



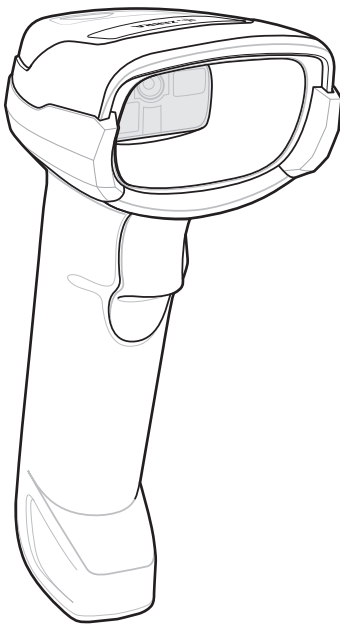
POST IN WORK AREA

DS2278 DIGITAL SCANNER

USEFUL BAR CODES

DIGITAL SCANNER FEATURES

<http://www.zebra.com/DS2278>



Digital Scanner

Quick Start Guide



FACTORY DEFAULTS



RETURN TO FACTORY DEFAULTS

ADD AN ENTER KEY (Carriage Return/Line Feed)

To add an Enter key after scanned data, scan the bar code below.



ADD AN ENTER KEY (CARRIAGE RETURN/LINE FEED)

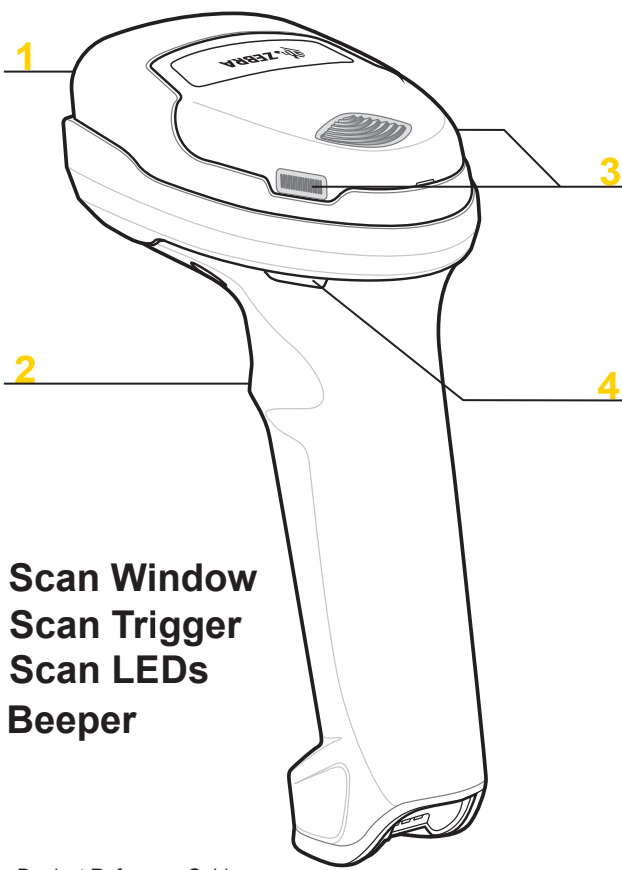
ADD A TAB KEY

To add a Tab key after scanned data, scan the bar code below.



ADD A TAB KEY

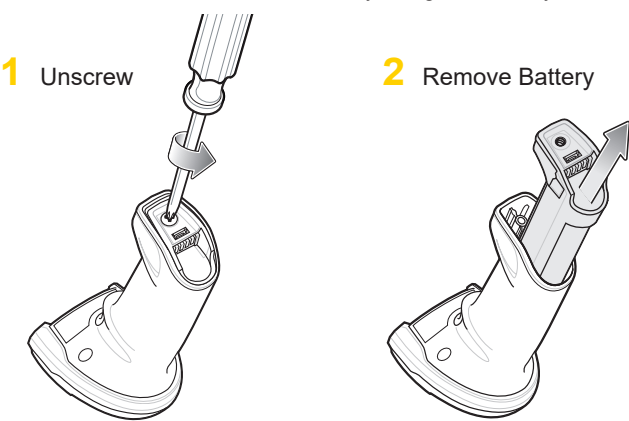
Note: Standard range digital scanner pictured.



See Product Reference Guide for detailed information

BATTERY REMOVAL

Note: It is recommended to fully charge the battery before use.



