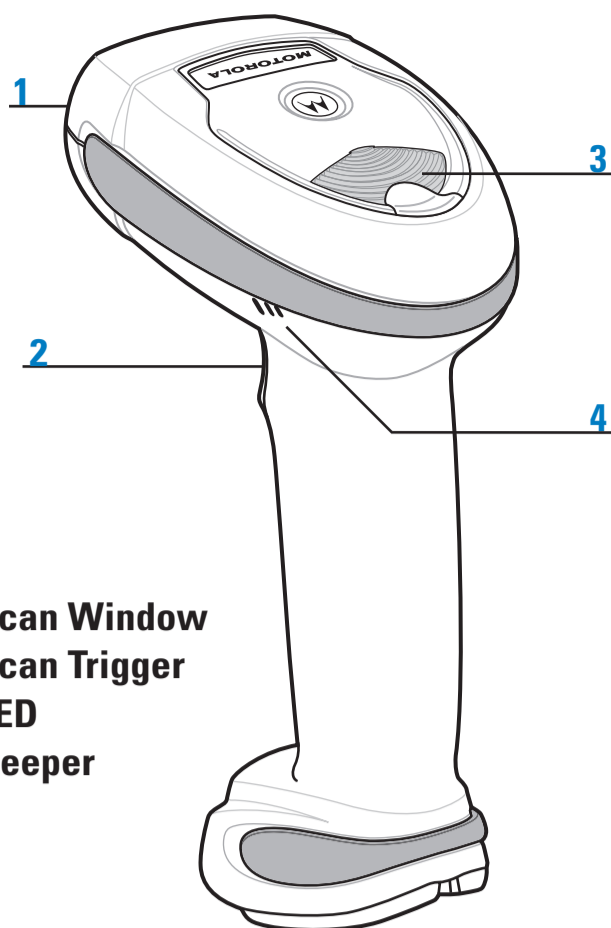
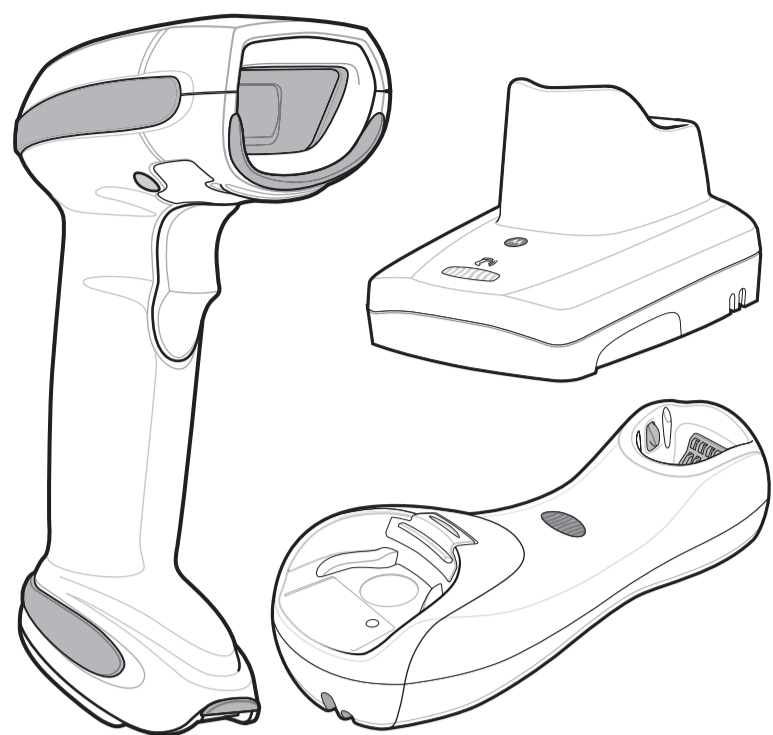


