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M 2 0 0 0 S e r i e s



symbol[®]

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

Patents

This product is covered by one or more of the following U.S. and foreign Patents:

U.S. Patent No. 4,593,186; 4,603,262; 4,607,156; 4,652,750; 4,673,805; 4,736,095;
4,758,717; 4,760,248; 4,806,742; 4,816,660; 4,845,350; 4,896,026; 4,897,532; 4,923,281;
4,933,538; 4,992,717; 5,015,833; 5,017,765; 5,021,641; 5,029,183; 5,047,617; 5,103,461;
5,113,445; 5,130,520; 5,140,144; 5,142,550; 5,149,950; 5,157,687; 5,168,148; 5,168,149;
5,180,904; 5,216,232; 5,229,591; 5,230,088; 5,235,167; 5,243,655; 5,247,162; 5,250,791;
5,250,792; 5,260,553; 5,262,627; 5,262,628; 5,266,787; 5,278,998; 5,280,162; 5,280,163;
5,280,164; 5,280,498; 5,304,786; 5,304,788; 5,306,900; 5,324,924; 5,337,361; 5,367,151;
5,373,148; 5,378,882; 5,396,053; 5,396,055; 5,399,846; 5,408,081; 5,410,139; 5,410,140;
5,412,198; 5,418,812; 5,420,411; 5,436,440; 5,444,231; 5,449,891; 5,449,893; 5,468,949;
5,471,042; 5,478,998; 5,479,000; 5,479,002; 5,479,441; 5,504,322; 5,519,577; 5,528,621;
5,532,469; 5,543,610; 5,545,889; 5,552,592; 5,557,093; 5,578,810; 5,581,070; 5,589,679;
5,589,680; 5,608,202; 5,612,531; 5,619,028; 5,627,359; 5,637,852; 5,664,229; 5,668,803;
5,675,139; 5,693,929; 5,698,835; 5,705,800; 5,714,746; 5,723,851; 5,734,152; 5,734,153;
5,742,043; 5,745,794; 5,754,587; 5,762,516; 5,763,863; 5,767,500; 5,789,728; 5,789,731;
5,808,287; 5,811,785; 5,811,787; 5,815,811; 5,821,519; 5,821,520; 5,823,812; 5,828,050;
5,848,064; 5,850,078; 5,861,615; 5,874,720; 5,875,415; 5,900,617; 5,902,989; 5,907,146;
5,912,450; 5,914,478; 5,917,173; 5,920,059; 5,923,025; 5,929,420; 5,945,658; 5,945,659;
5,946,194; 5,959,285; 6,002,918; 6,021,947; 6,029,894; 6,031,830; 6,036,098; 6,047,892;
6,050,491; 6,053,413; 6,056,200; 6,065,678; 6,067,297; 6,082,621; 6,084,528; 6,088,482;
6,092,725; 6,101,483; 6,102,293; 6,104,620; 6,114,712; 6,115,678; 6,119,944; 6,123,265;
6,131,814; 6,138,180; 6,142,379; 6,172,478; 6,176,428; 6,178,426; 6,186,400; 6,188,681;
6,209,788; 6,209,789; 6,216,951; 6,220,514; 6,243,447; 6,244,513; 6,247,647; 6,308,061;
6,250,551; 6,295,031; 6,308,061; 6,308,892; 6,321,990; 6,328,213; 6,330,244; 6,336,587;
6,340,114; 6,340,115; 6,340,119; 6,348,773; 6,380,949; 6,394,355; D305,885; D341,584;
D344,501; D359,483; D362,453; D363,700; D363,918; D370,478; D383,124; D391,250;
D405,077; D406,581; D414,171; D414,172; D418,500; D419,548; D423,468; D424,035;
D430,158; D430,159; D431,562; D436,104.
Invention No. 55,358; 62,539; 69,060; 69,187, NI-068564 (Taiwan); No. 1,601,796; 1,907,875;
1,955,269 (Japan); European Patent 367,299; 414,281; 367,300; 367,298; UK 2,072,832;
France 81/03938; Italy 1,138,713
rev. 06/02

