SPT 1800 Series

Product Reference Guide

SPT 1800 Series
Product Reference Guide

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Revision A
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Contents

About This Guide

Introduction xi
Chapter Descriptions xi
Notational Conventions xiii
Related Documents xiv
Service Information xiv
Symbol Support Center xv

Chapter 1. Getting Started

Introduction 1-3
Unpacking the Terminal 1-3
Accessories 1-3
Parts of the SPT 1800 1-4
Getting Started 1-6
Installing the Battery 1-6
Charging the Battery 1-7
Starting the SPT 1800 1-9
Configuring the Spectrum24 Network (SPT 184x only) 1-12
Configuring the Wide Area Network (SPT 1833 only) 1-12
Using the SPT 1800 1-13
Using the Power Button/Backlight Control 1-13
Using the Contrast Control 1-13
Writing with the Stylus 1-13
Tapping Versus Clicking 1-14
Using the Onscreen Keyboard 1-14
Icon Descriptions 1-15
Cables and Cradles 1-15
Synchronization/Charging Cable 1-16
CRD1800-1000S Single-slot Serial Cradle 1-17
CRD1700-4000S Four-slot Serial Cradle 1-18

CRD1700-1000M-1 Modem Cradle 1-19
CRD1700-4000E Four-slot Ethernet Cradle 1-20
Four-slot Charging Cradle 1-21
VCD 1700/VCD X800Vehicle Cradle. 1-22
VCA 3000 Vehicle Charging Adapter. 1-23
MSR 3000 Mag Stripe Reader 1-25
Using the MSR 3000 1-26
Charging the Terminal's Battery 1-26
TRG 3000 Trigger Handle. 1-27
Replacing the Handstrap. 1-29
Symbol Palm Terminal Desktop Software. 1-29
System Requirements 1-30
Symbol Palm Terminal Desktop Software Installation 1-31

Chapter 2. Network Setup

Introduction 2-3
Data Encryption. 2-3
WEP Encryption. 2-4
Kerberos Authentication 2-4
Configuring a Spectrum24 Connection
(SPT 184x Only) 2-5
SPT 1842 Configuration 2-5
SPT 1846 Configuration 2-7
Configuring a CDPD WAN Connection
(SPT 1833 Only) 2-11
Setup Wizard 2-12
Maintenance Screens and Menus 2-17
Merlin Menu Options 2-18

Chapter 3. Working with Your SPT 1800 Terminal

Introduction 3-3
Applications. 3-3
Changing the Applications Launcher Display Format 3-4
Switching Applications 3-4
Setting Preferences for Applications 3-5
Displaying Applications by Category 3-5
Writing Graffiti 2 with the Stylus 3-6
Practicing Graffiti 2 with the Memo Pad. 3-6
General Guidelines for Graffiti 2 Writing 3-7
Using the On-Screen Keyboard 3-15
Using Application Controls 3-17
Using Menus 3-18

Choosing a Menu 3-18
Graffiti 2 Menu Commands. 3-19
Edit Menu Commands 3-19
Choosing Fonts 3-20
Using Categories 3-21
Using Categories in Lists 3-22
Defining a New Category 3-23
Renaming Categories. 3-25
Attaching Notes 3-26
Marking Private Entries. 3-26
Beaming Information to Other SPT 1800 Terminals 3-27
Scanning with the SPT 1800 3-29

Chapter 4. Finding Information With Your SPT 1800 Terminal

Introduction 4-3
Using the Find Command 4-3
Using Phone Lookup 4-4
Phone Lookup Tips. 4-5

Chapter 5. Applications: Calculator

Introduction 5-3
Opening the Calculator 5-3
Using the Calculator Screen 5-3
Special Calculator Buttons 5-3
Calculator Menu Commands 5-4
Recent Calculations 5-5

Chapter 6. Applications: Date Book

Introduction 6-3
Opening the Date Book 6-3
Using the Date Book 6-4
Scheduling an Event. 6-4
Rescheduling an Event. 6-8
Setting an Alarm for an Event. 6-8
Scheduling Repeating Events 6-10
Marking a Private Event 6-12
Deleting an Event 6-12
Changing the Date Book View. 6-13
Working in Week View 6-13
Working in Month View. 6-15
Working in Agenda View 6-16

Date Book Menu Commands 6-17
Record Menu 6-17
Options Menu 6-19

Chapter 7. Applications: Address Book

Introduction 7-3
Opening the Address Book 7-3
Address Book Entries 7-4
Creating an Address Book Entry 7-4
Deleting an Address Book Entry 7-6
Duplicating an Address Book Entry 7-6
Working with Address Book Entries. 7-6
Beaming Address Entries to Other SPT 1800 Terminals. 7-10
Address Book Menu Commands 7-11
Record Menu 7-12
Options Menu 7-13

Chapter 8. Applications: Memo Pad

Introduction 8-3
Opening the Memo Pad. 8-3
Creating a New Memo 8-4
Reviewing Memos. 8-5
Arranging Memos 8-5
Manually Arranging the Memo List 8-6
Choosing a Memo Category 8-6
Marking a Private Memo 8-6
Deleting a Memo. 8-7
Memo Pad Menu Commands 8-8
Record Menu 8-8
Options Menu 8-9

Chapter 9. Applications: To Do List

Introduction 9-3
Opening the To Do List 9-3
Working With To Do Items 9-4
Setting Priority (Optional). 9-4
Checking Off a To Do Item 9-5
To Do Item Details 9-6
Choosing a To Do Category 9-7
Setting a Due Date 9-7
Marking a To Do Item Private 9-8

Deleting a To Do Item 9-8
To Do Show Options 9-8
To Do List Menu Commands 9-10
Record Menu 9-10
Options Menu 9-11

Chapter 10. Applications: HotSync®

Introduction 10-3
The HotSync Process and the HotSync Manager 10-3
Performing a HotSync Operation for the First Time 10-3
Using User Profiles 10-6
Using File Link 10-8
Conducting a Local HotSync Operation 10-9
Selecting HotSync Setup Options 10-9
Customizing HotSync Application Settings 10-12
Conducting a HotSync Operation via Modem 10-14
Preparing Your Computer for a Modem HotSync Operation 10-14
Preparing Your SPT 1800 Terminal for a Modem HotSync Operation 10-15
Selecting the Conduits for a Modem HotSync Operation 10-16
Performing a HotSync Operation via Modem 10-17
Conducting Wireless HotSync Operations 10-18
Setting Up for a Wireless HotSync 10-18
Performing a Spectrum24 HotSync 10-19
Performing a CDPD HotSync 10-20
Setting Up the Ethernet Cradle for HotSync 10-21
Installing NetSync 10-21
Creating a CRD1700-4000E Modem Sync Service 10-22
Configuring the Remote Host PC for Use with the Ethernet Cradle 10-23
The Ethernet HotSync Process 10-23

Chapter 11. Applications: ScoutSync Client

Introduction 11-3
Overview of the ScoutSync Client 11-3
Configuring the ScoutSync Client 11-4
Selecting Conduits for Synchronization 11-5
Performing a Synchronization 11-6
Automatically Synchronizing Using a Cradle 11-6
Viewing the Synchronization Log 11-7
ScoutSync Client Menu Commands 11-8
Options Menu 11-8

Chapter 12. Applications: AirBEAM

Chapter Contents 12-1
Introduction 12-3
AirBEAM Package Builder 12-3
AirBEAM Client 12-4
AirBEAM License 12-4
Configuring the AirBEAM Client 12-4
Synchronizing with the Server 12-9

Chapter 13. Applications: Preferences

Introduction 13-3
Buttons Preferences 13-3
Pen Preferences 13-5
HotSync Buttons Preferences 13-6
Connection Preferences 13-7
Digitizer Preferences 13-9
Formats Preferences 13-9
Country Default 13-9
Time, Date, Week Start and Numbers Formats 13-10
Date & Time Preference 13-10
Setting the Date 13-11
Setting the Time 13-11
Setting the Time Zone 13-12
General Preferences 13-13
Auto-Off 13-13
Stay On In Cradle 13-13
System, Alarm and Game Sounds 13-14
Beam Receive 13-14
Kerberos Preferences 13-14
Network Preferences 13-14
Selecting a Service 13-15
Entering a User Name 13-16
Entering a Password 13-16
Adding Connection Settings 13-17
Connecting to Your Service 13-20
Creating Additional Service Templates 13-20
Adding Detailed Information to a Service Template 13-21
Idle Timeout 13-22
Defining Primary and Secondary DNS 13-23
IP Address 13-24
Creating a Login Script 13-25
Deleting a Service Template 13-27

IPR2024-01221 Exhibit 2009 Page 10 of 322

Network Preferences Menu Commands 13-27
Service Menu 13-27
Options Menu 13-28
TCP/IP Troubleshooting 13-28
Owner Preferences 13-29
ShortCuts Preferences. 13-30
Creating a ShortCut 13-30
Editing a ShortCut 13-31
Deleting a ShortCut 13-31
Symbol Preferences. 13-32
Trigger Wake 13-32
High Beep. 13-32
Trigger Sled 13-32

Chapter 14. Applications: Security

Introduction 14-3
Assigning a Password 14-3
Hiding Private Entries 14-4
Showing Private Entries. 14-5
Masking Private Entries 14-5
Locking Your SPT 1800 Terminal 14-6
Changing or Deleting a Password 14-7
Recovering from a Lost Password. 14-8

Chapter 15. Applications: Laser Scanner

Introduction 15-3
Scanning with the SPT 1800 15-3
SScan Application 15-3
SScan Menu Commands 15-3
Demo Scan Application 15-4
Demo Scan Menu Options 15-6
Scanning 1-D Bar Codes Using Demo Scan 15-7
Barcode Application 15-7
Scanning Problems 15-8
Battery Implications While Using the Laser Scanner 15-9

Chapter 16. Installing and Removing Applications

Introduction 16-3
Installing Applications 16-3
Removing Applications 16-6
Removing the Symbol Palm Terminal Desktop Software 16-7

Chapter 17. Getting Help With Your SPT 1800 Terminal

Introduction 17-3
Displaying Online Tips 17-3
Symbol Information 17-4
SPT 1800 Diagnostics Utility 17-4
System Information 17-5
Bar Code Scanner Test 17-6
Serial Port Test 17-7
Digitizer Alignment Test 17-8
System Diagnostics Test 17-8
Troubleshooting 17-9
Technical Support, Service and Repair 17-15
Technical Support 17-15

Chapter 18. Maintaining Your SPT 1800 Terminal

Introduction 18-3
Caring for Your SPT 1800 Terminal 18-3
Battery Considerations 18-3
Resetting Your SPT 1800 Terminal 18-5
Performing a Soft Reset 18-5
Performing a Hard Reset 18-5

Appendix A. Non-ASCII Characters for Login Scripts

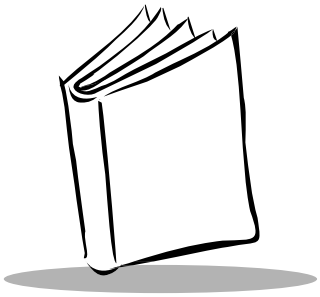
Introduction A-1
Use of ^char A-1
Carriage Return and Line Feed A-1
Literal Characters A-2
Examples: A-2

Appendix B. Installing the Multi-Language Operating System

Introduction B-1
Download the Operating System B-1
Download the Desktop Software B-1
Installation B-2
Switching Between Languages B-7

Index

Feedback



About This Guide

Introduction

The SPT 1800 product family is the next generation of pen-based, one-dimensional bar code scanning, pocket-sized terminals which also offer a new ruggedized design, rechargeable lithium-ion battery and optional wireless local and wide area networking capability. The complete line of SPT 1800 products are based on the popular Palm Computing™ platform architecture, offering users a fast, friendly, and flexible interface for data acquisition and management. The SPT 1800 consists of the following models:

SPT 1800	Performs 1-dimensional scanning and batch communication. Memory configuration: 4 MB ROM/8 MB RAM.
SPT 1833	Performs 1-dimensional scanning and uses the CDPD radio to perform wide area wireless communication. Memory configuration: 4 MB ROM/8 MB RAM.
SPT 1842	Performs 1-dimensional scanning and uses the Symbol Spectrum24 radio to perform 2 MB local area wireless communication. Memory configuration: 4 MB ROM/8 MB RAM.
SPT 1846	Performs 1-dimensional scanning and uses the Symbol Spectrum24 radio to perform 11 MB local area wireless communication. Memory configuration: 4 MB ROM/8 MB RAM.

The SPT 1800 Series Product Reference Guide provides information about all the SPT 1800 Series terminals and its accessories.

Chapter Descriptions

Topics covered in this guide are as follows:

- *Chapter 1, Getting Started*, explains the physical buttons and controls on your SPT 1800 terminal, how to install and charge the battery, start your SPT 1800 terminal for the first time, and set up your Symbol Palm Terminal (SPT) Desktop software.
- Chapter 2, *Network Setup*, explains how to set up your SPT 184x terminals for use on Spectrum24 and SPT 1833 terminals for use on CDPD wireless networks, respectively.
- Chapter 3, *Working with Your SPT 1800 Terminal*, explains how to open applications, use the on-screen keyboard, write with the stylus and use common features on your SPT 1800 terminal.
- Chapter 4, *Finding Information With Your SPT 1800 Terminal*, explains how to locate information on your SPT 1800 terminal with the Find command and the Phone Lookup command.
- Chapter 5, *Applications: Calculator*, explains the Calculator application, which allows you to perform simple calculations on your SPT 1800.
- Chapter 6, *Applications: Date Book*, covers the Date Book application, which enables you to quickly and easily schedule appointments or any kind of activity associated with a time and date.
- Chapter 7, *Applications: Address Book*, explains the Address Book application, which enables you to keep names, addresses, phone numbers and other information about your personal or business contacts.
- Chapter 8, *Applications: Memo Pad*, explains the Memo Pad application, which provides a place to take notes not associated with Date Book, Address Book or To Do items.
- Chapter 9, *Applications: To Do List*, describes the To Do List application, which is a convenient place to create reminders and prioritize the things that you have to do.
- Chapter 10, *Applications: HotSync®*, describes the HotSync utility, which allows you to synchronize data between the SPT 1800 and your computer.
- Chapter 11, *Applications: ScoutSync Client*, describes the ScoutSync™ application, which enables you to connect your SPT 1800 terminal to a Scout Server and transfer data between the ScoutSync Client and your company's back-end applications and databases.

- Chapter 12, *Applications: AirBEAM*, describes the AirBEAM application, which allows specially designed software packages to be transferred between a host server and Symbol wireless handheld devices.
- Chapter 13, *Applications: Preferences*, describes the Preferences screens, which enable you to customize the configuration options on your SPT 1800 terminal. Included in this chapter are instructions on configuring your SPT 1800 terminal for use in the Spectrum24 and CDPD environments.
- Chapter 14, *Applications: Security*, covers the security options available for protecting your SPT 1800 from unauthorized users.
- Chapter 15, *Applications: Laser Scanner*, covers laser scanner applications and the proper methods for scanning 1- and 2-dimensional bar codes.
- Chapter 16, *Installing and Removing Applications*, explains how to install and remove applications on your SPT 1800 terminal and how to remove the Symbol Palm Terminal (SPT) Desktop software from your computer.
- Chapter 17, *Getting Help With Your SPT 1800 Terminal*, describes methods for troubleshooting problems with the SPT 1800, and contact phone numbers for technical support.
- Chapter 18, *Maintaining Your SPT 1800 Terminal*, provides information to help you take proper care of your SPT 1800 terminal and prolong battery life. This chapter also discusses how to reset your SPT 1800 terminal.
- Appendix A, *Non-ASCII Characters for Login Scripts*, provides information to enable you to create custom login scripts that require non-ASCII characters. This information is for advanced users only.
- Appendix B, *Installing the Multi-Language Operating System*, provides information on how to download and flash the multi-language operating system.

Notational Conventions

This document uses these conventions:

- “Terminal” refers to any model of SPT 1800.
- “User” refers to anyone using an application on the SPT 1800.
- “You” refers to the End User, System Administrator or Technical Support person using this manual as a reference to install, configure, operate, maintain and troubleshoot the SPT 1800.
- *Italics* are used to highlight specific items in the general text, and to identify chapters and sections in this and related documents.

- Bullets indicate:
  - lists of alternatives or action items.
  - lists of required steps that are not necessarily sequential.
- Numbered lists indicate a set of sequential steps, i.e., those that describe step-by-step procedures.
- “Tap” refers to selecting an option on the display using the stylus.

Related Documents

- *CRD 1700-4000S Cradle Quick Reference Guide*, p/n 60308-001
- *CRD 1800-1000S Cradle Quick Reference Guide, p/n 72-54489-xx*
- *CRD 1700-1000M-1 Modem Cradle Quick Reference Guide*, p/n 72-55040-xx
- *CRD 1700-4000E Ethernet Cradle Quick Reference Guide*, p/n 72-39472-xx
- *CHX700-4000C Charging Cradle Quick Reference Guide,* p/n 72-50367-xx
- *MDM 3006 Modem Module Quick Reference Guide*, p/n 72-55338-xx
- *MSR 3000 Magnetic Stripe Reader Quick Reference Guide,* p/n 72-38392-xx
- *VCA 3000 Charging Adaptor Quick Reference Guide*, p/n 72-51938-xx
- *Keypad Module Quick Reference Guide*, p/n 72-54733-xx
- *S24 Site Survey Utility User Guide*, p/n 72E-39283-xx
- *Spectrum24 Access Point AP-3020 Product Reference Guide*, p/n 70-20504-xx
- *SPT 1700 Series Site Admin Tool User Guide*, p/n 72E-39284-xx
- *SPT 1733/2733 CDPD Developer’s Guide*, p/n 72E-42911-xx
- *SPT 173X/183X WAN Developer’s Guide*, p/n 72E-56804-xx
- *SPT 1740 Spectrum24 Driver Extensions Library Developer’s Guide*, p/n 70-38524-xx
- *SPT 1740 Web Client User’s Guide*, p/n 72-42792-xx
- *SPT 1800 Series Quick Reference Guide*, p/n 72-51336-xx
- *SPT Terminal Series System Software Manual*, p/n 72E-56803-xx
- *VCD 1700 Installation Instructions (Vehicle Cradle)*, p/n 72-43825-xx
- *VCD 1700 Series Vehicle Cradle Quick Reference Guide*, p/n 72-42033-xx

Service Information

If you have a problem with your equipment, contact the *Symbol Support Center* for your region. See page xv for contact information. Before calling, have the model number, serial number, and several of your bar code symbols at hand.

Call the Support Center from a phone near the scanning equipment so that the service person can try to talk you through your problem. If the equipment is found to be working properly and the problem is symbol readability, the Support Center will request samples of your bar codes for analysis at our plant.

If your problem cannot be solved over the phone, you may need to return your equipment for servicing. If that is necessary, you will be given specific directions.

Note: *Symbol Technologies is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty. If the original shipping container was not kept, contact Symbol to have another sent to you.*

Symbol Support Center

For service information, warranty information or technical assistance contact or call the Symbol Support Center in:

United States [1]
Symbol Technologies, Inc.
One Symbol Plaza
Holtsville, New York 11742-1300
1-800-653-5350

Canada
Symbol Technologies Canada, Inc.
2540 Matheson Boulevard East
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IPR2024-01221 Exhibit 2009 Page 18 of 322

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Norway/Norge
Symbol's registered and mailing address:
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Symbol's repair depot and shipping address:
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Support E-Mail:
Sweden.Support@se.symbol.com

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

If you purchased your Symbol product from a Symbol Business Partner, contact that Business Partner for service.

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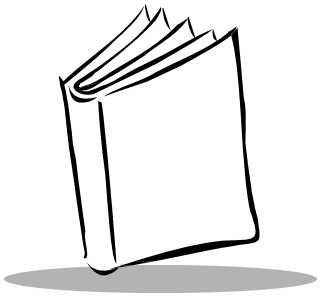
IPR2024-01221 Exhibit 2009 Page 20 of 322



Chapter 1
Getting Started

Chapter Contents

Introduction 1-3
Unpacking the Terminal 1-3
Accessories 1-3
Parts of the SPT 1800 1-4
Getting Started 1-6
- Installing the Battery 1-6
- Charging the Battery 1-7
- Starting the SPT 1800 1-9
- Configuring the Spectrum24 Network (SPT 184x only) 1-12
- Configuring the Wide Area Network (SPT 1833 only) 1-12

Using the SPT 1800 1-13
- Using the Power Button/Backlight Control 1-13
- Using the Contrast Control 1-13
- Writing with the Stylus 1-13
- Tapping Versus Clicking 1-14
- Using the Onscreen Keyboard 1-14
- Icon Descriptions 1-15

Cables and Cradles 1-15
- Synchronization/Charging Cable 1-16
- CRD1800-1000S Single-slot Serial Cradle 1-17
- CRD1700-4000S Four-slot Serial Cradle 1-18
- CRD1700-1000M-1 Modem Cradle 1-19
- CRD1700-4000E Four-slot Ethernet Cradle 1-20
- Four-slot Charging Cradle 1-21
- VCD 1700/VCD X800Vehicle Cradle 1-22
- VCA 3000 Vehicle Charging Adapter 1-23

MSR 3000 Mag Stripe Reader 1-25
Using the MSR 3000 1-26
Charging the Terminal's Battery 1-26
TRG 3000 Trigger Handle. 1-27
Replacing the Handstrap. 1-29
Symbol Palm Terminal Desktop Software. 1-29
System Requirements 1-30
Symbol Palm Terminal Desktop Software Installation 1-31

IPR2024-01221 Exhibit 2009 Page 22 of 322

Introduction

This chapter explains the physical buttons and controls on your SPT 1800 terminal, how to install and charge the battery, start your SPT 1800 terminal for the first time, set up your cradle and install your Symbol Palm Terminal Desktop software.

Unpacking the Terminal

Carefully remove all protective material from around the terminal and save the shipping packaging for later storage and shipping.

Verify that you received all equipment listed on the packing slip and inspect the equipment for damage. If any equipment is missing or damaged, contact the Symbol Technologies Support Center immediately. Refer to page xv for contact information.

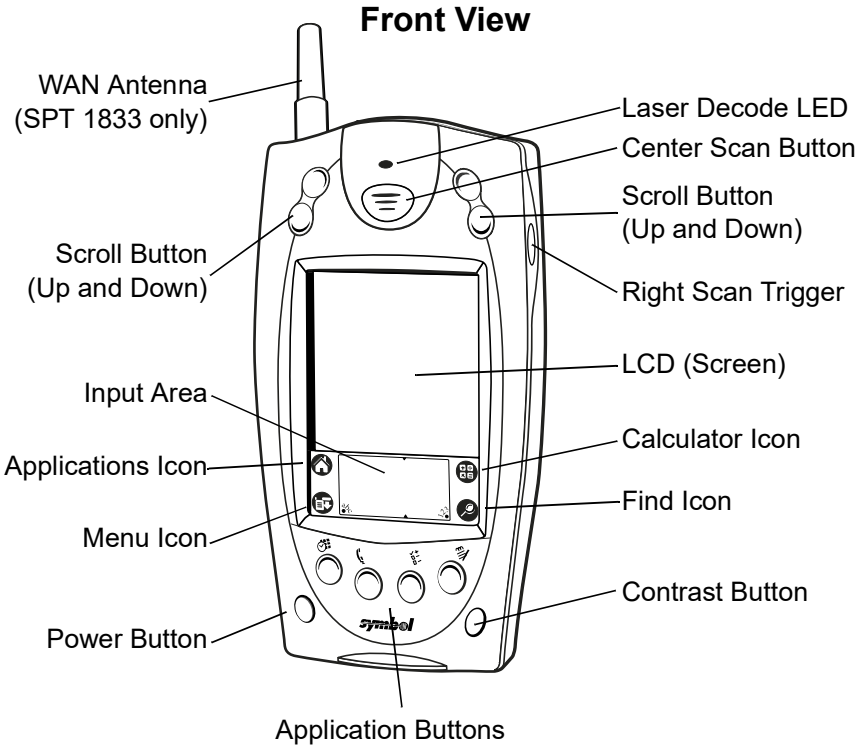
Accessories

The following are accessories for the SPT 1800:

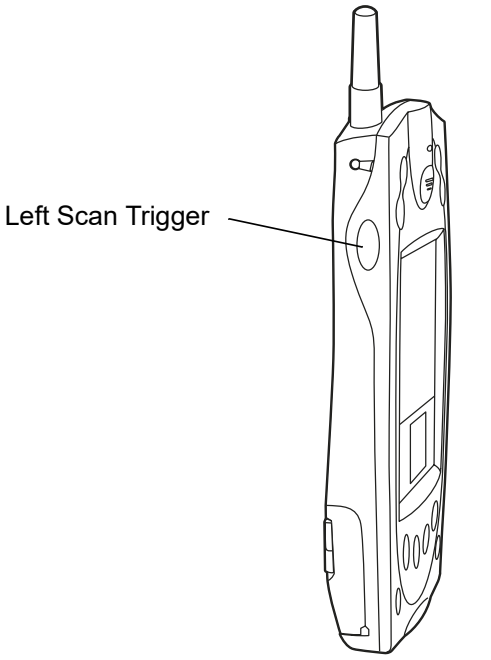
- Single-slot Modem Cradle
- Single-slot Serial Cradle
- Four-slot Charging Cradle
- Four-slot Ethernet Cradle
- Four-slot Serial Cradle
- Vehicle Cradle
- Snap-On Modem Module
- Snap-On DEX Cable
- Snap-On Keypad
- Mag Stripe Reader
- TRG 3000 Trigger Handle
- Synchronization/Charging Cable
- Vehicle Charging Adapter
- Holster
- Lanyard
- Spare Battery.

Parts of the SPT 1800

Front View

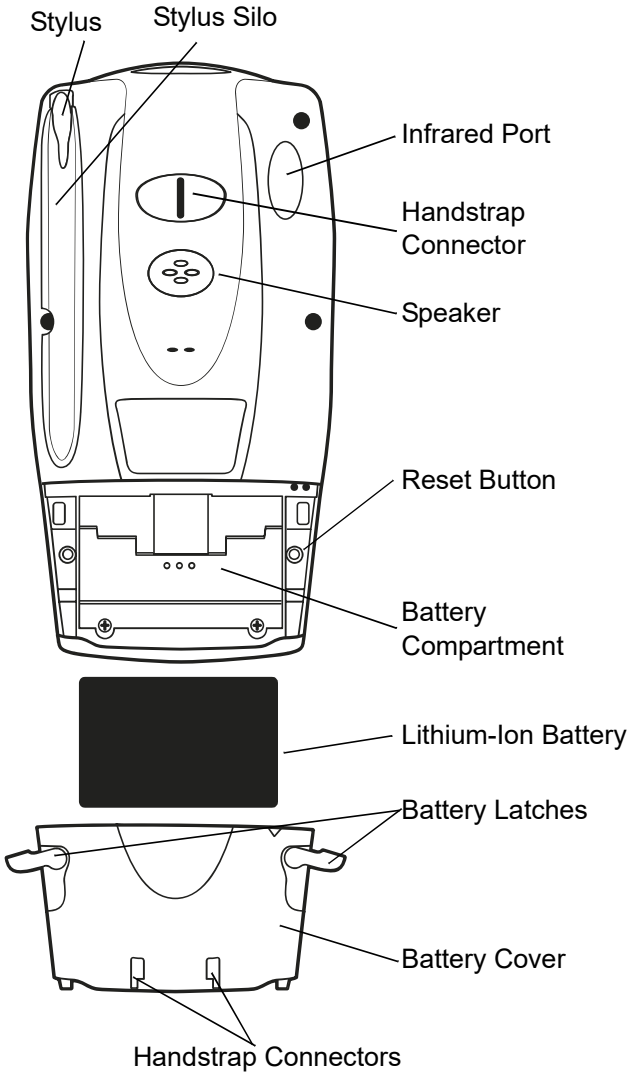


Left View

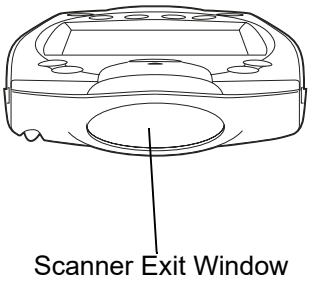


IPR2024-01221 Exhibit 2009 Page 24 of 322

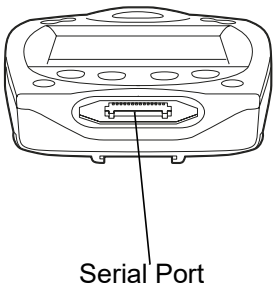
Back View



Top View



Bottom View



Getting Started

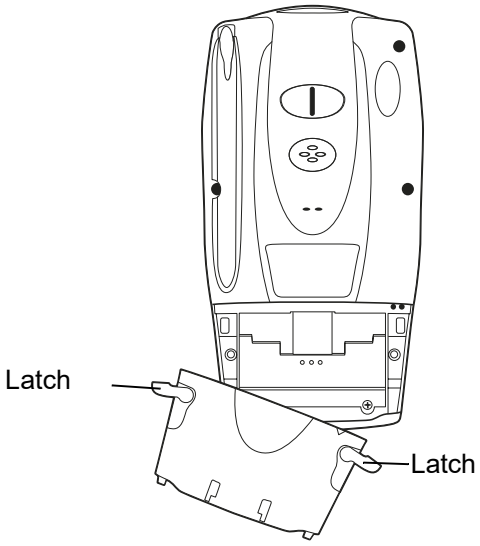
Before you can use your SPT 1800, perform the basic set up procedures covered on the following pages. Specifically:

- Install and charge the battery
- Start the SPT 1800
- Initiate a Spectrum24 network (SPT 184x only) or wide area network (WAN) connection (SPT 1833 only).

Installing the Battery

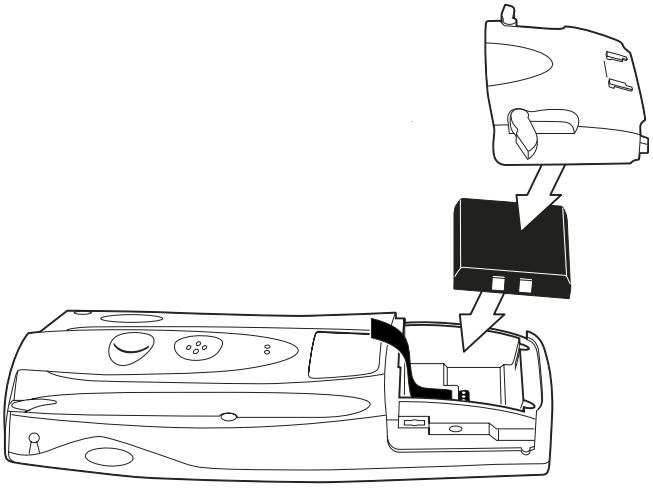
To install the battery in your SPT 1800:

1. Open the latches on the battery cover and lift it away from the SPT 1800.



IPR2024-01221 Exhibit 2009 Page 26 of 322

2. Insert the lithium-ion battery in the battery compartment, making sure it snaps into place.



3. Replace the battery cover and re-secure the latches.

Note: *Be careful to position the battery latches completely open while securing the battery cover on the terminal.*

Charging the Battery

Caution

The main battery charges the backup battery in the SPT 1800. Once the battery is fully charged, do not remove it from the SPT 1800 for 24 hours. During this period, the SPT 1800 cannot maintain any user data if the battery is removed from the terminal.

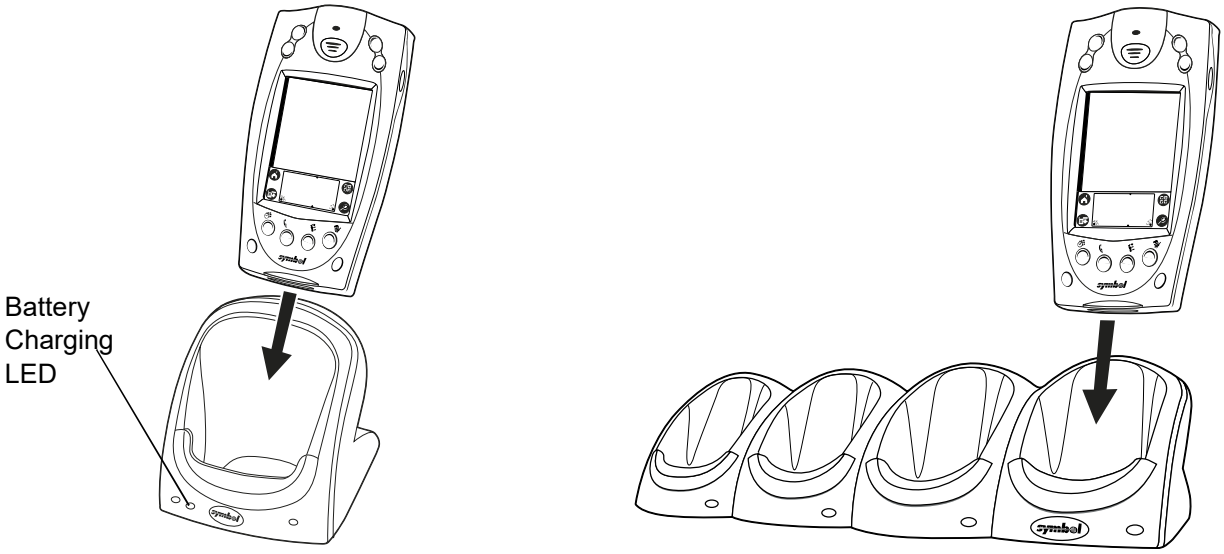
Before using your SPT 1800 for the first time, charge the lithium-ion battery. The terminal's battery can be charged using a charging cradle, the Synchronization/Charging Cable, or the Universal Battery Charger (UBC). For instructions on using the UBC to charge your batteries, refer to the Quick Reference Guide which came with your UBC. Follow these same procedures to recharge the battery when the terminal's battery level is low.

Using a Cradle to Charge the Battery

To charge the terminal's battery using a cradle:

1. Ensure the battery is installed in the terminal. Refer to *Installing the Battery* on page 1-6 for instructions.

2. Ensure the cradle is plugged into a wall outlet. Refer to *Cables and Cradles* on page 1-15.
3. Insert the SPT 1800 terminal in the cradle as shown:



On the CRD 1800-1000S serial cradle and the CRD 1700-1000M-1 modem cradle, the battery charging LED turns red to indicate that the battery is charging, then turns green after approximately two hours to indicate that the terminal's battery is fully charged.

