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#### Patents

This product is covered by one or more of the patents listed on the website: www.symbol.com/patents.

#### **Translated Guides**

Pour consulter la version traduite de ce guide, reportez-vous au CD du LS 4208 ou visitez le site Web ci-dessous

Per ottenere una versione tradotta della presente guida, consultare il CD LS 4208 oppure visitare il sito Web riportato sotto.

Die übersetzte Version dieser Kurzübersicht finden Sie auf der CD-ROM zum LS 4208 oder auf der folgenden Website.

Podrá encontrar la versión traducida de esta guía en el CD del LS 4208 o bien en la siguiente página Web.

Para obter uma versão traduzida deste guia, consulte o CD do LS 4208 ou visite o site abaixo.

各国語版のガイドについては、LS 4208 CD を参照するか、以下の Web サイトに アクセスしてください。

有关本指南的译文版本,请参见 LS 4208 CD 或访问以下网站。

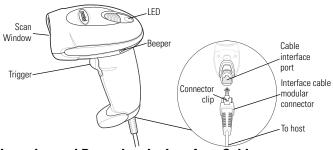
#### LS 4208 CD

http://www.symbol.com/manuals.

## Introduction

The LS 4208 scanner combines excellent scanning performance and advanced ergonomics to provide the best value in a lightweight laser scanner. Whether used as a hand-held scanner or in hands-free mode in a stand, the scanner ensures comfort and ease of use for extended periods of time. Before programming the scanner, scan the appropriate bar code(s), beginning on page 5, to communicate with the host.

### Parts

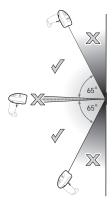


## Inserting and Removing the Interface Cable

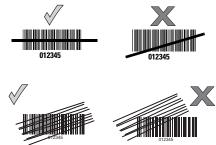
To connect the interface cable, insert the interface cable's modular connector into the cable interface port.

To remove the interface cable, unplug the installed cable's modular connector by depressing the connector clip with the tip of a screwdriver.

## Aiming



# Scanning



# **Beeper Definitions**

The scanner issues different beep sequences and patterns to indicate status. The table below defines beep sequences that occur during both normal scanning and while programming the scanner.

Beeper Sequence	Indication
Standard Use	
Low/medium/high beep	Power up.
Short high beep	A bar code symbol was decoded (if decode beeper is enabled).
4 long low beeps	A transmission error was detected in a scanned symbol. The data is ignored. This occurs if a unit is not properly configured. Check option setting.
5 low beeps	Conversion or format error.
Lo/hi/lo beep	ADF transmit error.
Hi/hi/lo beep	RS-232 receive error.
Parameter Menu Scanning	
Short high beep	Correct entry scanned or correct menu sequence performed.
Lo/hi beep	Input error, incorrect bar code or "Cancel" scanned, wrong entry, in- correct bar code programming sequence; remain in program mode.
Hi/lo beep	Keyboard parameter selected. Enter value using bar code keypad.
Hi/lo/hi/lo beep	Successful program exit with change in the parameter setting.
Low/hi/low/hi beep	Out of host parameter storage space. Scan <i>Set Defaults</i> on page 5.

Beeper Sequence	Indication	
Code 39 Buffering		
Hi/lo beep	New Code 39 data was entered into the buffer.	
3 Beeps - long high beep	Code 39 buffer is full.	
Lo/hi/lo beep	The Code 39 buffer was erased or there was an attempt to clear or transmit an empty buffer.	
Lo/hi beep A successful transmission of buffered data.		
Host Specific		
USB only		
4 short high beeps	Scanner has not completed initialization. Wait several seconds and scan again.	
Scanner gives a power-up beep after scanning a USB Device Type.	Communication with the bus must be established before the scanner can operate at the highest power level.	
This power-up beep occurs more than once.	The USB bus may put the scanner in a state where power to the scan- ner is cycled on and off more than once. This is normal and usually happens when the host PC cold boots.	
RS-232 only	·	
1 short high beep	A <bel> character is received and Beep on <bel> is enabled.</bel></bel>	

# **LED Definitions**

In addition to beeper sequences, the scanner communicates with the user using a twocolor LED display. The table below defines LED colors that display during scanning.

