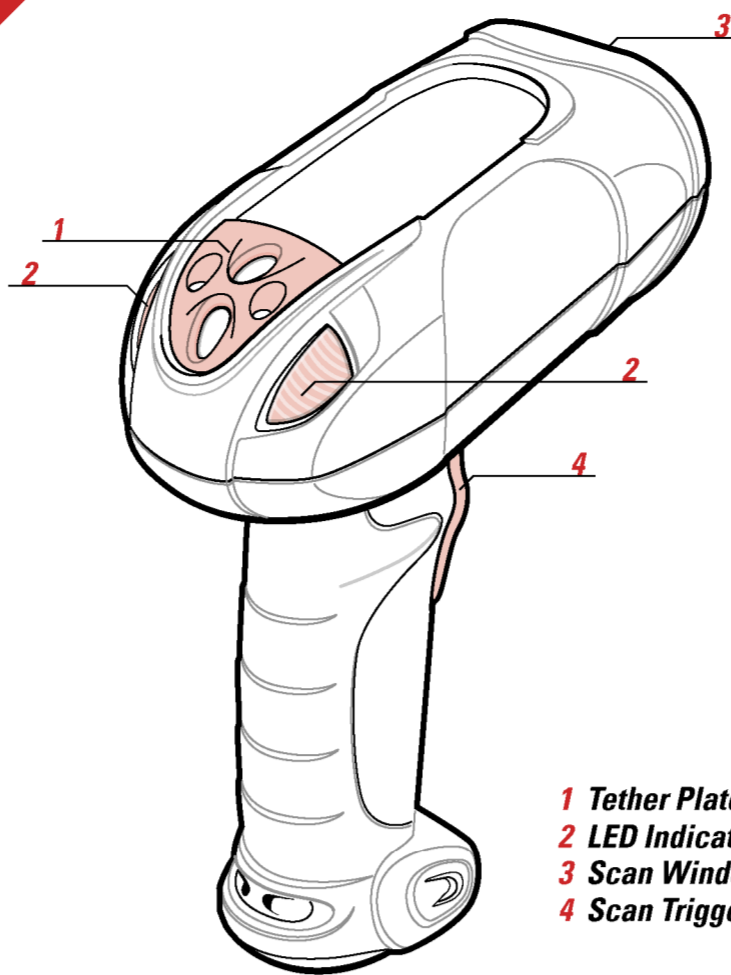
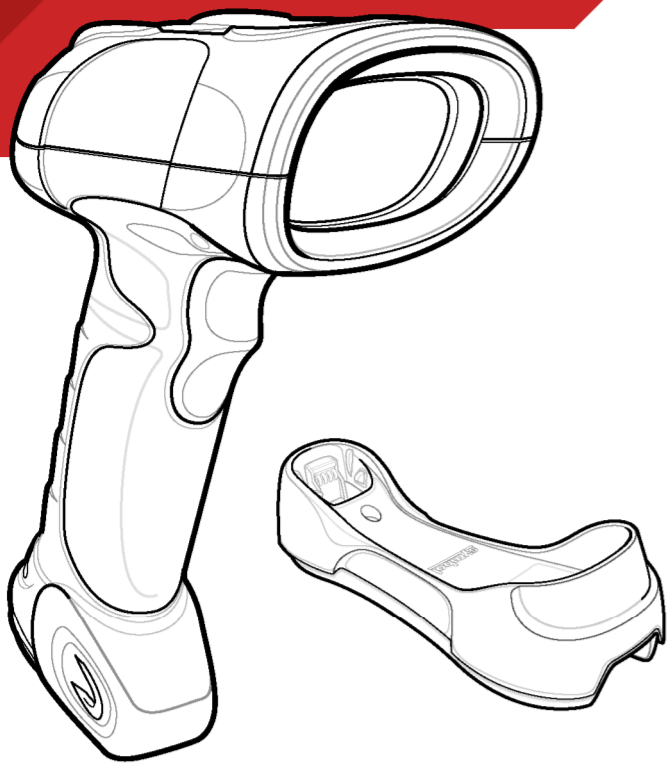


