P370 / 470 RF Scanner

Quick Reference Guide

symbol®
The Enterprise Mobility Company™

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http://www.symbol.com

Warranty

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

Patents

This product is covered by one or more patents. For patent information go to: http://www.symbol.com/patents.

Introduction

The P470/370 cordless RF scanners bring new flexibility and economy to data capture and data management in both industrial and retail operations. The scanner communicates with your host computer through radio transmission instead of through a cable. With the RF scanner, you are free to scan and transmit without a physical cable, from as far away as 100 feet (30.5 meters) even without a direct line of sight. This lets you take the scanner to where the work is, whether on the loading dock, the plant floor, the warehouse, or the POS checkout area. There are several versions available:

- P470: cordless retail scanner.
- P370: cordless industrial scanner.
- P370 ALR: cordless industrial ALR scanner.

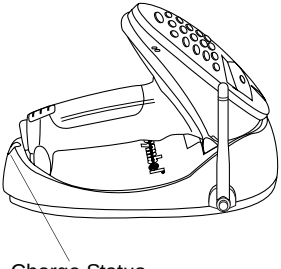
This *Quick Reference Guide* provides basic instruction on the set up and use of the Phaser P370/P470 RF scanners.

Refer to PL 370/470 RF Cradle Quick Reference Guide (p/n 72-38494-xx) for information on setting up the PL 370/470 RF cradle.

To quickly get you started with your new scanner:

1. Charge the scanner in the cradle.
2. Power up the scanner.
3. Follow the Quick Startup Instructions (see page 6).
4. Use the test bar codes to ensure the scanner is working properly (see page 7).

Charging the Scanner in the Cradle



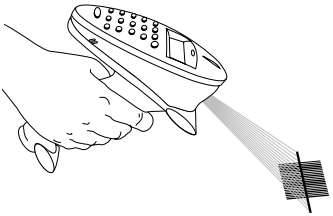
To charge the scanner, insert the scanner into the cradle so the nose of the scanner and tip of the handle seat into the receptacles. The scanner displays “UNIT CRADLED” when properly inserted in the cradle.

The battery charges automatically. A full charge of a depleted battery takes approximately 3-1/2 hours. The charge status indicator light on the back of the cradle blinks then becomes solid when the battery is fully charged.

Powering Up the Scanner

To turn the scanner on, press the “Enter” key or pull the trigger. The scanner is brought out of sleep mode and into scanning mode.

Scanning



Consult the *P470/P370 RF Scanners Product Reference Guide* (p/n 72-38495-xx) for programming instructions. If you need assistance, contact your local supplier or the Symbol Support Center.

To scan:

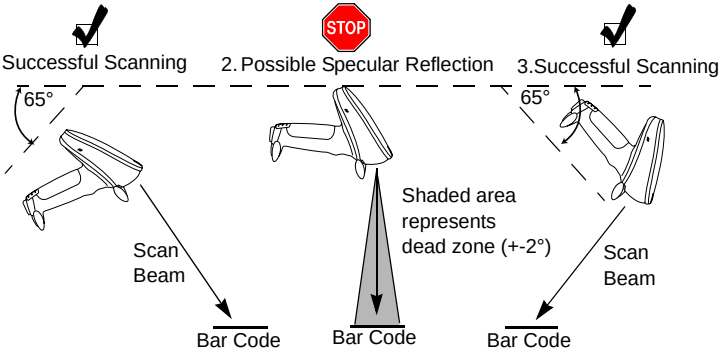
1. Ensure the battery is charged.
2. Ensure the bar code is in the correct scanning range.
3. Aim and press the trigger. When the scanner has read the symbol:
   - a beep sounds.
   - the LED above the display turns green.
   - the red laser turns off.

Aiming

Hold at an Angle

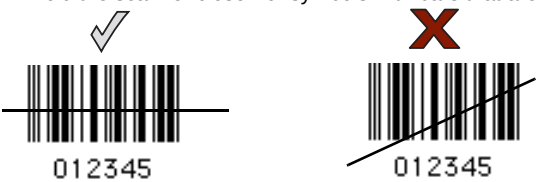
Do not hold the scanner directly over the bar code. Laser light reflecting directly back into the scanner from the bar code is known as specular reflection. Specular reflection can make decoding difficult.

The scanner can tilt up to 65° forward or back and achieve a successful decode. Simple practice quickly shows what tolerances to work within.



