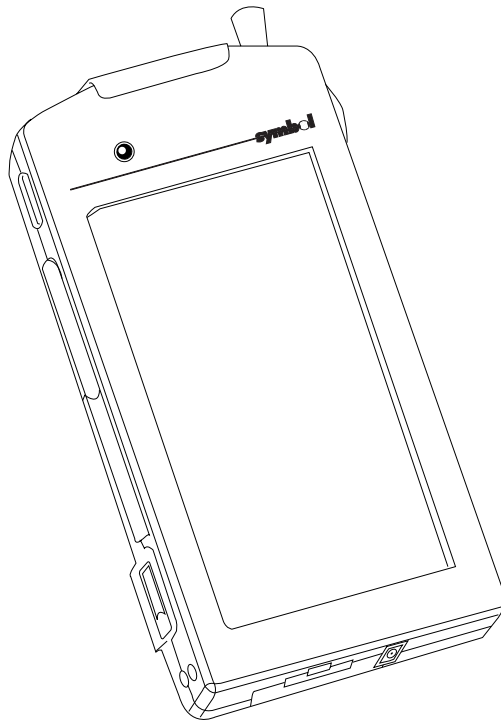


symbol[®]

PPT 41xx



Quick Reference

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<http://www.symbol.com>

Quick Reference

Introduction

The PPT 41xx is a PC-compatible, hand-held terminal which incorporates pen input, an integrated bar code laser scanner, and radio frequency wireless technology via Symbol's Spectrum One® and Spectrum24® PCMCIA radio cards. The PPT 41xx runs industry-standard software to further ease application development and use.

About This Guide

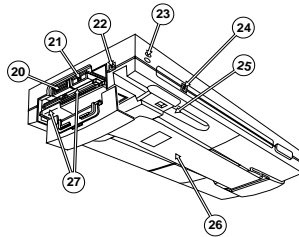
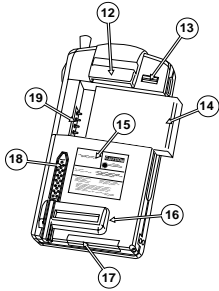
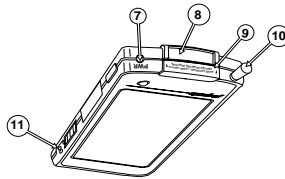
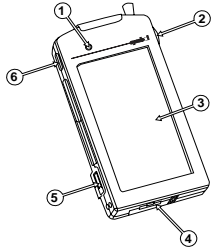
This guide covers the following topics:

- **Parts of the PPT 41xx**
- **Providing Power to the Terminal**
- **Removing the Battery from the Terminal**
- **Charging the Battery Pack**
- **Cleaning the Battery**
- **Inserting the Battery Into the Terminal**
- **Using the Cradle**
- **Powering On the Terminal**
- **Communicating with the Host**
- **Using the Pen**
- **Using the Scanner**

Quick Reference

Parts of the PPT 41xx

The following diagram details each part of the PPT 41xx terminal.



Quick Reference

Parts of the PPT 41xx (cont'd)

1. Scan/Decode LED
2. Scanner Button (right)
3. LCD
4. Serial/Keyboard Port Cover
5. IR (Infrared) Communications Port
6. Scanner Button (left)
7. PWR Button
8. Scanner Window
9. Regulatory Label
10. Antenna
11. Charging Contacts (left)
12. Handstrap Holder
13. Battery Pack Release Switch
14. NiMH Battery Pack
15. Caution Label
16. Handstrap Holder
17. PCMCIA Sockets Cover
18. Pen
19. Battery Pack Contacts
20. Serial/RS-232 Port
21. Keyboard Port
22. Power Jack
23. Charging Contacts (right)
24. Reset Button
25. Pen Slot
26. Handstrap
27. PCMCIA Cards

Quick Reference

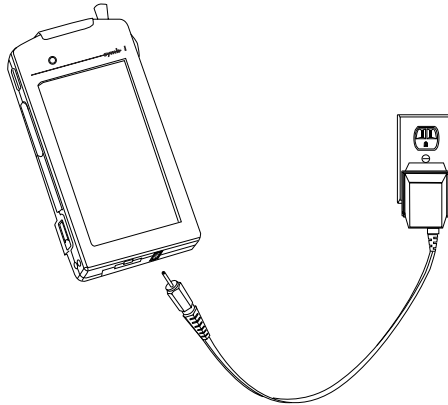
Providing Power to the Terminal

Power can be provided to the PPT 41xx through an AC Adapter plugged into a standard electrical outlet, or through the use of a rechargeable NiMH (Nickel Metal Hydride) battery pack.