USB CAPS LOCK OVERRIDE BAR CODE

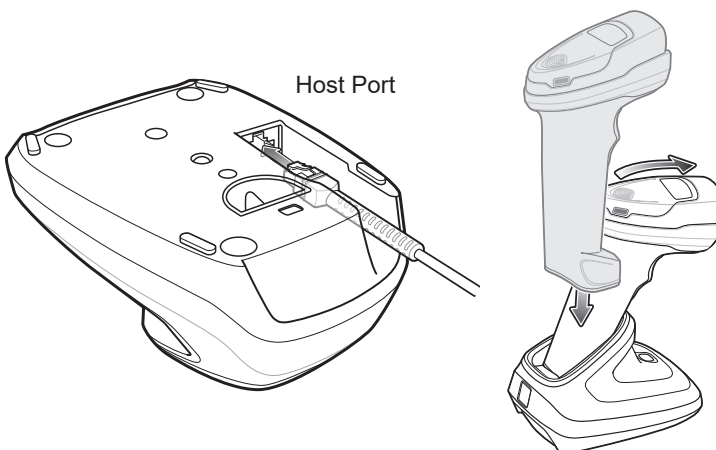


USB - OVERRIDE CAPS LOCK KEY (ENABLE)

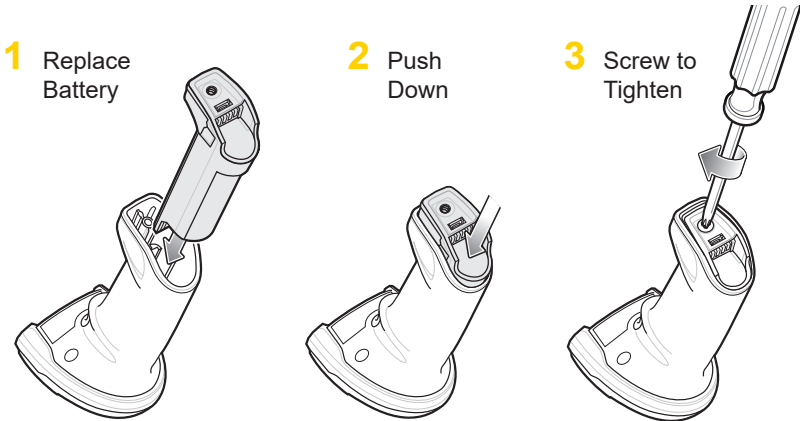


*USB - DO NOT OVERRIDE CAPS LOCK KEY (DISABLE)

CRADLE CABLE CONNECT AND INSERT

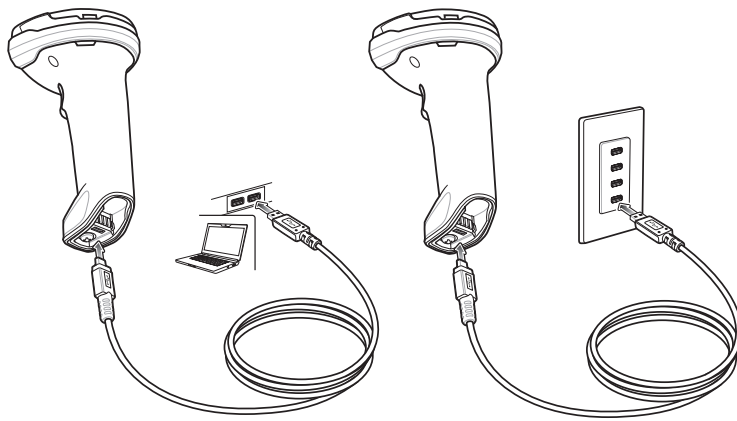


BATTERY INSERTION



CHARGE ONLY MICRO USB CONNECTION

Note: For best performance, it is recommended to use Zebra accessories.