LED	Indication
Off	No power is applied to the scanner, or the scanner is on and ready to scan.
Green A bar code was successfully decoded.	
Red	A data transmission error or scanner malfunction occurred.

# Troubleshooting

Problem	Possible Cause	Possible Solutions	
Nothing happens when the trigger is pulled.	No power to the scan- ner.	Check the system power. Ensure the power supply is connected if the configuration re- quires a power supply.	
	Interface/power cables are loose.	Check for loose cable connections.	
Laser comes on, but sym- bol does not decode.	Scanner is not pro- grammed for the correct bar code type.	Ensure the scanner is programmed to read the type of bar code scanned. Refer to the LS 4208 Product Reference Guide, p/n 72E-69413-xx, for more information.	
	Bar code symbol is un- readable.	Check the symbol to ensure it is not defaced. Try scanning test symbols of the same bar code type.	
	Distance between scan- ner and bar code is in- correct.	Move the scanner closer to or further from the bar code.	
Symbol is decoded but not transmitted to the host.	Scanner is not pro- grammed for the correct host type.	Scan the appropriate host type bar code.	
Scanned data is incorrectly displayed on the host.	Scanner is not pro- grammed to work with the host.	<ul> <li>Ensure proper host is selected.</li> <li>Check the scanner's host type parameters or editing options.</li> <li>For RS-232, ensure the scanner's communication parameters match the host's settings.</li> <li>For a keyboard wedge configuration, ensure the system is programmed for the correct keyboard type, and the CAPS LOCK key is off.</li> <li>Ensure editing options (e.g., UPC-E to UPC-A conversion) are properly programmed.</li> <li>Refer to the LS 4208 Product Reference Guide, p/n 72E-69413-xx, for more information.</li> </ul>	

## **Programming Bar Codes**

Following are some frequently used programming bar codes.

Note: For additional host types, refer to the LS 4208 Product Reference Guide, p/n 72E-69413-xx, available on the LS 4208 CD, or on the Symbol website: http://www.symbol.com/manuals.

### Set Defaults

Scan SET DEFAULTS to set all parameters to their default values.



### Scanning Modes

Scan the appropriate bar code below to determine the scanning pattern.

- SINGLE LINE ONLY No up and down scan line movement (no raster).
- MULTI-LINE SMART RASTER The scan line begins as a single line and moves up and down (rasters) when a partial scan of a bar code is detected, or no bar code is decoded 500 ms after the trigger is pulled.
- MULTI-LINE ALWAYS RASTER (default) Rastering (up and down scan line movement) begins immediately.







## **Host Type**

If a Synapse cable is used (i.e., part number STIxx-xxxx), the scanner autodetects the Synapse cable and there is no need to scan bar codes to enable the Synapse host.

If a USB interface is used, the scanner autodetects the USB and defaults to the HID keyboard interface. See page 8 to select the IBM hand-held host type. Refer to the *LS 4208 Product Reference Guide*, p/n 72E-69413-xx, for additional USB host types.

If a Keyboard Wedge, RS-232, Wand Emulation, Scanner Emulation, or IBM 46XX is used, the appropriate host type must be scanned. Select the appropriate host type from the bar codes that follow.



Country Keyboard Types (Country Codes)





FRENCH CANADIAN Windows 95/98



French Canadian Windows XP/2000



RMAN Windows

Country Keyboard Types (Country Codes)





**ITALIAN** Windows





LIK ENGLISH Windows



IAPANESE Windows



PORTUGUESE-BRAZILIAN Windows

**RS-232 Host Types** 



STANDARD RS-232



ICL RS-232

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RS-232 Host Types



NIXDORF RS-232 MODE A



NIXDORF RS-232 MODE B





OPOS/JPOS

**USB Host Types** 



HID KEYBOARD EMULATION

IBM HAND-HELD USB

**IBM 46XX Host Types** 

PORT 5B





SYMBOL WAND

Many Wand hosts require input as Code 39 data. Scan the following bar codes to enable or disable transmission of data to the Wand host as Code 39 data.