Note: *If using a rechargeable battery, be sure to fully charge the battery before powering on the terminal. (See **Charging the Battery Pack** for instructions.)*

To connect power to the terminal through the AC Adapter:

1. Connect the AC Adapter plug (p/n 50-14000-015 for 220VAC, or p/n 50-14000-016 for 110VAC) into the power jack on the bottom of the terminal.
2. Plug the adapter into the electrical outlet.

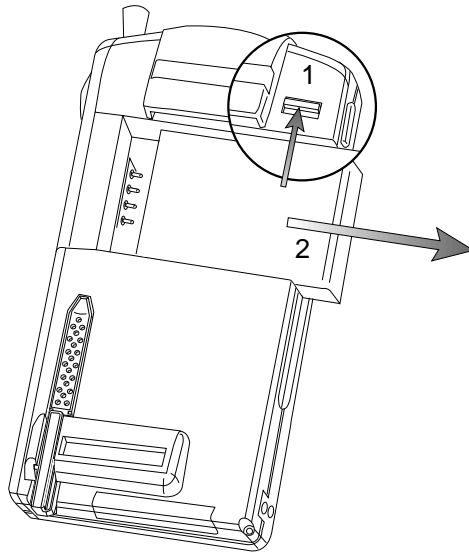


Quick Reference

Removing the Battery from the Terminal

To remove the NiMH battery pack from the terminal:

1. Push the battery pack release switch on the back of the terminal to release the battery pack as shown:



2. Remove the battery pack by sliding it out of the compartment.

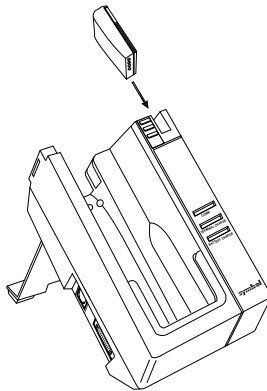
Quick Reference

Charging the Battery Pack

Prior to using PPT41xx for the first time, the NiMH battery pack should be completely charged. Check with your System Administrator to ensure that the battery has been charged.

The NiMH battery pack can be recharged by:

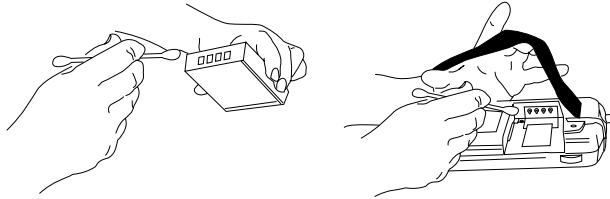
- connecting the AC Adapter (p/n 50-14000-015 or 50-14000-016) to the terminal and plugging it into an electrical outlet. The terminal's battery pack will be fully charged in 14 hours.
- placing the terminal in the cradle. The battery pack will be fully charged in 1.5 hours, provided the appropriate software has been installed.
- removing the battery pack from the back of the terminal and inserting it into the spare battery charging slot on the cradle. The battery pack will be fully recharged in 1.5 hours.



Quick Reference

Cleaning the Battery

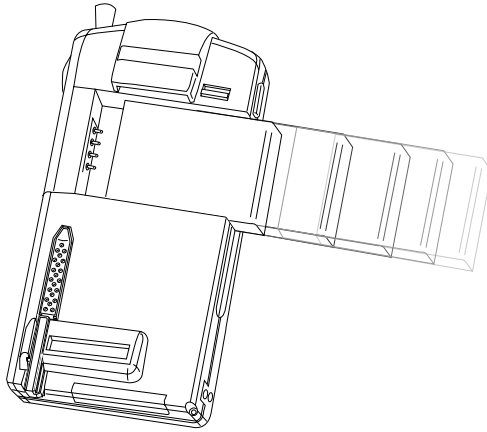
The battery contacts on the terminal and on the battery should be cleaned regularly, using a non-residue Isopropyl Alcohol-based contact cleaner (non-lubricating) on a cotton swab.



Quick Reference

Inserting the Battery Into the Terminal

Slide the battery pack into its compartment as shown, making sure that the battery pack release switch catches, and holds the battery pack firmly in place.



