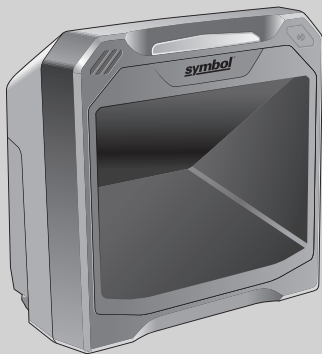# DS7708 2D VERTICAL SLOT SCANNER
QUICK REFERENCE GUIDE

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 our 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:
http://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 068895, 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: http://www.zebra.com/warranty 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 Technologies Customer Support Center at: http://www.zebra.com/support.

Overview

This Quick Reference Guide is designed to assist during routine DS7708 operation. Detailed information about installation, performance specifications, programming bar codes, and troubleshooting can be found in the *DS7708 2D Vertical Slot Scanner Product Reference Guide* (p/n MN001062AXX).
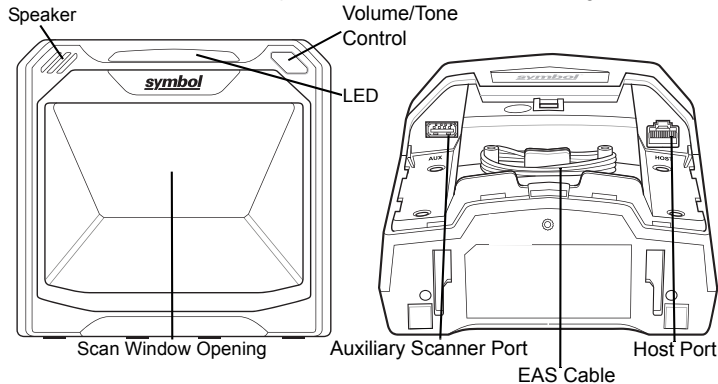
Unpacking

Carefully remove the DS7708 from the packaging to avoid damaging the scan window. Once removed from its packaging, inspect it for damage. Keep the packaging. It is the approved shipping container, and should be used if the scanner needs to be returned for servicing. Before using the scanner peel off the protective cover from the scan window.
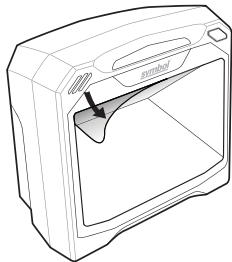
Product Features

The DS7708 scanner reads bar codes quickly and accurately with a minimum of effort. The scanner includes an Electronic Article Surveillance (EAS) antenna which allows simultaneous bar code reading and security tag deactivation.

The DS7708 can sit on table top, or be attached to a wall mounting surface.

Speaker

Volume/Tone
Control

symbol

LED

Scan Window Opening

Auxiliary Scanner Port

Host Port

EAS Cable

Connecting to a Host and/or Auxiliary Scanner

✓ *NOTE* For detailed host configurations and connections refer to the
Product Reference Guide.

The scanner has two ports at its bottom. Remove the back cover (see *Removing the Back Cover on page 5*) and turn the scanner upside down for access to the host and auxiliary scanner ports.

Removing the Back Cover

To remove the back cover, lightly press on the indentations at the top of the cover, slide downward until it becomes free, and lift up off the scanner.

Press
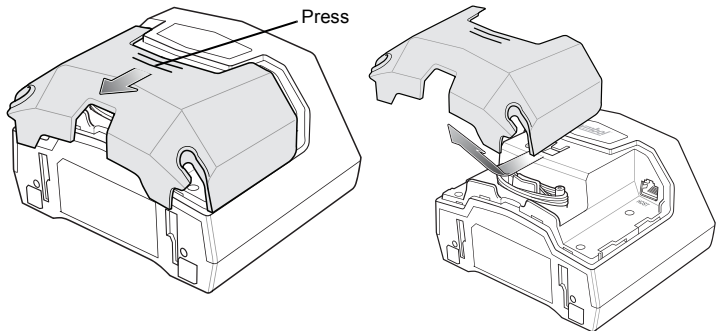
Insert the host cable into the RJ-45 connector on the back right of the scanner.
Insert auxiliary scanner cable (optional) into the USB connector on the back left of
the scanner.

