



USB I/O Hub



Installation Guide

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

Introduction

This guide describes how to install and use a USB I/O Hub with a vehicle cradle.

Install the USB I/O Hub into a vehicle. Once installed, the USB I/O Hub:

- provides power to a vehicle cradle
- provides USB hub for three USB devices (such as printers)
- provides a powered USB port for charging another device.

The USB I/O Hub is powered by the vehicle's 12V or 24V electrical system. The operating voltage range is 9V to 32V and supplies a maximum current of 3A to the vehicle cradle and 1.5 A to the four USB ports simultaneously.

Requirements

For mounting on a flat surface:

- four M3 screws (included)
- four wall anchors (not included).

For mounting onto a RAM Mount[®]:

- RAM Mount (sold separately)
- Four M4 screws, lock washers and flat washers (included).

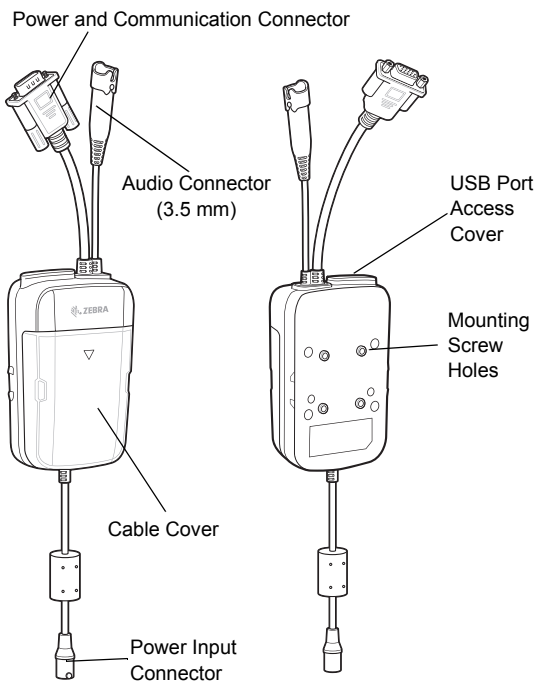
For CLA power connection:

- CLA (not included), p/n CHG-AUTO-CLA1-01

For hard-wired power connection:

- power input cable (included), p/n CHG-AUTO-HWIRE1-01
- UL Listed in-line fuse rated 250V, 5A (included), must be used if not connecting to vehicle's fuse panel
- in-line fuse holder (included), must be used if not connecting to vehicle's fuse panel.

Parts



FRONT VIEW

REAR VIEW



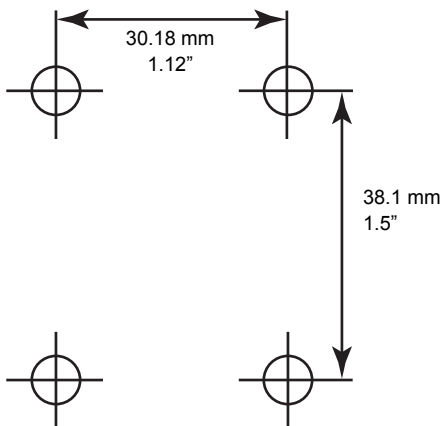
CAUTION ROAD SAFETY - Do not use the device while driving. Park the vehicle first. Always ensure the device is fully inserted into the cradle. Do not place it on the seat or where it can break loose in a collision or sudden stop. Lack of proper insertion may result in property damage or personal injury. Zebra is not responsible for any loss resulting from the use of the products while driving. Remember: Safety comes first.