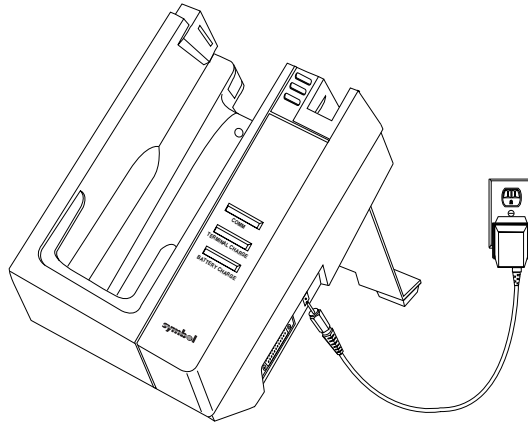
Quick Reference

Using the Cradle

The Cradle (CRD 4100-1010) is an optional device which can be used for charging and serial communications with the terminal.

Charging the Battery Using the Cradle

1. Connect the AC Adapter plug (p/n 50-14000-013 for 220VAC, p/n 50-14000-014 for 110VAC) into the cradle and the adapter into the electrical outlet.



2. Firmly seat the terminal in the cradle. The battery pack is fully recharged in 1.5 hours, provided the appropriate software has been installed.

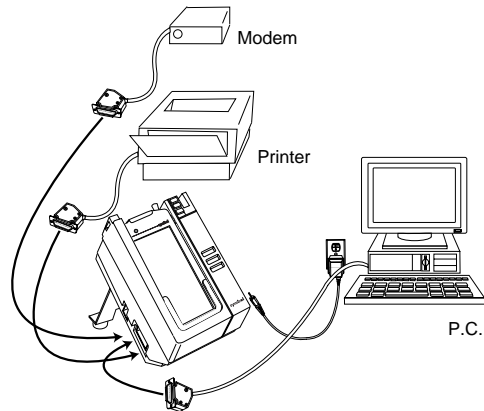
The spare battery pack can be recharged by inserting it in the spare battery charging slot on the cradle (See “**Charging the Battery Pack**”).

Quick Reference

Serial Communications Using the Cradle

To perform serial communications using the cradle, do the following:

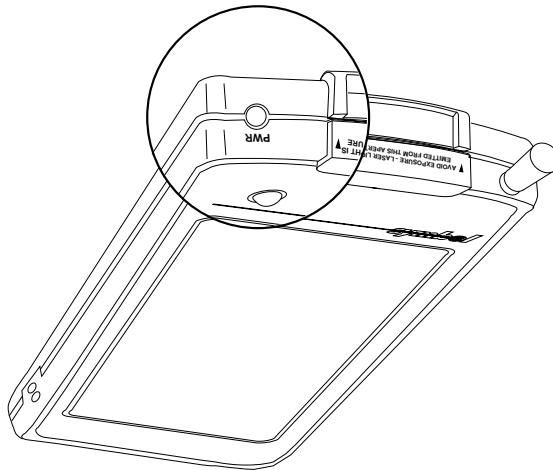
1. Connect the AC Adapter plug (p/n 50-14000-13 or 50-14000-14) into the cradle and the adapter into the electrical outlet.
2. Connect the cradle to the host computer, printer, or modem, using a suitable cable. See the System Administrator for the appropriate cable.
3. Place the terminal into the cradle, and perform the communication steps as determined by your application software.



Quick Reference

Powering On the Terminal

Once your battery pack is fully charged, or you've plugged your terminal into an electrical outlet, you are ready to power the terminal on. To power on the terminal, press the PWR button, located on the top left-hand side of the terminal, opposite the radio antenna.



Quick Reference

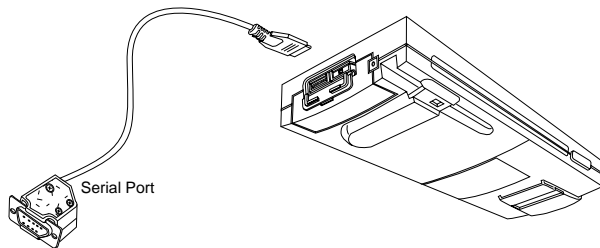
Communicating with the Host

Wireless communication can be performed through the Spectrum One[®] PCMCIA Type II radio card installed into the PPT 4110 or the Spectrum24[®] PCMCIA Type II radio card installed into the PPT 4140. The terminal can also perform communications with a host computer directly through an RS-232 cable.

