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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; 5,850,078; 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; 6,036,098; 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; 6,250,551; 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. 07/01

Introduction

The SPS 3000 series is a family of ergonomic expansion packs for the Compaq[®] iPAQ[®] Pocket PC device that extend the capabilities of the iPAQ by adding bar code scanning and wireless functionality. Its features include:

- Integrated 1D Scan Engine
- Integrated Spectrum24 802.11b (11Mbps) radio and antenna
- Ergonomic, lightweight design
- 100% compatible with iPAQ cradles and chargers
- Easy to Use

Configurations

There are four configurations of the SPS 3000, each providing specific features that extend the capabilities of the iPAQ:

- .Scan Only Integrated 1D bar code scanner
- Scan/WLAN Integrated 1D bar code scan engine, Integrated 802.11b (11Mbps) radio and antennae, and 770mAH Lithium-lon battery
- •WLAN -Integrated 802.11b (11Mbps) radio and antennae, and 770mAH Lithium-Ion battery

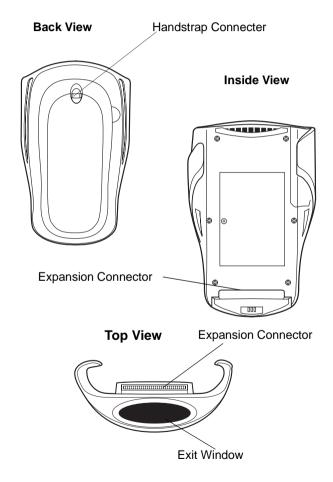
About This Guide

This guide describes how to set up and use the SPS 3000. Specific topics covered include:

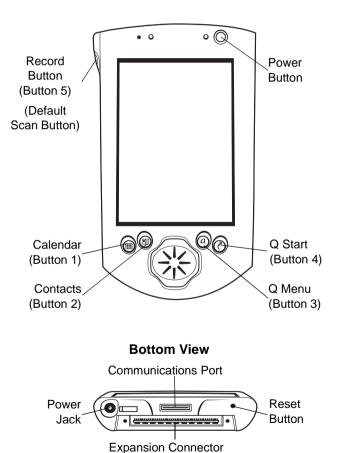
- Parts of the SPS 3000 on page 2
- *iPAQ Pocket PC Parts Used by the SPS 3000* on page 3
- Installing the SPS 3000 SDK on page 4
- Inserting the iPAQ into the SPS 3000 on page 6
- Attaching the Lanyard on page 9
- Scanning Bar Codes on page 9

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Parts of the SPS 3000



iPAQ Pocket PC Parts Used by the SPS 3000 Front View





Installing the SPS 3000 SDK

The Symbol SPS 3000 Windows CE SDK (Software Developers Kit) provides the tools necessary to create and deploy bar code scanning applications for the Compaq iPAQ Pocket PC.

Note: The SDK contains the scan drivers needed to operate the SPS 3000.

Download the SDK from the Software Developer Zone at this web address:

http://software.symbol.com/devzone

After the SDK is properly installed, reboot the iPAQ by pressing the reset button with the stylus.

Checking the Battery Power (For S24/LAN units only)

- 1. Power on the iPAQ by depressing and releasing the power button.
- 2. Open the "START" screen and select "Settings."
- 3. From the bottom of the "Settings" screen, select "System."
- 4. Scroll the screen, if necessary, and select the "Power" icon.

5. The state of the expansion pack bettery can be found under the "External battery:" entry.

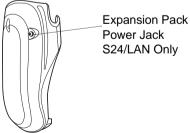
🏨 Settings	11:08a 🐽		
Power			
Main battery: Battery power remaining:	LiPolymer		
	100%		
External battery: Battery power remaining:	LiIon		
0	100%		
On battery power: Turn off device if not used for	3 minutes 🔻		
On external power: Turn off device if not used for	5 minutes 👻		
Adjust hacklight settings to conserve power.			
			

Charging the SPS 3000 Battery (For SAN/LAN units only)

The SPS 3000 battery is internal and cannot be removed.

The battery can be charged with the expansion pack connected to an iPAQ or unconnected to an iPAQ.

Charging Expansion Pack Alone



1. Insert the power plug from the AC adapter into the power jack on the expansion pack.



- Note: A fully discharged battery should recharge in approximately 2.5 hours. There is no indication that the battery is charging or is fully charged. The iPAQ must be used to check the battery status.
- 2. Once battery is fully charged, the external power from the AC adapter can be removed.

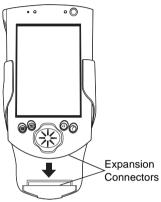
Expansion Pack Connected to an iPAQ

- Insert the power plug from the AC adapter into the power jack on the iPAQ or on the expansion pack, or place the two units into a cradle that has the AC adapter power plug connected.
- 2. The battery in the expansion pack will begin to charge only after the battery in the iPAQ has become fully charged. The iPAQ battery takes approximately 2.5 hrs. to charge when fully discharged.
- 3. From the "Power" screen, the state of the expansion pack battery can be found under the "External battery:" entry.
- 4. The expansion pack, when being charging, will have "Recharging state:" and "Charging" state immediately above the bar graph on the iPAQ charging screen.
 - Note: Note that the bar graph will be continuously stepping from 0 to 100% as the battery is charging.
- 5. Once the expansion pack battery is completely charged, the entry above the bar graph will change to read "Battery power remaining:" and the bar graph will be filled to 100%.
- 6. Once the expansion pack battery is completely charged, the external power from the AC adapter can be removed.