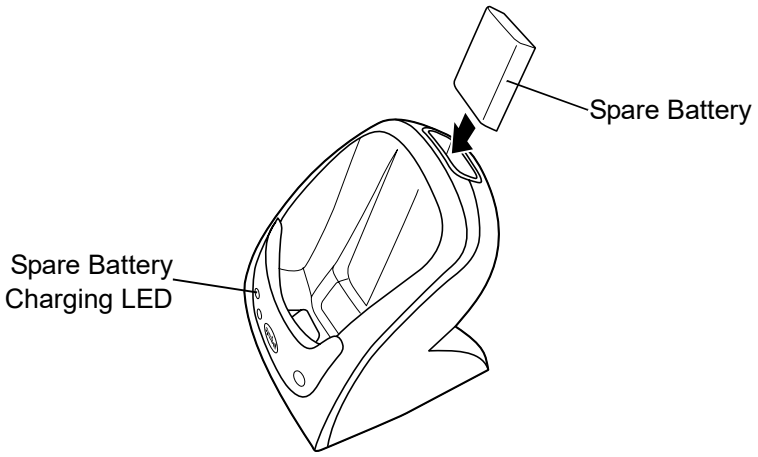
Note: *On older CRD 1700 single slot and modem cradles, the charging LED may not illuminate green when the terminal's battery is fully charged.*

Spare Battery Charging

The CRD1800-1000S single-slot cradle has a spare battery charging slot which charges the terminal's spare battery. Insert the battery in the spare battery charging slot in the back of the cradle. The spare battery charging LED turns red to indicate the spare battery is

IPR2024-01221 Exhibit 2009 Page 28 of 322

charging, then turns green after approximately two hours to indicate the battery is fully charged.



Starting the SPT 1800

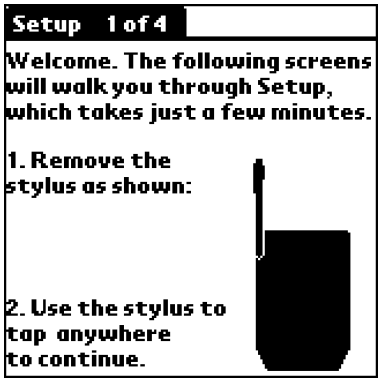
After installing and charging the battery, start the terminal by pressing the red power button on the front of the SPT 1800. If the terminal does not power on, perform a hard reset (refer to *Performing a Hard Reset* on page 18-5).

Note: *When starting the terminal for the first time, or whenever the battery is completely drained, a hard reset is required.*

The first time you start the SPT 1800, Welcome setup instructions appear onscreen. These instructions include screen calibration and time and date setting. Calibration aligns the internal circuitry of the SPT 1800 with its touch-sensitive screen so your SPT 1800 can detect the task you want to perform when you tap an element on the screen.

1. Remove the stylus from the back of the terminal.

2. Use the stylus to tap anywhere on the screen.



3. Tap anywhere on the next screen.
4. Follow the on-screen instructions, tapping the screen where indicated. Tap the exact center of each target that displays on the screen with the tip of the stylus.

5. The third screen allows you to set the country, time zone, date and time.

6. Select a country from the Country pick list.
7. Tap the Time Zone box. The Set Time Zone screen appears.

IPR2024-01221 Exhibit 2009 Page 30 of 322

8. Use the up and down arrows to scroll to your country and time zone. The terminal's scroll buttons can be used to scroll the list a page at a time.

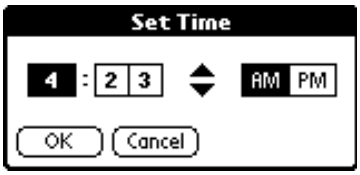
9. Make sure your time zone is highlighted, then tap OK.

   Tip: Choose the time zone from the list that corresponds to where you are. When you travel, use this dialog to change time zones. If you're not sure what time zone you are in, find out what time it is, and select the time zone which shows the current new time. Do not use the time zone dialog to switch between daylight savings time and standard time. Use the Daylight Savings pick list.

10. Tap on the Daylight Saving pick list to toggle this feature on or off.
11. Tap the Set Date box.
12. Tap the arrows at the top of the screen to select the current year. Tap the month; then tap the current date.

13. The screen closes and the dates you selected are displayed in the Set Date box.
14. Tap the Time box.

15. Tap each minute number, and then tap an arrow to change the number.



16. If applicable, tap AM or PM.
17. Tap OK to set the new time and return to the previous screen.

Note: *To display time based on a 24-hour clock, change the time format.*
See Time, Date, Week Start and Numbers Formats on page 13-10.

---

18. Tap the Next button to read instructions on entering text or tap the Done button to finish.

Configuring the Spectrum24 Network (SPT 184x only)

Before the SPT 184x can be used on the Spectrum24 wireless LAN, your facility must be set up with the equipment required to run the wireless LAN and your terminal must be properly configured. Refer to Chapter 2, *Network Setup* for instructions on configuring your terminal for use with Spectrum24.

Configuring the Wide Area Network (SPT 1833 only)

Before the SPT 1833 can be used on a WAN (CDPD), your terminal must be properly configured. Refer to Chapter 2, *Network Setup* for instructions on configuring your terminal for use with WAN.

IPR2024-01221 Exhibit 2009 Page 32 of 322

Using the SPT 1800

This section describes the procedures for the basic use of the SPT 1800 series terminal. Topics covered include powering on the terminal, using the backlight, adjusting the screen contrast, writing with the stylus and using the onscreen keyboard.

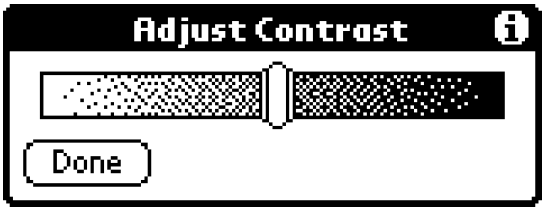
Using the Power Button/Backlight Control

The power button turns the SPT 1800 on and off. This button also serves as your backlight control for low-light conditions. With the unit on, press and hold the power button for approximately 2 seconds to turn the backlight on and off.

Using the Contrast Control

To adjust the contrast:

1. Press the contrast control button, which displays the contrast adjusting bar on the terminal's screen.



2. Using your stylus, adjust the contrast by scrolling the contrast bar until the contrast is set to the desired level, or use either of the scroll buttons on the top of the terminal to adjust the contrast level.
3. Press the contrast control button or tap *Done* on the screen to turn off the contrast control.

Writing with the Stylus

Your SPT 1800 includes Graffiti 2 handwriting software as the primary system for entering text and numbers. Graffiti 2 is a system where simple strokes you write with the stylus are

instantly recognized as letters or numbers. Refer to *Writing Graffiti 2 with the Stylus* on page 3-6 for more information.

Tapping Versus Clicking

Just as you use a mouse pointer to click elements on your computer's screen, you use the stylus to tap elements on your SPT 1800's touch-sensitive screen. Tapping is the basic action used to execute tasks on your SPT 1800.

Note: *Always use the point of the stylus for tapping or making strokes on the SPT 1800 screen. Do not use a pen, pencil, or any other sharp object to write on the SPT 1800 screen. If you misplace your stylus, visit the www.symbol.com site for information on a replacement.*

With your SPT 1800 turned on, you can tap the screen to perform many operations, such as the following:

- Open applications.
- Choose menu commands.
- Initiate a global Find operation.
- Select options in dialog boxes.
- Open the onscreen keyboards.

Just as you drag the mouse to select text or move objects on your computer, you can drag the stylus to select text. In addition, you can use the stylus to drag the slider of any scroll bar.

Using the Onscreen Keyboard

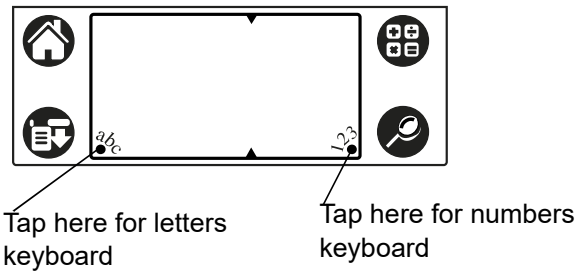
You can activate the on-screen keyboard any time you need to enter text or numbers on your SPT 1800. Note that you can enter Graffiti 2 characters while using the on-screen keyboard.

To use the on-screen keyboard:

1. Open any SPT 1800 application.
2. Tap any record name, or tap the *New* button with the tip of the stylus.

IPR2024-01221 Exhibit 2009 Page 34 of 322

3. Tap the left target to open the Alpha keyboard, or tap the right target to open the Numeric keyboard.



Refer to *Using the On-Screen Keyboard* on page 3-15 for additional information.

Icon Descriptions

	Applications Icon	Tap to exit the current application and to display a list of available applications for selection.
	Calculator Icon	Tap to display the calculator application.
	Menu Icon	Tap from within an application to display the menu of options for the selected application.
	Find Icon	Tap from within an application to enter search criteria to find an entry.

Cables and Cradles

There are optional cable and cradle solutions that enable you to charge the terminal's battery and synchronize information on your SPT 1800 terminal with host system applications:

- Synchronization/Charging Cable
- CRD1800-1000S Single-slot Serial Cradle
- CRD1700-4000S Four-slot Serial Cradle
- CRD1700-1000M-1 Single-slot Modem Cradle
- CRD1700-4000E Four-slot Ethernet Cradle
- CHS X700-4000C Four-slot Charging Cradle
- VCD 1700/VCD X800 Vehicle Cradle

- CBL-1700 Snap-On DEX Cable
- VCA 3000 Vehicle Charging Adapter.

Synchronization/Charging Cable

To connect the Synchronization/Charging Cable:

1. Make sure the battery is installed in the terminal. Refer to *Installing the Battery* on page 1-6 for instructions.
2. Turn off your host computer.
3. Plug the serial cable into the serial communication port on your host computer.

Note: *You may require a 9-pin to 25-pin adapter, p/n 160-0072 to connect the cable to the serial port on the back of your host computer.*

Note: *Your SPT 1800 terminal requires a dedicated port. It cannot share a port with an internal modem or other device. If you are unsure about the location of the serial port on your computer, refer to the user's manual supplied with the computer.*

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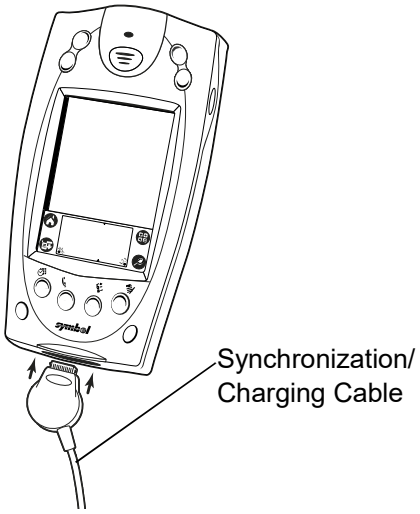
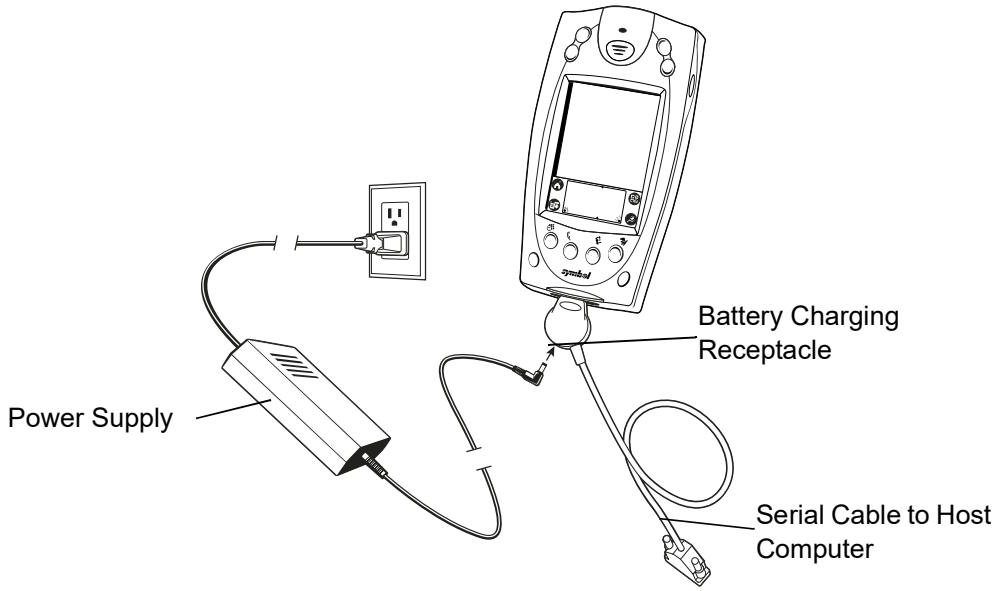
4. Insert the cable into the bottom of the terminal, as shown.



IPR2024-01221 Exhibit 2009 Page 36 of 322

5. Plug the power cable into a wall outlet and plug the other end into the battery charging receptacle on the side of the Synchronization/Charging Cable.

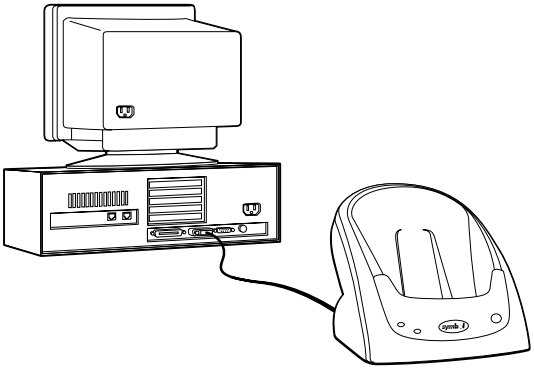


CRD1800-1000S Single-slot Serial Cradle

To connect the cradle:

1. Turn off your computer.
2. Plug one end of the serial cable into the host connector on the back of the cradle.
3. Plug the other end of the serial cable into the serial communication port on your computer.

Note: *You may require a 9-pin to 25-pin adapter, p/n 160-0072 to connect the cable to the serial port on the back of your computer.*



Note: *Your SPT 1800 terminal requires a dedicated port. It cannot share a port with an internal modem or other device. If you are unsure about the location of the serial port on your computer, refer to the user's manual supplied with the computer.*

4. Connect the power jack to the power receptacle on the back of the cradle.
5. Plug the power cable into the wall.

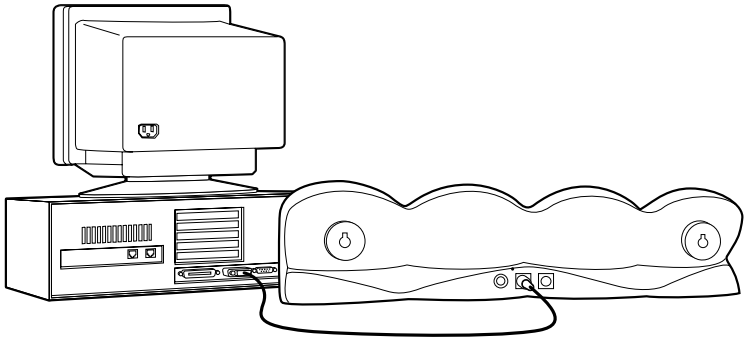
CRD1700-4000S Four-slot Serial Cradle

To connect the cradle:

1. Turn off your computer.
2. Plug one end of the serial cable into the host connector on the back of the cradle.
3. Plug the other end of the serial cable into the serial communication port on your computer.

Note: *You may require a 9-pin to 25-pin adapter, p/n 160-0072 to connect the cable to the serial port on the back of your computer.*

IPR2024-01221 Exhibit 2009 Page 38 of 322



Note: *Your SPT 1800 terminal requires a dedicated port. It cannot share a port with an internal modem or other device. If you are unsure about the location of the serial port on your computer, refer to the user's manual supplied with the computer.*

4. Connect the power jack into the power receptacle on the back of the cradle.
5. Plug the power cable into the wall.

CRD1700-1000M-1 Modem Cradle

To connect the cradle:

1. Turn off your computer.
2. Plug the RJ-41 connector of the communication cable into the Line Out port on the back of the cradle.
3. Plug the other end of the cable into the serial port on the back of your computer.
4. Plug one end of the phone cord into the Line In port on the cradle, and the other end into a wall phone jack.
5. Connect one end of the power cable into the power port on the back of the cradle, and plug the other end into a wall outlet.

Note: *Your SPT 1800 terminal requires a dedicated port. It cannot share a port with an internal modem or other device. If you are unsure about the location of the serial port on your computer, refer to the user's manual supplied with the computer.*

Refer to *Chapter 10, Applications: HotSync®* for instructions on configuring the cradle and terminal for modem synchronization.

CRD1700-4000E Four-slot Ethernet Cradle

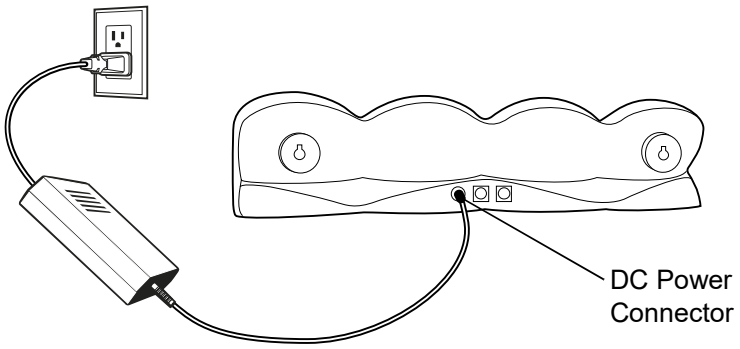
Before setting up the cradle, make sure that Symbol Palm Terminal Desktop Software is installed and running on the host computer, as well as properly configured Network HotSync software on the SPT 1800 terminal. Refer to *Symbol Palm Terminal Desktop Software* on page 1-29 for instructions on installing this software. Specific software setup necessary to use the CRD1700-4000E is discussed in Chapter 10, *Applications: HotSync®*.

A DHCP server must be configured and operational on the subnet to which the cradle will be attached.

To connect the cradle:

1. Connect the power supply cable round plug to the power connector on the back of the cradle.
2. Connect the power supply AC plug to a standard electrical outlet.

Note: *International customers must use a separate AC power cable appropriate for their respective country.*

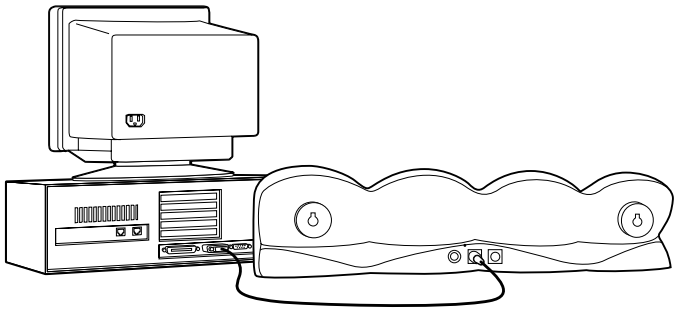


The cradle's LEDs blink, then remain off until a terminal is inserted into one or more of the slots.

IPR2024-01221 Exhibit 2009 Page 40 of 322

To set up for network communications:

1. Ensure there is a DHCP server accessible to the CRD1700-4000E on the subnet to which it will be attached.
2. Connect one end of a standard 10 Base-T network cable to the middle connector on the back of the CRD1700-4000E. Connect the other end of the cable to a hub which is connected to your subnet.
3. Power-up the unit; the CRD1700-4000E performs its power-up sequence, then attempts to collect all network parameters from the local DHCP server.



If configuration of the unit from the local DHCP server fails, all LEDs flash red. The unit becomes unresponsive until power is removed, the unit is connected to a network with a DHCP server, and power is restored.

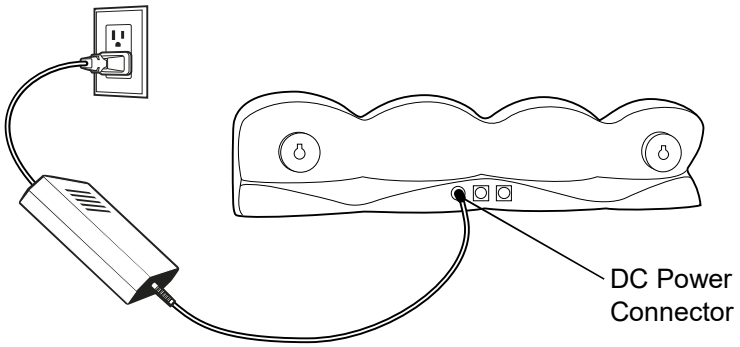
Note: *Before communication between the SPT 1800 terminal and the host computer can take place, the Symbol Palm Terminal Desktop Software must be installed and running on the host computer.*

Four-slot Charging Cradle

To connect the cradle:

1. Connect the power supply cable round plug to the power connector on the back of the cradle.
2. Connect the power supply AC plug to a standard electrical outlet.

Note: *International customers must use a separate AC power cable appropriate for their respective country.*



The cradle's LEDs blink, then remain off until a terminal is inserted into one or more of the slots.

VCD 1700/VCD X800Vehicle Cradle

The SPT 1800 provides a serial port at the bottom of the terminal. When you insert a terminal into a vehicle cradle, it connects to the cradle's serial port. The terminal can then use the cradle's serial port to communicate with an external device. Refer to *Quick Reference Guide* for your vehicle cradle for instructions on installing the cradle in a vehicle.

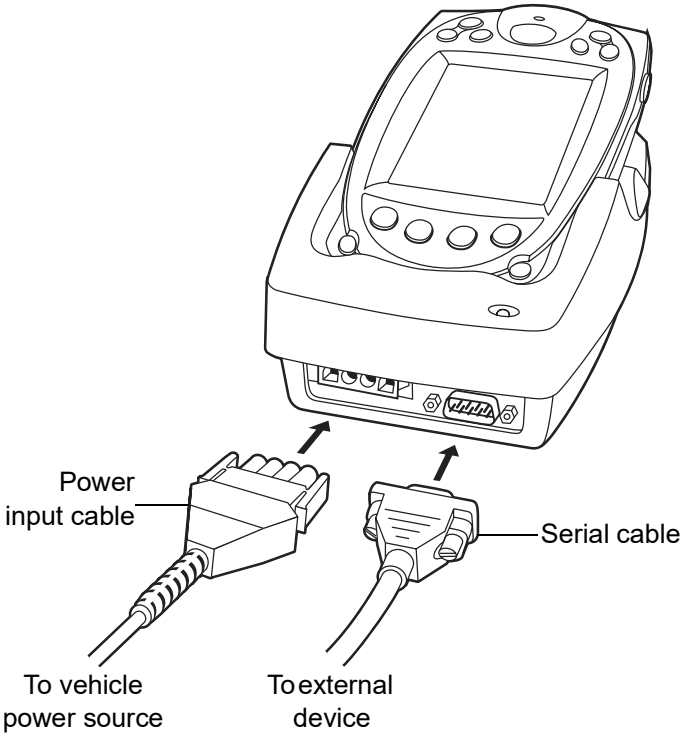
To connect the cradle:

1. Plug a 9-pin serial cable into the serial port located next to the power port at the bottom of the cradle. Note that some devices may require the serial cable to be a null modem cable.

Note: *The external device must use an RS-232 serial connection limited to TXD, RXD, RTS and CTS data lines. It must also have its own power supply, as the cradle's serial port does not provide power.*

2. Connect the other end of the cable to the serial port of the external device (*e.g.*, a host computer, printer, or modem).

IPR2024-01221 Exhibit 2009 Page 42 of 322



To begin communication:

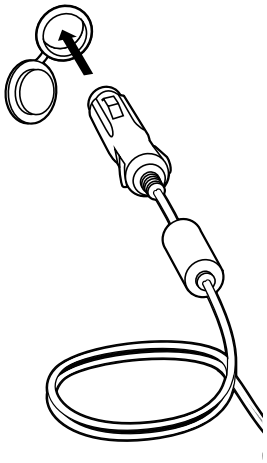
1. Insert the terminal into the cradle.
2. Connect the Power Input cable to your vehicle power source. Then plug the cable into the Power Port on the terminal.
3. To initiate communication, make appropriate selections on the terminal, as determined by the application you are using.

Note: *Removing a terminal during data communication will disrupt communication between the terminal and the attached device.*

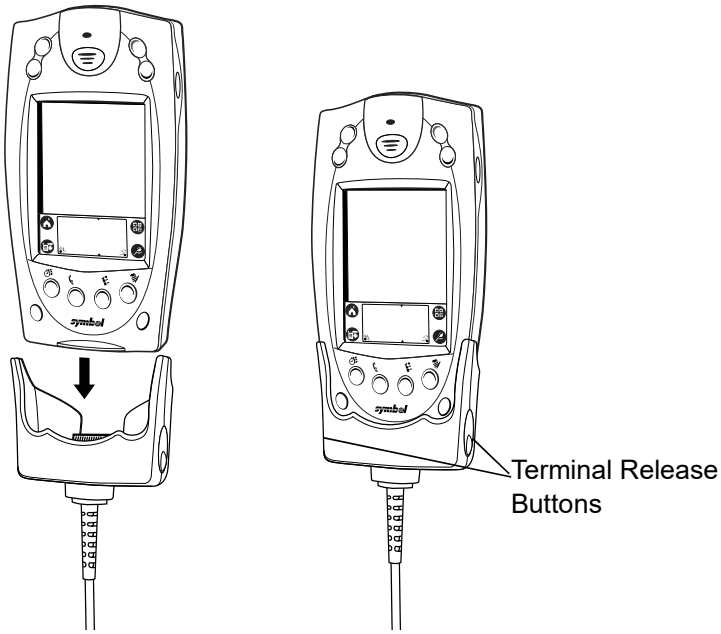
VCA 3000 Vehicle Charging Adapter

The VCA-3000 Vehicle Charging Adapter connects to the cigarette lighter in your vehicle to charge the battery. To set up the VCA 3000:

1. Insert the connector into the cigarette lighter of your vehicle.



2. Insert the terminal into the module at the other end of the VCA 3000.



The terminal's battery begins charging automatically.

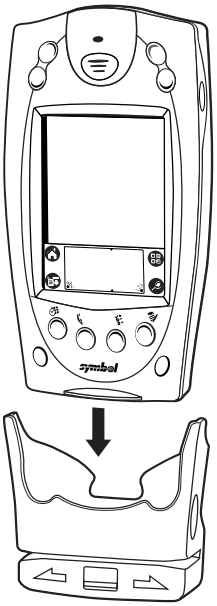
3. To remove the terminal from the VCA 3000, press both terminal release buttons and pull the terminal up.

IPR2024-01221 Exhibit 2009 Page 44 of 322

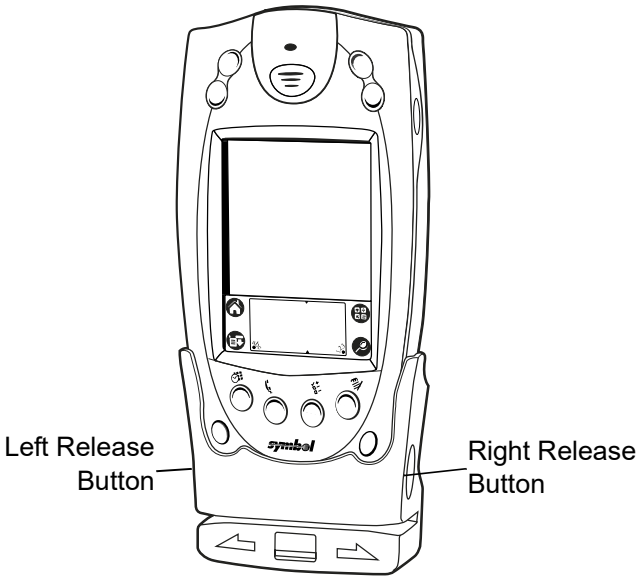
MSR 3000 Mag Stripe Reader

The MSR 3000 Magnetic Stripe Reader allows easy data capture with the swipe of a magnetic stripe card. To install the MSR 3000:

1. Place the MSR 3000 on the bottom of the terminal as shown, ensuring it snaps into place.



2. To remove, simultaneously press the release buttons on both sides of the magnetic stripe reader and pull the terminal up.

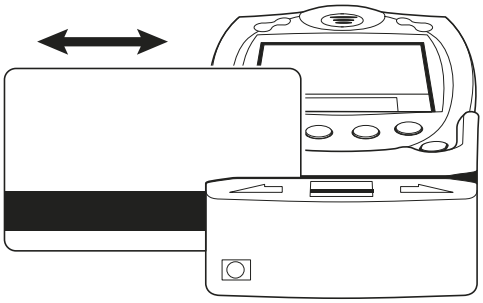


Using the MSR 3000

In order to use the MSR 3000, your SPT 1800 must have an application installed which accepts magnetic stripe data. The MSR 3000 System Software Manual (p/n 72-38411-xx) describes the application programming interface which can be used to develop MSR applications on the SPT 1800.

To use the Magnetic Stripe Reader:

1. Tap the icon.
2. Tap the icon associated with the Magnetic Stripe Reader application on your terminal.
3. Swipe the magnetic stripe card through the reader, ensuring the magnetic stripe on the card is positioned as shown in the following illustration.



Note: *The card may be swiped in either direction, from left to right, or from right to left. For best results, gently press down on the card while swiping to ensure contact with the bottom of the reader.*

Charging the Terminal's Battery

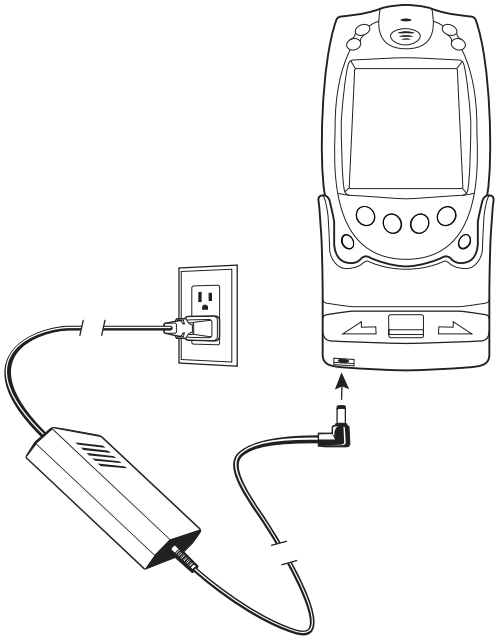
The terminal's battery can be charged while the MSR 3000 is in place on the bottom of the terminal, using the Power Supply (p/n 50-14000-107) and Line Cord (p/n 50-16000-182).

Note: *To use the cradles for charging and batch communication, you must first remove the Magnetic Stripe Reader from the bottom of the terminal.*

IPR2024-01221 Exhibit 2009 Page 46 of 322

To charge the terminal's battery using the power supply and line cord:

1. Insert the adapter cable into the power port on the bottom of the MSR as shown.



2. Plug the wall plug into the wall outlet. The terminal's battery is fully charged after two hours.

   The terminal can be used while plugged into the wall outlet.

TRG 3000 Trigger Handle

The TRG 3000 Trigger Handle adds a trigger in scanning gun form to your terminal, increasing comfort when using the terminal in scan-intensive applications for extended periods of time.

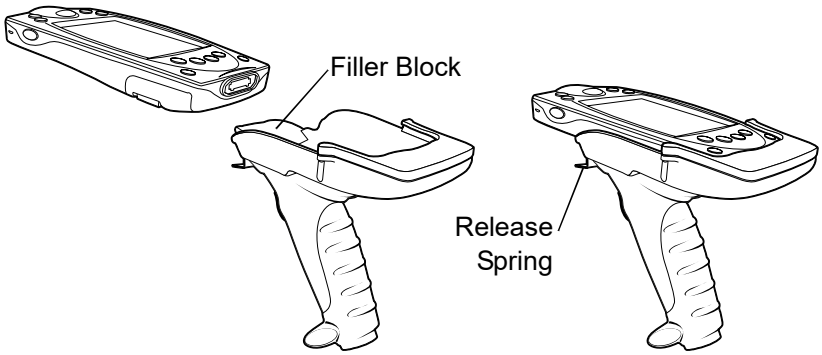
Note: *The SPT 1800 Series terminal does not require additional file downloads. The software for this accessory reside in the operating system.*

Whether you perform a hard or soft reset on the terminal, the file will not be lost.

To install the trigger handle hardware:

1. Slide the terminal into the Trigger Handle until it locks in place.

Note: *For some terminal models, you must remove the filler block from the front of the handle.*

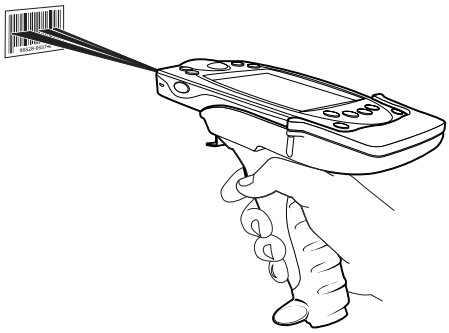


To remove the terminal, press down the release spring and pull the terminal forward.

Note: *Remove the Trigger Handle when synchronizing with the desktop computer. Wireless synchronization can be performed while the handle is attached.*

To scan bar codes using the Trigger Handle:

1. Start the terminal's scanning application.
2. Aim the terminal at the bar code.
3. Pull the trigger on the handle. Make sure the red scan beam covers the entire bar code. The green scan LED lights and a beep sounds to indicate a successful decode.



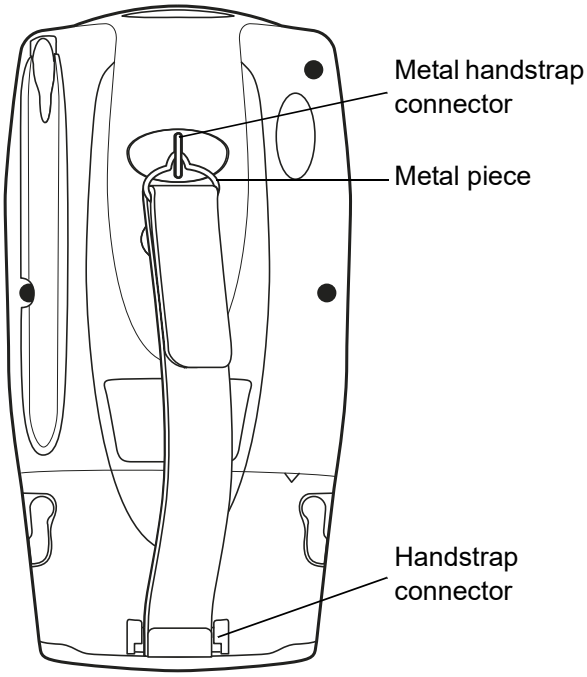
IPR2024-01221 Exhibit 2009 Page 48 of 322

Replacing the Handstrap

The terminal has a factory-installed handstrap which increases comfort when holding the terminal for extended periods of time. The handstrap may be removed or replaced, if damaged.

To replace the handstrap on the SPT 1800, 184x and 1833 terminals:

1. Unhook the bottom of the handstrap from the handstrap connector on the battery cover.
2. Remove the metal piece, threaded through the metal handstrap connector on the back of the terminal.



3. Thread the metal piece of the new handstrap through the metal handstrap connector on the back of the terminal.
4. Slide the flat metal piece into the handstrap connector on the battery cover.
5. Adjust the velcro® strap to fit your hand.

Symbol Palm Terminal Desktop Software

Symbol Palm Terminal Desktop software extends many of the functions of your SPT 1800 Series terminal to your computer. Although using Symbol Palm Terminal Desktop software

is optional, when you use it with your SPT 1800 Series terminal and the built-in HotSync technology, you can fully synchronize the information on your SPT 1800 Series terminal with the information on your computer. Changes you make on your SPT 1800 Series terminal or Symbol Palm Terminal Desktop display in both places after you synchronize.

