ZEBRA RFD40 RFID Standard Sled User Guide

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RFD40
RFID Standard Sled

Quick Start Guide

MN-004149-01EN Rev. A

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Service Information
If you have a problem using the equipment, contact your facility's Technical or Systems Support. If there is a problem with the equipment, they will contact the Zebra Global Customer Support Center at: zebra.com/support. For the latest version of this guide, localized translations, and related product guides, visit the Zebra website at: **zebra.com/support**.

Contents

Getting Started

The RFD40 UHF RFID Standard sled provides RAIN Radio Frequency Identification (RFID) tag reading, writing, and locating capability to supported Zebra mobile computers and other host devices. To use the RFD40 sled for the first time with a mobile computer:

1. Insert the battery into the device.

2. Charge the RFD40 sled using the charging cradle, charging cup, or USB-C cable.

3. Replace the standard cover with the adaptor that is specific to the mobile computer to be used with the sled.

4. Place the mobile computer into the adaptor headfirst.

5. Secure the mobile computer into the adaptor by pressing down on the bottom of the mobile computer.

6. Set the region using 123RFID Desktop or 123RFID Mobile. For the latest versions of guides and software, go to: zebra.com/support. For detailed information, refer to the Product Reference Guide at: **zebra.com/support**.

Adaptor Installation

To install the adaptor,

1. Remove the cover by pulling up on the lip.

2. Secure the adaptor onto the RFD40 by fastening the four coin screws into the sled.

Figure 1 Adaptor Installation
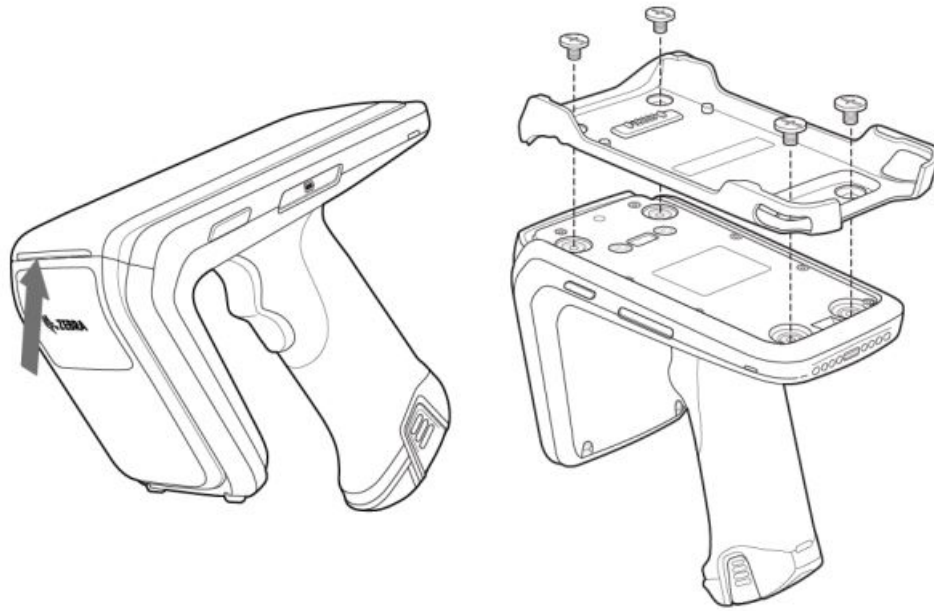
RFD40 RFID Standard Sled Features

