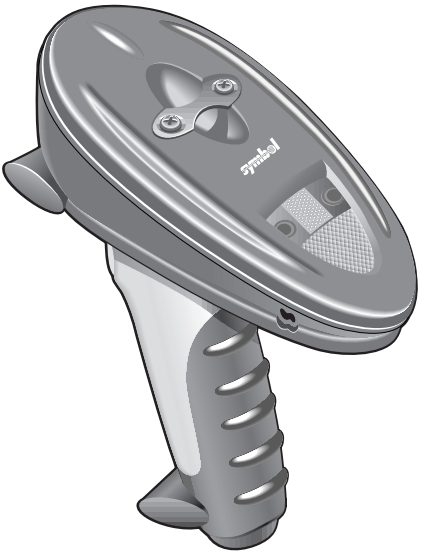
QRG

P 3 0 0 S e r i e s
(S T D / F Z Y / P R O)



symbol®

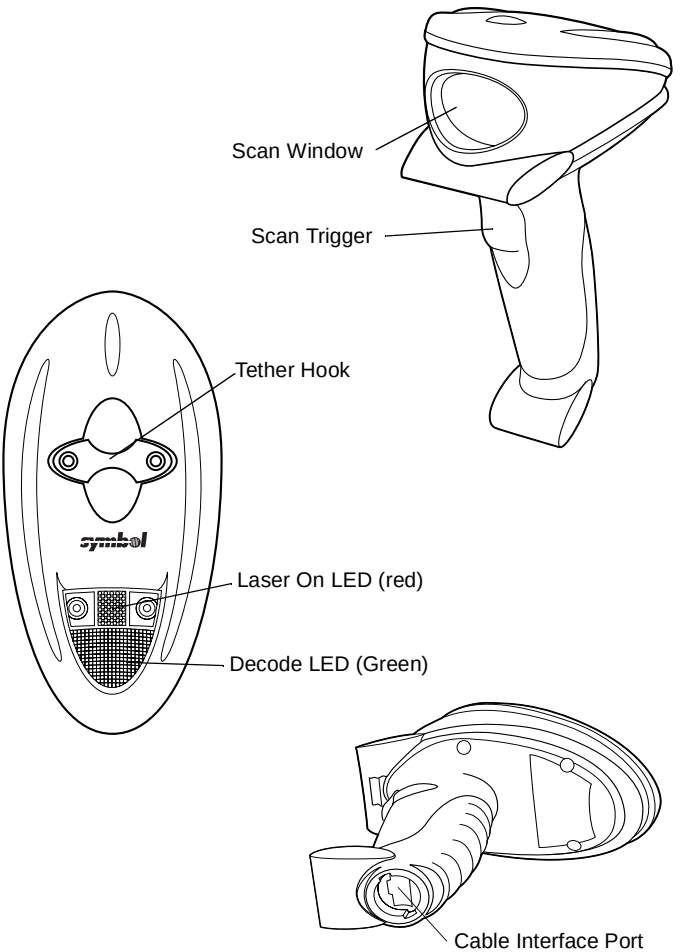
P 3 0 0 S e r i e s
(S T D / F Z Y / P R O)

Symbol Technologies, Inc.
One Symbol Plaza
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. 4,496,831; 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; 5,278,398; 5,280,162; 5,280,163; 5,280,164; 5,280,498; 5,304,786; 5,304,788; 5,306,900; 5,321,246; 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; 6,031,830; 6,036,098; 6,047,892; 6,050,491; 6,053,413; 6,056,200; 6,065,678; 6,067,297; 6,068,190; 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; 6,216,951; 6,220,514; 6,243,447; 6,244,513; 6,247,647; 6,308,061; 6,250,551; 6,295,031; 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 (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. 11/01

Parts of the P 300 Series Scanner



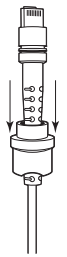
P 300/302/304 Product Descriptions

- P 300STD: undecoded version of the scanner.
- P 302FZY: decodes damaged or poorly printed bar codes; uses multi-interfaces of RS-232, Wand Emulation, Keyboard Wedge, and Synapse.
- P 304PRO: scans one and two-dimensional bar codes; uses interfaces of RS-232 and Synapse.
- P 304IMG: performs point-and-shoot image capture, outputs to digital formats of TIFF, JPEG, and BMP. This version is covered in the *P 304IMG Quick Reference Guide*, p/n 72-40804-xx.

