# CR2278-PC

Presentation Cradle

Quick Reference Guide

ZEBRA

Introduction

The CR2278-PC (presentation) cordless digital scanner cradle acts as charger and radio communication interface for the DS2278 cordless digital scanner. The CR2278-PC can sit on a tabletop or be mounted with an L-bracket (supplied by a third party vendor).

The cradle receives data from the digital scanner via a Bluetooth radio, and sends that data to the host through an attached cable. The cradle also charges the digital scanner's internal battery when the digital scanner is inserted. When inserted into the cradle, the digital scanner can be charged from an external power supply or a USB cable powered by the host.

This document provides basic instructions on setting up and using the cradle.

Equipment Supplied

The cradle package includes one CR2278-PC cradle.

Accessories

- Power supply, if necessary.
- Host cable, for connecting to a host interface.

Save the shipping container for storing or shipping. Inspect all equipment for damage. If anything is damaged or missing, call an authorized Zebra Support Center immediately.

Related Documentation

- *DS2278 Digital Scanner Quick Start Guide,* p/n MN-002916-xx.
- *DS2278 Digital Scanner Product Reference Guide*, p/n MN-002915-xx.

All documentation and translations are available at: www.zebra.com/support.

Service Information

If you have a problem running your unit or using your equipment, contact your facility's Technical or Systems Support. If there is a problem with the equipment, they will contact Zebra Support at http://www.zebra.com/support.

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

Patents

For patent information, go to: http://www.ip.zebra.com.

Cradle Features
Top

Pairing Bar
Code (in back)

Charging/Communications
Contacts

LED Indicator

Bottom

Rubber Feet

Host
Interface Port

Station Mount
Threaded Brass
Screw Holes
(2 - M4 x 5 mm)

Rubber Feet
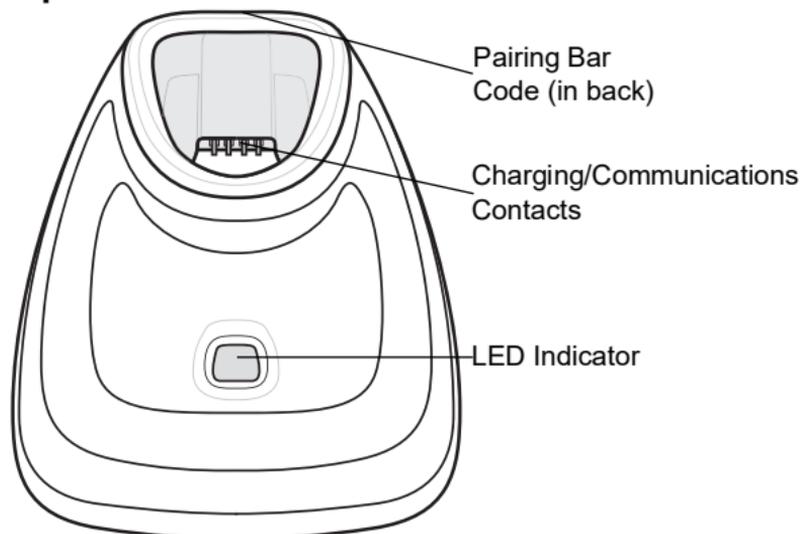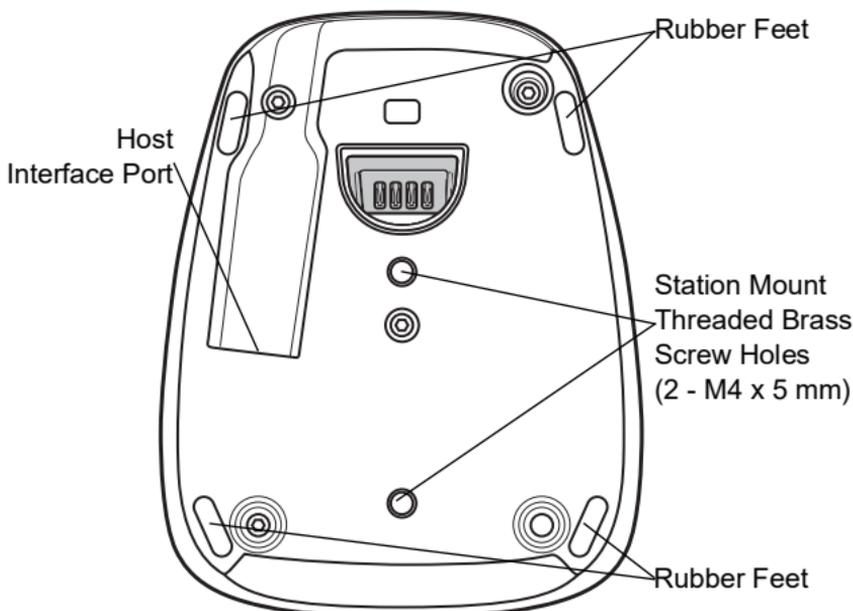
Cradle Connections

1. Connect the appropriate cable to the power supply and an AC power source, if necessary. This ensures detection of the host and prevents inadvertently back powering the cradle from improper detection of the host.