Figure 2 RFD40 RFID Standard Sled Features
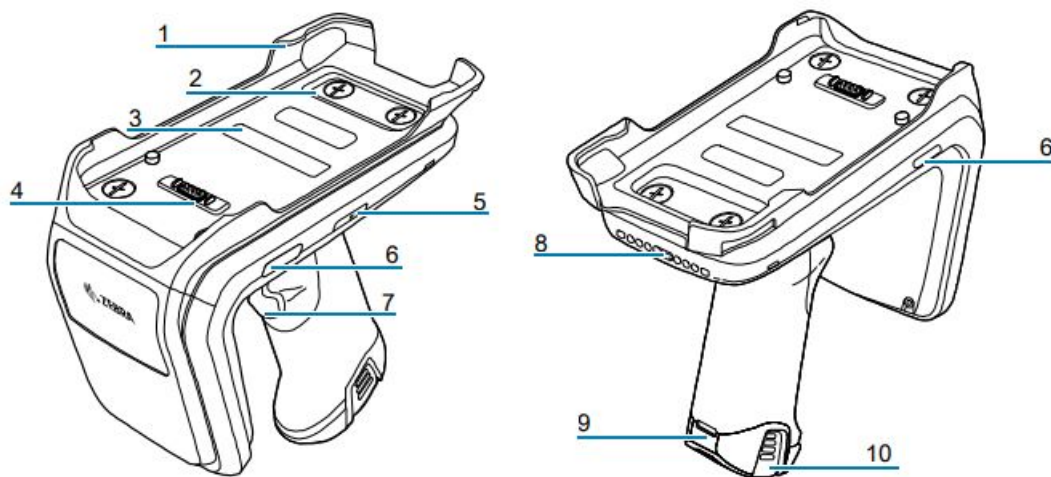
1	Adaptor (Sold Separately)
2	Coin Screws (4)
3	Adaptor Label
4	eConnex™ Communication Port
5	Battery Status LED
6	Decode LED
7	Tri-Function Trigger
8	Charging Contact and USB-C Port
9	Tethering Point for Handstrap
10	Rubber Foot

Device Installation

Installing the Mobile Computer into the RFD40 Sled

To secure the mobile computer to the RFD40 sled, place the top of the device fully forward into the RFD40 sled adaptor and push down on the bottom of the mobile computer.

NOTE Depending on the mobile computer being used with the sled, the mobile computer may be inserted into the adaptor tail-end first.
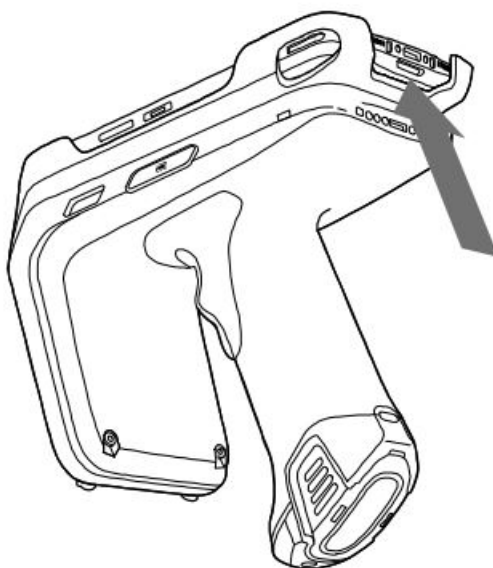
NOTE While installing the mobile computer into the adaptor, use caution and do not to collide the deconned™ Communication Port on the RFD40.

Removing the Mobile Computer from the RFD40 Sled

To remove the mobile computer from the RFD40 sled, firmly hold the sled handle and lift the device off of the sled adaptor.

UI Indicators

The RFD40 RFID Standard sled presents multiple modalities to inform the user of various device states. The sled provides LED definitions for decode and battery status as well as beeper indications to indicate battery charge progress. The trigger on the device is also capable of carrying out various programmable tasks.

Decode LED Definitions

NOTE: The LED indicators on the RFD40 RFID Standard sled will differ from the LED indicators on the mobile computer being used with the sled.

Table 1 RFD40 RFID Standard Sled Decode LED Indications

Table 1 RFD40 RFID Standard Sled Decode LED Indications

Scan	LED Status
Good Scan	Green
Scan Error	Red
RFID Tag Read Indicator Enabled	Green
Read Error	Red

Battery LED Definitions

Table 2 RFD40 RFID Standard Sled LED Definitions While Charging

Table 2 RFD40 RFID Standard Sled LED Definitions While Charging

Condition	Indication
Pre-charging	Amber (Fast, Fast, Slow)
Charging	Amber (Blinking)
Fully Charged	Green (Stays On)
Charging Error	Amber (Fast Blinking)
Firmware Update in Progress	Amber-Blinking

Battery Beeper Indications

Table 3 RFD40 RFID Standard Sled Battery Beeper Indications

Table 3 RFD40 RFID Standard Sled Battery Beeper Indications

Condition	Tone
Low Battery (20%)	Medium-length tones
Lower Battery (10%)	Short tones - repeat
Suspend	High/Medium/Low
Charging	Short tone when the charger is connected.
Fully Charged	One Beep
Charging Error	Three Beeps (single occurrence)
Power On	Low/Medium/High Beep

Trigger Modes

NOTE: By default, the device assumes the upper trigger as the RFID decode trigger and the lower trigger as the mobile computer decode trigger.