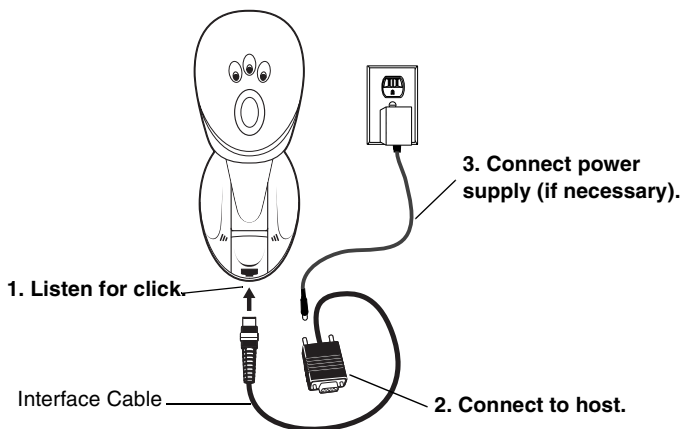
Introduction

The Cyclone™ M2000 Series scanner combines the benefits of multiple scan patterns (omni-directional, 2D raster, single scan-line and semi-omni directional scan pattern) with a light-weight, hands-free/hand-held design. The scanner's built-in stand seamlessly accommodates both counter-top and hand-held use. The scanner can be programmed to emit the preferred scan pattern for both counter-top and hand-held use.

The following models are available:

- M2004-I200 (RS-232C) contains on-board discrete RS-232C communications for connecting to RS-232C asynchronous terminals and host systems. It also accommodates Synapse™ Smart Cables which allow you to connect to a wide variety of host systems.
- M2004-I290 (RS-232C with EAS) also supports Checkpoint VII Electronic Article Surveillance (EAS).
- M2005-I200 (IBM 468X/469X) is fully compatible with the entire line of IBM 468X/469X terminals. It also accommodates Synapse Smart Cables.
- M2005-I290 (IBM 468X/469X with EAS) provides additional signal lines for EAS deactivation (Checkpoint VII).
- M2007-I200 (USB) supports USB connectivity. It also accommodates Synapse Smart Cables.
- M2007-I290 (USB with EAS) provides additional signal lines for EAS deactivation (Checkpoint VII).

Setting Up your Scanner



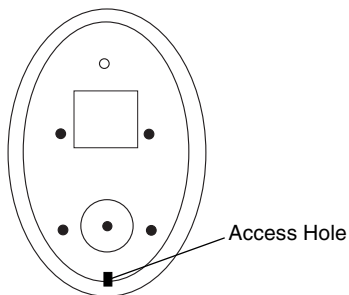
If you are using a Synapse cable, the scanner autodetects your host. If you are using another cable, set the M2000 to communicate with your particular POS host by scanning the appropriate bar code(s) in the *Cyclone™ M2000 Series Product Reference Guide*.

Power up the host. The green LEDs on top of the scanner flash 3 times while 3 power-up beeps sound, indicating the scanner is operational.

Removing the Interface Cable

Different cables are required for different hosts. To remove the interface cable:

1. Unplug the cable's modular connector by depressing the connector clip through the access hole on the bottom of the scanner with a screwdriver or paper clip.



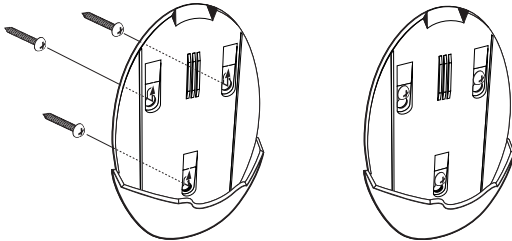
2. Carefully slide out the cable.

Wall Mounting the Scanner

An optional wall-mount bracket is available for using the M2000 in “scanning from above” applications. To wall-mount the M2000:

1. Place the bracket in its desired location on the wall, and place a pencil mark on the wall through each keyhole in the bracket.
2. Remove the bracket, and insert three #6 screws into the pencil marks on the wall. Do not tighten them all the way; leave enough space for the bracket's keyholes to slide onto.

3. Insert the bracket's keyholes over the screws, and slide the bracket down to secure. If necessary, tighten the screws.



4. Slide the base of the scanner into the bracket with the scan window facing down.

Electronic Article Surveillance (EAS) (Optional)

Because there are several Checkpoint EAS systems available, your local Checkpoint representative should install the EAS cable. To contact your local Checkpoint representative inside the U.S. call 800-257-5540, ext. 4300. Outside the U.S., call (609) 848-1800, ext. 4300.

If you are using an EAS cable, refer to the Universal Cable EAS Installation Sheet (Symbol p/n 70-32824-xx).