Mounting the USB I/O Hub to a Flat Surface

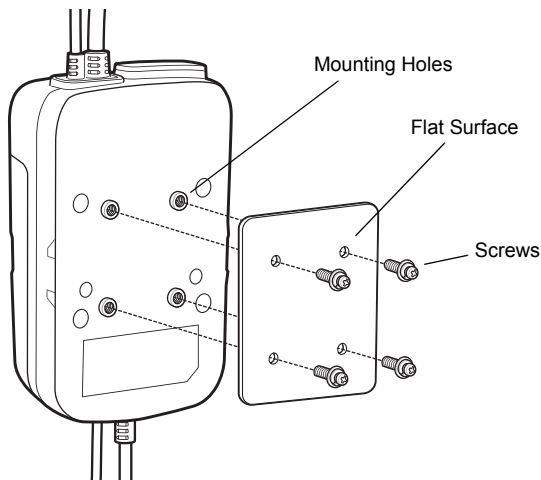


CAUTION Only mount the USB I/O Hub in a vertical position. Never mount the USB I/O Hub on the side or upside down or on a wall that can be subject to impact or collision of greater than 10Gs, in accordance with SAE J1455 Section 4.10.3.5.

1. Select a mounting location for the cradle. It should be flat, and must provide adequate support for the USB I/O Hub.
2. Prepare the mounting surface, using the mounting template below, with wall anchors that support the weight of the USB I/O Hub. The anchors should accept four M3 screws.



3. Position the mounting plate on the mounting surface.



4. Fasten the mounting plate using four M3 screws (provided).



CAUTION Do not install the USB I/O Hub on or near an air bag cover plate or within an aerobic zone. Also, do not install it in a location that affects vehicle safety or driveability.

Mounting the Cradle to a RAM Mount

To mount the USB I/O Hub onto a RAM Mount:

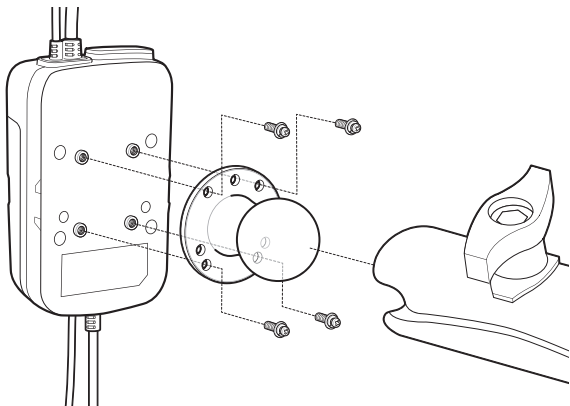


CAUTION Only mount the USB I/O Hub in a vertical position. Never mount the USB I/O Hub on the side or upside down or on a wall that can be subject to impact or collision of greater than 10Gs, in accordance with SAE J1455 Section 4.10.3.5.

1. Follow the instructions that are provided with the RAM Mount for RAM Mount mounting instructions.
2. Align the mounting plate with the RAM Mount ball base.
3. Secure the mounting plate to the ball base using M4 screws, lock washers and flat washers (provided).



CAUTION Do not install the USB I/O Hub on or near an air bag cover plate or within an aerobic zone. Also, do not install it in a location that affects vehicle safety or driveability.



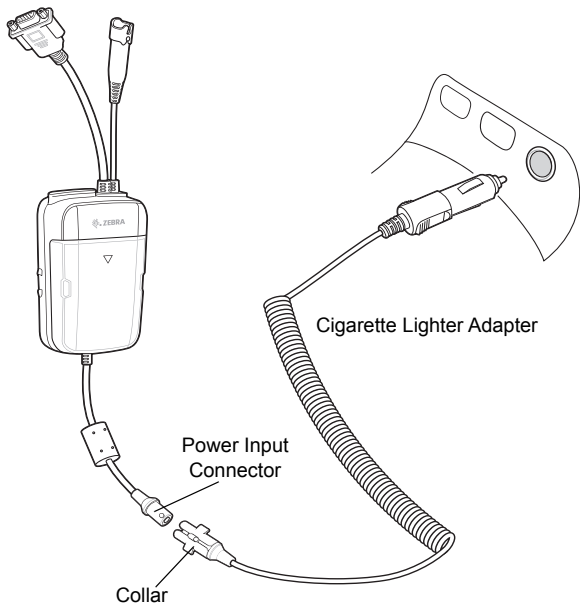
4. Secure the RAM Mount to the vehicle depending upon the type of RAM Mount. See instructions provided with RAM Mount.
5. Adjust RAM Mount according to RAM Mount instructions.