DISABLE CONVERT TO CODE 39 FOR WAND HOST (Default)

### **Scanner Emulation Host Type**

Scan the bar code below to enable the Scanner Emulation host.



### **Carriage Return/Line Feed**

To append a carriage return/line feed to all transmitted data, scan the following bar codes in the order shown. To cancel this operation, the **SET DEFAULTS** bar code on page 5, or refer to the *LS 4208 Product Reference Guide*.







### **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.

### **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.

#### **Power Supply**

Note: Use only a Symbol-approved power supply (p/n 50-14000-008, 50-14000-009 or 50-14000-010) output rated 5 VDVC and minimum 650mA. 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.

Hinweis: Benutzen Sie nur eine von Symbol Technologies genehmigte Stromversorgung (Teilenr. 50-14000-008, 50-14000-009, 50-14000-010) mit einer Ausgangsleistung von 5 VDC (Gleichstrom) und mindestens 650mA. Die Stromversorgung ist nach EN60950 für die Verwendung in SELV-Stromkreisen zertifiziert. Bei Verwendung eines anderen Netzteils werden alle für das Gerät gewährten Genehmigungen außer Kraft gesetzt, und der Betrieb kann gefährlich sein.

### Radio Frequency Interference Requirements



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 instruction manual, may cause

harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If the 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:

- · Re-orient 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.

### Marking and European Economic Area (EEA)

#### Statement of Compliance



Symbol Technologies, Inc., hereby declares that this device is in compliance with all the applicable Directives, 89/336/EEC, 73/23/EEC. A Declaration of Conformity may be obtained from http://www2.symbol.com/doc/.

### Laser Devices



Symbol devices using lasers comply with 21CFR1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001 and EN60825-1:1994+ A1:2002 +A2:2001, IEC60825-1:1993+A1:1997+A2:2001.

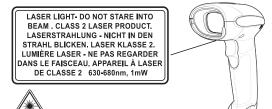
The laser classification is marked on one of the labels on the device. Class 1 Laser devices are not considered to be hazardous when used for their intended purpose. The following

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



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ENGLISH

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



מוצר לייזר רמה 1

ENGLISH CLASS 1 CLASS 2 DO NOT STARE CLASS 2 LASER		HEB
DANISH / DAN		ITAI
KLASSE 1 KLASSE 2	KLASSE 1 LASERPRODUKT LASERLYF KLASSE 2 LASERPRODUKT	CLA: CLA:
DUTCH / NEDE	RLANDS	AL L Nof
KLASSE 1 KLASSE 2	KLASSE-1 LASERPRODUKT LASERLICHT NIET IN STRAAL STARENLASERPRODUKT, KLASSE-2 LASERPRODUKT	KLA: KLA:
FINNISH / SUG	IMI	POR
LUOKKA 1 LUOKKA 2	LUOKKA 1 LASERTUOTE LASERVALO ÄLÄ TUIJOTA SÄDETTÄ LUOKKA 2 LASERTUOTE	CLA: CLA:
FRENCH / FRA	NÇAIS	SPA
CLASSE 1 CLASSE 2	PRODUIT LASER DE CLASSE 1 LUMIERE LASER NE PAS REGARDER LE RAYON FIXEMENT PRODUIT LASER DE CLASSE 2	CLA: CLA:
GERMAN / DE	UTCH	SW
KLASSE 1 KLASSE 2	LASERPRODUKT DER KLASSE 1 LASERSTRAHLEN NICHT DIREKT IN DEN LASERSTRAHL SCHAUEN LASERPRODUKT DER KLASSE 2	KLA:
CHINESE / 简 1 类 2 类	5体中文 1 类微光产品 激光 切勿注视光束 2 类激光产品	JA ク ク
<b>KOREAN /</b> 한 1등급 2등급	국어 1등급 레이저 제품 레이저 광선 이 광선을 주시하지 마십시오. 2등급 레이저 제품	

