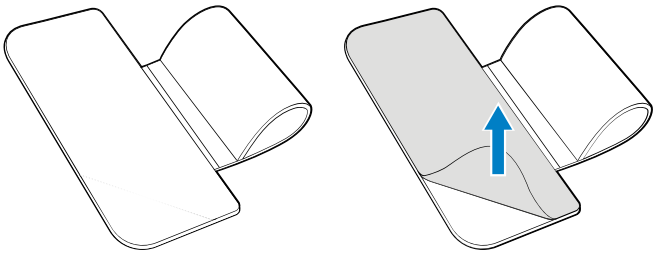
1	Trapezoid mounting areas

Installing the Stylus Holder

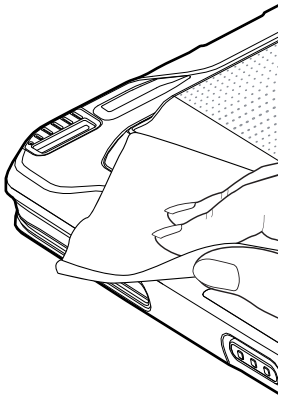
Install the Stylus Holder onto the tablet to hold a stylus for easy access.

To install the Stylus Holder:

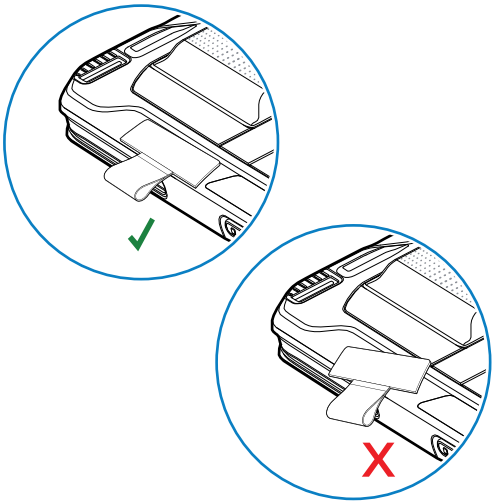
1. Remove the adhesive backing.



2. Using the cleaning cloth, wipe the area on the tablet.



3. Align the Stylus Holder on to the tablet and press down to adhere to the tablet.



Vehicle Dock Installation

This section describes different ways to install the Vehicle Dock.

The device can be installed in a variety of ways:

- Position the device horizontally on a desk or mounted on a vehicle console.
- Wall mount the device using the optional wall mount.
- Overhead mount on a lift truck cage using mounting hardware.

Depending on the vibration resistance and pivoting demands, mounting brackets, clamp feet, or RAM mount elements can also be used to attach the device. Contact your Zebra sales office to learn more about the available installation options.

WARNING: The unit could fall during transit or installation/mounting and cause injury. Always ensure that there are two people available when installing or removing the device.

Mounting Safety

Failure to install the Vehicle Dock correctly, or modifications to the Vehicle Dock, may result in serious injury or damage to property.

CAUTION:

Do not install the Vehicle Dock in a location that affects vehicle safety, visibility, or ability to drive.

If mounted above head height, it is recommended to also use a safety strap with the mount bracket.

When using the Vehicle Dock in wet locations, the user must prevent water and dust from settling on the pogo pin connectors. The tablet should always be in dock or cover dock with a plastic bag.

Tighten peripherals with thumbscrews by hand only. Do not use tools for tightening thumbscrews.

IMPORTANT: The vehicle front end connected fuse must meet UL 275. If using an external antenna, connect antenna in a vertical position to the device.

NOTE: If installing peripherals, allow enough space when selecting a mounting location.

To ensure operator safety, you must use a calibrated torque wrench and the supplied mounting hardware specific to the device model purchased when fastening the Vehicle Dock and mount. Use of a mount in vehicles driven on public roads or highways is prohibited. Contact Zebra Technical Support or your Zebra

representative if you have a problem with mount installation. For detailed mounting information, refer to the ET6x Product Reference Guide at zebra.com/support.

Electrical Guidelines

There are various electrical potentials when installing the Vehicle Dock on a vehicle such as a forklift.

WARNING:

Most electrically driven forklift vehicles have floating chassis connected to neither DC+ or DC-. However, electrical faults can cause the battery + or - to be connected to the chassis via low resistance paths. All connected peripherals must be completely isolated.

The Vehicle Dock accepts DC power sources with a minimum of 12 to 15 VDC nominal. A DC/DC Power Supply is required for voltages above 15 VDC nominal.

Applying a voltage above 15 VDC nominal without the DC/DC Power Supply or reversing polarity may result in permanent damage to the dock and tablet and voids the product warranty.

CAUTION: Attach the Vehicle Dock connecting cable as close to the battery as possible. Connecting the Vehicle Dock to large electrical loads, such as converters for the forklift motor may result in random restarts, malfunctions and/or irreparable damage to the Vehicle Dock and tablet.

To connect devices fed by other power sources to the device, such as printers, power up the peripheral devices at the same time or after the device to avoid start-up problems, malfunctions, or irreparable damage to the Vehicle Dock and tablet.

Wiring Guidelines

As with other vehicle cables, carefully consider the routing of the cables to ensure they do not pose a hazard to the operator or the safe operation of the vehicle. If necessary, secure the cables with cable ties or some other mechanical means to prevent loops or loose lengths of wire from catching on stationary items when the vehicle is in motion.

Before installing the cables between the Vehicle Dock and other devices, consider the following:

- Ensure that drilling holes do not damage the vehicle or its wiring.
- Protect cable runs from pinching, overheating and physical damage.
- Use grommets to protect cables that pass through metal.
- Use plastic straps and tie-downs to secure cables and connectors in their desired location, away from areas where they may get snagged or pulled.
- Keep cables away from heat sources, grease, battery acid and other potential hazards.
- Keep cables away from control pedals and other moving parts that may damage the cables or interfere with the operation of the vehicle.

CAUTION: Make sure the cables run inside the roll cage of the vehicle.

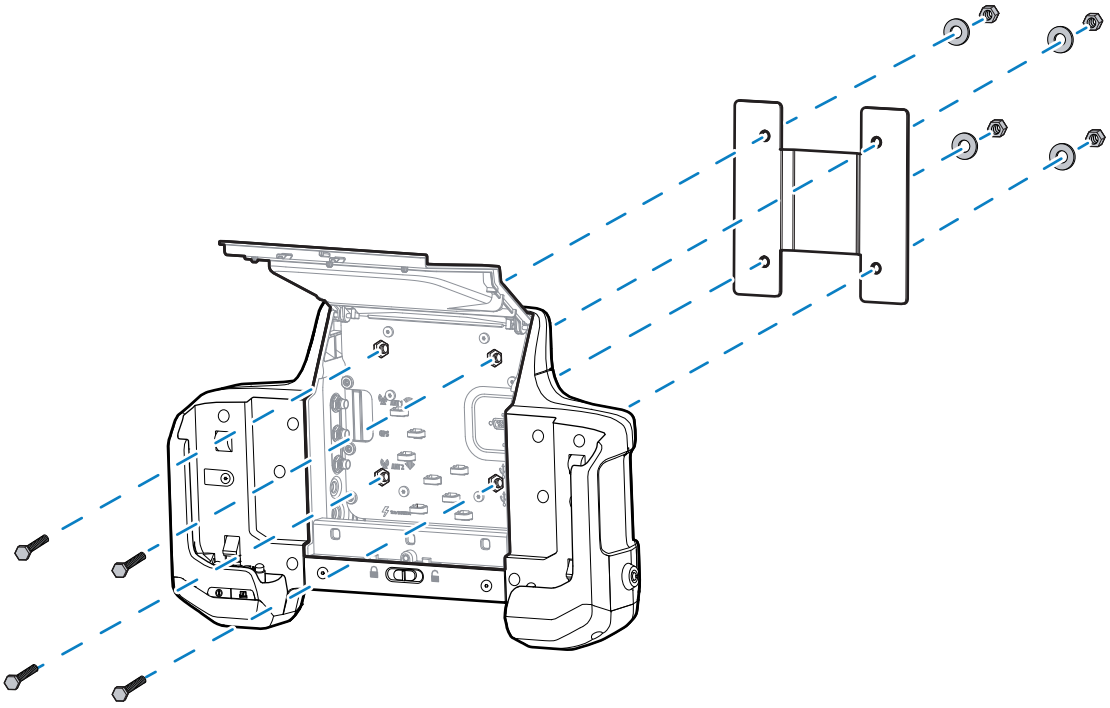
Mounting the Vehicle Dock

Mount the Vehicle Dock on various types of vehicle using 3rd party mounting hardware.

NOTE: The Vehicle Dock contains screw hole patterns for 75 mm VESA and 100 mm VESA mounts.

To mount the Vehicle Dock:

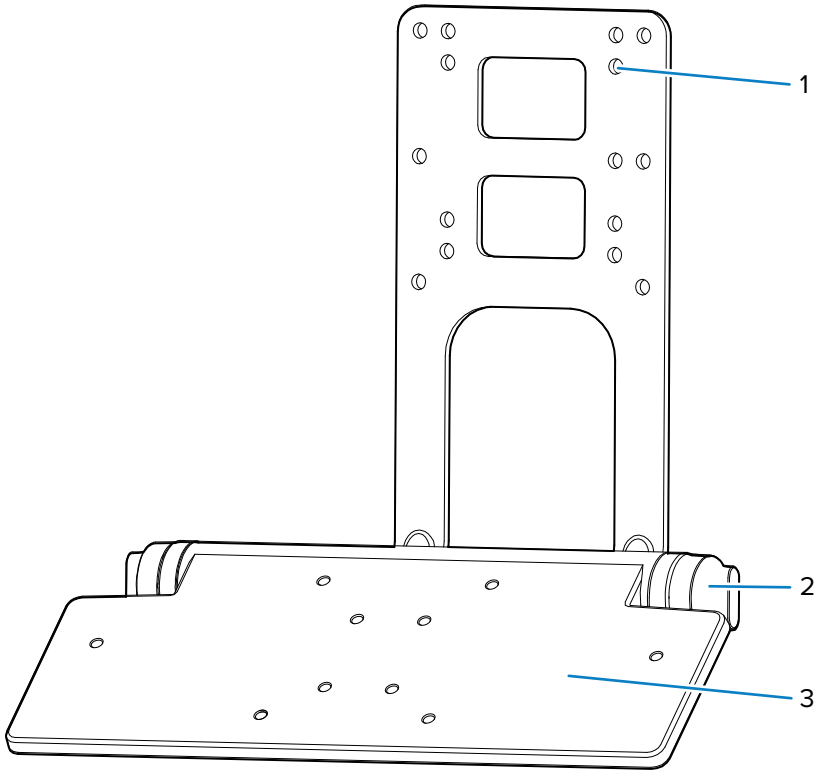
1. Open the access door.
2. Align the mounting screw holes with the screw holes on the third-party mounting hardware.
3. Insert four bolts (supplied) into the appropriate screw holes.



4. Insert the washers onto the bolts.
5. Secure using the four lock washers.

Installing the Keyboard Mounting Bracket

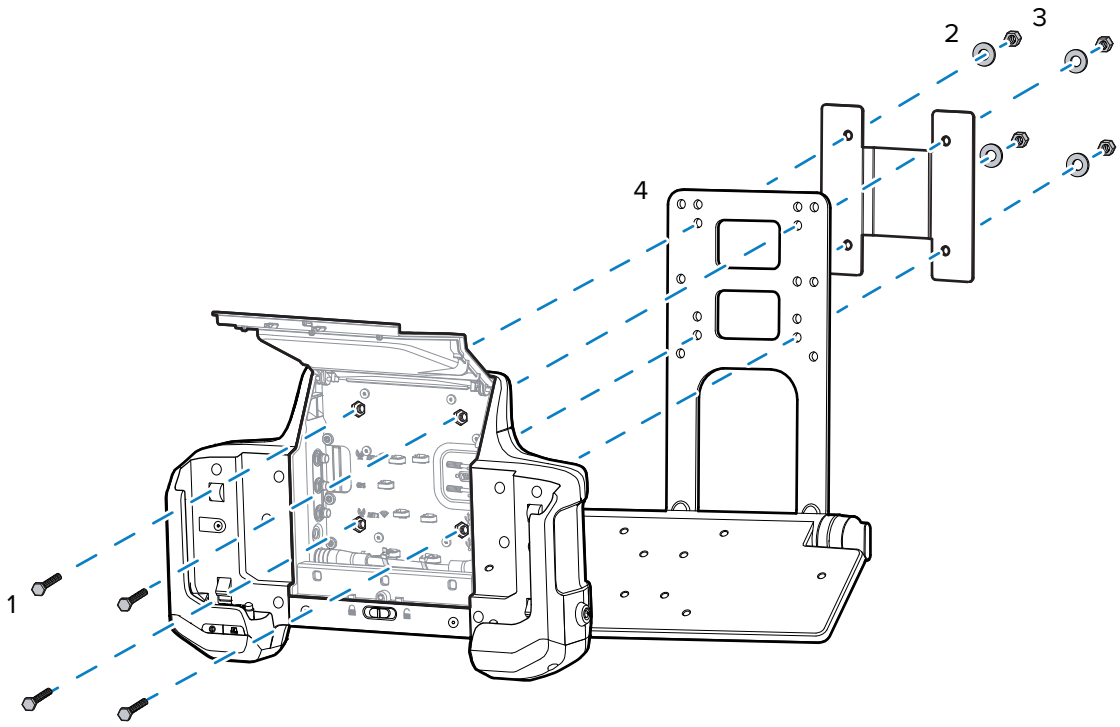
Use the optional Keyboard Mounting Bracket to mount a keyboard onto the Vehicle Dock.



1	Mounting holes
2	Locking knobs
3	Tray

NOTE: Mount the Vehicle Dock to third-party mounting systems that use 100 mm or 75 mm VESA mounting patterns.

1. Align the Vehicle Dock mounting holes with the keyboard bracket (4) third-party bracket (5) mounting holes.



2. Insert four bolts (1) into the Vehicle Dock bolt holes and through the brackets (4).
3. Place the washers (2) onto the bolts.
4. Secure with four lock nuts (3).

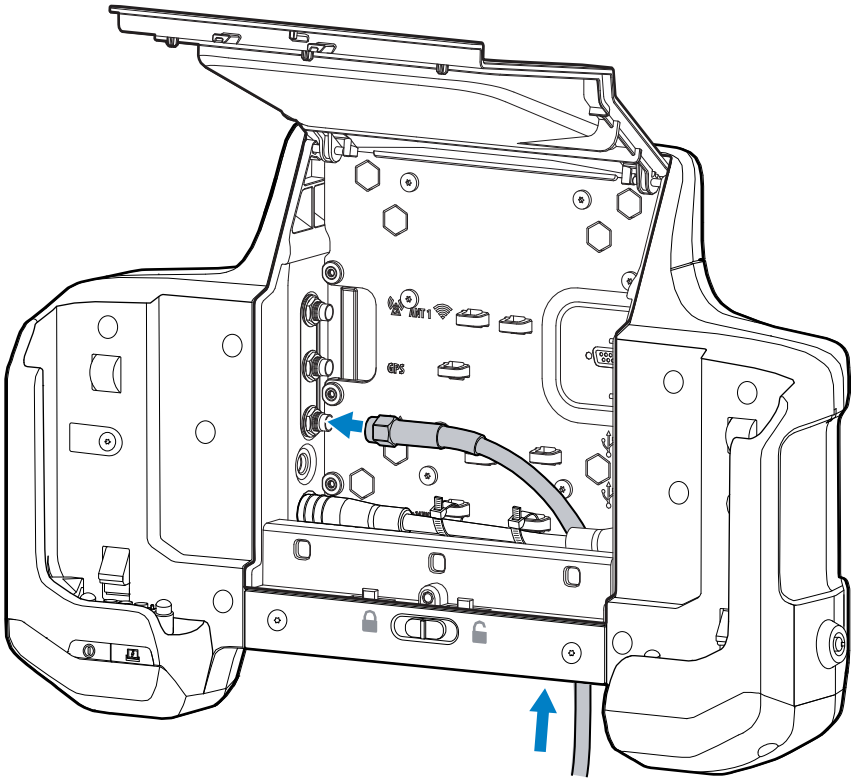
Routing Cables

All cable connections must go through the bottom cable access holes.