Scan the Entire Symbol

- The scan beam must cross every bar and space on the symbol (as in the left bar code below).
- Hold the scanner farther away for larger symbols.
- Hold the scanner closer for symbols with bars that are close together.



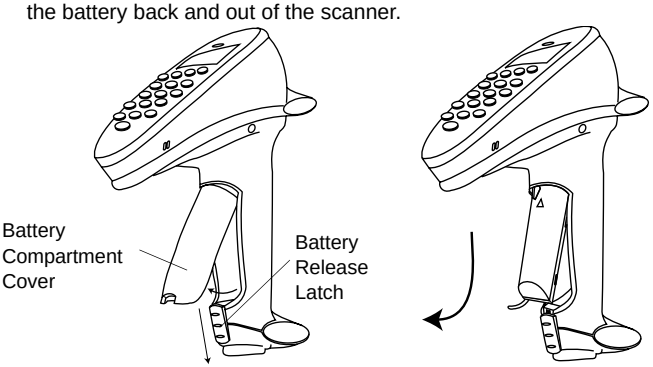
Changing the Battery

When a battery is fully charged, it generally lasts up to 10 hours without being returned to the cradle. By returning it to the cradle during the day, this time is extended.

If a significant decrease in battery life is noticed and does not correspond to increased usage, consider replacing the battery.

Removing the Battery

1. Slide the battery release latch down using center indent and remove the battery compartment cover.
2. Slide the battery toward the bottom of the scanner and then pull the bottom of the battery back and out of the scanner.



Replacing the Battery

1. Place the top portion of the battery (curved side up, contacts toward top) into the scanner and then slide it up the handle.
2. Replace the battery compartment cover.
3. Slide the release latch up to secure the cover in place.

Quick Startup Instructions

The table that follows includes an index of startup instructions to help get you started quickly. The index is listed in a step-by-step order beginning with step 1, *Setting up the System*. This index references pages in the *P470/P370 RF Scanners Product Reference Guide* (p/n 72-38495-xx). The Product Reference Guide is included on the CD shipped with the scanner. It is also available on the Symbol Web site at: http://www.symbol.com/manuals.

Mandatory steps are designated by an asterisk (*). If an item has multiple pages referenced, the most important reference is in bold.

Topic	PRG Page
1. Setting Up the System	
• Connecting the cradle to a host *	2-1
- RS-232 connection	2-2
- Synapse connection (keyboard wedge, USB, etc.)	2-3
• Charging the battery *	1-3, **2-8**
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Test Symbols

5012345248

Code 128

0000 3001

EAN-8

0 12345 67890

13 Mil UPC

01234567

Code 39

Regulatory Information

All Symbol devices are designed to be compliant with rules and regulations in locations they are sold and are 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.

CAUTION Only use Symbol 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.

Country Approvals

Regulatory markings are applied to the device signifying the radio (s) are approved for use in the following countries: United States, Canada, Australia, Japan and Europe.
Please refer to the Symbol Declaration of Conformity (DoC) for details of other country markings. This is available at http://www2.symbol.com/doc/.

Operation of the device without regulatory approval is illegal.

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 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.

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

Warnings for Use of Wireless Devices

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

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.

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 minimize the potential for interference.

If you have any reason to suspect that interference is taking place, turn OFF your device

Hearing Aids

The wireless device may interfere with some hearing aids. In the event of interference you may want to consult your hearing aid supplier to discuss solutions.

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.

FCC / EU RF Exposure Guidelines

Safety Information

The device complies with Internationally recognized 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.

Handheld Devices

To comply with FCC RF exposure requirements, this device must be operated in the hand with a minimum separation distance of 20 cm or more from a person's body. Other operating configurations should be avoided.

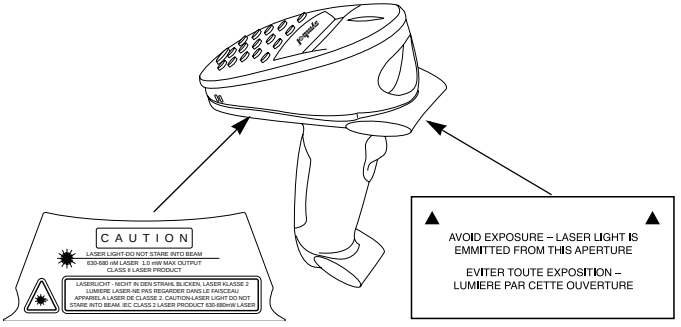
Laser Devices

Complies with 21CFR1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001.
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