HEBREW	מוצר לייזר רמה 1	רמה 1
	אור לייזר אין להביט אל תוך הזרם מוצר לייזר רמה 2	רמה 2
ITALIAN / ITALIA	NO	
CLASSE 1 CLASSE 2	PRODOTTO AL LASER DI CLASSE 1 LUCE LASER SE IKKE IND I STRÅLENNON FISSARE IL RAGGIO	PRODOTTO
AL LASER DI CLAS	ISE 2	
NORWEGIAN / N	IORSK	
	LASERPRODUKT,KLASSE 1 LASERLYS IKKE STIRR INN I LYSSTRÅLEN LASERPRODUKT, KLASSE 2	
PORTUGUESE / F	PORTUGUÊS	
CLASSE 1	PRODUTO LASER DA CLASSE 1	
CLASSE 2	LUZ DE LASER NÃO FIXAR O RAIO LUMINOSO PRODUTO LASER DA CLASSE 2	
SPANISH / ESPA	ŇOL	
	PRODUCTO LASER DE LA CLASE 1 LUZ LASER NO MIRE FIJAMENTE EL HAZ PRODUIT LASER DE CLASSE 2	
SWEDISH / SVE	NSKA	
	LASERPRODUKT KLASS 1	
KLASS 2	LASERLJUS STIRRA INTE MOT STRÅLEN LASERPRODUKT KLASS 2	
JAPANESE / E	3本語	

RFANESE/日本語 ッラス1 クラス1 レーザ製品 ッラス2 レーザ光線 光線を直視しないでください クラス2 レーザ製品

## Warranty

Subject to the terms of Symbol's hardware warranty statement, the LS 4208 hand held scanner products are warranted against defects in workmanship and materials for a period of five years from the date of shipment.

The Liquid Polymer scan element includes an unprecedented limited lifetime warranty.

For the complete Symbol hardware product warranty statement, go to: http://www.symbol.com/warranty.

# **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	Canada	905-629-7226
United Kingdom	0800 328 2424 (Inside UK) +44 118 945 7529 (Outside UK	Asia/Pacific	337-6588 (Inside Singapore) +65-337-6588 (Outside Singapore)
Australia	1-800-672-906 (Inside Australia) +61-3-9866-6044 (Outside Australia	Austria <b>/</b> Österreich	01-5055794-0 (Inside Austria) +43-1-5055794-0 (Outside Austria)
Denmark <b>/</b> Danmark	7020-1718 (Inside Denmark) +45-7020-1718 (Outside Denmark)	Finland/Suomi	9 5407 580 (Inside Finland) +358 9 5407 580 (Outside Finland)
France	01-40-96-52-21 (Inside France) +33-1-40-96-52-50 (Outside France)	Germany <b>/</b> Deutschland	6074-49020 (Inside Germany) +49-6074-49020 (Outside Germany)
ltaly <b>/</b> Italia	2-484441 (Inside Italy) +39-02-484441 (Outside Italy)	Mexico/México	5-520-1835 (Inside Mexico) +52-5-520-1835 (Outside Mexico)
Netherlands <b>/</b> Nederland	315-271700 (Inside Netherlands) +31-315-271700 (Outside Netherlands)	Norway <b>/</b> Norge	+47 2232 4375
South Africa	11-809 5311 (Inside South Africa) +27-11-809 5311 (Outside South Africa)	Spain/España	+913244000 (Inside Spain) +34-9-1-320-39-09 (Outside Spain)
Sweden <b>/</b> Sverige	Switchboard: 08 445 29 00 (domestic) Call Center: +46 8 445 29 29 (international)	Europe/Mid-East Distributor Operations	Contact local distributor or call +44 118 945 7360
Latin America Sales Support			

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



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http://www.symbol.com