

RFD40

RFID Standard Sled



ZEBRA

Quick Start Guide

Copyright

ZEBRA and the stylized Zebra head are trademarks of Zebra Technologies Corporation, registered in many jurisdictions worldwide. Google, Android, Google Play and other marks are trademarks of Google LLC. All other trademarks are the property of their respective owners.

© 2021 Zebra Technologies Corporation and/or its affiliates. All rights reserved.

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

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

SOFTWARE: zebra.com/linkoslegal

COPYRIGHTS: zebra.com/copyright

WARRANTY: zebra.com/warranty

END USER LICENSE AGREEMENT: zebra.com/eula

Terms of Use

- Proprietary Statement
- This manual contains proprietary information of Zebra Technologies Corporation and its subsidiaries ("Zebra Technologies"). It is intended solely for the information and use of parties operating and maintaining the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without the express, written permission of Zebra Technologies.
- Product Improvements
- Continuous improvement of products is a policy of Zebra Technologies. All specifications and designs are subject to change without notice.
- Liability Disclaimer
- Zebra Technologies takes steps to ensure that its published Engineering specifications and manuals are correct; however, errors do occur. Zebra Technologies reserves the right to correct any such errors and disclaims liability resulting therefrom.
- Limitation of Liability
- In no event shall Zebra Technologies or anyone else involved in the creation, production, or delivery of the accompanying product (including hardware and software) be liable for any damages whatsoever (including, without limitation, consequential damages including loss of business profits, business interruption, or loss of business information) arising out of the use of, the results of use of, or inability to use such product, even if Zebra Technologies has been advised of the possibility of such damages. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

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.

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.

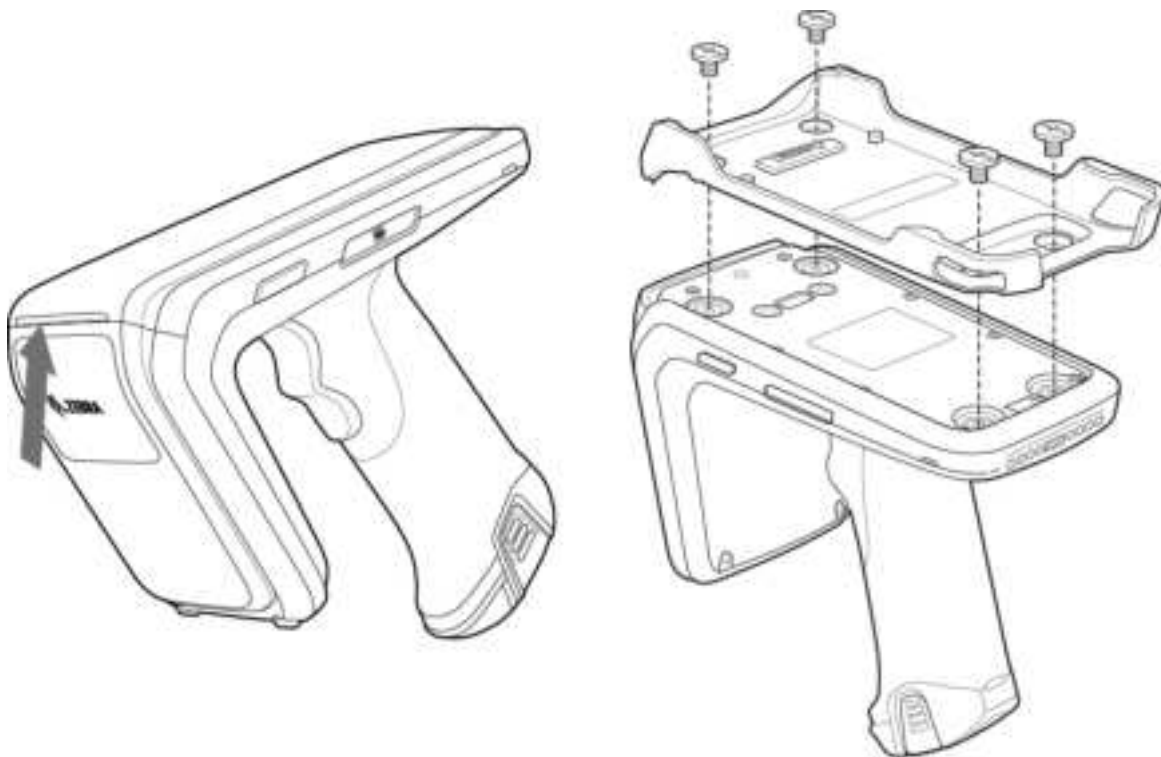
For detailed information, refer to the Product Reference Guide at: zebra.com/support.