In accordance with Clause 5, IEC 825 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
רמה 1 מוצר לייזר רמה 1
רמה 2 אור לייזר
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 TUIJOTA SÄDETTÄ
LUOKKA 2 LASERTUOTE

PORTUGUESE / PORTUGUÊS
CLASSE 1 PRODUTO LASER DA CLASSE 1
CLASSE 2 LUZ DE LASER NÃO FIXAR O RAIO LUMINOSO
PRODUTO LASER DA CLASSE 2

FRENCH / FRANÇAIS
CLASSE 1 PRODUIT LASER DE CLASSE 1
CLASSE 2 LUMIERE 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 / DEUTCH
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

CHINESE / 简体中文
1 类 1 类激光产品
2 类 激光
切勿注视光束
2 类激光产品

KOREAN / 한국어
1등급 1등급 레이저 제품
2등급 레이저 광선
이 광선을 주시하지 마십시오.
2등급 레이저 제품

JAPANESE / 日本語
クラス1 クラス1 レーザ製品
クラス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

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 EN60950-1 with SELV outputs. Use of an alternative power supply invalidates any approval given to this device and may be dangerous.

Batteries

Please follow the local regulations when disposing of re-chargeable batteries.

Taiwan - Recycling

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.

「廢電池請回收」

Symbol Rechargeable Batteries

Symbol 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 life of a battery pack such as heat, cold, customer usage profiles, age, and severe drops.

When batteries are stored over a year, battery cell manufacturers advise that some irreversible deterioration in overall battery quality may occur. To minimize this loss, they recommend storing batteries half charged in a dry, cool place between 41° and 77°F (5° and 25°C), the cooler the better) and removed from the equipment to prevent the loss of capacity. Batteries should be charged to half capacity at least once a year. If an electrolyte leakage is observed, avoid any contact with the affected area and properly dispose of the battery.

Replace the battery when a significant loss of run time is detected. Batteries must be charged within the 32° to 104°F (0° to 40°C) temperature range.

The standard warranty period for all Symbol batteries is 30 days, regardless if the battery was purchased separately or included as part of the mobile computer. For more information on Symbol batteries, please visit http://mysymbolcare.symbol.com/battery/batbasics1.html.

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 & 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)

2.4GHz devices for use through the EEA have the following restrictions:

- Maximum radiated transmit power of 10 mW EIRP in the frequency range 2.400 -2.4835 GHz
- France, equipment is restricted to 2.446 -2.454 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 Directive 1999/5/EC. A Declaration of Conformity may be obtained from http://www2.symbol.com/doc/.

Brazil

Declarações Regulamentares para P370, P470 PL370 y PL470 BRAZIL

NOTA: A marca de certificação se aplica ao Equip. de Radiação Restrita, model P470 y PL470. Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário."

Para maiores consultas sobre ANATEL consulte o site: www.anatel.gov.br

The following signifies approval in Brazil.

ANATEL
Agência Nacional de Telecomunicações
HHHH-AA-FFFF

Waste Electrical and Electronic Equipment (WEEE)

English: For EU Customers: All products at the end of their life must be returned to Symbol for recycling. For information on how to return product, please go to: http://www.symbol.com/environmental_compliance.

Čeština: Pro zákazníky z EU: Všechny produkty je nutné po skončení jejich životnosti vrátit společnosti Symbol k recyklaci. Informace o způsobu vrácení produktu najdete na webové stránce: http://www.symbol.com/environmental_compliance.

Dansk: Til kunder i EU: Alle produkter skal returneres til Symbol til recirkulering, når de er udtjent. Læs oplysningerne om returnering af produkter på: http://www.symbol.com/environmental_compliance.

Deutsch: Für Kunden innerhalb der EU: Alle Produkte müssen am Ende ihrer Lebensdauer zum Recycling an Symbol zurückgesandt werden. Informationen zur Rücksendung von Produkten finden Sie unter http://www.symbol.com/environmental_compliance.

Eesti: EL klientidele: kõik tooted tuleb nende eluea lõppedes tagastada taaskasutamise eesmärgil Symbol'ile. Lisainformatsiooni saamiseks toote tagastamise kohta külastage palun aadressi: http://www.symbol.com/environmental_compliance.

Español: Para clientes en la Unión Europea: todos los productos deberán entregarse a Symbol al final de su ciclo de vida para que sean reciclados. Si desea más información sobre cómo devolver un producto, visite: http://www.symbol.com/environmental_compliance.