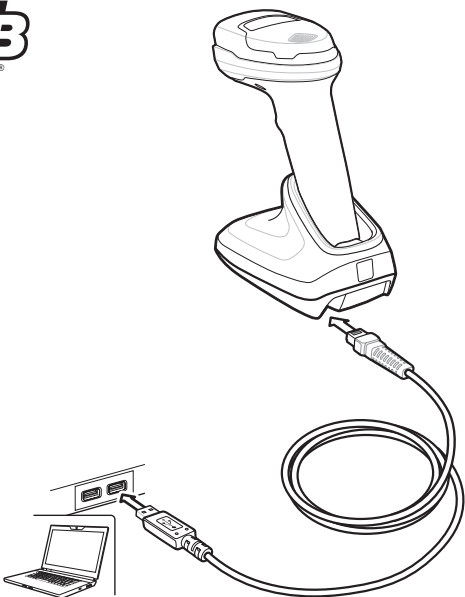
MICRO USB HID CONVERSION

When charging the scanner with a Micro USB cable instead of the presentation cradle, the scanner enumerates over USB as a CDC device. If your host does not have a CDC driver, a delay occurs between connecting the scanner to the host and the start of charging. To eliminate the delay scan **HID Device Conversion** below to enumerate as an HID device. This allows the scanner to begin charging sooner.



HID DEVICE CONVERSION

STEP 1 - CONNECT HOST INTERFACE



NOTE: Cables may vary depending on configuration

STEP 2 - SET UP INTERFACE (Scan Host Bar Codes)

USB Scan *ONE* of the bar codes below

The interface cable automatically detects the host interface type and uses the default setting. If the default (*) does not meet your requirements, scan another host bar code below.



*USB KEYBOARD (HID)



IBM HAND-HELD USB

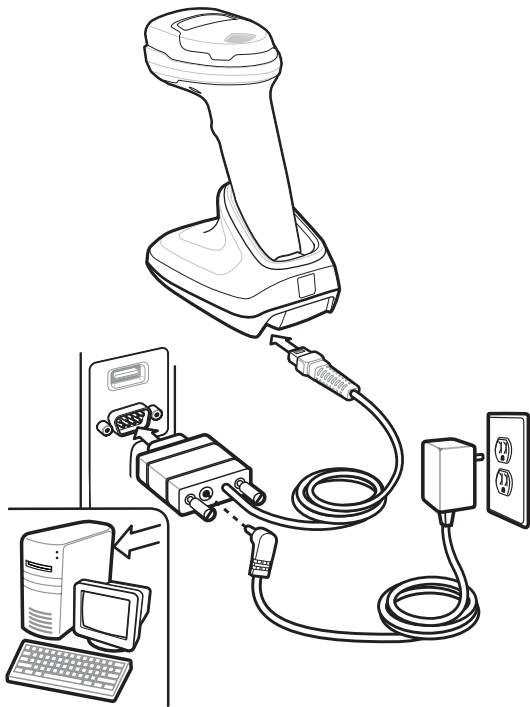


OPOS (IBM HAND-HELD with FULL DISABLE)



SYMBOL NATIVE API (SNAP) WITH IMAGING

RS-232



RS-232 Scan *ONE* of the bar codes below

The interface cable automatically detects the host interface type and uses the default setting. If the default (*) does not meet your requirements, scan another host bar code below.



*STANDARD RS-232



NIXDORF RS-232 MODE B



ICL RS-232



FUJITSU RS-232

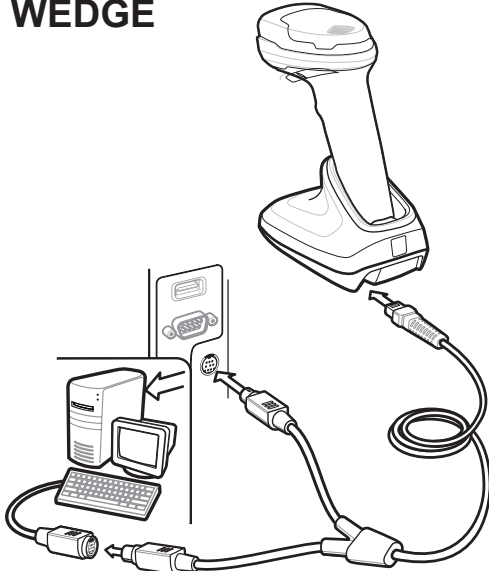


NIXDORF RS-232 MODE A



OPOS/JPOS

KEYBOARD WEDGE



Keyboard Wedge Scan a bar code below

The Auto-Host Detect Cable feature automatically detects the host interface type and uses the default setting. If the default (*) does not meet your requirements, scan the IBM PC/AT and IBM PC COMPATIBLE bar code below.

