QRG

P360/460 Memory Scanner

symbol®

P360/460 Memory Scanner

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. 4,460,120; 4,496,831; 4,593,186; 4,603,262; 4,607,156; 4,652,750; 4,673,805; 4,736,095; 4,758,717; 4,816,660; 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; 5,850,078; 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; 6,047,892; 6,050,491; 6,053,413; 6,056,200; 6,065,678; 6,067,297; 6,068,190; 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, D419,548; D423,468; D424,035.
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. 06/00

Introduction

The Phaser P 360/460 Memory Scanner brings new flexibility and economy to data capture and data management in retail operations. The Phaser has an integrated keypad and display, and is able to operate in both corded and battery-powered cordless modes. This provides advanced point-of-sale scanning and also allows the Phaser to be used for other in-store tasks such as delivery, inventory, pricing, and even gift registry. There are two versions available:

- P 460: the batch retail version
- P 360: the batch industrial version

This *Quick Reference Guide* provides basic instruction on the set up and use of the scanner. Unless otherwise noted, the term Phaser refers to both versions of the scanner.

Setting up the Phaser

Installing the Cable

Note that the P 360 does not have a cable interface.

There are two kinds of cables that attach to the Phaser:

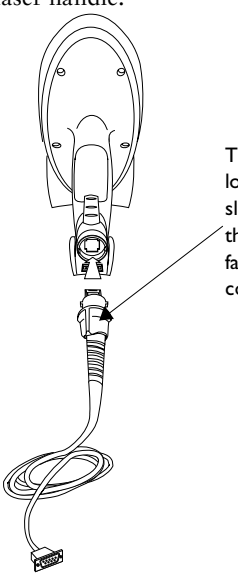
- an RS-232 which connects directly to a host
- a Synapse Adapter cable that connects to a Synapse Smart Cable.

To Install a Synapse Smart Cable

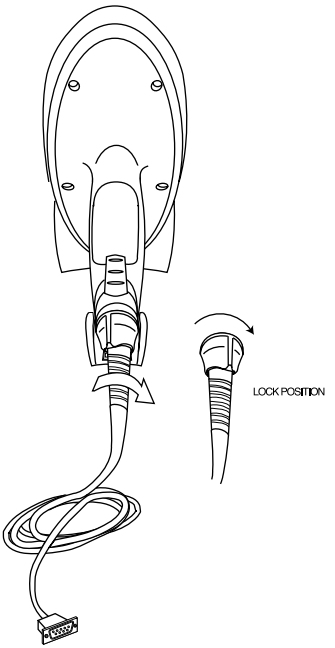
Refer to the instructions from the Synapse cable.

To Install an RS-232 Cable

1. Switch off all devices connected to the Phaser cable.
2. Plug the modular connector on the cable into the receptacle in the bottom of the Phaser handle.



3. Turn the cable twist-lock 1/8 turn clockwise to seat it.



4. Gently pull the cable to make certain it is properly seated.
5. Plug the other end of the cable to the host computer.

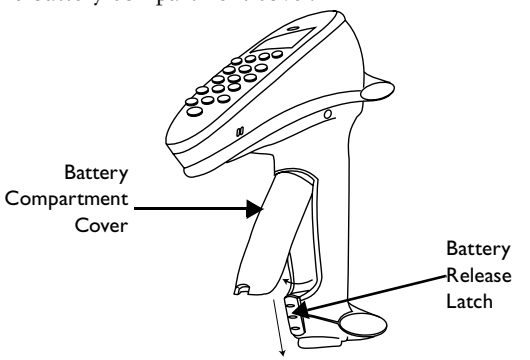
Disconnecting Cables

Most hosts require RS-232 cables, all other hosts require Synapse cables. To disconnect the scanner cable:

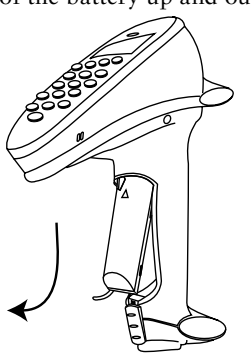
1. Power down all the devices connected to the Phaser cable.
2. Remove the cable by twisting the twist-lock 1/8 turn counter-clockwise and pulling the cable out.