To route cables:

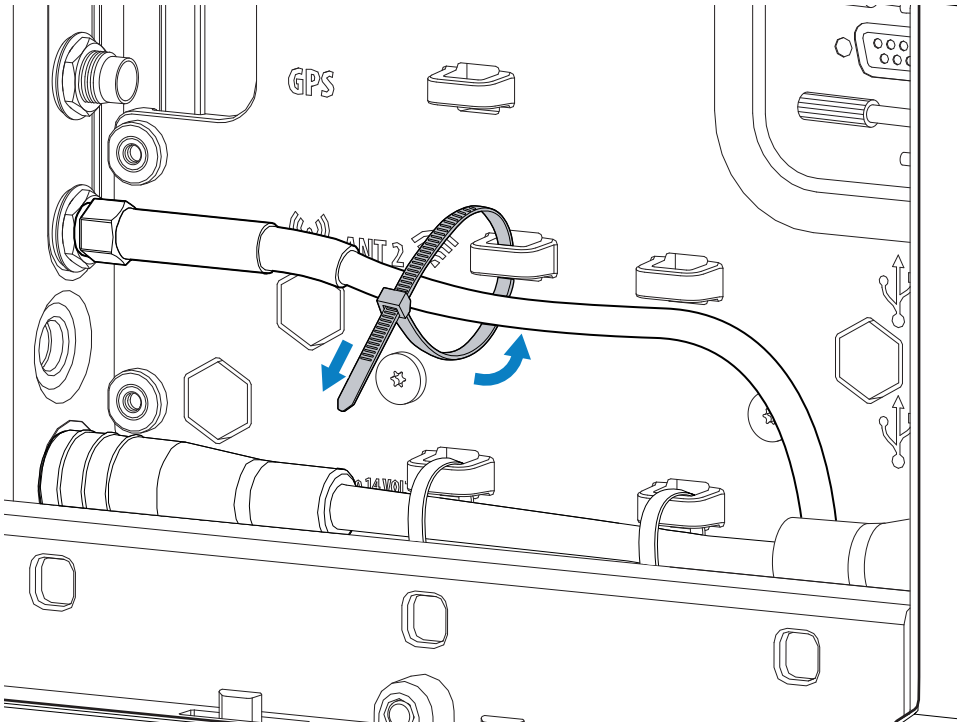
1. Feed cable up into the bottom of the Vehicle Dock.

   Cables that connect to the connectors on the left side should be fed up the right cable access hole. Cables that connect to the connectors on the right side should be fed up the left cable access.



2. Connect the cable connector to the Vehicle Dock connector.
3. For coax cables, tighten the connector.

4. Use zip ties to secure the cable to the cable mounting tab.



5. Close the access door.

Power

You can supply power to the Vehicle Dock in several ways.

The installation instructions are divided into:

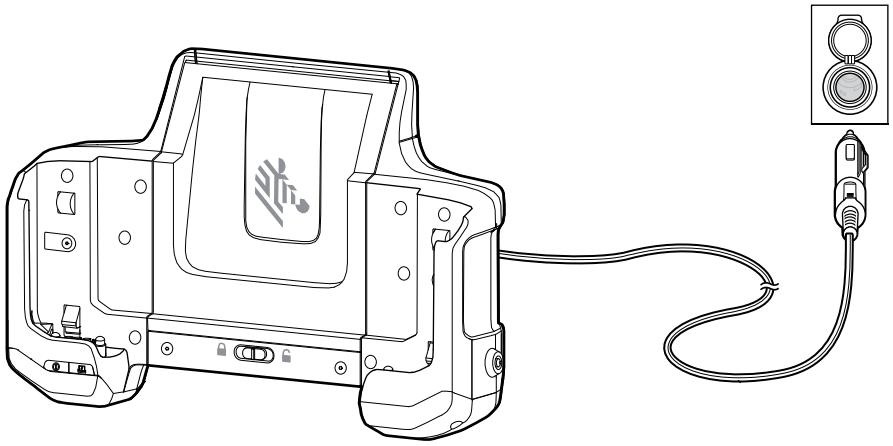
- CLA Cable installation
- New wired installations
- Replacement legacy installations.

Installing a CLA Cable

Use the CLA cable to power the Vehicle Dock from a vehicle cigarette lighter port.

1. Open the Vehicle Dock Access Door.
2. Route the CLA cable DC connector through the bottom access hole in the bottom of the dock.
3. Plug the DC connector into the Power port.
4. Secure the cable to a mounting point with a cable tie.
5. Close the Access Door.

6. Plug the plug into the cigarette lighter receptacle.

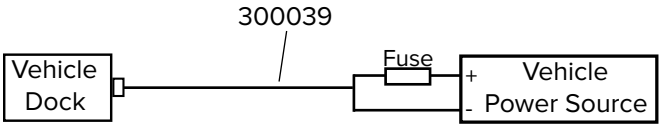


New Wired Installations

This section describes the procedures to install the Vehicle Dock in a new installation.

Vehicles with Power 15 VDC or Less

For vehicles with a power source that is 15 VDC or less, a DC/DC Power Supply is not required. Use the Direct Wire Kit to connect the Vehicle Dock to the power source.



1. Measure the distance from the vehicle power source to the Vehicle Dock power port.
2. Cut the Direct Wire Kit cable from the DC power plug to length.
3. Strip the ends of the two wires to 6 mm (0.25 in.).
4. Strip both ends of the fuse holder wires to 6 mm (0.25 in.).
5. Using a butt splice connector, connect the red wire to one end of the fuse holder wire.
6. Connect a ring terminal to the other end of the fuse holder wire.
7. Connect a ring terminal to the end of the black wire.
8. Insert the fuse into the fuse holder.
9. Close the fuse holder cover.
10. Connect the black wire to the negative power source.
11. Connect the fuse wire to the positive power source.
12. Open the Vehicle Dock Access Door.
13. Route the power connector through the bottom access hole in the bottom of the dock.
14. Plug the DC connector into the Power port.
15. Secure the cable to a mounting point with a cable tie.

16. Close the Access Door.

Vehicles with Power Greater than 15 VDC

Use a DC/DC Power Supply when the power source (usually the forklift truck battery) exceeds the input range of the ET6x (for example, trucks equipped with a 72 VDC battery).

- Vehicle with power between 19 - 90 VDC and ET60 with heated touch screen, use CBL-ET6-ADP2-1, CA1210, and DC/DC Power Supply (p/n PS1370).
- Vehicle with power between 9 - 60 VDC, use Direct Wire Kit and DC/DC Power Supply (p/n 450083).
- Vehicle with power between 50 - 150 VDC, use Direct Wire Kit and DC/DC Power Supply (p/n 450084).

Mounting the DC/DC Power Supply

Mount the DC/DC Power Supply to the vehicle using screws (not included).

CAUTION:

Only qualified service personnel should connect the device to the vehicle battery.

For proper and safe installation, the input power cable must be connected to a fused circuit on the vehicle. This fused circuit requires a user supplied 5 or 10 amp maximum time delay (slow blow) high interrupting rating fuse. If the supply connection is made directly to the battery, the fuse should be installed in the positive lead within 127 mm (5 in.) of the battery positive (+) terminal.

Avoid usage in areas where moisture can affect the power supply connections. The power supply should be mounted in a dry location within the vehicle or placed in a suitable protective enclosure.

Risk of ignition or explosion. Explosive gas mixture may be vented from the battery. Work only in well ventilated area. Avoid creating arcs and sparks at the battery terminal.

NOTE:

Power adapter and extension cable requirements may vary.

Use the DC/DC Power Supply when replacing an existing vehicle computer installation and for new installations.

Figure 26 450083/84

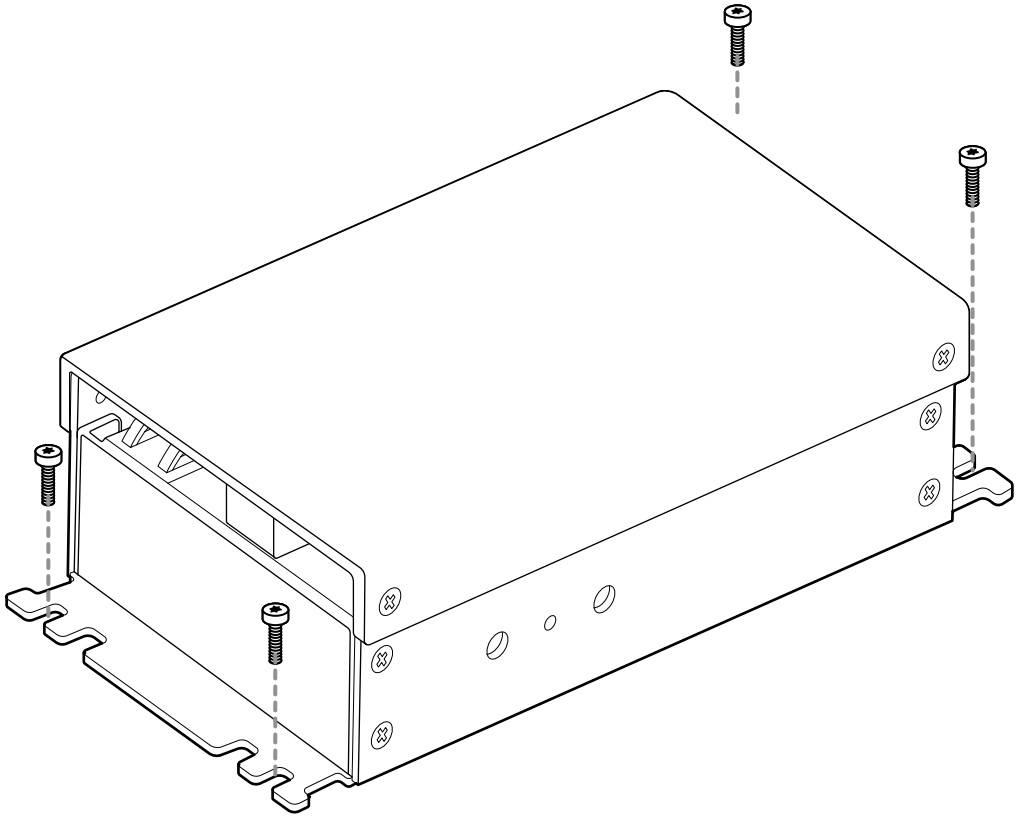
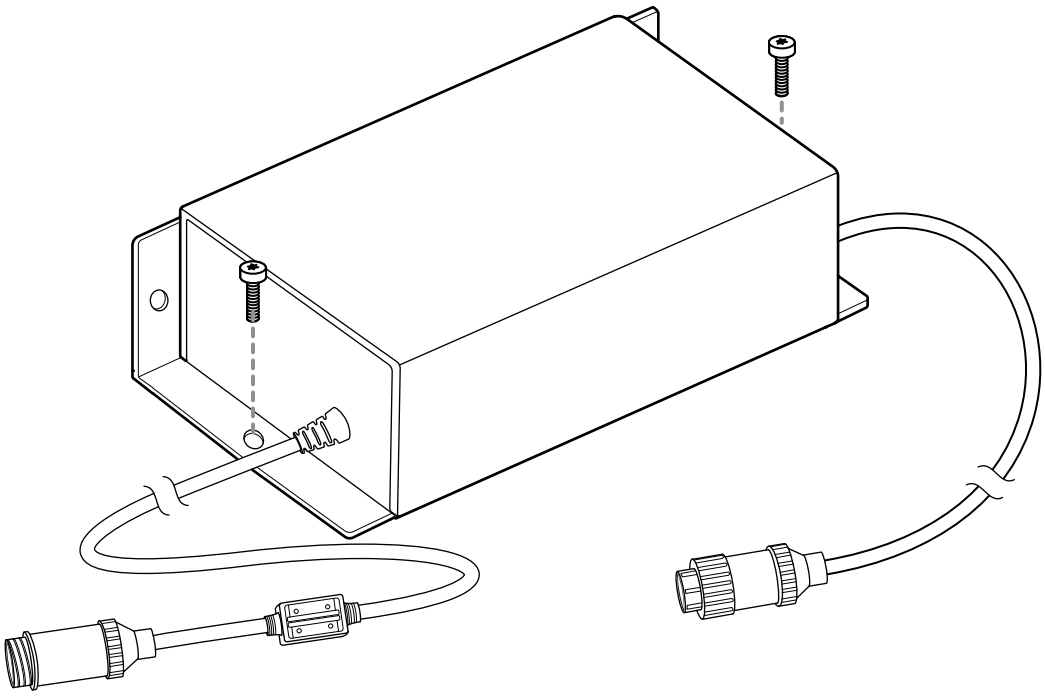
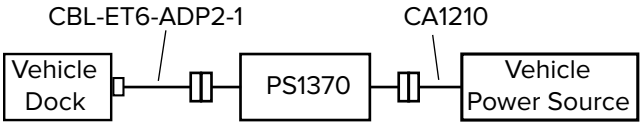


Figure 27 PS1370



New Installation with PS1370 Power Supply

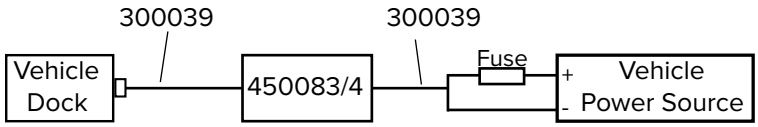
When installing a new installation, use the DC Power Adapter (p/n CBL-ET6-ADPA2-1), DC/DC Power Supply (p/n PS1370), and the Power Extension Cable (p/n CA1210). Must be used with the ET60 with installed Touch Screen Heater.



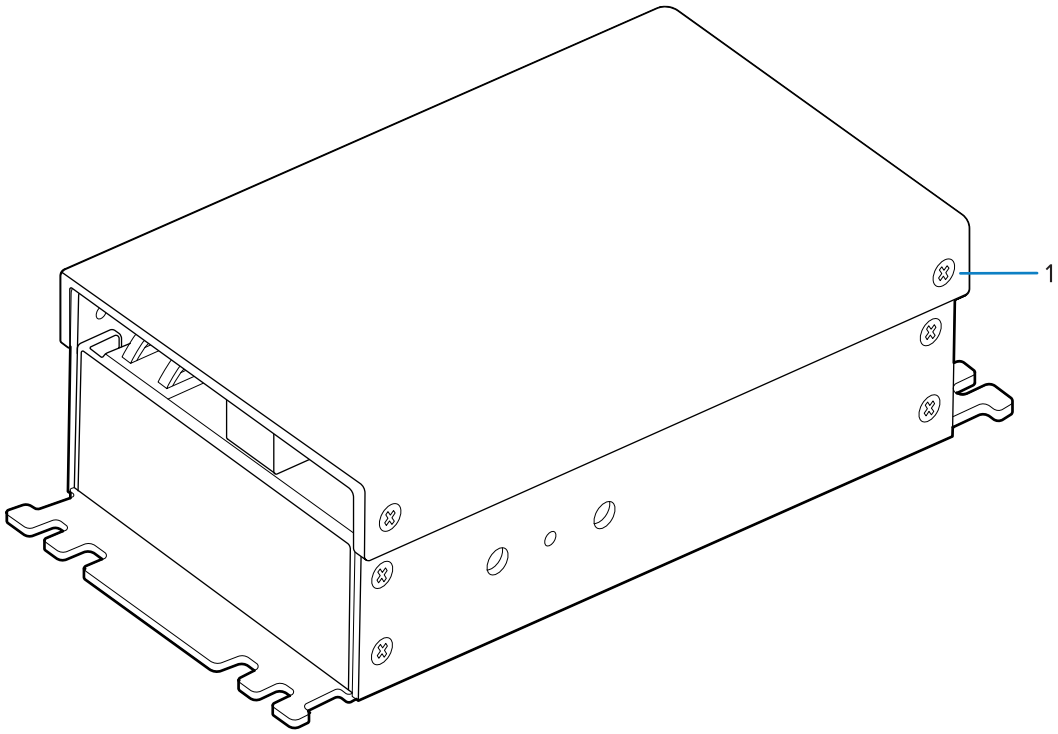
1. Mount the DC/DC Power Supply to the vehicle using four screws (not included).
2. Install the Power Extension Cable to the vehicle power source. Refer to the CA1210 Power Extension Cable Installation Instructions, MN-002747-01, supplied with the cable.
3. Connect Power Supply input connector to the Power Extension Cable connector.
4. Connect Power Supply output connector to the DC Power Adapter connector.
5. Route the DC Power Adapter DC connector through the bottom access hole in the bottom of the dock.
6. Plug the DC connector into the Power port.
7. Secure the cable to a mounting point with a cable tie.
8. Close the Access Door.