# LS 3478 Quick Start Guide

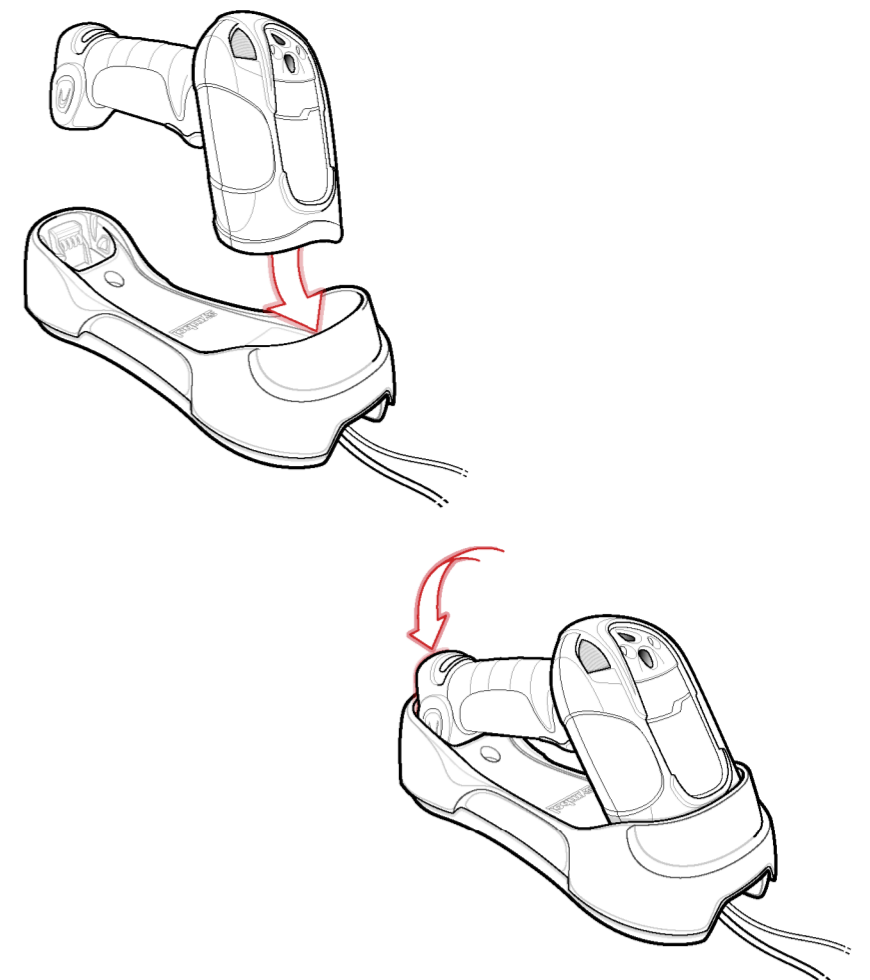
<http://www.symbol.com/barcode>  
See Product Reference Guide for more information