Scanning Modes

The M2000 may be used on the counter-top or in a hand-held orientation. In hand-held use, the scanner operates in triggered mode where you pull the trigger to activate the scan pattern and decode the bar code. In counter-top use, the scanner operates in continuous (constant-on) mode, where it automatically decodes a bar code presented in its field of view.

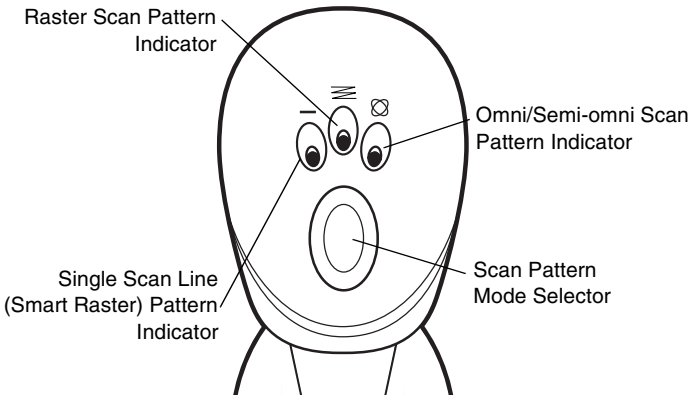
Laser Patterns

The scanner emits one of four laser patterns:

- **Cyclone Omnidirectional Scan Pattern** is a highly efficient scan pattern which decodes 1D and EAN/UCC reduced space symbologies in any orientation.
- **Cyclone Semi-omnidirectional Scan Pattern**, an alternative to the full omnidirectional pattern, scans highly truncated 1D and RSS bar codes. The bar code must be presented horizontally with no more than 20° tilt.
- **Raster Scan Pattern** directly opens the laser to a full sized raster pattern. Decodes 1D, PDF-417, RSS, and Composite Codes.
- **Single Scan Line Pattern (Smart Raster)** creates a single scan line which opens vertically for PDF-417 symbols using the Smart Raster feature. This feature autodetects the type of bar code being scanned and adjusts its pattern accordingly. This provides optimal performance on 1D, PDF-417, EAN/UCC, RSS and Composite Codes.

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One pattern can be selected for counter-top mode and another for hand-held mode via programming bar code in the *M2000 Series Product Reference Guide* (p/n 72-39696-xx). For hand-held mode, you may alternatively select a pattern by pressing the Scan Pattern Mode Selector button when the scanner is lifted off the counter.



To scan in hand-held mode, pick up the scanner and hold it within the scanning range for the bar code. A sensor on the bottom of the scanner's stand detects when the scanner is lifted off the counter, and automatically switches to the programmed hand-held laser pattern.

LED Indications

The lit LED indicates the selected scan pattern for hand-held and counter-top mode. In hand-held mode, pressing the Scan Pattern Mode Selector button selects the next pattern, and lights the corresponding LED. (The counter-top laser pattern is selectable only via programming bar codes.) When a bar code is successfully decoded, all three LEDs light momentarily.

Beeper Indications

The beeper indicates the scanner's status as follows:

Beeper	Indication
3 Beeps	Power up (or reset) has occurred.
1 Beep	A bar code is successfully decoded.
4 Beeps	Transmission error. Bar code data was not received by the host.
Fast warble	A programming parameter was entered successfully.

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 meeting with your company's safety programs to prevent employee injury.

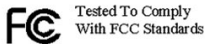
- Reduce or eliminate repetitive motion
- Maintain a natural position
- Reduce or eliminate excessive force
- Keep objects that are used frequently within easy reach
- Perform tasks at correct heights
- Reduce or eliminate vibration
- Reduce or eliminate direct pressure
- Provide adjustable workstations
- 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.

Radio Frequency Interference Requirements



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 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.

CE Marking and European Union Compliance



Products intended for sale within the European Union are marked with the CE Mark which indicates compliance to applicable Directives and European Normes (EN).

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 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.