CLA Power Connection

To connect the Cigarette Lighter Adapter (CLA) to the USB I/O Hub:

1. Ensure that the connector collar is installed on the connector.
2. Connect the CLA power output connector to the Power Input Connector on the USB I/O Hub.

3. Plug the CLA into a power outlet (cigarette lighter receptacle).



Hard-Wired Power Connection

Please read all of these instructions before beginning.



WARNING! A properly trained technician must perform the power connection. Improper connection can damage your USB I/O Hub or mobile computer. Refer to the vehicle's Owner's Manual for instructions for removing power.

To connect the cradle to power:



CAUTION When setting up connection for this USB I/O Hub, only use the power input cable provided with this USB I/O Hub.

1. Locate the vehicle power source.



NOTE The ideal location for connecting the USB I/O Hub power input cable would be an accessory output in your vehicle's fuse panel. The USB I/O Hub should be added to a circuit with a maximum load capacity for the USB I/O Hub and the original circuit. Refer to the vehicle's *Owner's Manual* for identification of the circuit.

If a fused output is not available, the USB I/O Hub must be installed with the provided in-line fuse holder and UL Listed 5A fuse. The fuse protects the vehicle from an electrical short on the power line to the USB I/O Hub.

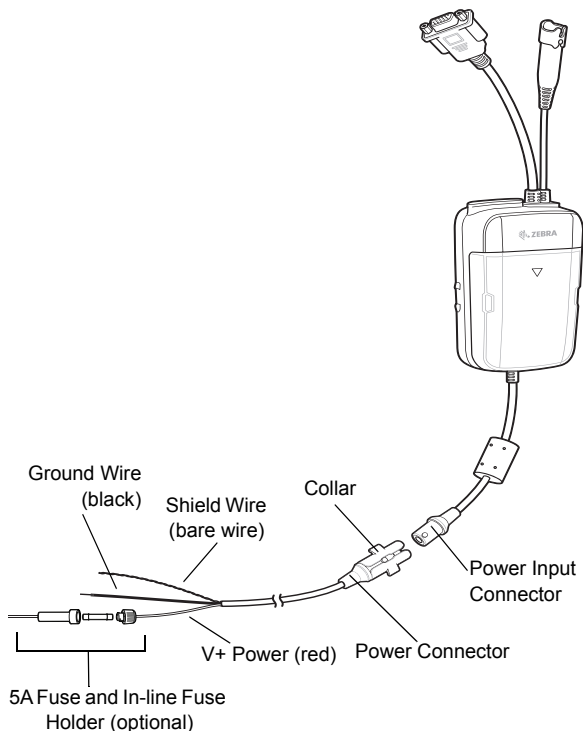
To use the USB I/O Hub to charge the device, when the vehicle's ignition is off, connect the USB I/O Hub to unswitched power.

2. Route the power input cable from the USB I/O Hub's power port to the connection point for the vehicle's power source.



NOTE The means of routing and securing the power input cable from the USB I/O Hub through to the vehicle power source is extremely important. Hazards associated with improper wiring can be severe. To avoid unintentional contact between the wire and any sharp edges, provide the cable with proper bushings and clamping where it passes through openings. If the wire is subjected to sharp surfaces and excess engine vibration, the wiring harness insulation can wear away, causing a short between the bare wire and chassis. This can start a fire. To avoid any mishaps, all wiring should be routed away from moving parts, high temperature areas and any contaminants.

3. When using the supplied in-line fuse holder (which must be used if not connecting to vehicle's fuse panel):
 - a. Ensure the fuse holder contains a 5A UL Listed slow-blow fuse.
 - b. Splice the fuse holder to the end of the red V+ wire, as shown below. Make the distance from the fuse to the power connection point as short as possible.