With Symbol Palm Terminal Desktop software you can:

- Work with your SPT 1800 terminal applications on your computer. The Symbol Palm Terminal Desktop software duplicates the Date Book, Address Book, To Do List and Memo Pad applications on your SPT 1800 terminal, so you can view, enter and modify any data stored on your SPT 1800 terminal.
- Back up the data stored on your SPT 1800 terminal with HotSync technology and synchronize the data with the Symbol Palm Terminal Desktop software. Synchronization is a one-step procedure that ensures your data is always safe and up-to-date. Refer to Chapter 10, *Applications: HotSync®* for information about using this feature.
- Import and export data, so you can easily transfer data from other Windows applications into Address Book or Memo Pad.
- Print your Date Book, Address Book, To Do List and Memo Pad information on any Windows-compatible printer.

System Requirements

To install and operate the Symbol Palm Terminal Desktop software, your computer system must meet the following requirements:

- Windows 95 or higher
- IBM-compatible 486 computer or higher
- 8 MB RAM (memory) *minimum,* 16 MB recommended
- 12 MB available hard disk space
- VGA monitor or better
- CD-ROM drive
- Mouse
- One available serial port.

Optional Equipment

- Modem
- Windows-compatible printer.

IPR2024-01221 Exhibit 2009 Page 50 of 322

Symbol Palm Terminal Desktop Software Installation

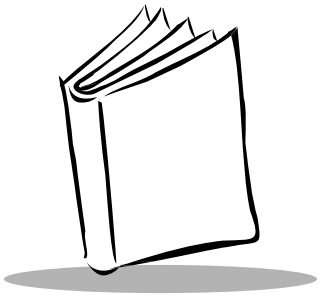
Go to http://devzone.symbol.com to download the Symbol Palm Terminal Desktop software.

The following instructions guide you through installing the Symbol Palm Terminal Desktop software. After you install the software, refer to the Help menu for complete information about how to use the Symbol Palm Terminal Desktop software.

To ensure a safe and uninterrupted installation of the Symbol Palm Terminal Desktop software, do the following before installing:

- Connect the cradle to your computer.
- If you have placed your SPT 1800 terminal in the cradle, remove it during software installation.
- Exit all programs, including those that run automatically at startup, such as fax software, virus protection software, screen-saver software and application toolbars such as Microsoft® Office.
- Do *not* simply copy the Symbol Palm Terminal Desktop files to your hard drive. You must use the installer to place the files in their proper locations and then decompress them.

IPR2024-01221 Exhibit 2009 Page 52 of 322



Chapter 2
Network Setup

Chapter Contents

Introduction 2-3
Data Encryption 2-3
WEP Encryption 2-4
Kerberos Authentication 2-4
Configuring a Spectrum24 Connection
(SPT 184x Only) 2-5
SPT 1842 Configuration 2-5
SPT 1846 Configuration 2-7
Configuring a CDPD WAN Connection
(SPT 1833 Only) 2-11
Setup Wizard 2-12
Maintenance Screens and Menus 2-17
Merlin Menu Options 2-18

Introduction

Wireless networks allow SPT 1800 Series terminals to communicate wirelessly, and to send captured data “real time” to a host device. Terminals and their supported network types are:

Terminal	Network Technology
SPT 184x	Spectrum24 (LAN)
SPT 1833	CDPD (WAN)

Before a terminal can be used on a Spectrum24 LAN, your facility must be set up with the equipment required to run the network and the terminal must be properly configured. Before a terminal can be used on a CDPD WAN, you must activate your device on the network. Refer to the following sections for specific configuration information for each terminal type: *Configuring a Spectrum24 Connection (SPT 184x Only)* on page 2-5 and *Configuring a CDPD WAN Connection (SPT 1833 Only)* on page 2-11.

Data Encryption

Note: *Data Encryption is only available on SPT 1846 terminal.*

Security is becoming more of a concern in today’s wireless environment and the possibility exists that someone could obtain unauthorized access to your network. The user must determine whether enhanced data encryption is necessary for their application.

Encryption becomes the most efficient method in preventing unauthorized network access and improving data security. Encryption entails scrambling and coding information, typically with mathematical formulas called algorithms, before the information is transmitted. An algorithm is a set of instructions or formula for scrambling the data. A key is the specific code used by the algorithm to encrypt or decrypt the data. Decryption is the decoding and unscrambling of received encrypted data.

The same device, host computer or front-end processor, usually performs both encryption and decryption. The data transmit or receive direction determines whether the encryption or decryption function is performed. The device takes plain text, encrypts or scrambles the text typically by mathematically combining the key with the plain text as instructed by the algorithm, then transmits the data over the network. At the receiving end, another device

takes the encrypted text and decrypts, or unscrambles, the text revealing the original message. An unauthorized user can know the algorithm, but cannot interpret the encrypted data without the appropriate key. Only the sender and receiver of the transmitted data know the key.

WEP Encryption

Symbol uses the Wired Equivalent Privacy (WEP) algorithm, specified in IEEE 802.11 section 8, for encryption and decryption. WEP uses the same key for both encrypting and decrypting text. Typically an external key service distributes the key. Users should change the key often for added security. IEEE 802.11 defines two types of authentication, Open System and Shared Key. Open system authentication is a null authentication algorithm. Shared key authentication is an algorithm where both the Access Point and the terminal share an authentication key to perform a checksum on the original message. Both 40-bit and 128-bit shared key encryption algorithms are supported in the Symbol Spectrum24 environment. Terminals are required to use the same encryption algorithm to interoperate. Access Points and terminals cannot transmit and receive if the Access Point is using 128-bit encryption and the terminal is using a 40-bit encryption algorithm.

By default, IEEE 802.11 devices operate in an open system network where any wireless device can associate with an Access Point without authorization. The SPT 1846 terminal with a valid shared key is allowed to associate with the Access Point. Authentication management messages (packets) are unicast, meaning authentication messages transmit from one Access Point to one terminal only, not broadcast or multicast.

Kerberos Authentication

Authentication is critical for the security of any wireless LAN device, including a Spectrum24 device operating on a wireless network. Traditional authentication methods are not suitable for use in wireless networks where an unauthorized user can monitor network traffic and intercept passwords. The use of strong authentication methods that do not disclose passwords is necessary. Symbol uses the Kerberos authentication service protocol (specified in RFC 1510), to authenticate users/clients in a wireless network environment and to securely distribute the encryption keys used for both encrypting and decrypting plain text.

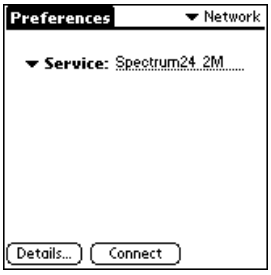
IPR2024-01221 Exhibit 2009 Page 56 of 322

Configuring a Spectrum24 Connection (SPT 184x Only)

SPT 1842 Configuration

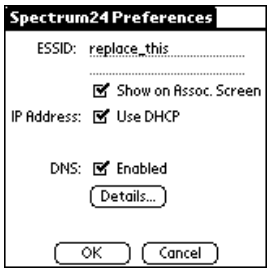
To configure your SPT 1842 terminal for use on a Spectrum24 network:

1. On the Main Application screen, tap the icon.
2. Tap the preference options pick list and select Network. The Network Preference screen displays:



Note: *Refer to Network Preferences Menu Commands on page 13-27 for details about using the Network Preferences menu options.*

3. Tap the Service pick list and select Spectrum24, then tap Details. The Spectrum24 Preferences screen displays:



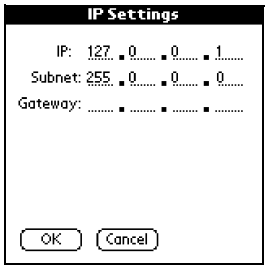
Enter the following information:

Extended Service Set ID (ESSID).	The ESSID identifies the radio network and differentiates between different radio networks. All terminals on the same network, as well as the access points in your facility, must have the same ESSID. Ask your System Administrator for the correct ESSID number of your network.
Show on Assoc. Screen	Displays the ESSID name that the terminal is trying to associate with in the *Service Connection Process* screen.
Internet Protocol (IP) address.	Each SPT 184x terminal requires a unique internet address (IP address). This address can be administered and entered manually through the terminal, or administered and allocated by a server on the network, using DHCP.
DNS	The IP address of a server containing a database of host names and their associated IP addresses so that when a host name is used, it can be resolved into its IP address.

Note: *The default value for this field is Use DHCP. Use this option if you want the IP address to be dynamically selected by the DHCP server.*

---

4. To manually enter the IP address information for this terminal, deselect Use DHCP and tap Settings. The IP Settings screen displays:



5. Enter the IP address, Subnet mask, and Gateway address for this terminal.

   Tap each field to display a keypad for selection of the address information. Each part of the four-part address must be in the range of 0-255; numbers are the only allowable characters in these fields. Ask your Internet Service Provider or your System Administrator for the correct IP, Subnet and Gateway information.

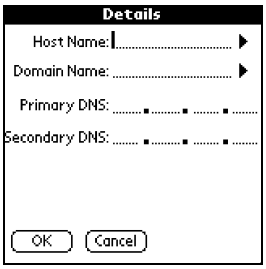
6. Tap *Done* to exit the Keypad.
7. Tap *OK* to save the information and return to the Spectrum24 Preferences screen.

8. To enable DNS, tap the *Enable DNS* box. A `Details` button is added to the screen.

Note: *Many systems do not require a DNS. If you are not sure, leave the DNS fields blank.*

---

a. Tap the `Details` button to display the Details screen.



Enter the Host and Domain Names. If you need more space to enter name information, tap the arrow to the right of these fields to display a blank screen.

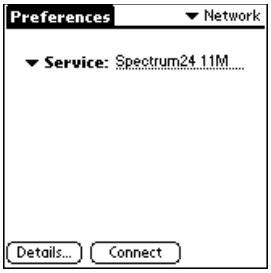
Tap the Primary and Secondary DNS fields to display a keypad to enter the address information for these fields. Each part of the four-part address must be in the range of 0-255; numbers are the only allowable characters in these fields. Ask your Internet Service Provider or System Administrator for the correct Primary or Secondary DNS numbers.

b. Tap *OK* to save the information and return to the Spectrum24 Preferences Screen, or Cancel to return to this screen without saving the DNS information.

SPT 1846 Configuration

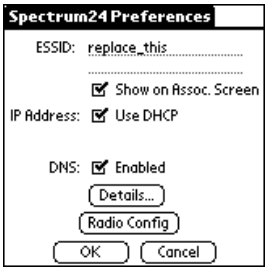
To configure your SPT 1846 terminal for use on a Spectrum24 network:

1. On the Main Application screen, tap the icon.
2. Tap the preference options pick list and select Network. The Network Preference screen displays:



Note: *Refer to Network Preferences Menu Commands on page 13-27 for details about using the Network Preferences menu options.*

3. Tap the Service pick list and select Spectrum24, then tap Details. The Spectrum24 Preferences screen displays:



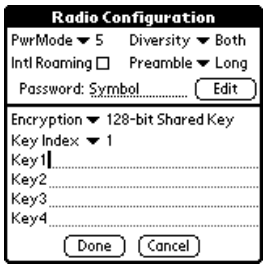
Enter the following information:

Extended Service Set ID (ESSID).	The ESSID identifies the radio network and differentiates between different radio networks. All terminals on the same network, as well as the access points in your facility, must have the same ESSID. Ask your System Administrator for the correct ESSID number of your network.
Show on Assoc. Screen	Displays the ESSID name that the terminal is trying to associate with in the *Service Connection Process* screen.
Internet Protocol (IP) address.	Each SPT 184x terminal requires a unique internet address (IP address). This address can be administered and entered manually through the terminal, or administered and allocated by a server on the network, using DHCP.
DNS	The IP address of a server containing a database of host names and their associated IP addresses so that when a host name is used, it can be resolved into its IP address.

4. Tap the *Radio Config* button to set the radio configuration parameters.
5. Enter your Radio Config password then tap *OK*.

Note: *For first time users, the default password is* Symbol.

6. The Radio Configuration screen appears.



PwrMode The power-saving level of the terminal. Power Mode 5 uses the least power and is the recommended configuration.

Diversity Determines whether the radio firmware attempts to use one or two antenna ports for communications. It is important to match this setting with the actual number of antennas in use.

If set to “Both”, the radio firmware attempts to use both antenna ports for communications.

Both is the default and provides the best chance of a clear signal.

Preamble Approximately 8 bytes of the packet header generated by the Access Point and is attached to the packet prior to transmission. Preamble length is transmission data rate dependent. The *Short* preamble is 50% shorter than *Long* preamble.

Both the SPT 1846 and Access Point need to be set to the same preamble to associate.

Intl Roaming Enables the adapter to roam and associate to Access Points with country codes other than the United States.

Password Displays the current password. To change the password, tap the *Edit* button.

Encryption Tap to select encryption type (Open System, 40-bit Shared Key, 128-bit Shared Key or Kerberos), an efficient method of preventing data theft and improving data security.

40-bit encryption: Requires a 10 Hex digit Encryption key.

128-bit encryption: Requires a 26 Hex digit Encryption key.

Key Index Specifies which key (Key1 - Key 4) to use when transmitting to an access point.

Key1 - Key4 Specific key codes required for encryption.

7. For Open System Configuration:

   Open System does not use any type of encryption algorithm. To configure Open System:

   a. Select *Open System* from the *Encryption* pick list.
   b. Tap *Done* when configuration is complete, then tap *OK* to return to the Spectrum24 Preferences screen.
   c. Tap *Connect* to connect to the network.

8. For WEP Configuration:

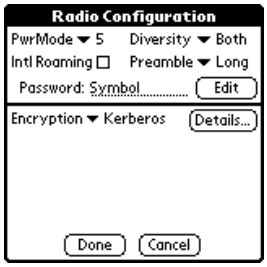
   WEP uses an encryption key to perform a checksum on the original message. To configure WEP:

   a. Select either *40-Bit Shared Key* or *128-Bit Shared Key* from the *Encryption* pick list.
   b. Select Key Index.
   c. Enter the encryption keys in Key1 through Key 4 fields.
   d. Tap *Done* when configuration is complete, then tap *OK* to return to the Spectrum24 Preferences screen.
   e. Tap *Connect* to connect to the network.

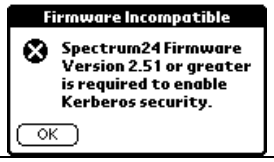
9. For Kerberos Configuration:

   Kerberos uses an authorization key to authenticate users/clients in a wireless network environment and to securely distribute the encryption keys used for both encrypting and decrypting plain text. To configure Kerberos:

   a. Select *Kerberos* from the *Encryption* pick list. The following screen appears:



Note: *If your terminal does not have the correct Spectrum24 firmware, the following message appears. Consult with your system administrator.*



IPR2024-01221 Exhibit 2009 Page 62 of 322

b. Tap the `Details` button. The *Kerberos Details* screen appears.

c. Enter the settings provided by your system administrator.

d. Tap the `Advanced` button. The *Kerberos Advanced* screen appears:

e. Enter the settings provided by your system administrator.

f. Tap the `Done` button to return to the previous screen.

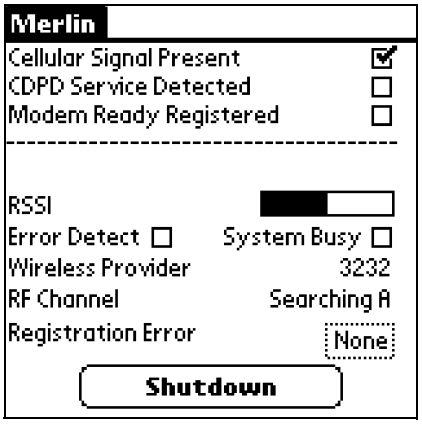
g. Tap the `Done` button to return to the *Spectrum24 Preferences* screen.

h. Tap `Connect` to connect to the network.

Configuring a CDPD WAN Connection (SPT 1833 Only)

Before the SPT 1833 terminal can be used, you need to be activated on a CDPD network. All CDPD identification and address information is entered through the Preferences application on the SPT 1833 terminal. To configure your SPT 1833 terminal for use on a

CDPD network, tap the icon from the Applications Launcher. The main Merlin screen displays:



Setup Wizard

The first time that the Merlin™ Modem Manager software is started the Setup Wizard will display and prompt you through the steps to configure and set up the terminal for operation.

Note: *If this is not the first time you are accessing the Merlin Modem Manager, tap the icon and select Setup Wizard from the Merlin menu.*

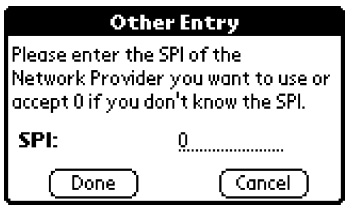
At any time, you can choose to cancel the Setup Wizard and exit back to the Application Launcher by tapping the *Cancel* button. If you do choose to cancel, the Setup Wizard will be displayed the next time that the Modem Manager is selected. It is recommended that once you begin the setup process you continue through to its completion.

IPR2024-01221 Exhibit 2009 Page 64 of 322

1. To begin configuration, tap *Next*. The Network Provider screen displays:

2. Select a Wireless Provider from the pick list:

3. Tap *Other* if you need to enter a Service Provider Interface number representing a different carrier. The following screen displays:

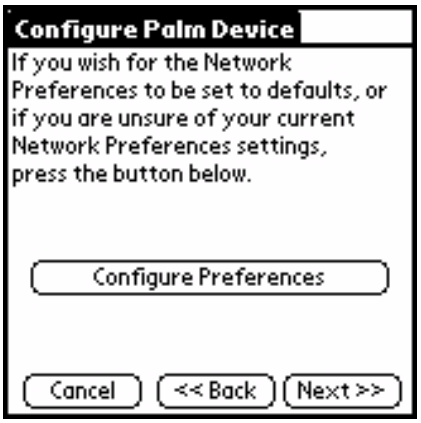


4. Enter the SPI number and tap *Done*.
5. The Network Provider screen reappears. Tap *Next* to continue.

Note: *The Setup Wizard will not proceed until a CDPD carrier selection has been made.*

---

6. The Configure Palm Device screen displays:

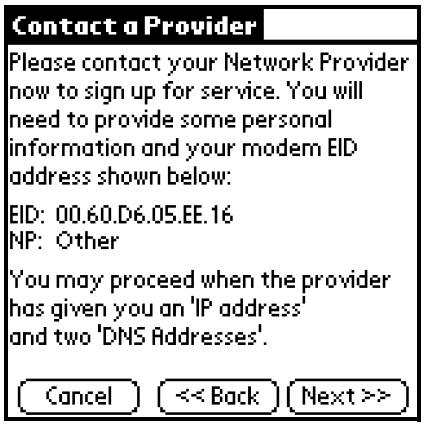


7. Tap the *Configure Preferences* button to configure the terminal with the network library settings that Symbol recommends. A “Palm Configuration Complete” message will display below the *Configure Preferences* button when the process is finished.

Note: *If you are confident that the Network Preferences are correct, you may bypass this step. However, it strongly suggested that you verify preference configuration.*

---

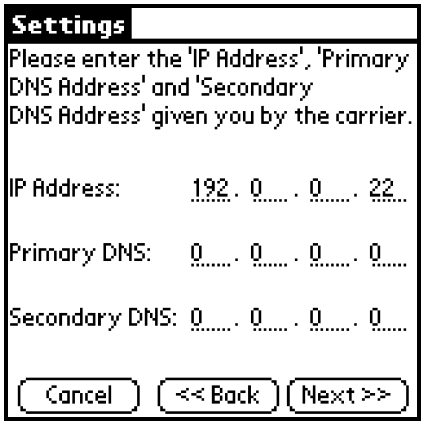
8. Tap *Next* to continue. The Contact A Provider screen displays:



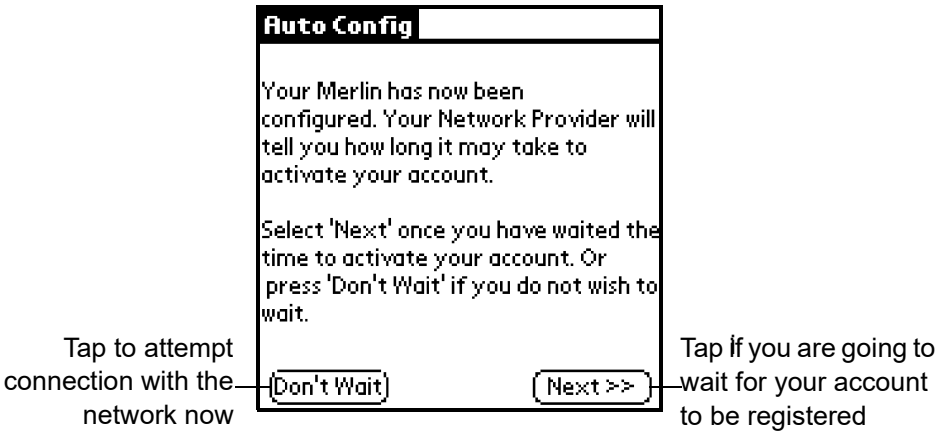
You are informed that you will need an IP address and two DNS addresses from your Network Provider before continuing.

IPR2024-01221 Exhibit 2009 Page 66 of 322

9. Tap *Next* to continue. The Settings screen displays:



10. Enter the required information and tap *Next* to continue. You are prompted to confirm the settings. Verify the information you entered is accurate and tap *Next*.
11. Once the modem has been configured, the Auto Config screen displays:



Tapping either button displays the Check Network screen as the modem attempts to register.

12. When the modem connects successfully and the following screen displays:

IPR2024-01221 Exhibit 2009 Page 68 of 322

Maintenance Screens and Menus

The SPT 1833 terminal includes menu commands to make it fast and easy to configure and check the status of your modem. This section explains the menu commands specific to the Merlin Modem Manager.

Quick Status Screen

The initial Merlin Modem Manager screen displays numerous modem parameters. These include the detection of a CDPD channel and whether the modem has successfully registered. The modem's status is updated every 3 seconds.

Setting	Description
Cellular Signal Present	When checked, it indicates that the modem has identified a cellular signal.
CDPD Service Detected	When checked, it indicates that the modem has identified and is synchronized to a CDPD signal in the area.
Modem Ready Registered	When checked, it indicates that the modem has successfully registered with a CDPD service provider in the coverage area. When the indicator is lit a working data connection exists and can be used by other applications to transmit and receive data. Until this checkbox is selected, the modem can neither transmit nor receive data.
RSSI	Measures Received Signal Strength from the wireless base station. These values range from one to ten bars. The greater the number of bars, the better the performance of the modem.
Error Detect	When checked, it indicates that a large number of errors have been detected by the modem. Under these circumstances the modem may continue to operate but with a severely reduced performance, caused by the increased likelihood of connection retries and data errors when communicating with the wireless base station.
System Busy	When checked, it indicates that the currently detected CDPD system is busy. The modem may continue to operate but at a decreased level of performance.
Wireless Provider	Displays the CDPD channel’s System Provider’s Identifier.

Setting	Description
RF Channel	Shows the CDPD channel that is currently active. If the unit is not registered or is searching for a channel, the value displayed will be either "Searching A" or "Searching B", depending on the state of the modem. Once a channel has been detected, a numeric value for the channel is displayed.
Registration Error	This shows either “None” or a numeric value between 1 and 7. If “None” is displayed there was a successful registration without any errors. If a numeric error code is displayed then an error has occurred. Tap to display details about the error.
Shutdown	Turns the modem off.

Merlin Menu Options

Tapping the Menu key provides a series of menus. Merlin Modem Manager software supports shortcuts to access any of the menus. The following are the available menu options.

Merlin Menu

Disconnect Terminates the active Network session with the modem. If disconnected, the Merlin Modem Manager can no longer perform 3-second updates.

Shutdown Performs the same function as Disconnect.

Terminates the active Network session with the modem and forces the modem to power off. If the modem is shutdown, the Merlin Modem Manager can no longer perform 3-second updates.

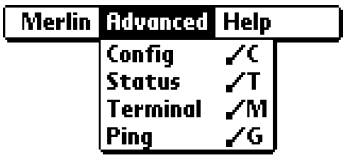
Reconnect Reconnects a network session that has previously been disconnected. When *Reconnect* is selected, the 3-second updates of the software begin again.

IPR2024-01221 Exhibit 2009 Page 70 of 322

Network Prefs Brings the user directly to the Network Preferences screen. Refer to Chapter 13, *Applications: Preferences* for details.

Setup Wizard Launches the Setup Wizard to configure your modem.

Advanced Menu



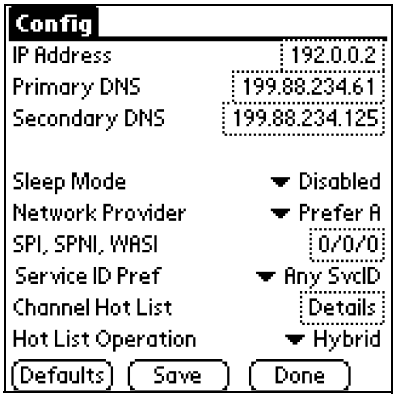
Config (Configuration) Displays the network connection configuration screen, allowing you to make the desired changes or refinements to your network settings. Refer to *Configuration Screen* on page 2-20 for detailed information.

Status Displays the Detailed Status screen, which shows various details about how your modem is connecting to a Network or the Internet. This screen is used for diagnostic purposes and for assisting customer service in diagnosing any problems you may encounter with Network connections. Refer to *Status Screen* on page 2-23 for detailed information.

Terminal Displays the terminal emulator, allowing you to connect to and send AT commands to the modem. Refer to *Terminal Screen* on page 2-25 for detailed information.

Ping Displays the Ping screen, allowing you to send a packet to a particular IP address to determine if it is online. Refer to *Ping Screen* on page 2-26 for detailed information.

Configuration Screen



You can select any of the buttons, or triggers, and modify their settings. Note that none of your changes will become active until you tap the *Save* button. When *Save* is selected, you are provided with the Disconnecting and Reconnecting screens, indicating that the settings are being saved and the modem is being reset with the new settings. The *Save* button also returns you to the Quick Status screen.

IP Address This is the current IP address of the modem. Tap to enter a new IP address.

Primary DNS This is the current Primary DNS address of the modem. Tap to enter a new DNS address.

Secondary DNS This is the current Secondary DNS address of the modem. Tap to enter a new DNS address.

Sleep Mode Allows or disallows the modem to enter the low-power mode. Please note that this feature is only functional when used on Wireless IP networks that support it.

Network Provider Configure the side preferences for the modem. All CDPD systems are categorized into “A” systems or “B” systems. This setting determines which system category (categories). The modem will search for a CDPD system among the two system category choices. Refer to *Network Provider pick list* on page 2-21 for detailed information.

SPI, SPNI, WASI Configures all identification values for a particular system or Wireless IP network. Also called Service ID parameters.

IPR2024-01221 Exhibit 2009 Page 72 of 322

Service ID Pref Configures the preferences for the service ID parameters. Refer to *Network Provider pick list* on page 2-21 for detailed information.

Channel Hot List Configures a list of channels upon which the modem will attempt to find service. This user-configurable list can contain up to 32 channels, listed in the particular order that you want the modem to use.

Hot List Operation Configures how the Channel Hot List entered is used.

Sleep Mode pick list

Enabled The modem will attempt to enter a low-power mode if it is not required to carry out any communications with a Network. The modem may respond sluggishly to the first communication request when it is required again.

Disabled The modem is not allowed to enter sleep mode.

Network Provider pick list

A only The modem will search for a CDPD system on the "A" side only. For users who do not roam, this selection can sometimes speed the registration process, as the modem does not have to look on the "B" side as well before it can register.

B only Same as "A only" except on the "B" side.

Prefer A The modem will search for a CDPD system on the "A" side first and attempt registration on any system it finds. However, if the modem cannot register on the "A" side, it will then attempt to find service on the "B" side. For users who roam, this setting would be appropriate if the home system was on the "A" side.

Prefer B The modem will search for a CDPD system on the "B" side first and attempt registration on any system it finds. However, if the modem cannot register on the "B" side, it will then attempt to find service on the "A" side. For users who roam, this setting would be appropriate if the home system was on the "B" side.

Service ID Pref pick list

Only SvcID The modem will attempt to detect *only* the system in the Service ID parameters for registration. This is useful in cases where the user wishes to prevent roaming to any other system but his home one.

PreferSvcId The modem will first attempt to register on the system described by the SPI/WASI/SPNI entries. If no system is found, the modem will attempt to register on the remaining available systems in the area. This is useful in situations where the user spends most of his time in one area and occasionally roams. In this case, the user would enter the Network ID parameters that reflect the system he most often will register on. Another situation where this may be useful is in cases where the user has two systems in his area but prefers service on one due to rate advantages, etc.

IgnoreSvcID The modem will attempt to register on any system but that reflected in the Network ID entries. This is useful in situations where the user wishes to block registration on systems in his area that he does not have an agreement with. This may speed up the registration process in some areas.

Any SvcID The SPI/WASI/SPNI entries are ignored. This is the default configuration and ensures that the modem will attempt to register on any valid system that it can find.

IPR2024-01221 Exhibit 2009 Page 74 of 322

Hot List Operation pick list

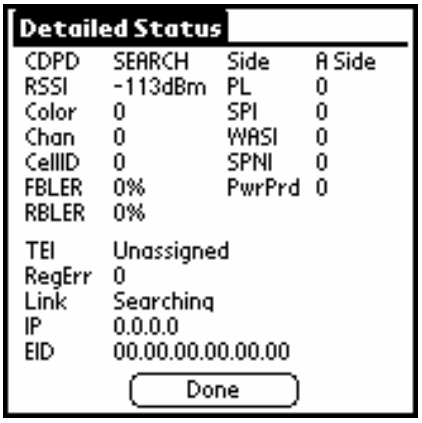
Scan All Ignores the list of channels and searches all of them.

Use List Attempts to search for system on the channels in the list. If service cannot be found on those channels, the user will be unregistered.

Hybrid Attempts to search for systems on the given channels first, and then opens the search up to all channels if none can be found. Given this selection, the modem will also update the channel list automatically with any channel on which it has found service. In this way, the channel list is eventually updated with all CDPD systems in the area.

Status Screen

The Status screen shows modem information which is updated every 3 seconds.This screen was designed to assist support personnel in diagnosing problems with your modem. If a problem develops, the Symbol Support Center (Refer to *Symbol Support Center* on page xv for contact information) will find the information displayed here of importance.



Note: *There are no menus on this screen and no place for user entry. Tapping Done will return you to the Quick Status screen.*

CDPD Entry identifies the current CDPD acquisition state.

SEARCH The modem is searching for service.

ACQ'D	The modem has acquired or synchronized to a CDPD system in the area.

RSSI Entry is the signal strength measured on the current channel. During the SEARCH phase of operation, this value may vary according to the channel on which an attempt will be made. When ACQ'D, the signal strength measurement should remain somewhat constant.

Color	Area color code being transmitted by the CDPD system.
Chan	The current channel. During the SEARCH phase, this value may change according to the channel that is being attempted. Once a channel has been ACQ'D, this should remain relatively constant.
CellID	CDPD Base Station identifier number.
BLER	A measurement of the error rate on the forward channel detected by the modem.
Side	Display of the current Side, given the A/B side distribution of the CDPD channels.
PL	The current Power Level value at which transmission will take place.
SPI	The current CDPD Base Station Service Provider Identifier.
WASI	The current CDPD Base Station Wide Area Service Identifier.
SPNI	The current CDPD Base Station Service Provider Network Identifier.
PwrProd	The Power Product value transmitted by the current CDPD system.
RegErr	A numeric value representing the last registration error encountered. A value of 1-7 indicates an error; a value of 0 indicates no error and a value of 255 indicates no registration attempt was made.
Link	Identifies the current CDPD communication link state. Can be Locked or Searching.

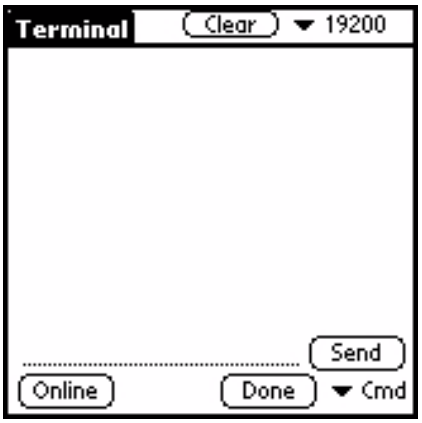
IP is the IP address of the unit.

EID is the Equipment ID of the unit.

IPR2024-01221 Exhibit 2009 Page 76 of 322

Terminal Screen

The Terminal provides an internal terminal emulator for communication with the modem, allowing users to further customize the operation of their modem based on the AT command set.



To begin a terminal session:

1. Tap the *Online* button.

   Going online terminates any active network session and establishes a serial session to the modem.

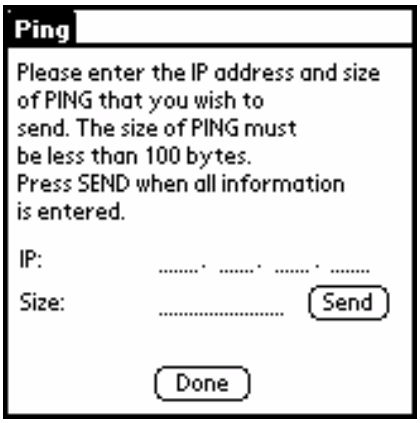
   The screen shows the data that is being received from the modem. As data is received, it is displayed line by line on the screen display. Scroll bars automatically display when the amount of displayed data exceeds the physical size of the SPT 1833 terminal's total display area. You can scroll back and forth through most of the previously displayed data. There is a physical limitation on how much previous data can be scrolled and once this limitation is reached, the oldest data will be overwritten, so the screen buffer always maintains the last 2000 bytes of data from the modem.

2. Tap *Offline* button to close the serial session.
3. Tap *Done* to terminate any serial session and re-establish a network session, returning you to the Quick Status screen.
4. Tap the *Clear* button to clear the current screen buffer.

At the bottom of the screen is a field for entry of an AT command. There are a number of pre-defined commands that are included in the Cmd pick list. When you selection of any of these commands, the modem will automatically send the command, without the need to press *Send* button.

Ping Screen

From this screen you can send a PING request to another network device whose network address you already know. This is useful to verify network connectivity.



As with other PING applications, you must enter the IP address of the other network device in the IP field and then select the desired payload size. Pressing the *Send* button will send the PING. A status line will provide information on whether or not the PING was successful by displaying a "Success" or "Fail" message. There is a 20 second timeout for a response before a "Success" or "Fail" message may display.

Please note that there are some limitations on this PING implementation:

- The size of PING payload is limited to 99 bytes. If a payload of greater than that is entered, a data error message will be displayed.
- The delay to wait for response is fixed at 20 seconds.

After you have viewed this information, press the *OK* button to return to the Quick Status screen.

Help Menu

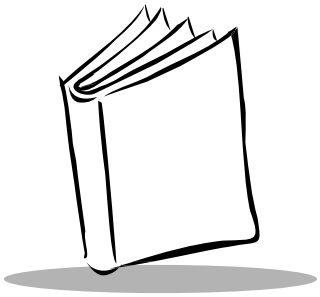
The Help menu shows basic information about your modem, modem driver, and Merlin application.