POST IN WORK AREA

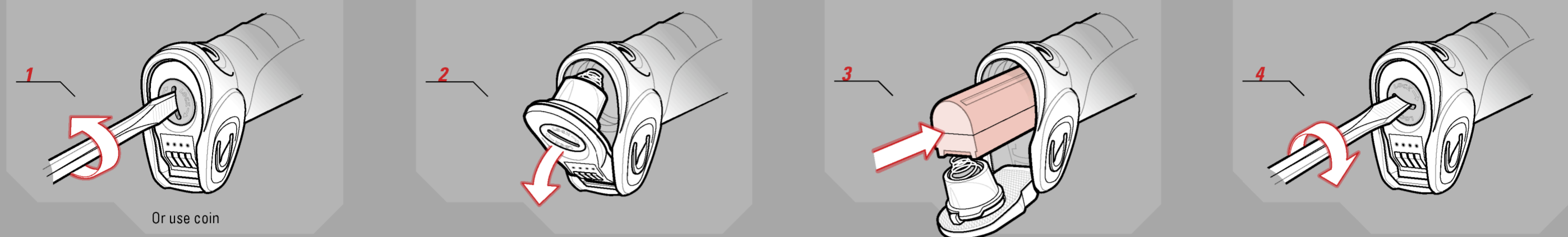


- 1 Tether Plate
- 2 LED Indicators
- 3 Scan Window
- 4 Scan Trigger

## Cradle Insertion



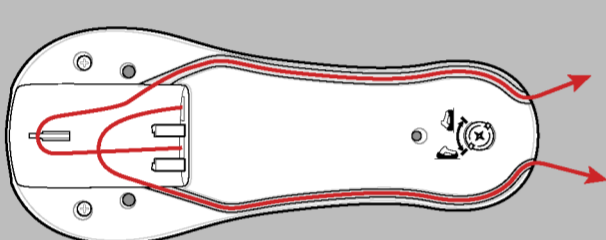
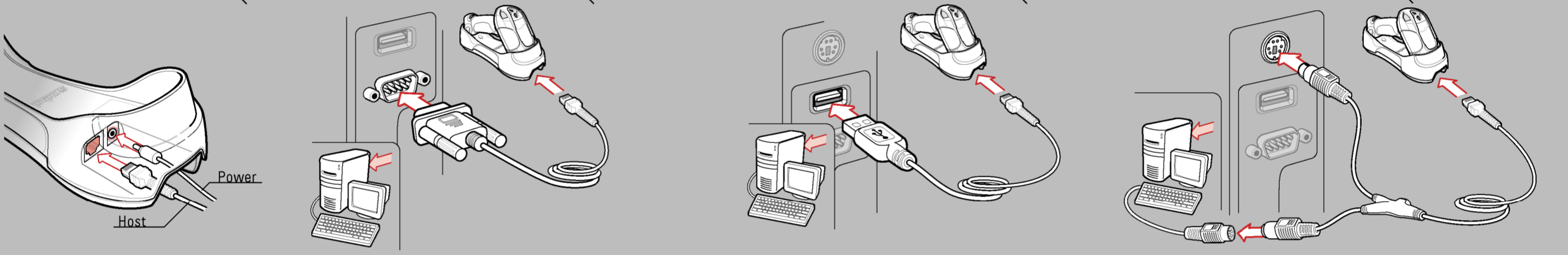
## Battery Insertion/Removal