4. Prepare the cable termination.
 - a. Red wire: connect to a +12/24 V vehicle power source.
 - b. Black wire and Shield wire: connect to vehicle ground wire or chassis ground.

- ✓ **NOTE** How the cable terminates depends on the vehicle. If the vehicle has a power output connector, then you must attach a mating connector to the end of the power cable. You may be able to connect to a fuse panel with a simple blade terminal or commercially available connector. Consult the vehicle *Owner's Manual* for information on how to access the power supply in the vehicle.

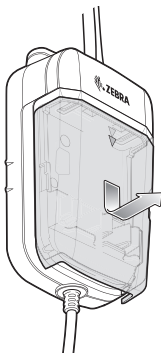
5. Ensure that the connector collar is installed on the connector.
6. Connect the power connector to the power Input Connector on the USB I/O Hub.

To see if the USB I/O Hub has power, connect to a vehicle cradle and insert a device into the cradle. The Charging LED on the device indicates charging. See the device User Guide for charging indications.

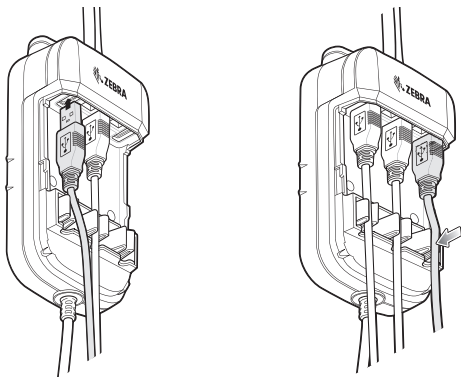
Connect USB Cables

The USB I/O Hub provides three USB ports for connecting devices such as printers to a device in the vehicle cradle. To connect USB cables:

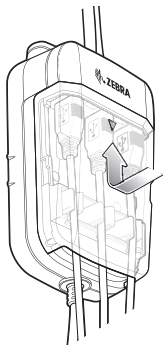
1. Slide the cable cover down and remove.



2. Insert the USB cable connector into one of the USB ports.
3. Place each cable into the cable holder.



4. Align the cable cover onto the USB I/O Hub. Ensure that the cables are within the cover opening.



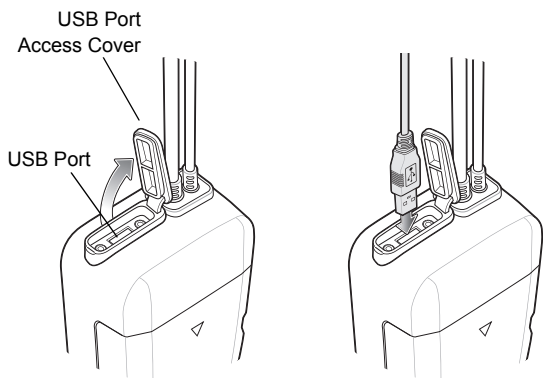
5. Slide cable cover up to lock into place.

External USB Cable

The USB I/O Hub provides a USB port for charging external devices such as cell phones. This port is for charging only.

1. Open the USB Access Cover.

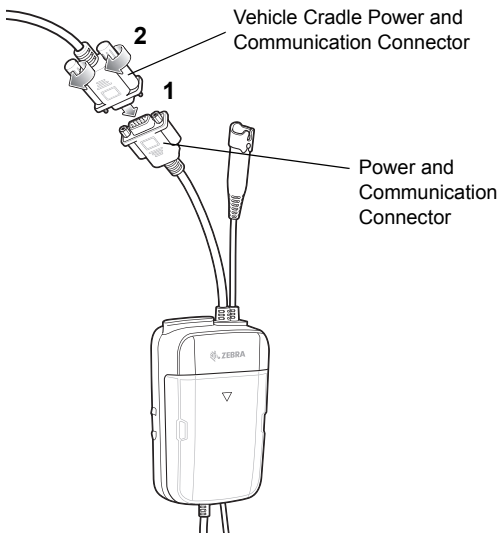
2. Insert the USB cable connector into the USB port.