Installing the Interface Cable

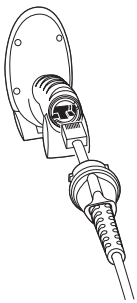
1.

Slide the cable boot downward.



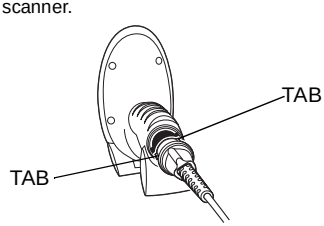
2.

Insert the connector into the bottom of the scanner.



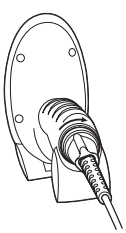
3.

Slide the cable boot up and line up the connector tabs with the tabs on scanner.



4.

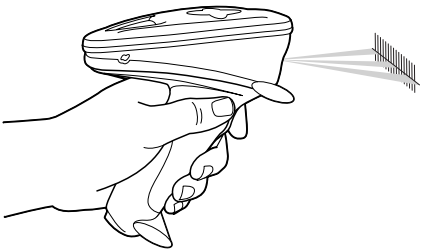
Push the boot into the scanner and twist the boot clockwise to lock into place.



Note: Different hosts require different interface cables. Refer to the *P 300/302/304 Scanner Product Reference Guide* (p/n 72-39417-xx) for instructions on connecting interface cables.

Scanning

1. Aim the scanner at the bar code.
2. Press the trigger. The Scan LED lights red, then turns green upon successful decode. A beep indicates success.



Scanning Tips

- Make sure the laser beam covers the entire symbol.
- For larger symbols, hold the scanner farther away from the symbol.
- For symbols with bars that are close together, hold the scanner closer to the symbol.

Right

Wrong

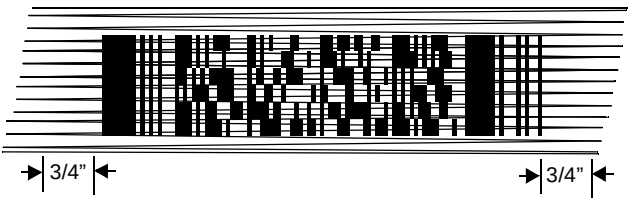
Scanning 2-D Bar Codes

The P 304PRO scans 1- and 2-dimensional bar codes. To scan a 2-dimensional bar code:

1. Point the scanner at the bar code and press the scan button.

Slab Raster

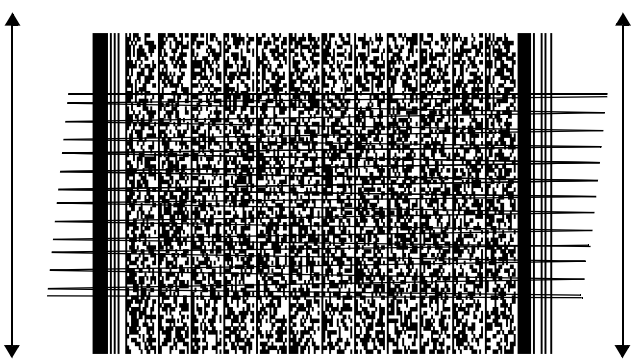
2. As the raster pattern spreads, keep the pattern in the same horizontal plane as the bar code.