New Installation with 450083 or 450084 Power Supply

When installing a new installation, use the Direct Wire Kit (p/n 300039).

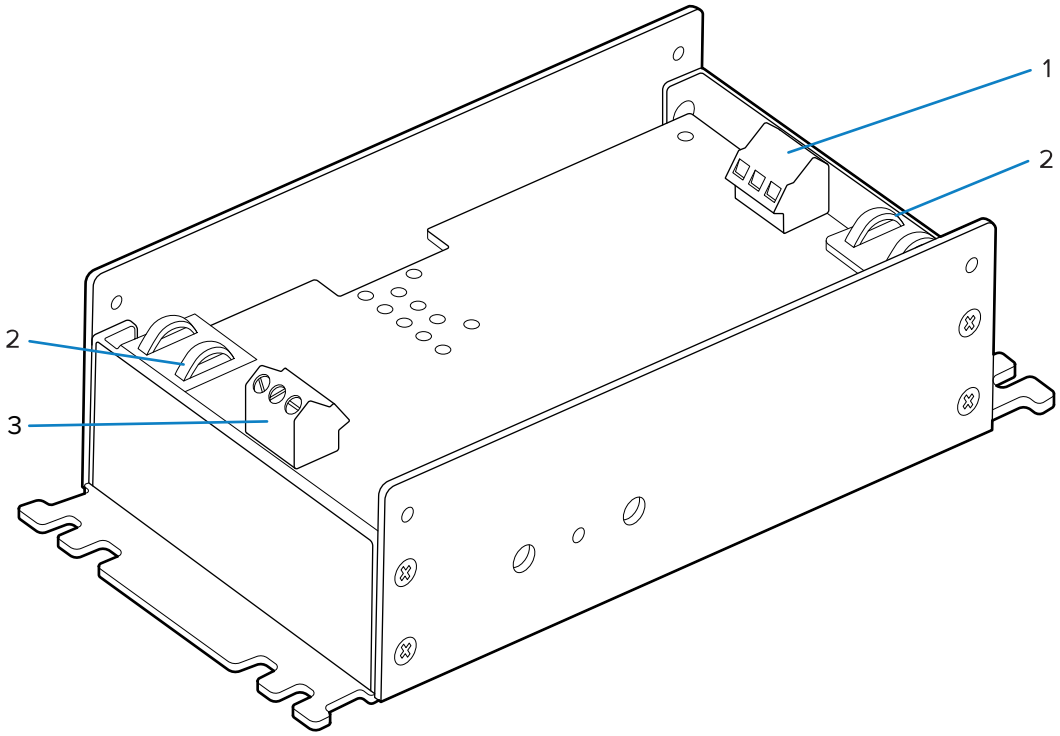


1. Mount the DC/DC Power Supply (p/n 450083 or 450084) to the vehicle using four screws (not included).
2. Using a #2 Phillips screwdriver, remove and retain the four screws securing the cover to the power supply.



1	Screw (4)

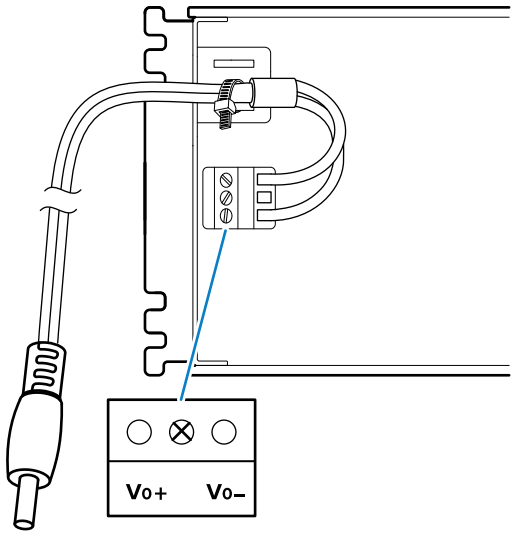
3. Lift the cover off the power supply.



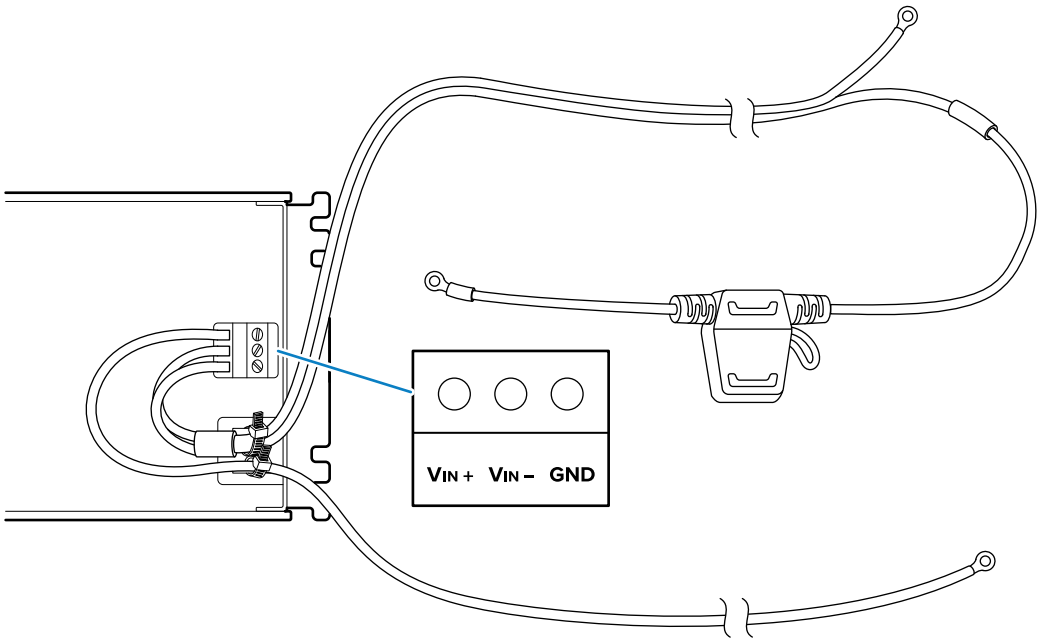
1	Input power terminal
2	Mounting point
3	Output power terminal

4. Measure the distance from the installed DC/DC Power Supply to the Vehicle Dock power port.
5. Cut the Direct Wire Kit cable from the DC power plug to length. Save the rest of the cable.
6. Strip the ends of the two wires to 6 mm (0.25 in.).

7. Insert the black wire into the **Vo-** terminal and the red wire into the **Vo+** terminal.



8. Secure the terminal screws.
9. Use cable tie (not included) to secure the cable to the mounting point.



10. Strip the ends of the two wires to 6 mm (0.25 in.).
11. Insert the black wire into the **Vin-** terminal and the red wire into the **Vin+** terminal.
12. Secure the terminal screws.
13. Strip the end of the Ground wire (customer supplied) to 6 mm (0.25 in.).
14. Insert the ground wire into the GND terminal.
15. Use cable tie (not included) to secure the cables to the mounting point.
16. Strip both ends of the fuse holder wires to 6 mm (0.25 in.).

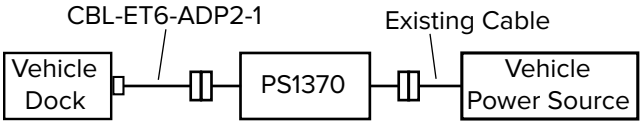
17. Using a butt splice connector, connect the red wire to one end of the fuse holder wire.
18. Connect a ring terminal to the other end of the fuse holder wire.
19. Connect a ring terminal to the end of the black wire.
20. Insert the fuse into the fuse holder.
21. Close the fuse holder cover.
22. Connect the black wire to the to the negative connection of the vehicle DC power source.
23. Connect the red wire to the to the positive connection of the vehicle DC power source.
24. Secure the ground wire to the DC/DC Power Supply mounting screw.
25. Place the cover on the DC/DC Power Supply.
26. Secure using the four screws retained during removal.
27. Route the DC Power Adapter DC connector through the bottom access hole in the bottom of the dock.
28. Plug the DC connector into the Power port.
29. Secure the cable to a mounting point with a cable tie.
30. Close the Access Door.

Replacing Legacy Installations

This section describes the procedures to install the Vehicle Dock in an existing installation.

Replacing an Existing Legacy Installation with PS1370 Power Supply

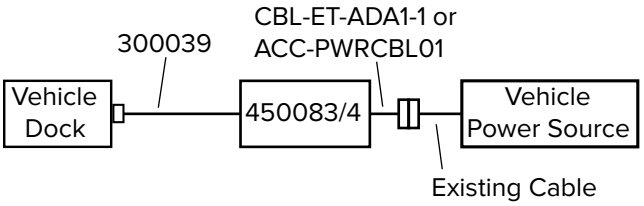
When replacing an existing legacy installation with an ET6x installation, use the DC Power Adapter (p/n CBL-ET6-ADPA2-1), and the DC/DC Power Supply (p/n PS1370).



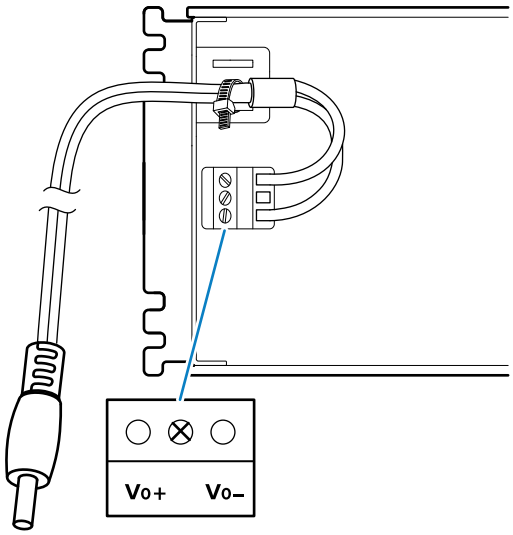
1. Mount the DC/DC Power Supply to the vehicle using four screws (not included).
2. Connect Power Supply input connector to the existing power cable connector.
3. Connect Power Supply output connector to the DC Power Adapter connector.
4. Open the Vehicle Dock Access Door.
5. Route the DC Power Adapter DC connector through the bottom access hole in the bottom of the dock.
6. Plug the DC connector into the Power port.
7. Secure the cable to a mounting point with a cable tie.
8. Close the Access Door.

Replacing an Existing Legacy Installation with 450083 or 450084 Power Supply

When replacing an existing legacy installation with an ET6x installation, use the Direct Wire Kit and either a DC Power Adapter Cable (p/n CBL-ET-ADA1-1 for Zebra vehicle computers), or DC Power Adapter Cable (p/n ACC-PWRCBL01 for Honeywell or LXE vehicle computers).

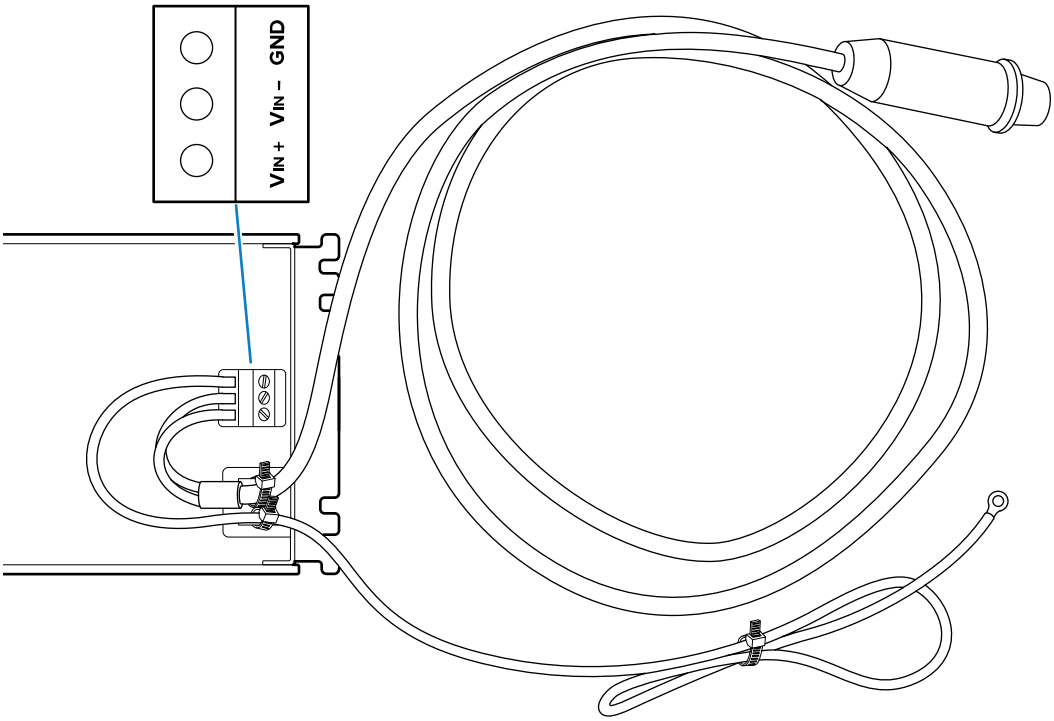


1. Remove the existing vehicle computer.
2. Install the appropriate DC/DC Power Supply.
3. Measure the distance from the installed DC/DC Power Supply to the Vehicle Dock power port.
4. Cut the Direct Wire Kit cable from the DC power plug to length.
5. Strip the ends of the two wires to 6 mm (0.25 in.).
6. Insert the black wire into the **Vo-** terminal and the red wire into the **Vo+** terminal.