# LI4278 LINEAR IMAGER QUICK START GUIDE



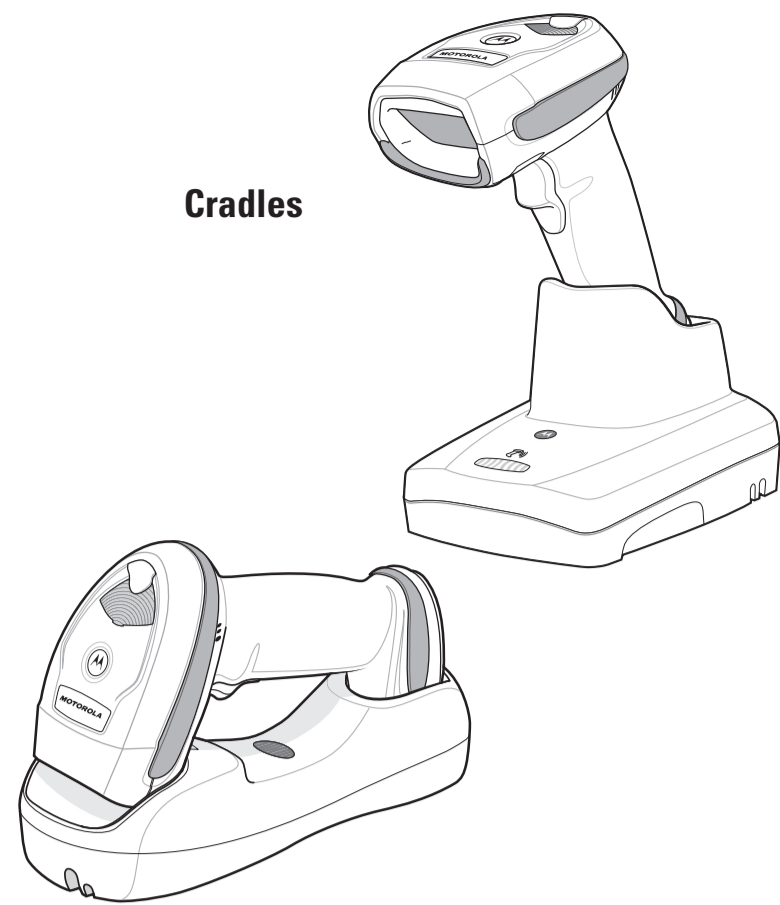
<http://www.motorolasolutions.com/li4278> See Product Reference Guide for detailed information

POST IN WORK AREA



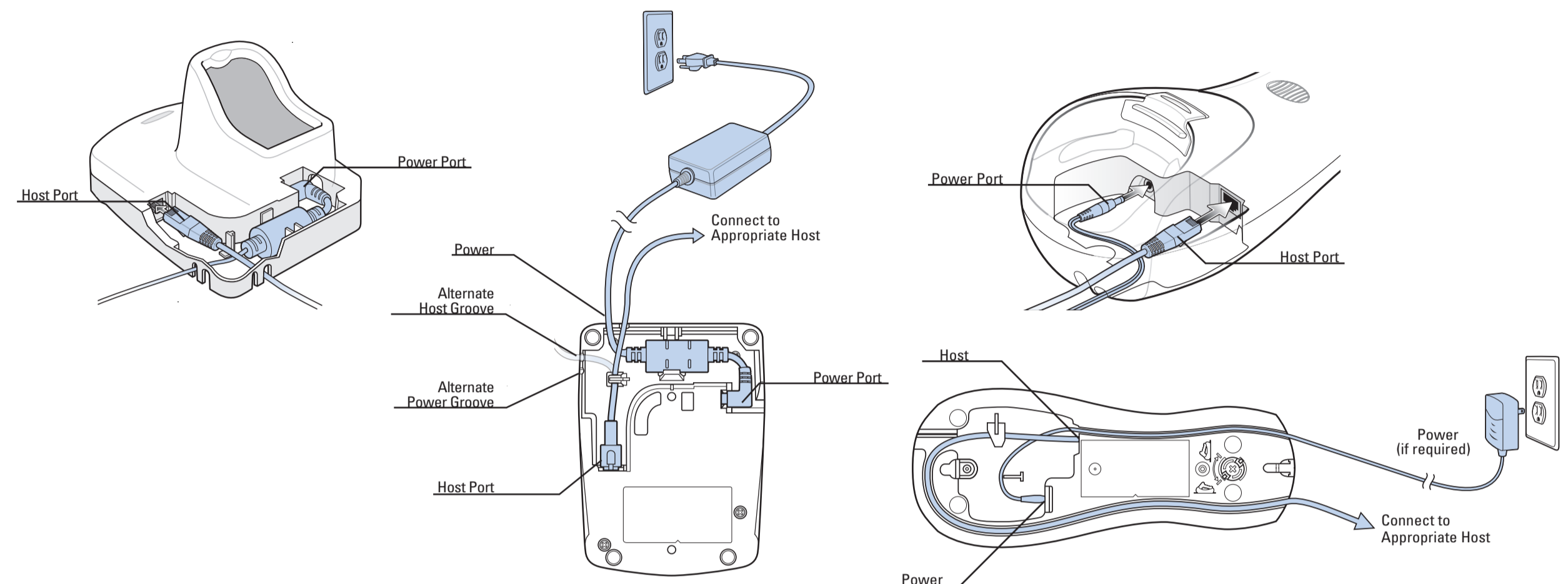
- 1 Scan Window
- 2 Scan Trigger
- 3 LED
- 4 Beeper