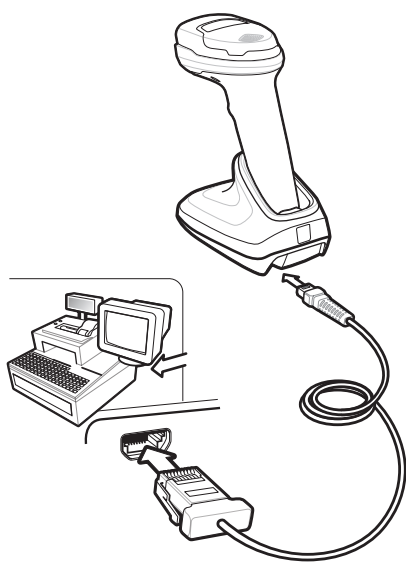


*IBM AT NOTEBOOK



IBM PC/AT and IBM PC COMPATIBLE

IBM 46XX



IBM 46XX Scan *ONE* of the bar codes below

The Auto-Host Detect Cable feature automatically detects the host interface type, but there is no default setting. Scan one of the bar codes below to select the appropriate port.



NON-IBM SCANNER EMULATION (PORT 5B)



TABLE-TOP SCANNER EMULATION (PORT 17)



HAND-HELD SCANNER EMULATION (PORT 9B)

123Scan

ABOUT 123Scan

123Scan is an easy-to-use, PC-based software tool that enables rapid and easy customized setup of a scanner via a bar code or USB cable. For more information, visit: <http://www.zebra.com/123Scan>.

UTILITY FUNCTIONALITY

- Device configuration
- Electronic programming (USB cable)
- Programming bar code(s)
- Data view – scan log (display scanned bar code data)
- Access asset tracking information
- Upgrade firmware and view release notes
- Remote management (SMS package generation)

Aiming



0 1 2 3 4 5



0 1 2 3 4 5

Pairing

To pair directly with your PC, tablet, or phone, scan HID Bluetooth Classic below. You must then discover and connect to the scanner from your device.



HID BLUETOOTH CLASSIC

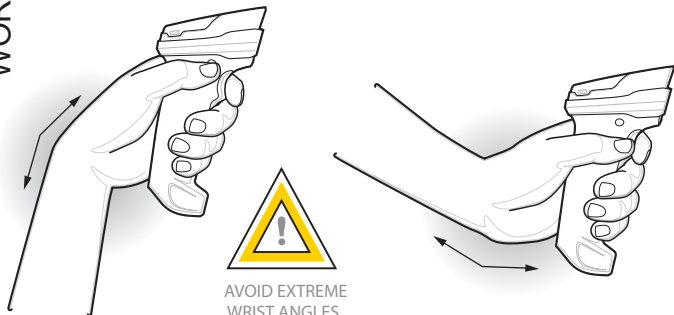
For the best experience on Windows and Android™ devices download the app/utility noted below:
- Windows: Go to www.zebra.com/support; search for Scan-To-Connect; select the Scan-To-Connect link; select the Scan-To-Connect for Windows Download and Support link.
- Android: Go to the Google Play Store at play.google.com/store and download the Zebra Scan-To-Connect (STC) utility.

DS2278 DIGITAL SCANNER

RECOMMENDED USAGE GUIDE - OPTIMUM BODY POSTURE

POST IN WORK AREA

Avoid Extreme Wrist Angles



Avoid Bending



Avoid Reaching



Health and Safety Recommendation

Ergonomic Recommendations

Caution: In order to avoid or minimize the potential risk of ergonomic injury follow the recommendations below. Consult with your local Health & Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

- Reduce or eliminate repetitive motion
- Maintain a natural position
- Reduce or eliminate excessive force
- Reduce or eliminate vibration
- Perform tasks at correct heights
- Keep objects that are used frequently within easy reach
- Reduce or eliminate direct pressure
- Provide adjustable workstations
- Provide adequate clearance
- Provide a suitable working environment
- Improve work procedures.

BEEPER INDICATIONS

Indication	Beeper Sequence
Power up	Low/medium/high beeps
Barcode decoded	Medium beep
Transmission error detected; data is ignored	4 long low beeps
Successful parameter setting	High/low/high/low beeps
Correct programming sequence performed	High/low beeps
Incorrect programming sequence, or Cancel barcode scanned	Long low/long high beeps
Low battery indication (on trigger release)	4 short high beeps

Cradle Indication	Cradle LED Indicator
Standard Use	
Power up	Green (stays on)
Radio Indications	
Bluetooth connection established	Green (off, then on)
Battery Indications	
Charging	Amber blinking
Fully charged	Green (solid)
Charging error	Amber fast blinking