7. Secure the terminal screws.
8. Use cable tie (not included) to secure the cable to the mounting point.

9. Secure the terminal screw.



10. Strip the ends of CBL-ET-ADPA1-1 cable (or ACC-PWRCBL01 for Honeywell and LXE) to 6 mm (0.25 in.).

11. Insert the cable black wire into the **Vin-** terminal and the red wire into the **Vin+** terminal.

12. Strip the ends of a ground wire (sold separately) to 6 mm (0.25 in.).

13. Insert one end of the ground wire (customer supplied) into the GND terminal.

14. Secure the terminal screws.

15. Use cable tie (not included) to secure the cables to the mounting point.

16. Connect cable connector to the existing power cable connector.

17. Secure the ground wire to the DC/DC Power Supply mounting screw.

18. Place the cover on the DC/DC Power Supply.

19. Secure using the four screws retained during removal.

20. Open the Vehicle Dock Access Door.

21. Route the Direct Wire Cable DC connector through the bottom access hole in the bottom of the dock.

22. Plug the DC connector into the Power port.

23. Secure the cable to a mounting point with a cable tie.

24. Close the Access Door.

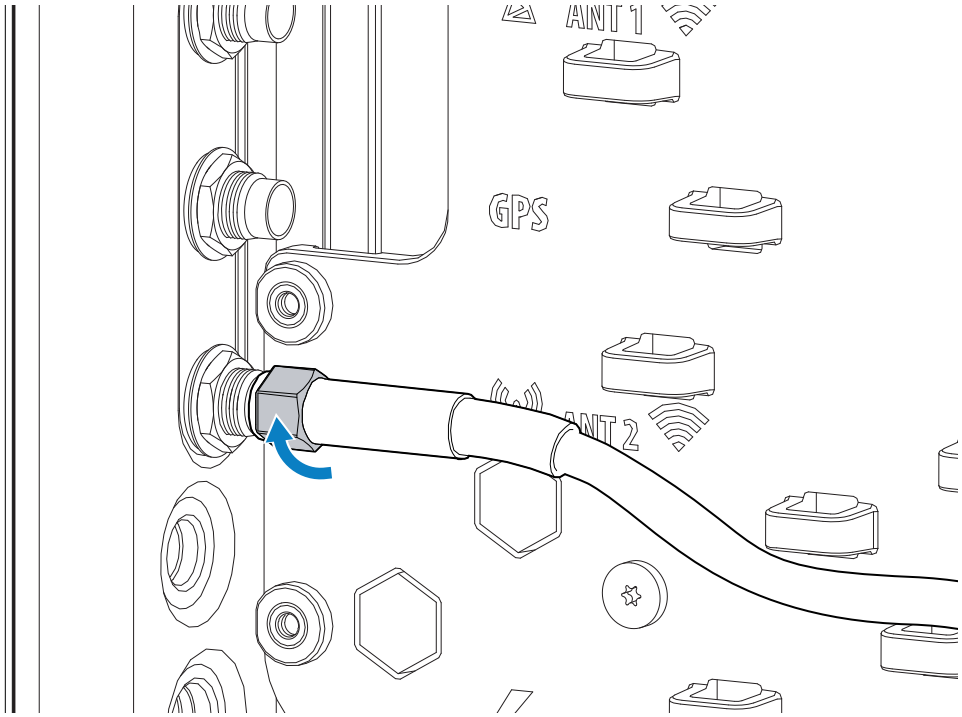
Installing an External Antenna

To determine the best antenna option for your location, contact your Zebra representative.

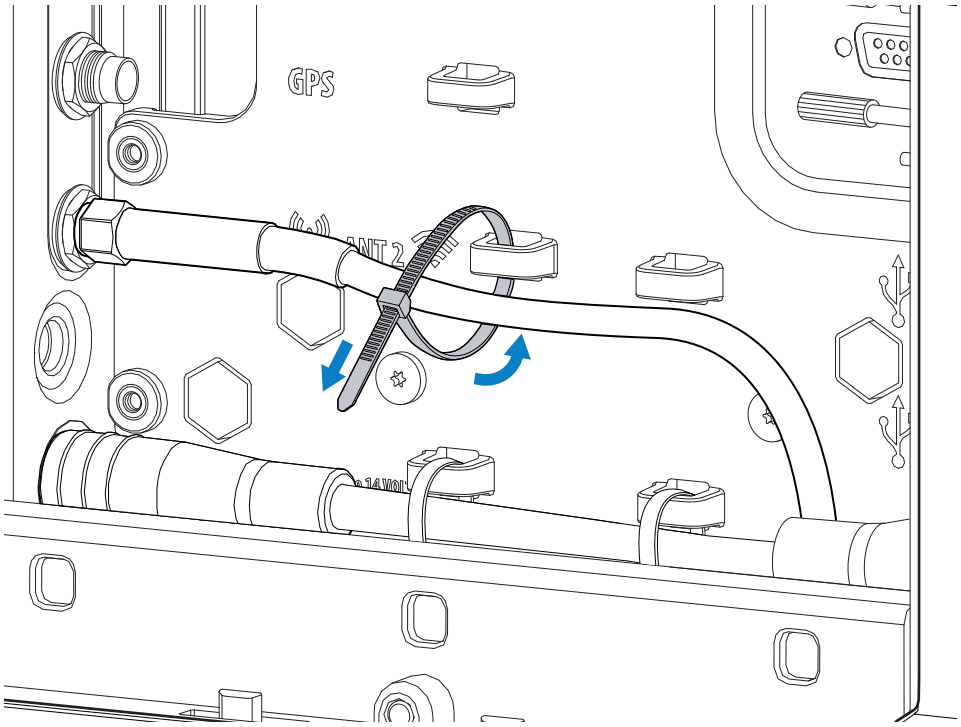
CAUTION: If using a magnetic mount antenna, place it in a location that balances the need for the device to communicate with the access points and local Bluetooth peripherals.

NOTE: The tablet switches from the external antennas to the internal antennas when the tablet is removed from the Vehicle Dock. When the tablet is re-inserted into the Vehicle Dock, the tablet switches back to the external antennas.

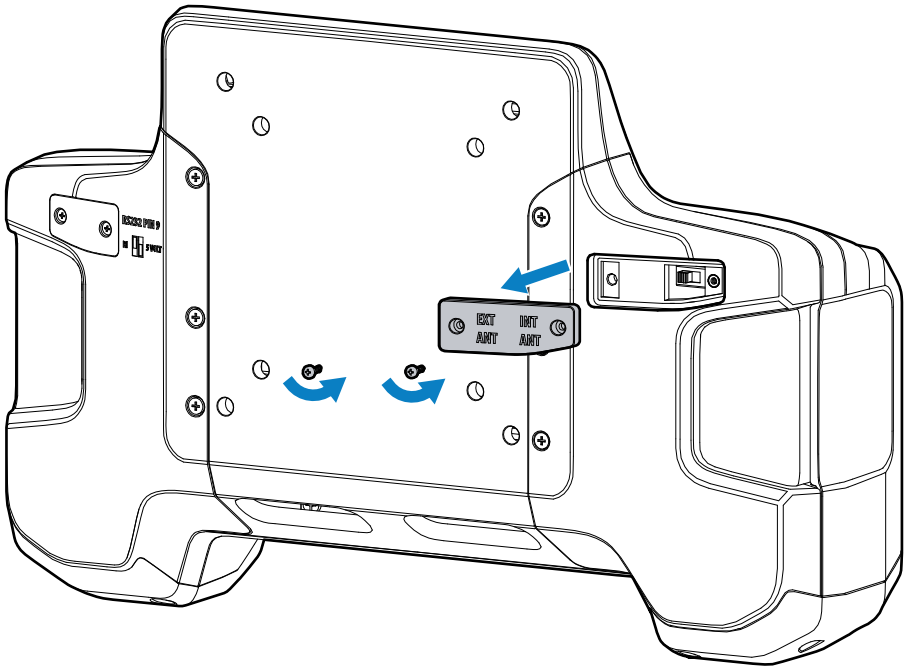
1. Open the Access Door.
2. Route the external antenna cable up through the bottom of the Vehicle Dock.
3. Connect the antenna cables to the appropriate port on the inside of the Vehicle Dock.



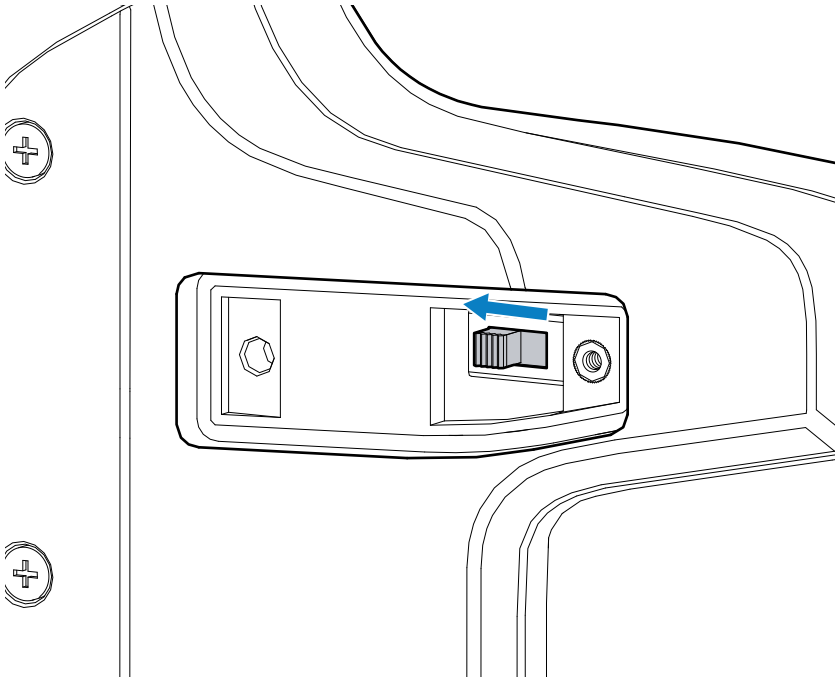
4. Secure cables with cable ties.



5. Remove two screws securing the antenna access door on the back of the Vehicle Dock.



6. Ensure the switch is to the EXT ANT position.

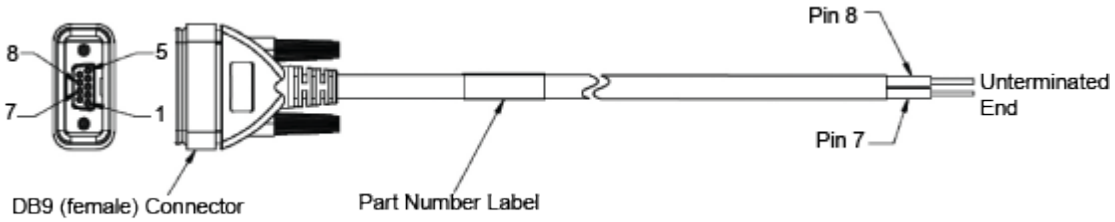


7. Replace the antenna access door.
8. Set antenna configuration using the **PTA Settings** application on the ET6x. See the ET6x Product Reference Guide.

Installing the Screen Blanking Cable

To use screen blanking, connect the Screen Blanking cable (p/n CA1300) to the Vehicle Dock RS-232 connector and to the a switch on the vehicle. Activate this switch electrically (for example, motion sensor) or mechanically (for example, pedal switch) when the vehicle is in motion.

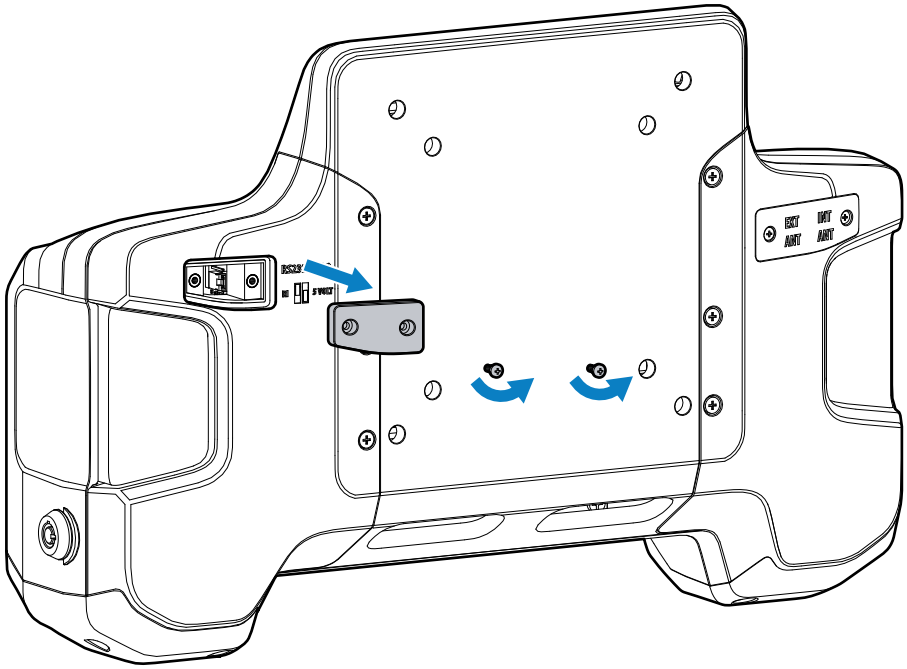
The screen blanking feature makes use of the RS-232 port to monitor electrical relay closure. When enabled, the CTS/RTS pins of the RS-232 port are continuously monitored by the screen blanking application.



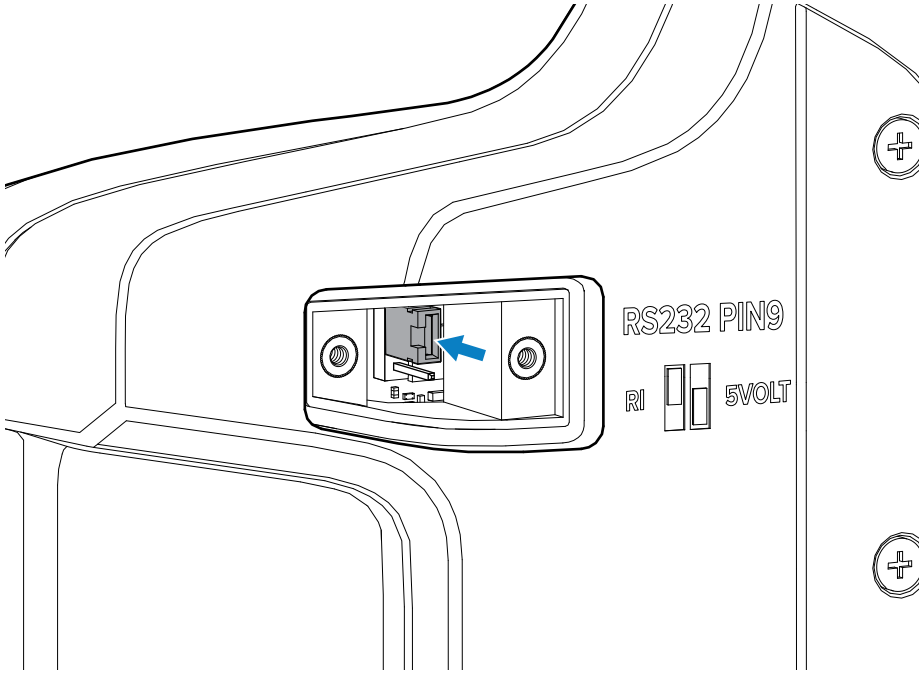
When the vehicle is in motion, the switch closes the circuit, allowing data packets to be sent or received through the RTS and CTS pins. The computer detects that the circuit is closed and turns off the screen. When the vehicle is not in motion, the switch opens the circuit, preventing data packets from being sent or received. The computer detects that the circuit is open and turns on the screen.

1. Open the Access Door.
2. Route the Screen Blanking Cable up through the bottom of the Vehicle Dock.

3. Remove the RS-232 connector cover.
4. Connect the cable to the RS-232 port on the inside of the Vehicle Dock.
5. Tighten the thumb screws to ensure proper water sealing.
6. Secure cable with cable ties.
7. Remove two screws securing the RS-232 access door on the back of the Vehicle Dock.