## Cradles



Refer to the LI4278 Product Reference Guide, or the cradle Quick Reference Guides for detailed information about cradle setup. When charging, use the cradle power supply for faster charge time.

## STEP 1 - CRADLE CABLE CONNECTIONS

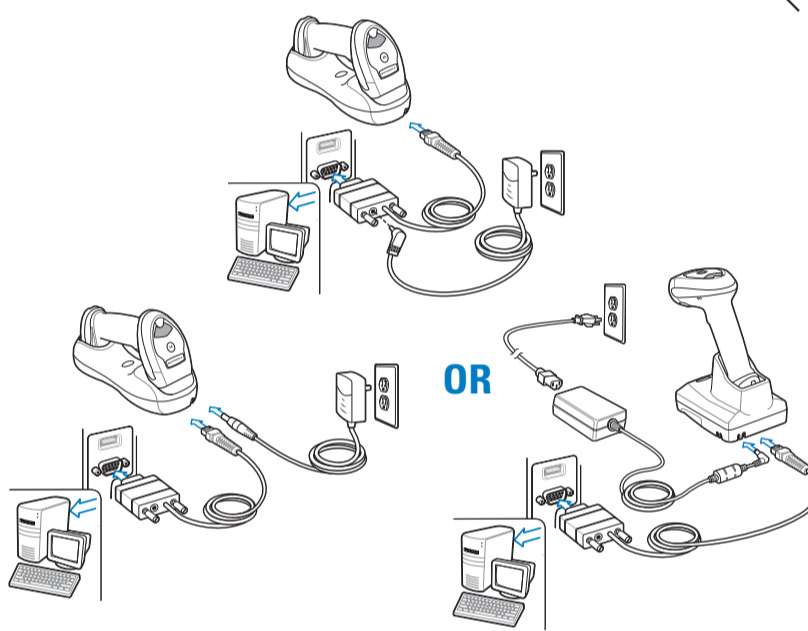


**Important:** Charge the linear imager scanner for 24 hours before the first full day of use.

## STEP 2 - CONNECT HOST INTERFACE

NOTE: Cables may vary depending on configuration

### RS-232



## STEP 3 - SET UP INTERFACE (Scan Host Bar Codes)

### RS-232

Scan **ONE** of the bar codes below



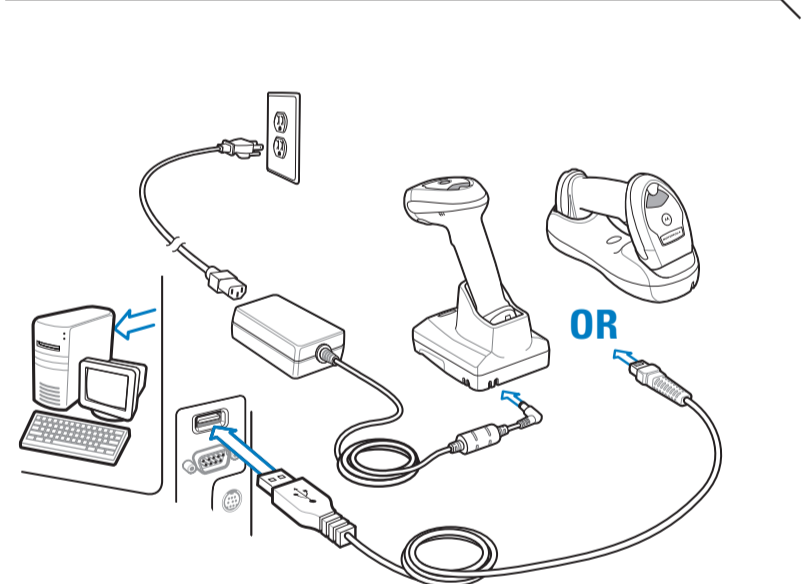
## STEP 4 - RADIO COMM HOST TYPES

### Radio Communications Host Types

Scan a bar code below to choose how the scanner connects to a remote device. Scan **CRADLE HOST** if connecting to the CR0078 cradle. Refer to the *Product Reference Guide* for detailed information.



