Quick Reference

Introduction
This guide describes how to set up and use a CRD 8000 single-slot modem charging cradle with Symbol PDT 8000 Series terminals. The cradle:

- provides power for operating the terminal
- provides for data communication between the terminal and a host computer, remotely through the phone lines
- synchronizes information between the terminal and a host computer (with customized or third party software, it can also be used to synchronize your terminal with corporate databases)
- re-charges the terminal’s battery
- re-charges a spare battery.

The cradle requires a 15VDC power supply, and provides 15VDC power to an inserted PDT 8000 terminal.

About this Guide
This guide provides basic information on the following topics:

- Requirements on page 2
- Parts on page 3
- Power Connection on page 4
- Phone Line Connection on page 5
- Terminal Battery Charging on page 6
- Spare Battery Charging on page 7
- LED Indicators on page 8
- Modem Country Setup on page 9
- Troubleshooting on page 10
- Regulatory Information on page 13
- Service Information on backcover.

Requirements

• for power connection
  For U.S Customers: CBL-8000-100U
  For International Customers: Power Supply, p/n 50-14001-005, DC Cable, p/n 50-16002-011, AC Cord, appropriate for your country

• for modem connection
  - telephone number, IP address and DNS/WINS address information from your dial-in server administrator
  - a dial-in account on the host system, including a user ID and password
  - an RJ11 or RJ12 modem cable
  - a functioning telephone jack that supports plug-in modems connected to the local telephone system
  - setup of Country Codes to use the modem with the appropriate country's telephone network (see Modem Country Setup on page 9).

• for communication
  - a PDT 8000 Series terminal
  - Microsoft ActiveSync
  - setup of host computer and terminal (refer to the PDT 8000 Series Product Reference Guide for detailed instructions).
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Parts

FRONT

LED not functional

Terminal Slot

Spare Battery Charging LED

BACK

Spare Battery Charging Slot

Power port

Line In port

Line Out port
There are three connection ports on the rear of the cradle:

<table>
<thead>
<tr>
<th>Ports</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line In (use with standard RJ-11 connectors)</td>
<td>Used for connection to the phone line system.</td>
</tr>
<tr>
<td>Line Out (use with standard RJ-11 connectors)</td>
<td>Used for connection to a handset in a loop-through fashion. Can be used to connect a telephone set simultaneously with the modem. The telephone can then be used when the modem is not in use.</td>
</tr>
<tr>
<td>Power</td>
<td>Used for connecting to the power supply.</td>
</tr>
</tbody>
</table>

**Power Connection**

To connect the cradle to a power source:

To see if the cradle has power, insert the terminal. The terminal’s charging LED blinks amber to indicate that the battery is charging and turns solid amber when battery is completely charged. See *LED Indicators* on page 8 for other indications.
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Phone Line Connection
To use the cradle to provide data communication between a terminal and a host computer, remotely through a phone line, connect one end of the phone cord into the Line In port on your cradle, and the other end into a wall phone jack.
Terminal Battery Charging

1. Ensure the cradle is connected to a power source. See *Power Connection on page 4.*

2. Insert the terminal into the cradle. The terminal starts to charge automatically.

The terminal charging LED blinks amber to indicate that the battery is charging and turns solid amber when battery is completely charged. The battery usually charges in two hours or less, but may take up to four hours to fully charge. See *LED Indicators on page 8* for other indications.
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Spare Battery Charging

1. Ensure the cradle is connected to a power source. See Power Connection on page 4.

2. Slide the latches on both sides of the battery up, to ensure they are in the unlock position.

3. Insert the battery into the Spare Battery Charging slot on the back of the cradle. Position it with the charging contacts facing down (over charging pins) and gently press down on the battery to ensure proper contact.

4. Lock the battery into place by sliding the latches on the battery down.

The spare battery charging LED blinks amber to indicate that the terminal battery is charging and turns solid amber when the battery is completely charged. The battery usually charges in two hours or less, but may take up to four hours to fully charge. See LED Indicators on page 8 for other indications.
## LED Indicators

<table>
<thead>
<tr>
<th>LED</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Terminal Charging (LED is on terminal)</strong></td>
<td></td>
</tr>
<tr>
<td>Off</td>
<td>Terminal not in cradle; terminal not placed correctly, cradle is not powered.</td>
</tr>
<tr>
<td>Fast Blinks Amber</td>
<td>Error in charging; check placement of terminal.</td>
</tr>
<tr>
<td>Slow Blinks Amber</td>
<td>Terminal is charging.</td>
</tr>
<tr>
<td>Solid Amber</td>
<td>Charging complete.</td>
</tr>
<tr>
<td><strong>Spare Battery Charging (LED is on cradle)</strong></td>
<td></td>
</tr>
<tr>
<td>Off</td>
<td>No spare battery in slot; spare battery not placed correctly; cradle is not powered.</td>
</tr>
<tr>
<td>Fast Blinks Amber</td>
<td>Error in charging; check placement of spare battery.</td>
</tr>
<tr>
<td>Slow Blinks Amber</td>
<td>Spare battery is charging.</td>
</tr>
<tr>
<td>Solid Amber</td>
<td>Charging complete.</td>
</tr>
</tbody>
</table>
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Modem Country Setup
The modem defaults to operation with US telephone networks (country code: B5). To operate the modem with other country telephone networks, you must set the appropriate country code by entering the Country of Installation command. The modem will adjust its operating parameters to comply with the telephone network in the country specified.

Syntax

+GCI=<country_code>

This command must be entered in your terminal, while setting up for communication through a modem connection. For detailed instructions, refer to the PDT 8000 Series Product Reference Guide.

Supported Countries

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>FD or 0A</td>
<td>Greece</td>
<td>46</td>
<td>Norway</td>
<td>FD or 82</td>
</tr>
<tr>
<td>Belgium</td>
<td>FD or 0F</td>
<td>Iceland</td>
<td>FD</td>
<td>Portugal</td>
<td>8B</td>
</tr>
<tr>
<td>Brazil</td>
<td>16</td>
<td>Ireland</td>
<td>FD or 57</td>
<td>Spain</td>
<td>FD or A0</td>
</tr>
<tr>
<td>Canada</td>
<td>20</td>
<td>Italy</td>
<td>FD or 59</td>
<td>Sweden</td>
<td>FD or A5</td>
</tr>
<tr>
<td>Denmark</td>
<td>FD or 31</td>
<td>Liechtenstein</td>
<td>FD</td>
<td>Switzerland</td>
<td>FD or A6</td>
</tr>
<tr>
<td>Finland</td>
<td>FD or 3C</td>
<td>Luxembourg</td>
<td>FD</td>
<td>TBR-21 (Europe)</td>
<td>FD</td>
</tr>
<tr>
<td>France</td>
<td>FD or 3D</td>
<td>Mexico</td>
<td>73</td>
<td>United Kingdom</td>
<td>FD or B4</td>
</tr>
<tr>
<td>Germany</td>
<td>FD or 42</td>
<td>Netherlands</td>
<td>FD or 7B</td>
<td>United States</td>
<td>B5 (Default)</td>
</tr>
</tbody>
</table>

Note: It is highly recommended that you use FD where possible. If you have trouble connecting, use the alternate code where provided.
# Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery is not charging.</td>
<td>Terminal (or spare battery) was removed from the cradle too soon.</td>
<td>Replace the terminal or spare battery in the cradle. It can take up to four hours to recharge a completely depleted battery pack.</td>
</tr>
<tr>
<td>Battery is faulty.</td>
<td></td>
<td>Replace the battery.</td>
</tr>
<tr>
<td>Terminal charging LED does not light when the terminal is inserted.</td>
<td>Terminal is not seated firmly in the cradle, or the battery is not properly installed in the terminal.</td>
<td>Ensure the battery is properly installed in the terminal, and re-insert the terminal in the cradle.</td>
</tr>
<tr>
<td>Cradle is not receiving power.</td>
<td></td>
<td>Ensure the power supply cable is securely connected on both ends.</td>
</tr>
<tr>
<td>Spare battery charging LED does not light when the spare battery is placed in the slot.</td>
<td>Spare battery is not placed correctly.</td>
<td>Remove the battery, wait two minutes, and re-insert the battery.</td>
</tr>
<tr>
<td></td>
<td>The cradle is not receiving power.</td>
<td>Ensure the power supply cable is securely connected on both ends.</td>
</tr>
</tbody>
</table>
### Quick Reference

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal not communicating through the modem.</td>
<td>The modem cable is not fully connected.</td>
<td>Ensure the modem cable is connected securely to both the cradle and to the telephone jack.</td>
</tr>
<tr>
<td></td>
<td>The cradle is not receiving power.</td>
<td>Ensure the power cable is connected securely to both the cradle and to the AC power.</td>
</tr>
<tr>
<td></td>
<td>The terminal is not fully seated in the cradle.</td>
<td>Remove and re-insert the terminal into the cradle, ensuring it is firmly seated.</td>
</tr>
<tr>
<td></td>
<td>Communications software is not installed or configured properly.</td>
<td>Perform setup as described in the PDT 8000 Series Product Reference Guide.</td>
</tr>
<tr>
<td></td>
<td>Configuration parameters are lost after a cold boot (hard reset) is performed.</td>
<td>Perform setup as described in the PDT 8000 Series Product Reference Guide.</td>
</tr>
<tr>
<td></td>
<td>Problems in the telephone lines that prevent communication.</td>
<td>Connect a conventional telephone and dial the remote modem to verify the telephone lines are functioning properly. If not, contact the remote System Administrator.</td>
</tr>
<tr>
<td>Terminal has successfully connected through modem, but no data is being transmitted over the connection.</td>
<td>Data is being transferred over S24 radio link.</td>
<td>Temporarily disable the radio link to force data transmission to use modem connection: Tap the wireless LAN icon from the systray on the Today screen. Tap the Mode or General tab. Enter an invalid value in the ESID: text box. Power cycle the terminal. Verify that your radio link has been disabled (the wireless LAN icon has a red box with a ! on it). Once you have completed your data transmission via modem, re-enable your radio link.</td>
</tr>
<tr>
<td>Symptom</td>
<td>Possible Cause</td>
<td>Action</td>
</tr>
<tr>
<td>---------</td>
<td>---------------</td>
<td>--------</td>
</tr>
<tr>
<td>ActiveSync fails.</td>
<td>A partnership was not established with the host computer.</td>
<td>Establish a partnership with the host computer. Refer to the PDT 8000 Series Product Reference Guide for detailed instructions.</td>
</tr>
<tr>
<td>Host computer is not selected in the ActiveSync dialog box on the terminal.</td>
<td></td>
<td>Select host computer in the ActiveSync dialog box. Refer to the PDT 8000 Series Product Reference Guide for detailed instructions.</td>
</tr>
<tr>
<td>Modern RAS connection not allowed by host computer.</td>
<td></td>
<td>Select RAS connection in the host computer File - Connection Settings dialog box. Refer to the ReadMe files provided with the host computer ActiveSync application.</td>
</tr>
<tr>
<td>Terminal or cradle was disconnected from the telephone line while ActiveSync was in progress.</td>
<td></td>
<td>Disconnect the modem cable for 30 seconds to hang up the local telephone connection. Close any open windows on the terminal and any modem connections.</td>
</tr>
<tr>
<td>Synchronization did occur, however the session is configured to close immediately after synchronization is complete.</td>
<td></td>
<td>Verify the setting of the When manually synchronizing disconnect when complete checkbox by tapping Start - ActiveSync - Tools - Options - Schedule tab.</td>
</tr>
<tr>
<td>Dial-out fails</td>
<td>Location setting is incorrect.</td>
<td>Verify Dialing Locations and Dialing Patterns are correct.</td>
</tr>
<tr>
<td>Incorrect server phone number.</td>
<td></td>
<td>Verify the phone number you are connecting to by looking at the Connecting dialog boxes.</td>
</tr>
<tr>
<td>Trouble Connecting: There is no answer at the number dialed. Verify the phone... error message appears</td>
<td></td>
<td>Modem may be required to be powered prior to opening port for dial-out. Tap Start - Settings - System - Symbol Settings - Settings - External5VoltPower and select ActiveOn.</td>
</tr>
<tr>
<td>The Connection Manager routes are incorrect.</td>
<td></td>
<td>Warm reset your terminal as described in the PDT 8000 Series Product Reference Guide. Confirm the connection settings.</td>
</tr>
</tbody>
</table>
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Regulatory Information

All Symbol devices are designed to be compliant with rules and regulations in locations they are sold and will be labeled as required.

Any changes or modifications to Symbol Technologies equipment, not expressly approved by Symbol Technologies, could void the user’s authority to operate the equipment.

Power Supply

Note: Use only a Symbol-approved power supply 50-14001-005 output rated 15VDC and minimum 2.5A. The power supply is certified to EN60950 with SELV outputs.

Hinweis: Benutzen Sie nur eine Symbol Technologies genehmigt Stromversorgung 50-14001-005 in den Ausgabe: 15VDC und minimum 2.5A. Die Stromversorgung ist bescheinigt nach EN60950 mit SELV Ausgaben

Radio Frequency Interference Requirements

Note: 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.
Telecom Approval Warnings and Notices

This product contains Symbol Modem Type MCDB.

Connecting to the telephone network

A compliant telephone lead is required with RJ11 plug (line is on middle pair) for connection to modem, terminated with an appropriate and correctly wired local telecom connector compatible with the telephone network. Such a cable may be sourced from your local supplier. Alternatively, compliant RJ11 plug to RJ11 plug cables may be used with a range of adapters for places such as Europe.

Caution: To reduce risk of fire, use only No. 26 AWG or larger telecommunication line cord.

User and Service Access - No part of the modem, other than the line connection plug, is accessible to users.

United States

Where this device contains a Symbol Technologies, Inc. internal modem, this equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. A Supplier's Declaration of Conformity for the modem type may be obtained from http://www2.symbol.com/doc/. On the exterior of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3).

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.

This equipment must be connected to the telephone network or premises wiring using a compatible modular jack (RJ11C) compliant with the applicable FCC Part 68 rules and requirements adopted by ACTA. A compliant telephone cord and modular plug must be used.

This equipment must not be used on party lines.

If your premises has specially wired alarm equipment connected to the telephone line, ensure the installation of this modem does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.
Quick Reference

Should you experience trouble with this equipment, please contact your facility’s Technical or Systems Support first who will contact your nearest Symbol Customer Service Centre. If necessary, the Symbol Support Centre may be contacted at: 1-800-653-5350. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

If the modem causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn’t practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the modem. If this happens the telephone company will provide advance notice so you may make any necessary modifications to maintain uninterrupted service.

Fax

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless it clearly contains a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.) In order to program this information into your fax/modem, you should consult documentation supplied with the necessary fax driver application software being used with the host terminal.

Canada

This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation “IC:” before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.
The Ringer Equivalence Number (REN) for this terminal equipment is 0.1. The REN assigned to each terminal equipment provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed five.

**Brazil**

The following signifies approval in Brazil.

![ANATEL](image)

**The European Economic Area (EEA)**

**Statement of Compliance**

Symbol Technologies, Inc., hereby, declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A Declaration of Conformity may be obtained from [http://www2.symbol.com/doc/](http://www2.symbol.com/doc/)

The modem is designed to interwork with the following Public Switched Telephone Networks: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.
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Warranty

(A) Seller's hardware Products are warranted against defects in workmanship and materials for a period of ninety (90) days from the date of shipment, provided the Product remains unmodified and is operated under normal and proper conditions. Warranty provisions and durations on software, integrated installed systems, Product modified or designed to meet specific customer specifications ("Custom Products"), remanufactured products, and reconditioned or upgraded products, shall be as provided in the applicable Product specification in effect at the time of purchase or in the accompanying software license. (B) Products may be serviced or manufactured with parts, components, or subassemblies that originate from returned products and that have been tested as meeting applicable specifications for equivalent new material and Products. The sole obligation of Seller for defective hardware Products is limited to repair or replacement (at Seller's option) on a "return to service depot" basis with prior Seller authorization. Shipment to and from Seller will be at Seller's expense, unless no defect is found. No charge will be made to Buyer for replacement parts for warranty repairs. Seller is not responsible for any damage to or loss of any software programs, data or removable data storage media, or the restoration or reinstallation of any software programs or data other than the software, if any, installed by Seller during manufacture of the Product. The aforementioned provisions do not extend the original warranty period of any Product that had either been repaired or replaced by Seller. (C) The above warranty provisions shall not apply to any Product (i) which has been repaired, tampered with, altered or modified, except by Seller's authorized service personnel; (ii) in which the defects or damage to the Product result from normal wear and tear, misuse, negligence, improper storage, water or other liquids, battery leakage or failure to perform operator handling and scheduled maintenance instructions supplied by Seller; (iii) which has been subjected to unusual physical or electrical stress, abuse, or accident, or forces or exposure beyond normal use within the specified operational and environmental parameters set forth in the applicable Product specification; nor shall the above warranty provisions apply to any expendable or consumable items, such as batteries, supplied with the Product, EXCEPT FOR THE WARRANTY OF TITLE AND THE EXPRESS WARRANTIES STATED ABOVE, SELLER DISCLAIMS ALL WARRANTIES ON PRODUCTS FURNISHED HERUNDER INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW ARE LIMITED IN DURATION TO THE LIMITED WARRANTY PERIOD. SOME STATES OR COUNTRIES DO NOT ALLOW A LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR CONSUMER PRODUCTS. IN SUCH STATES OR COUNTRIES, FOR SUCH PRODUCTS, SOME EXCLUSIONS OR LIMITATIONS OF THIS LIMITED WARRANTY MAY NOT APPLY. The stated express warranties are in lieu of all obligations or liabilities on the part of Seller for damages, including but not limited to, special, indirect or consequential damages arising out of or in connection with the use or performance of the Product or service. Seller's liability for damages to Buyer or others resulting from the use of any Product or service furnished hereunder shall in no way exceed the purchase price of said Product or the fair market value of said service, except in instances of injury to persons or property.
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
1-631-738-2400

Canada
905-629-7226

Europe/Mid-East

Distributor Operations
+44 118 945 7360

Latin America
1-800-347-0178 Inside US
+1-561-483-1275 Outside US

Europe/Mid-East
Contact local distributor or call

Netherlands/Nederland
315-271700
Norway/Norge
+47 2232 4375

Australia 1-800-672-906

Austria/Österreich 1-505-5794-0

France
01-40-96-52-21
Germany/Deutschland
6074-49020

United Kingdom
0800 328 2424
Asia/Pacific
+65-6796-9600

Italy/Italia
2-484441
Mexico/México
5-520-1835

South Africa
11-8095311
Spain/España
91 324 40 00
Inside Spain

Sweden/Sverige
84452900
+34 91 324 40 00
Outside Spain

1Customer 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.