Auxiliary Port

Host Port
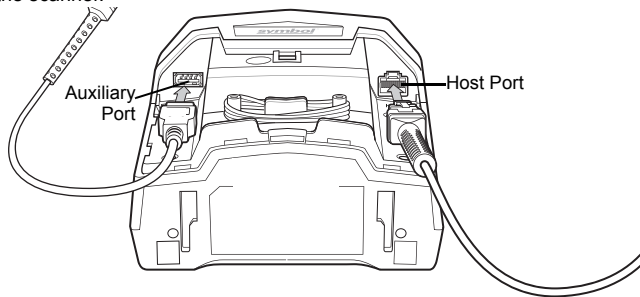
Replacing the Back Cover

The back cover has three channels to route the outgoing cables so that they are
organized and do not hinder the scanner's placement. Place the back cover on
the back of the scanner and ensure the cables are positioned appropriately to be
routed through one or more of the cable routing channels. Route the cables
through the nearest channel. (See the figure .)

Press the cover and slide upwards until it snaps into place.


Cable Routing Channels
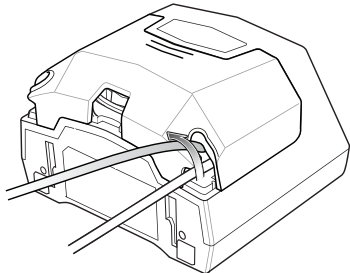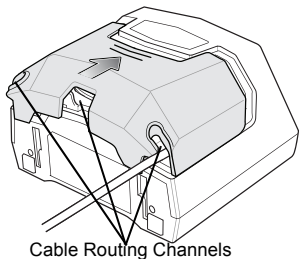
Removing the Back Cover with Cables Installed

Follow the procedure noted in *Removing the Back Cover on page 5* and slide the cable(s) out of the retaining slots to ensure they can move freely.

Mounting the Scanner (Optional Hardware Required)

The DS7708 is designed to sit on top of a table, or be mounted to a wall. The mounting slots in the bottom of the scanner accept a mounting bracket to secure it to the mounting surface.

Mounting Slots

Plastic Tabs

Mounting Bracket
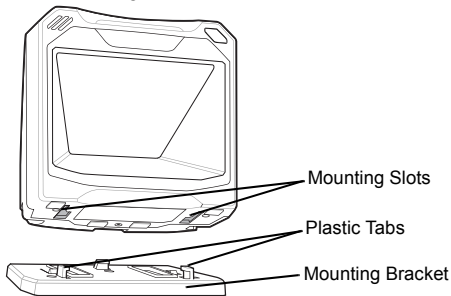
Attaching the Scanner to the Table Top

The recommended method of installation is attaching the scanner to the table top using the double-sided tape provided on the bottom of the bracket. Determine the location for installing the scanner; attach the scanner to the mounting bracket; peel off the paper on the two strips of double-sided tape; position the bracket; and press down onto the table surface.

Mounting the Scanner to a Table Top
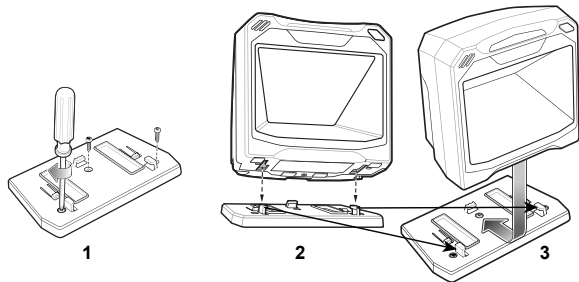
1 **2** **3**