Table 4 RFD40 RFID Standard Sled Default Trigger Functions

**Table 4** RFD40 RFID Standard Sled Default Trigger Functions

Condition	Upper Trigger	Lower Trigger	Both	Description
RFID Start/Stop	X	-	-	User Programmable.
Barcode Start/Stop	-	X	-	User Programmable.
Start Bootloader Recovery	-	X	-	Press and hold the lower trigger for five seconds while inserting the battery.
Configurable/Signal Intent to Mobile Device	-	-	X	Feature support is determined by the mobile computer being used with the device.

RFID Sled Battery Replacement

Battery Installation

To install the battery:

1. Align the battery with the notch facing the back of the device.
2. Slide the battery into the handle of the device.
3. Snap the battery into place.
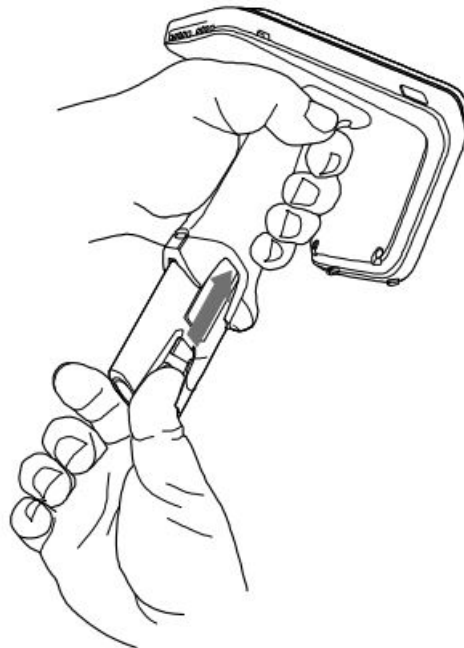
Battery Removal

To remove the battery, pinch the clips to unlock the battery and slide downwards to release.

Charging

Before using the RFD40 for the first time, fully charge the battery by placing it in the charging cradle until the LED Power/Charging Indicator turns solid green. The RFD40 RFID sled and mobile computer may be charged in the charging cradle individually or attached together. When an RFD40 RFID sled is removed from a charging cradle, it is automatically powered on. If a reader is not used for a duration of thirty minutes, the reader enters Off mode.

Figure 3 Single-Slot Charging Cradle
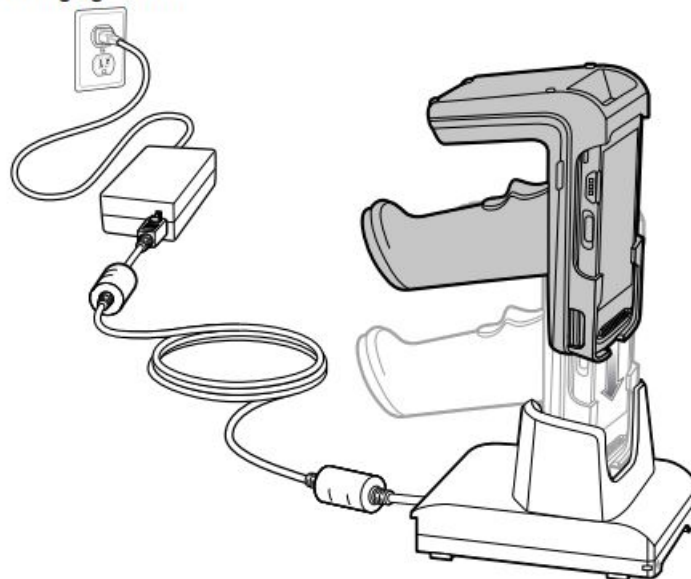
Optimum Tag Decoding

Ergonomic Best Practices

 NOTE Taking breaks and task rotation is recommended. Optimum Upright Body Posture

Optimum Body Posture for Low Scanning

AVOID REACHING

AVOID BENDING

Optimum Body Posture for High Scanning Use a Ladder

Avoid Extreme Wrist Angles

AVOID EXTREME WRIST ANGLES

Regulatory Information

This device is approved under Zebra Technologies Corporation. This guide applies to the following model number: RFD4030 All Zebra devices are designed to be compliant with the rules and regulations in the locations they are sold and will be labelled as required.