Adaptor Installation

To install the adaptor,

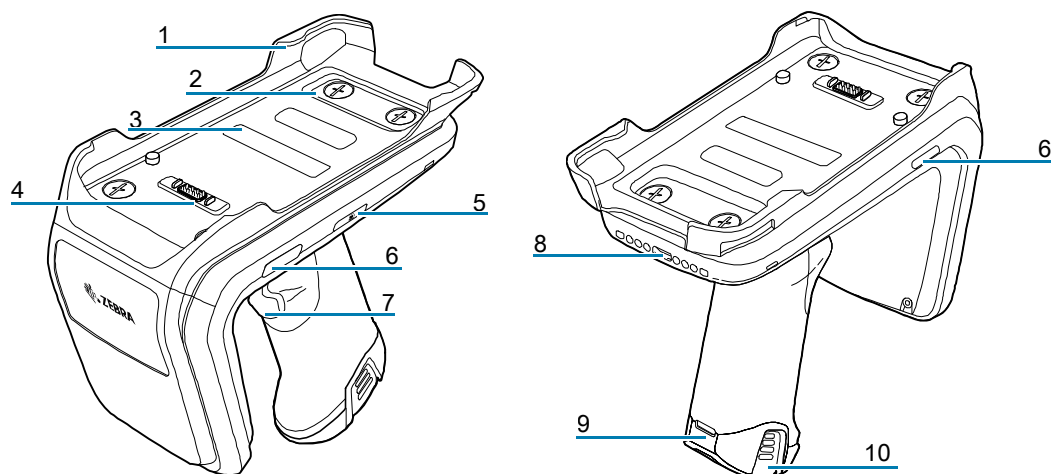
1. Remove the cover by pulling up on the lip.
2. Secure the adaptor onto the RFD40 by fastening the four coin screws into the sled.

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

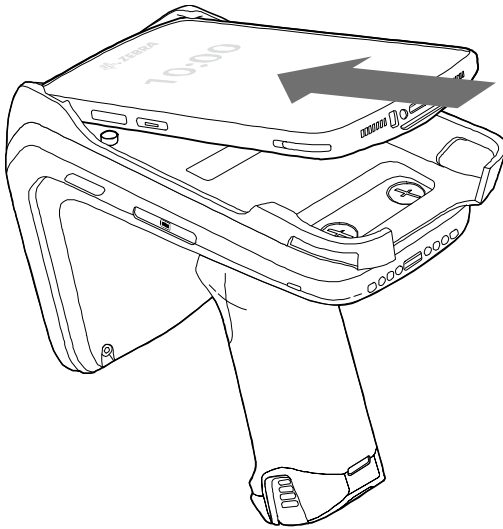
To secure the mobile computer to the RFD40 sled, place the top of the device fully forward into the RFD40 sled adaptor and push down on the bottom of the mobile computer.



NOTE Depending on the mobile computer being used with the sled, the mobile computer may be inserted into the adaptor tail-end first.

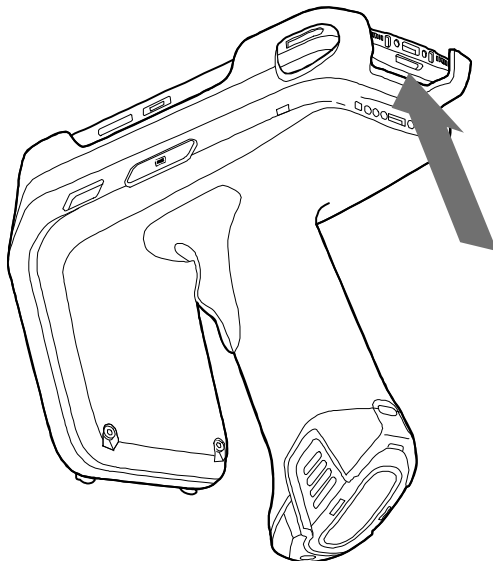


NOTE While installing the mobile computer into the adaptor, use caution and do not to collide the eConnex™ Communication Port on the RFD40.