3. The LED turns from red to green and the scanner beeps one or more times to indicate a successful scan.

"Tall" PDF Bar Codes

If the PDF417 symbol is too "tall" for the vertical scan pattern to cover it, try a slow "up and down" scanning motion. With the raster pattern open, move the scanner slowly down toward the bottom of the symbol, keeping the beam horizontal to the rows, then slowly back up toward the top.



The scan beam does not have to be *perfectly* parallel with the top and bottom of the symbol (up to a 4^{o} tilt will work).

What Does the Beep Mean?

One beep (short high tone) indicates a successful decode. If any other beeps are heard, contact the technical person in charge of scanning.

Troubleshooting

If the scanner does not work after you've followed the operating procedures:

- Check the system power.
- Check that scanning is enabled.
- Check for loose cable connections.
- Check that the scanner is programmed to decode the type of bar code you are scanning.
- Check that the symbol is not badly defaced.

Cleaning

Wipe the scanner window periodically with a lens tissue or other material suitable for cleaning optical material.

Set Defaults Bar Code

Set Defaults

Default Table

Parameter	FZY Default	PRO Default
Beeper Volume	High	High
Laser On Time	3.0 seconds	5.0 seconds
Power Mode	Continuous	Continuous
Beep after Good Decode	Enable	Enable

Parameter	FZY Default	PRO Default
Transmit “No Read” Message	Disable	Disable
Linear Code Type Security Levels	1	1
Bi-directional Redundancy	Disable	Disable
UPC/EAN Parameters		
UPC-A	Enable	Enable
UPC-E	Enable	Enable
EAN-8	Enable	Enable
EAN-13	Enable	Enable
Bookland EAN	Disable	Disable
Decode UPC/EAN Supplementals	Ignore	Ignore
Decode UPC/EAN Supplemental Redundancy	7	7
Transmit UPC-A Check Digit	Enable	Enable
Transmit UPC-E Check Digit	Enable	Enable
UPC-A Preamble	System Character	None
UPC-E Preamble	System Character	None
Convert UPC-E to A	Disable	Disable
EAN-8 Zero Extend	Disable	
UPC/EAN Security Levels	0	1
UPC/EAN Coupon Code	Disable	Disable
Convert EAN-8 to EAN-13	Enabled	Enabled
Code 128 Parameters		
Code 128	Enable	Enable
UCC/EAN	Enable	Enable
Code 39 Parameters		
Code 39	Enable	Enable
Trioptic Code 39	Disable	Disable
Set Length(s) for Code 39	2 to 55	1-55
Code 39 Check Digit Verification	Disable	Disable
Transmit Code 39 Check Digit	Disable	Disable
Code 39 Full ASCII Conversion	Disable	
Buffer Code 39	Disable	Disable
Code 93 Parameters		
Code 93	Disable	Disable
Set Length(s) for Code 93	4-55	4-55

Parameter	FZY Default	PRO Default
Interleaved 2 of 5 Parameters		
I 2 of 5	Enable	Disable
Set Length(s) for I 2 of 5	14	14
I 2 of 5 Check Digit Verification	Disable	Disable
Transmit I 2 of 5 Check Digit	Disable	Disable
Convert I 2 of 5 to EAN 13	Disable	Disable
Discrete 2 of 5 Parameters		
Discrete 2 of 5	Disable	Disable
Set Length(s) for D 2 of 5	12	12
Codabar Parameters		
Codabar	Disable	Disable
Set Length(s) for Codabar	5-55	5-55
CLSI Editing	Disable	Disable
NOTIS Editing	Disable	Disable
MSI Plessey Parameters		
MSI Plessey	Disable	Disable
Set Length(s) for MSI Plessey	Any Length	Any Length
MSI Plessey Check Digits	One	One
Transmit MSI Plessey Check Digit	Disable	Disable
MSI Plessey Check Digit Algo-rithm	Mod10/Mod10	Mod10/Mod10
Data Option Parameters		
Transmit Code ID Character	None	None
Pause Duration	0	0
Prefix/Suffix Values	7013 (<CR/LR> for serial	Enter
Scan Data Transmission Format	Data as is	Data as is
RS-232C Parameters		
RS-232 Host Type	Standard	Standard
Baud Rate	9600	9600
Parity	None	None
Check Receive Errors	Do Not Check	Check
Hardware Handshaking	None	None
Software Handshaking	None	None
Host Serial Response time-out	2 sec.	2 sec.
RTS Line State	Low	Low
Stop Bit Select	1	1
ASCII Format	8-Bit	8-Bit
Beep on <BEL>	Disable	Disable
Intercharacter Delay	0	0