2. Insert the interface cable into the appropriate port on the host side.

3. Insert the interface cable into the host port in the cradle.

4. Pair the digital scanner to the cradle either by inserting it in the cradle or by scanning the pairing bar code.

5. If necessary, scan the appropriate host bar code (for non-autodetected interfaces). Refer to the *Product Reference Guide*.

Changing the Host Interface

To connect to a different host, or to the same host through a different cable:

1. Unplug the interface cable from the host.

2. Unplug the power supply from the host cable, if required.

3. Connect the interface cable to the new host, or the new interface cable to the existing host.

4. Reconnect the power supply, if required.

5. If necessary, scan the appropriate host bar code (for non-autodetected interfaces). Refer to the *Product Reference Guide.*

Using a DC Power Supply

The cradle can operate from host supplied power, if available. If host power is limited or not available, an external DC power supply can be used with certain host interface cables that support a power jack.

> ⚠️ *CAUTION* Always disconnect the DC power supply BEFORE disconnecting the cable to the host end or the cradle may not recognize the new host.

Mounting the Cradle

When placing the cradle on a tabletop, the rubber feet on the bottom of the cradle provide traction and prevent surface damage.

To mount the cradle to a tabletop or on an L-bracket (using a third party bracket):

1. Attach the interface and power cables to the cradle (see *Cradle Connections on page 3*).

2. Attach the cradle securely to the surface using two M4 screws.

3. Insert the digital scanner in the cradle.

Inserting the Digital Scanner in the Cradle.
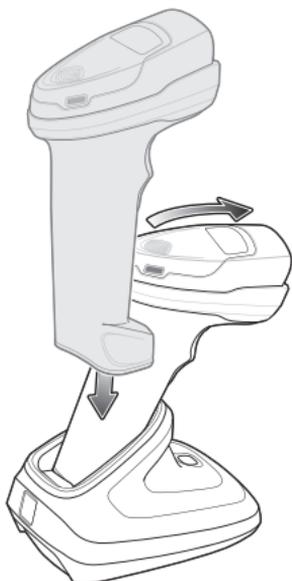
✓ **CAUTION**   Do not pour, spray, or spill any liquid on the cradle.

Sending Data to the Host Computer

The cradle receives data from the digital scanner via a wireless radio connection and transmits it to the host computer via the host cable. The digital scanner and cradle must be paired for successful wireless communication.

Pairing

✓ **NOTE** The pairing bar code that connects the digital scanner to a cradle is unique to each cradle.

Do not scan data or parameters until pairing completes.

Only when the digital scanner is paired to the cradle, it automatically tries to reconnect to a remote device when a disconnection occurs that is due to the radio losing communication. Refer to the Product Reference Guide for more information.

Pairing is the process by which a digital scanner initiates communication with a cradle. To pair the digital scanner with the cradle, scan the pairing bar code. A high/low/high/low beep sequence indicates that the pairing bar code was decoded. When a connection between the cradle and digital scanner is established, a low/high beep sounds.

Lost Connection to Host

If scanned data does not transmit to the cradle's host, ensure that all cables are firmly inserted and the power supply is connected to an appropriate AC outlet, if applicable. If scanned data still does not transmit to the host, reestablish a connection with the host:

1. Disconnect the host interface cable from the cradle.

2. Wait three seconds.

3. Reconnect the host interface cable to the cradle.

4. Reestablish pairing with the cradle by scanning the pairing bar code.

Charging the Digital Scanner in the Cradle

The scanner ships with the battery installed. It is recommended that the battery be fully charged before first used as it ships with an approximate 10% charge.

Scanner and battery, by default, ship in battery off mode. To enable the battery pull the scanner trigger. If the scanner does not boot then the battery is low and requires charging.

To charge the battery, insert the scanner in the cradle (see *Inserting the Digital Scanner in the Cradle. on page 5*). The battery begins charging when the cradle LED indicator starts flashing amber. The battery is fully charged when the cradle LED is solid green. A complete charge of a fully discharged battery can take up to five hours in the cradle with external power.

Cradle LED Indicators

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

Troubleshooting

If the cradle does not work after following the previous procedures:

• Check the system power.

- Check for loose cable connections.
- Check that the digital scanner is inserted properly in the cradle.
- Check that the host settings are correct and the cradle is connected to the appropriate port on the host.
- If water spills on the contacts area, the unit might not function properly. Turn the power off and tilt the cradle to drain as much liquid as possible. Do not shake the cradle. Use a paper towel to dry the outside surfaces, and expose the unit to room conditions for up to 24 hours to allow liquid to dry around the contacts.