Installing or Changing the Battery

1. Slide the battery compartment release latch down and remove the battery compartment cover.



2. Slide the battery towards the bottom of the scanner and then pull the bottom of the battery up and out of the scanner.



Replacing the Battery

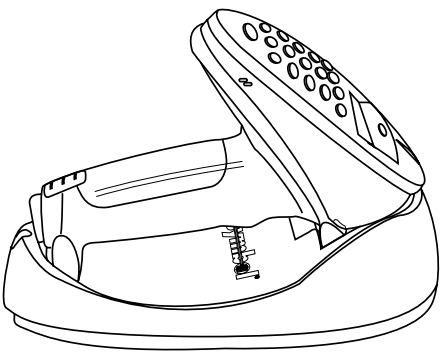
1. Seat the battery fully in the scanner and then slide it up the handle.
2. Replace the battery compartment cover and slide the release latch up to secure the cover in place.

Powering Up the Scanner

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

Recharging the Scanner in the Cradle

To recharge the scanner, place it front-side down into the cradle. Make sure that the contacts in the bottom of the scanner match up with the metal contacts on the cradle.

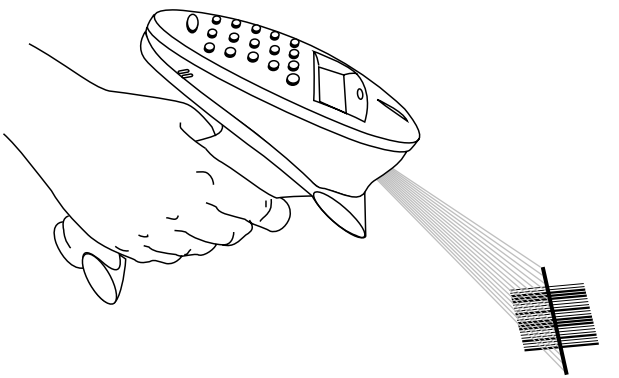


A full re-charge takes up to 4 hours, you may need less time depending upon the remaining charge in the battery. The LED light on the bottom of the cradle becomes solid to alert you when the battery has been recharged.

Scanning with the Phaser

For POS operation, the scanner ships with a default application that is ready-to-use right out of the box. Otherwise, consult the *Phaser Series Scanner Product Reference Guide* (p/n 70-33629-xx) for programming instructions. If you need assistance, contact your local supplier or Symbol Support Center.

1. If you are using the scanner in a POS environment, make sure all cable connections are secure. Otherwise, make sure the battery is charged.
2. Make sure the bar code is in the correct scanning range. Aim and press the trigger. When the scanner has read the symbol:
   - You hear a beep.
   - The LED above the screen turns green.
   - The red laser turns off.



Keyboard Entry

Instead of scanning a bar code, you can enter the bar code's data using the keypad on the top of the scanner. To enter numeric characters, press the number key on the keypad.

To enter alpha characters, press the Mode key once to put the scanner in Alpha Mode. Press the numeric key with the letter you want above it - once for the first letter, quickly twice for the second letter, or quickly three times for the third letter.

To return to numeric mode, press the Mode key again.

The * key is a special key that can be programmed for custom specific operations. Ask your system administrator for more information.

Host Communications

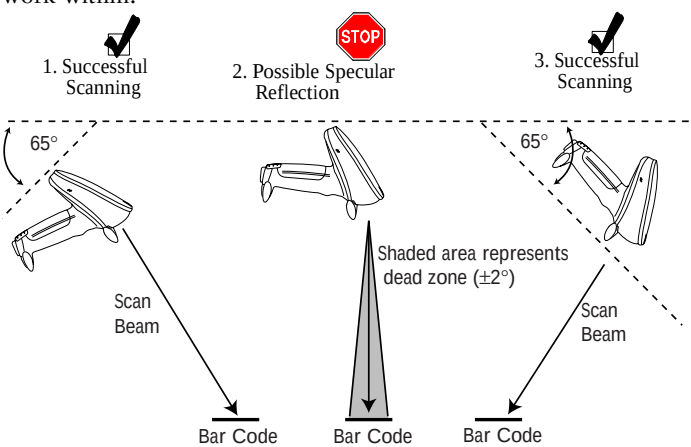
With some terminal types, the Phaser is unable to answer host terminal polls until the appropriate host type is selected. This may result in an error message generated by the host computer. Contact your System Administrator for assistance.