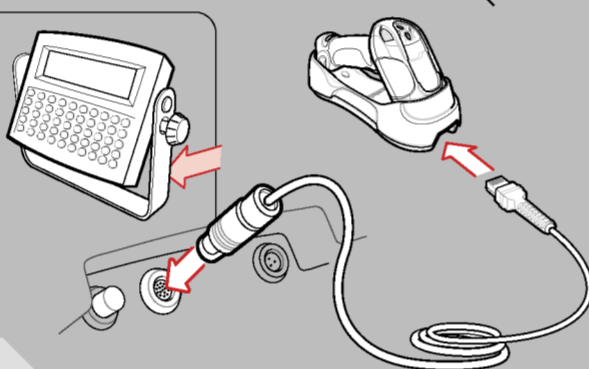
## Host Interfaces

NOTE: Cables may vary depending on configuration

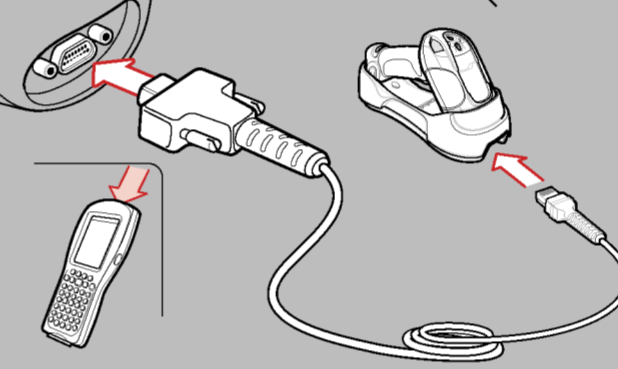
### Cable Connection at Cradle



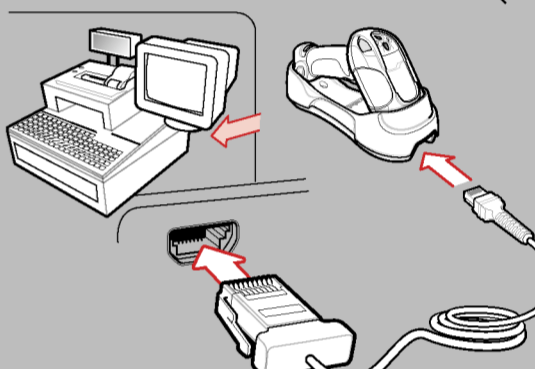
### Scanner Emulation



### Wand Emulation



### IBM 46XX



## Troubleshooting

Please refer to the LS 3478 Product Reference Guide Troubleshooting section for further information.

### Scanner not working

- No power to scanner → Check battery
- End cap not secured correctly → Turn end cap to secure

### Scanner not decoding bar code

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

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

- Scanner not paired to host-connected cradle → Pair the scanner to the cradle (using the PAIR bar code on the cradle)
  - Cradle not programmed for correct host interface → Check scanner host parameters or edit options
  - Interface cable is loose → Check for loose cable connections
- If data is still not transmitting to host, it may be necessary to recycle power on the cradle

### Scanned data incorrectly displayed on host

- Paired cradle host communication parameters do not match the host's parameters → Check cradle host parameters or edit options

