



# CR8178-PC



**Presentation Cradle**

---

**Quick Reference  
Guide**

## Introduction

The CR8178-PC (presentation) cordless digital scanner cradle acts as charger and radio communication interface for the DS8178 cordless digital scanner. The CR8178-PC can sit on a desktop or be mounted on a wall. The CR8178-PC healthcare cradle can sit on a desktop or be mounted on a wall or cart.

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. 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 CR8178-PC cradle.

## Accessories

The following equipment may be needed:

- Power supply (for faster charging).
- Mounting
  - Two M4 screws (for a vertical mount using the threaded brass screw holes, if applicable). Not available from Zebra.
  - Wall mount bracket. Sold separately from Zebra.



**NOTE** For Healthcare cradles only: When the digital scanner is in lamp mode, the work station requires a special bracket for vertical mounting (not available from Zebra).

- 3M™ Dual Lock™ fasteners for mounting. Sold separately from Zebra.

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

- *DS8178 Digital Scanner Quick Start Guide*, p/n MN-002753-xx.
- *DS8178 Digital Scanner Product Reference Guide*, p/n MN-002752-xx.
- *CR8178-SC Standard Cradle Quick Reference Guide*, p/n MN-002784-xx.
- *CR8178-PC Document Capture Stand*, p/n MN-002858-xx.

All documentation and translations are available at:

[www.zebra.com/support](http://www.zebra.com/support).

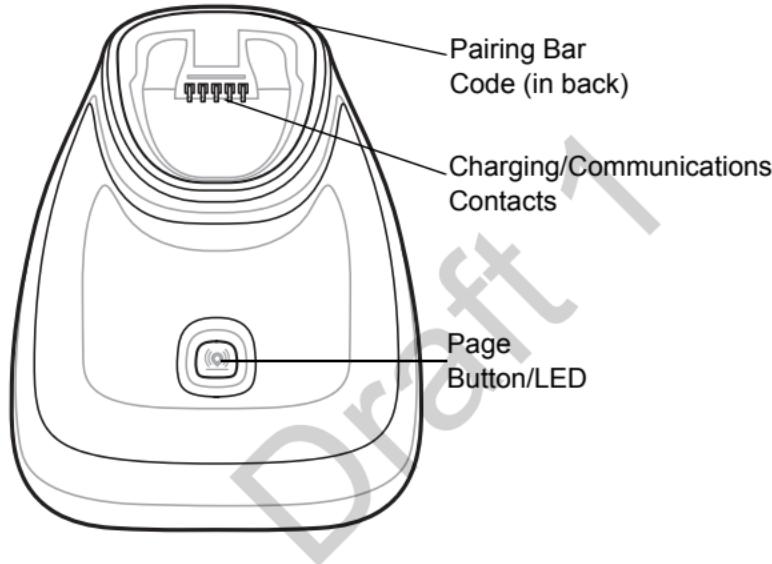
## Service Information

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 the Zebra Global Customer Support at <http://www.zebra.com/support>.

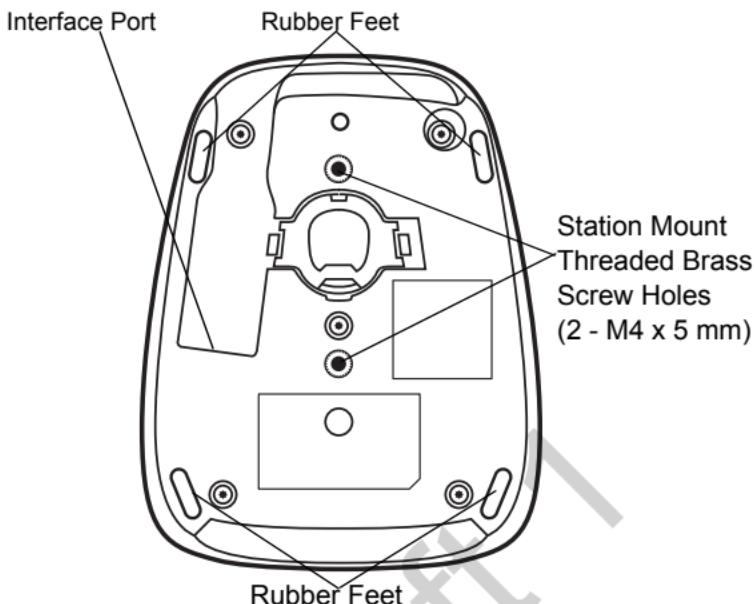
For the latest version of this guide go to: <http://www.zebra.com/support>.