Inserting the iPAQ into the SPS 3000

1. Slide the iPAQ through the SPS 3000 sleeves to connect the iPAQ and SPS 3000.

- Quick Reference
- 2. The iPAQ and SPS 3000 are joined when their expansion connectors are fully engaged. (You will hear a slight click.)



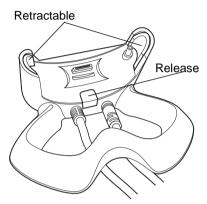


To remove the SPS 3000, push up on the bottom of the iPAQ to disengage the expansion connector, then slide the iPAQ off the SPS 3000 sleeves.

When inserting the iPAQ and SPS 3000 into the cradle, ensure that the retractable stabilizing arms located on the inside of the cradle are extended. These will provide a secure fit between the units. If the arms are not extended before inserting the iPAC and

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SPS 3000, press the release button located on the back of the cradle.



Note: The battery in the expansion pack will begin to charge only after the battery in the iPAQ has become fully charged. The iPAQ battery and the external battery take approximately 5 hrs. to charge altogether when both are fully discharged.

Attaching the Lanyard

Thread the lanyard through the handstrap connector on the back of the scanner, leaving a loop to pull the long end of the lanyard



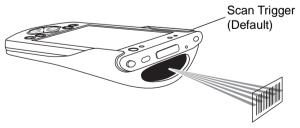


Thread the long end of the lanyard through the loop and pull.

Scanning Bar Codes

To scan bar codes with the SPS 3000:

- 1. Insert the iPAQ into the SPS 3000.
- 2. Press the scan trigger to launch the scanning application.
- 3. Press and hold the scan trigger again to turn on the laser.
- 4. Ensure that the red scan beam covers the entire bar code. Upon successful decode, you will see the Power LED blink green and hear an audible beep.





Maintaining the SPS 3000

For trouble-free service, follow these tips when using your SPS 3000:

- Do not scratch the exit window.
- The exit window of your SPS 3000 contains glass. Do not subject it to any strong impact.
- Protect your SPS 3000 from temperature extremes, hot or cold:
 - Do not leave it on the dashboard of a car on a hot day
 - Keep it away from heaters and other heat sources
 - Keep it away from freezers and other cold sources.
- Do not store or use your SPS 3000 in any location that is extremely dusty, damp or wet.
- If the surface of the SPS 3000 exit window becomes soiled, clean it with a soft lens cloth moistened with a diluted window-cleaning solution.

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 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 upipment 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.

This device complies with FCC Part 15. 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 undeside operation.

Radio Frequency Interference Requirements - Canada

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.

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.
- 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:

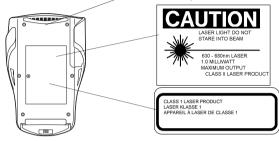
Caution: Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure.

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.

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Scanner Labeling

AVOID EXPOSURE – Laser light is emitted from this aperture. ÉVITER TOUTE EXPOSITION - Lumière laser émis par cette ouverture



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



HEBREW

רמה 1 מוצר לייזר רמה 1

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

ITALIAN / ITALIANO

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

NORWEGIAN / NORSK

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

PORTUGUESE / PORTUGUÊS

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

SPANISH / ESPAÑOL

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

SWEDISH / SVENSKA

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

ENGLISH

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

DANISH / DANSK

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

DUTCH / NEDERLANDS

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

FINNISH / SUOMI

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

FRENCH / FRANÇAIS

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

GERMAN / DEUTCH

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

LASERPRODUKT DER KLASSE 2

RF Devices

Symbol's RF products are designed to be compliant with the rules and regulations in the locations into which they are sold and will be labeled as required. The majority of Symbol's RF devices are type approved and on to require the user to obtain license or authorization before using the equipment. Any changes or modifications to Symbol Technologies equipment not expressly approved by SymbolTechnologies could void the user's authority to operate the equipment.

The Spectrum24 equipment is intended for use throughout the European Economic Area, but its authorization for use in France is restricted as follows:

- PAN European Frequency Range: 2.400 2.4835 GHz, identified by -EU suffix to the model number found on the product label
- France Restrict Frequency Range for use in France: 2.4465 2.4835 GHz, identified on [Product mmmm] by the -FR suffix to the model number found on the product label
- Belgium Operation in an out of doors environment in Belgium must be restricted to 2.460 2.4835 GHz band
- Italy Operation in Italy requires a user license
- · Mexico Restrict Frequency Range for use in Mexico: 2.450 2.4835 GHz
- · Chile Restricted Power Output for use in Chile: 50 mW



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		

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



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