## LS 3478 Programming Bar Codes

### Set Defaults



### IBM 46XX Host Types



### Scanner Emulation Host Types



### Unpairing/Disconnection



### Wand Emulation Host Types



### USB Host Types



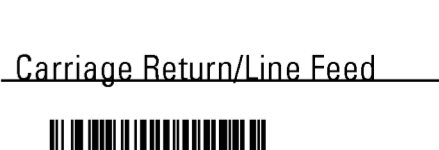
### Keyboard Wedge Host Types



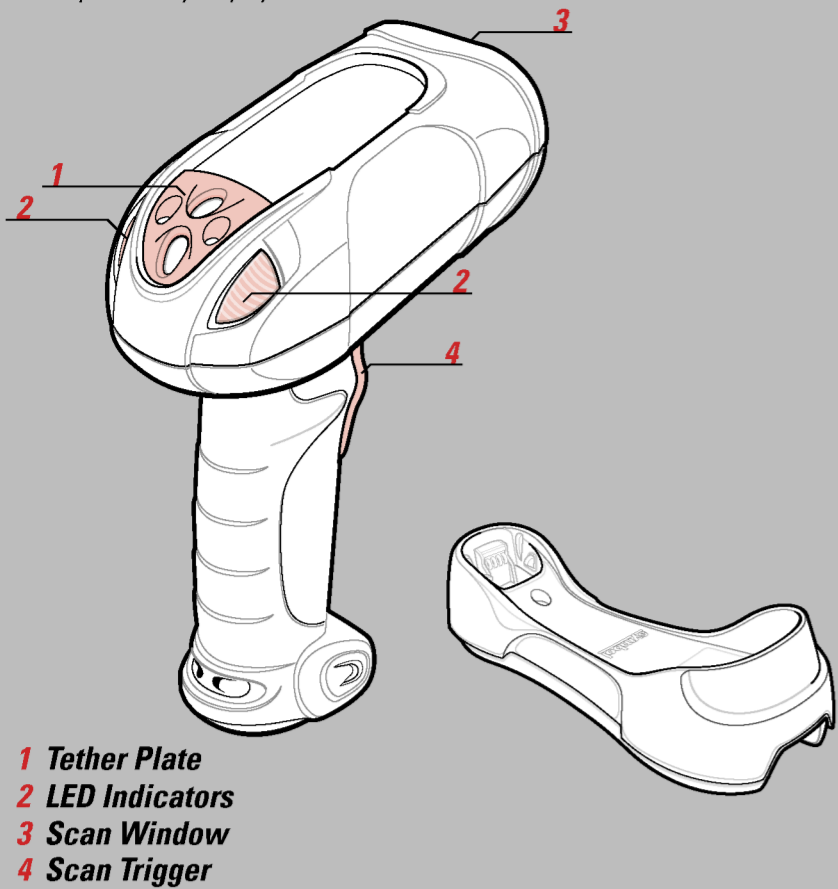
### IBM HAND-HELD USB



### RS-232 Host Types

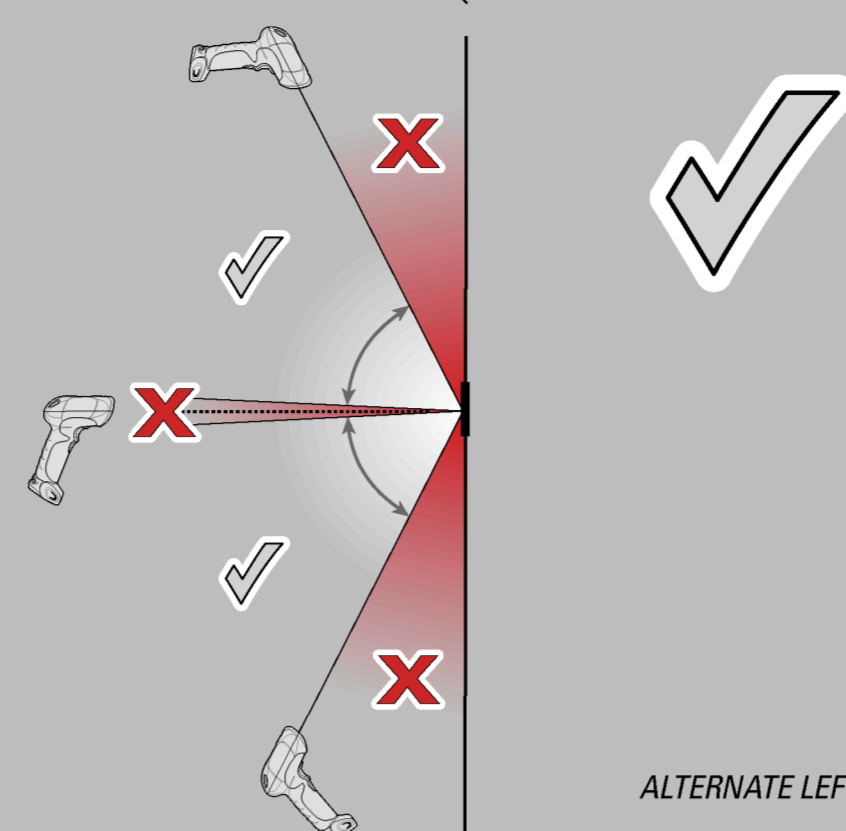






### Optimum Scanning Positions

#### Aiming

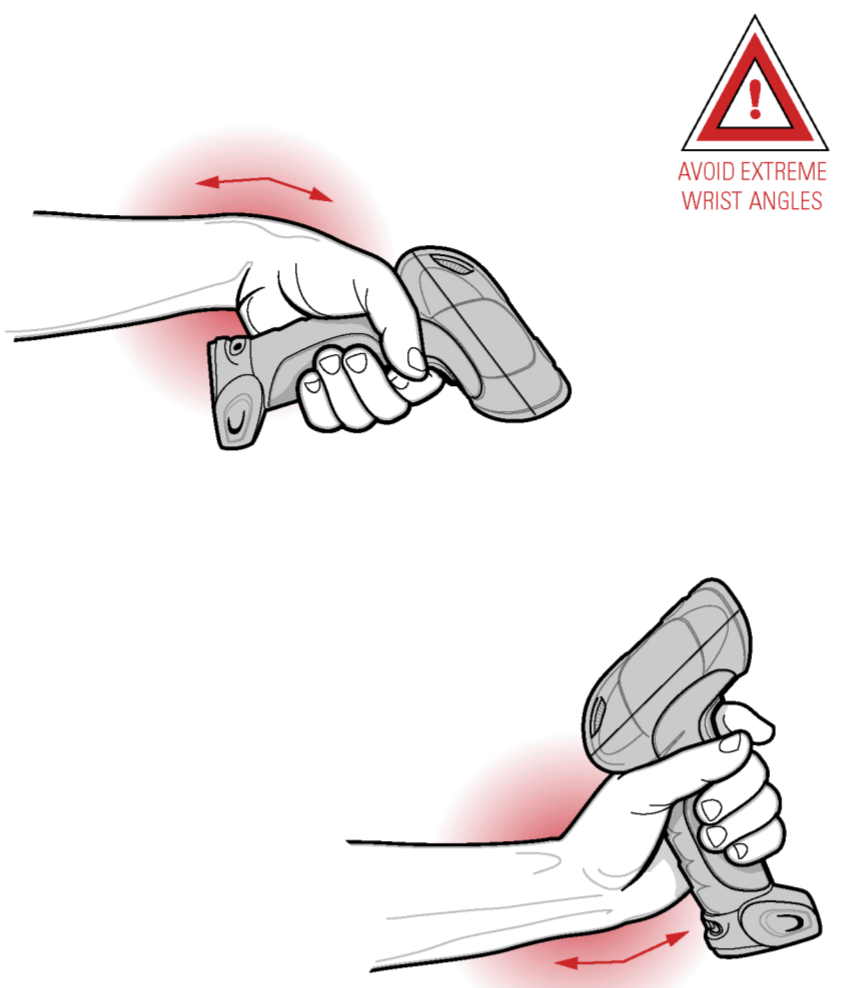


ALTERNATE LEFT AND RIGHT HANDS  
TAKING BREAKS AND TASK ROTATION RECOMMENDED

### Optimum Upright Body Posture



### Avoid Extreme Wrist Angles



### Beeper Indications

#### Standard Use

Low-medium-high beep	Short high beep	4 long low beeps	4 short high beeps
Power up	Bar code decoded [if decode beeper enabled]	Transmission error detected; data is ignored	Low battery indication
Short low-high beep	High-low beep	Long low-high beep	
Scanner has paired with the cradle	Scanner has unpaired from the cradle	Unsuccessful pairing attempt	

#### Parameter Menu Scanning

High-low-high-low beep	High-low beep	Long low-high beep
Successful parameter setting	Correct programming sequence performed	Incorrect programming sequence or Cancel bar code scanned

### LED Indications

#### Standard Use

Off	Green	Red
No power applied to scanner, or scanner is on and ready to scan	Bar code successfully decoded	Data transmission error or scanner malfunction

#### Charging Use

Green Slow Flash	Green Fast Flash	Red Flash
Scanner charging in slow mode (used when cradle is powered from USB bus)	Scanner charging in rapid mode (used when cradle is powered from external power supply)	Charging problem