SCANNER LED INDICATIONS

Hand-Held Scanning	
Indication	LED Indicator
Digital scanner is on and ready to scan, or no power to scanner	Off
Barcode is successfully decoded	Green flash
Transmission error	Red
Hands-Free (Presentation) Scanning	
No power to scanner	Off
Scanner dock in cradle	Single green flash
Digital scanner is ready to scan	Green
Barcode is successfully decoded	Off momentarily
Transmission error	Red
Charging with Micro USB Connection	
Digital scanner is charging	Green flash (fast continuous)
Digital scanner is fully charged	Green (solid)
Initial connection	Single green flash
Charge error	Red (solid)

Local Contact: _____

TROUBLESHOOTING

Digital scanner not working	
No power to scanner	Check system power; ensure battery is charged.
Digital scanner is disabled	Ensure that correct host interface cable is used.
Digital scanner decoding barcode, but data not transmitting to host	
Host interface not configured properly	Scan appropriate host parameter barcodes.
Interface cable is loose	Ensure all cable connections are secure.
Invalid ADF Rule	Program the correct ADF rules.
Digital scanner not paired to cradle	Scan cradle pairing barcode.

Digital scanner not decoding barcode	
Digital scanner not programmed for barcode type	Ensure scanner is programmed to read type of barcode being scanned.
Barcode unreadable	Ensure barcode is not defaced; try scanning test barcode of same barcode type.
Distance between scanner and barcode incorrect	Move scanner closer to, or further from barcode.
Scanned data incorrectly displayed on host	
Host interface not configured properly	Scan appropriate host parameter barcodes.
Region improperly configured	Select appropriate country and language encoding scheme.

REGULATORY INFORMATION

© 2023 Zebra Technologies, Inc.

Zebra reserves the right to make changes to any product to improve reliability, function, or design. Zebra does not assume any product liability arising out of, or in connection with, the application or use of any product, circuit, or application described herein. No license is granted, either expressly or by implication, estoppel, or otherwise under any patent right or patent, covering or relating to any combination, system, apparatus, machine, material, method, or process in which Zebra products might be used. An implied license exists only for equipment, circuits, and subsystems contained in Zebra products.

Warranty

For the complete Zebra hardware product warranty statement, go to: www.zebra.com/warranty.

For Australia Only.

This warranty is given by Zebra Technologies Asia Pacific Pte. Ltd., 71 Robinson Road, #05-02/03, Singapore 068955, Singapore. Our goods come with guarantees that cannot be excluded under the Australia Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. Zebra Technologies Corporation Australia's limited warranty above is in addition to any rights and remedies you may have under the Australian Consumer Law. If you have any queries, please call Zebra Technologies Corporation at+65 6858 0722. You may also visit our website: www.zebra.com for the most updated warranty terms.

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

Waste Electrical and Electronic Equipment (WEEE)

English: For EU and UK Customers: For products at the end of their life, please refer to recycling/disposal advice at www.zebra.com/weee.

TURKISH WEEE Statement of Compliance
EEE Yönetmeliğine Uygundur

CMM Disclosure

部件名称 (Parts)	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
金属零件 (Metal Parts)	X	O	O	O	O	O
电路模块 (Circuit Modules)	X	O	O	O	O	O
电缆及电缆组件 (Cables and Cable Assemblies)	O	O	O	O	O	O
塑料和聚合物零件 (Plastic and Polymeric Parts)	O	O	O	O	O	O
光学和光学组件 (Optical and Optical Components)	X	O	O	O	O	O
电池 (Batteries)	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 SJ/T 11364—2014 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SJ/T 11364—2014 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”的技术要求进行进一步说明。)

This table was created to comply with China RoHS requirements.

Regulatory Information

This device is approved under Zebra Technologies Corporation.

This guide applies to Model Number: DS2278 and DS2278A. All Zebra devices are designed to be compliant with rules and regulations in locations they are sold and will be labeled as required.

Local language translations are available at the following website: www.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.

Caution:
Only use Zebra approved and UL listed accessories, battery packs, and battery chargers. Do NOT attempt to charge damp/wet mobile computers or batteries. All components must be dry before connecting to an external power source.
Declared maximum operating temperature: 50°C

Bluetooth® Wireless Technology
This is an approved **Bluetooth®** product. For more information on the Bluetooth SIG listing, please visit www.bluetooth.com.