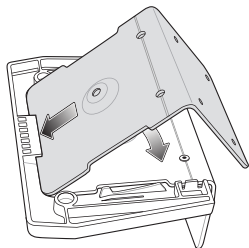1. Follow the steps in *Connecting to a Host and/or Auxiliary Scanner on page 4* to connect all interface and power cables to the scanner. Ensure the back cover is replaced and the cables are routed appropriately.
2. Determine the location for installing the scanner.
3. Diagram 1: Mount the table bracket with three screws (not included).
4. Diagram 2: Invert the scanner slightly and align the mounting slots over the plastic tabs on the bracket.
5. Diagram 3: Insert the plastic tabs into the mounting slots on the scanner, and slide the scanner back until it clicks into place.
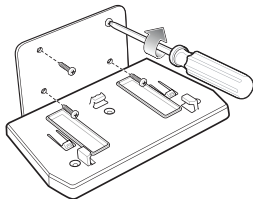
Mounting the Scanner to a Wall

1

2
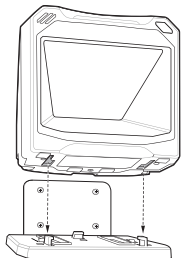
3
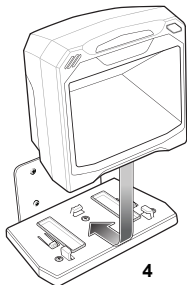
4
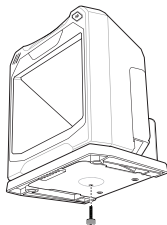
5

1. Follow the steps in *Connecting to a Host and/or Auxiliary Scanner on page 4* to connect all interface and power cables to the scanner. Ensure the back cover is replaced and the cables are routed appropriately.
2. Determine the location for installing the scanner.
3. Use a pencil to mark the four mounting holes. (A mounting template is provided in the *Product Reference Guide*.)
4. Diagram 1: Insert the back metal bracket under the plastic hook in the base plate and set in place so that the thumb screw holes align.
5. Place the mounting bracket in position over the drilled holes with its flat surface facing the mounting surface.
6. Diagram 2: Insert four screws (provided) through the holes and fasten to the mounting surface.
7. Diagram 3: Invert the scanner slightly and align the mounting slots over the plastic tabs on the bracket.
8. Diagram 4: Insert the plastic tabs into the mounting slots on the scanner, and slide the scanner back until it clicks into place.
**9.** Diagram 5: To secure the scanner in the bracket, insert the thumb screw (provided) through the hole in the bottom of the bracket and fasten to the scanner bottom.

Removing the Scanner from the Mounting Bracket

To remove the scanner:

1. Grasp the scanner firmly on both sides.
2. Slide the scanner forward and lift out.

Operating the Scanner
Power

The DS7708 does not have an on/off switch. It is ready to scan when connected to a power supply (host).

Indicator Lights

The scanner includes an array of three bi-color (green/red) LEDs to display system status and alerts. Center LED conditions: Off, Dim, Full; Outer LED conditions: Off, Full.

Adjusting Speaker Volume

To change the volume of the beep, scan the beeper volume bar code in the *Product Reference Guide*, or use the two-function **Volume/Tone** button on the front of the scanner.

Press and release the **Volume/Tone** button repeatedly until the desired volume level sounds (high, medium or low).

Adjusting Speaker Tone

To change the tone of the beep, scan the beeper tone bar code in the *Product Reference Guide*, or use the two-function **Volume/Tone** button on the front of the scanner.

Press and hold the **Volume/Tone** button for three seconds to change to a different tone. Repeat this process until the desired tone sounds (high, medium, low or medium to high tone).

> *NOTE* If the decode tone is set to Off, the **Volume/Tone** button on the scanner cannot be used to control the volume of decode tones.
>
> If the **Volume/Tone Button Control** parameter is disabled, the **Volume/Tone** button on the scanner cannot be used to control the volume of decode tones.

Scanning Bar Codes

Install and program the scanner. Refer to the *Product Reference Guide*, for programming instructions.

For the best scanning performance, the table top or surface area covered by the active scan area should be free of any designs (for example, stripes or patterns). Ideally, that area should be a light, solid color.