### Optimum Body Posture for Low Scanning

ALTERNATE LEFT AND RIGHT KNEES



### Optimum Body Posture for Extended Range Scanning



## LS 3478 Recommended Usage Guide

<http://www.symbol.com/barcode>

SYMBOL TECHNOLOGIES, INC. One Symbol Plaza Hotsville, New York 11742-1300

Local Contact:

### Regulatory Information

©2004 SYMBOL TECHNOLOGIES, INC. All rights reserved.

Symbol reserves the right to make changes to any product to improve reliability, function, or design. Symbol 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 Symbol products might be used. An implied license exists only for equipment, circuits, and subsystems contained in Symbol products. Symbol and the Symbol logo are registered trademarks of Symbol Technologies, Inc. Other product names mentioned in this manual may be trademarks or registered trademarks of their respective companies and are hereby acknowledged.

Symbol Technologies, Inc., One Symbol Plaza, Hotsville, N.Y. 11742-1300, <http://www.symbol.com>

#### Patents

This product may be covered by one or more U.S. and foreign Patents. For patent information go to: [www.symbol.com/patents](http://www.symbol.com/patents)

#### 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/neutral 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

All Symbol devices are designed to be compliant with rules and regulations in locations they are sold and will be labeled as required. Any changes or modifications to Symbol Technologies equipment, not expressly approved by Symbol Technologies, could void the user's authority to operate the equipment.