## Cradle Features

### Top



## Bottom



## 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 prevent inadvertently back powering the cradle from improper detection of the host.
2. Insert the interface cable into the host port.
3. Insert the interface cable into the cradle's host port.
4. Pair the digital scanner to the cradle either by inserting it in the cradle (if Pair on Contacts is enabled) 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 cradle.
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. An external power supply is recommended if fastest charging is required.



**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

### Horizontal Mount

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



**NOTE** When mounting the cradle on a mobile cart it is recommended to mount the cradle securely on the surface.

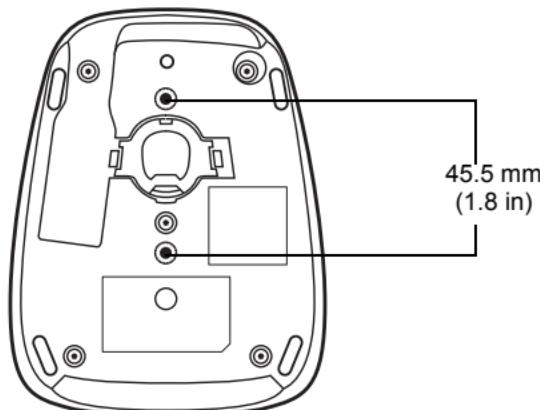
### 75 Degree Mount



**NOTE** The 75° mount is used in Lamp Mode for Healthcare units only. Refer to the *Product Reference Guide* for information on Lamp Mode.

The cradle can be mounted at a 75° angle (maximum) using the two brass threaded screw holes.

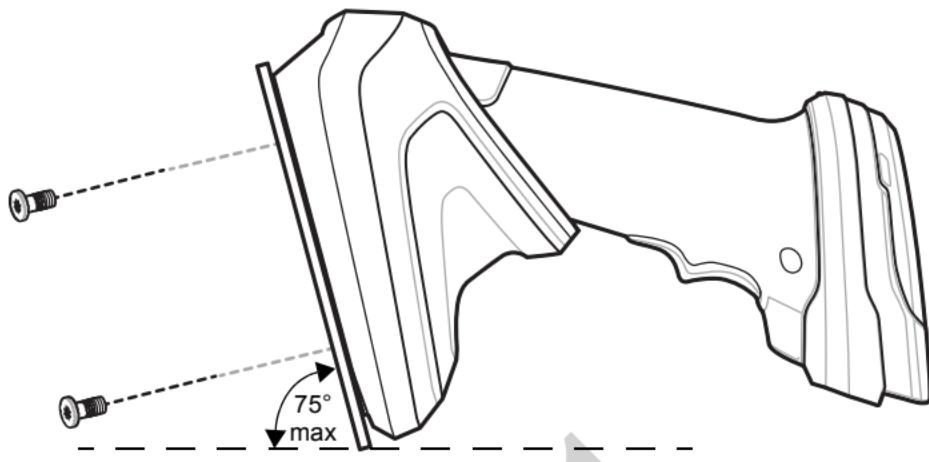
1. Position the cradle on the mounting surface and mark the surface on either side of the cradle.
2. Pre-drill two holes to accommodate the two brass threaded screw holes. Drill the holes 45.5 mm (1.8 in) apart.



Note: Drawing is not to scale.

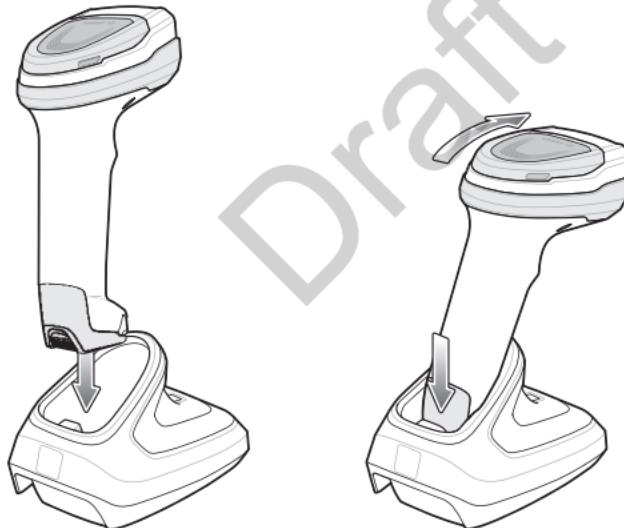
1. Attach the interface and power cables (see [Cradle Connections on page 4](#)).