Active Scan Area

The active scan area is the area in front of the scanner window opening in which a bar code can be decoded. The dotted area represents the active scan area.
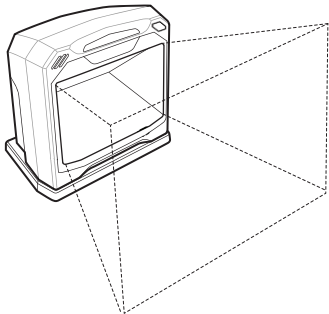
To scan a bar code:

1. Ensure all cable connections are secure.
2. Orient the item with the bar code facing the scanner window.
3. Present the item anywhere within the active scan area.
4. Upon successful decode, the scanner beeps and the green LED flashes momentarily.

Maintenance

Cleaning the scanner window is the only maintenance required. A dirty or scratched window may affect scanning activity.

- Remove any dirt particles with a damp cloth.
- Wipe the window with a tissue moistened with ammonia or water.

Troubleshooting

Problem	Possible Causes	Possible Solutions
The red LED illumination does not come on when the directions for installing the host cable are followed.	No power to the scanner.	Ensure the host has power, and is on. If the scanner uses a separate power supply, ensure it is connected to a working AC outlet. Power-up sequence is incorrect. Refer to the *Product Reference Guide* for more information.
	Interface cable is not properly connected.	Check for loose cable connections.

Problem	Possible Causes	Possible Solutions
The red LED illumination gets brighter when the bar code is presented in the field of view, but bar code cannot be read.	Scanner is not programmed to read the bar code type.	Ensure scanner is programmed to read the bar code type scanned.
	Bar code is damaged.	Try scanning other bar codes of the same bar code type.
	Bar code is not within the scanner's decode range.	Move the bar code to the region within the scanner's decode range.
	The host has disabled scanning or overridden parameter settings.	See the technical person in charge of scanning.

Problem	Possible Causes	Possible Solutions
The red LED illumination turns on dim and does not get brighter (the scanner does not change to active decoding mode) when a bar code is presented in the field of view.	Bar code is not within the scanner's detection range.	Move the bar code to the region within the scanner's detection range.
Bar code is decoded, but not transmitted to the host.	Scanner is not programmed for the correct host type.	Scan the appropriate host type bar code.

Problem	Possible Causes	Possible Solutions
Scanned data is incorrectly displayed on the host.	Scanner is not programmed to work with the host. Check scanner host type parameters or editing options.	Ensure proper host is selected. For RS-232, ensure the scanner's communication parameters match the host's settings. For Keyboard Wedge, ensure scanner is programmed with the correct country code and that the CAPS LOCK key is off. Ensure editing options (for example., UPCE to UPCA Conversion) are properly programmed.
USB host not functioning properly.	Scanner does not recognize host.	Remove and reinsert the USB cable and the external power supply, if applicable.

NOTE If the symbol still does not scan, contact the distributor or call Zebra Technologies Support. See the back cover for contact information.

Programming

Your System Administrator should customize the scanner for your particular application using programming bar codes found in the *Product Reference Guide*.

If the user is programming the scanner, refer to the *Product Reference Guide* for more information.

⚠️ *IMPORTANT*   When scanning the desired bar code in this guide, cover the other bar code(s) on the page.

Following are some frequently used programming bar codes. Scanner defaults include an asterisk (*).

Set Defaults

Scanning this bar code sets all parameters to their factory default values.

*Set Defaults

Host Interfaces

For additional host types, refer to the *Product Reference Guide*
http://www.zebra.com/support

Autodetecting Host Interfaces

For USB and RS-232 interfaces, 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.

For the Keyboard Wedge interface, 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.

For the IBM interface, the Auto-Host Detect Cable feature automatically detects the host interface type, but there is no default setting. Scan a bar code to select the appropriate port.

Keyboard Wedge Host Type

IBM PC/AT & IBM PC Compatibles

Country Keyboard Types (Country Codes)

Country keyboard options apply to the Keyboard Wedge and USB interfaces only. Refer to the *Product Reference Guide* for the full selection of Country Codes.