### USB



### USB

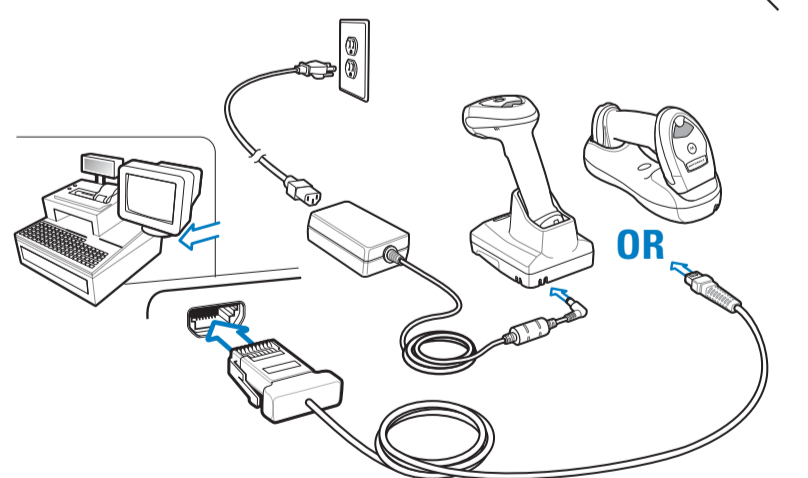
Scan **ONE** of the bar codes below



### Unpairing/Disconnection



### IBM 46XX

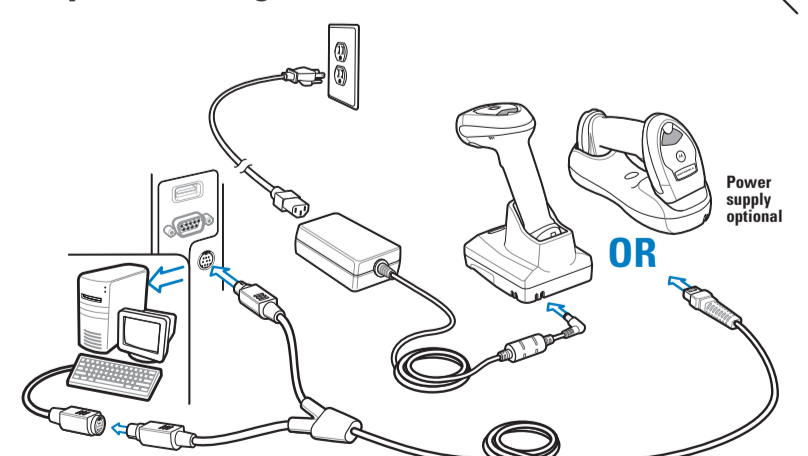


### IBM 46XX

Scan **ONE** of the bar codes below



### Keyboard Wedge



### Keyboard Wedge

Scan bar code below



## HELPFUL BAR CODES

### SET DEFAULTS



### BATTERY OFF



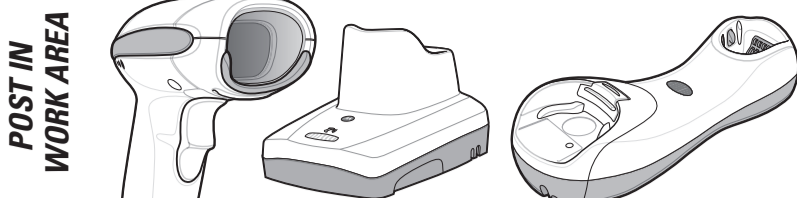
## 123SCAN<sup>2</sup>

123Scan<sup>2</sup> is an easy-to-use, PC-based software tool that enables rapid and easy customized setup via a bar code or USB cable. For more information, visit: <http://www.motorolasolutions.com/123Scan>.