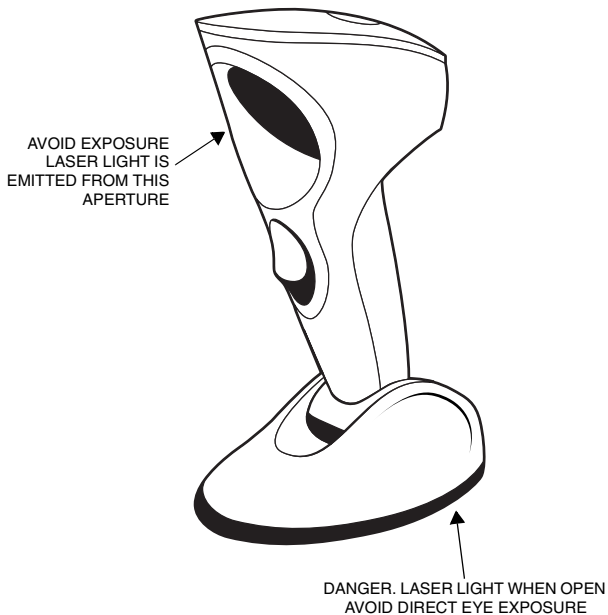
Class 1 Laser devices are not considered to be hazardous when used for their intended purpose. The following statement is required to comply with US and international regulations:

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.

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Scanner Labeling



CAUTION



LASER LIGHT-DO NOT STARE INTO BEAM
630-680 nm LASER 1.0 mW MAX OUTPUT
CLASS II LASER PRODUCT



LASER LIGHT. DO NOT STARE INTO BEAM. CLASS 2 LASER PRODUCT
LASERLICHT - NICHT IN DEN STRAHL BLICKEN, LASERKLASSE 2
LUMIERE LASER-NE PAS REGARDER DANS LE FAISCEAU
APPAREIL A LASER DE CLASSE 2. 630-680nm, 1mW

Q u i c k R e f e r e n c e

In accordance with Clause 5, IEC 0825 and EN60825, the following information is provided to the user:



ENGLISH

CLASS 1 CLASS 1 LASER PRODUCT
CLASS 2 LASER LIGHT
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT

HEBREW

מוצר לייזר רמה 1 רמה 1
אור לייזר רמה 2
אין להביט אל תוך הזרם
מוצר לייזר רמה 2

DANISH / DANSK

KLASSE 1 KLASSE 1 LASERPRODUKT
KLASSE 2 LASERLYF
SE IKKE IND I STRÅLEN
KLASSE 2 LASERPRODUKT

ITALIAN / ITALIANO

CLASSE 1 PRODOTTO AL LASER DI CLASSE 1
CLASSE 2 LUCE LASER
NON FISSARE IL RAGGIOPRODOTTO
AL LASER DI CLASSE 2

DUTCH / NEDERLANDS

KLASSE 1 KLASSE-1 LASERPRODUKT
KLASSE 2 LASERLICHT
NIET IN STRAAL STAREN
KLASSE-2 LASERPRODUKT

NORWEGIAN / NORSK

KLASSE 1 LASERPRODUKT, KLASSE 1
KLASSE 2 LASERLYS IKKE STIRR INN I LYSSTRÅLEN
LASERPRODUKT, KLASSE 2

FINNISH / SUOMI

LUOKKA 1 LUOKKA 1 LASERTUOTE
LUOKKA 2 LASERVALO
ÄLÄ TUJOTA SÄDETTÄ
LUOKKA 2 LASERTUOTE

PORTUGUESE / PORTUGUÊS

CLASSE 1 PRODUTO LASER DA CLASSE 1
CLASSE 2 LUZ DE LASER NÃO FIXAR O RAIOS LUMINOSOS
PRODUTO LASER DA CLASSE 2

FRENCH / FRANÇAIS

CLASSE 1 PRODUIT LASER DE CLASSE 1
CLASSE 2 LUMIÈRE LASER
NE PAS REGARDER LE RAYON FIXEMENT
PRODUIT LASER DE CLASSE 2

SPANISH / ESPAÑOL

CLASE 1 PRODUCTO LASER DE LA CLASE 1
CLASE 2 LUZ LASER
NO MIRE FIJAMENTE EL HAZ
PRODUCTO LASER DE LA CLASE 2

GERMAN / DEUTSCH

KLASSE 1 LASERPRODUKT DER KLASSE 1
KLASSE 2 LASERSTRAHLEN
NICHT DIREKT IN DEN LASERSTRAHL SCHAUEN
LASERPRODUKT DER KLASSE 2

SWEDISH / SVENSKA

KLASS 1 LASERPRODUKT KLASS 1
KLASS 2 LASERLJUS STIRRA INTE MOT STRÅLEN
LASERPRODUKT KLASS 2

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Warranty

(A) Warranty Symbol Technologies (hereafter “Seller”) hardware Products are warranted against defects in workmanship and materials for a period of three (3) years from the date of shipment, unless otherwise provided by Seller in writing, provided the Product remains unmodified and is operated under normal and proper conditions. Warranty provisions and durations on software, integrated installed systems, Product modified or designed to meet specific customer specifications (“Custom Products”), remanufactured products, and reconditioned or upgraded products, shall be as provided in the applicable Product specification in effect at the time of purchase or in the accompanying software license.