2. Attach the cradle securely to the surface. Rotate to 75°.



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.

Pairing registers a digital scanner to the cradle such that the digital scanner and cradle can exchange information. The cradle operates in two modes: Point-to-Point and Multipoint-to-Point. In Point-to-Point mode, pair the digital scanner to the cradle either by inserting it in the cradle (if pair on contacts is enabled), or by scanning the pairing bar code. In Multipoint-to-Point mode, you can pair up to seven digital scanners to one cradle.

To pair the digital scanner with the cradle, scan a pairing bar code. A high-low-high-low beep sequence followed by a low-high beep sequence indicates successful pairing and connection to the remote device. A long low, long high beep sequence indicates unsuccessful pairing.

## 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 Battery in the Cradle

When using a new battery in the digital scanner, the battery requires a charge to be enabled. Insert the battery in the digital scanner and place the digital scanner in the cradle (see *Inserting the Digital Scanner in the Cradle*. on page 6). 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 three hours using external power.

**Cradle LED Indicators**

LED	Indication
<b>Standard Use</b>	
Green (stays on)	Power Up
<b>Radio Indications</b>	
Green (off, then on)	Bluetooth connection established
Blue	Page button
Blue (fast/fast/slow)	Page issued
<b>Battery Indications</b>	
Amber (stays on)	Pre-charging
Amber blinking	Charging
Green (stays on)	Fully charged
Amber fast blinking	Charging Error
<b>Battery End of Life Indications</b>	
Red blinking	Charging
Red (stays on)	Fully charged
Red fast blinking	Charging error
<b>Maintenance Indications</b>	
Red (stays on)	Enter boot loader
Red blinking	Firmware installation

## 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 the following Model Number: CR8178-PC.

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.

## Bluetooth® Wireless Technology

This is an approved Bluetooth® product. For more information or to view the End Product Listing, please visit

<https://www.bluetooth.org/tpg/listings.cfm>.

## Power Supply

Use ONLY one of the following Zebra approved UL LISTED ITE (IEC/EN 60950-1, LPS) power supplies with an ambient temperature of at least 50 degrees C and one of the following electrical ratings:

- Output 12Vdc, min 4.16A
- Output 5.0Vdc, 1.2A
- Output 5.2Vdc, min 1.2A

Use of alternative power supplies will invalidate any approvals given to this unit and may be dangerous.

## 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, and Europe.

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, Switzerland, and the United Kingdom.



**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 Aircraft**

Switch off your wireless device whenever you are instructed to do so by airport or airline staff. If your device offers a 'flight mode' or similar feature, consult airline staff as to its use in flight.

### **Safety in Hospitals**



### **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:

- 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 minimise 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 from radio devices. For information on 'International' human exposure to electromagnetic fields, refer to the Zebra Declaration of Conformity (DoC) at <http://www.zebra.com/doc>.

For further information on the safety of RF energy from wireless devices, see

<https://www.zebra.com/us/en/about-zebra/company-information/corporate-responsibility.html> located under Corporate Responsibility.

- Europe**

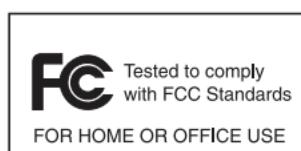
To satisfy EU RF exposure requirements, a transmitting device must operate with a minimum separation distance of 20 cm or more from a person's body.

- US and Canada**

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

Pour satisfaire aux exigences Américaines et Canadiennes d'exposition aux radio fréquences, un dispositif de transmission doit fonctionner avec une distance de séparation minimale de 20 cm ou plus de corps d'une personne.

## Radio Frequency Interference Requirements-FCC



**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's 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 - This device complies with Industry Canada's license-exempt RSS's. 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.

Cet appareil est conforme aux exigences relatives à l'émission de radiofréquences exemptes de licence édictées par Industrie Canada. Son fonctionnement est soumis aux deux conditions suivantes: (1) Ce dispositif ne peut causer des interférences; et (2) Cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.



## 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 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: <http://www.zebra.com/doc>.