8. Move the jumper to the bottom two pins.

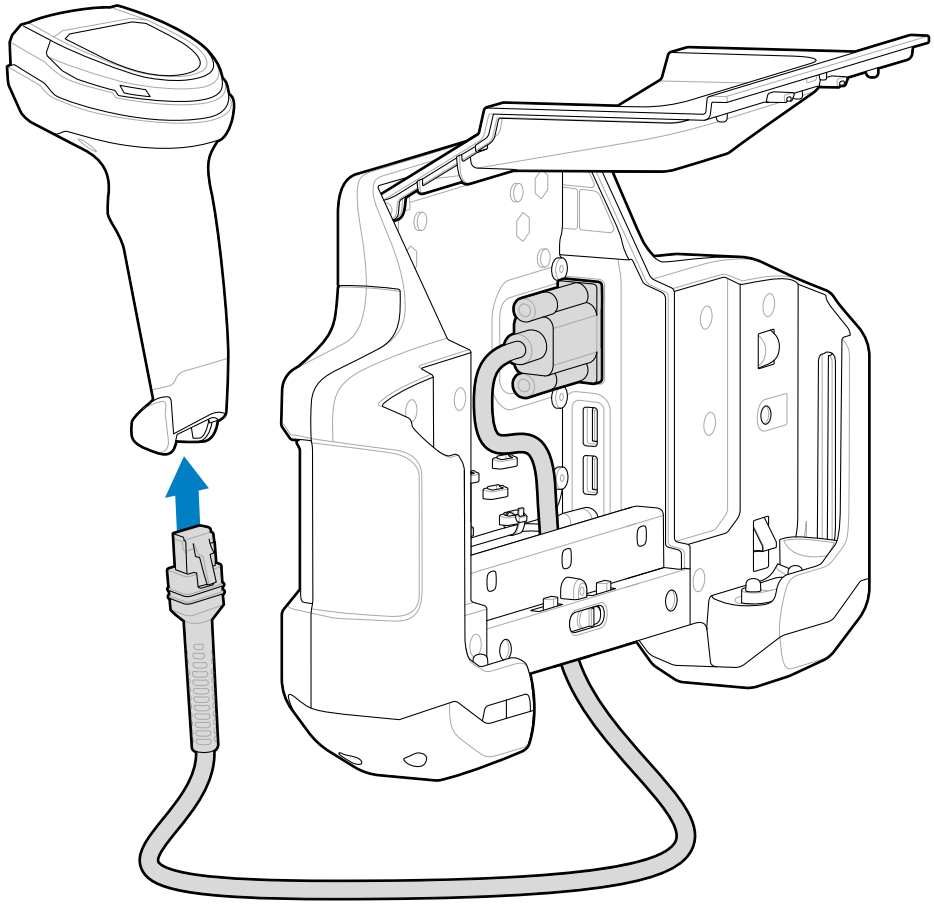


9. Replace the RS-232 access door.

Connecting an RS-232 Scanner

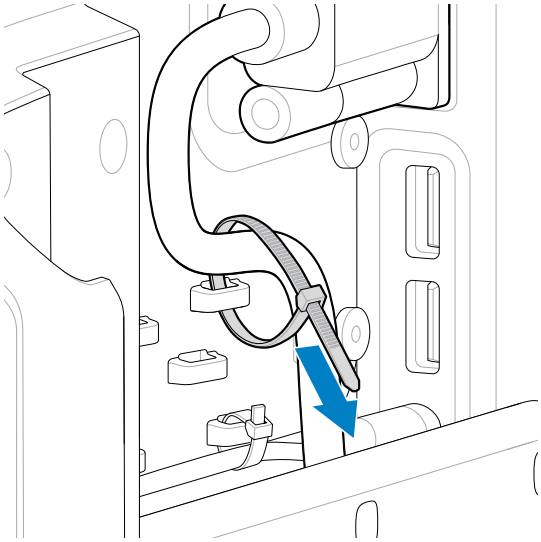
Before using an RS-232 scanner with the device, connect the scanner to the device.

1. Open the access door.
2. Route the RS-232 cable up through the bottom of the Vehicle Dock.
3. Connect the scanner cable RS-232 connector to the RS-232 port and to the scanner.

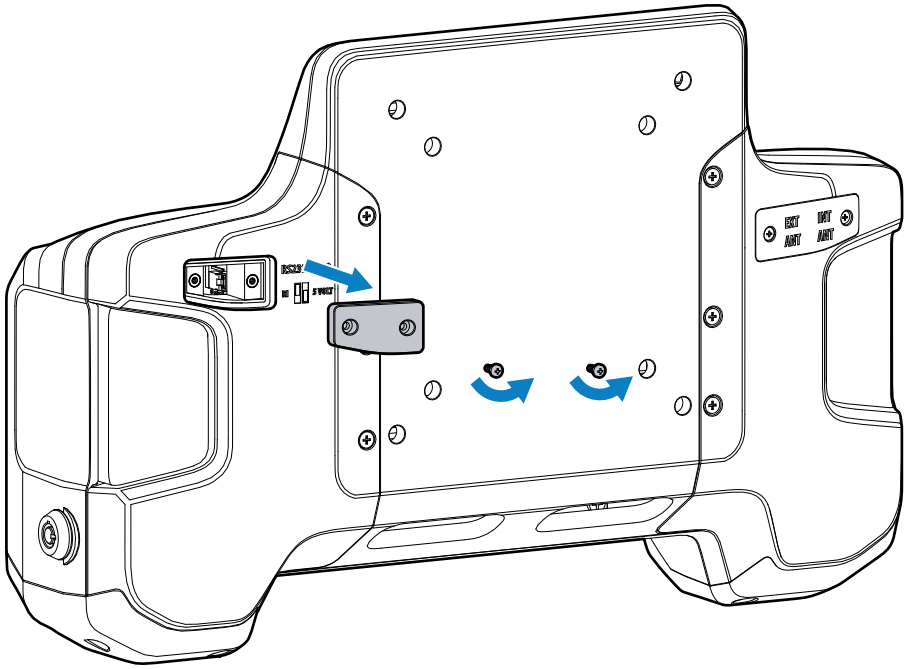


4. Tighten the RS-232 connect thumb screws.

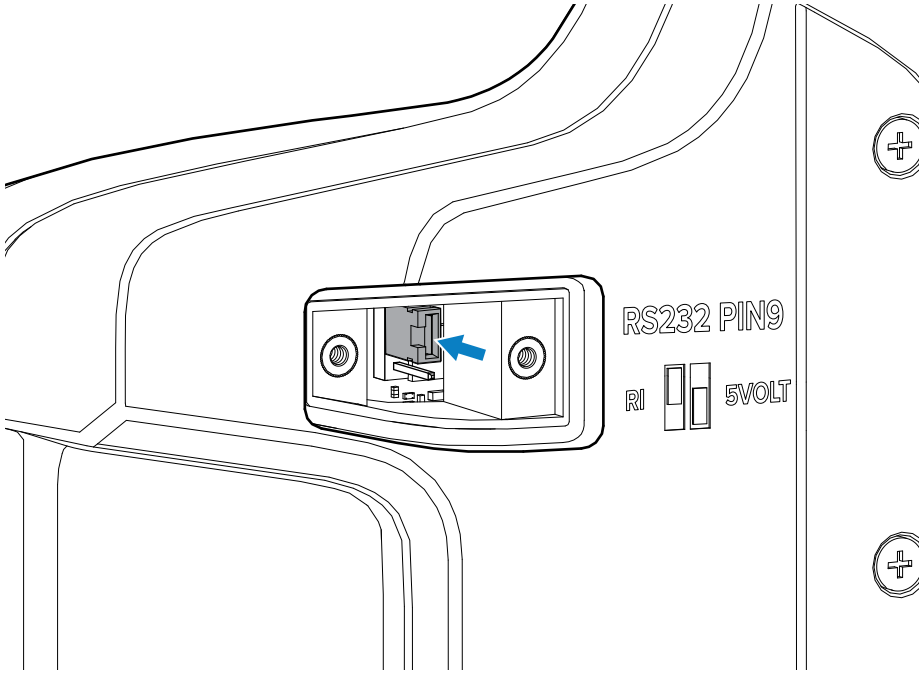
5. Secure cable with cable ties.



6. Close the access door.
7. Remove two screws securing the RS-232 access door on the back of the Vehicle Dock.



8. Move the jumper to the bottom two pins.



9. Replace the RS-232 access door.

NOTE: When not using the RS-232 connector, move the jumper to the top two pins to prevent corrosion on the pins when not in use.

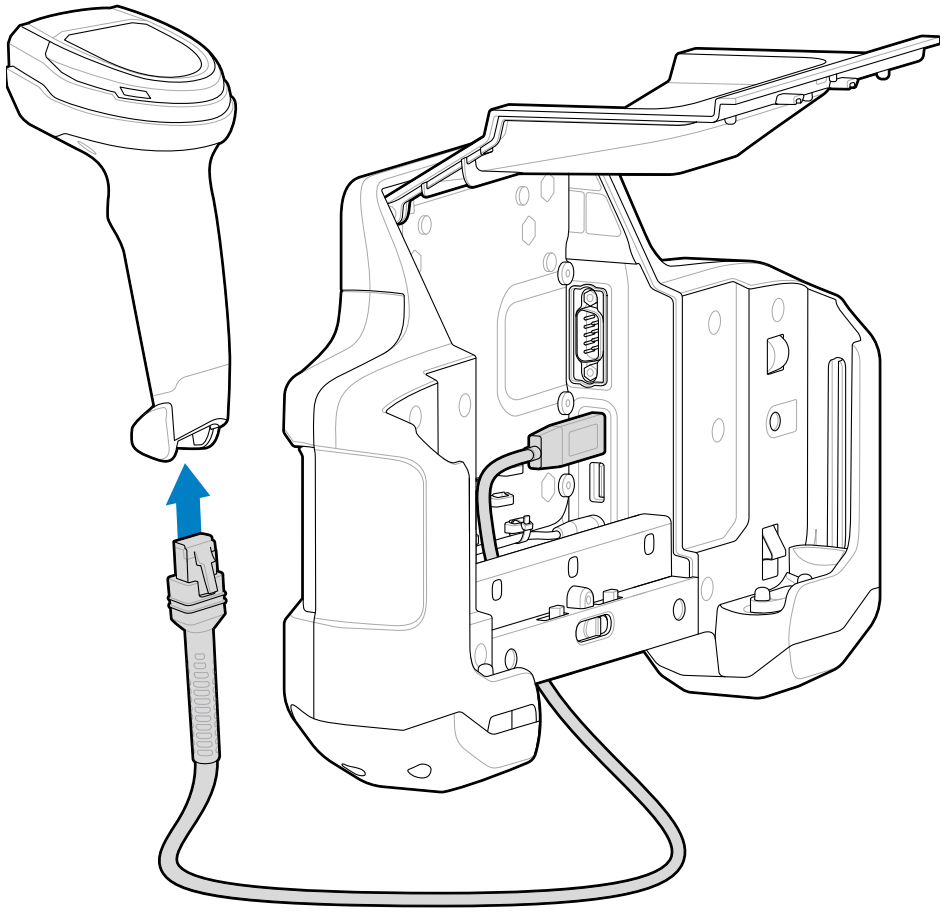
Connecting a USB Scanner

When connecting a USB scanner to the device, connect in either Simple Serial Interface (SSI) or Human Interface Device (HID) mode.

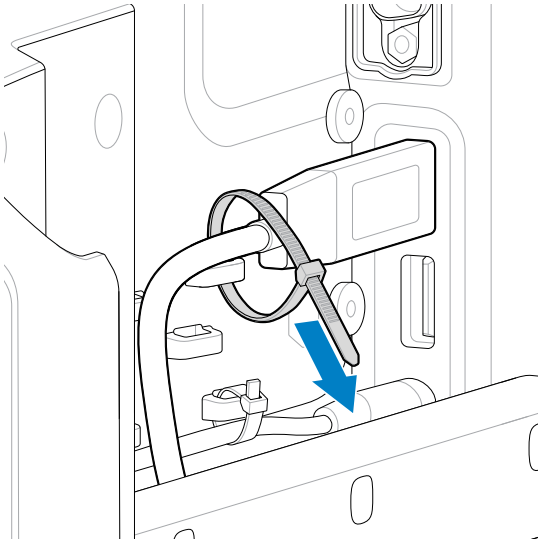
Pair the USB scanner to the device using SSI or HID.

1. Open the access door.
2. Route the USB cable up through the bottom of the Vehicle Dock.

3. Connect the scanner cable USB connector to either USB port.



4. Secure cable with cable ties.

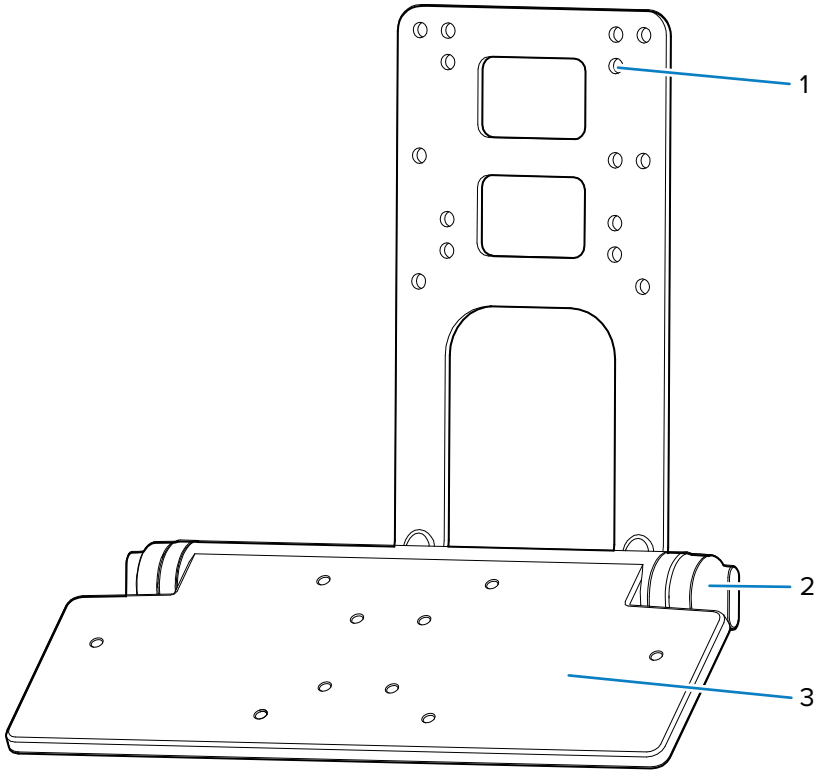


5. Close the access door.
6. For SSI mode, ensure that the scanner is in SSI mode. Refer to the scanner Product Reference Guide and scan the SSI Over USB CDC barcode.

7. For HID mode, ensure that the scanner is in HID mode. Refer to the scanner Product Reference Guide and scan the HID Keyboard barcode or perform a factory reset.

Installing the Keyboard Mounting Bracket

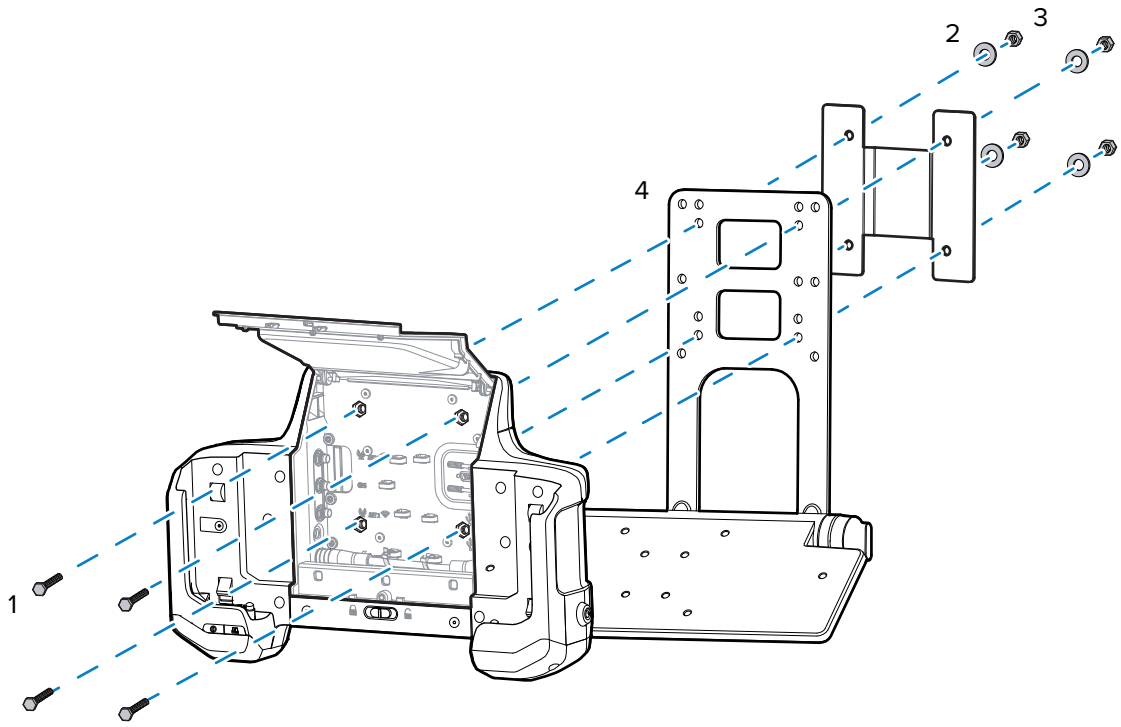
Use the optional Keyboard Mounting Bracket to mount a keyboard onto the Vehicle Dock.