RS-232 Communications

To connect the terminal to the host for communications through an RS-232 cable:

1. Connect the subminiature connector on the cable (p/n 25-12059-01) to the port on the bottom of the terminal.



2. Plug the DE9 connector into the host's serial communications port. If the host computer has a 25-pin serial connector, then an adapter cable may be required.

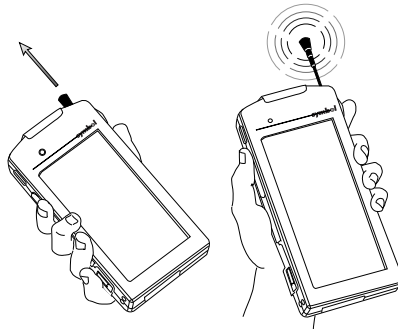
Quick Reference

Radio Communications

Subject to local country availability, wireless communication is performed via the Spectrum One[®] or Spectrum24[®] PCMCIA Type II radio cards. Ensure that the System Administrator has properly installed the PCMCIA radio card into the PCMCIA socket of the PPT 4110 (Spectrum One[®]) or PPT4140 (Spectrum24[®]).

To perform wireless communications:

1. Gently pull the radio antenna up.



2. Perform communications as determined by your application software.

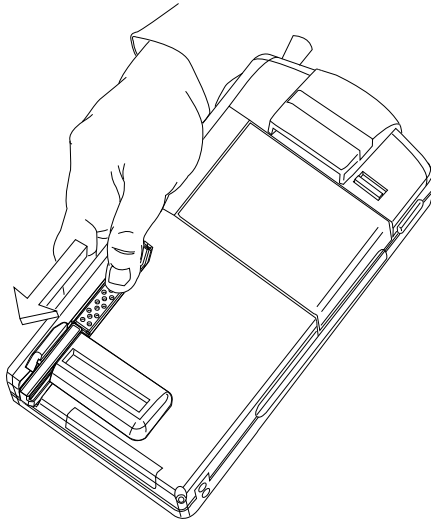
Quick Reference

Using the Pen

The PPT 41xx comes with a pen (p/n 50-12000-031), which, depending upon the application running on your terminal, can be used to select items on the screen, as a mouse is used, or to write characters directly on the screen, which can be used in an application performing character recognition.

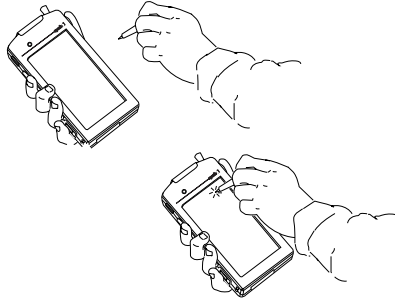
Using the Pen to Select an Item

1. Remove the pen from the back of the terminal by pressing on the “dotted” area of the pen, and sliding it out of the pen slot.



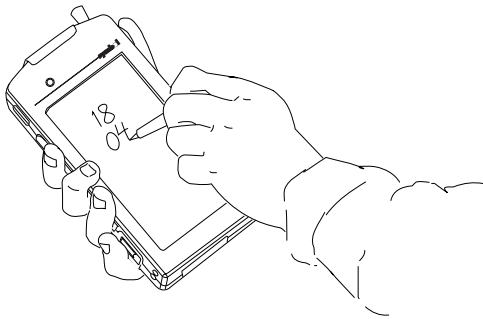
Quick Reference

2. Gently apply pressure to the screen to select an item.



Using the Pen to Perform Handwriting

1. Remove the pen from the back of the terminal by pressing on the “dotted” area of the pen, and sliding it out of the pen slot.
2. Gently apply pressure to the screen and write normally.



Quick Reference

Replacing the Pen

To replace the pen in its slot, slide the pen into the pen slot on the back of the terminal, making sure that it snaps into place for security.

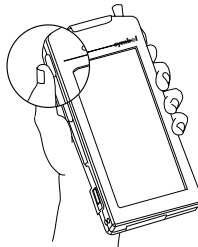
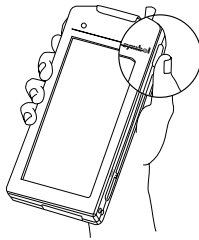
Note: *If you lose your pen, either use your finger, or a non-metallic, non-abrasive type plastic pointer to select items or to write on the screen. Do NOT use anything which will scratch or mark the screen. See your PPT 41xx Product Reference Guide (p/n 70-11997-xx) for information on ordering a new pen.*