Modem Info	Displays the Quick Status screen. Refer to 2-17 for details.

IPR2024-01221 Exhibit 2009 Page 78 of 322

Driver Info	Displays the version of the modem driver.
About	Displays version and copyright information for Merlin.

IPR2024-01221 Exhibit 2009 Page 80 of 322



Chapter 3
Working with Your SPT 1800 Terminal

Chapter Contents

Introduction 3-3
Applications 3-3
- Changing the Applications Launcher Display Format 3-4
- Switching Applications 3-4
- Setting Preferences for Applications 3-5
- Displaying Applications by Category 3-5

Writing Graffiti 2 with the Stylus 3-6
- Practicing Graffiti 2 with the Memo Pad 3-6
- General Guidelines for Graffiti 2 Writing 3-7

Using the On-Screen Keyboard 3-15
Using Application Controls 3-17
Using Menus 3-18
- Choosing a Menu 3-18
- Graffiti 2 Menu Commands 3-19
- Edit Menu Commands 3-19

Choosing Fonts 3-20
Using Categories 3-21
- Using Categories in Lists 3-22
- Defining a New Category 3-23
- Renaming Categories 3-25

Attaching Notes 3-26
- Marking Private Entries 3-26

Beaming Information to Other SPT 1800 Terminals 3-27
Scanning with the SPT 1800 3-29

Introduction

This chapter explains how to open applications, use the on-screen keyboard, write with the stylus, perform scanning, and use common features on your SPT 1800 terminal.

Applications

Your SPT 1800 terminal is equipped with a variety of applications which display in the Applications Launcher. Use the Applications Launcher to open any application installed on your SPT 1800 terminal. You can also open the four main applications — Date Book, Address Book, To Do List and Memo Pad — with the buttons on the front panel of your SPT 1800 terminal.

> **Tip:** The buttons on the front panel provide instant access to the selected application. You don't need to turn on your SPT 1800 terminal first.

The Applications Launcher also displays the current time, battery level and application category.

To open applications:

1. Tap the icon on the SPT 1800 terminal screen to open the Applications Launcher.

2. Tap the icon of the application that you want to open. If you have many applications installed on your SPT 1800 terminal, tap the scroll bar to see all of your applications.

   Tip: As a shortcut, write the Graffiti 2 handwriting software character stroke for the first letter of the application you want to use. The Applications Launcher scrolls to

the first application that begins with that letter. Refer to *Writing Graffiti 2 with the Stylus* on page 3-6 for additional information.

Changing the Applications Launcher Display Format

By default the Applications Launcher displays each application as an icon. As an alternative, you can choose to show a list of applications.

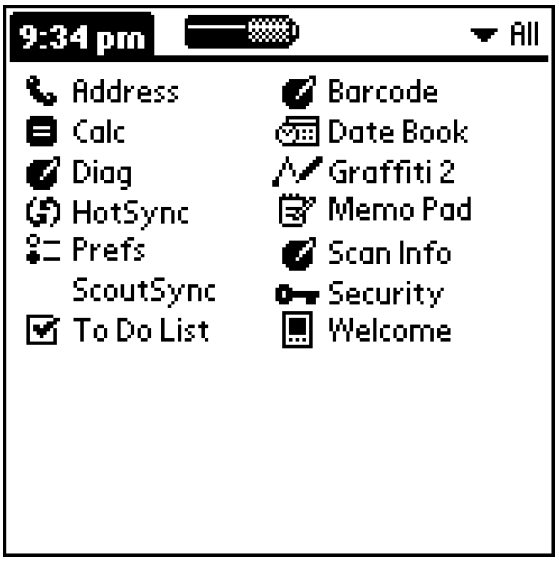
To change the Applications Launcher display:

1. Tap the icon on the SPT 1800 terminal screen to open the Applications Launcher.
2. Tap the icon to open the Applications Launcher menus.
3. Tap Preferences from the Options menu to open the Preferences screen.
4. Tap the View By pick list and select the List option.

Note: *Tap the Remember Last Category checkbox to display only the last category of applications that you have selected.*

---

5. Tap the *OK* button to close the Preferences screen and display the Applications Launcher in list format.



Switching Applications

When working in any application, you can tap the icon or press the buttons on the front panel to switch to any other application. Your SPT 1800 terminal saves your work in the current application and displays it when you return to the current screen.

IPR2024-01221 Exhibit 2009 Page 84 of 322

Setting Preferences for Applications

You can set preferences for individual applications in the Preferences screen. Not all applications have preference settings.

To set preferences for an application:

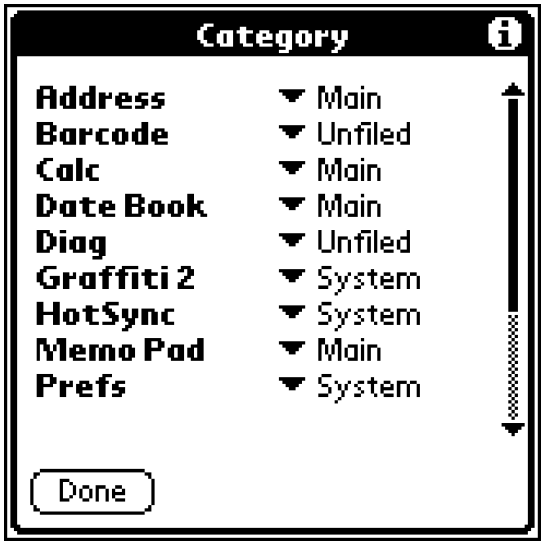
1. Open an application.
2. Tap the Menu icon.
3. From the Options menu, select Preferences.
4. Enter the desired preference settings; then tap *OK*.

Displaying Applications by Category

The category feature enables you to limit the number of applications that display on the screen. You can assign your applications to categories and then choose to display a single category or all your applications.

To display applications by category:

1. Tap the icon on the SPT 1800 terminal screen to open the Applications Launcher.
2. Tap the icon to open the Applications Launcher menus.
3. Tap Category from the App menu to open the Category screen.



4. Tap the pick list next to each application to assign it to a category.

Tip: To create a new category, tap Edit Category from the pick list to open the Edit Categories screen. Tap the *New* button, enter the category name, and then tap the *OK* button to add the category. Tap *OK* to close the Edit Categories screen.

5. Tap the *Done* button to close the Category screen and return to the Applications Launcher.
6. Tap the pick list in the upper-right corner of the screen and select the application category you want to display.

   Tip: You can also tap the icon to scroll through the application categories.

Writing Graffiti 2 with the Stylus

Your SPT 1800 terminal includes Graffiti 2 handwriting software as the primary system for entering text and numbers. Graffiti 2 is a system where simple strokes you write with the stylus are instantly recognized as letters or numbers.

This section explains the basics of Graffiti 2, and how to make strokes in the Graffiti 2 writing area. Your SPT 1800 terminal also includes Giraffe — a game you can use to practice writing Graffiti 2. Refer to *Installing Applications* on page 16-3 for instructions on how to install Giraffe.

Practicing Graffiti 2 with the Memo Pad

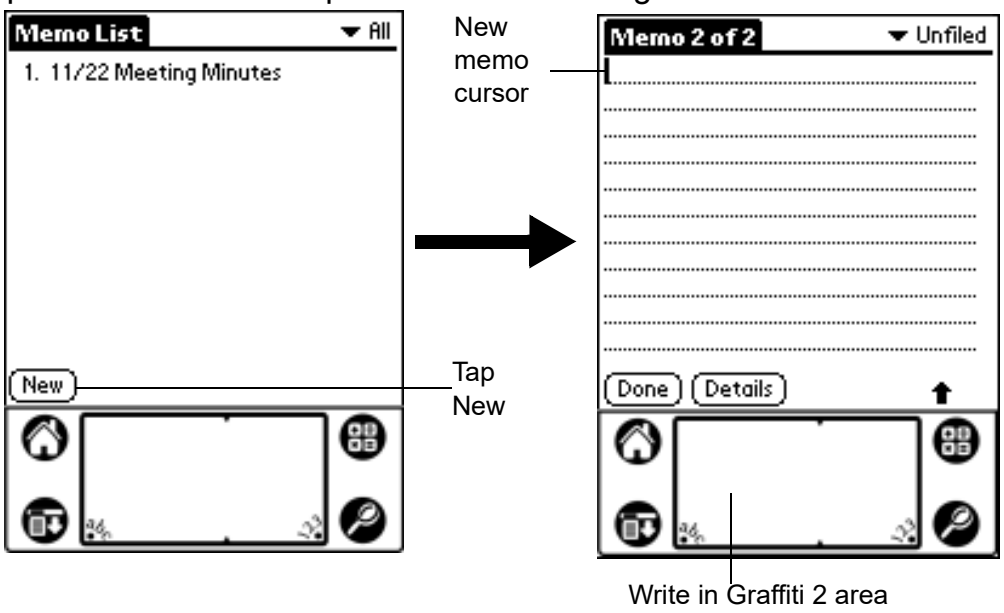
The Memo Pad application is ideal for practicing the Graffiti 2 alphabet. This section explains how to open the Memo Pad and use it to practice Graffiti 2. A complete explanation of the Memo Pad application appears in Chapter 8, *Applications: Memo Pad*.

To open the Memo Pad application:

1. Press the button on the front of your SPT 1800 terminal to open the Memo Pad application.

IPR2024-01221 Exhibit 2009 Page 86 of 322

2. Tap the *New* button to open a new Memo Page.



Note: *A cursor displays in the upper-left corner of the Memo Page to indicate where new text will display.*

General Guidelines for Graffiti 2 Writing

Follow these guidelines to learn and use Graffiti 2 writing strokes successfully:

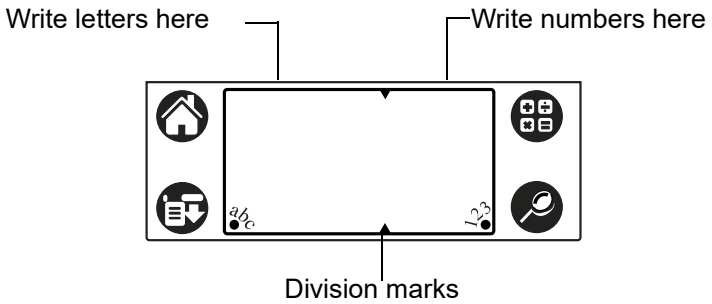
- To achieve 100% accuracy, practice drawing characters exactly as they appear in the tables later in this chapter.

- The heavy dot on each shape indicates where to start the stroke. Some characters have similar shapes, but different starting and ending points. Always start the stroke at the heavy dot. (Do not draw the heavy dot; it is there only as a guideline.)
- The Graffiti 2 writing strokes for letters closely resemble letters of the standard English alphabet, both upper case and lower case. Graffiti 2 includes symbols made with a single stroke and symbols made with multiple strokes.

  For multi-stroke characters, a temporary character is displayed after the first stroke, to show that the stroke was recognized. For example, after the first vertical

stroke of “t”, a temporary “l” is shown. There is a limited time window, during which the second stroke must be drawn. Otherwise the temporary stroke is recorded.

- The text input area is divided into two parts, one for writing lowercase letters and one for writing numbers. The small marks at the top and bottom of the text input area define the division line. To have your terminal recognize letters and numbers, you must begin letter strokes on the left side, and number strokes on the right side of the text input area. Uppercase letters are formed by writing across the division line.



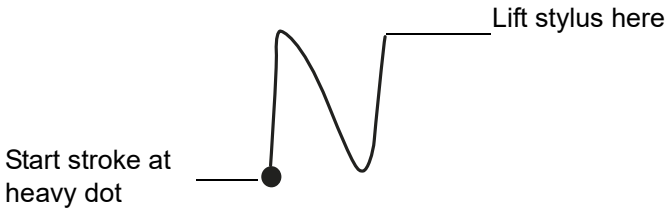
To write Graffiti 2 letters:

1. Tap the screen where you want to write your text (an entry in your Data Book, an e-mail address, etc.).

Note: *A blinking cursor must display onscreen above the Graffiti 2 writing area before you can begin writing text.*

2. Use the *The Graffiti 2 Alphabet* on page 3-10 to find the stroke shape for the letter you want to create. For example, the stroke shown below creates the letter “n.”

Note: *There are two different stroke shapes available for some letters. For these letters, choose the one that’s easiest for you.*



IPR2024-01221 Exhibit 2009 Page 88 of 322

As you'll see later, you use these shapes to create both upper- and lowercase letters.

1. Position the stylus in the appropriate place of the text input area.
2. Start your stroke at the heavy dot, and draw the stroke shape as it displays in the tables.

Note: *Don't try to draw the dot shape itself. The heavy dot is there to show the starting point of the stroke.*

---

3. Lift the stylus from the screen at the end of the stroke shape.
4. Your terminal recognizes your stroke immediately and displays the letter at the insertion point onscreen. As soon as you lift the stylus from the screen, you can begin the stroke for the next character you want to write.

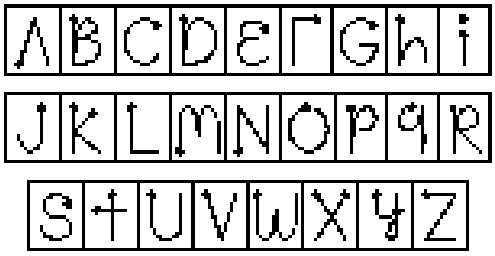
Graffiti 2 Tips

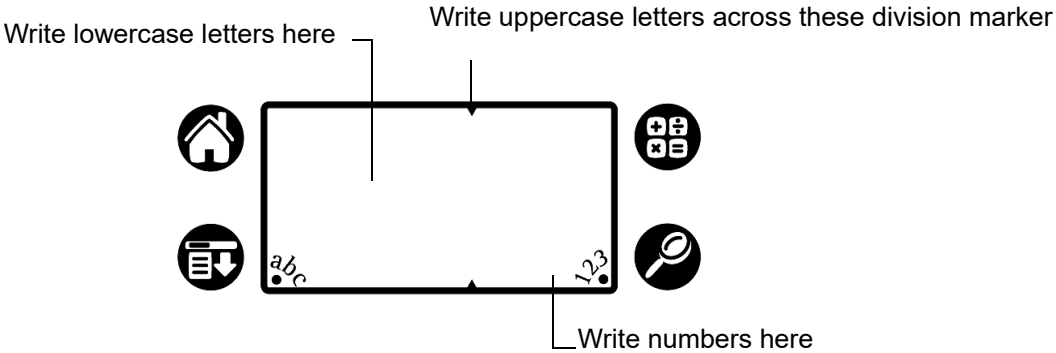
When using Graffiti 2 writing, keep the following tips in mind:

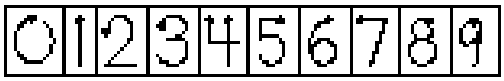
- For greater accuracy, draw letters with large strokes; strokes that nearly fill the text input area are easily interpreted.
- To delete characters, set the insertion point to the right of the character you want to delete, and draw the Backspace stroke (a line from right to left) in the text input area.
- Write at natural speed. Writing too slowly can produce errors.
- Do not write at a slant. Keep vertical strokes parallel to the sides of the text input area.
- When letters and numbers can be written using two different strokes, use the one that's easiest for you.
- Press firmly.

The Graffiti 2 Alphabet

Draw Graffiti 2 letters according to the following alphabet.







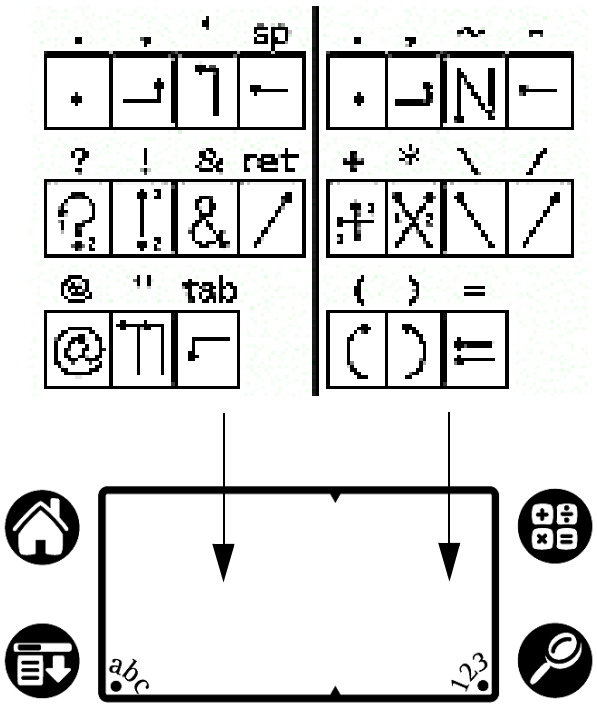
Writing Punctuation Marks and Other Special Characters

Using Graffiti 2 writing, you can create any punctuation symbol and special character available from a standard keyboard.

- The period and comma punctuation marks can be written on either side of the text input area (the letter or number side). Other common punctuation marks can be

IPR2024-01221 Exhibit 2009 Page 90 of 322

written on one side of the text input area according to the chart below (in general, the more frequently used punctuation is on the left side).

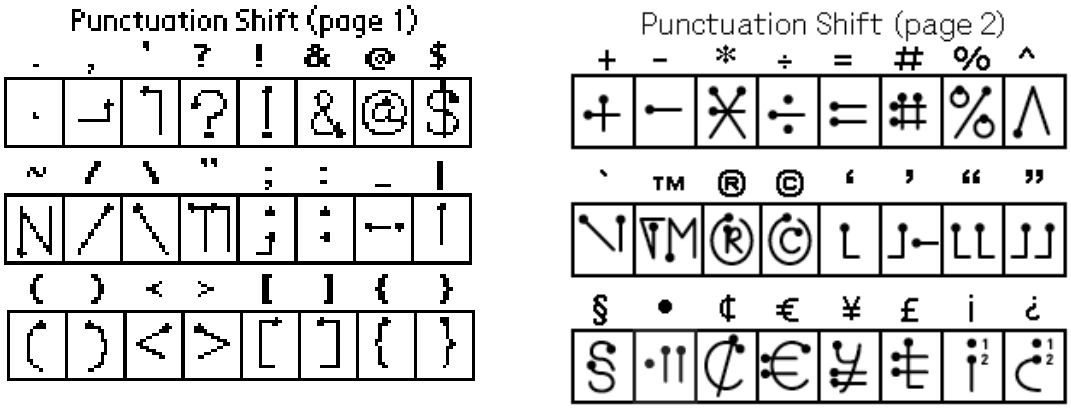


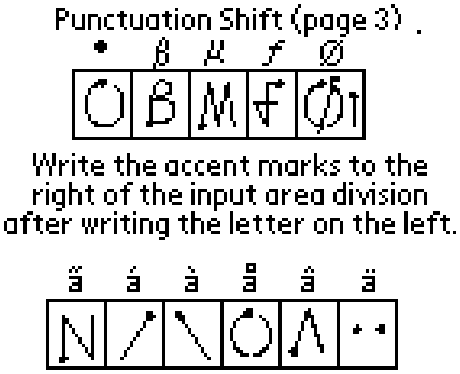
Note that the punctuation characters are can also be entered anywhere on the text input area if you first use the shift character. This requires an additional shift stroke, but you may find it more convenient, since you don’t have to remember on which side of the input area to make the stroke.

- When writing letters with accent marks, first write the letter stroke on the left side (or in the center for uppercase letters) of the input area. Then quickly write the accent stroke on the right side of the input area, as shown in the illustration below.
- Symbols and other special characters can be written using the Shift command. When you make a vertical stroke from the bottom to the top in the text input area, the Shift indicator arrow appears in the lower right corner of the screen. While this arrow is visible, you can make the punctuation shift characters shown in the illustration below. Once the arrow goes away, the punctuation mark appears.

  Tip: Using an additional Shift stroke to finish writing the character (as shown in the demo) is optional, but will make the character appear more quickly.

Draw punctuation, symbols or accent marks using the following strokes:





Tip:Samples of the character strokes are available in the Graffiti 2 Help file. To view the Help file, use the full-screen pen stroke, dragging the stylus from the text input area to the top of the screen. Note that the accented characters appear on a Punctuation Shift screen, but do not use the Shift command. To write uppercase accented characters, write the letter across the division mark, just as you would do with an ordinary letter.

Using the Graffiti 2 Tuner

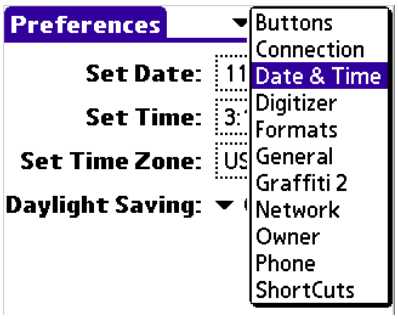
The Graffiti 2 tuner provides alternate strokes for making the T, P, Y, and $ characters. For example, you may want to form the letter “T” by using strokes similar to a space and an “L”. But if this technique is difficult to control, you can turn off this option.

To use the tuner:

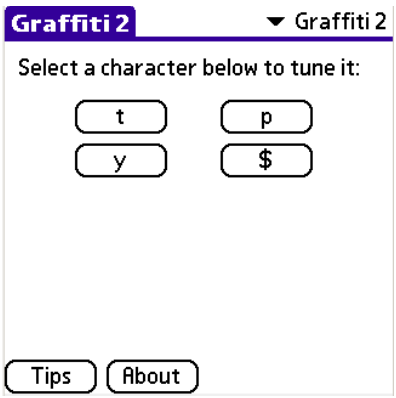
1. Tap the Applications icon.
2. In the pick list in the upper right corner of the screen, tap Main or System.
3. Tap on the Prefs icon.

IPR2024-01221 Exhibit 2009 Page 92 of 322

4. Select Graffiti 2 from the pick list in the upper right corner of the screen.

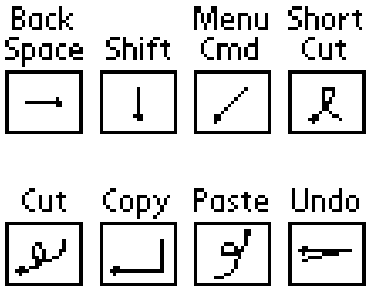


5. Tap on one of the letters available for you to tune:



Using Graffiti 2 Gestures

Gestures are editing commands, such as cut, paste, and the ShortCut command which will be explained in the next section. To use gestures, draw the following strokes:



Using Graffiti 2 ShortCuts

Graffiti 2 ShortCuts let you quickly and easily enter commonly used words or phrases. ShortCuts are similar to the Glossary or Autotext features of some word processors. Graffiti 2 writing comes with several predefined ShortCuts. You can also create your own, for any words, letters, or numbers.

You can create ShortCuts, with up to 45 characters, using the ShortCut preferences. For example, you could create a ShortCut for your name or for the header of a memo. All ShortCuts you create appear on the list in the ShortCut Preferences screen, are available in any of your terminal applications, and are backed up on your computer when you perform a HotSync® operation.

Your terminal includes the following predefined Graffiti 2 ShortCuts for common entries:

- ds—Date stamp
- ts—Time stamp
- dts—Date/time stamp
- me—Meeting
- br—Breakfast
- lu—Lunch
- di—Dinner

To use a ShortCut:

Draw the ShortCut stroke, followed by the ShortCut character or characters.

When you draw the ShortCut stroke, the ShortCut symbol appears at the insertion point.

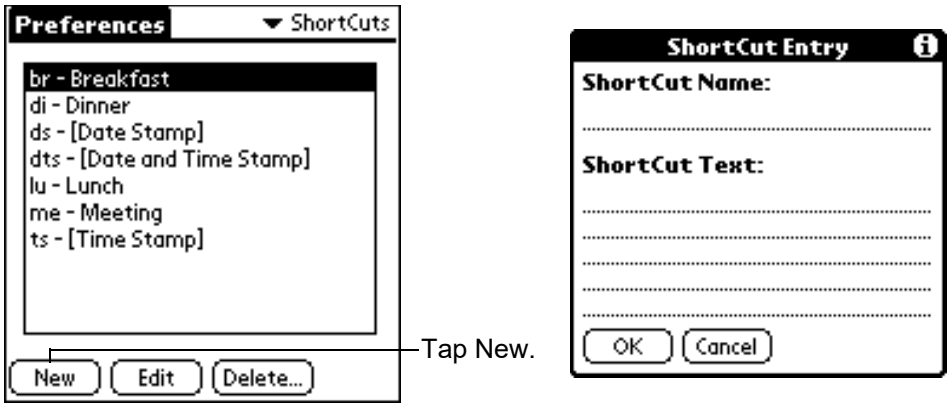
ShortCut	

To create a ShortCut:

1. Tap the Applications icon.
2. Select All or System from the pick list in the upper right corner.
3. Select Prefs from the menu.
4. Tap ShortCuts in the pick list in the upper right corner.
5. Tap New.

IPR2024-01221 Exhibit 2009 Page 94 of 322

6. In the ShortCut Name line of the ShortCut Entry screen, enter the letters you want to use to activate the ShortCut.



7. Tap the ShortCut Text area, then enter the text that will appear when you write the ShortCut characters.
8. You can add a space character after the last word in your ShortCut text, so that a space automatically follows the ShortCut text.
9. Tap OK.

To edit a ShortCut:

1. In the ShortCut Preferences screen, tap the ShortCut you want to edit.
2. Tap Edit.
3. Make the changes you want; then tap OK.

To delete a ShortCut:

1. In the ShortCut Preferences screen, tap the ShortCut you want to delete.
2. Tap Delete; then tap Yes.

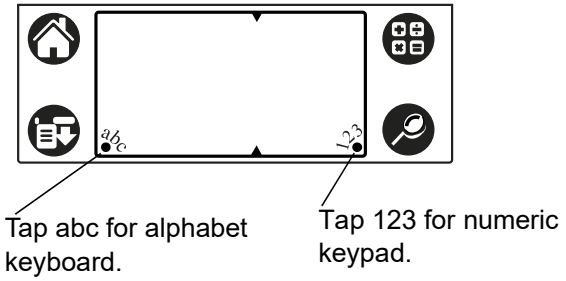
Using the On-Screen Keyboard

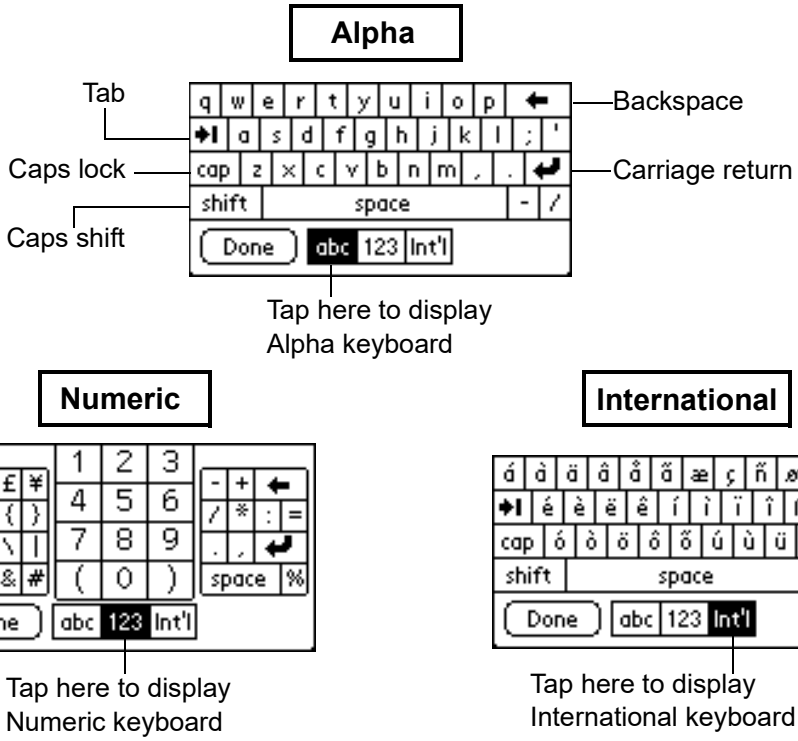
You can activate the on-screen keyboard any time you need to enter text or numbers on your SPT 1800 terminal as an alternative to Graffiti 2. Note that you cannot enter Graffiti 2 characters while using the on-screen keyboard.

To use the on-screen keyboard:

1. Open any SPT 1800 terminal application (such as the Memo Pad application, as described in the previous section).
2. Tap any record name, or tap the *New* button.

3. Tap the left target to open the Alpha keyboard, or tap the right target to open the Numeric keyboard.





4. Tap the characters of the on-screen keyboard to enter text and numbers.

Note: *The on-screen keyboard also includes a dialog for international characters. You can switch among the three dialogs at any time to enter the exact text you need.*

After you finish, tap the *Done* button to close the on-screen keyboard and place the text in your SPT 1800 terminal application.

IPR2024-01221 Exhibit 2009 Page 96 of 322

Using Application Controls

SPT 1800 applications include several types of controls. Once you become familiar with these controls, you can easily select options and navigate through your SPT 1800 terminal applications. The following table lists the controls and how to use them.

☑	**Check box.** When a check mark displays in a check box, the corresponding option is active. If a check box is empty, tap it to insert a check mark. If a check box is checked, tapping it removes the check mark.
	Scroll arrows. Tap the up arrow to display the previous page of information, or tap the down arrow to display the next page. These arrows perform the same function as pressing the upper and lower portions of the scroll button on the front panel of the SPT 1800 terminal.
Icon	**Pick list**.Tap the arrow to display a list of choices, and then tap an item on the list to select it.
OK	**Button**.Tap a button to perform a command. Buttons display with different text depending on their function. In most cases, tapping a button opens or closes a dialog. A dialog is a screen that displays on your SPT 1800 terminal, prompting you to enter information or make settings. A dialog always contains an OK, Cancel or Done button, so you can close the dialog when you are through with it. The on-screen keyboard is an example of a dialog.
	Scroll bar. Drag the slider to scroll the display one line at a time. To scroll to the previous page, tap the arrow at the top of the scroll bar. To scroll to the next page, tap the arrow at the bottom of the scroll bar.

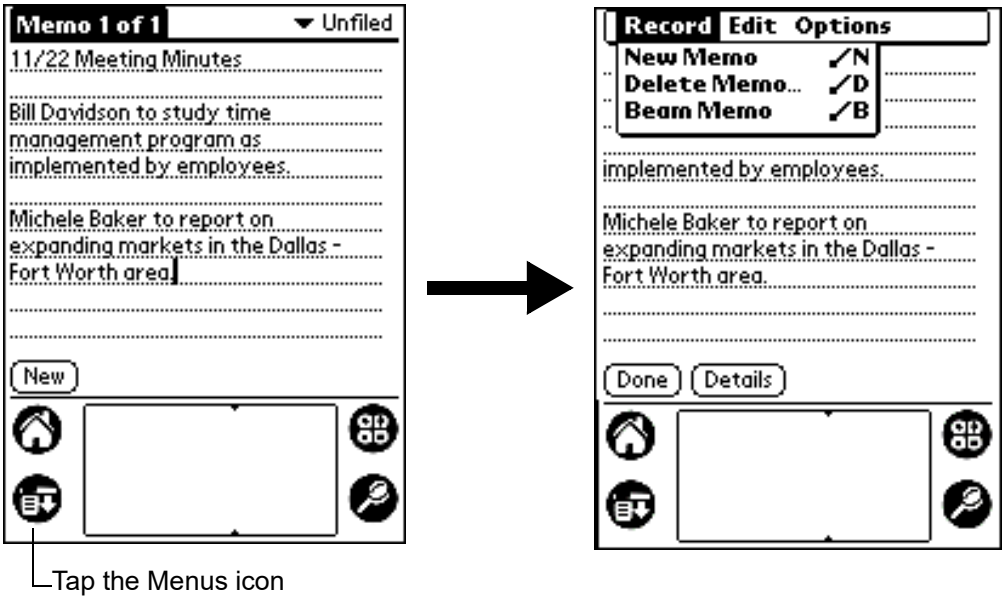
Using Menus

Menus are a special set of commands available in most of your SPT 1800 terminal applications (Memo Pad, Date Book, etc.). The exact commands that display in the menus depend on the application that is currently running on your SPT 1800 terminal.

Some menu commands are common to all SPT 1800 terminal applications. These are described in this section; other menu commands are described in the chapters about each SPT 1800 terminal application.

To activate the menus:

1. Open an SPT 1800 terminal application (such as the Memo Pad, as described earlier in this chapter).
2. Tap the icon to open the menus for the application at the top of the screen.



In this example, three menus are available: Record, Edit and Options. The Record menu is selected and contains the “New Memo,” “Delete Memo” and “Beam Memo” commands.

Choosing a Menu

After you activate the menus for an application, tap the menu that contains the command you want to use.

The menus and menu commands available depend on the application currently running on your SPT 1800 terminal, and vary depending on *which part* of the application is currently

IPR2024-01221 Exhibit 2009 Page 98 of 322

on the screen. Using the Memo Pad application as an example, the menus are different for the Memo List screen and the Memo screen.

Graffiti 2 Menu Commands

Most menu commands have Graffiti 2“Command stroke” equivalents — similar to keyboard commands on computers. The command letters display on the right side of the menu commands.

To use the Graffiti 2 menu commands, draw the Command stroke followed by the corresponding command letter.

Command	

When you draw the Command stroke, the Command Bar displays just above the Graffiti 2 writing area to indicate that you are in Command mode. The command bar is displayed for approximately 4 seconds.

Tap an icon that represents the command you want, or enter the shortcut for the command in the input text area below the Command toolbar. For example, to choose Select All in the Edit menu, draw the command stroke in the text area to display the Command toolbar; then draw the letter S. Note that if you wait more than three seconds to draw the shortcut letter, you’ll have to redraw the command stroke to redisplay the Command toolbar.

Note: *You do not have to tap the icon or access the menus when you use the Graffiti 2 menu commands. However, since the Command mode is active for approximately four seconds, you must write the letter character immediately to activate the menu command.*

Edit Menu Commands

The Edit menu is available with any screen where you enter or edit text. In general, the Edit Menu commands available in the Edit menu apply to text that you *select* in an application.

To select text in an application:

1. Tap the beginning of the text that you want to select.
2. Drag the stylus over the text to highlight it (in black).

Note: *You can drag across the text to select additional words, or drag down to select a group of lines.*

The following commands may display in an Edit menu:

Undo	Reverses the action of the *last edit* command. For example, if you used the Cut command to remove text, the Undo command replaces the text you removed.
Cut	Removes the selected text and stores it temporarily in the memory of your SPT 1800 terminal. You can paste the cut text into another area of the application or into a different application.
Copy	Copies the selected text and stores it temporarily in the memory of your SPT 1800 terminal. You can paste the copied text into another area of the application or into a different application.
Paste	Inserts the text that you cut or copied at the selected point in your SPT 1800 terminal application. The Paste command replaces any selected text. If you did not previously cut or copy text, the Paste command does nothing.
Select All	Selects all of the text on the current record or screen. This enables you to cut or copy all of the text and paste it elsewhere.
Keyboard	Opens the on-screen keyboard. When you finish with the on-screen keyboard, tap the Done button.
Graffiti 2 Help	Opens the dialogs that show the Graffiti 2 character strokes. Use this command any time you forget a stroke for a particular character.