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

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

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

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

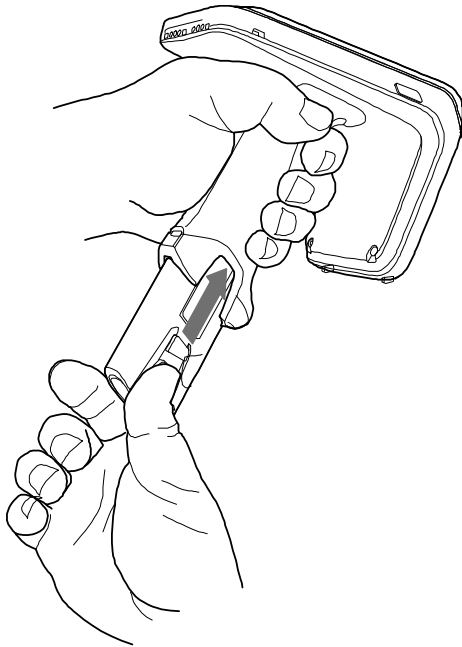
Condition	Upper Trigger	Lower Trigger	Both	Description
RFID Start/Stop	X	-	-	User Programmable.
Barcode Start/Stop	-	X	-	User Programmable.
Start Bootloader Recovery	-	X	-	Press and hold the lower trigger for five seconds while inserting the battery.
Configurable/Signal Intent to Mobile Device	-	-	X	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.

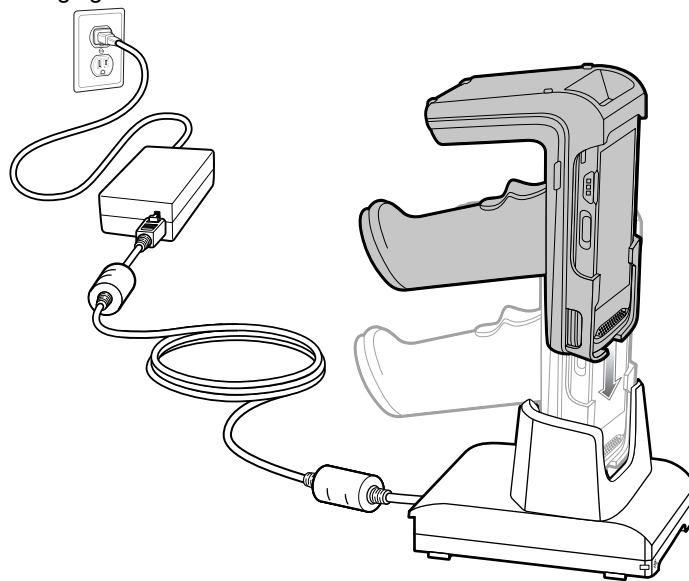


Charging

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

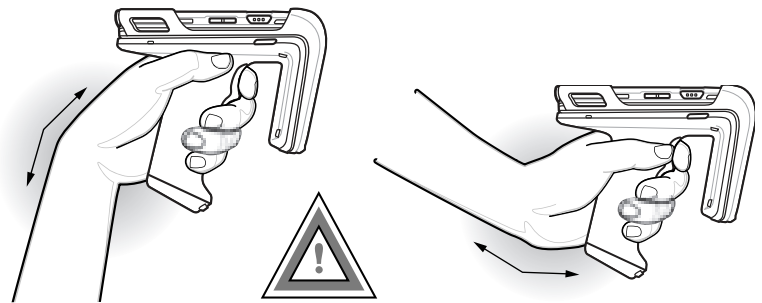
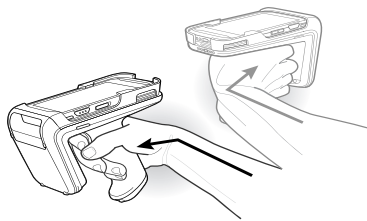


Optimum Body Posture for High Scanning

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 labeled 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 / 現地語の翻訳 / 현지 언어 번역 / Перевод на местный язык / 本地語言翻譯 / 本地语言翻译 / Yerel dil çeviri / Tłumaczenie na język 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 equipments.

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 behavior 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.

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/weee.

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.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radio électrique subi même si le brouillage est susceptible d'en compromettre le fonctionnement.

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.