Ελληνικά: Για πελάτες στην Ε.Ε.: Όλα τα προϊόντα, στο τέλος της διάρκειας ζωής τους, πρέπει να επιστρέφονται στην Symbol για ανακύκλωση. Για περισσότερες πληροφορίες σχετικά με την επιστροφή ενός προϊόντος, επισκεφθείτε τη διεύθυνση http://www.symbol.com/environmental_compliance στο Διαδίκτυο.

Français : Clients de l'Union Européenne : Tous les produits en fin de cycle de vie doivent être retournés à Symbol pour recyclage. Pour de plus amples informations sur le retour de produits, consultez : http://www.symbol.com/environmental_compliance.

Italiano: per i clienti dell'UE: tutti i prodotti che sono giunti al termine del rispettivo ciclo di vita devono essere restituiti a Symbol al fine di consentirne il riciclaggio. Per informazioni sulle modalità di restituzione, visitare il seguente sito Web: http://www.symbol.com/environmental_compliance.

Latviešu: ES klientiem: visi produkti pēc to kalpošanas mūža beigām ir jānogādā atpakaļ Symbol otrreizējai pārstrādei. Lai iegūtu informāciju par produktu nogādāšanu Symbol, lūdzu, skatiet: http://www.symbol.com/environmental_compliance.

Lietuvių: ES vartotojams: visi gaminiai, pasibaigus jų eksploatacijos laikui, turi būti grąžinti utilizuoti į kompaniją „Symbol“. Daugiau informacijos, kaip grąžinti gaminį, rasite: http://www.symbol.com/environmental_compliance.

Magyar: Az EU-ban vásárlóknak: Minden tönkrement terméket a Symbol vállalathoz kell eljuttatni újrahasznosítás céljából. A termék visszajuttatásának módjával kapcsolatos tudnivalókért látogasson el a http://www.symbol.com/environmental_compliance weboldalra.

Malti: Għal klijenti fl-UE: il-prodotti kollha li jkunu waslu fl-aħħar tal-ħajja ta' l-użu tagħhom, iridu jiġu rritornati għand Symbol għar-riċiklaġġ. Għal aktar tagħrif dwar kif għandek tirritorna l-prodott, jekk jogħġbok żur: http://www.symbol.com/environmental_compliance.

Nederlands: Voor klanten in de EU: alle producten dienen aan het einde van hun levensduur naar Symbol te worden teruggezonden voor recycling. Raadpleeg http://www.symbol.com/environmental_compliance voor meer informatie over het terugzenden van producten.

Polski: Klienci z obszaru Unii Europejskiej: Produkty wycofane z eksploatacji należy zwrócić do firmy Symbol w celu ich utylizacji. Informacje na temat zwrotu produktów znajdują się na stronie internetowej http://www.symbol.com/environmental_compliance.

Português: Para clientes da UE: todos os produtos no fim de vida devem ser devolvidos à Symbol para reciclagem. Para obter informações sobre como devolver o produto, visite: http://www.symbol.com/environmental_compliance.

Slovenski: Za kupce v EU: vsi izdelki se morajo po poteku življenjske dobe vrniti podjetju Symbol za reciklažo. Za informacije o vraèilu izdelka obišèite: http://www.symbol.com/environmental_compliance.

Slovenščina: Pre zákazníkov z krajín EU: Všetky výrobky musia byť po uplynutí doby ich životnosti vrátené spoločnosti Symbol na recykláciu. Bližšie informácie o vrátení výrobkov nájdete na: http://www.symbol.com/environmental_compliance.

Suomi: Asiakkaat Euroopan unionin alueella: Kaikki tuotteet on palautettava kierrätettäväksi Symbol-yhtiöön, kun tuotetta ei enää käytetä. Lisätietoja tuotteen palauttamisesta on osoitteessa http://www.symbol.com/environmental_compliance.

Svenska: För kunder inom EU: Alla produkter som uppnått sin livslängd måste returneras till Symbol för återvinning. Information om hur du returnerar produkten finns på http://www.symbol.com/environmental_compliance.

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	Asia/Pacific	337-6588
Australia	1-800-672-906	Austria/Österreich	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	11-809 5311	Spain/España	+913244000
Sweden/Sverige	08 445 29 00	Europe/Mid-East Distributor Operations	Contact local distributor or call +44 118 945 7360
Latin America Sales Support	Inside USA: 1-800-347-0178; Outside USA: +1.954.255.2610		

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

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