Choosing Fonts

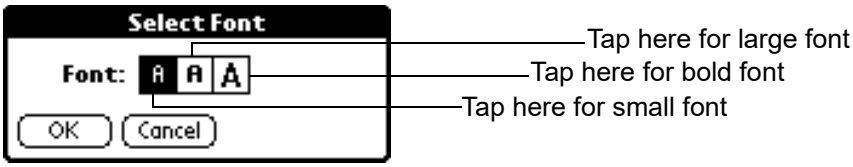
In most of your SPT 1800 terminal applications, you can change the font style to make the text on the screen easier to read. You can even choose a different font style for each application that supports this feature.

IPR2024-01221 Exhibit 2009 Page 100 of 322

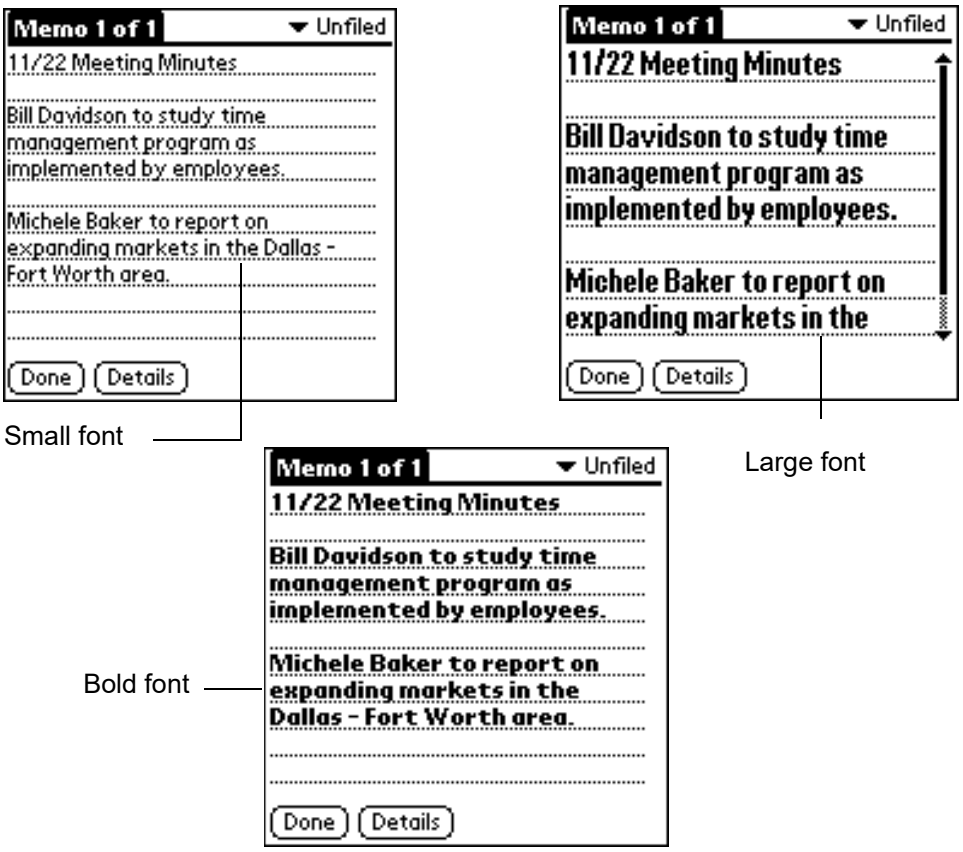
Note: *The Expense application does not support changing fonts.*

To change the font style:

1. Open a SPT 1800 terminal application.
2. Tap the icon to open the menus at the top of the screen.
3. Tap Font from the Options menu to open the Select Font screen.



4. Tap the font style you want to use.
5. Tap the *OK* button to close the screen and return to the application with the new font style.



Using Categories

Categories can help you group Address entries, To Do items, Memos, and Expense application records for easy review. You cannot, however, assign categories to Date Book events.

When you first create an entry, it is automatically assigned to the currently displayed category. For example, if a record is created while the Personal category is displayed, the record is assigned to the Personal category. If a record is created while the All category is displayed, it will be designated as “Unfiled,” which means it does not belong to any particular category. You can leave an entry as Unfiled or assign it to a category at any time. Either way, the entry is always available until you delete it. The category you choose is used only for sorting and reviewing records, and does not affect the actual contents of the record.

Note: *The use of categories is optional. You do not need to assign categories to use SPT 1800 terminal applications.*

To assign a category to an entry:

1. Tap a To Do item, Memo, Expense record or an Address Book entry.
2. Tap the *Details* button to open the Details screen (for an Address Book entry, you then tap the *Edit* button).
3. Tap the Category pick list to display a list of available categories.

4. Tap the category that you want to assign to the entry.
5. Tap the *OK* button to close the Details screen and activate your setting.

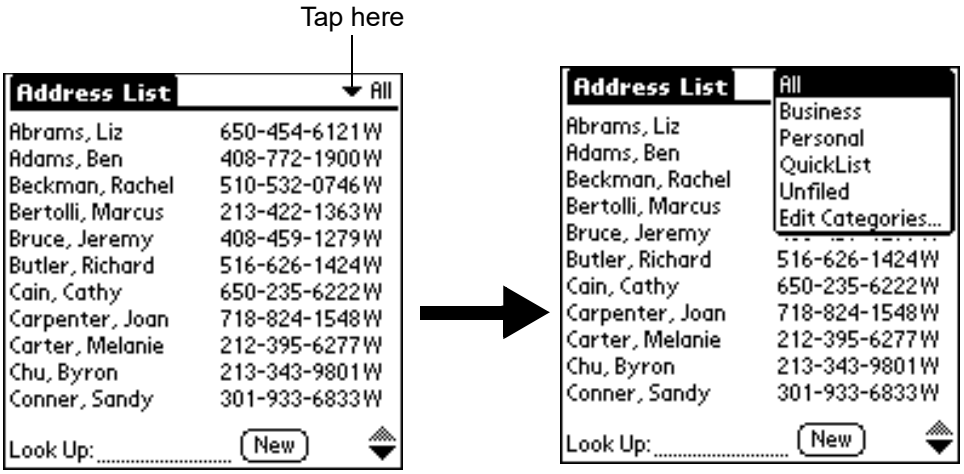
Using Categories in Lists

After you assign categories to your entries, you can easily display lists of your entries by category.

IPR2024-01221 Exhibit 2009 Page 102 of 322

To use categories in a List screen:

1. Tap the category pick list in the upper-right corner of the List screen.



2. Tap the category of entries that you want to view. The List screen changes to show only the records filed in that selected category.
3. Repeat the previous steps, and tap All in the category pick list to restore the list of all Address Book entries.

   Tip: Pressing the application button on the front panel of the SPT 1800 terminal toggles through the available categories.

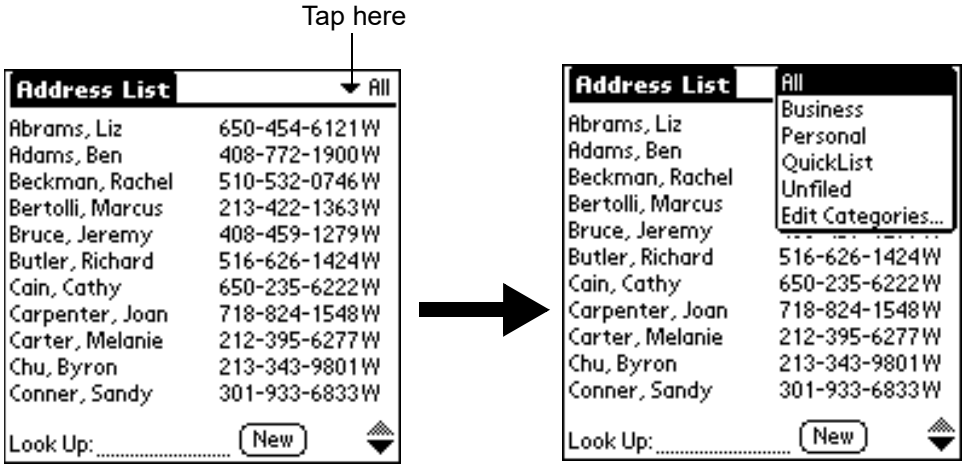
Defining a New Category

Your SPT 1800 terminal comes with two default categories: Business and Personal. In addition, the Address Book contains the QuickList category, designed as a “quick reference” of commonly used names, addresses and phone numbers (such as doctor, lawyer, etc.).

You can change the names of these default categories, or add new categories to suit your needs. You can define up to 15 categories for each application.

To define a new Address Book category:

1. Tap the category pick list in the upper-right corner of the screen.



2. Tap the Edit Categories item to open the Edit Categories screen.

3. Tap the *New* button to open another Edit Categories screen.

4. Enter the name of the new category, and tap the *OK* button to close the Edit Categories screen.
5. Tap the *OK* button to close the first Edit Categories screen and view your new category in the pick list.

IPR2024-01221 Exhibit 2009 Page 104 of 322

Note: *You can edit any of your records and file them in the new categories as appropriate.*

Renaming Categories

You can also use the Edit Categories screen to change the names of any existing category.

To change the name of an Address Book category:

1. Tap the category pick list in the upper-right corner of the screen.
2. Tap the Edit Categories item to open the Edit Categories screen.

3. Tap the category that you want to rename, then tap the *Rename* button to open another Edit Categories screen.

4. Enter the new name that you want to assign to the category, and tap the *OK* button to close the Edit Categories screen.
5. Tap the *OK* button to close the first Edit Categories screen and view the new name in the pick list.

Note: *You can "merge" two or more Categories by assigning them the same name. For example, if you change the name of the "Personal" category to the name "Business," all entries formerly in the Personal category display in the Business category.*

Attaching Notes

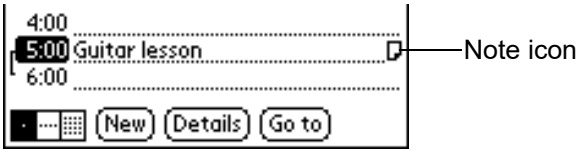
SPT 1800 terminal applications (except the Memo Pad) enable you to attach a note to an entry. A note is anything that you want to write, and can be up to several thousand characters long. For example, if you have an appointment in the Date Book application, you could attach a note with directions to the location.

To attach a note to an entry:

1. Display the entry where you want to add a note.
2. Tap the *Details* button to open the Details screen.

Note: *In the Address Book only, the Edit button is used.*

3. Tap the *Note* button to open the Note screen.
4. Write Graffiti 2 character strokes or the on-screen keyboard for the text you want to appear in the note. Use the Carriage Return stroke to move down to new lines in the note.
5. Tap the *Done* button to close the note and return to the application screen. A note icon displays at the right side of any item that has a note attached. To review or edit a note, tap the icon. To delete a note, tap the icon, Delete, and then Yes to confirm.



Marking Private Entries

In SPT 1800 terminal applications you can mark individual entries as Private. Private entries remain visible and accessible until you change the Security setting to hide all Private entries. Refer to *Chapter 14, Applications: Security* for complete information about how to activate and use the SPT 1800 terminal Security settings.

To mark an entry as Private:

1. Display the entry that you want to mark as Private.
2. Tap the *Details* button to open the Details screen.
3. Select the Private check box to insert a check mark and mark the entry as Private.

IPR2024-01221 Exhibit 2009 Page 106 of 322

The Private Records screen displays:

Beaming Information to Other SPT 1800 Terminals

Your SPT 1800 terminal is equipped with an IR (infrared) port that can “beam” information to other compatible printers and terminals. The IR port is located on the back of the terminal. Refer to *Parts of the SPT 1800* on page 1-4 for the exact location of the IR port.

Note: *If you are using a device other than an SPT 1800 terminal, confirm that your device includes the required infrared hardware before you use this feature.*

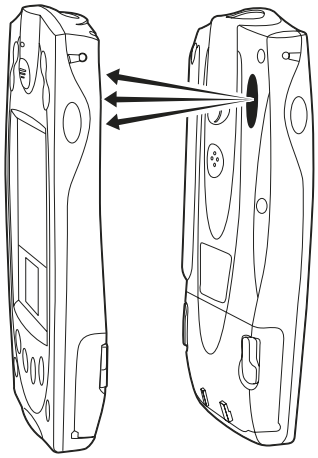
You can beam the following information between SPT 1800 terminals:

- The current Address Book, Date Book, To Do List or Memo Pad entry
- All the Address Book, To Do List or Memo Pad entries in the current category
- A special Address Book entry which you designate as a “business card” (refer to *Beaming Address Entries to Other SPT 1800 Terminals* on page 7-10 for details).
- An application installed in RAM memory.

To beam information:

1. Locate the entry, category, business card or application you want to beam.
2. Tap the icon.
3. Tap the Beam command from the Record menu to open the Beam Status screen.
4. Point the IR port directly at the IR port of the receiving SPT 1800 terminal.

Tip: SPT 1800 terminals transmit data at varying distances up to three ft., depending on lighting conditions when IR is activated. For best results, the IR windows should be aligned and clear of obstacles.



5. Wait for the Beam Status screen to indicate that the transfer is complete before you continue working on your SPT 1800 terminal.

To receive beamed information:

1. Turn on your SPT 1800 terminal.
2. Point the IR port directly at the IR port of the transmitting SPT 1800 terminal to open the Beam Status screen.
3. Tap the *Yes* button to accept the transmission.
4. Wait for the Beam Status screen to indicate that the transfer is complete, then tap the *OK* button to display the new entry.

Note: *Incoming entries are filed under the "Unfiled" category.*

To turn beaming off:

1. Tap the Applications icon, then Prefs.
2. In the pick list in the upper right corner, pick General.

   The Beam Receive pick list gives you the options of On or Off.

IPR2024-01221 Exhibit 2009 Page 108 of 322

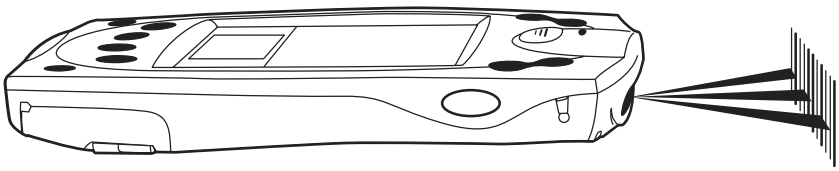
Scanning with the SPT 1800

The SPT 1800 has an integrated laser bar code scanner which, if your unit is configured to use scanning input, allows you to collect data by scanning bar codes. The SPT 1800 decodes the following bar code types:

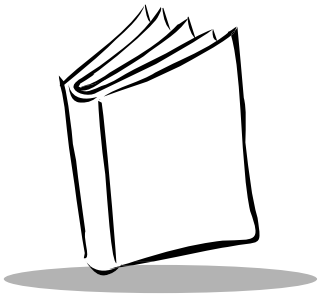
- UPC-A/UPC-E/UPC-E1
- EAN-8/EAN-13
- Bookland EAN
- Code 128
- UCC/EAN-128
- ISBT 128
- Code 39
- Trioptic Code 39
- Code 93
- I 2 of 5
- D 2 of 5
- Codabar
- MSI Plessey.

To scan bar codes with the SPT 1800:

1. Start your scanning application.
2. Aim the scanner at the bar code.
3. Press either the right, left or center scan trigger. Make sure the red scan beam covers the entire bar code. The green scan LED lights and a beep sounds to indicate a successful decode.



IPR2024-01221 Exhibit 2009 Page 110 of 322



Chapter 4
Finding Information With Your SPT 1800 Terminal

Chapter Contents

Introduction 4-3
Using the Find Command 4-3
Using Phone Lookup 4-4
Phone Lookup Tips. 4-5

Introduction

This chapter explains how to locate information on your SPT 1800 terminal with the Find command and the Phone Lookup command.

Using the Find Command

The Find command locates any text that you specify and is available in any SPT 1800 terminal application. You can search for whole words or the beginning letters of a word. The Find command searches all the data on your SPT 1800 terminal and lists which applications contain the text.

For example, suppose you want to find a particular name, but aren't sure where you stored it. The Find command immediately lists all instances of that name and enables you to jump directly to the name.

To use the Find command:

1. Tap the icon from any SPT 1800 terminal application to open the Find screen.

   Tip: If you select text in an application before you tap the *Find* button, the selected text automatically displays in the Find screen.

2. Enter the text that you want to find in your SPT 1800 terminal.

Note: *The Find command is not case-sensitive. In other words, searching for the name "davidson" also finds "Davidson." The Find command also searches the contents of notes.*

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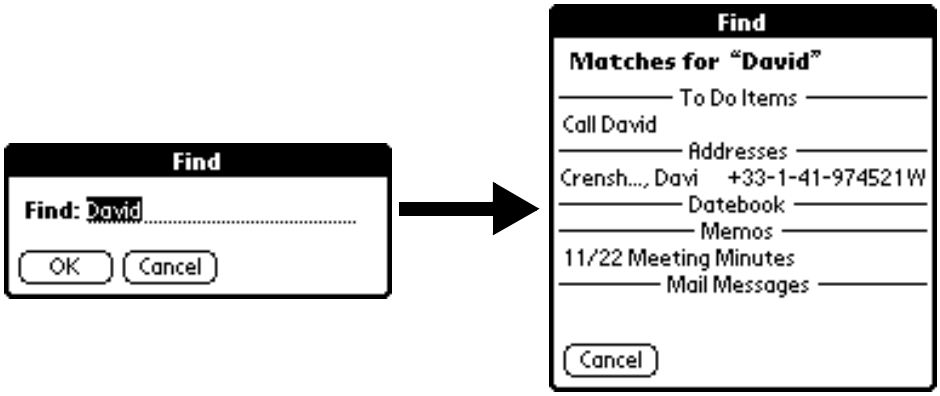
3. Tap the *OK* button to display a list of all instances of the text that you specified.



Note: *As your SPT 1800 terminal searches for the text, you can tap the Stop button to stop the search at any time. For instance, if the entry you want displays before your SPT 1800 terminal finishes the search. To continue the search after you tap Stop, tap the Find More button.*

4. Tap the text that you want to review. The selected entry and its corresponding SPT 1800 terminal application display on the screen.

Using Phone Lookup

In addition to using the Find feature to locate text, you can search for and display phone numbers with the Phone Lookup menu command. After you find a phone number, you can paste it directly into an SPT 1800 terminal application.

For example, if you want to include a phone number in a memo, use the Phone Lookup feature to find the phone number and transfer it directly into the memo.

To use the Phone Lookup command:

1. Display the entry where you want to insert a phone number. This can be an event in the Date Book, a To Do List Item or a memo in the Memo Pad application.

Note: *The Phone Lookup feature is not available in the Address Book and Expense applications.*

2. Tap the icon to open the menus for your application.

IPR2024-01221 Exhibit 2009 Page 114 of 322

3. Tap Phone Lookup from the Options menu to display the Phone Number Lookup screen.

4. Tap the phone number you want to use.

Note: *To find a phone number more quickly, you can enter the first letter of the name you want to find in the Look Up line at the bottom of the screen. The list scrolls to the first name that starts with that letter. You can continue to add letters to narrow your search.*

---

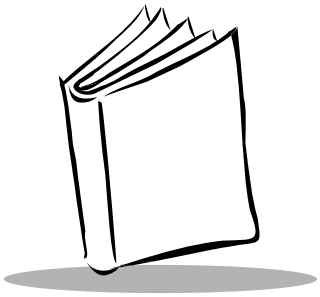
5. Tap the *Add* button to close the Phone Number Lookup screen and paste the name and phone number you selected into the entry selected in step 1.

Phone Lookup Tips

You can also use the Graffiti Command stroke “/L” to activate the Phone Lookup feature.

- You can use Phone Lookup while entering text. For example, to insert the full name and phone number for someone with the last name “Williams,” write the Graffiti characters for “Wi”, then the Phone Lookup Command stroke “/L.”
  Assuming you have only one Address Book entry that begins with “Wi,” your SPT 1800 terminal inserts the full name “Williams” (and the corresponding phone number). If you have more than one name that begins with “Wi,” the Phone Lookup screen displays.
- The Phone Lookup feature also works for selected text. Drag to highlight the text, and then write the Phone Lookup Command stroke “/L.” Your SPT 1800 terminal replaces the selected text and adds the phone number to the name that it finds.

IPR2024-01221 Exhibit 2009 Page 116 of 322



Chapter 5
Applications: Calculator

Chapter Contents

Introduction 5-3
Opening the Calculator 5-3
Using the Calculator Screen 5-3
    Special Calculator Buttons 5-3
Calculator Menu Commands 5-4
    Recent Calculations 5-5

Introduction

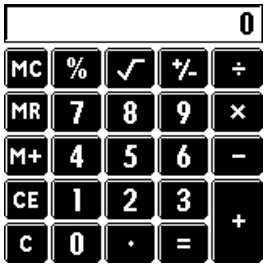
The Calculator enables you to perform basic mathematical calculations. You can also store and retrieve values in the Calculator's memory.

Opening the Calculator

To open the Calculator tap the icon.

Using the Calculator Screen

The Calculator performs general mathematical functions including addition, subtraction, multiplication and division. To use the Calculator screen, tap the Calculator buttons that appear on the screen.



Special Calculator Buttons

The Calculator includes several buttons to help you perform calculations.

Clears the last number you entered. Use this button if you make a mistake while entering a number in the middle of a calculation. This button enables you to re-enter the number without starting the calculation over.

Clears the entire calculation to begin a new calculation.

Toggles the current number between a negative and positive value. If you want to enter a negative number, enter the number first and then press the +/- button.

Places the current number into Memory. Each new number you enter with the M+ button is added to the total already stored in memory. The number that you add can be either a calculated value, or any number you enter by pressing the number buttons. Pressing this button has no effect on the current calculation (or series of calculations); it merely places the value into memory until it is recalled.

Recalls the stored value from memory and inserts it in the current calculation.

Removes any value stored in the Calculator memory.

Calculator Menu Commands

The Calculator supports Copy and Paste commands. You can use these commands to copy a value from the Calculator and paste it into another application on your SPT 1800 terminal. Similarly, you can copy values from other applications on your SPT 1800 terminal, such as Expense, and paste the values into the Calculator. For additional information on the Copy and Paste commands, refer to *Using Menus* on page 3-18.

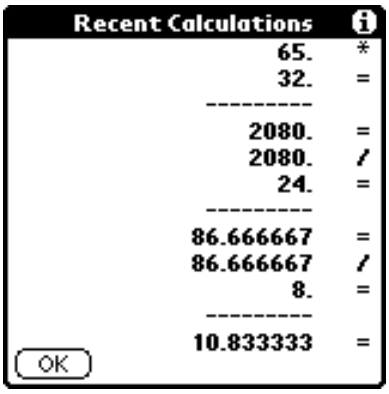
IPR2024-01221 Exhibit 2009 Page 120 of 322

Recent Calculations

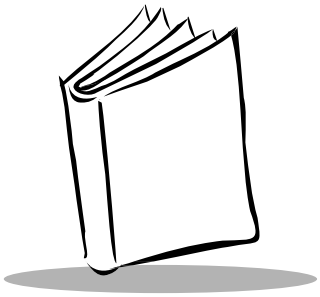
The Recent Calculations command enables you to review the last series of calculations, and is particularly useful for confirming a series of “chain” calculations.

To display the Recent Calculations:

1. Tap the icon to open the Calculator menus.
2. Tap Recent Calculations from the Options menu to display the Recent Calculations screen.



3. When you finish reviewing the screen, tap the *OK* button to close the Recent Calculations screen and return to the Calculator.



Chapter 6
Applications: Date Book

Chapter Contents

Introduction 6-3
Opening the Date Book 6-3
Using the Date Book 6-4
Scheduling an Event. 6-4
Rescheduling an Event. 6-8
Setting an Alarm for an Event. 6-8
Scheduling Repeating Events 6-10
Marking a Private Event 6-12
Deleting an Event 6-12
Changing the Date Book View. 6-13
Working in Week View 6-13
Working in Month View. 6-15
Working in Agenda View 6-16
Date Book Menu Commands. 6-17
Record Menu 6-17
Options Menu 6-19

Introduction

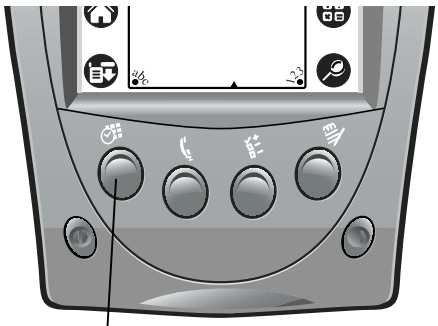
The Date Book enables you to quickly and easily schedule appointments or any kind of activity associated with a time and date.

With the Date Book, you can:

- Enter a description of your appointment and assign it to a specific time and date.
- Schedule events by time and /or date, repeating events such as weekly meetings, and continuous events such as a three day conference.
- Display a chart of your appointments for an entire week. The Week View feature makes it easy to spot any potential scheduling overlaps or conflicts. They can also be displayed by Day, Month, or Agenda.
- Display a monthly calendar to quickly spot days where you have morning, lunch or afternoon appointments.
- Set an alarm to sound prior to the scheduled activity.
- Create reminders for events that are based on a particular date, rather than time of day. Birthdays and anniversaries are easy to track with your SPT 1800 terminal.
- Attach notes to individual events for a description or clarification of the entry in your Date Book.

Opening the Date Book

To open the Date Book, press the Date Book button on the front panel of the SPT 1800 terminal.



Date Book button

Tip: Press the Date Book button repeatedly to cycle through the Day, Week, Month and Agenda Views.

Using the Date Book

Each entry in the Date Book is called an event, any kind of activity that you associate with a day. When the Date Book screen first displays, it shows the current date and a list of times for a normal business day. You can enter a new event on any of the available time lines.

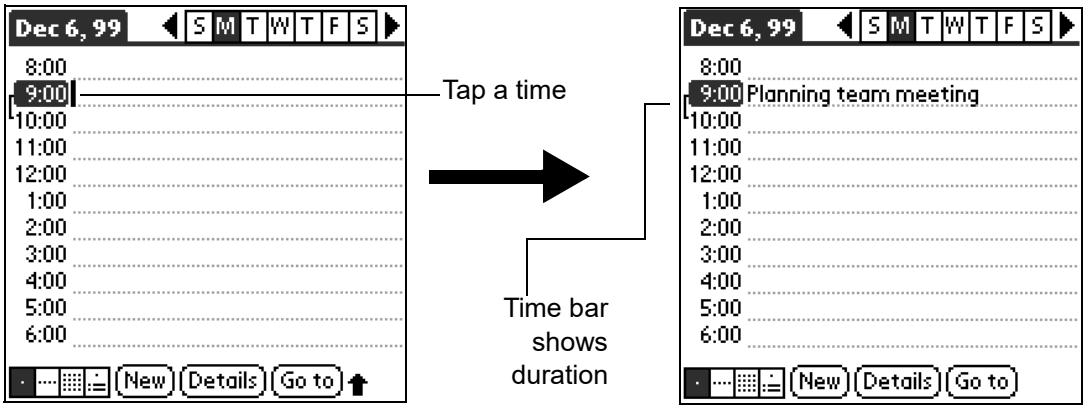
Scheduling an Event

When you create an event, its description displays on the time line, and its duration is automatically set to one hour. These are referred to as timed events. You can easily change the start time and duration for any timed event.

You can also include events in your Date Book that occur on a particular date but have no specific start or end times, such as birthdays, holidays and anniversaries. These are referred to as untimed events. Untimed events display at the top of the Date Book screen with a diamond in the time list. You can have several untimed events on a particular date.

To schedule a timed event for the current day:

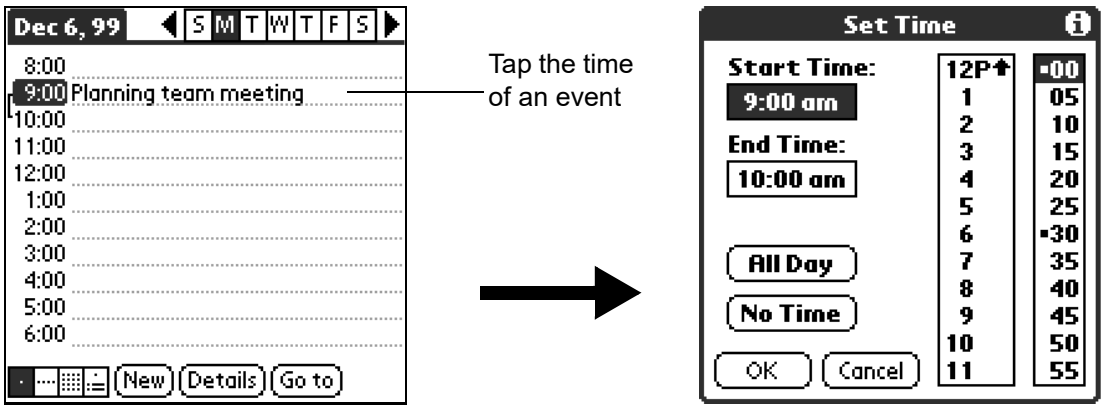
1. Tap the time line that corresponds to your event in the Date Book screen.



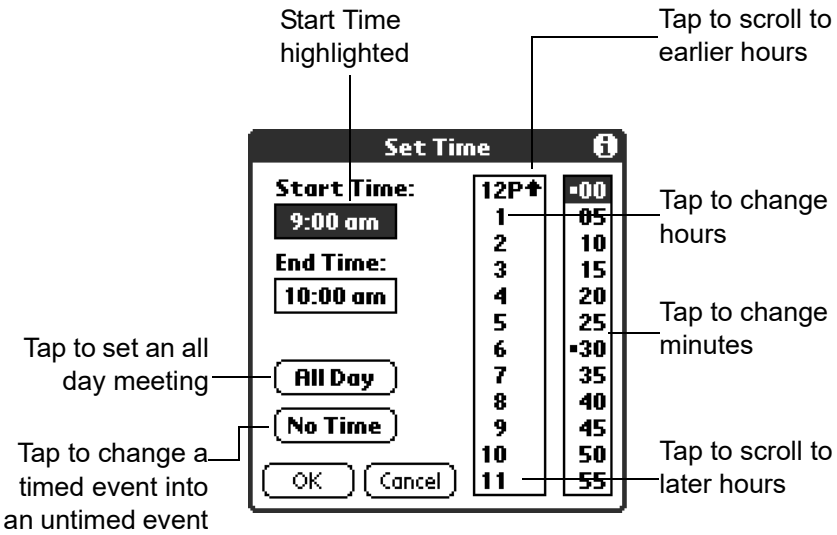
2. Use the stylus to write Graffiti character strokes (or use the on-screen keyboard) to describe your event. You can enter up to 255 characters.
3. If your appointment is longer or shorter than an hour, tap the time of the event to open the Set Time screen. If your appointment is one hour long, skip to step 7.

IPR2024-01221 Exhibit 2009 Page 126 of 322

Note: *You can also open the Set Time screen to select a start time by writing a number on the number side of the Graffiti writing area. No event can be selected.*



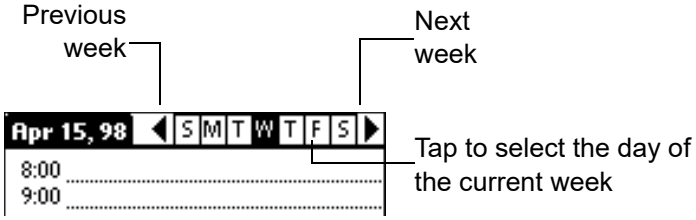
4. Tap the time columns on the right side of the Set Time screen to set the Start Time.



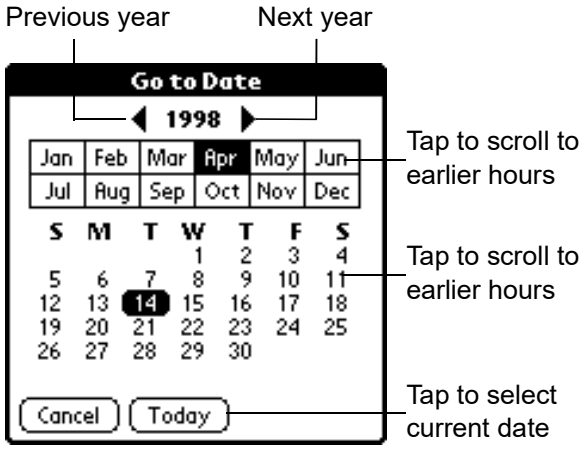
5. Tap the End Time box, and then tap the time columns to set the End Time.
6. Tap the *OK* button to confirm your selection and close the Set Time screen.
7. Tap a blank area of the screen to de-select the event. A vertical line displays next to the time, indicating the duration of the event.

To schedule a timed event for another day:

1. Select the date you want for the event by doing one of the following:
   - Tap the day of the week that you want in the Date Bar at the top of the Date Book screen. If necessary, tap the Previous week or Next week scroll bars to move to another week.



   - Tap the *Go To* button to open the Go to Date screen. Select a date by tapping a year, month and day in the calendar.



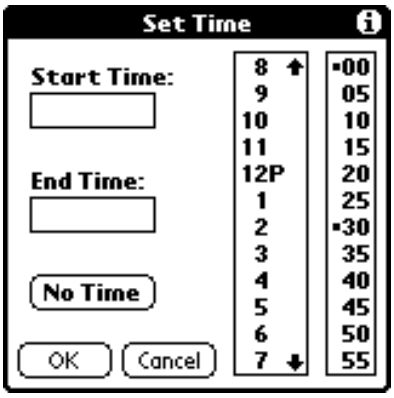
   - Press the scroll button on the front panel of the SPT 1800 terminal to scroll to another day. Press the upper half of the button to move to the previous day or the lower half to move to the next day.
2. After you locate the date, follow the steps described in the previous section, *To schedule a timed event for the current day:*

Note: *You can also add Address Book information to an event using the Phone lookup option. Refer to Using Phone Lookup on page 4-4 for details.*

IPR2024-01221 Exhibit 2009 Page 128 of 322

To schedule an untimed event:

1. Select the date that you want for the event as described in the previous section, *To schedule a timed event for another day:*
2. Tap *New* to open the Set Time screen.



3. Tap *OK*, so that no start or end times are defined for the new event.

Note: *You can also create a new untimed event by making sure no event is selected, then writing letters in the Graffiti writing area.*

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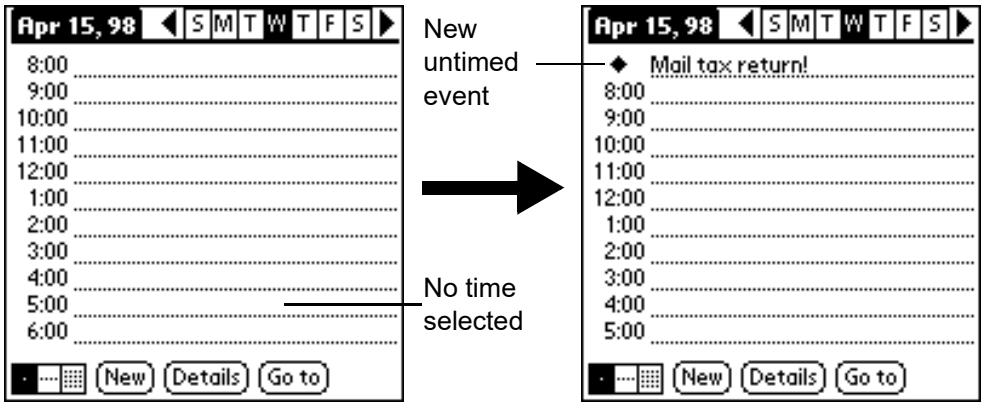
4. Enter a description for the event (which displays at the top of the Date Book screen).