*US English (North American)

French (France)

German

Country Keyboard Types (continued)

Italian

Japanese (ASCII)

Portuguese (Brazil)

Country Keyboard Types (continued)

Russian

Spanish

Swedish

Country Keyboard Types (continued)

UK English

RS-232 Host Types

*Standard RS-232

ICL RS-232

RS-232 Host Types (continued)

Nixdorf RS-232 Mode A

Nixdorf RS-232 Mode B

Fujitsu RS-232

RS-232 Host Types (continued)

OPOS/JPOS

USB Host Types

***USB Keyboard HID
(Common Keyboard Wedge Interfacing)**

**IBM Hand-Held USB
(For IBM SurePOS 700 Series)**

IBM 46XX Host Types

Port 9B

Regulatory Information

This guide applies to Model Number DS7708. All Symbol 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 Symbol equipment, not expressly approved by Symbol, could void the user's authority to operate the equipment.

Caution: Only use Symbol approved and UL Listed accessories.

Declared maximum operating temperature: 40°C.

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 & 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.

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: 1.7 ms.

Power Supply

Use ONLY a Symbol approved UL LISTED ITE (IEC/EN 60950-1, LPS/SELV) power supply with electrical ratings:

1. PWRS-14000-058R Output 5Vdc, min 2A, with a maximum ambient temperature of at least 50 degrees C.
2. PWRS-14000-148R Output 12Vdc, min 3A, with a maximum ambient temperature of at least 40 degrees C.

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

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 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

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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

Marking and European Economic Area (EEA)

Statement of Compliance

Symbol hereby declares that this device is in compliance with all the applicable Directives, 2004/108/EC, 2006/95/EC and 2011/65/EU. A Declaration of Conformity may be obtained from http://www.zebra.com/doc.

Japan (VCCI) - Voluntary Control Council for Interference
Class B ITE

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラス
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	사 용 자 안 내 문
B 급 기기 (가정용 방송통신기자재)	이 기기는 가정용 (B 급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다 .

Other Countries
China

通过访问以下网址可下载当地语言支持的产品说明书
http://www.zebra.com/CN-ZH/Pages/Contact_Us#support_tab

合 格 证

Turkish WEEE Statement of Compliance
EEE Yönetmeliğine Uygundur.

China RoHS

This table was created to comply with China RoHS requirements.

	(Pb)	(Hg)	(Cd)	(Cr(VI))	(PBB)	(PBDE)
(Metal Parts)	O	O	O	O	O	O
(Circuit Modules)	X	O	O	O	O	O
(Cables and Cable Assemblies)	O	O	O	O	O	O
(Plastic and Polymeric Parts)	O	O	O	O	O	O
(Optics and Optical Components)	O	O	O	O	O	O
(Batteries)	O	O	O	O	O	O

SJ/T 11364

O   GB/T 26572

X: GB/T 26572

(" × "

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/recycling/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/recycling/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/recycling/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/recycling/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/recycling/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/recycling/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/recycling/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/recycling/weee voor meer informatie over het terugzenden van producten.

Polski: Klienci z obszaru Unii Europejskiej: Produkty wycofane z eksploatacji należy zwrócię do firmy Zebra w celu ich utylizacji. Informacje na temat zwrotu produktów znajdujⁱ się na stronie internetowej http://www.zebra.com/recycling/weee.

Čeština: Pro zákazníky z EU: Všechny produkty je nutné po skonèení jejich životnosti vrátit spoleènosti Zebra k recyklaci. Informace o zpùsobu vrácení produktu najdete na webové stránce: http://www.zebra.com/recycling/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/recycling/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/recycling/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/recycling/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/recycling/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/recycling/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/recycling/weee στο Διαδίκτυο.

Malti: 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 jogħġbok żur: http://www.zebra.com/recycling/weee.

Românesc: Pentru clienţii din UE: Toate produsele, la sfârşitul duratei lor de funcţionare, trebuie returnate la Zebra pentru reciclare. Pentru informaţii despre returnarea produsului, accesaţi: http://www.zebra.com/recycling/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/recycling/weee.