Pour assurer la conformité avec l'exigence d'exposition aux radiofréquences USED, l'utilisateur doit garder l'avant de l'antenne d'émission du dispositif RFID à au moins 21 cm de toute personne à proximité.

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 filing.

Brasil

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

Este produto está homologado pela Anatel de acordo com os procedimentos regulamentados para avaliação da conformidade de produtos para telecomunicações e atende aos requisitos técnicos aplicados, incluindo os limites de exposição da Taxa de Absorção Específica referente a campos elétricos, magnéticos e eletromagnéticos de radiofrequência.

中国

通过访问以下网址可下载当地语言支持的产品说明书 zebra.com/support

如果配套使用外部电源适配器，请确保其已通过 CCC 认证



产品中有害物质的名称及含量

部件名称	有害物质 					
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
金属部件	O	O	O	O	O	O
电路模块	X	O	O	O	O	O
电缆及电缆组件	O	O	O	O	O	O
光学和光学组件	O	O	O	O	O	O
电池	O	O	O	O	O	O
本表格依据 SJ/T 11364 的规定编制。 O: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。 X: 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。(企业可在此处, 根据实际情况对上表中打“x”的技术原因进行进一步说明。						

Евразийский Таможенный Союз (EAC)

Данный продукт соответствует требованиям знака EAC.



France

Cet appareil a été testé et déclaré conforme aux limites applicables d'exposition aux radiofréquences (RF).

Le débit d'absorption spécifique (DAS) local quantifie l'exposition de l'utilisateur aux ondes électromagnétiques de l'équipement concerné.

Les valeurs SAR les plus élevées sont disponibles sur la déclaration de conformité (DoC) disponible sur: zebra.com/doc

México

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

臺灣

低功率電波輻射性電機管理辦法

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

公司資訊

台灣班馬科技股份有限公司 / 台北市信義區松高路 9 號 13 樓



行政院環保署 (EPA) 要求乾電池製造或進口商，需依廢棄物清理法第 15 條之規定，於販售、贈

送或促銷的電池上標示回收標誌。請聯絡合格的台灣回收廠商，以正確棄置電池。

限用物質含有情況標示聲明書

設備名稱		型號（型式）				
單元	限用物質及其化學符號					
	鉛	汞	鎘	六價鉻	多溴聯苯	多溴二苯醚
印刷電路板及電子	-	○	○	○	○	○
金屬零件	-	○	○	○	○	○
電纜及電纜組件	○	○	○	○	○	○
塑料和聚合物零件	○	○	○	○	○	○
光學與光學元件	○	○	○	○	○	○
備考 1. “超出 0.1 wt %” 及 “超出 0.01 wt %” 係指限用物質之百分比含量超出百分比含量基準值。						
備考 2. “○” 係指該項限用物質之百分比含量未超出百分比含量基準值。						
備考 3. “-” 係指該項限用物質為排除項目。						
Note 1: “Exceeding 0.1 wt%” and “exceeding 0.01 wt%” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.						
Note 2: “O” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.						
Note 3: The “-” indicates that the restricted substance corresponds to the exemption.						

TÜRK WEEE Uyumluluk Beyanı

EEE Yönetmeliğine Uygundur.

ประเทศไทย

เครื่องโทรคมนาคมและอุปกรณ์นี้ มีความสอดคล้องตามข้อกำหนดของ กทช .

เครื่องวิทยุคมนาคมนี้มี อัตราการดูดกลืนพลังงานจำเพาะ (Specific Absorption Rate – SAR) อันเนื่องมาจากเครื่องวิทยุคมนาคมเท่ากับ

ซึ่งสอดคล้องตามมาตรฐานความปลอดภัยต่อสุขภาพของมนุษย์จากการใช้เครื่องวิทยุคมนาคมที่คณะกรรมการกิจการโทรคมนาคมแห่งชาติ ประกาศกำหนด

เครื่องวิทยุคมนาคมนี้มี ระดับการแผ่คลื่นแม่เหล็กไฟฟ้าสอดคล้องตาม มาตรฐานความปลอดภัยต่อสุขภาพของมนุษย์ จากการใช้ เครื่องวิทยุคมนาคมที่ คณะกรรมการกิจการ

โทรคมนาคมแห่งชาติ ประกาศกำหนด



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.com/warranty.

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.com/support.

For the latest version of the guide go to: zebra.com/support.

Additional Information

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