Aiming

Hold at an angle

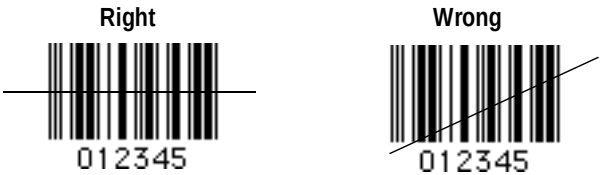
Do not hold the scanner directly over the bar code. Laser light reflecting *directly* back into the scanner from the bar code is known as specular reflection. This strong light can "blind" the scanner and make decoding difficult. The area where specular reflection occurs is known as a "dead zone".

You can tilt the scanner 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).
- The larger the symbol, the farther away you should hold the scanner.
- Hold the scanner closer for symbols with bars that are close together.



What Does The Beep Mean?

When you hear 1 beep (short high tone) it means data has been decoded successfully. 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 these operating instructions:

- Check the system power.
- Check that scanning is enabled.
- Check that the battery is installed correctly.
- Check for loose cable connections.
- Be sure the Phaser is programmed to read the type of bar code you are trying to scan.
- Check to be sure the symbol is not defaced.

Cleaning

Wipe the scanner window periodically with a lens tissue or other material suitable for cleaning optical material, such as eyeglasses. ***Caution:*** Do not pour, spray or spill any liquid on the scanner.

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 proceeding exclusion or limitation may not apply to you.

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

Radio Frequency Interference Requirements

This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the Federal Communications Commissions Rules and Regulation. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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 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 Industry Canada Standard ICES-003.

Cet appareil numérique de la classe B est conform à la norme NMB-003 d'Industrie 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.
- IEC1000-4-5:1995; 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 60 950 + A1+A2+A3+A4+A11 - Safety of Information Technology Equipment Including Electrical Business Equipment
- EN 60 825-1 (EN 60 825) - 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.

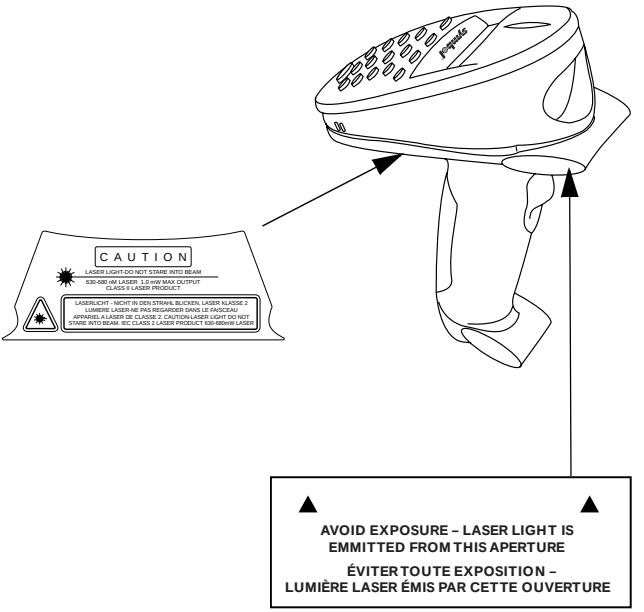
Service Information

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	1-505-5794
Denmark	7020-1718	Finland	9 5407 580
France	01-40-96-52-21	Germany	6074-49020
Italy	2-484441	Mexico	5-520-1835
Netherlands	315-271700	Norway	66810600
South Africa	11-4405668	Spain	9-1-320-39-09
Sweden	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	

Scanner Labeling



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

DANISH

KLASSE 1	KLASSE 1 LASERPRODUKT
KLASSE 2	LASERLYF SE IKKE IND I STRÅLEN KLASSE 2 LASERPRODUKT AL LASER DI CLASSE 2

DUTCH

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

FINNISH

LUOKKA 1	LUOKKA 1 LASERTUOTE
LUOKKA 2	LASERVALO ÄLÄ TUIJOTA SÄDETTÄ LUOKKA 2 LASERTUOTE

FRENCH

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

GERMAN

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

HEBREW

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

ITALIAN

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

NORWEGIAN

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

PORTUGUESE

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

SPANISH

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

SWEDISH

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

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