Regulatory Information is available in French, Italian, German, Spanish (Spain), Portuguese, Japanese, Korean, and simplified Chinese. Please see Web site: <http://www.symbol.com/manuals> and look for your specific product.

#### Service Information

Before you use the unit, it must be configured to operate in your facility's network and run your applications.

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 Symbol Support Center:

United States	1-800-653-5350 or 1-631-738-2400
Canada	905-629-7226
United Kingdom	0800 328 2424
Asia/Pacific	+65-6796-9600
Australia	1-800-672-9006
Austria/Osterreich	01-5055794-0
Denmark/Danmark	7020-1718
Finland/Suomi	9 5407 580
France	01-40-96-52-21
Germany/Deutschland	6074-49020
Italy/Italia	2-484441
Mexico/México	5-520-1835
Netherlands/Nederland	315-271700
Norway/Norge	+47 2232 4375
South Africa	11-8095311
Spain/España	91 324 40 00 (Inside Spain)
	+34 91 324 40 00 (Outside Spain)
Sweden/Sverige	08 445 29 00
Latin America Sales Support	1-800-347-0178 (Inside US)
	+1-954-255-2610 (Outside US)
Europe/Mid-East Distributor Operations	
Contact local distributor or call	+44 118 945 7360

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



#### Country Approval

Regulatory markings are applied to the device signifying the radio (s) are approved for use in the following countries: United States, Canada, Australia, Japan & Europe<sup>1</sup>.

Please refer to the Symbol Declaration of Conformity (DoC) for details of other country markings. This is available at <http://www2.symbol.com/doc/>.

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

#### Radio Modules

The LS 3478 Scanners contain an approved radio module. This module is the Symbol Bluetooth radio Type: 21-64381

#### Bluetooth Devices

This product is an approved Bluetooth device. BT ID: BT01784



#### Power Supply

Use only a Symbol-approved power supply 50-14000-101 output rated 9 Vdc and minimum 1 A. The power supply is certified to EN60950 with SELV outputs. Use of alternative power supply will invalidate any approval given to this device and may be dangerous.



#### FCC / EU RF Exposure Guidelines

##### Safety Information

The device complies with Internationally recognised standards covering Specific Absorption Rate (SAR) related to human exposure to electromagnetic fields from radio devices.

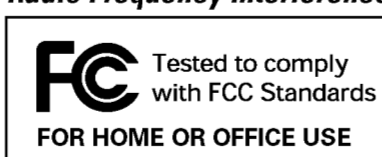
##### Reducing RF Exposure - Use Properly

It is advisable to use the device only in the normal operating position.

##### Hand Held Devices:

To comply with FCC RF exposure requirements, this device must be operated in the hand. Other operating configurations should be avoided.

#### Radio Frequency Interference Requirements



**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

##### Radio Transmitters

This device complies with RSS 210 of Industry & Science 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.

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



#### Marking and European Economic Area (EEA)

Bluetooth for use through the EEA have the following restrictions:  
• Maximum radiated transmit power of 10mW EIRP in the frequency range 2.400 - 2.4835 GHz  
• Belgium outside usage, the equipment is restricted to 2.460 - 2.4835 GHz frequency range  
• Italy requires a user license for outside usage.