Health and Safety Recommendations
Ergonomic Recommendations

⚠ **CAUTION**   In order to avoid or minimize the potential risk of ergonomic injury, follow the recommendations below. Consult with your local Health and 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.
- Keep objects that are used frequently within easy reach.
- Perform tasks at correct heights.
- Reduce or eliminate vibration.
- Reduce or eliminate direct pressure.
- Provide adjustable workstations.
- Provide adequate clearance.
- Provide a suitable working environment.
- Improve work procedures.

Regulatory Information

This device is approved under Zebra Technologies Corporation.

This guide applies to Model Number CR2278 and CR2278A.

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 translations are available at the following website: http://www.zebra.com/doc.

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

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

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

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

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

Note: Europe includes Austria, Belgium, Bulgaria, Croatia, 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.

Potentially Hazardous Atmospheres - Fixed Installations

You are reminded of the need to observe restrictions on the use of radio devices in fuel depots, chemical plants etc. and areas where the air contains chemicals or particles such as grain, dust, or metal powders.

Safety in Hospitals

Wireless devices transmit radio frequency energy and may affect medical electrical equipment. When installed adjacent to other equipment, it is advised to verify that the adjacent equipment is not adversely affected.

Pacemakers

Pacemaker manufacturers recommended that a minimum of 15cm (6 inches) be maintained between a hand-held 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:
- Should ALWAYS keep the device more than 15cm (6 inches) from their pacemaker when turned ON.
- Should not carry the device in a breast pocket.
- Should use the ear furthest from the pacemaker to minimize the potential for interference.
- If you have any reason to suspect that interference is taking place, turn OFF your device.

Other Medical Devices

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.

- **International**

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.

- **US and Canada**

  Co-located statement

  To comply with FCC RF exposure compliance requirement, the antenna used for this transmitter must not be co-located or operating in conjunction with any other transmitter/antenna except those already approved in this filling.

  IMPORTANT NOTE: (For mobile device use)

   Radiation Exposure Statement:

   This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

  NOTE IMPORTANTE: (Pour l'utilisation de dispositifs mobiles)

   Déclaration d'exposition aux radiations:

   Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet

équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

To satisfy FCC RF exposure requirements, a mobile transmitting device must operate with a minimum separation distance of 20 cm or more from a person's body.

Power Supply

⚠ **WARNING ELECTRICAL SHOCK**: Use only a Zebra/Sharp 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.

Radio Frequency Interference Requirements-FCC

FC Tested to comply with FCC Standards
FOR HOME OR OFFICE USE
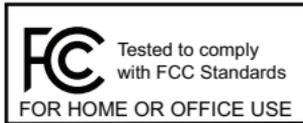
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate 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 in an outlet on a circuit different from the receiver is connection.
- 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.

Label Marking: The Term 'IC:' before the radio certification only signifies that Industry Canada technical specifications were met.

Etiquette de marquage: Le terme "IC" avant la certification radio signifie que le produit est compatible avec le spécification Industrie Canada

CE Marking and European Economic Area (EEA)

Bluetooth® Wireless Technology for use through the EEA have 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 Directives 2014/53/EU and 2011/65/EU.

Any radio operation limitations within EEA countries are identified in the Appendix A of EU Declaration of Conformity. The full text of the EU Declaration of Conformity is available at: www.zebra.com/doc.

EU Importer: Zebra Technologies B.V

Address: Mercurius 12, 8448 GX Heerenveen, Netherlands

Other Countries
Brazil (UNWANTED EMISSIONS - ALL PRODUCTS)

Declarações Regulamentares para CR2278 - Brazil

Nota: A marca de certificação se aplica ao Transceptor, modelo CR2278. Este equipamento opera em caráter secundário, isto é, não tem direito a

proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

Para maiores informações sobre ANATEL consulte o site: www.anatel.gov.br.

Chile

Este equipo cumple con la Resolución No 403 de 2008, de la Subsecretaria de telecomunicaciones, relativa a radiaciones electromagnéticas

China

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

合格证

Eurasian Customs Union

Евразийский Таможенный Союз
Данный продукт соответствует требованиям знака EAC.

ΕΠC

UK
CA

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

Mexico

Restrict Frequency Range to: 2.450 - 2.4835 GHz.

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.

Taiwan

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。

Ukraine

Дане обладнання відповідає вимогам технічного регламенту №1057, № 2008 на обмеження щодо використання деяких небезпечних речовин в електричних та електронних пристроях.

Thailand

เครื่องโทรคมนาคมและอุปกรณ์นี้ มีความสอดคล้องตามข้อกำหนดของ กทช.

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)
金属部件 (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
塑料和聚合物部件 (Plastic and Polymeric Parts)	O	O	O	O	O	O
光学和光学组件 (Optics and Optical Components)	O	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 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"×"的技术原因进行进一步说明。）

This table was created to comply with China RoHS requirements.

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.

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