# LI4278 LINEAR IMAGER

# SCANNING

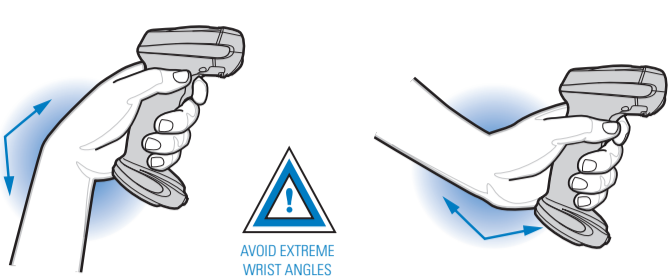


## Aiming



## RECOMMENDED USAGE GUIDE - OPTIMUM BODY POSTURE

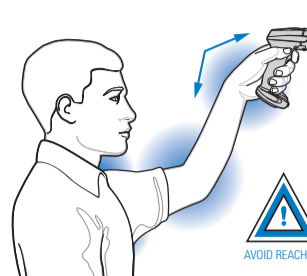
### Avoid Extreme Wrist Angles



### Avoid Bending



### Avoid Reaching



### 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 ergonomic 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.

## BEEPER INDICATIONS

### Standard Use

Low/medium/high beep	Short medium beep	4 long low beeps	4 short beeps
Power up	Bar code decoded	Transmission error detected; data is ignored	Low battery

### Parameter Menu Scanning

High/low/high/low beep	High/low beep	Low/high beep
Successful parameter setting	Correct programming sequence performed	Incorrect programming sequence or "Cancel" bar code scanned

### Wireless Operation

High/low/high/low beep	High/low beep	Low/high beep
Pairing bar code scanned	Bluetooth disconnection	Bluetooth connection established

## LED INDICATIONS

### Hand-Held Scanning

Off	Green	Red
Scanner is on and ready to scan, or no power to scanner	Bar code is successfully decoded	Transmission error

### Hands-Free (Presentation) Scanning

Off	Green	Off Momentarily	Red
No power to scanner	Scanner is ready to scan	Bar code is successfully decoded	Transmission error

### Charging

Off	Green - Slow Continuous	Green - Fast Continuous	Green - Solid
No power to scanner	Non-critical battery temperature fault	Scanner is charging	Scanner is fully charged

Local Contact:

## TROUBLESHOOTING

### Scanner not working

No power to scanner	Scanner is disabled
Check system power; battery may be discharged; charge scanner in cradle; check battery door is closed; ensure battery end cap is secured	Ensure that correct host interface cable is used

### Scanner decoding bar code, but data not transmitting to host

Scanner not programmed for correct host interface	Scanner not paired to host-connected interface	Interface cable is loose	Cradle lost connection to host
Scan appropriate host parameter bar codes	Pair the scanner to the cradle	Ensure all cable connections are secure	In this order: disconnect power supply; disconnect host cable; wait three seconds; reconnect host cable; reconnect power supply; reestablish pairing

### LED indicates low battery start-up

Low battery start-up	Cradle communication error	LED indicates battery temperature
Wait for red LED to turn green indicating scanner is charging	Inspect contacts; remove and reinsert scanner in cradle	Do not use scanner; move scanner to location with normal operating temperature; refer to the Product Reference Guide for more information

### Scanner not decoding bar code

Scanner not programmed for bar code type	Bar code unreadable	Distance between scanner and bar code incorrect
Ensure scanner is programmed to read type of bar code being scanned	Ensure bar code is not defaced; try scanning test bar code of same bar code type	Move scanner closer to or further from bar code

### Scanned data incorrectly displayed on host

Scanner not programmed for correct host interface
Scan appropriate host parameter bar codes

## HELPFUL BAR CODES

### ADD AN ENTER KEY (Carriage Return/Line Feed)

To add an Enter key after scanned data, scan all **THREE** bar codes in numerical order.

1. SCAN OPTIONS

2. <DATA><SUFFIX 1>

3. ENTER

### ADD A TAB KEY

To add a Tab key after scanned data, scan all **THREE** Enter key bar codes (left) in numerical order then scan all **FIVE** bar codes below in numerical order.

1. SCAN SUFFIX

2.

3.

4.

5.

## REGULATORY INFORMATION

© 2011-2012 MOTOROLA SOLUTIONS, Inc. All rights reserved. Motorola reserves the right to make changes to any product to improve reliability, function, or design. Motorola 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 Motorola products might be used. An implied license exists only for equipment, circuits, and subsystems contained in Motorola products.

### Power Supply

Use only Motorola/Symbol approved power supply. The power supply shall be Listed to UL/CSA 8950-1 and certified to IEC60950-1 and EN60950-1 with SELV outputs. Use of alternative power supply will invalidate any approval given to this device and may be dangerous.

### Warranty

For the complete Motorola Solutions hardware product warranty statement, go to: <http://www.motorola.com/enterprise/mobility/warranty>.