1	Mounting holes
2	Locking knobs
3	Tray

NOTE: Mount the Vehicle Dock to third-party mounting systems that use 100 mm or 75 mm VESA mounting patterns.

1. Align the Vehicle Dock mounting holes with the keyboard bracket (4) third-party bracket (5) mounting holes.



2. Insert four bolts (1) into the Vehicle Dock bolt holes and through the brackets (4).
3. Place the washers (2) onto the bolts.
4. Secure with four lock nuts (3).

Installing the Keyboard Cable

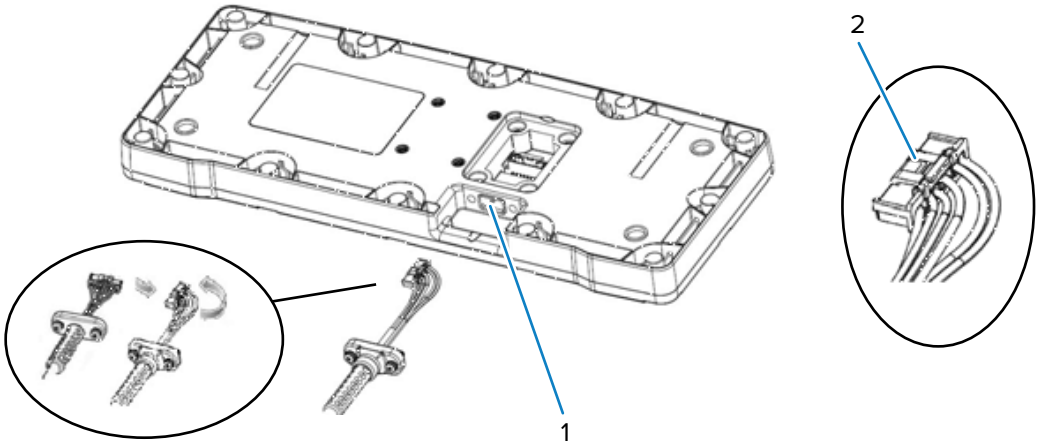
Two keyboard require installation of a USB cable prior to installation.

NOTE: For CBL-ET-KBUSB1-01, and CBL-ET-KBUSB2-01 only.

To install the keyboard USB cable:

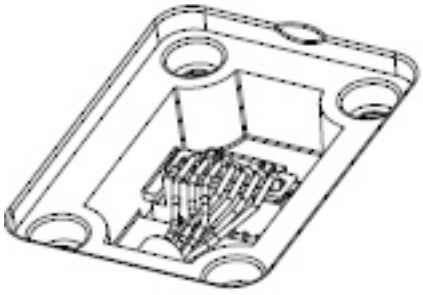
1. Remove the four screws securing the cable cover to the keyboard.

2. Turn the cable connector at a right angle as shown below and insert the connector (with connector clips on top) into the keyboard housing.



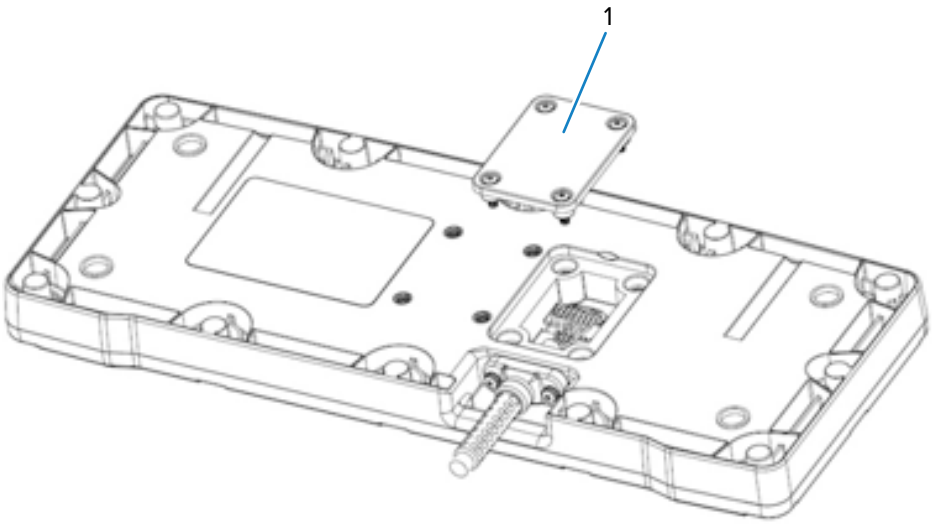
1	Keyboard housing
2	Connector clips

3. Turn the cable connector straight (with connector clips on top) and plug the connector in the keyboard.



4. Secure the cable retention to the housing using the two retention screws. Torque the M3 screws to 6kgf-cm (5.2 lbs-in).

5. Gently push the wires downward and install the cable cover. Torque the four M3 screws to 6kgf-cm (5.2 lbs-in).



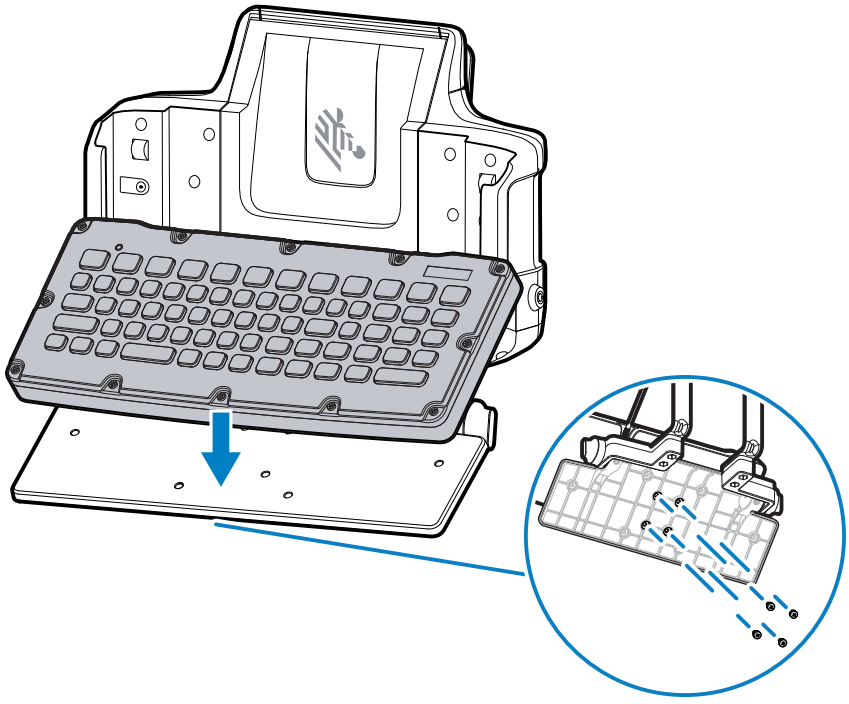
1	Cable cover with M3 screws (4)

Mounting the Keyboard

The Keyboard Mount supports installation of the USB keyboards.

To mount the keyboard onto the Keyboard Mount tray:

1. Align the keyboard with the tray on the Keyboard Mount.

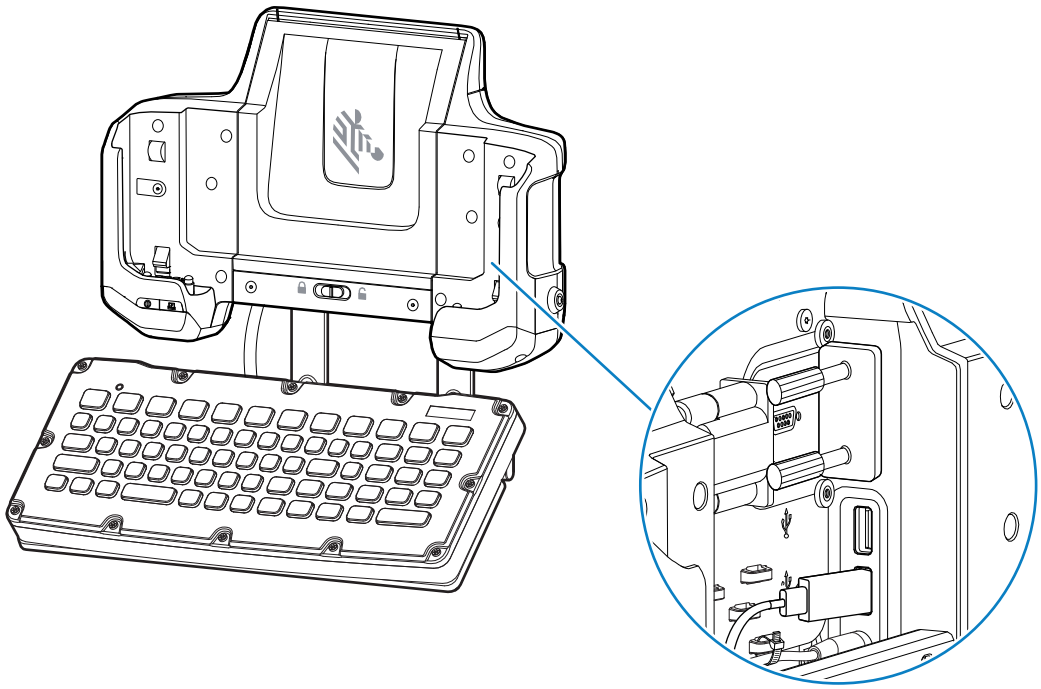


2. Insert four screws through the tray and into the keyboard.

3. Secure screws.
4. Route keyboard cable through the bottom of the Vehicle Dock.
5. Plug the USB connector into one of the USB ports.

CAUTION: Ensure that the thumb-screws on the RS-232 connector are tight to ensure water sealing.

6. If required, remove the RS-232 connector cover and plug the RS-232 connector into the RS- 232 port.
7. Tighten connector thumb-screws.



NOTE: When the keyboard heater should work with more power, connect the Y-cable (CBL-ET-KBUSB2- 01) to the keyboard. Connect the RS-232 connector to the RS-232 port and set the jumper to power Pin 9 on the RS-232 port. Refer to Keyboard Heater on page 143 for more information.

When not using the RS-232 connector, move the jumper to the top two pins to prevent corrosion on the pins when not in use.

8. Secure the cable(s) using cable ties.
9. Use the adjustment knows to position the keyboard tray angle.
10. To adjust the keyboard tray position, loosen the right and left locking knobs two full turns.
11. Rotate the keyboard tray to the desired position and tighten the keyboard tray locking knobs to secure the tray in position.

Installing a Keyboard on a RAM Mount

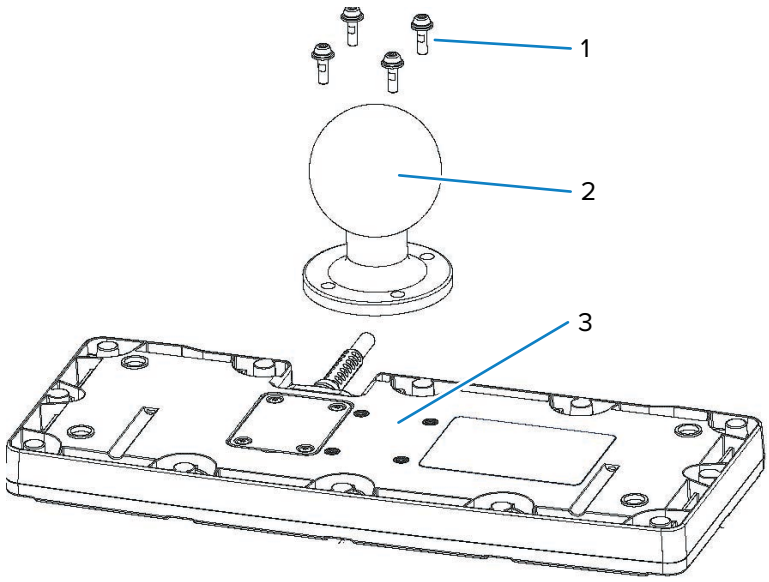
Use RAM Mounts if the keyboard is not attached to the Vehicle Dock, but mounted remotely from the Vehicle Dock at another place on the truck.

CAUTION: If mounting to a thin surface such as drywall or plywood, a reinforcing plate is required.

Part Number	Description
MT3502	2.25" Ball base
M4x14	Four screws with captive washers

To mount the RAM mount on the keyboard:

1. Align the four holes on the ball base plate with the four holes on the keyboard bottom.



1	Screws (4)
2	Ball base
3	Keyboard bottom

2. Secure using the four screws with captive washers.

Keyboard Heater

The USB keyboards contain three internal USB heaters that prevent damage when operating in condensing environments:

- Low - this heater operates with the standard USB cable, and turns on when the temperature is below 20° C (68° F).
- Normal - this heater operates with the Y-cable, and turns on when the temperature is below 15° C (59° F).
- High - this heater operates with the Y-cable, and turns on when the temperature is below 5° C (41° F).

Updating the Operating System

This section provides instructions on initial setup, how to reset the tablet, and how to reinstall the Windows operating system.

Initial Windows Setup

After performing a factory reset or updating the firmware or operating system, the Windows setup process begins.

Next, a short configuration process occurs after which the Windows home screen displays.

Any apps that you installed from the Windows Store prior to reset are automatically reinstalled using your mobile broadband or Wi-Fi internet connection when connected; apps installed from other sources are not. After the process is complete, a list of apps removed during reset is created on the desktop.

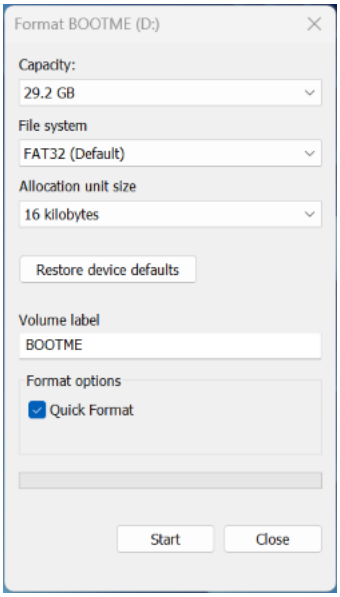
Creating an Installation 32GB USB Flash Drive

Before you begin, download the software for your device by visiting Zebra Support and Downloads at zebra.com/us/en/support-downloads/tablets/et60w-et65w.html.

NOTE: Make sure the entire file downloads completely. Partial downloads may corrupt the device.