Parameter	FZY Default	PRO Default
Wand Parameters		N/A
Wand Emulator Bar Output	Bar High	
Variable Leading Margin	80 msec.	
Convert all to Code 39	Disable	
Keyboard Wedge Parameters		N/A
Host Type	IBM PC/AT	
National Keyboard Type	North American	
Fast Transmit	Enable	
Intercharacter Delay	0	
PDF417 Parameters	N/A	
PDF417		Enable
MicroPDF		Enable
Scanning Mode		Smart Raster
Raster Height		15
Raster Expansion		11
Aiming Mode		Slab Raster
Macro PDF Parameters	N/A	
Macro PDF Transmit/Decode Mode		Buffer all Symbols/ Transmit PDF when complete
Transmit Each Symbol in Code-word Format		Disabled
ESC Characters		None
Delete Character Set ECIs		Enabled
ECI Decoder		Enabled
Transmit Unknown Codewords		Disabled
Transmit Macro PDF User-Selectable Field	N/A	
Transmit File Name		Disabled
Transmit Block Count		Disabled
Transmit Time Stamp		Disabled
Transmit Sender		Disabled
Transmit Addresses		Disabled
Transmit File Size		Disabled
Transmit Checksum		Disabled
Transmit Macro PDF Control Header		Disabled
Last Block Marker		Disabled

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

Radio Frequency Interference Requirements

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), as follows. Amendments to these Directives or ENs are included:

Applicable Directives

- Electromagnetic Compatibility Directive 89/336/EEC
- Low Voltage Directive 73/23/EEC.

Applicable Standards

- EN 55022:1998, Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment
- EN 55024:1998; Information Technology Equipment - Immunity characteristics - Limits and methods of measurement
- IEC 1000-4-2:1995; Electromagnetic compatibility (EMC); Part 4:Testing and measurement techniques; Section 4.2:Electrostatic discharge immunity test
- IEC 1000-4-3:1997; Electromagnetic Compatibility (EMC); Part 4:Testing and measurement techniques; Section 3. Radiated, radio frequency, electromagnetic field immunity test
- IEC 1000-4-4:1995; Electromagnetic compatibility (EMC); Part 4: Testing and measurement techniques; Section 4:Testing electrical fast transient,/Burst immunity
- IEC 1000-4-5:1995; Electromagnetic compatibility (EMC), Part 4: Testing and measurement techniques; Section 5: Surge Immunity
- IEC 1000-4-6:1996; Electromagnetic compatibility (EMC), Part 4:Testing and measurement techniques; Section 6: Immunity to conducted disturbances, induced by radio frequency fields
- IEC 1000-4-11:1994; Electromagnetic compatibility (EMC), Part 4: Testing and measurement techniques; Section 11: Voltage Dips, Short Interruptions, and Voltage Variations
- EN 60950 + A1+A2+A3+A4+A11 - Safety of Information Technology Equipment Including Electrical Business Equipment
- EN 60825 - Safety of Devices Containing Lasers.