### For Australia Only

This warranty is given by Motorola Solutions Australia Pty Limited (ABN16 004 742 312) of Tally Ho Business Park, 10 Wesley Court, Burwood East, Victoria. Our goods come with guarantees that cannot be excluded under the Australian 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. Motorola Solutions 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 Motorola Solutions Australia at 1800574339. You may also visit our website: [http://www.motorola.com/Business/XA-EN/Pages/Contact\\_US](http://www.motorola.com/Business/XA-EN/Pages/Contact_US) 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 Motorola Solutions Global Customer Support Center at: <http://www.motorolasolutions.com/support>. For the latest version of this guide go to: <http://www.motorolasolutions.com/support>.

### Waste Electrical and Electronic Equipment (WEEE)

**English:** For EU Customers: At the end of their life, do not throw away your Motorola products. Please go to: <http://www.motorola.com/recycling>.

**French:** À la fin de leur vie, ne jetez pas vos produits Motorola. Veuillez vous rendre au point de collecte approprié. Pour plus d'informations, visitez <http://www.motorola.com/recycling>.

**German:** Am Ende der Lebensdauer der Geräte sollten diese nicht in den Hausmüll gegeben werden. Bitte wenden Sie sich an den zuständigen Sammelbehälter für Elektroschrott. Weitere Informationen finden Sie unter <http://www.motorola.com/recycling>.

**Italian:** Alla fine della vita dei dispositivi, non gettarli nei rifiuti domestici. Per informazioni, visitate <http://www.motorola.com/recycling>.

**Japanese:** 製品の寿命が尽きた後、家庭のゴミとして捨てることはしないでください。適切な回収場所を確認してください。詳しくは <http://www.motorola.com/recycling> をご覧ください。

**Korean:** 제품의 수명이 다 되었을 때, 가정에서 버리지 마세요. 올바른 재활용 절차를 따르십시오. 자세한 내용은 <http://www.motorola.com/recycling> 을 참조하십시오.

**Spanish:** Al final de la vida útil de los dispositivos, no los tire a la basura. Para obtener más información, visite <http://www.motorola.com/recycling>.

**Turkish:** EEE ürünlerinizin kullanım ömrü dolduktan sonra, evde atılmamalıdır. Doğru geri dönüşüm prosedürüne başvurun. Daha fazla bilgi için <http://www.motorola.com/recycling> adresine bakın.

**Ukrainian:** Після закінчення терміну експлуатації не викидайте продукцію Motorola в побутові відходи. Для отримання додаткової інформації відвідайте <http://www.motorola.com/recycling>.

**Chinese:** 产品使用寿命结束后，请勿随意丢弃。请访问 <http://www.motorola.com/recycling> 获取更多信息。

**Arabic:** عند انتهاء عمر المنتج، لا ترميها في المهجع المنزلي. للحصول على مزيد من المعلومات، يرجى زيارة <http://www.motorola.com/recycling>.

**Russian:** По окончании срока службы не выбрасывайте продукцию Motorola в мусорный бак. Для получения дополнительной информации посетите <http://www.motorola.com/recycling>.

**Polish:** Po zakończeniu użytkowania nie wyrzucajcie produktów Motorola do śmieci. Aby uzyskać więcej informacji, odwiedź <http://www.motorola.com/recycling>.

**Czech:** Po skončení životnosti výrobku nevyhazujte výrobky Motorola do domovního odpadu. Pro více informací navštivte <http://www.motorola.com/recycling>.

**Slovak:** Po skončení životnosti výrobku nevyhazujte výrobky Motorola do domového odpadu. Viac informácií nájdete na <http://www.motorola.com/recycling>.

**Hungarian:** A termék élettartama leteltével ne dobja ki a háztartási szeméttel. További információkért látogasson meg a <http://www.motorola.com/recycling> címet.

**Croatian:** Nakon završetka životnog vijeka, ne bacajte proizvod Motorola u kućni otpad. Za više informacija posjetite <http://www.motorola.com/recycling>.

**Slovenian:** Po koncu življenjske dobe izdelka ne vržite izdelka Motorola v gospodinjstveni odpadki. Za več informacij obiščite <http://www.motorola.com/recycling>.

**Malay:** Setelah tamat tempoh hayat, jangan buang produk Motorola ke dalam tong sampah rumah. Untuk maklumat lanjut, sila lawati <http://www.motorola.com/recycling>.