#### Statement of Compliance

Symbol Technologies, Inc., hereby, declares that this device is in compliance with the essential requirements and other relevant provisions of Directives 1999/5/EC, 89/336/EEC and 73/23/EEC. Declaration of Conformities may be obtained from <http://www2.symbol.com/doc/>

#### Laser Labels

In accordance with Clause 5, IEC 825 and EN60825, the following information is provided to the user:



<b>ENGLISH</b> CLASS 1 LASER PRODUCT CLASS 2 LASER LIGHT DO NOT STARE INTO BEAM CLASS 2 LASER PRODUCT	<b>HEBREW</b> רמה 1 מוצר לייזר רמה 1 רמה 2 מוצר לייזר רמה 2 אין לכווין את העין לזרם מוצר לייזר רמה 2
<b>DANISH / DANSK</b> KLASSE 1 LASERPRODUKT LASERLYF SE IKKE IND I STRÅLEN KLASSE 2 LASERPRODUKT	<b>ITALIAN / ITALIANO</b> CLASSE 1 PRODOTTO AL LASER DI CLASSE 1 CLASSE 2 LUCE LASER NON FISSARE IL RAGGIO/PRODOTTO AL LASER DI CLASSE 2
<b>DUTCH / NEDERLANDS</b> KLASSE 1 LASERPRODUKT LASERLICHT NIET IN STRAAL STAREN KLASSE 2 LASERPRODUKT	<b>NORWEGIAN / NORSK</b> KLASSE 1 LASERPRODUKT, KLASSE 1 KLASSE 2 LASERLYS IKKE STIRR INN ILYSSTRÅLEN LASERPRODUKT, KLASSE 2
<b>FINNISH / SUOMI</b> LUOKKA 1 LASERTUOTE LUOKKA 2 LASERVALO ÄLÄ TUJOTA SÄDETTÄ LUOKKA 2 LASERTUOTE	<b>PORTUGUESE / PORTUGUÊS</b> CLASSE 1 PRODUTO LASER DA CLASSE 1 CLASSE 2 LUZ DE LASER NÃO FIXAR O RAIO LUMINOSO PRODUTO LASER DA CLASSE 2
<b>FRENCH / FRANÇAIS</b> CLASSE 1 PRODUIT LASER DE CLASSE 1 CLASSE 2 LUMIERE LASER NE PAS REGARDER LE RAYON/FIXEMENT PRODUIT LASER DE CLASSE 2	<b>SPANISH / ESPAÑOL</b> CLASSE 1 PRODUCTO LASER DE LA CLASE 1 CLASSE 2 LUZ LASER NO MIRE FIJAMENTE EL HAZ PRODUCTO LASER DE LA CLASE 2
<b>GERMAN / DEUTSCH</b> KLASSE 1 LASERPRODUKT DER KLASSE 1 KLASSE 2 LASERSTRAHLEN NICHT DIREKT IN DEN LASERSTRAHL SCHAUEN LASERPRODUKT DER KLASSE 2	<b>SWEDISH / SVENSKA</b> KLASSE 1 LASERPRODUKT KLASS 1 KLASSE 2 LASERLJUS STIRRA INTE MOT STRÅLEN LASERPRODUKT KLASS 2
<b>JAPANESE / 日本語</b> 第1種 レーザー製品 第2種 レーザー光線 光線を見つめないでください 2種 レーザー製品	<b>CHINESE / 简体中文</b> 1类 1类激光产品 2类 激光切勿注視光束 2类激光产品

#### Laser Devices

Symbol products using lasers comply with US 21CFR1040.10, and IEC825-1:1993, EN60825-1:1994+A11:1996. The laser classification is marked on one of the labels on the device.

Class 1 Laser devices are not considered to be hazardous when used for their intended purpose. The following statement is required to comply with US and international regulations:

**Caution:** Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure.

Class 2 laser scanners use a low power, visible light diode. As with any very bright light source, such as the sun, the user should avoid staring directly into the light beam. Momentary exposure to a Class 2 laser is not known to be harmful.

#### Scanner Labeling

**CAUTION - CLASS 2 LASER LIGHT - WHEN OPERATED IN THE TEMPERATURE RANGE FROM 0°C TO 40°C (32°F TO 104°F), THIS CLASS 2 LASER PRODUCT MAY BE USED WITHOUT SPECIAL PRECAUTIONS. THIS CLASS 2 LASER PRODUCT COMPLIES WITH CANADIAN REGULATIONS FOR CLASS 2 LASER PRODUCTS. FOR MORE INFORMATION, SEE THE USER MANUAL.**