## Japan (VCCI) - Voluntary Control Council for Interference

Class B ITE

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

## Korea Warning Statement for Class B ITE

기 종 별	사용자 안내문
B 급 기기	이 기기는 가정용으로 전자파 적합등록을 한 기기이오니 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

## Brazil (UNWANTED EMISSIONS - ALL PRODUCTS)

### *Declarações Regulamentares para CR8178 - Brazil*

Nota: A marca de certificação se aplica ao Transceptor, modelo CR8178. 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](http://www.anatel.gov.br).

Este produto está homologado pela Anatel, de acordo com os procedimentos regulamentados pela Resolução nº242/2000 e atende aos requisitos técnicos aplicados, incluindo os limites de exposição da Taxa de Absorção Específica referente a campos elétricos, magnéticos e

eletromagnéticos de radiofrequênciа, de acordo com as Resoluções n° 303/2002 e 533/2009.

Este dispositivo está em conformidade com as diretrizes de exposição à radiofrequênciа quando posicionado pelo menos X centímetros de distância do corpo. Para maiores informações, consulte o site da Anatel.

## Chile

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

Conforme a Resolución 755 parte j.1), se ajustará el dispositivo a operar en interiores en las siguientes bandas con una potencia máxima radiada no superior a 150mW:

2.400 hasta 2.483,5 MHz

5.150 hasta 5.250MHz

5.250 hasta 5.350MHz

5.725 hasta 5.850MHz

Además, de acuerdo con Resolución 755, para la banda 5150-5250MHz la operación del equipo estará restringida al interior de inmuebles y la densidad de potencia radiada máxima no supera 7,5mW/MHz en cualquier banda de 1MHz y 0.1875mW/25kHz en cualquier banda de 25kHz.

## 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](http://www.zebra.com/support)

合格证

## Eurasian Customs Union



Евразийский Таможенный Союз

Данный продукт соответствует требованиям знака ЕАС.

## 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.

## South Korea

For a radio equipment using 2400~2483.5MHz or 5725~5825MHz, the following two expression should be displayed;

당해 무선설비는 운용 중 전파혼신 가능성이 있음

당해 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없습니다.

## Taiwan

### ***Turkish WEEE Statement of Compliance***

EEE Yönetmeliğine Uygundur.

## **Waste Electrical and Electronic Equipment (WEEE)**

**English:** For EU Customers: All products at the end of their life must be returned to Zebra for recycling. For information on how to return product, please go to: <http://www.zebra.com/weee>.

**Français:** Clients de l'Union Européenne: Tous les produits en fin de cycle de vie doivent être retournés à Zebra pour recyclage. Pour de plus amples informations sur le retour de produits, consultez :

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

**Español:** Para clientes en la Unión Europea: todos los productos deberán entregarse a Zebra al final de su ciclo de vida para que sean reciclados. Si desea más información sobre cómo devolver un producto, visite: <http://www.zebra.com/weee>.

**Bulgarish:** За клиенти от ЕС: След края на полезния им живот всички продукти трябва да се връщат на Zebra за рециклиране. За информация относно връщането на продукти, моля отидете на адрес: <http://www.zebra.com/weee>.

**Deutsch:** Für Kunden innerhalb der EU: Alle Produkte müssen am Ende ihrer Lebensdauer zum Recycling an Zebra zurückgesandt werden. Informationen zur Rücksendung von Produkten finden Sie unter <http://www.zebra.com/weee>.

**Italiano:** per i clienti dell'UE: tutti i prodotti che sono giunti al termine del rispettivo ciclo di vita devono essere restituiti a Zebra al fine di consentirne

il riciclaggio. Per informazioni sulle modalità di restituzione, visitare il seguente sito Web: <http://www.zebra.com/weee>.

**Português:** Para clientes da UE: todos os produtos no fim de vida devem ser devolvidos à Zebra para reciclagem. Para obter informações sobre como devolver o produto, visite: <http://www.zebra.com/weee>.

**Nederlands:** Voor klanten in de EU: alle producten dienen aan het einde van hun levensduur naar Zebra te worden teruggezonden voor recycling. Raadpleeg <http://www.zebra.com/weee> voor meer informatie over het terugzendende van producten.

**Polski:** Klienci z obszaru Unii Europejskiej: Produkty wycofane z eksploatacji należą zwrócić do firmy Zebra w celu ich utylizacji. Informacje na temat zwrotu produktów znajdują się na stronie internetowej <http://www.zebra.com/weee>.