**Vietnamese:** Sau khi hết hạn sử dụng, đừng vứt sản phẩm Motorola vào thùng rác gia đình. Để biết thêm thông tin, hãy truy cập <http://www.motorola.com/recycling>.

**Thai:** เมื่อหมดอายุการใช้งาน อย่าทิ้งผลิตภัณฑ์ Motorola ในถังขยะในบ้าน. สำหรับข้อมูลเพิ่มเติม โปรดเยี่ยมชม <http://www.motorola.com/recycling>.

**Indonesian:** Setelah masa pakai berakhir, jangan membuang produk Motorola ke tempat sampah rumah. Untuk informasi lebih lanjut, kunjungi <http://www.motorola.com/recycling>.

**Tamil:** பின்னர் பயன்பாட்டின் முடிவு, Motorola தயாரிப்பை வீட்டு கழிவுப்பொருளாக எறிவது தவிர்ப்பது. மேலும் தகவல்களைப் பெற <http://www.motorola.com/recycling> லுக்குச் செல்லுங்கள்.

**Tagalog:** Pagkatapos ng paggamit, huwag mag-putol ng produkong Motorola sa bahay. Para sa karagdagang impormasyon, bisitahin <http://www.motorola.com/recycling>.

**Urdu:** استعمال ختم ہونے کے بعد، Motorola کی مصنوعات کو گھریلو زبالے میں نہ ڈالیں۔ مزید معلومات کے لیے <http://www.motorola.com/recycling> پر ملاحظہ کریں۔

**Bengali:** পণ্যের ব্যবহার শেষ হলে, Motorola পণ্য বাড়ির মусорবালিতে ফেলেবেন না। আরও তথ্যের জন্য <http://www.motorola.com/recycling> দেখুন।

**Punjabi:** ਪ੍ਰਦੂਸ਼ਣ ਦੀ ਸਮਾਂ ਪੂਰਾ ਹੋਣ ਤੋਂ ਬਾਅਦ, Motorola ਉਤਪਾਦ ਨੂੰ ਘਰੇਲੂ ਕੂਟਾਣੇ ਵਿੱਚ ਨਾ ਸੁੱਟੋ। ਵਧੇਰੇ ਜਾਣਕਾਰੀ ਲਈ <http://www.motorola.com/recycling> ਵੇਖੋ।

**Malayalam:** ഉപയോഗത്തിന് ശേഷം, Motorola ഉത്പന്നം വീടുമുറിയിലേക്ക് മാലിന്യമായി എറിയാതെ ശ്രദ്ധിക്കുക. കൂടുതൽ വിവരങ്ങൾക്ക് <http://www.motorola.com/recycling> സന്ദർശിക്കുക.

**Kannada:** ഉപയോഗത്തിന് ശേഷം, Motorola ഉത്പന്നം വീടുമുറിയിലേക്ക് മാലിന്യമായി എറിയാതെ ശ്രദ്ധിക്കുക. കൂടുതൽ വിവരങ്ങൾക്ക് <http://www.motorola.com/recycling> സന്ദർശിക്കുക.

**Telugu:** ఉపయోగం ముగిసిన తర్వాత, Motorola ఉత్పత్తిని ఇంట్లోని కుక్కబావిలో వేయకండి. మరింత సమాచారం కోసం <http://www.motorola.com/recycling> చూడండి.

**Assamese:** ব্যৱহাৰ শেষ হোৱাৰ পাছত, Motorola ব্যৱহাৰ কৰা বস্তুটো ঘৰৰ কুৰিচত নো নিক্ষেপ কৰিব। অধিক তথ্যৰ বাবে <http://www.motorola.com/recycling> চাওক।

**Odia:** ବ୍ୟବହାର ଶେଷ ହେବା ପରେ, Motorola ଉତ୍ପାଦକୁ ଘରକୁ ନା ପକାଇବେ। ଅଧିକ ସୂଚନା ପାଇଁ <http://www.motorola.com/recycling> ଦେଖନ୍ତୁ।

**Malayalam:** ഉപയോഗത്തിന് ശേഷം, Motorola ഉത്പന്നം വീടുമുറിയിലേക്ക് മാലിന്യമായി എറിയാതെ ശ്രദ്ധിക്കുക. കൂടുതൽ വിവരങ്ങൾക്ക് <http://www.motorola.com/recycling> സന്ദർശിക്കുക.

### Bluetooth® Wireless Technology

This is an approved Bluetooth® product. For more information or to view End Product Listing, please visit <https://www.bluetooth.org/tpp/listings.cfm>.