(B) Spare Parts Spare parts (i.e. parts, components, or subassemblies sold by Seller for use in the service and maintenance of Products) are warranted against defects in workmanship and materials for a period of thirty (30) days from the date of shipment. Spare parts may be new or originate from returned units under the conditions set forth in subsection D below.

(C) Repair of Symbol-branded hardware For repairs on Symbol-branded hardware Products under this Agreement, including repairs covered by warranty, the repair services provided are warranted against defects in workmanship and materials on the repaired component of the Product for a period of thirty (30) days from the shipment date of the repaired Product, or until the end of the original warranty period, whichever is longer.

(D) Product Service Products may be serviced or manufactured with parts, components, or subassemblies that originate from returned products and that have been tested as meeting applicable specifications for equivalent new material and Products. The sole obligation of Seller for defective hardware Products is limited to repair or replacement (at Seller’s option) on a “return to service depot” basis with prior Seller authorization. Customer is responsible for shipment to the Seller and assumes all costs and risks associated with this transportation; return shipment to the Customer will be at Seller’s expense. Customer shall be responsible for return shipment charges for product returned where Seller determines there is no defect (“No Defect Found”), or for product returned that Seller determines is not eligible for warranty repair. No charge will be made to Buyer for replacement parts for warranty repairs. Seller is not responsible for any damage to or loss of any software programs, data or removable data storage media, or the restoration or reinstallation of any software programs or data other than the software, if any, installed by Seller during manufacture of the Product.

(E) Original Warranty Period Except for the warranty applying solely to the repaired component arising from a repair service as provided in Section C above, the aforementioned provisions do not extend the original warranty period of any Product that had either been repaired or replaced by Seller.

(F) Warranty Provisions The above warranty provisions shall not apply to any Product (i) which has been repaired, tampered with, altered or modified, except by Seller’s authorized service personnel; (ii) in which the defects or damage to the Product result from normal wear and tear, misuse, negligence, improper storage, water or other liquids, battery leakage, use of parts or accessories not approved or supplied by Symbol, or failure to perform operator handling and scheduled maintenance instructions supplied by Seller; (iii) which has been subjected to unusual physical or electrical stress, abuse, or accident, or forces or exposure beyond normal use within the specified operational and environmental parameters set forth in the applicable Product specification; nor shall the above warranty provisions apply to any expendable or consumable items, such as batteries, supplied with the Product.

EXCEPT FOR THE WARRANTY OF TITLE AND THE EXPRESS WARRANTIES STATED ABOVE, SELLER DISCLAIMS ALL WARRANTIES ON PRODUCTS FURNISHED HEREUNDER INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW ARE LIMITED IN DURATION TO THE LIMITED WARRANTY PERIOD. SOME STATES OR COUNTRIES DO NOT ALLOW A LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR CONSUMER PRODUCTS. IN SUCH STATES OR COUNTRIES, FOR SUCH PRODUCTS, SOME EXCLUSIONS OR LIMITATIONS OF THIS LIMITED WARRANTY MAY NOT APPLY.

The stated express warranties are in lieu of all obligations or liabilities on the part of Seller for damages, including but not limited to, special, indirect or consequential damages arising out of or in connection with the use or performance of the Product or service. Seller’s liability for damages to Buyer or others resulting from the use of any Product or service furnished hereunder shall in no way exceed the purchase price of said Product or the fair market value of said service, except in instances of injury to persons or property.

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	1-800-653-5350 1-631-738-2400	Canada	905-629-7226
United Kingdom	0800 328 2424	Asia/Pacific	+65-6796-9600
Australia	1-800-672-906	Austria/Österreich	1-505-5794-0
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
Sweden/Sverige	84452900		+34 91 324 40 00 Outside Spain
Latin America Sales Support	1-800-347-0178 Inside US +1-561-483-1275 Outside US		
Europe/Mid-East Distributor Operations	Contact local distributor or call +44 118 945 7360		

¹Customer support is available 24 hours a day, 7 days a week.

For the latest version of this guide go to:

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



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