Laser Devices

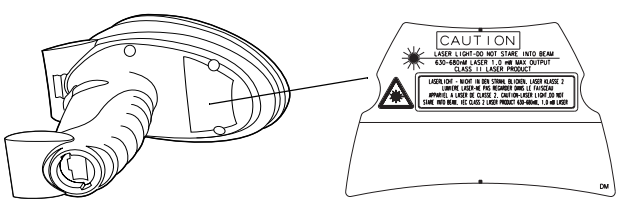
Symbol products using lasers comply with US 21CFR1040.10, and IEC825-1:1993, EN60825-1:1994+A11:1996. The laser classification is marked on one of the labels on the product.

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



P 3 0 0 S e r i e s
(S T D / F Z Y / P R O)

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

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

DANSK / 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

Warranty

Symbol Technologies, Inc. (“Symbol”) manufactures its hardware products in accordance with industry-standard practices. Symbol warrants that for a period of twelve (12) months from date of shipment, products will be free from defects in materials and workmanship.

This warranty is provided to the original owner only and is not transferable to any third party. It shall not apply to any product (i) which has been repaired or altered unless done or approved by Symbol, (ii) which has not been maintained in accordance with any operating or handling instructions supplied by Symbol, (iii) which has been subjected to unusual physical or electrical stress, misuse, abuse, power shortage, negligence or accident or (iv) which has been used other than in accordance with the product operating and handling instructions. Preventive maintenance is the responsibility of customer and is not covered under this warranty.

Wear items and accessories having a Symbol serial number will carry a 90-day limited warranty. Non-serialized items will carry a 30-day limited warranty.

Warranty Coverage and Procedure

During the warranty period, Symbol will repair or replace defective products returned to Symbol’s manufacturing plant in the US. For warranty service in North America, call the Symbol Support Center at 1-800-653-5350. International customers should contact the local Symbol office or support center. If warranty service is required, Symbol will issue a Return Material Authorization Number. Products must be shipped in the original or comparable packaging, shipping and insurance charges prepaid. Symbol will ship the repaired or replacement product freight and insurance prepaid in North America. Shipments from the US or other locations will be made F.O.B. Symbol’s manufacturing plant.

Symbol will use new or refurbished parts at its discretion and will own all parts removed from repaired products. Customer will pay for the replacement product in case it does not return the replaced product to Symbol within 3 days of receipt of the replacement product. The process for return and customer’s charges will be in accordance with Symbol’s Exchange Policy in effect at the time of the exchange.

Customer accepts full responsibility for its software and data including the appropriate backup thereof.

Repair or replacement of a product during warranty will not extend the original warranty term.

Symbol’s Customer Service organization offers an array of service plans, such as on-site, depot, or phone support, that can be implemented to meet customer’s special operational requirements and are available at a substantial discount during warranty period.

General

Except for the warranties stated above, Symbol disclaims all warranties, express or implied, on products furnished hereunder, including without limitation implied warranties of merchantability and fitness for a particular purpose. The stated express warranties are in lieu of all obligations or liabilities on part of Symbol for damages, including without limitation, special, indirect, or consequential damages arising out of or in connection with the use or performance of the product.

Seller’s liability for damages to buyer or others resulting from the use of any product, shall in no way exceed the purchase price of said product, except in instances of injury to persons or property.

Some states (or jurisdictions) do not allow the exclusion or limitation of incidental or consequential damages, so the preceding exclusion or limitation may not apply to you.

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	337-6588
Australia	1-800-672-906	Austria/Österreich	1-505-5794
Denmark/Danmark	7020-1718	Finland/Suomi	9 5407 580
France	01-40-96-52-21	Germany/Deutchland	6074-49020
Italy/Italia	2-484441	Mexico/México	5-520-1835
Netherlands/Nederland	315-271700	Norway/Norge	66810600
South Africa	11-4405668	Spain/España	+913244000
Sweden/Sverige	84452900		
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 +44 208 945 7360		

[1]Customer 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.

72-39416-01
Revision C — November 2001

Symbol Technologies, Inc. One Symbol Plaza Holtsville, NY 11742-1300