5. Tap a blank area on the screen to de-select the untimed event.

Note: *If you create an event and decide later that there is no particular start or end time, you can easily change it to an untimed event. Tap the time of the event in the Date Book screen, tap the No Time button, then tap the OK button to confirm your selection and close the Set Time screen.*

Rescheduling an Event

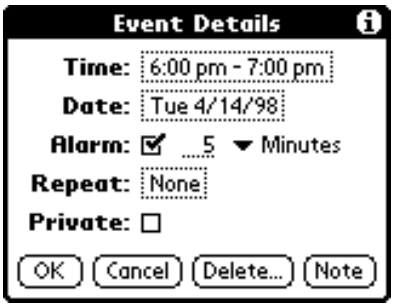
You can easily make changes to your schedule with your SPT 1800 terminal.

To reschedule an event:

1. Tap the event (not the time of the event) you want to reschedule.
2. Tap the *Details* button to open the Event Details screen for that event.
3. To change the time, tap the Time box and select the new time as described earlier in this chapter.
4. To change the date, tap the Date box and select the new date as described earlier in this chapter.
5. Tap the *OK* button to close the Event Details screen and return to the Date Book screen.

Setting an Alarm for an Event

The Alarm setting enables you to set an audible alarm for events in your Date Book. You can set an alarm to sound minutes, hours or days before an event. When you set an alarm, an icon displays to the far right of the event with the alarm. When the alarm tone sounds, a reminder message also displays on the SPT 1800 terminal screen.

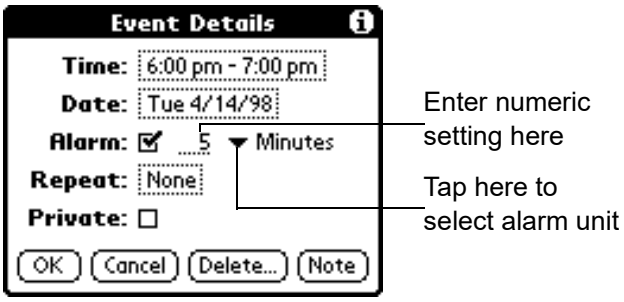


The default Alarm setting is 5 minutes before the time of the event, but you can change this to any number of minutes, hours or days.

IPR2024-01221 Exhibit 2009 Page 130 of 322

To set an alarm for an event:

1. Tap the event to which you want to assign an alarm.
2. Tap the *Details* button to open the Event Details screen for that event.
3. Select the Alarm check box in the Event Details screen to activate the alarm. (Refer to *Options Menu* on page 6-19 for details about setting alarm options.)

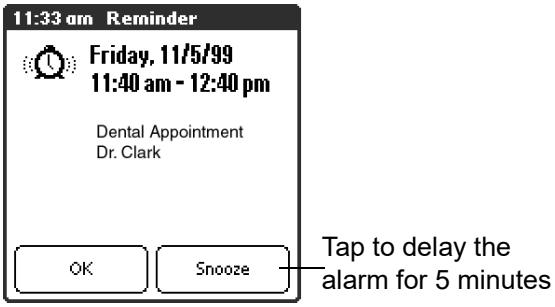


4. Tap the Alarm units pick list to select Minutes, Hours or Days.
5. Select the “5” (default) and enter any number from 0 to 99 (inclusive) as the numeric alarm setting.
6. Tap the *OK* button to close the Event Details screen and return to the Date Book screen.

Note: *You can set a silent alarm for an untimed event. In this case, the alarm triggers at the specified period of minutes, hours or days before midnight (beginning) of the day of the untimed event. No audible alarm sounds for an untimed event; instead, the reminder message displays on the screen of the SPT 1800 terminal.*

For example, you could create a reminder for an untimed event that occurs on February 4th. If the alarm reminder is set for 5 minutes, the alarm reminder displays at 11:55 PM on the night of February 3rd. The reminder remains on the screen until you turn on your SPT 1800 terminal and tap the *OK* button to dismiss it.

Once an alarm has gone off, you can dismiss the alarm for a 5 minute period using the Snooze option.

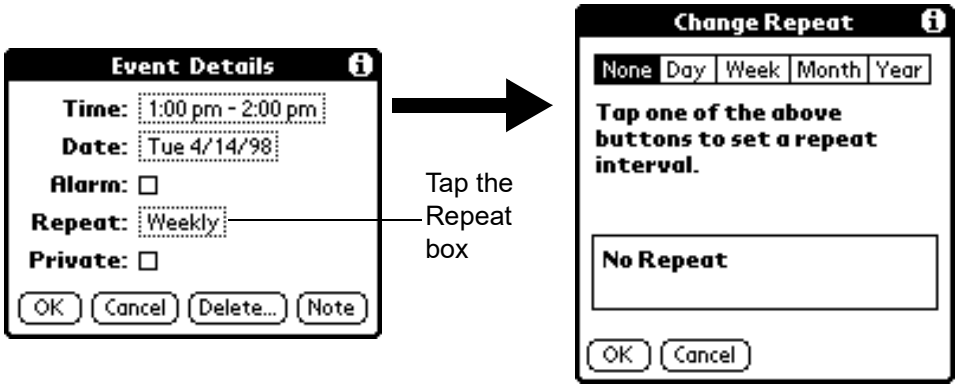


Scheduling Repeating Events

The Repeat function enables you to schedule events that recur at regular intervals. A birthday is a good example of an event that repeats annually. Another example would be a weekly guitar lesson that falls on the same day of the week and the same time of day. After you enter a repeating event, a icon displays to the far right of the event.

To schedule a repeating event:

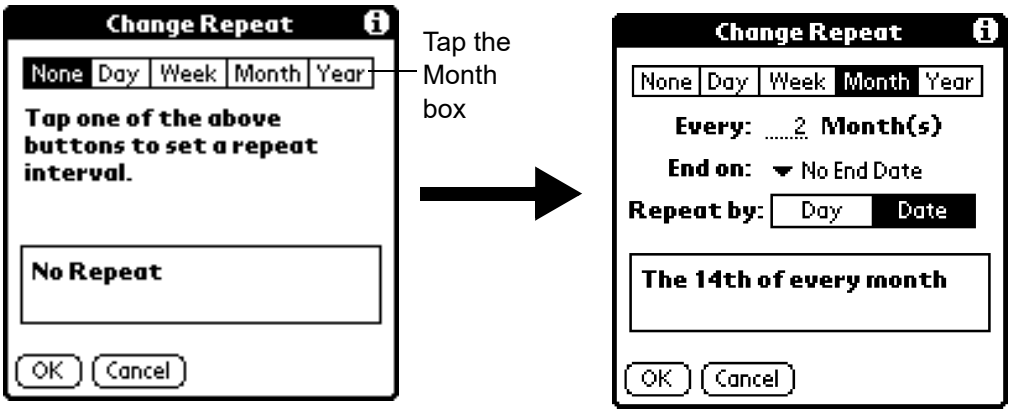
1. Tap anywhere on the text of an event in the Date Book screen.
2. Tap the *Details* button to open the Event Details screen.
3. Tap the Repeat box in the Event Details screen to open the Change Repeat screen.



4. Tap Day, Week, Month or Year in the Change Repeat screen.

IPR2024-01221 Exhibit 2009 Page 132 of 322

5. Enter a number that corresponds to how often you want the event to repeat in the "Every" area. For example, if you select Month and enter the number "2," the event repeats every other month.



6. If you want to specify an ending date for the repeating event, tap the End on pick list and tap Choose Date. Use the Date Picker to select an end date.
7. Tap the *OK* button to close the Change Repeat screen and activate your settings.

Considerations for the Repeat Function

- If you change the start date of a repeating event, your SPT 1800 terminal calculates the number of days you have moved the event, then automatically changes the end date to maintain the duration of the repeating event.
- If you change the *repeat interval* (e.g., daily to weekly) of a repeating event, past occurrences (prior to the day on which you change the setting) are left alone and your SPT 1800 terminal creates a new repeating event.
- If you change the date of an occurrence of a repeating event (e.g., from January 14th to January 15th) and apply the change to all occurrences, the new date becomes the start date of the repeating event. Your SPT 1800 terminal adjusts the end date to maintain the duration of the event.
- If you change other repeat settings (e.g., time, alarm, private) of a repeating event and apply the change to all occurrences, your SPT 1800 terminal creates a new event. The start date of this new event is the day on which the setting is changed. Past occurrences (prior to the day of the change) are left alone and not changed.
- If you make a change to one occurrence of a repeating event (e.g., time), that occurrence no longer shows the Repeat icon.

Marking a Private Event

You can designate a specific event as “private.” When you activate the Security features, your SPT 1800 terminal hides all private entries and you must enter a password to display them on the screen.

To mark an event as private:

1. Tap the event you want to mark as private.
2. Tap the *Details* button to open the Event Details screen for that event.
3. Select the Private check box.
4. Tap the *OK* button to close the Event Details screen and return to the Date Book screen.

Deleting an Event

There are three ways to delete an event from the Date Book application: simply delete the text of the event, use the Menu Commands (described in the *Record Menu* section later in this chapter), or use the Event Details screen.

Note: *If you delete the text of a repeating event, you delete all instances of that event. If you use the Menu Command or the Event Details screen, you can delete one occurrence of the event (as an exception) or all occurrences.*

To delete an event with the Event Details screen:

1. Tap anywhere in the text area of the event to delete.
2. Tap the *Details* button to open the Event Details screen.
3. Tap the *Delete* button to open the Delete Event alert.
4. Tap the *OK* button to confirm you want to delete the event.

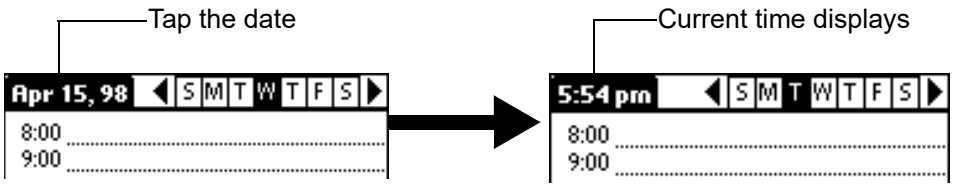
IPR2024-01221 Exhibit 2009 Page 134 of 322

Changing the Date Book View

In addition to displaying the calendar for a specific day, you can also display your Date Book by the week, month, and agenda.

To toggle through the different views, press the Date Book button repeatedly to display the next view or select one of the Date Book View icons.

To display the current time tap the date in the Date Book title bar to display the current time.



Note: *After a few seconds, the title bar reverts to show the date.*

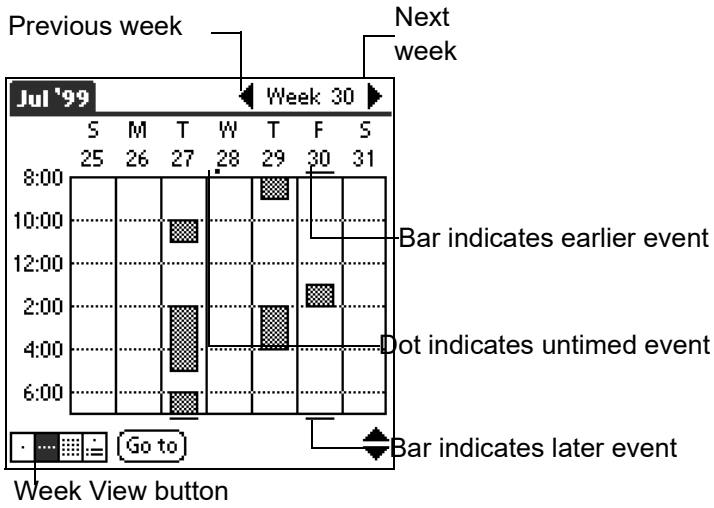
Working in Week View

The Week View shows a chart of your events for an entire week. This view lets you quickly review your appointments and available time slots. The graphical display helps you spot overlaps and conflicts in your schedule.

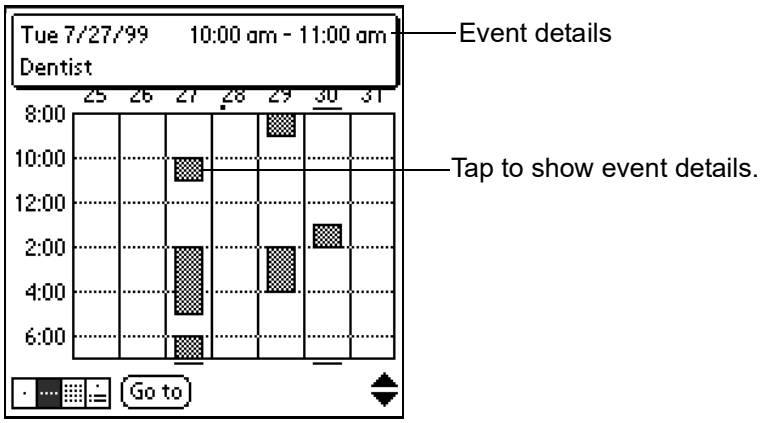
To display the Week View:

1. Tap the Week View button in the Date Book screen.
2. Tap the navigation controls to move forward or backward a week at a time, or to display details of an event.

Note: *The Week View also shows untimed events and events that are before and after the range of times shown.*



3. Tap any of the events to show a description of the event.



Tips for Using Week View

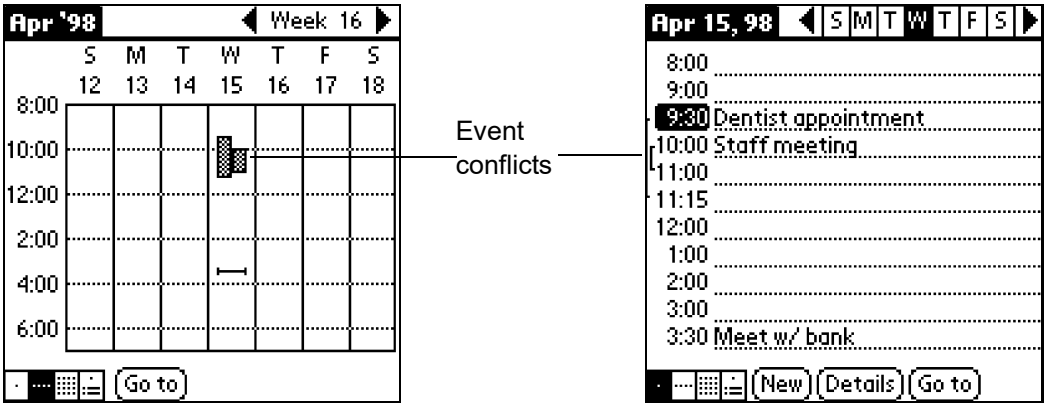
- To reschedule an event, tap and drag the event to a different time or day.
- Tap a blank time on any day to move directly to that day with the Day View screen.
- Tap any of the days and dates that display at the top of the Week View to move directly to that day without selecting an event.
- The Week View shows the time span defined by the Start Time and End Time in the Date Book Preferences settings. If you have an event before or after this time span, a bar displays at the top or bottom of that day's column, and these ⬍ on-screen scroll arrows display if your scheduled events go beyond the displayed time range.

IPR2024-01221 Exhibit 2009 Page 136 of 322

Spotting Event Conflicts in Week View

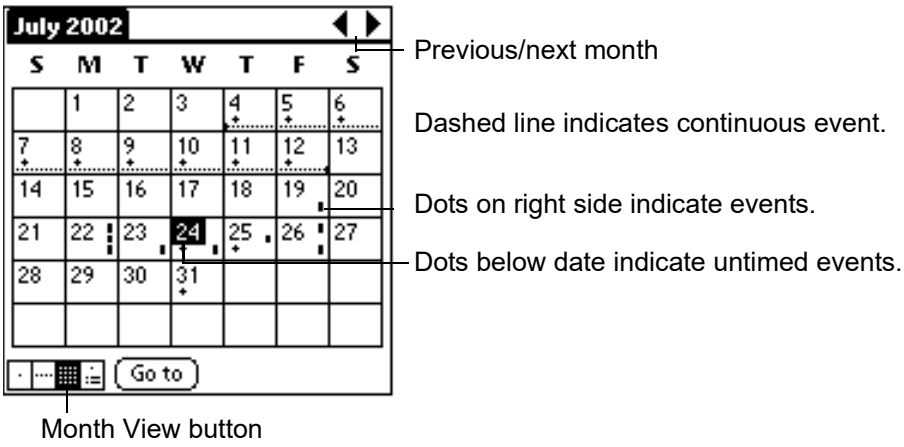
With the ability to define specific start and end times for any event, it's possible to schedule events that overlap (an event that starts before a previous event finishes).

In this case, any event conflict (time overlap) displays in the Week View as overlapping bars. The Day View displays bracketed bars to the left of the conflicting times.



Working in Month View

The Month View screen shows which days have events scheduled. Dots and lines in the Month View indicate events, repeating events and untimed events.



Tips for Using Month View

- Tap any day that displays in the Month View screen to move directly to that day with the Day View screen.

- Tap the arrows at the top to move forward or backward a month.
- Tap the *Go To* button to open the Date Picker and choose a different month.
- When the Month View is on the screen, you can use the scroll button on the front panel of the SPT 1800 terminal to move between months. Press the upper half of the button to display the previous month, or press the lower half to display the next month.

Note: *You can control the dots and lines that display in the Month View. Refer to Options Menu later in this chapter.*

Working in Agenda View

The Agenda view shows your appointments, untimed events, and To Do List items in a single screen. You can also use the Agenda view to check off completed To Do List items.

To display the Agenda View:

1. Tap the Agenda View button in the Date Book screen.
2. Tap the desired event to go to a Day View of any event on the Agenda view screen.

Tips for Using Agenda View

- Tap any appointment while in Agenda view to display the Day View of the appointment.
- Check off completed To Do List items in the Agenda view, or click a description of an item to go directly into the To Do List application.

IPR2024-01221 Exhibit 2009 Page 138 of 322

Date Book Menu Commands

The Date Book includes menu commands to perform common file and editing tasks. This section explains the menu commands that are specific to the Date Book.

Refer to *Using Menus* on page 3-18 for information about menu commands common to all of your SPT 1800 terminal applications.

Record Menu

When you select the Record menu, its commands display on screen.

New Event Creates an event and opens the Set Time screen where you can choose start and end times for the new event. If you do not enter start and end times, it creates a blank untimed event.

Delete Event Opens an alert screen, prompting you to confirm that you want to delete the current event. You must tap an event before you use the Delete Event command. Tap the OK button to delete the event from your SPT 1800 terminal, or tap the Cancel button to close the alert screen and keep the event.

Note: By default your SPT 1800 terminal removes the event from the Date Book, but retains a copy of the event and transfers it to an archive file on your computer the next time you perform a HotSync operation. To remove the event completely, clear the Save archive copy on PC check box.

Attach Note Opens the Note screen, where you can create a Note for the current event.

Delete Note Opens an alert screen, prompting you to confirm that you really want to delete the Note attached to the event. Tap the OK button to delete the Note from the memory of your SPT 1800 terminal, or tap the Cancel button to close the alert screen and return to the Date Book.

Purge Opens an alert screen, prompting you to confirm that you want to purge events older than a certain time period — based on the current date on the internal clock on the SPT 1800 terminal. You can use the Purge command to conserve memory on your SPT 1800 terminal. The default setting for the Purge alert is to “Save archive copy on PC.” This setting removes events from the Date Book, but retains copies and transfers them to an archive file on your computer during the next HotSync operation.

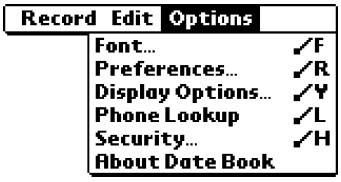
Note: The Purge command also deletes repeating events if they *end* before the date that you activate the Purge command.

Beam Event Beams the current event to another terminal through the IR port. Refer to *Beaming Information to Other SPT 1800 Terminals* on page 3-27 for more information.

IPR2024-01221 Exhibit 2009 Page 140 of 322

Options Menu

When you select the Options menu, its commands display on screen.



Font Opens the Select Font screen where you can choose a different font (text) style for your Date Book entries. Refer to *Choosing Fonts* on page 3-20 for details.

Preferences Enables you to set the range of times that display in the Date Book, and to automatically activate alarms for each event.

- **Start/End Time.** Enables you to define the start and end times for the Date Book screens. If the time slots you select do not fit on one screen, you can tap the ⬍ arrows to scroll up and down.
- **Alarm Preset.** Automatically sets an alarm for each new event. The silent alarm for untimed events is defined by minutes, days or hours before midnight of the date associated with the event.
- **Alarm Sound.** Controls the tone the alarm generates when it sounds (i.e., Alert, Bird, Concert, Phone, etc.)
- **Remind Me.** Defines how many times the alarm sounds. The choices are: Once, Twice, 3 times, 5 times and 10 times.
- **Play Every.** Defines how often the alarm sounds. The choices are every: Minute, 5 minutes, 10 minutes and 30 minutes.

Display Options Allows you to change the Date Book's appearance and which events display.

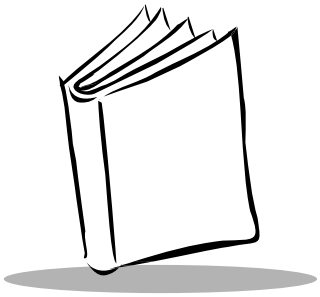
- **Show Time Bars.** Activates the time bars that display in the Day View. The time bars show the duration of an event and illustrate event conflicts.
- **Compress Day View.** Controls how times display in the Day View. When Compress Day View is off, all time slots display. When it is on, start and end times display for each event, but blank time slots toward the bottom of the screen disappear to minimize scrolling.
- **Month View settings.** These check boxes apply to the Month View of the Date Book. You can activate any or all of these settings to show that you have Timed, Untimed or Daily Repeating events in the Month View *only*.

Phone Lookup Activates the Phone Lookup feature. Refer to *Using Phone Lookup* on page 4-4.

Security Opens the Change Security screen where you can change the security of the open memo. Refer to Chapter 14, *Applications: Security* for details.

About Date Book Shows version (revision) information for the Date Book application.

IPR2024-01221 Exhibit 2009 Page 142 of 322



Chapter 7
Applications: Address Book

Chapter Contents

Introduction 7-3
Opening the Address Book. 7-3
Address Book Entries 7-4
Creating an Address Book Entry 7-4
Deleting an Address Book Entry. 7-6
Duplicating an Address Book Entry 7-6
Working with Address Book Entries 7-6
Beaming Address Entries to Other SPT 1800 Terminals 7-10
Address Book Menu Commands 7-11
Record Menu 7-12
Options Menu 7-13

Introduction

The Address Book enables you to keep names, addresses, phone numbers and other information about your personal or business contacts.

With the Address Book, you can:

- Quickly look up or enter names, addresses, phone numbers and other information.
- Enter up to five phone numbers (home, work, fax, car, etc.) or e-mail addresses for each name.
- Define which phone numbers appear in the Address List screen for each Address Book entry.
- Attach a note to each Address Book entry where you can enter additional information about the entry.
- Assign categories to your Address Book entries, so you can quickly sort and view them in logical groups.

Opening the Address Book

To open the Address Book:

1. Press the Address Book button on the front panel of the SPT 1800 terminal to open the Address Book and display a record list.

Tip: Press the Address Book button repeatedly to cycle through the categories in which you have records.

Address Book Entries

An Address Book entry is where you store name and address information about people or businesses. Your SPT 1800 terminal makes it easy to create, edit and delete Address Book entries.

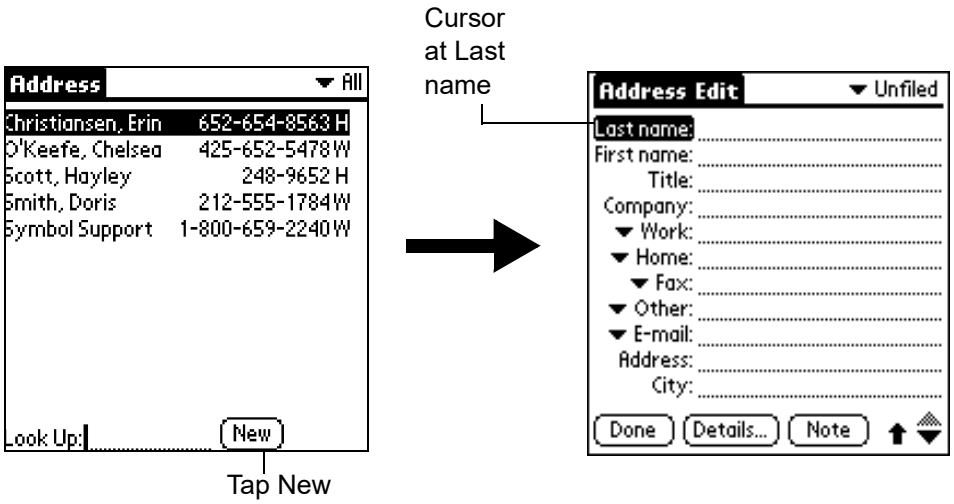
Creating an Address Book Entry

You can create Address Book entries on your SPT 1800 terminal, or use the Symbol Palm Terminal Desktop software to create Address Book entries on your computer and download the entries to your SPT 1800 terminal with the next HotSync operation. Refer to Chapter 10, *Applications: HotSync®* for details.

Note: *The Symbol Palm Terminal Desktop software also has data import capabilities that enable you to load database files into the Address Book on your SPT 1800 terminal. Refer to the online documentation supplied with the Symbol Palm Terminal Desktop software for details.*

To create a new Address Book entry:

1. Press the button on the front of your SPT 1800 terminal to display the Address List screen.
2. Tap the *New* button to display the Address Edit screen.



IPR2024-01221 Exhibit 2009 Page 146 of 322

3. Enter the last name of the person you want to add to your Address Book.

Note: *Your SPT 1800 terminal automatically capitalizes the first letter of each field (except numeric and e-mail fields). You do not have to use the Graffiti capital stroke to capitalize the first letter of the name.*

---

4. Tap the Last Name selected field.
5. Enter the person's information in that field.
6. Repeat steps 4 and 5 to enter the other information that you want to include in this Address Book entry.
7. Tap the ⬍ arrows to move to the next page of information.
8. After you finish entering information, tap the *Done* button to return to the Address List screen.

Note: *You can also attach a note to an entry simply by tapping Note and entering the necessary information.*

Tap Done

Tip: You can create an Address Book entry that always displays at the top of the list by beginning the Last name (or Company name) field with a blank space. For example, you might create an “If Found Call” entry that contains your name and phone number in case you lose your SPT 1800 terminal.

Deleting an Address Book Entry

Use the Menu Commands (described in *Record Menu* on page 7-12) or the Address Entry Details screen to delete an entry.

To delete an entry with the Address Entry Details screen:

1. Tap the Address Book entry that you want to delete to display the Address View screen for that entry.
2. Tap the *Edit* button to display the Address Edit screen.
3. Tap the *Details* button to open the Event Details screen.
4. Tap the *Delete* button to open the Delete Address alert.
5. Tap the *OK* button to confirm you want to delete the entry.

Duplicating an Address Book Entry

You can duplicate existing entries, which can be helpful when you want to enter multiple people from a single organization. When you duplicate an entry, the word *Copy* displays next to the name in the First Name field.

To duplicate an entry:

1. Tap the name you want to duplicate.
2. Perform one of the following:
   - Tap the Address Edit tab at the top of the screen; then tap Duplicate Record in the Record menu.
   - In the Graffiti text area of your device's screen, drag a diagonal line from the lower left to upper right to display the Command toolbar; then write a T in the Graffiti text area to initiate the Duplicate Record command.
3. Edit the record as necessary.

Working with Address Book Entries

Your SPT 1800 terminal enables you to quickly find your Address Book entries, group them by category, and display the entries by name or company name. You can also choose the type of information you want your entries to include and exchange Address Book information with other SPT 1800 terminal users.

IPR2024-01221 Exhibit 2009 Page 148 of 322

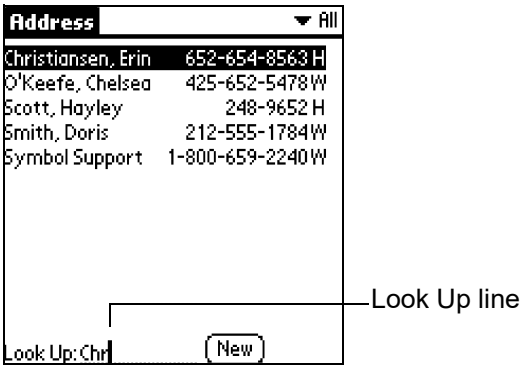
Looking Up Address Book Entries

When working with the Address Book, the scroll button on the front panel of the SPT 1800 terminal makes it easy to navigate among your address entries. In the Address List screen, the scroll button moves up or down an entire screen of address entries. If you hold down the scroll button, you accelerate the scrolling so that it displays every third screen. In the Address View screen, the scroll button moves to the previous or next address entry.

You can also use the Address List Look Up feature to quickly scroll to any of your Address Book entries.

To look up an Address Book entry:

1. Display the Address List screen.
2. Enter the first letter of the name you want to find.



Note: *The letter displays on the Look Up line and the list scrolls to the first entry that begins with that letter. If you write another letter, the list scrolls to the first entry that starts with those two letters. For example, writing an "s" might scroll to "Sands," and writing "sm" might scroll further to "Smith." If you sort the list by company name, the Look Up feature scrolls to the first letter of the company name.*

---

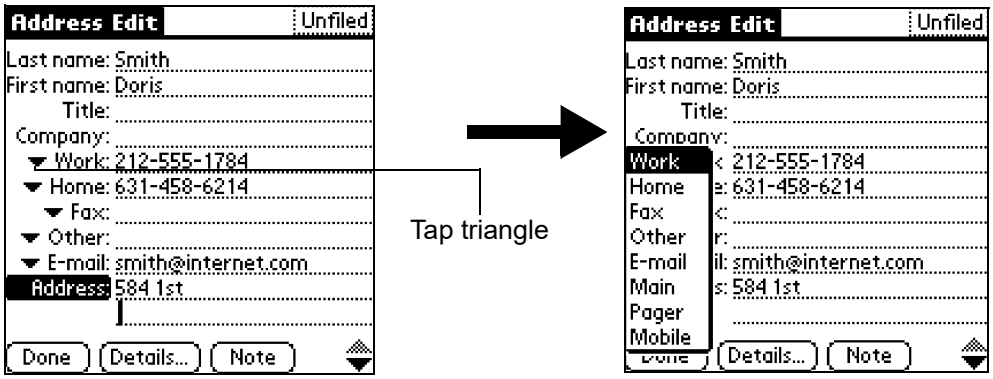
3. Tap any entry to view its contents, or use the carriage return stroke to view the selected entry.

Choosing Types of Phone Numbers

Your SPT 1800 terminal enables you to choose the types of phone numbers or e-mail addresses that you associate with an Address Book entry. Any changes you make apply only to the current Address Book entry.

To choose other types of phone numbers in an Address Book entry:

1. Tap the Address Book entry.
2. Tap the *Edit* button to display the Address Edit screen for that entry.
3. Tap the pick list next to the label you want to change.



4. Tap the new label you want to use.

Assigning Address Categories

Categories can help you file individual Address Book entries into groups for easy review. You can assign and edit categories in the Address Book or by using the Categories pick list in the Details screen (Refer to *Using Categories* on page 3-22 for a complete description of categories).

To assign a category to an Address Book entry:

1. Tap the Address Book entry you want to assign to a category.
2. Tap the *Edit* button in the Address View screen to display the Address Edit screen.
3. Tap the pick list in the upper-right corner and tap the category that you want to assign to the Address Book entry.

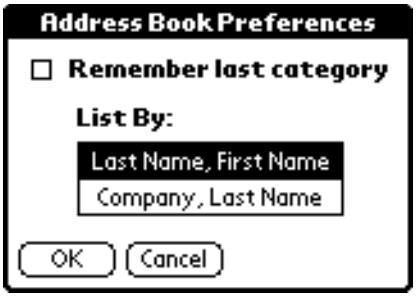
Sorting by Name or Company

You can sort the entries in the Address List screen by Company and Last Name, rather than by Last Name and First Name. These settings do not change your Address Book data; they merely change the view.

IPR2024-01221 Exhibit 2009 Page 150 of 322

To sort the entries in the Address List screen:

1. Display the Address List screen.
2. Tap the icon to open the Address Book menus.
3. Tap Preferences from the Options menu to open the Address Book Preferences screen.



4. Tap the setting that you want for the Address List screen.
5. Tap the *OK* button to display the Address List screen with your new setting.

Note: *Entries with no company name sort by last name.*

Editing Address Entry Details

The Address Entry Details screen provides a variety of options that you can associate with an Address entry.

To open the Address Entry Details screen:

1. Tap an Address Book entry to display the Address View screen for that entry.
2. Tap the *Edit* button to display the Address Edit screen.
3. Tap the *Details* button to open the Address Entry Details screen.

4. Select any of the following settings:

Show in List	Choose which type of phone or other information displays on the Address List screen for the current entry. Your options are: Work, Home, Fax, Other and E-mail.
Category	Assign the entry to a particular category. Your options are: Business, Personal, QuickList, Unfiled and Edit Categories.
Private	Hide this entry when the security features are turned on.

Beaming Address Entries to Other SPT 1800 Terminals

The IR port on your SPT 1800 terminal enables you to beam the following Address Book entries to other SPT 1800 terminals:

- **Business card.** A specially designated entry containing information you want to exchange with business contacts. You can send your business card quickly with one-touch beaming.
- **Current address entry.** The entry currently selected on your SPT 1800 terminal. For example, you may want to beam the name of a business contact to a coworker who also uses an SPT 1800 terminal.
- **Category of address entries.** All entries assigned to the selected category. For example, you might want to share your list of restaurants with a friend.

Note: *For more on the IR port, refer to* *Beaming Information to Other SPT 1800 Terminals on page 3-27.*

To select a business card:

1. Create an Address Book entry containing the information you want on your business card.
2. Tap your business card entry to display the Address View screen for that entry.
3. Tap the icon to open the Address Book menus.
4. Tap Select Business Card from the Record menu, and tap Yes to accept this entry as your business card.

To beam a business card:

1. Tap your business card entry to display the Address View screen for that entry.

IPR2024-01221 Exhibit 2009 Page 152 of 322

2. Tap the icon to open the Address Book menus.
3. Tap Beam Business Card from the Record menu to beam your card to another SPT 1800 terminal.

   Tip: You can press the button for about two seconds to beam your card.