Local language translation / Tradução do idioma local / Übersetzung in die lokale Sprache / Raduccion de idioma local / Traduction en langue locale / Prijevod na lokalni jezik / Traduzione in lingua locale / Yerel dil çeviri /Tlumaczenie na jzyk lokalny: **zebra.com/support**

Any changes or modifications to Zebra equipment not expressly approved by Zebra could void the user's authority to operate the equipment.

Declared maximum operating temperature: 50°C

For use only with Zebra approved and UL Listed mobile devices, Zebra approved, and UL Listed/Recognized battery packs.

Regulatory Markings

Regulatory markings subject to certification are applied to the device signifying the radio(s) is/are approved for use. Refer to the Declaration of Conformity (DoC) for details of other country markings. The DOC is available at: **zebra.com/doc**.

Health and Safety Recommendations

Ergonomic Recommendations
In order to avoid or minimize the potential risk of ergonomic injury, always follow good ergonomic workplace practices. Consult with your local Health and Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

Safety in Hospitals and Aircraft
NOTE: Wireless devices transmit radio frequency energy that may affect medical electrical equipment and aircraft's operation. Wireless devices should be switched off wherever you are requested to do so in hospitals, clinics, healthcare facilities or by airline staff. These requests are designed to prevent possible interference with sensitive equipment's.

Medical Devices
It is recommended that a minimum separation distance of 20 cm (8 inches) be maintained between a wireless device and a medical devices such as pacemakers, defibrillator, or other implantable devices to avoid potential interference with the medical device. Pacemaker users should keep the device at the opposite side of the

pacemaker or turn OFF the device if suspected of interference. Please consult your physician or the manufacturer of the medical device to determine if the operation of your wireless product may interfere with the medical device.

RF Exposure Guidelines

⚠ Safety Information
Reducing RF Exposure — Use Properly
Only operate the device in accordance with the instructions supplied. The device complies with internationally recognized standards covering human exposure to electromagnetic fields. For information on international human exposure to electromagnetic fields, refer to the Zebra Declaration of Conformity (DoC) at **zebra.com/doc**.

Use only Zebra tested and approved headset, belt-clips, holsters, and similar accessories to ensure RF exposure compliance. If applicable, follow the instructions for use as detailed in the accessory guide.

The use of third-party belt clips, holsters, and similar accessories may not comply with RF exposure compliance requirements and should be avoided.

For further information on the safety of RF energy from wireless devices, refer to RF exposure and assessment standards section at zebra.com/responsibility.

To satisfy RF exposure requirements, this device must be hand-use only and, where applicable use only with Zebra tested and approved accessories.

Power Supply

⚠ **WARNING ELECTRICAL SHOCK:** Use only a Zebra approved, Certified ITE LPS power supply with appropriate electrical ratings. Use of alternative power supply will invalidate any approvals given to this unit and may be dangerous.

Batteries and Power Packs

This information applies to Zebra-approved batteries and power packs containing batteries.

Battery Information

⚠ **CAUTION:** Risk of explosion if battery is replaced by an incorrect type. Dispose of batteries according to instructions. Use only Zebra approved batteries. Accessories which have battery charging capability are approved for use with the following battery models:

- Model BT-000380 (3.6 VDC, 7000 mAh)

Zebra approved rechargeable battery packs are designed and constructed to the highest standards within the industry.

However, there are limitations as to how long a battery can operate or be stored before needing replacement. Many factors affect the actual life cycle of a battery pack such as heat, cold, harsh environmental conditions, and severe drops.

When batteries are stored over six months, some irreversible deterioration in overall battery quality may occur. Store batteries at half charge in a dry, cool place, removed from the equipment to prevent loss of capacity, rusting of metallic parts, and electrolyte leakage. When storing batteries for one year or longer, the charge level should be verified at least once a year and charged to half charge.

Replace the battery when a significant loss of run time is detected.

- Standard warranty period for all Zebra batteries is one year, regardless if the battery was purchased separately or included as part of the host device. For more information on Zebra batteries, please visit: **zebra.com/batterydocumentation** and select the Battery Best Practices link.