1. Insert a 32 GB or larger USB flash drive into a host computer.

2. From **Windows Explorer**, right-click on the USB flash drive and select **Format**.



3. In the **File system** drop-down, select **FAT32**.

CAUTION: Only the FAT32 format is recognized by the system BIOS.

4. In the **Volume label** text box, enter B00TME.
5. Click **Start**.

   A warning displays; click **OK** to proceed.
6. Click **OK** when the format is complete, and confirmation dialogs displays.
7. Using **Windows Explorer**, extract the software files you downloaded into a folder.
8. Copy all the contents of the folder to the formatted USB flash drive.
9. Ensure all the files are copied successfully.
10. Safely unmount the USB flash drive.

Creating an Installation USB Flash Drive Greater than 32GB

Before you begin, download the software for your device by visiting Zebra Support and Downloads at zebra.com/us/en/support-downloads/tablets/et60w-et65w.html.

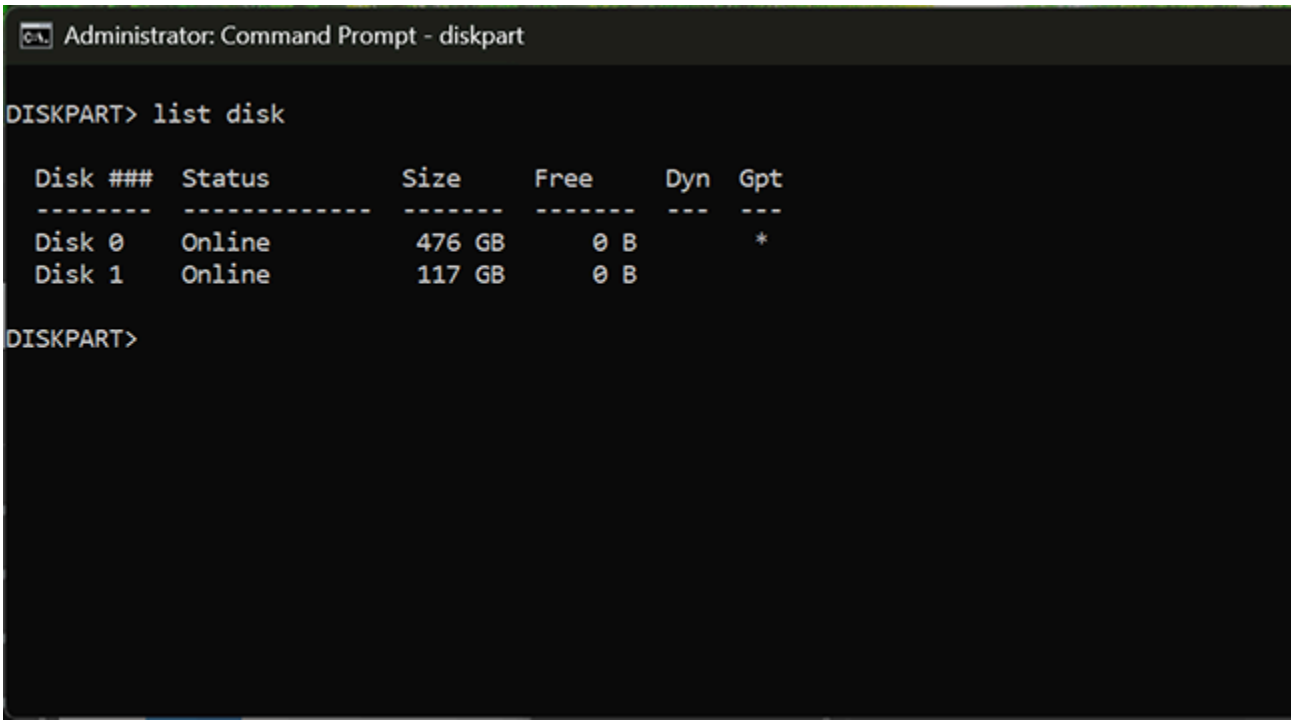
NOTE: Make sure the entire file downloads completely. Partial downloads may corrupt the device.

1. Insert a USB flash drive that is larger than 32GB into a host computer.
2. Select Start (icon) > **All apps**.
3. Scroll down and select **Windows Tools**.
4. Right-click on **Command Prompt** and select **Run as administrator**.
5. Touch **Yes**.

   The **Administrator: Command Prompt** window displays.

6. Type: `diskpart`, then press the **Enter** key.
7. Type: `list disk`, then press the **Enter** key.

   A list of displays.



8. Type: `select disk <disk number>`, where `<disk number>` is the USB drive in the list. For example `select disk 1`.
9. Press the**Enter**key.
10. Type: `clean`, then press the **Enter** key.

    This erases all partitions on the USB drive.
11. Type:`create partition primary size=30000`, then press the **Enter** key.
12. Type:`format fs=fat32 quick label=BOOTME`, then press the**Enter**key.
13. Type: `assign`, then press the **Enter** key.
14. Type: `active`, then press the **Enter** key.
15. Type: `exit`, then press the **Enter** key.
16. Using **Windows Explorer**, extract the software files you downloaded into a folder.
17. Copy only the contents of the extracted parent folder to the root of the formatted USB flash drive.
18. Ensure all the files are copied successfully.
19. Safely unmount the USB flash drive.
20. Using **Windows Explorer**, extract the software files you downloaded into a folder.
21. Copy all the contents of the folder to the formatted USB flash drive.

Reinstalling Windows

Before you begin, connect the ET6x keyboard or any standard USB keyboard to the tablet. A physical keyboard is required to complete the setup.

1. Connect the tablet to a power source.
2. Plug the bootable USB flash drive into the USB-A port.
3. Reboot the device.
4. Before Windows starts, press **F12** on a standard keyboard or **FN** + **F12** on the ET6x keyboard.

   The Boot menu displays.
5. Select **USB**. The tablet boots to WinPE and installs the operating system and BIOS updates. Installation takes approximately 9 minutes.
6. When complete, press **Alt**+**F4** on the keyboard. The device reboots, and the Windows setup process initiates. See Initial Windows Setup.
7. After the Windows setup is complete, in the taskbar, touch **^** >  > **Eject (drive name)**.
8. After the **Safe To Remove Hardware** message displays, remove the USB flash drive.

Maintenance and Troubleshooting

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

Maintaining the Device

Follow these guidelines to maintain the device properly.

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

- To avoid scratching the screen, use a Zebra-approved, capacitive-compatible stylus intended for use with a touch-sensitive screen. Never use an actual pen, pencil, or other sharp object on the surface of the device screen.
- The device's touch-sensitive screen is made of glass. Do not drop the device or subject it to strong impact.
- Protect the device from temperature extremes. Do not leave it on the dashboard of a car on a hot day, and keep it away from heat sources.
- Do not store the device in any dusty, damp, or wet location.
- Use a soft lens cloth to clean the device. If the surface of the device screen becomes soiled, clean it with a soft cloth moistened with an approved cleanser.
- Periodically replace the rechargeable battery to ensure maximum battery life and product performance. Battery life depends on individual usage patterns.
- A screen protector is applied to the device. Zebra recommends using a screen protector to minimize wear and tear. Screen protectors enhance the usability and durability of touchscreen displays. Benefits include:
  - Protection from scratches and gouges
  - Abrasion and chemical resistance
  - Glare reduction
  - Keeping the device’s screen looking new
  - Quick and easy installation.
- Periodically inspect accessory cables and connectors. Check the inside and outside of cradles to ensure good electrical contact.

Battery Safety Guidelines

To use the device safely, you must follow the battery guidelines.

- The area in which the 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.
- Follow battery usage, storage, and charging guidelines found in this guide.
- Improper battery use may result in a fire, explosion, or other hazard.
- To charge the mobile device battery, the ambient battery and charger temperatures must be between 0°C and +40°C (+32°F and +104°F).
- Do not use incompatible batteries and chargers, including non-Zebra batteries and chargers. Use of an incompatible battery or charger may present a risk of fire, explosion, leakage, or other hazard. If you have any questions about the compatibility of a battery or a charger, contact the Global Customer Support Center.
- For devices that utilize a USB port as a charging source, the device shall only be connected to products that bear the USB-IF logo or have completed the USB-IF compliance program.
- Do not disassemble or open, crush, bend or deform, puncture, or shred the battery.
- 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 properly dispose of used rechargeable batteries.
- Do not dispose of batteries in fire.
- In the event of a battery leak, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with water for 15 minutes, and seek medical advice.
- If you suspect damage to your equipment or battery, contact Customer Support to arrange for inspection.

Best Practices for Enterprise Mobile Computing Devices Operating in Hot Environments and Direct Sunlight

Exceeding the operating temperature by external hot environments will cause the device's thermal sensor to notify the user of a shutdown of the WAN modem or shutdown the device until the device's temperature returns to the operational temperature range.

CAUTION: This device is capable of non-charging operation at a very high ambient temperature (63°C (145.4°F)). When handling this device at elevated room temperatures (> 50°C (122°F)), the

surface temperatures of this device and other room objects may be hot to the touch. Care should be taken to avoid direct skin contact with hot surfaces.

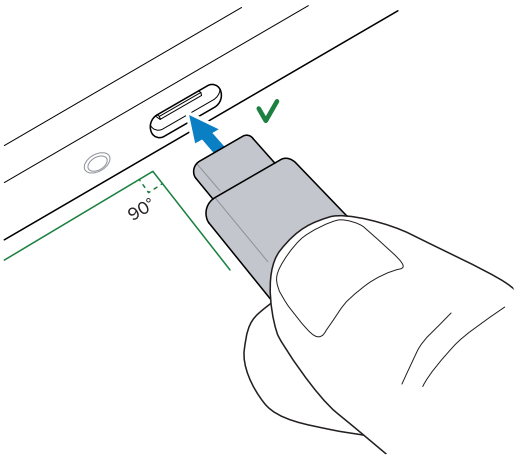
- Avoid direct sunlight to the device - The easiest way to prevent overheating is to keep the device out of direct sunlight. The device absorbs light and heat from the sun and retains it, getting hotter the longer it remains in sunlight and heat.
- Avoid leaving the device in a vehicle on a hot day or hot surface - Similar to leaving the device out in direct sunlight, the device will also absorb the thermal energy from a hot surface or, when left on the dashboard of a vehicle or seat, getting warmer the longer it remains on the hot surface or inside the hot vehicle.
- Turn off unused apps on the device. Open, unused apps running in the background can cause the device to work harder, which in turn may cause it to heat up. This will also improve your mobile computer device's battery life performance.
- Avoid turning your screen brightness up - Just the same as running background apps, turning your brightness up will force your battery to work harder and create more heat. Minimizing your screen brightness may extend operating the mobile computer device in hot environments.

Connecting a USB-C Cable

It is important to correctly align the cable in a straight line when inserting it into the device to prevent damage to the connector or cable.

Examine the device's USB-C port and USB-C connector for damage. If either is damaged, stop using it and get it serviced or repaired.

1. Using your index finger and thumb, hold both sides of the USB-C cable.
2. Insert the cable straight into the port and not at an angle.



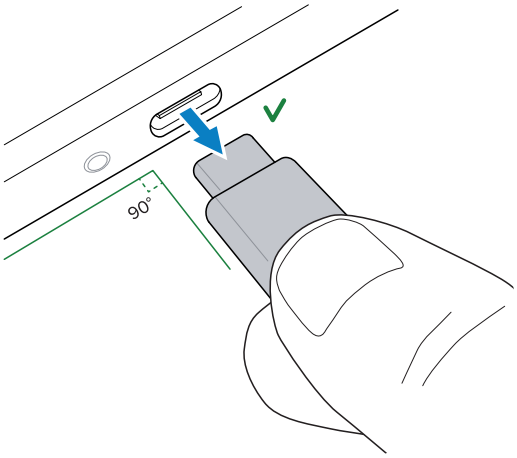
Disconnecting a USB-C Cable

It is important to correctly align the cable in a straight line when removing it from the device to prevent damage to the connector or cable.

Examine the device's USB-C port and USB-C connector for damage. If either is damaged, stop using it and get it serviced or repaired.

1. Using your index finger and thumb, hold both sides of the USB-C cable where it is connected to the device.

2. Gently pull it straight out and not at an angle.

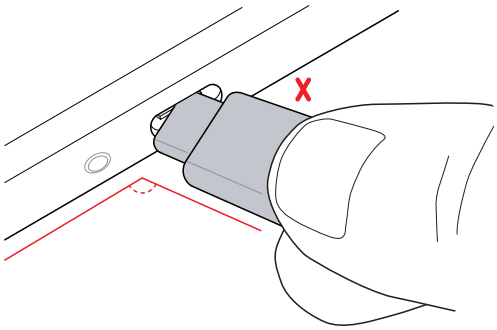


Properly Plugging and Unplugging a USB-C Cable

This section outlines the proper procedures for safely connecting and disconnecting a USB Type-C cable to prevent damage to the device's connector port.

When connecting/disconnecting the cable from your device:

- Visually inspect the input connector for damage, foreign materials, or signs of moisture.
- Avoid inserting or removing the cable in a non-horizontal direction (for example, upward, downward, left, right, or forward direction). Keep it straight.



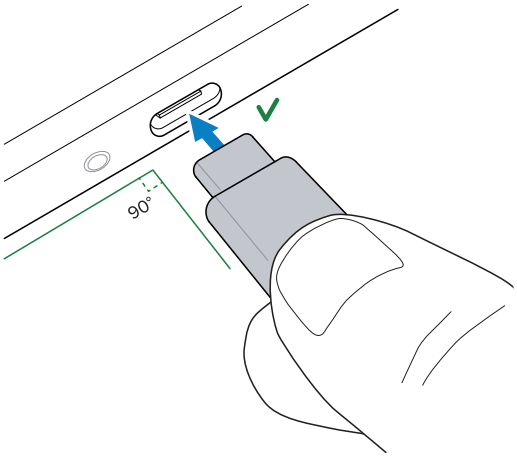
- Avoid inserting or removing the cable in a forceful manner.
- Avoid wiggling the cable when plugged into the port.
- Avoid pulling or tugging the cable when plugged into the port.

Connecting a USB-C Cable

It is important to correctly align the cable in a straight line when inserting it into the device to prevent damage to the connector or cable.

Examine the device's USB-C port and USB-C connector for damage. If either is damaged, stop using it and get it serviced or repaired.

1. Using your index finger and thumb, hold both sides of the USB-C cable.
2. Insert the cable straight into the port and not at an angle.

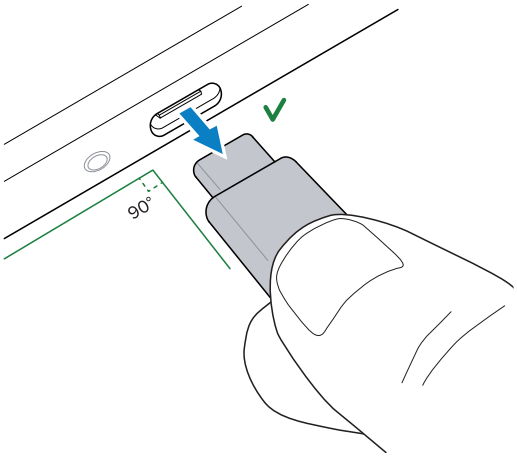


Disconnecting a USB-C Cable

It is important to correctly align the cable in a straight line when removing it from the device to prevent damage to the connector or cable.

Examine the device's USB-C port and USB-C connector for damage. If either is damaged, stop using it and get it serviced or repaired.

1. Using your index finger and thumb, hold both sides of the USB-C cable where it is connected to the device.
2. Gently pull it straight out and not at an angle.



Approved Cleaning and Disinfectant Agents

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

CAUTION: Do not use quaternary ammonia wipes.