To beam the current entry:

1. Tap an Address Book entry that you want to beam to display the Address View screen for that entry.
2. Tap the icon to open the Address Book menus.
3. Tap Beam Address from the Record menu to beam the current entry to another SPT 1800 terminal through the IR port.

   Tip: You can set the full-screen pen stroke to beam the current entry. Refer to *Pen Preferences* on page 13-5 for details.

To beam the current category:

1. Display the Address List screen.
2. Tap the pick list in the upper-right corner and tap the category you want to beam to display the entries in that category.
3. Tap the icon to open the Address Book menus.
4. Tap Beam Category from the Record menu to beam the entries in the current category to another SPT 1800 terminal through the IR port.

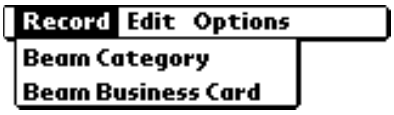
Address Book Menu Commands

The Address Book includes menu commands to make it fast and easy to perform common file and editing tasks. This section explains the menu commands specific to the Address Book.

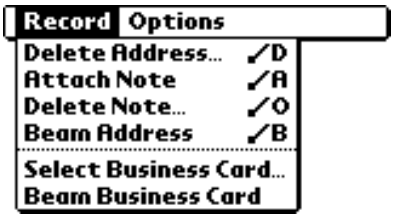
Refer to *Using Menus* on page 3-18 for information about menu commands common to all of your SPT 1800 terminal applications.

Record Menu

When you select the Record menu, its commands display on the screen. The menu commands are slightly different depending on the current screen.



Address List



Address View

Delete Address Opens an alert screen prompting you to confirm deletion of the current entry. Tap the OK button to delete the entry from your SPT 1800 terminal, or tap the Cancel button to close the alert screen and keep the entry.

Note: By default, your SPT 1800 terminal removes the entry from the Address Book, but retains a copy of the entry and transfers it to an archive file on your computer the next time you perform a HotSync operation. To remove the entry completely, clear the Save archive copy on PC check box.

Attach Note Opens the Address Book Note screen where you can create a Note for the current entry.

Delete Note Opens an alert screen prompting you to confirm deletion of the Note attached to the entry. Tap the OK button to delete the Note, or tap the Cancel button to close the alert screen and keep the note.

Beam Address Beams the current Address Book entry to another SPT 1800 terminal through the IR port.

Beam Category Beams all Address Book entries in the current category to another SPT 1800 terminal through the IR port.

Select Business Card Enables you to select the current Address Book entry as your business card. To beam your business card to other SPT 1800 terminals, use the Beam Business Card command.

Beam Business Card Sends the current business card to another SPT 1800 terminal through the IR port. You can also initiate this command by holding down the Address Book button for at least two seconds. This is a convenient way to exchange business cards with other SPT 1800 terminal users.

IPR2024-01221 Exhibit 2009 Page 154 of 322

Options Menu

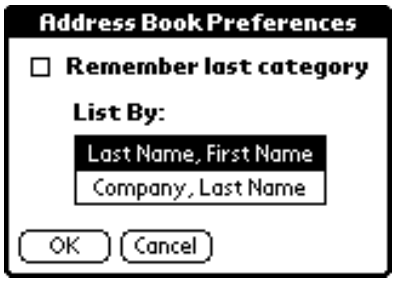
When you select the Options menu, its commands display on screen:

Address List

Address View

Font Opens the Select Font screen where you can choose a different font (text) style for your Address Book entries. Refer to *Choosing Fonts* on page 3-20 for details.

Preferences Opens the Address Book Preferences screen.



- **Remember last category.** Determines how the Address Book displays when you return from another Palm application (Memo Pad, To Do List, etc.). If you select this check box, the Address Book shows the last category you selected. When you clear it, the Address Book shows the address entries for all categories.
- **List By.** Determines whether address entries sort by last name, first name or by company name, last name in the Address List screen.

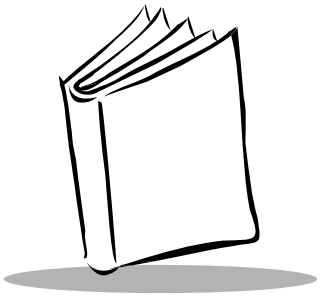
Rename Custom Fields

Enables you to define custom field names. Each Address Book entry contains four “custom fields” that you can rename. Any changes you make to the names of the custom fields display in all of your Address Book entries.

About Address Book

Shows version (revision) information for the Address Book application.

IPR2024-01221 Exhibit 2009 Page 156 of 322



Chapter 8
Applications: Memo Pad

Chapter Contents

Introduction 8-3
Opening the Memo Pad 8-3
Creating a New Memo 8-4
Reviewing Memos 8-5
Arranging Memos. 8-5
Manually Arranging the Memo List 8-6
Choosing a Memo Category 8-6
Marking a Private Memo 8-6
Deleting a Memo 8-7
Memo Pad Menu Commands 8-8
Record Menu 8-8
Options Menu 8-9

Introduction

The Memo Pad provides a place to take notes that are not associated with Date Book, Address Book or To Do items.

With the Memo Pad, you can:

- Take notes or write any kind of message on your SPT 1800 terminal.
- Drag and drop memos into popular computer applications like Microsoft Word, when you synchronize using Symbol Palm Terminal Desktop software and HotSync technology.
- Assign categories for memos. This enables you to quickly view your business-related memos, personal memos or any other category that you define.
- Quickly jot down phone numbers and other types of information. Later, you can copy and paste this information to other applications.

Opening the Memo Pad

To open the Memo Pad:

1. Press the Memo Pad button on the front panel of the SPT 1800 terminal to display the Memo List screen.

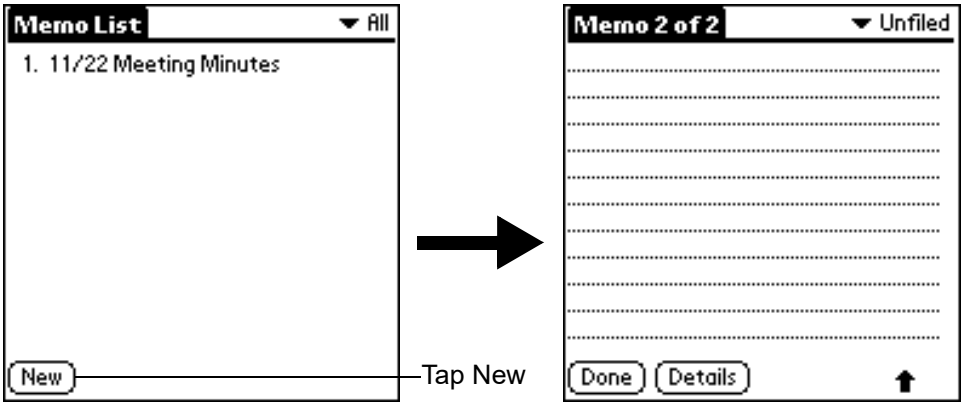
Tip: Press the Memo Pad button repeatedly to cycle through the categories in which you have memos.

Creating a New Memo

A memo is the record where you enter, review and modify the individual Memo Pad entries. A memo can contain up to 4,000 characters; the number of memos you can store is dependent only on the memory available on your SPT 1800 terminal.

To create a new memo:

1. Open the Memo Pad application.
2. Tap the *New* button to create a new memo.



Note: *In the Memo List screen, you can also begin writing in the Graffiti 2 writing area to create a new memo. The first letter is automatically capitalized and begins your new memo.*

3. Enter the text you want to appear in the memo. Use the carriage return stroke to move down to new lines in the memo.
4. After you finish, tap the *Done* button to return to the Memo List screen.

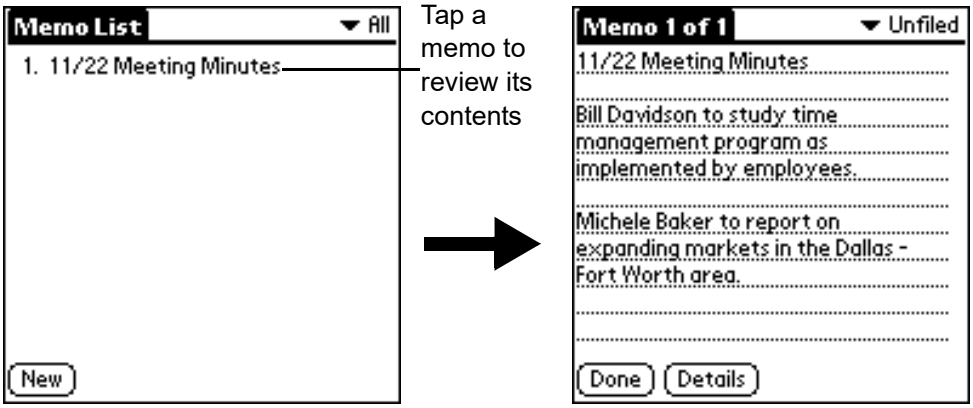
IPR2024-01221 Exhibit 2009 Page 160 of 322

Reviewing Memos

Each time you create a memo, the first line of the memo displays in the Memo List screen. This makes it easy to locate and review your memos.

To review the contents of a memo:

1. Tap the text of the memo that appears in the Memo List screen to display the memo on the screen.



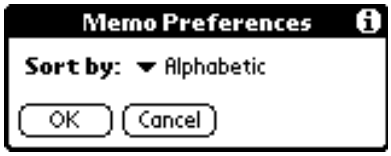
2. Review or edit the text in the memo. If the message is more than one page, a scroll bar will display for easy navigation. If the message is longer than one page, use the Options menu items to navigate.
3. Tap the *Done* button to save your changes to the memo and return to the Memo List screen.

Arranging Memos

The Memo Preferences screen enables you to sort your memos alphabetically or in any order that you want.

To select a sort option:

1. In the Memo List screen, tap the icon to open the Memo Pad menus.
2. Tap Preferences from the Options menu to open the Memo Preferences screen.



3. Tap the Sort by pick list and choose Manual or Alphabetic.
4. Tap the *OK* button to close the Memo Preferences screen and activate your setting.

Manually Arranging the Memo List

If you choose the Manual option for the Sort by setting, you can rearrange the order of the memos in the Memo List screen. Your SPT 1800 terminal renumbers all the memos to reflect the new order.

Note: *The Manual setting of the Memo Preferences is not transferred to the Symbol Palm Terminal Desktop. If you choose to display your memos alphabetically on the Symbol Palm Terminal Desktop and then perform a HotSync operation, the memos are still arranged in the order defined in the Memo Preferences setting.*

To rearrange the order of your memos:

1. Select the Manual option in the Preferences screen as described in the previous procedure.
2. In the Memo List screen, tap and drag the memo to a new location in the list. When you lift the stylus from the SPT 1800 terminal screen, the memo displays in its new location.

Choosing a Memo Category

Categories are used to file individual memos into groups for easy review. You can assign and edit categories using the Categories pick list (in the upper-right corner of the screen) or the Details screen. Refer to *Using Categories* on page 3-22 for a complete description of categories.

Marking a Private Memo

You can designate a specific memo as “private.” When you activate the Security features, your SPT 1800 terminal hides all private entries and you must enter a password to display them on the screen.

IPR2024-01221 Exhibit 2009 Page 162 of 322

To mark a memo as private:

1. Tap the memo you want to mark as private to display it on the screen.
2. Tap the *Details* button to open the Memo Details screen for that memo.

3. Select the Private check box.
4. Tap the *OK* button to close the Memo Details screen and return to the memo screen.

Deleting a Memo

There are three ways to delete a memo: simply delete the text of the memo, use the Menu Command (as described in the *Record Menu* on page 8-8) or use the Memo Details screen.

To delete a memo with the Memo Details screen:

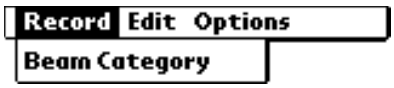
1. Tap the memo that you want to delete to display it on the screen.
2. Tap the *Details* button to open the Memo Details screen.
3. Tap the *Delete* button to open the Delete Memo alert.
4. Tap the *OK* button to confirm that you want to delete the current memo.

Memo Pad Menu Commands

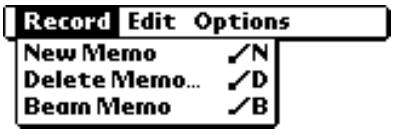
The Memo Pad includes menu commands to make it fast and easy to perform common file and editing tasks. Refer to *Using Menus* on page 3-18 for information about menu commands that are common to all SPT 1800 terminal applications.

Record Menu

When you select the Record menu, its commands display on screen:



Record Menu when viewing Memo List



Record Menu when viewing the Memo screen

Beam Category Beams all memos in the current category to another terminal through the IR port.

New Memo Creates a new memo.

Delete Memo Opens an alert screen, prompting you to confirm that you want to delete the current memo. Tap the OK button to delete the memo from your SPT 1800 terminal, or tap the Cancel button to close the alert screen and keep the memo.

Note:By default your SPT 1800 terminal removes the memo from the Memo List, but retains a copy of the memo and transfers it to an archive file on your computer the next time you perform a HotSync operation. To remove the memo completely, clear the Save archive copy on PC check box.

Beam Memo Beams the current memo to another SPT 1800 terminal through the IR port.

IPR2024-01221 Exhibit 2009 Page 164 of 322

Options Menu

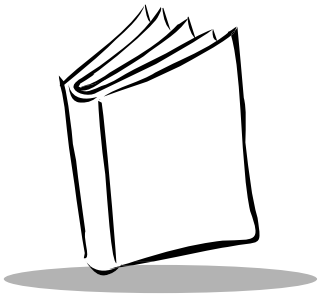
When you select the Options menu, its commands display on screen.

Options Menu when viewing Memo List

Options menu when viewing the Memo Screen

Font	Opens the Select Font screen where you can choose a different font (text) style for your Memo Pad entries. Refer to *Choosing Fonts* on page 3-20 for details.
Preferences	Activates the Memo Preferences screen and enables you to define the sort order for your memos.
Security	Opens the Change Security screen where you can change the security of the open memo. Refer to Chapter 14, *Applications: Security* for details.
Phone Lookup	Activates the Phone Lookup feature, described in *Using Phone Lookup* on page 4-4.
About Memo Pad	Shows version (revision) information for the Memo Pad application.

IPR2024-01221 Exhibit 2009 Page 166 of 322



Chapter 9
Applications: To Do List

Chapter Contents

Introduction 9-3
Opening the To Do List 9-3
Working With To Do Items 9-4
- Setting Priority (Optional) 9-4
- Checking Off a To Do Item 9-5
- To Do Item Details 9-6
- Choosing a To Do Category 9-7
- Setting a Due Date 9-7
- Marking a To Do Item Private 9-8
- Deleting a To Do Item 9-8
- To Do Show Options 9-8

To Do List Menu Commands 9-10
- Record Menu 9-10
- Options Menu 9-11

Introduction

The To Do List is a convenient place to create reminders and prioritize the activities that you have to do.

With the To Do List, you can:

- Make a quick and convenient list of things to do.
- Assign a priority level to each task.
- Assign a due date for any or all of your To Do items.
- Assign a category for any, or all of your To Do items. You can then view your To Do List based on category (Business, Personal, etc.).
- Sort your To Do items by due date, priority level or category.
- Attach notes to individual To Do items for a description or clarification of the task.

Opening the To Do List

Press the To Do List button on the front panel of the SPT 1800 terminal to display the To Do List screen.

To Do List button

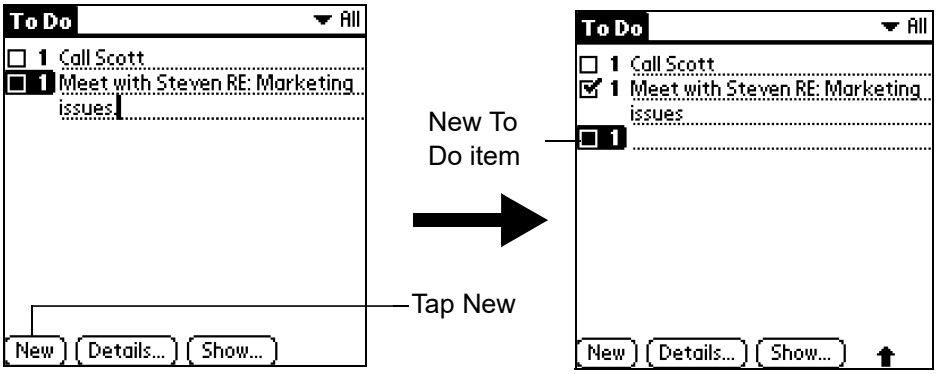
Tip: Press the To Do List button repeatedly to cycle through the categories in which you have items.

Working With To Do Items

A To Do item is a reminder of some task that you have to complete. Your SPT 1800 terminal gives you control over the appearance, level of detail and the sort order of To Do items.

To create a To Do item:

1. Tap the *New* button in the To Do List screen.



2. Enter the text you want to appear in the To Do item. The text can be longer than one line.

Note: *If a To Do item is not currently selected, writing in the Graffiti 2 writing area automatically creates a new To Do item.*

3. Tap anywhere on the screen to de-select the To Do item.

Note: *You can add a name, address, and phone number to a To Do List item using the Phone Lookup option. Refer to Using Phone Lookup on page 4-4 for details.*

Setting Priority (Optional)

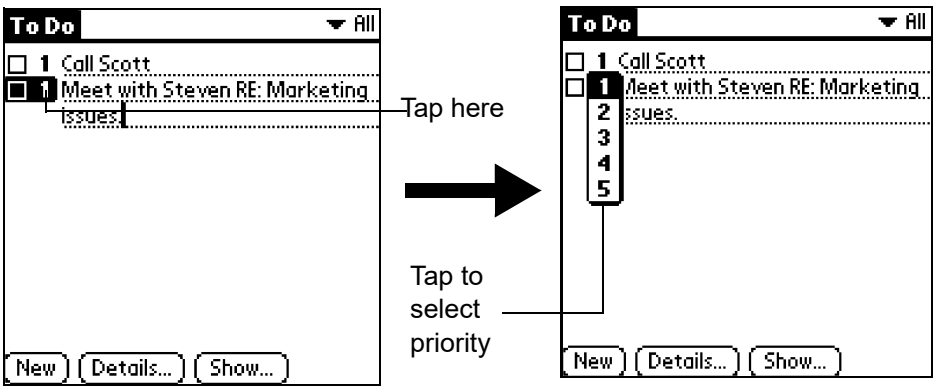
Priority settings for To Do items enable you to arrange the tasks in your To Do List according to relative levels of importance. The default setting for the To Do List arranges To Do items by priority and due date, with priority 1 items at the top. If you have a number of To Do items in your list, changing an item's priority setting may move its position in the list.

IPR2024-01221 Exhibit 2009 Page 170 of 322

Note: *When you create a new To Do item, its Priority is automatically set to level "1," the highest (most important) level. However, if you select a To Do item first, the new item displays beneath the selected item with the same priority as the selected item.*

To set a Priority level for a To Do item:

1. Tap the Priority number on the left side of the To Do item to open the Priority pick list. (Refer to *To Do Show Options* on page 9-8 if priority numbers are not visible.)



2. Tap the Priority number that you want to set for the To Do item (1 is most important and 5 is least important).

Note: *You can also change the Priority setting for a To Do item with the To Do Details screen described later in this chapter.*

Checking Off a To Do Item

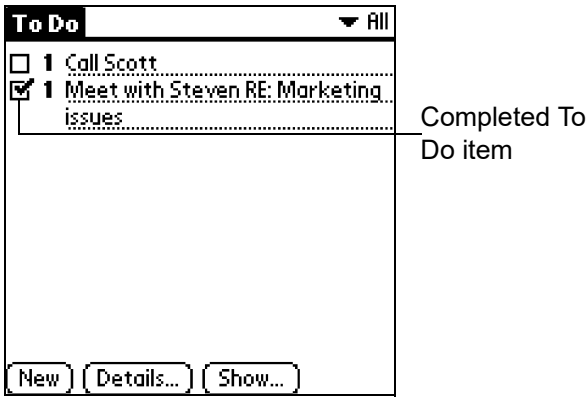
The To Do List makes it easy to mark tasks as you complete them. You can set the To Do List to record the date that you complete the To Do item and you can choose to show or hide complete To Do items. Refer to *To Do Show Options* on page 9-8.

To check off a To Do List item:

1. In the To Do List, select an entry and tap the *Show* button.
2. In the To Do Preferences screen, tap Show Completed Items.

Note: *If you clear this setting, your To Do items disappear from the list when you complete (check) them. These items have not been deleted, and still reside in the memory of your SPT 1800 terminal. You must purge completed items to remove them from memory. Refer to To Do Show Options on page -8 for details.*

3. Tap the check box on the left side of the item.



To Do Item Details

The To Do Item Details screen enables you to change individual To Do item settings.

To activate the To Do Item Details screen:

1. Tap anywhere on the text of a To Do item in the To Do List screen.
2. Tap the *Details* button to open the To Do Item Details screen.

The following sections describe the features and settings that are available in the To Do Item Details screen.

IPR2024-01221 Exhibit 2009 Page 172 of 322

Choosing a To Do Category

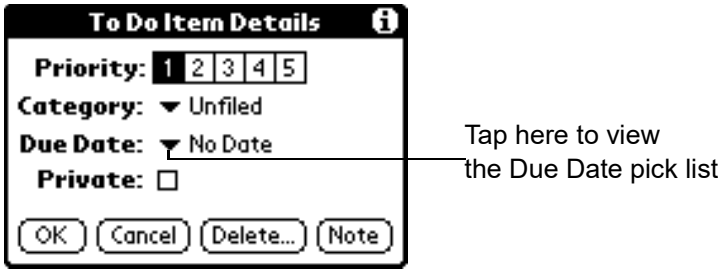
Categories can help you file individual To Do items into groups for easy review. You can assign and edit categories using the Categories pick list in the Details screen (refer to *Using Categories* on page 3-22 for a complete description of categories).

Setting a Due Date

You can associate a due date with any To Do List item. You can also sort the items that display in the list based on their due date.

To set a Due Date for a To Do List Item:

1. Tap the “No Date” text in the Details screen to open the Due Date pick list.



2. Tap the Due Date pick list to view potential due dates for the To Do item. The following are available:

Today	Assigns the current date.
Tomorrow	Assigns tomorrow’s date.
One week later	Assigns the date exactly one week from the current date.
No Date	Removes the due date from the To Do item.
Choose date	Opens the Due Date screen where you can chose any due date that you want for the To Do item.

3. Tap the *OK* button to confirm your selection and close the To Do Details screen.

Note: *If you turn on the Show Due Dates option in the To Do Show options screen, you can tap directly on the due date in the To Do List to open the pick list shown in step 2.*

Marking a To Do Item Private

An item on your To Do List can be marked as Private by tapping the Private checkbox. Note it can only be Private if Security is turned on.

Deleting a To Do Item

There are three ways to delete a To Do item: simply delete the text of the To Do item, use the Menu Command (as described in *Record Menu* on page 9-10), or use the To Do Details screen.

To delete a To Do item with the To Do Details screen:

1. Tap anywhere in the text area of the To Do item that you want to delete.
2. Tap the *Details* button to open the To Do Item Details screen.
3. Tap the *Delete* button to open the Delete To Do alert screen.
4. Tap the *OK* button to confirm that you want to delete the To Do item.

To Do Show Options

The Show Options screen enables you to control the appearance of the To Do List application.

To change the Show Options settings:

1. Tap the *Show* button in the To Do List screen to open the To Do Preferences screen.

IPR2024-01221 Exhibit 2009 Page 174 of 322

2. Select any of the following settings:

Sort by	Enables you to sort the To Do items in one of the following ways: • Priority, Due Date • Due Date, Priority • Category, Priority • Category, Due Date
Show Completed Items	Displays your complete To Do items in the To Do List. If you turn off this setting, your To Do items disappear from the list when you complete (check) them. They will remain in memory until they are Purged (refer to *Record Menu* on page 9-10 for more information about purging).
Show Only Due Items	Shows only the To Do items that are currently due, past due or have no due date specified in the To Do List. When this setting is active, To Do items that are not yet due do not display.
Record Completion Date	Replaces the due date with the actual completion date (when you checked the item). If you do not assign a due date to an item, the completion date still records when you complete the item.
Show Due Dates	Displays the due dates associated with To Do items in the To Do List screen, and displays an exclamation mark next to incomplete To Do items after the due date passes.
Show Priorities	Shows the priority numbers for the To Do items in the To Do List screen.
Show Categories	Shows the category for each To Do item on the far right of the To Do List screen.

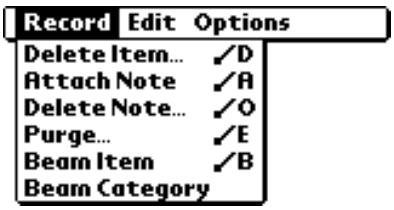
3. Tap the *OK* button to confirm your selections and close the screen.

To Do List Menu Commands

The To Do List includes menu commands to perform common file and editing tasks. Refer to *Using Menus* on page 3-18 for information about menu commands that are common to all SPT 1800 terminal applications.

Record Menu

When you select the Record menu, its commands display on screen.



Delete Item Opens an alert screen, prompting you to confirm that you want to delete the current To Do item. You must select a To Do item before you can delete it. Tap the OK button to delete the To Do item from your SPT 1800 terminal, or tap the Cancel button to close the alert screen and keep the To Do item.

Note: By default your SPT 1800 terminal removes the item from the To Do list, but retains a copy of the item and transfers it to an archive file on your computer the next time you perform a HotSync operation. To remove the event completely, clear the Save archive copy on PC check box.

Attach Note Opens the To Do Note screen where you can create a note for the current To Do item.

Delete Note Opens an alert screen, prompting you to confirm that you really want to delete the note attached to the To Do item. You must select a To Do item before you can delete its note. Tap the Yes button to delete the Note from the memory of your SPT 1800 terminal, or tap the No button to close the alert screen and return to the To Do List.

IPR2024-01221 Exhibit 2009 Page 176 of 322

Purge Deletes To Do items that you mark (check) as complete. All complete To Do List items remain in the To Do List until you use this command. The default setting is “Save archive copy on PC.” This removes complete To Do items from the To Do List, but retains copies and transfers them to an archive file on your computer the next time you perform a HotSync operation.

Beam Item Beams the current To Do item to another SPT 1800 terminal through the IR port.

Beam Category Beams all To Do Items in the current category to another SPT 1800 terminal through the IR port.

Options Menu

When you select the Options menu, its commands displays on screen.

Font Displays the Select Font screen where you can choose a different font (text) style for your Address Book entries. Refer to *Choosing Fonts* on page 3-20 for details.

Phone Lookup Activates the Phone Lookup feature, which is described in *Using Phone Lookup* on page 4-4.

Security Allows you to change the Security on a To Do List item. You can hide, show, or mask an item. Refer to Chapter 14, *Applications: Security* for details.

About To Do List Shows version (revision) information for the To Do List application.

IPR2024-01221 Exhibit 2009 Page 178 of 322

Chapter 10
Applications: HotSync®

Chapter Contents

Introduction 10-3
The HotSync Process and the HotSync Manager 10-3
Performing a HotSync Operation for the First Time. 10-3
    Using User Profiles. 10-6
    Using File Link 10-8
Conducting a Local HotSync Operation. 10-9
Selecting HotSync Setup Options 10-9
Customizing HotSync Application Settings 10-12
Conducting a HotSync Operation via Modem 10-14
    Preparing Your Computer for a Modem HotSync Operation 10-14
    Preparing Your SPT 1800 Terminal for a Modem HotSync Operation. 10-15
    Selecting the Conduits for a Modem HotSync Operation 10-16
    Performing a HotSync Operation via Modem 10-17
Conducting Wireless HotSync Operations. 10-18
Setting Up for a Wireless HotSync. 10-18
    Performing a Spectrum24 HotSync 10-19
    Performing a CDPD HotSync 10-20
    Performing a GSM HotSync 10-21
Setting Up the Ethernet Cradle for HotSync 10-22
    Installing NetSync. 10-22
    Creating a CRD1700-4000E Modem Sync Service 10-23
    Configuring the Remote Host PC for Use with the Ethernet Cradle 10-24
    The Ethernet HotSync Process 10-24

IPR2024-01221 Exhibit 2009 Page 180 of 322

Introduction

HotSync technology enables you to synchronize (exchange and update) data between one or more SPT 1800 terminals and the Symbol Palm Terminal Desktop software. To synchronize data, you must connect your SPT 1800 terminal and Symbol Palm Terminal Desktop either directly with a cable or cradle, or indirectly with a modem or network.

With HotSync technology you can:

- Synchronize the data entries on your SPT 1800 terminal with the entries on your host system, and vice versa.
- Manage individual or multiple SPT 1800 terminals with a centralized computer.
- Keep your data safe by automatically creating backup copies each time you synchronize.

The HotSync Process and the HotSync Manager

The HotSync process automatically synchronizes data between your SPT 1800 terminal and Symbol Palm Terminal Desktop. Changes you make on your SPT 1800 terminal or Symbol Palm Terminal Desktop display in both places after a HotSync operation. HotSync technology synchronizes only the needed portions of files, thus reducing synchronization time. You can synchronize your data by connecting your SPT 1800 terminal directly to your computer with either the single- or four-slot serial cradle or Synchronization/Charging Cable, or indirectly with a modem or network.

The HotSync Manager oversees the synchronization process. It runs in the background and monitors a communications port on your computer for a HotSync command from an SPT 1800 terminal. When it “hears” a HotSync command, HotSync Manager synchronizes data in the Date Book, Address Book, To Do List and Memo Pad applications, even when the Symbol Palm Terminal Desktop is not running!

Once you complete a few simple setup steps, performing a HotSync operation is as simple as pressing a button. Follow the steps in the next section to complete the setup.

Performing a HotSync Operation for the First Time

The first time you synchronize your data, you need to enter user information on both the SPT 1800 terminal and the Symbol Palm Terminal Desktop. Once you enter this information and synchronize, the HotSync Manager recognizes your SPT 1800 terminal and doesn’t ask for this information again. If you are a System Administrator preparing several SPT

1800 terminals for a group of users, refer to *Conducting Wireless HotSync Operations* on page 10-18 performing the following steps.

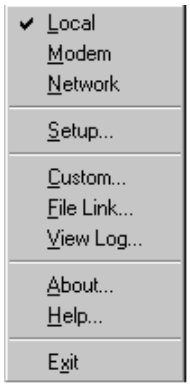
Important: You must perform your first HotSync operation with a local, direct connection, rather than using a modem.

Note: *The following instructions assume that you have already installed Symbol Palm Terminal Desktop software on your computer. If you have not yet installed the software,* refer to *Symbol Palm Terminal Desktop Software on page 1-29 for details.*

To perform a HotSync operation for the first time:

1. Double-click the Symbol Palm Terminal Desktop icon on the Windows desktop (or select Symbol Palm Terminal Desktop from the Start menu) to start the Symbol Palm Terminal Desktop software.
2. Click the icon in the Windows System Tray to open the HotSync Manager menu.

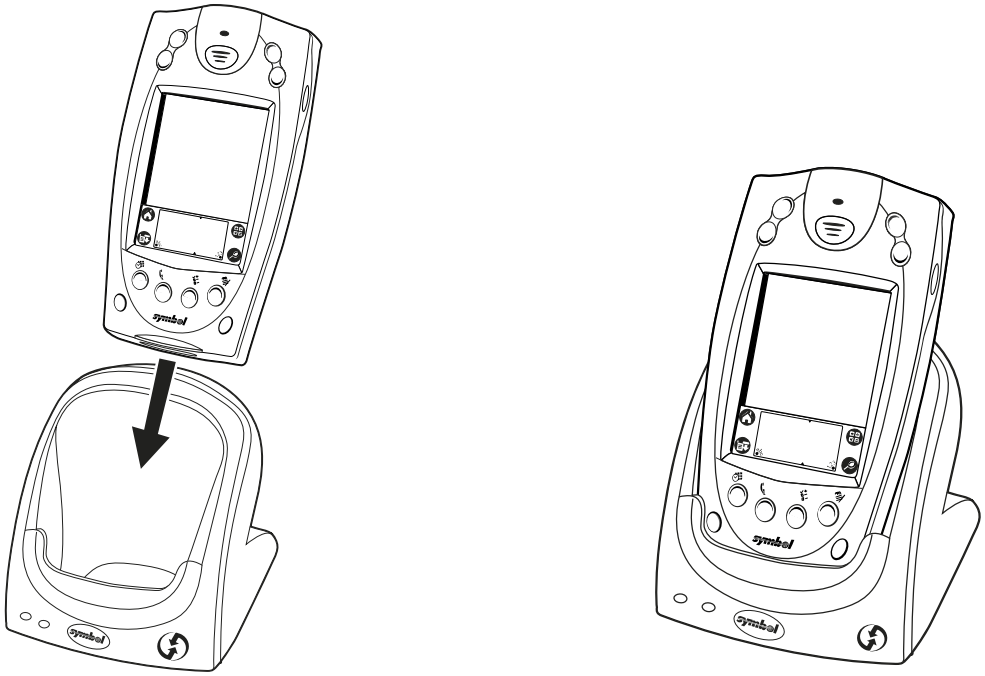
   Tip: The Windows System Tray is usually in the lower-right corner on your computer display. The location may vary depending on the location of the taskbar and the version of Windows you are using.



3. Click Local from the HotSync Manager menu to indicate that you are using the cradle or the synchronization/charging cable to synchronize.
4. Turn on the SPT 1800 terminal and slide it into the cradle.

IPR2024-01221 Exhibit 2009 Page 182 of 322

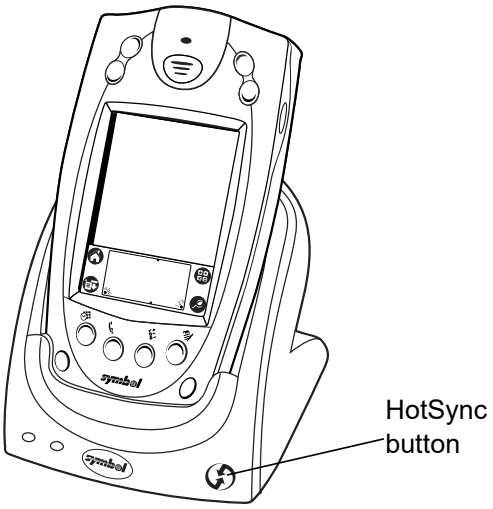
Note: *If you are using the synchronization/charging cable, connect one end of the cable into the serial port on the back of your computer, and the other end into the serial port on the bottom of the terminal.*



Tip: The curved edge on the bottom of the SPT 1800 terminal should align smoothly with the cradle when it is inserted properly.

5. Press the button on the front of the SPT 1800 cradle and open the New User dialog.

Note: *If you are using the synchronization/charging cable, tap the icon on the terminal.*



6. Enter a user name for your SPT 1800 terminal and click the *OK* button to open the HotSync Progress dialog and start the synchronization process.

   Important: Every SPT 1800 terminal should have a unique name. Never try to synchronize more than one SPT 1800 terminal to the same user name.