Battery Safety Guidelines

(!) **IMPORTANT** - SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

⚠ **WARNING –** When using this product basic safety precautions should always be followed, including the following: 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.

- Read all the instructions before using the product.
- Follow battery usage, storage, and charging guidelines found in the user's guide.
- Improper battery use may result in a fire, explosion, or other hazard. To charge the mobile device battery, the battery and charger temperatures must be between 0°C and +40°C (+32°F and +104°F).

Do not use incompatible batteries and chargers. Use of an incompatible battery or charger may present a risk of fire, explosion, leakage, or other hazard. If you have any questions about the compatibility of a battery or a charger, contact Zebra support.

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. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion, or risk of injury.

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, disassemble, or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water, rain, snow 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. To reduce the risk of injury, close supervision is necessary when used near children.

Please follow local regulations to promptly dispose of used re-chargeable batteries. Do not dispose of batteries in fire. Exposure to temperatures over 100°C (212°F) may cause explosion.

Seek medical advice immediately if a battery has been swallowed. In the event of a battery leak, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with large amounts of water and seek medical advice.

If you suspect damage to your equipment or battery, contact Zebra support to arrange for inspection.

CE Marking and European Economic Area (EEA)
Statement of Compliance

Zebra hereby declares that this radio equipment is in compliance with Directives 2014/53/EU and 2011/65/EU. Any radio operation limitations within EEA countries are identified in Appendix A of EU Declaration of Conformity. The full text of the EU Declaration of Conformity is available at: **zebra.com/doc**.

Waste Electrical and Electronic Equipment (WEEE)

For EU and UK Customers: For products at the end of their life, please refer to recycling/disposal advice at: zebra.com/wee. EU Importer: Zebra Technologies B.V Address: Mercurius 12, 8448 GX Heerenveen, Netherlands

United States and Canada Regulatory
Radio Frequency Interference Notices

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radio Frequency Interference Requirements - Canada

Innovation, Science and Economic Development Canada ICES-003 Compliance Label: CAN ICES-3 (B)/NMB-3(B)

This device complies with Innovation, Science and Economic Development Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

RF Exposure Requirements – FCC and ISED

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated in compliance with the FCC RF emission guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of **fcc.gov/oet/ea/fccid**.
To ensure compliance with FCC/ISED RF exposure requirement, the user shall keep the front of the RFID Device transmitting antenna at least 21 cm away from any nearby persons.

Limb-worn Devices

To satisfy RF exposure requirements, this device must be hand-held only and, where applicable use only with Zebra tested and approved accessories.

Co-located Statement

To comply with FCC RF exposure compliance requirement, the antenna used for this transmitter must not be co-located (within 20 cm) or operating in conjunction with any other transmitter/antenna except those already

approved in this filling.

United Kingdom
Statement of Compliance
Zebra hereby declares that this radio equipment is in compliance with the Radio Equipment Regulations 2017 and the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012. Any radio operation limitations within UK are identified in Appendix A of UK Declaration of Conformity. The full text of the UK Declaration of Conformity is available at: zebra.com/doc. UK Importer: Zebra Technologies Europe Limited Address: Dukes Meadow, Millboard Rd, Bourne End, Buckinghamshire, SL8 5XF

Warranty
For the complete Zebra hardware product warranty statement, go to: **zebra.comwarranty**.

Service Information
Before you use the unit, it must be configured to operate in your facility's network and run your applications. If you have a problem running your unit or using your equipment, contact your facility's Technical or System Support. If there is a problem with the equipment, they will contact Zebra support at **zebra.comsupport**. For the latest version of the guide go to: **zebra.comsupport**.

Additional Information
For information on using the RFD4030, refer to the RFD4030 product guide available at: **zebra.com/support**.

zebra.com

Documents / Resources

RFD40 RFID Standard Sled Quick Start Guide ZEBRA	**ZEBRA RFD40 RFID Standard Sled** [pdf] User Guide RFD40, RFID Standard Sled
RFD40 RFID Standard Sled Quick Start Guide ZEBRA	**ZEBRA RFD40 RFID Standard Sled** [pdf] User Guide RFD40 RFID Standard Sled, RFD40, RFID Standard Sled, Standard Sled, Sled

References

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