Power to Vehicle Cradle

The USB I/O Hub can provide power to a Vehicle Cradle.

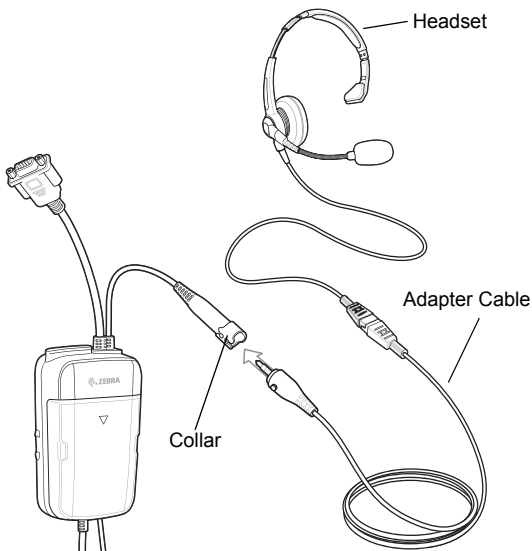
1. Connect the Power Output Cable connector to the Power Input Cable connector of the Vehicle Cradle.
2. Tighten thumbscrews by hand until tight.



Audio Headset Connection

The USB I/O Hub provides audio connection to the device in a vehicle cradle.

Depending upon, headset, connect the headset and audio adapter to the Headset connector.



Care and Cleaning

Avoid getting oils, grease or gasoline on the cradle, and do not let debris gather in the bottom of the cradle slot. When necessary, clean the cradle with a mild cleaner. If you are not sure whether or not to use a particular cleaner, contact Zebra for advice.

Troubleshooting

Symptom	Possible Cause	Action
Device in Vehicle Cradle charging LED does not light up.	USB I/O Hub is not receiving power.	Ensure the Power Input Cable is securely connected to the cradle's Power Port.
	Vehicle Cradle is not receiving power from USB I/O Hub.	Check Power Output Cable connection to Vehicle Cradle Power Input Cable.
Audio not heard on headset.	Headset cables not connected.	Ensure that all cables are connected correctly.
	USB I/O Hub not receiving power.	Ensure power is supplied to USB I/O Hub.

Regulatory Information

This device is approved under Zebra Technologies Corporation.

This guide applies to the following Model Numbers:
SHARE-USBH

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.

Vehicle Installation

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles (including safety systems). Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

An air bag inflates with great force. DO NOT place objects, including either installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

Position the device within easy reach. Be able to access the device without removing your eyes from the road.

Note: connection to an alert device that will cause a vehicle horn to sound or lights to flash, on receipt of a call on public roads, is not permitted.

IMPORTANT

Before installing or using, check state and local laws regarding windshield mounting and use of equipment.

For Safe installation

- Do not put your phone in a location that obstructs the drivers vision or interferes with the operation of the Vehicle.
- Do not cover an airbag.

Potentially Hazardous Atmospheres

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) and any other area where you would normally be advised to turn off your vehicle engine.

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

Zebra hereby declares that this device is in compliance with all applicable Directives, 2014/30/EU, 2014/35/EU and 2011/65/EU. 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

기종별	사용자안내문
B 급 기기 (가정용 방송통신기자재)	이 기기는 가정용 (B 급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다 ..

Eurasian Customs Union

Евразийский Таможенный Союз

Данный продукт соответствует требованиям знака EAC.



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>.

Bulgarian: 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 terugzenden van producten.

Polski: Klienci z obszaru Unii Europejskiej: Produkty wycofane z eksploatacji należy 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 újrhasználtság céljából. A termék visszajuttatásának módjával kapcsolatos tudnivalóért 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.

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/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 gražinti utilizuoti į kompaniją „Zebra“. Daugiau informacijos, kaip gražinti 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 dönüşürme için Zebra'ya iade edilmelidir. Ürünlerin nasıl iade edileceği hakkında bilgi için lütfen şu adresi ziyaret edin: <http://www.zebra.com/weee>.

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.



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