100% of the active ingredients in any cleaner must consist of one or some combination of the following:

- Isopropyl alcohol
- Denatured Alcohol
- 50/50 mixture of water and bleach (see important note below)
- 50/50 mixture of water and hydrogen peroxide
- Lysol disinfectant spray
- Disinfecting wipe with Alkyl C12-C18

IMPORTANT:

When using sodium hypochlorite (bleach) based products always follow the manufacturer's recommended instructions: use gloves during application and remove the residue afterward with a damp alcohol cloth or a cotton swab to avoid prolonged skin contact while handling the device. Due to the powerful oxidizing nature of sodium hypochlorite, the metal surfaces on the device are prone to oxidation (corrosion) when exposed to this chemical in liquid form (including wipes).

In the event that these types of disinfectants come in contact with metal on the device, prompt removal with an alcohol-dampened cloth or cotton swab after the cleaning step is critical.

Cleaning Instructions

This section provides instructions for cleaning the device.

Use caution and avoid damaging the device when using cleaning materials.

CAUTION: Always wear eye protection. Read the warning label on alcohol product before using. If you have to use any other solution for medical reasons please contact the Global Customer Support Center for more information.

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

Approved Cleanser Active Ingredients

100% of the active ingredients in any cleaner must consist of one or some combination of the following: isopropyl alcohol, bleach/sodium hypochlorite (see important note below), hydrogen peroxide, ammonium chloride, or mild dish soap. [1]

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

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

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

Approved cleaners include:

- Purell Ethanol Wipes
- 409 Glass Cleaner
- Windex Blue

Harmful Ingredients

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

Many vinyl gloves contain phthalate additives, which are often not recommended for medical use and are known to be harmful to the housing of the device.

Special Cleaning Notes

Do not handle the device while wearing vinyl gloves containing phthalates. Remove vinyl gloves and wash hands to eliminate any residue left from the gloves.

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

IMPORTANT: If the battery connectors are exposed to cleaning agents, thoroughly wipe off as much of the chemical as possible and clean with an alcohol wipe. It is also recommended to install the battery in the terminal prior to cleaning and disinfecting the device to help minimize buildup on the connectors. When using cleaning/disinfectant agents on the device, it is important to follow the directions prescribed by the cleaning/disinfectant agent manufacturer.

Cleaning Frequency

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

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

Device Cleaning Instructions

Do not apply liquid directly to the device. Dampen a soft cloth or use pre-moistened wipes. Do not wrap the device in the cloth or wipe, instead gently wipe the unit. Before use, allow the unit to air dry.

NOTE: For thorough cleaning, it is recommended to first remove all accessory attachments, such as hand straps or cradle cups from the mobile device and to clean them separately.

Display

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

Housing

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

Camera and Exit Window

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

Cleaning the Fingerprint Reader

Under normal circumstances, you should clean the fingerprint reader once a month or whenever necessary.

To clean the fingerprint reader, gently rub the sensor surface with the cloth or any microfiber cloth.

You can use a small amount of alcohol or warm, soapy water from time to time to clean the reader's surface. Dry it off after cleaning.

CAUTION: Do not use bleach, solvents, or abrasives to clean the reader.

Cleaning Cradle Connectors

1. Remove the DC power cable 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 leave any cotton residue on the connector.
4. All sides of the connector should also be rubbed with the cotton-tipped applicator.
5. Remove any lint left by the cotton-tipped applicator.
6. If grease and other dirt can be found on other areas of the cradle, use a lint-free cloth and alcohol to remove.
7. 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 low humidity requires less drying time.

CAUTION: After cleaning the cradle connectors with bleach-based chemicals, follow the Cleaning Cradle Connectors instructions to remove bleach from the connectors.

Troubleshooting

This section provides information for resetting and troubleshooting the device and accessories.

Resetting the Device

There are two reset functions: soft reset, hard reset, and factory reset.

Restarting the Device

If the device is running slow or some applications are not functioning properly, restart the device.

1. Touch .
2. Touch **Power** > **Restart**.

   The device shuts down and restarts.

Performing a Factory Reset

A factory reset restores Windows to the original factory settings.

1. Connect the device to a power source.
2. In the taskbar, touch .
3. Touch .
4. Touch **System** > **Recovery**.
5. Touch **Reset PC**.
6. Touch **Keep my files** to remove all apps and settings but keep all personal files or **Remove everything** to remove all personal files, apps, and settings.

CAUTION: Removing everything erases all data, including your account configuration, applications, music, pictures, and files. Make sure that you back up all the required data before you proceed.

7. Touch **Next**.
8. Select **Cloud download** or **Local reinstall**.
9. Touch **Next**.
10. Touch **Next**.

    The process can take an hour or longer. When the reset is complete, the Windows setup process begins.

Troubleshooting the Device

This section provides troubleshooting options for the device.

Table 14 Troubleshooting the Device

Problem	Cause	Solution
After installing the battery, the device does not boot up.	The power button was not pressed.	Press the Power button.
When pressing the power button the device does not turn on.	The battery is not charged.	Charge or replace the battery in the device.
	The battery is not installed properly.	Install the battery properly.
	System crash.	Perform a hard reset.
When pressing the power button, the device does not turn on, but two LEDs blink.	Battery charge is at a level where data is maintained, but the battery should be re-charged.	Charge or replace the battery in the device.
The battery did not charge	Battery failed.	Replace battery. If the device still does not operate, perform a hard reset.
	The device was removed from the cradle while the battery was charging.	Insert the tablet into the cradle and begin charging.
	Extreme battery temperature.	The ambient temperature must be between 0°C and 40°C (32 °F and 104°F).
Cannot see characters on display.	The device is not powered on.	Press the Power button.
During data communication with a host computer, no data transmitted, or transmitted data was incomplete.	The device is removed from the cradle or disconnected from the host computer during communication.	Replace the device in the cradle, or reattach the communication cable and re-transmit.
	Incorrect cable configuration.	See the system administrator.
	Communication software was incorrectly installed or configured.	Perform setup.
During data communication over Wi-Fi, no data was transmitted, or transmitted data was incomplete.	The Wi-Fi radio is not on	Turn on the Wi-Fi radio.
	You moved out of range of an access point.	Move closer to an access point.
During data communication over Bluetooth, no data transmitted, or transmitted data was incomplete.	Bluetooth radio is not on	Turn on the Bluetooth radio.
	You moved out of range of another Bluetooth device.	Move within 10 meters (32.8 feet) of the other device.
During data communication over mobile data, no data transmitted, or transmitted data was incomplete.	Mobile data is not on.	Turn on mobile data. If it is already on, turn it off and on again.
	You moved out of the coverage area.	Move into a coverage area.

Table 14 Troubleshooting the Device (Continued)

Problem	Cause	Solution
No sound.	The volume setting is low or turned off.	Adjust the volume.
The device shuts off.	The device is inactive.	The display turns off after a period of inactivity. Set this period to 15 seconds, 30 seconds, 1, 2, 5, 10 or 30 minutes.
	The battery is depleted.	Replace the battery.
The multi-touch screen responds slowly or improperly.	Your finger or screen is wet.	Ensure that your hands are clean and dry when touching the screen. Restart the tablet to try again.
The device does not decode a barcode.	The scanning application is not loaded.	Load a scanning application on the device. See the system administrator.
	Unreadable barcode.	Ensure the barcode is not defaced.
	The distance between the exit window and the bar code is incorrect.	Place the device within the proper scanning range.
	The device is not programmed for the barcode.	Program the device to accept the type of bar code being scanned. Refer to the EMDK or DataWedge application.
	The device is not programmed to generate a beep.	If the device does not beep on a good decode, set the application to generate a beep on a good decode.
	The battery is low.	If the scanner stops emitting a laser beam upon a trigger press, check the battery level. When the battery is low, the scanner shuts off before the device's low battery condition notification. Note: If the scanner is still not reading symbols, contact the distributor or the Global Customer Support Center.
The device cannot find any Bluetooth devices nearby.	Too far from other Bluetooth devices.	Move closer to the other Bluetooth device(s), within a range of 10 m (32.8 ft).
	The Bluetooth device(s) nearby are not turned on.	Turn on the Bluetooth device(s) to find.
	The Bluetooth device(s) are not in discoverable mode.	Set the Bluetooth device(s) to discoverable mode. If needed, refer to the device’s user documentation for help.

Table 14 Troubleshooting the Device (Continued)

Problem	Cause	Solution
I cannot unlock the device.	The user enters an incorrect password or PIN.	If the user enters an incorrect password five times, the user is requested to wait for 30 seconds when using a PIN, or Password.
Cannot transfer files or debug using a USB connection.	Too many USB connections to the device.	Only one USB-C interface is allowed when connecting the device to a host computer. If using a USB-C cable, ensure the device is not in a dock.

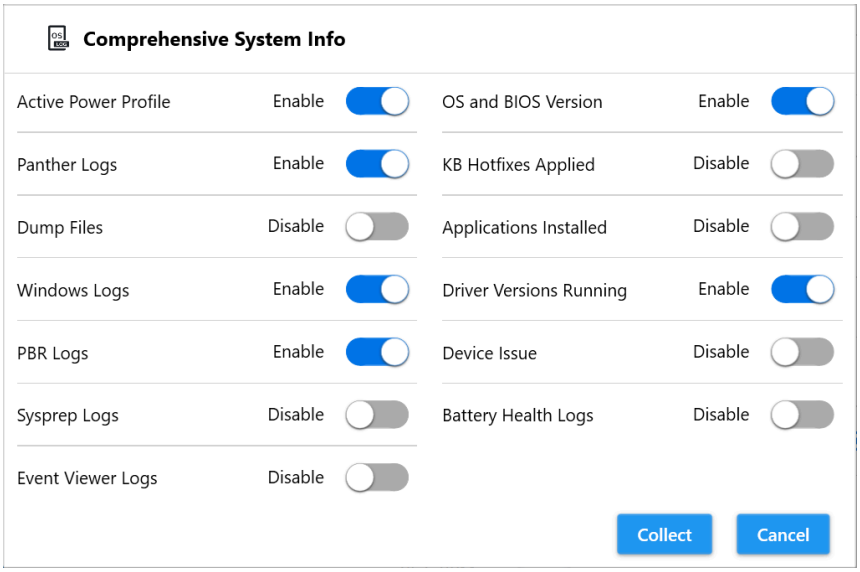
Capturing System Information

Comprehensive System Info captures various Windows data.

1. In the taskbar, touch ^ > .

   The **Zebra Control Hub** displays.
2. Touch **System Management**.
3. In the **Comprehensive System Info** module, touch **Collect**.

   The **Comprehensive System Info** dialog box displays.



4. Touch the gray switch for each data type.
5. Touch **Collect**.

The tablet saves the data file in the `My Document/Comprehensive_System_info` folder.

Capturing Data Logger Information

Data Logger captures battery and thermal information.

1. In the taskbar, touch ^ > .

   The **Zebra Control Hub** displays.
2. Touch**System Management**.
3. In the **Data Logger** module, select a time frame.
   - **1 Day**
   - **7 Day**
   - **30 Day**
   - **Infinite** - one log file is created for each day.
4. Touch the gray switch to enable logging.

The tablet saves the data file in the `My Document/Data_Logger` folder.

Technical Specifications

For device technical specifications, go to zebra.com/et6x

SE55 Decode Distances

The table below lists the typical distances for selected bar code densities. The minimum element width (or "symbol density") is the width in mils of the narrowest element (bar or space) in the symbol.

Table 15 SE55 Decode Distances

Symbol Density/ Bar Code Type	Typical Working Ranges	
	Near	Far
3 mil Code 39	6.9 (cm) / 2.7 (in.)	41.1 (cm) / 16.2 (in.)
5 mil Code 39	6.4 (cm) / 2.5 (in.)	67.6 (cm) / 26.6 (in.)
5 mil PDF417	7.1 (cm) / 2.8 (in.)	49.8 (cm) / 19.6 (in.)
6.67 mil PDF417	6.6 (cm) / 2.6 (in.)	65.0 (cm) / 25.6 (in.)
10 mil DataMatrix	5.6 (cm) / 2.2 (in.)	68.8 (cm) / 27.1 (cm)
80% UPC	5.1 (cm) / 2.0 (in.)	141.0 (cm) / 55.5 (in.)
100% UPC (13 mil)	6.4 (cm) / 2.5 (in.)	180.3 (cm) / 71.0 (in.)
15 mil Code 128 (4 in. wide)	18.3 (cm) / 7.2 (in.)	182.9 (cm) / 72.0 (in.)
20 mil Code 39	*	276.9 (cm) / 109.0 (in.)
55 mil Code 39	*	744.2 (cm) / 293.0 (in.)
100 mil Code 39	*	1,407 (cm) / 554.0 (in.)
100 mil DataMatrix	*	685.5 (cm) / 270.0 (in.)
Note: *Limited by the width of barcode in field of view; refer to SE55 Integration Guide for details. The photographic quality barcode at 18° tilt pitch angle under 20 fcd ambient illumination. Measurement is taken straight from the face of the scan engine's exit window to the surface of the barcode.		

I/O Connector Pin-Outs

Describes the pin-outs for the 8-pin I/O connector on the back of the device.

Figure 28 I/O Connector Pin-Outs

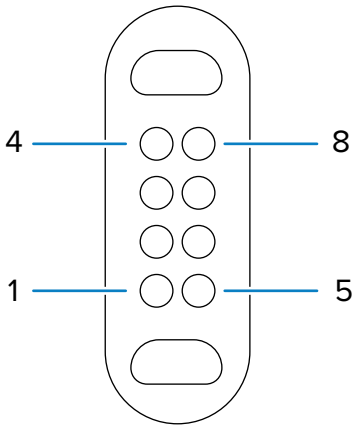


Table 16 I/O Connector Pin-Outs

Pin	Signal	Description
1	GND	Ground
2	D+	USB 2.0 Data+
3	VBUS/HOST	5 VDC Power Out
4	Wake	Scan wake
5	D-	USB 2.0 Data-
6	ID	Identify RFID accessory
7	DETECT	Accessory presence detect
8	GND	Ground

Expansion Module RS-232 Connector Pin-out

Describes the pin-outs for the 9-pin RS-232 serial connector on the expansion module.

Figure 29 Expansion Module Pin-Outs

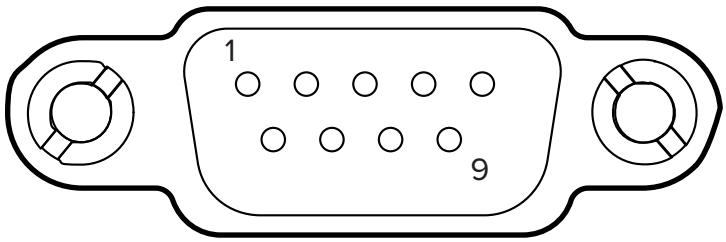


Table 17 Expansion Module Pin-Outs

Pin	Signal	Description
1	DCD	Data Terminal Ready
2	RxD	Receive Data
3	TxD	Transmit Data
4	RTS	Request to Send
5	CTS	Clear to Send
6	DSR	Data Set Ready
7	Ground	Ground
8	DCD	Data Carrier Detect
9	Ring Indicator 5 VDC	Ringing on telephone line 5 VDC output (up to 2 A)

Vehicle Dock Technical Specifications

This section provides specification information on the Vehicle Dock.

Table 18 Vehicle Dock Technical Specifications

Feature	Description
Dimensions	Height: 19.2 cm (7.6 in.) Width: 28.8 cm (11.3 in.) Depth 8.2 cm (3.2 in.)
Weight	1.2 kg (2.6 lbs)
Input Voltage	12-15 VDC
Maximum Power Consumption	60 watts
Operating Temperature	-30°C (-22°F) to +60°C (+140°F)
Storage Temperature	-40°C (-40°F) to +85°C (+185°F)
Humidity	5% to 95% non-condensing
Electrostatic Discharge (ESD)	+/- 15 kV air +/- 8 kV contact +/- 8 kV charge body