**Čeština:** Pro zákazníky z EU: Všechny produkty je nutné po skončení jejich životnosti vrátit společnosti Zebra k recyklaci. Informace o způsobu vrácení produktu najdete na webové stránce: <http://www.zebra.com/weee>.

**Eesti:** EL klientidele: kõik tooted tuleb nende eluea lõppedes tagastada taaskasutamise eesmärgil Zebra'ile. Lisainformatsiooni saamiseks toote tagastamise kohta külastage palun aadressi: <http://www.zebra.com/weee>.

**Magyar:** Az EU-ban vásárlóknak: minden tönkrement terméket a Zebra vállalathoz kell eljuttatni újrahasznosítás céljából. A termék visszajuttatásának módjával kapcsolatos tudnivalókért látogasson el a <http://www.zebra.com/weee> weboldalra.

**Svenska:** För kunder inom EU: Alla produkter som uppnått sin livslängd måste returneras till Zebra för återvinning. Information om hur du returnerar produkten finns på <http://www.zebra.com/weee>.

**Suomi:** Asiakkaat Euroopan unionin alueella: Kaikki tuotteet on palautettava kierrätettäväksi Zebra-yhtiöön, kun tuotetta ei enää käytetä. Lisätietoja tuotteen palauttamisesta on osoitteessa <http://www.zebra.com/weee>.

**Dansk:** Til kunder i EU: Alle produkter skal returneres til Zebra til recirkulering, når de er udtjent. Læs oplysningerne om returnering af produkter på: <http://www.zebra.com/weee>.

**Ελληνικά:** Για πελάτες στην Ε.Ε.: Όλα τα προϊόντα, στο τέλος της διάρκειας ζωής τους, πρέπει να επιστρέφονται στην Zebra για ανακύκλωση. Για περισσότερες πληροφορίες σχετικά με την επιστροφή ενός προϊόντος, επισκεφθείτε τη διεύθυνση <http://www.zebra.com/weee> στο Διαδίκτυο.

**Malta:** Għal klijenti fl-UE: il-prodotti kollha li jkunu waslu fl-aħħar tal-ħajja ta' l-użu tagħhom, iridu jiġu rritornati għand Zebra għar-riċiklaġġ. Għal aktar tagħrif dwar kif għandek tirritorna l-prodott, jekk jogħġibok żur: <http://www.zebra.com/weee>.

**Românesc:** Pentru clienții din UE: Toate produsele, la sfârșitul duratei lor de funcționare, trebuie returnate la Zebra pentru reciclare. Pentru informații despre returnarea produsului, accesați:  
<http://www.zebra.com/weee>.

**Slovenski:** Za kupce v EU: vsi izdelki se morajo po poteku življenjske dobe vrniti podjetju Zebra za reciklažo. Za informacije o vračilu izdelka obiščite: <http://www.zebra.com/weee>.

**Slovenčina:** Pre zákazníkov z krajín EU: Všetky výrobky musia byť po uplynutí doby ich životnosti vrátené spoločnosti Zebra na recykláciu.

Bližšie informácie o vrátení výrobkov nájdete na:

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

**Lietuvių:** ES vartotojams: visi gaminiai, pasibaigus jų eksploatacijos laikui, turi būti grąžinti utilizuoti į kompaniją „Zebra“. Daugiau informacijos, kaip grąžinti gaminį, rasite: <http://www.zebra.com/weee>.

**Latviešu:** ES klientiem: visi produkti pēc to kalpošanas mūža beigām ir jānogādā atpakaļ Zebra otrreizējai pārstrādei. Lai iegūtu informāciju par produktu nogādāšanu Zebra, lūdzu, skatiet: <http://www.zebra.com/weee>.

**Türkçe:** AB Müşterileri için: Kullanım süresi dolan tüm ürünler geri dönüştürme için Zebra'ya iade edilmelidir. Ürünlerin nasıl iade edileceği hakkında bilgi için lütfen şu adresi ziyaret edin:  
<http://www.zebra.com/weee>.

## **CMM Disclosure**



Zebra Technologies Corporation  
3 Overlook Point  
Lincolnshire, Illinois 60069 USA  
<http://www.zebra.com>

Zebra and the stylized Zebra head are trademarks of ZIH Corp., registered in many jurisdictions worldwide. All other trademarks are the property of their respective owners.

© 2016 Symbol Technologies LLC, a subsidiary of Zebra Technologies Corporation.



MN-002854-02 Rev. A - September 2016