### 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: United States, Canada, Japan, China, S. Korea, Australia, and Europe 1,2.

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

**Note1:** For 2.4GHz or 5GHz Products: Europe includes, Austria, Belgium, Bulgaria, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**Note 2:** The use of RFID Devices have varying restrictions of use; please refer to the Motorola/Symbol Declaration of Conformity (DOC) for details.

Operation of the device without regulatory approval is illegal.

### Frequency of Operation – FCC and IC

2.4 GHz only  
The available channels for 802.11 b/g operation in the US are Channels 1 to 11. The range of channels is limited by firmware.

### Warnings for Use of Wireless Devices

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

#### 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

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

#### Pacemakers

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

#### Persons with Pacemakers:

- 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 Motorola/Symbol Declaration of Conformity (DOC) at <http://www.motorola.com/doc>.

#### LED Devices

Complies with IEC/EN60825-1:2001 & EN 62471; 2008 and IEC62471: 2006 Class 1 LED output.

**LED Output – this device contains two LEDs for illumination and aiming.**  
Aim/Illumination  
Optical Output: 0.87mW  
Pulse Duration: Continuous  
Emitted Wavelength: 590-650nm

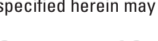
Viewing the LED output with certain optical instruments (for example, eye loupes, magnifiers and microscopes) may pose an eye hazard.  
Caution: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous LED light exposure.

#### Statement of Compliance

Motorola/Symbol hereby, declares that this device is in compliance with the essential requirements and other relevant provisions of Directives 1999/5/EC, 2004/108/EC and 2006/95/EC. Declaration of Conformities may be obtained from <http://www.motorola.com/doc>.

#### Batteries

##### Taiwan - Recycling



廢電池請回收

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

#### Battery Information

Motorola Solutions rechargeable battery packs are designed and constructed to the highest standards within the industry. However, there are limitations to how long a battery can operate or be stored before needing replacement. Many factors affect the actual life cycle of a battery pack, such as heat, cold, harsh environmental conditions and severe drops. When batteries are stored over six (6) months, some irreversible deterioration in overall battery quality may occur. Store batteries at half of full charge in a dry, cool place, removed from the equipment to prevent loss of capacity.

rusting of metallic parts and electrolyte leakage. When storing batteries for one year or longer, the charge level should be verified at least once a year and changed to half of full charge. Replace the battery when a significant loss of run time is detected. Standard warranty period for batteries is 30 days, regardless if the battery was purchased separately or included as part of the mobile computer or bar code scanner.

#### Battery Safety Guidelines

The area in which the units are charged should be clear of debris and combustible materials or chemicals. Particular care should be taken where the device is charged in a non commercial environment.

• Follow battery usage, storage, and charging guidelines found in the user's guide.  
• Improper battery use may result in a fire, explosion, or other hazard.

• To charge the mobile device battery, the battery and charger temperatures must be between +32 °F and +104 °F (0 °C and +40 °C)

• Do not use incompatible batteries and chargers. Use of an incompatible battery or charger may present a risk of fire, explosion, leakage, or other hazard. If you have any questions about the compatibility of a battery or a charger, contact Motorola Global Customer Support Center.

• For devices that utilize a USB port as a charging source, the device shall only be connected to products that bear the USB-IF logo or have completed the USB-IF compliance program.

• Do not disassemble or open, crush, bend or deform, puncture, or shred.

• Severe impact from dropping any battery-operated device on a hard surface could cause the battery to overheat.

• Do not short circuit a battery or allow metallic or conductive objects to contact the battery terminals.

• Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, or expose to fire, explosion, or other hazard.

• Do not leave or store the equipment in or near areas that might get very hot, such as in a parked vehicle or near a radiator or other heat source. Do not place battery into a microwave oven or dryer.

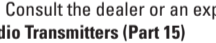
• Battery usage by children should be supervised.

• Please follow local regulations to promptly dispose of used re-chargeable batteries.

• Do not dispose of batteries in fire.

• Seek medical advice immediately if a battery has been swallowed.

#### Radio Frequency Interference Requirements - FCC



Tested to comply with FCC Standards FOR HOME OR OFFICE USE

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

#### Radio Transmitters (Part 15)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Radio Frequency Interference Requirements - Canada**  
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.

#### Radio Transmitters

This device complies with RSS 210 of Industry Canada. 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. Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: