# symbol®

# PDT 3200

**Quick Reference**

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## Introduction

Symbol Technologies' PDT 3200 is a handheld DOS computer. An integrated laser scanner makes the PDT 3200 a high-performance portable bar code data collection device. Models without the laser scanner accept input from most industry-standard bar code readers. The PDT 3200's wireless models provide instant communication of data between the unit and a host computer or terminal.

## About This Guide

This guide provides basic instructions on the operation and care of the terminal, and covers the following topics:

# Parts of the PDT 3200

Laser Warning Label
Scanner Head Screw
Scanner Head
Antenna
Scan LED
LCD
Good Read LED
Power Key
Lamp Key
Scanner Window
Keyboard
Left Scan Trigger
Batteries
Handstrap
Battery Compartment Cover
Right Scan Trigger
Left Scan Trigger
Battery Compartment Release Switch
PCMCIA Slot Cover
PCMCIA Slot
Regulatory Label
Serial Port (COM 1)

PDT 3200 Series

# Quick Reference

## Accessories

The following accessories are available for use with the PDT 3200 terminal:

- **Cradle**: The CRD 3200 cradle is used to recharge the terminal's NiCD or NiMH battery pack, and provides a connection for serial communications between the PDT 3200 and the host computer. See the *CRD 3200 Cradle Quick Reference Guide*, p/n 70-31469-01 for more information.
- **Portable Battery Charge**r: Instead of the cradle, the Portable Battery Charger can be used to recharge the terminal's batteries. Rechargeable batteries which have lost all power can be recharged in approximately 2 hours.
- **Cables**: Two serial cables are available:
  - RJ-45 to DB-9
  - DB-25 to DB-9/25 serial cable
- **Battery Packs**: Two battery packs are available:
  - NiMH
  - NiCd
- **Power Supplies**: Two power supplies are available:
  - 110V
  - 220V
- **Holster**: The holster allows you to carry the PDT 3200 on your belt.
- **Softcase**: The softcase protects the PDT 3200 during transport.
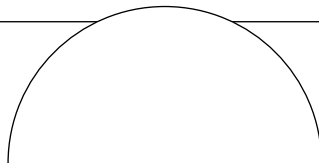
## Installing and Charging the Batteries

The PDT 3200 uses three standard AA alkaline or rechargeable nickel cadmium (NiCD) or nickel metal-hydride (NiMH) batteries. The NiCD and NiMH batteries are available in battery packs, which makes them very easy to replace.

The PDT 3200 also has a built-in lithium backup battery which temporarily saves data when the main NiCD or NiMH batteries lose their charge.

When the NiCD or NiMH batteries require charging, a battery icon appears at the top right-hand corner of the display. The terminal can also be programmed to emit a series of beeps to indicate low battery status. When you see the Low Battery icon or hear the warning beeps, turn off the terminal and recharge or replace the batteries as soon as possible. The lithium backup batteries retain the data in memory until the batteries are replaced.

To replace the batteries:

1. Power the PDT 3200 off.

**Quick Reference**

2. Detach the elastic hand strap from the back of the PDT 3200 by pulling its hook out of the holder near the base.
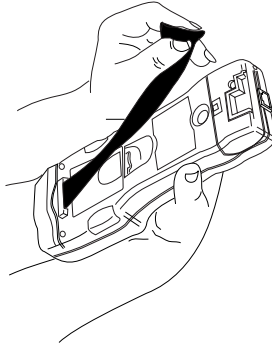
3. The battery compartment cover has a tab on one edge. Use your thumb to firmly press the tab toward the top of the PDT 3200 until the cover is released from the body of the unit.
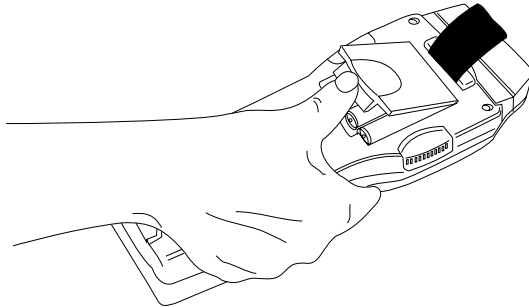
4. Pull the end of the plastic ribbon sticking out of the battery compartment toward the batteries until they pop out.

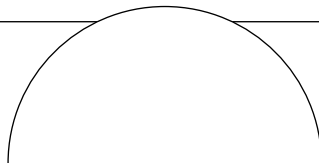5. Lay the plastic ribbon along the bottom of the battery compartment with the end sticking out of the compartment.

6. **Alkaline Batteries**: Insert the batteries in the positions indicated by the diagram inside the battery compartment.

   **NiCD or NiMH Battery Pack**: Find the positive(+) and negative (-) symbols on the battery pack's label. With the label facing you, tilt the positive end of the pack into the upper end of the battery compartment, then firmly press the negative end until it is fully inserted into the battery compartment.

7. Replace the battery compartment cover by sliding it into place. Be sure the plastic ribbon is tucked underneath the cover.

8. Replace the hand-strap hook in its holder.

# Quick Reference

# Powering the PDT 3200 On and Off

To power the terminal on and off, press the power key.

**POWER KEY**
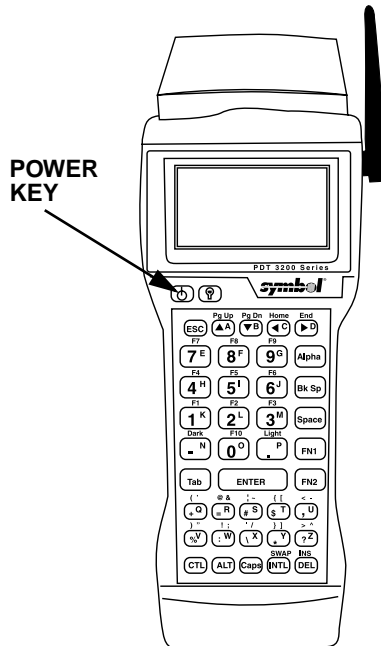
## Adjusting the Display

The PDT 3200's display is a backlit liquid crystal display of 21 characters in 8 rows. If you enter more than 21 characters without a line break, the text in the display scrolls to the left to make the additional characters visible.

To view long lines of text, you can move the display to the left or right by half screens. Hold down the FN 1 key, and press the left or right cursor key (◄ or ►) to move the display to the left or right. When you release the FN 1 key, the display snaps back to make the current cursor position visible.

You can also move the display up or down a half screen at a time. Hold down the FN 1 key, and press the up or down cursor key (▲ or ▼). When you release the FN 1 key, the display snaps back to make the current cursor position visible.

You can also press and release the FN 1 key before pressing any cursor keys. You can then move the display several times in any direction. When finished, press and release the FN 1 key again to return to the current cursor position.

## Adjusting the Contrast

When working in dim or bright light, you can adjust the contrast between the text and the background in the display. Press the FN 2 key. Then, with the ↗ cursor displayed, press the key with the label "Dark" above it to make the display background darker, or press the key with the label "Light" above it to make the background lighter. To see the PDT 3200's display even better in dim light, use the backlight.

# Quick Reference

## Using the Backlight

When using the PDT 3200 in dim light, you can turn on the backlight to see the display better. Press the lamp key (the key with the light bulb icon) below the LCD display to turn the backlight on or off. To save battery power, the backlight shuts off automatically if you do not press a key within a certain amount of time. The backlight turns back on when you press any keypad key.

The default time-out period for the backlight shut-off feature is 15 seconds. See the *PDT 3200 Product Reference Guide* for information on changing the default time-out period.
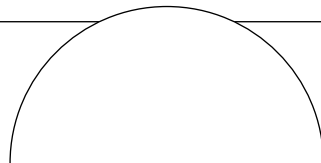
## Using the Keyboard

The PDT 3200 keypad is made up of 41 keys. Used individually or in combination, these keys provide equivalents to almost all the keys found on a standard keyboard. See the *PDT 3200 Product Reference Guide* for details about the available keys.



The best way to learn how the PDT 3200's keypad works is to play with it. The color coding of the keys and characters should help you.

- The yellow Alpha key works with the yellow letters on the other keys.
- The blue FN 1 key works with the functions (F1–F10) and

## Quick Reference

the blue characters printed above some of the keys.

- The black FN 2 key works with the black characters or operations printed above some of the keys.

For most applications, you need only the letters and numbers.

- Input letters by pressing the Alpha key to turn on Alpha mode and pressing the keys for the letters you want.
- Use the Caps key for uppercase letters.
- Input numbers and other frequently used characters by pressing the Alpha key again (to return to Normal mode) and pressing the appropriate keys.

## Using the Integrated Scanner

The PDT 3200 terminal has an integrated scanner. To use the scanner, point the scanning window at a bar code and press the trigger. A green LED indicates when a scan is successful.
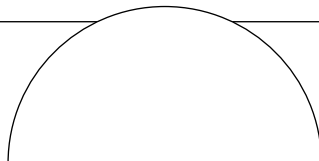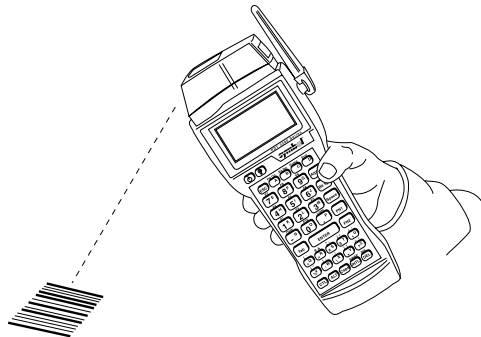
## Changing the Scanner Orientation

Normally, the laser window faces the left side of the PDT 3200 for easy right-handed scanning. If you prefer to hold the PDT 3200 in your left hand while scanning, turn the laser module around.

To rotate the laser module:

1. Unscrew the screw that secures the module to the main part of the PDT 3200. The screw comes loose but does not come out of the laser module. Do not try to force it out.

2. Gently lift the laser module away from the top of the main part of the PDT 3200. The module does not completely separate from the rest of the PDT 3200. Do not try to force the units apart.

3. Swivel the module around until the laser window faces the opposite direction. The module can rotate in only one direction. Do not try to force it the other way.
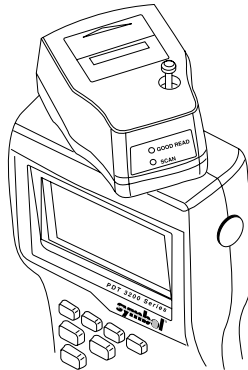


# Quick Reference

4.  Press the laser module back into the main part of the PDT 3200, and tighten the screw.

After changing the laser module's orientation, you may want to swap the operations of the triggers. Normally, the left trigger operates the laser scanner and the right trigger toggles the hand-held between normal and alpha modes. However, if this is not comfortable, you can switch these two so that the right trigger operates the scanner. To change the scanner's orientation, press the FN2 key, and then press the SWAP (INTL) key. The unit beeps.

## Attaching a Tethered Scanner

If your PDT 3200 does not have an integrated laser scanner, you can attach a bar code reader to the connector at the top. The reader's cable must have a standard 9-pin squeeze connector at the end.

To attach the bar code reader, match the orientation of the holes on the squeeze connector with the pins on the PDT 3200's connector. Then press the squeeze connector onto the PDT 3200 until it is firmly in place.
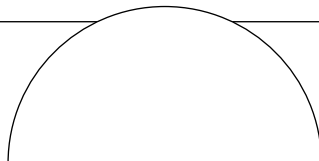
To disconnect the tethered bar code reader from the PDT 3200, press the sides of the squeeze connector and pull it away from the PDT 3200's connector.

## Setting Up for Communications

The PDT 3200 has a port for serial communications with a PC. The port is located in the base of the PDT 3200 unit. Designated as COM1, it is an RJ-45 connector providing a standard RS-232 connection. With a serial cable connected to it, the port allows communications with a host computer or any serial device, such as a printer or modem. The serial port also provides a connection inside the cradle for battery recharging.

**Serial Port**
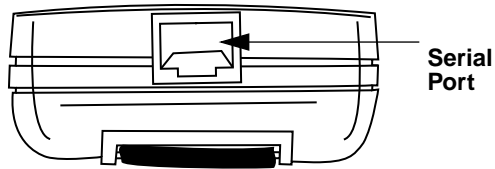
## Installing and Removing a PCMCIA Card

The PDT 3200 has a slot for plugging in PC cards, and each unit is factory-equipped with PhoenixCARD Manager Plus PC card drivers. PC cards provide such features as network connectivity, modem connectivity, and wireless capability. Their primary purpose in the PDT 3200 is to provide additional memory storage by functioning as a disk drive. (See the *PDT 3200 Product Reference Guide* for information about the PDT 3200's drives.)

## Quick Reference

## Opening the PC Card Slot Cover

The PC card slot is located near the bottom on the back of the PDT 3200 . Detach the elastic hand strap on the back of the PDT 3200 by pulling its hook out of the holder near the base. The slot is protected by a cover. Loosen the screw that secures the slot cover. Then, while pressing the round button above the slot cover, slide the cover out and away from the PDT 3200, as shown in the following illustration.
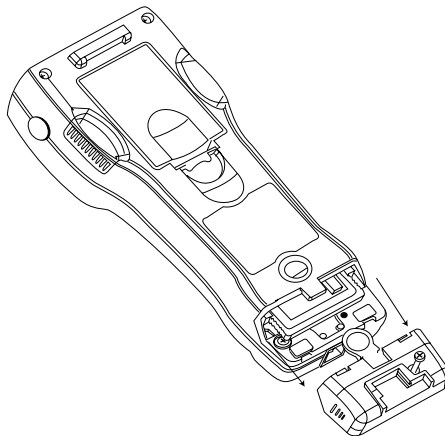


## Inserting a PC Card

All PC cards have two rows of small sockets on one end. The cards also have face-up and face-down sides. The card manufacturer's label is usually on the face-up side.

> *Note:*  Power the PDT 3200 unit off before inserting or re-moving a PC card.

With the PDT 3200 face down and the PC card face up, insert the socket-end of the card into the card slot, as shown in the illustration below. There are two tracks inside the slot to help guide the card. Push the card firmly into the slot until the ejector tab slides out. Then replace the PC card slot cover.

PCMCIA CARD LABEL

**PCMCIA EJECTOR SWITCH**
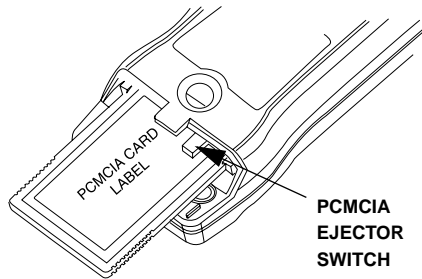
The PC card slot on the PDT 3200 is designed so that you cannot insert a card upside down or backward. If you cannot push the card all the way into the slot easily, you probably do not have the card positioned properly. Make sure you are putting the end with the holes into the slot first. Then flip the card over and try to insert it again.

# 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.

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.
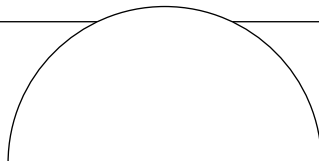
Congratulations on your purchase of this Symbol Technologies product. It is manufactured to the highest standards to ensure trouble-free operation and durability. In order to comply with various U.S. and International regulatory requirements, we have included this addendum with your product. It is an all-encompassing document that applies to the complete line of Symbol products. Therefore, many of the labels shown, and statements indigenous to other devices may not apply to your particular product.

### 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 Reglement sur le Materiél Brouilleur du Canada.

### CE Marking and European Union Compliance

Products intended for sale within the European Union are marked with the CEMark 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
- 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 Devices

Symbol products using lasers comply with US 21CFR1040.10, Subchapter J and IEC825/EN 60 825 (or IEC825-1/EN 60 825-1, depending on the date of manufacture). The laser classification is marked 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 visible or invisible 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.
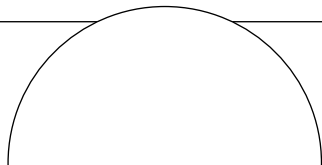
# Quick Reference

AVOID EXPOSURE · LASER LIGHT IS
EMITTED FROM THIS APERTURE.
EVITER TOUTE EXPOSITION · LUMIERE
LASER EMIS PAR CETTE OUVERTURE.

LASER LIGHT · DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT.

LUMIERE LASER · NE PAS REGARDER DANS
LE FAISCEAU. APPARIEL A LASER DE
CLASSE 2.

LASERSTRAHL · NICHT IN DEN STRAHL
BLICKEN. LASERPRODUKT DER KLASSE 2.

1mw · 680nm · 100sec. IEC 825 · 1:1993 /
EN60825 · 1:1994

**70-31467-01**
**Revision A — July, 1997**