Wireless Device Country Approvals

Note: This section is only applicable to WW/WREU configurations. Regulatory markings, subject to certification, are applied to the device signifying the radio(s) is/are approved for use in the following countries: United States, Canada, Japan, China, South Korea, Australia, Europe and United Kingdom.

Please refer to the Declaration of Conformity (DoC) for details of other country markings. This is available at www.zebra.com/doc.

Note: Europe includes Austria, Belgium, Bulgaria, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, and Switzerland.

Caution: Operation of the device without regulatory approval is illegal.

Warnings for Use of Wireless Devices

Caution: Please observe all warning notices with regard to the usage of wireless devices.

Safety in Hospitals

Wireless devices transmit radio frequency energy and may affect medical electrical equipment. Wireless devices should be switched off wherever you are requested to do so in hospitals, clinics or health care facilities. These requests are designed to prevent possible interference with sensitive medical equipment.

Pacemakers
Pacemaker manufacturers recommended that a minimum of 15cm (6 inches) be maintained between a handheld wireless device and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with independent research and recommendations by Wireless Technology Research.

Persons with Pacemakers

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 www.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 www.zebra.com/responsibility.

LED Devices

For LED devices which have been evaluated to IEC 62471 and comply with the Exempt Risk Group, no product labeling requirements apply. However, the following statement is required to comply with US and international regulations:
LED Compliance Statement:
Classified as "EXEMPT RISK GROUP" according to IEC 62471:2006 and EN 62471:2008.
Pulse duration: 9 ns.

Batteries

Taiwan - Recycling



「廢電池請回收」

EPA (Environmental Protection Administration) requires dry battery producing or importing firms in accordance with Article 15 of the Waste Disposal Act are required to indicate the recycling marks on the batteries used in sales, giveaway or promotion. Contact a qualified Taiwanese recycler for proper battery disposal.

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: Part Number BT-000317-01 (4.2 Vdc, 2400 mAh).

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

However, there are limitations 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 of full 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 of full charge.

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

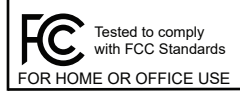
Standard warranty period for all Zebra batteries is one year, regardless if the battery was purchased separately or included as part of the mobile computer or barcode scanner. For more information on Zebra batteries, please visit: www.zebra.com/batterbasics.

Battery Safety 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 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 32°F and 104°F (0°C and 40°C).
- 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-B logo or have completed the USB-IF compliance program.
- Do not disassemble or open, crush, bend or deform, puncture, or shred.
- Severe impact from dropping any battery-operated device on a hard surface could cause the battery to overheat.
- Do not short circuit a battery or allow metallic or conductive objects to contact the battery terminals.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, or expose to fire, explosion, or other hazard.
- Do not leave or store the equipment in or near areas that might get very hot, such as in a parked vehicle or near a radiator or other heat source. Do not place battery into a microwave oven or dryer.
- Battery usage by children should be supervised.
- Please follow local regulations to promptly dispose of used re-chargeable batteries.
- Do not dispose of batteries in fire.
- Seek medical advice immediately if a battery has been swallowed.
- In the event of a battery leak, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with large amounts of water and seek medical advice.
- If you suspect damage to your equipment or battery, contact Zebra support to arrange for inspection.

Radio Frequency Interference Requirements -FCC



Tested to comply with FCC Standards FOR HOME OR OFFICE USE

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 Transmitters (Part 15)

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.

Radio Frequency Interference Requirements - Canada

CAN ICES-3 (B)/NMB-3(B)

Radio Transmitters

Innovation, Science and Economic Development Canada ICES-003

Compliance Label: CAN ICES-003 (B)/NMB-003(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.

CE Marking and European Economic Area (EEA)

Bluetooth® Wireless Technology for use through the EEA has the following restrictions:
• Maximum radiated transmit power of 100mW EIRP in the frequency range 2.400-2.4835 GHz.

Statement of Compliance

Zebra hereby declares that this radio equipment is in compliance with Directive 2011/65/EU and 1999/5/EC or 2014/53/EU (2014/53/EU supersedes 1999/5/EC from 13th June 2017). The full text of the EU Declaration of Conformity is available at the following internet address: www.zebra.com/doc.
EU Importer : Zebra Technologies B.V.
Address: Mercurius 12, 8448 GX Heerenveen, Netherlands

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: Dukess Meadow, Millboard Rd, Bourne End, Buckinghamshire, SL8 5XF



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DS2278 DIGITAL SCANNER