Quick Reference

Using the Scanner

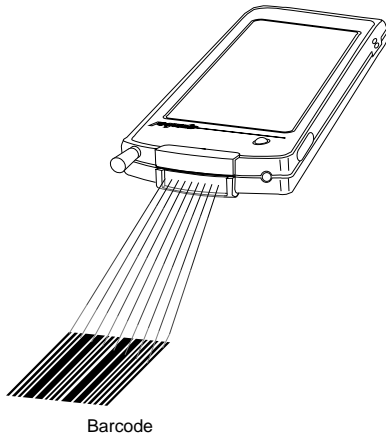
The PPT 41xx has an application-driven integrated laser bar code scanner, which allows for right- or left-handed scanning. The Scan/Decode LED lights red to indicate that the scanner is on, and green when a successful decode has occurred.

1. Press whichever scanning button on the terminal is more comfortable for you. Do not press both buttons at the same time.



Quick Reference

2. Point the laser scanner at the bar code, holding the terminal at approximately a 30° angle. Position the red beam to cover the entire bar code.



Quick Reference

Radio Frequency Interference Requirements

This device has been tested and found to comply with the limits for a Class A 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 A digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la Classe A respecte toutes les exigences du Règlement sur le Matériel Brouilleur du Canada.

CE Marking and European Union Compliance



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 55 022 - Limits and Methods of Measurement of Radio Interference Characteristics of Information technology Equipment
- EN 50 082-1 - Electromagnetic Compatibility - Generic Immunity Standard, Part 1: Residential, commercial, Light Industry
- IEC 801.2 - Electromagnetic Compatibility for Industrial Process Measurement and Control Equipment Part 2: Electrostatic Discharge Requirements
- IEC 801.3 - Electromagnetic Compatibility for Industrial Process Measurement and Control Equipment Part 3: Radiated Electromagnetic Field Requirements
- IEC 801.4 - Electromagnetic Compatibility for Industrial Process Measurement and Control Equipment Part 4: Electrical Fast Transients Requirements

Quick Reference

- EN 60 950 + Amd 1 + Amd 2 - Safety of Information Technology Equipment Including Electrical Business Equipment
- EN 60 825-1 (EN 60 825) - Safety of Devices Containing Lasers

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 do not require the user to obtain license or authorization before using the equipment. Any changes or modifications to Symbol Technologies equipment not expressly approved by Symbol Technologies could void the user's authority to operate the equipment.

Laser Safety Information

The PPT 41xx scanner uses a low-power, visible laser. 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 CDRH Class II laser is not known to be harmful. The required safety labels as they appear on the PPT 41xx are shown below.



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

Caution: Changes or modifications not expressly approved by Symbol Technologies could void the user's authority to operate the equipment.

Quick Reference

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

U.S. Patent No. 4,360,798; 4,369,361; 4,387,297; 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; 5,140,144; 5,142,550; 5,149,950; 5,157,687; 5,168,148; 5,168,149; 5,180,904; 5,229,591; 5,230,088; 5,235,167; 5,243,655; 5,247,162; 5,250,791; 5,250,792; 5,262,627; 5,280,163; 5,280,164; 5,280,498; 5,304,786; 5,304,788; 5,321,246; 5,367,151; 5,373,148; 5,378,882; 5,377,361; 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; 5,479,000; 5,479,002; 5,479,441; 5,504,322; 5,528,621; 5,532,469; 5,543,610; 5,545,889; 5,552,592; 5,578,810; 5,589,680; 5,608,202; 5,612,531; D305,885; D341,584; D344,501; D359,483; D362,435; D363,700; D363,918; D370,478.

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.

Quick Reference

Warranty Information

For Warranty & Service Information, Call:

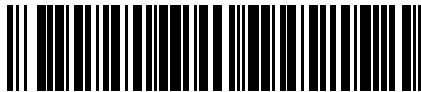
1-800-653-5350

**Outside North America, contact your local Symbol
representative**

Symbol products are warranted against defects in workmanship and materials for a period of one year from the date of shipment, provided that the product remains unmodified and is operated under normal and proper conditions.

This warranty is limited to repair or replacement at Symbol's option, with reasonable promptness after being returned to Symbol by a carrier selected and paid for by the customer. These provisions do not prolong the original warranty term for any product which has been repaired or replaced by Symbol.

This warranty applies to the original owner and does not extend to any product which has been subject to misuse, neglect, accidental damage, unauthorized repair or tampering. Preventive maintenance activities are not covered by warranty.



**70-11959-02
Revision A - July, 1997**