7. Wait for the Symbol Palm Terminal Desktop to display a message indicating that the process is complete.

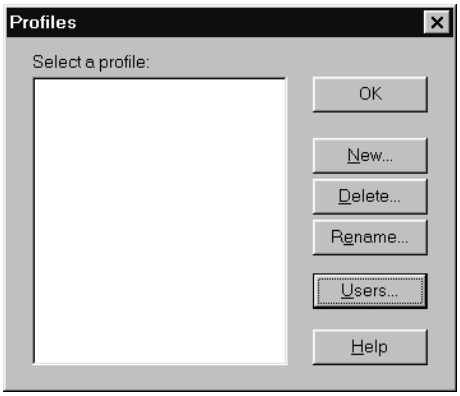
Using User Profiles

If you need to configure a number of SPT 1800 terminals with specific information (such as a company phone list) before distributing them to their users, you can create a User Profile to load the data into a SPT 1800 terminal without associating that data with a user name. The User Profile feature is designed only for the first-time HotSync operation, before you assign a User ID to a particular SPT 1800 terminal. Refer to *Conducting Wireless HotSync Operations* on page 10-18 for information about loading data after you assign a User ID.

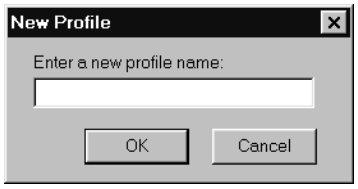
IPR2024-01221 Exhibit 2009 Page 184 of 322

To create a User Profile:

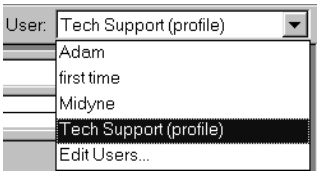
1. Open the Symbol Palm Terminal Desktop software.
2. Click Users from the Tools menu to open the Users dialog.
3. Click the *Profiles* button to open the Profiles dialog.



4. Click the *New* button to open the New Profile dialog.

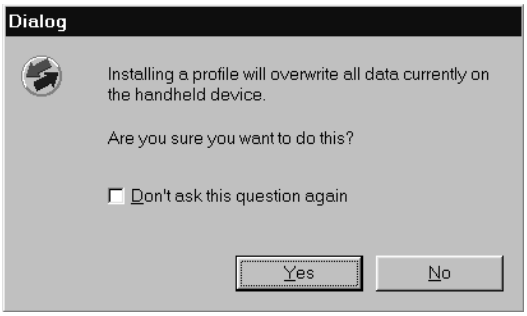


5. Enter a unique name for the Profile and click the *OK* button to return to the Profiles dialog.
6. Repeat steps 3 and 4 for each Profile that you want to create, then click the *OK* button to return to the Symbol Palm Terminal Desktop.
7. Select the Profile from the User drop-down box in the upper right hand corner of the screen and create the data for the Profile (e.g., company phone list, etc.).



To use a Profile for the first-time HotSync operation:

1. Place the new SPT 1800 terminal in the cradle, and press the button on the cradle to open the Users dialog.
2. Click the *Profiles* button to open the Profiles dialog.
3. Choose the Profile that you want to load on the SPT 1800 terminal, and click the *OK* button to open the following alert dialog:



4. Click the *Yes* button to transfer all the Profile data to the SPT 1800 terminal.

The next time you perform a HotSync operation, the Symbol Palm Terminal Desktop prompts you to assign a User name to the SPT 1800 terminal.

Using File Link

The File Link feature enables you to synchronize the Address Book and Memo Pad information on your SPT 1800 terminal with a separate external file such as a company phone list. HotSync Manager stores the data in a separate category on your Symbol Palm Terminal Desktop and your SPT 1800 terminal. You can configure the File Link feature to check for changes to the external file when you perform a HotSync operation.

With File Link you can synchronize with data stored in any of the following formats:

- Comma delimited (*.csv)
- Tab delimited (*.tsv)
- Memo Pad archive (*.mpa)
- Address Book archive (*.aba)
- Text (*.txt)

For information on how to set up a File Link, refer to the Symbol Palm Terminal Desktop Software online Help.

IPR2024-01221 Exhibit 2009 Page 186 of 322

Conducting a Local HotSync Operation

After you complete the first HotSync operation, the HotSync process is even faster and easier!

To conduct a local HotSync operation:

1. Insert the SPT 1800 terminal in the cradle, or connect the Synchronization/ Charging cable.
2. Start the HotSync Manager.
3. Press the button on the front of the CRD1800-1000S cradle to start the HotSync process. If you are using the Synchronization/Charging cable or the CRD 1700-4000S cradle, tap the icon on the terminal's application screen.

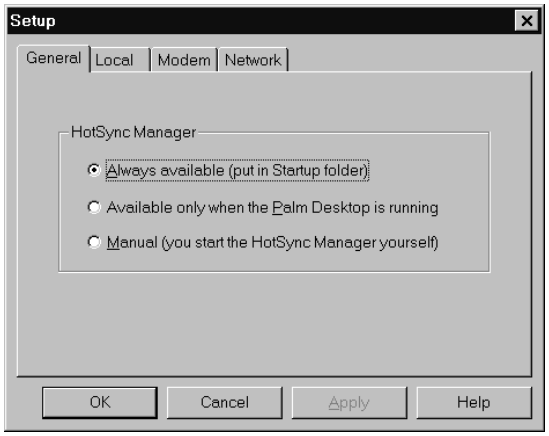
   Synchronization begins immediately.
4. Wait for the Symbol Palm Terminal Desktop to display a message indicating that the process is complete.

Selecting HotSync Setup Options

You can choose when you want HotSync Manager to run, and adjust the local, modem, and network HotSync settings.

To set the HotSync Options:

1. Click the icon in the Windows System Tray to open the HotSync Manager menu and click Setup. The Setup dialog displays with the General tab open:

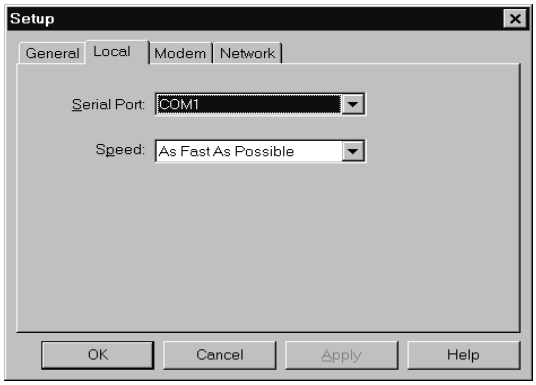


2. Select one of the following options:

Always available	Adds HotSync Manager to the Startup folder and constantly monitors the communication port for SPT 1800 terminal synchronization requests. With this option, the HotSync Manager conducts synchronizations even when the Symbol Palm Terminal Desktop is not running.
Available only when the Symbol Palm Terminal Desktop is running	Starts HotSync Manager and monitors requests automatically when you open the Symbol Palm Terminal Desktop software.
Manual	Starts the HotSync Manager and monitors requests only when you select HotSync Manager from the Start menu.

Tip: If you're not sure which option to use, use the Always available default setting.

3. Click the Local tab to display the settings for the connection between your computer and the SPT 1800 cradle or synchronization cable, and adjust the options as needed.



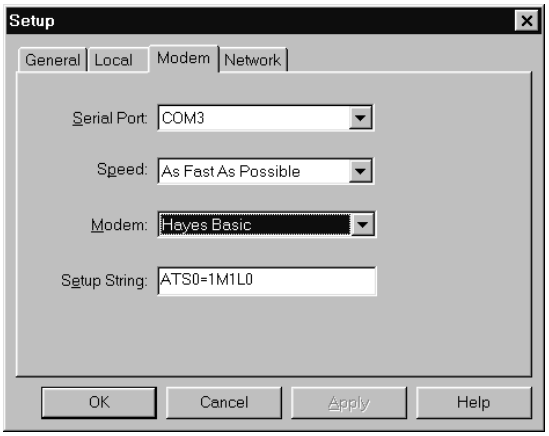
Serial Port Identifies the port Symbol Palm Terminal Desktop will use to communicate with the cradle or the synchronization/charging cable. This selection should match the port number where you connected the cradle or synchronization/charging cable.

Note: Your SPT 1800 terminal cannot share this port with an internal modem or other device. If you have trouble determining the correct serial port, refer to *Troubleshooting* on page 17-9.

IPR2024-01221 Exhibit 2009 Page 188 of 322

Speed Determines the speed at which data is transferred between your SPT 1800 terminal and Symbol Palm Terminal Desktop. We suggest you try the As Fast As Possible rate first, and adjust downward if you experience problems. This setting allows the Symbol Palm Terminal Desktop and SPT 1800 terminal to find and use the fastest speed.

4. Click the Modem tab to display the Modem settings and adjust the options as needed.



Serial Port Identifies the port where the modem is located. If you are unsure of the port assignment, review the Modem Properties in the Windows Control Panel.

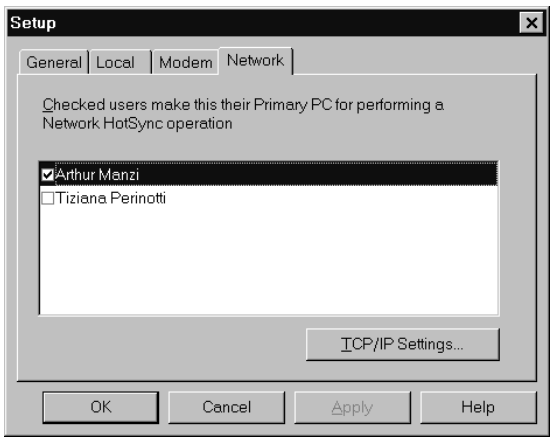
Speed Determines the speed at which data is transferred. We suggest you try the As Fast As Possible rate first, and adjust downward if you experience problems. This setting allows the Symbol Palm Terminal Desktop and SPT 1800 terminal to find and use the fastest speed.

Modem Identifies the modem type or manufacturer. Refer to your modem manual or face plate for its type or settings. If you’re not sure of your modem type or your modem doesn’t match any that appear in the list, choose Hayes Basic.

Setup String Identifies the setup string for your particular modem. Not all modems require a setup string. Refer to your modem manual and enter the setup string if recommended by the manufacturer.

5. Click the Network tab to display Network settings and adjust the options as needed.

Note: *You must have Network HotSync software installed to use this feature. Refer to* *Configuring NetSync Options on page 10-21.*



6. Click TCP/IP Settings to obtain the Primary PC Name, Address, and Subnet Mask (optional) for the selected user.
7. Click *OK* to close the Setup dialog.

Customizing HotSync Application Settings

For each application you can define a set of options that determines how records are handled during synchronization. These options are called a “conduit.” By default, the Symbol Palm Terminal Desktop synchronizes all files between the SPT 1800 terminal and the Symbol Palm Terminal Desktop. In general, you should leave the settings to synchronize all files. The only reason you might want to change these settings is to overwrite data on either your SPT 1800 terminal or Symbol Palm Terminal Desktop, or to avoid synchronizing a particular type of file because you don’t use it.

In addition to the standard application conduits, the Symbol Palm Terminal Desktop includes System and Install conduits. The System conduit backs up the system information stored in your SPT 1800 terminal, including Graffiti software ShortCuts. The Install conduit is used to install Palm-compatible applications.

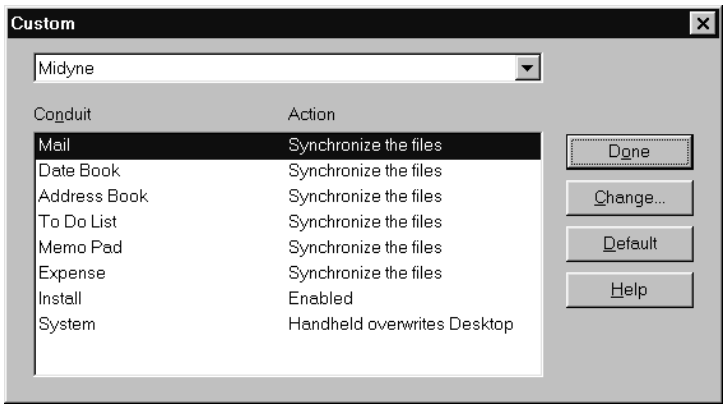
To customize HotSync application settings:

1. Click the icon in the Windows System Tray to open the HotSync Manager menu.

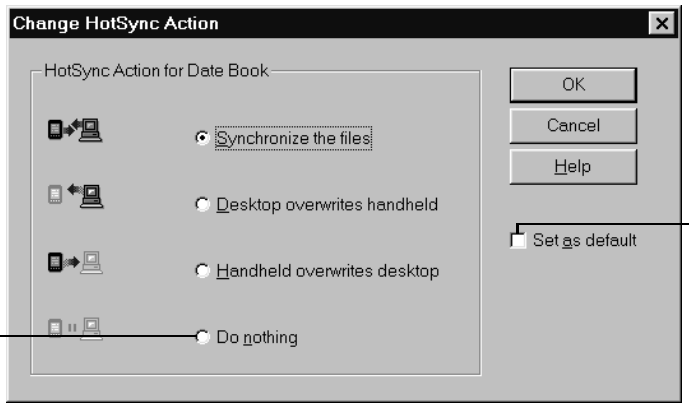
IPR2024-01221 Exhibit 2009 Page 190 of 322

Tip: You can also click the HotSync command on the Symbol Palm Terminal Desktop menu bar to open the HotSync Manager menu.

2. Click Custom from the HotSync menu to open the Custom dialog.



3. Select the appropriate user name from the drop-down list.
4. Select an application in the Conduit list to choose the conduit you want to change.
5. Click the *Change* button to open the Change HotSync Action dialog.



6. Determine the action you want to take.

Note: *Changing the HotSync setting from the default affects only the next HotSync operation. Thereafter, the HotSync Actions revert to their default settings. To use a new setting on an ongoing basis, check the Set As Default box. Clicking the Default button in the Custom dialog will revert to the new default settings.*

---

7. Repeat steps 2 through 6 to change conduit settings for other applications or for a different user name.
8. Click the *OK* button to close the Change HotSync Action dialog and activate your settings.

Conducting a HotSync Operation via Modem

You can use a modem to synchronize your SPT 1800 terminal when you are away from your computer.

Note: *You must first conduct an initial local HotSync operation using any of the SPT 1800 cradles before you perform a modem HotSync operation. Refer to* *Conducting a Local HotSync Operation on page 10-9* *for details.*

To perform a HotSync operation via modem you need:

- A modem connected to your computer.
- A modem connected to your SPT 1800 terminal with a special modem cable. (The cradle is not used for a modem HotSync operation.)
- The Symbol Palm Terminal Desktop software configured for use with a modem as described in *Selecting HotSync Setup Options* on page 10-9.

Preparing Your Computer for a Modem HotSync Operation

There are several steps you must perform to prepare your computer for a modem HotSync operation. Be sure to perform these steps before you leave your office so that your computer is ready to receive a call from your SPT 1800 terminal.

IPR2024-01221 Exhibit 2009 Page 192 of 322

To prepare your computer for a modem HotSync operation:

1. Confirm that the computer modem is connected and turned on, and that no communications applications, such as fax or telephony software, are running on a COM port.

Note: *Make sure the computer is disconnected from all online services, such as America Online (AOL) and CompuServe. This helps to avoid conflicts with the COM port.*

---

2. Start HotSync Manager and select Modem from the HotSync Manager menu. Refer to *Selecting HotSync Setup Options* on page 10-9 for details about this screen.

Preparing Your SPT 1800 Terminal for a Modem HotSync Operation

To prepare your SPT 1800 terminal for a modem HotSync operation:

1. Tap the icon to open the Applications Launcher.
2. Tap the icon to open the HotSync screen.
3. Tap Modem and select your modem from the pick list.

Note: *This will vary, dependent upon the SPT terminal you are using: SPT 1833 terminals use Merlin and SPT 184x terminals use Spectrum24.*

---

4. Tap Enter Phone # to open the Phone Setup screen.

Note: *If you have Network HotSync software installed on your SPT 1800 terminal, the Remote Setup screen displays instead. Refer to* *Network Preferences on page 13-14* *for more information.*

5. Enter the telephone number to access the modem connected to your computer.
6. If needed, enter a dial prefix (such as “9”) to access an outside line, and then tap the Dial Prefix check box.

   Tip: You can enter a comma in the field to introduce a “pause” in the dialing sequence.

7. If the phone line you’re using for the SPT 1800 terminal has “Call Waiting,” select the Disable call waiting check box to avoid an interruption during the modem HotSync operation.
8. If you want to use a calling card to place the call, select the check box and enter the calling card number.
9. Tap *OK* to return to the HotSync screen.
10. Tap the icon to open the HotSync menus.
11. Tap Modem Sync Preferences from the Options menu to display the Modem Sync Preferences screen.
12. Select Direct to Modem.
13. Click *OK*.

Selecting the Conduits for a Modem HotSync Operation

The Conduit Setup screen on your SPT 1800 terminal enables you to define which files and/or applications synchronize during a modem HotSync operation. Use these settings to minimize the time required to synchronize data with a modem.

To change the Conduit Setup for a modem HotSync operation:

1. Tap the icon to display the HotSync screen.
2. Tap the icon to open the HotSync menus.
3. Tap Conduit Setup from the Options menu to open the Conduit Setup screen.

IPR2024-01221 Exhibit 2009 Page 194 of 322

4. Tap the check boxes to de-select the files and/or applications that you do *not* want to synchronize during a modem HotSync operation. The default setting is to synchronize all files.

Note: *Applications that do not have a database (such as games) do not synchronize — even if the item is selected in the Conduit Setup screen.*

---

5. Tap the *OK* button to close the Conduit Setup screen and activate your settings for the next modem HotSync operation.

Performing a HotSync Operation via Modem

To perform a Modem HotSync operation:

Note: *If you are not using a PalmPilot modem, you need a special modem cable and an external modem. Connect one end of the special modem cable to the serial connector on the SPT 1800 terminal and the other end to the external modem. Do not attempt to use other kinds of cables, even if they appear to be similar.*

---

1. Tap the icon to open the HotSync application.
2. Tap the large icon to dial the Symbol Palm Terminal Desktop modem and synchronize the applications selected under Conduit Setup.
3. Wait for the HotSync operation to complete.

   If you have any problems conducting a HotSync operation, refer to *Troubleshooting* on page 17-9.

Conducting Wireless HotSync Operations

Using HotSync you can take advantage of the LAN and WAN connectivity available in business environments. You can dial in to a network or use a cradle that is connected to any computer on your LAN or WAN (provided that the computer connected to the cradle also has HotSync installed, your computer is on, and the HotSync Manager is running).

Setting Up for a Wireless HotSync

The SPT 1833 and 184x terminals allow you to perform a HotSync without using a cradle over a terminal specific wireless LAN (184x) or WAN (178x). This section describes the setup necessary for a wireless HotSync to occur.

Before a wireless HotSync can be performed, each terminal must be properly configured for use. Refer to Chapter 2, *Network Setup* for specific instructions for each terminal.

Once the terminal is properly configured for use, it must be set up to perform a wireless HotSync over the LAN or WAN.

To properly configure your terminal:

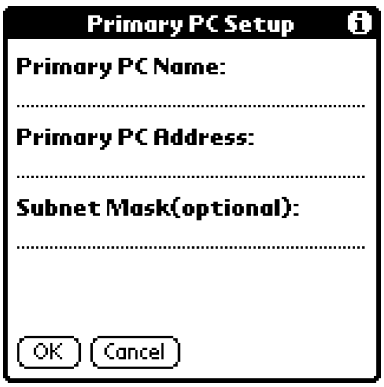
1. Tap the icon to open the Applications Launcher.
2. Tap the icon to open the HotSync application.
3. Tap the icon to display the HotSync Options menu and select Modem Sync Prefs.

   Select Network and tap *OK*.
4. Tap LANSync Prefs from the Options menu and select *Local HotSync*.
5. Tap Primary PC Setup on the Options menu.

Note: *The Primary PC Setup is extremely important! It tells the terminal how to locate the machine which it will synchronize with on the network.*

IPR2024-01221 Exhibit 2009 Page 196 of 322

The Primary PC Setup screen displays:



The information required for this screen is located by selecting the TCP/IP button on the Network tab of the HotSync Manager on the machine you are hotsyncing to. Copy down the Primary PC Name, Primary PC address, and the Subnet mask, and enter that information manually on the above screen. Refer to *Selecting HotSync Setup Options* on page 10-9 for details on how to access the Network tab.

Note: *If the Subnet Mask box on your PC is empty, you do not need to enter anything in that section on your terminal.*

---

6. Tap *OK*.
7. Tap Connection Setup on the Option menu and select:
   a. *Spectrum24* for a SPT 184x terminal
   b. *Merlin* for a SPT 1833 (CDPD) terminal.

Performing a Spectrum24 HotSync

Note: *This function is available on SPT 184x terminals only.*

To perform a HotSync via the Spectrum24 wireless LAN:

1. Ensure the terminal has been properly configured for use. Refer to *Setting Up for a Wireless HotSync* on page 10-18 for details.
2. Select the HotSync application from the main application screen.
3. Tap Modem, and tap Select Service to display the Network Preference Screen.

4. Verify that Spectrum24 displays in the Service pick list and that phone setup information is accurate and tap *Done.*
5. Tap the *HotSync* button to initiate the HotSync.

Performing a CDPD HotSync

Note: *This function is available on SPT 1833 terminals only.*

To perform a HotSync via the CDPD wireless WAN:

1. Ensure the terminal has been properly configured for use. Refer to *Setting Up for a Wireless HotSync* on page 10-18 for details.
2. Tap the icon to open the HotSync application.
3. Tap Modem, and tap Select Service to display the Network Preference screen.
4. Verify that Merlin displays in the Service pick list and that phone setup information is accurate and tap *Done*.
5. Tap the *HotSync* button to initiate the HotSync.

IPR2024-01221 Exhibit 2009 Page 198 of 322

Setting Up the Ethernet Cradle for HotSync

When the SPT 1800 terminal is inserted into the CRD1700-4000E cradle, the cradle appears as a dial-up PPP service to the terminal. Therefore, just as you would set up a Palm III terminal to connect to an Internet Service Provider (ISP) like Compuserve or Earthlink, the SPT 1800 terminals must be configured for use with the cradle. This section describes the steps necessary to configure both the SPT 1800 terminal and the CRD1700-4000E.

Installing NetSync

An SPT 1800 terminal must have NetSync installed and configured for it to communicate with the CRD1700-4000E. Additionally, NetSync extensions to the HotSync Manager must be installed on the host system which the SPT 1800 terminal is to synchronize with. The Network HotSync software is a free add-on for SPT 1800 terminals and is available at http://www.palm.com/support/downloads/netsync.html.

Follow the instructions to install the network HotSync software on your host PC, then perform a HotSync to install the program on your SPT 1800 terminal.

Configuring NetSync Options

Once NetSync is installed on your SPT 1800 terminal, it must be configured for use with the CRD1700-4000E. From the HotSync panel on your SPT 1800, select each of the option panels available from the “Options” menu (accessed by tapping the Menu icon) and configure them as follows:

1. To configure *Modem Sync Preferences*:
2. Tap the icon to open the HotSync menus.
3. Tap Modem Sync Preferences from the Options menu to display the Modem Sync Preferences screen.
4. Select Network.
5. Tap *OK*.
6. To configure the *Local Sync Preferences*:
   a. Tap the icon to open the HotSync menus.
   b. Tap LANSync Preferences from the Options menu to display the LANSync Preferences screen.
   c. Select Local HotSync (the CRD1700-4000E doesn’t use LANSync functionality).

d. Tap *OK*.

7. To configure the Primary PC Setup, refer to the *Setting Up for a Wireless HotSync* on page 10-18 for details:

Note: *Primary PC Setup is extremely important! It tells the terminal how to locate the machine which it will synchronize with on the network.*

---

8. Tap the icon to open the HotSync menus and select Conduit Setup.
   a. Check any items that you want synchronized and uncheck any items that you don't want synchronized.
   b. Tap *OK*.
9. Tap the icon to open the HotSync menus and select Connection Setup.
   a. For optimal performance, choose a communication rate of 57600 bps and a Standard modem.
   b. Tap *Done*.

Creating a CRD1700-4000E Modem Sync Service

The SPT 1800 terminal communicates with the CRD1700-4000E via a Modem Sync. The Modem Sync offers many options which must be configured for use with the CRD1700-4000E.

Create a separate CRD1700-4000E network configuration and select it as your default Modem Sync service. Use either Graffiti or the keyboard feature (click in the lower left-hand corner of the scratch pad on the abc to access the keyboard) to enter the following information:

1. Tap the icon to open the HotSync application.
2. Choose the Select Service box under the Modem Sync icon to create a new CRD1700-4000E service.
3. To select the Earthlink service, click Menu, Duplicate.
4. Change the service name to CRD1700-4000E. Leave the user name and password blank. You may enter any phone number you want, except '00', or you may leave it blank. The SPT 1800 terminal will not be able to HotSync if you use '00' as a phone number.

IPR2024-01221 Exhibit 2009 Page 200 of 322

Configuring the Remote Host PC for Use with the Ethernet Cradle

The remote PC you wish to HotSync the SPT 1800 to must be set up for Network HotSync and configured to run from the network.

1. Make sure HotSync Manager is installed and running.
2. From the HotSync Manager, make sure Network is checked. If you don't want HotSync Manager to use a serial port, make sure Local is unchecked.

Note: *The PC must be configured for proper TCP/IP network operation.*

The Ethernet HotSync Process

Once the CRD1700-4000E is properly connected, data communication between an SPT 1800 terminal and the host computer can take place. When a terminal is inserted in the cradle, the cradle detects its presence and attempts to initiate the HotSync process on the terminal. All local slots in the cradle operate simultaneously; the HotSync procedure starts immediately when any terminal is inserted into a local slot.

As stated earlier, if multiple slots are to be HotSync'd simultaneously, each must communicate with a different host PC. If the application requires simultaneous connection to a single host database, additional software, available from Symbol, is required.

Terminals inserted into daisy-chained cradles are HotSync'd in a round-robin fashion simultaneously with any HotSyncs from local slots. Daisy-chained cradles share a logical "fifth slot" on the CRD1700-4000E, which, while it shares equal priority with the local slots, allows only one HotSync at a time.

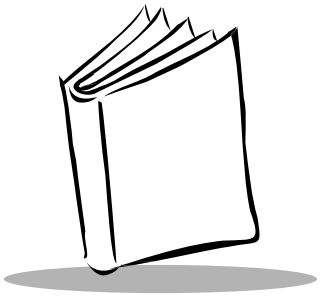
Performing HotSync with the Ethernet Cradle

To initiate communication between the terminal and the host, gently insert the SPT 1800 terminal into a local cradle slot, or a slot on an inter-connected serial cradle. Do not force. When properly inserted, the slot's LED turns red, then changes to flashing green, indicating that the host and the terminal are communicating. Removing the terminal from the cradle while the LED is flashing green will result in a disruption of communication and data may be lost.

If the terminal is inserted into an inter-connected serial cradle slot while another terminal on the serial cradle chain is communicating with a host, the terminal waits (its LED remains red) until the first terminal finishes communicating. After the communication session

completes, the slot's LED turns solid green and remains green until the terminal is removed from the slot. To remove the terminal, pull it straight up from the slot.

IPR2024-01221 Exhibit 2009 Page 202 of 322



Chapter 11
Applications: ScoutSync Client

Chapter Contents

Introduction 11-3
Overview of the ScoutSync Client 11-3
Configuring the ScoutSync Client 11-4
Selecting Conduits for Synchronization 11-5
Performing a Synchronization. 11-6
Automatically Synchronizing Using a Cradle 11-6
Viewing the Synchronization Log 11-7
ScoutSync Client Menu Commands 11-8
Options Menu 11-8

IPR2024-01221 Exhibit 2009 Page 204 of 322

Introduction

This chapter explains how to configure and use the ScoutSync Client on an SPT 1800 terminal. By reading this chapter, you will learn how to perform a synchronization and view your ScoutSync Client synchronization log.

Note: *Before performing the procedures found in this chapter, your system administrator should install, set up, and run ScoutSync on a computer. Your system administrator must also grant you access to a Scout Server.*

Overview of the ScoutSync Client

The ScoutSync Client is an application that enables you to connect your SPT 1800 terminal to a Scout Server. A Scout Server resides on a Windows NT server or workstation that your system administrator manages and is responsible for transferring data between the ScoutSync Client and your company's back-end applications and databases. Using Scout's powerful technology, you can seamlessly transfer data using an SPT 1800 terminal from virtually anywhere to your company's data stores.

Using the ScoutSync Client on your SPT 1800 terminal, you can:

- Run ScoutSync Conduits

  A ScoutSync Conduit is the central processing component that implements the synchronization logic during a synchronization session. Your system administrator installs conduits on your device.

- Initiate a synchronization session
- View your SPT 1800 terminal's synchronization log.

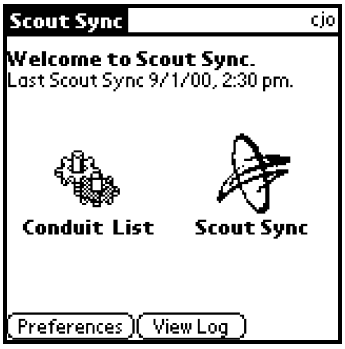
Configuring the ScoutSync Client

The Scout Preferences settings enable you to connect a mobile device to a ScoutSync Server. When configuring the preferences, you must specify the Scout host/server name, the command port used for ScoutSync Client/Server communications, and the user's profile/ID.

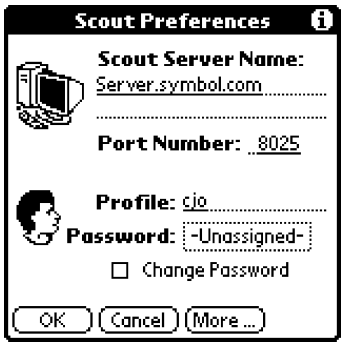
Note: *You must configure the settings before performing a synchronization.*

To configure the ScoutSync Client preferences of an SPT 1800 terminal:

1. Tap the icon to open the Applications Launcher.
2. Tap the icon to open ScoutSync. The main ScoutSync screen displays:



3. Tap the *Preferences* button. The following screen displays:



4. Enter the Scout Server Name and the Port Number. The default connection port is 8025 and should not be changed unless instructed by your system administrator.
5. Enter the Profile.

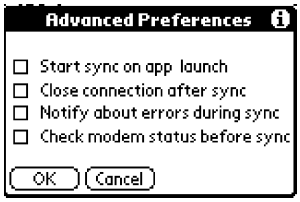
IPR2024-01221 Exhibit 2009 Page 206 of 322

6. Tap the word “Unassigned” in the Password field to display the Password box. If applicable, enter a password and tap the *OK* button. If not, tap Cancel.

Note: *“Assigned” replaces “Unassigned” after you enter a password.*

---

7. Tap the *More* button. The Advanced Preferences screen displays:



   - To synchronize on application launch, tap the *Start sync on app launch* check box.
   - To close the network connection after a synchronization, tap the *Close connection after sync* check box.
   - To be notified about errors, tap the *Notify about errors during sync* check box.
   - To indicate that you are using a Novatel Minstrel modem, tap the *Check modem status before sync* check box.
8. Tap *OK* twice to close the Scout Preferences screen.

Selecting Conduits for Synchronization

Developers have the ability to create custom conduits for synchronizing data. Before performing a synchronization, you can specify the conduits you want activated. Each conduit is associated with an application and determines how data is handled during a synchronization session. When a conduit is selected for synchronization, it knows what actions to perform and how to process the files and databases.

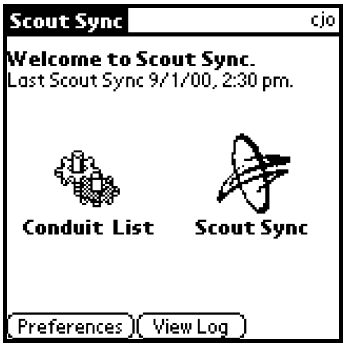
To select conduits for synchronizing an SPT 1800 terminal:

1. Tap the icon to open ScoutSync. The main ScoutSync screen displays.
2. Tap the icon to open the Conduit List.
3. Tap the checkboxes of the conduits that you want to synchronize.
4. Tap *Done*.

Performing a Synchronization

To perform a synchronization:

1. Tap the icon from the Applications Launcher. The following screen displays:



2. Tap the icon.

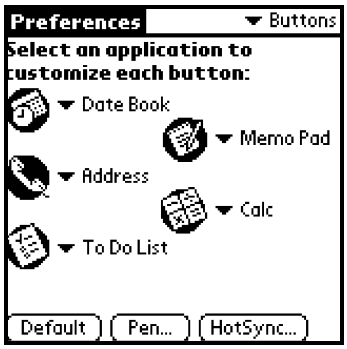
   The synchronization process begins.

Automatically Synchronizing Using a Cradle

You can configure a mobile device to automatically start and connect to a server when placed in the cradle. Once the device is configured, when placed in a cradle it will automatically perform a synchronization until you disable the feature.

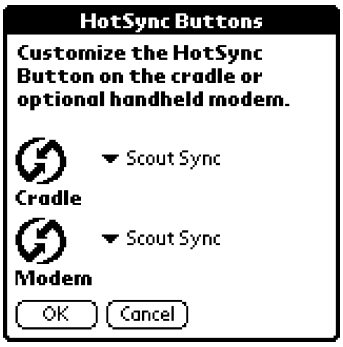
To automatically synchronize using a cradle with an SPT 1800 terminal:

1. Open the Applications Launcher.
2. Tap the icon.
3. Tap the pick list in the upper-right corner and select Buttons. The following screen displays:

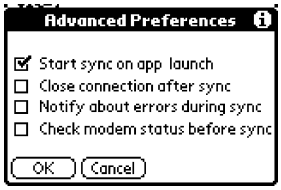


IPR2024-01221 Exhibit 2009 Page 208 of 322

4. Tap the *HotSync* button to open HotSync. The following screen displays:



5. Select ScoutSync from the Cradle pick list.
6. Return to the Applications Launcher and tap the icon. The main ScoutSync screen is displayed.
7. Tap Preferences, then More. The Advanced Preferences screen displays:



8. Select the Start sync on app launch check box and tap *OK*.
9. Place the SPT 1800 terminal in the cradle.

Viewing the Synchronization Log

The synchronization log of a mobile device displays a record of the date and time a user logged on and off a server. It also displays the list of files and databases installed on the mobile device and other informational messages.

To view the Synchronization Log:

1. Tap the icon. The main ScoutSync screen is displayed.
2. Tap the *View Log* button.

   The ScoutSync Log is displayed.

Note: *Only the most recent synchronization session log displays.*

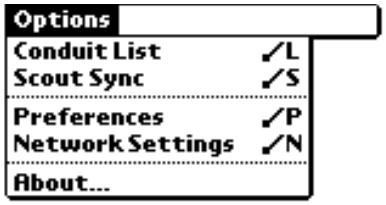
ScoutSync Client Menu Commands

ScoutSync Client includes menu commands to make it fast and easy to perform common tasks. This section explains the menu commands specific to ScoutSync.

Refer to *Using Menus* on page 3-18 for information about menu commands common to most of your SPT 1800 terminal applications.

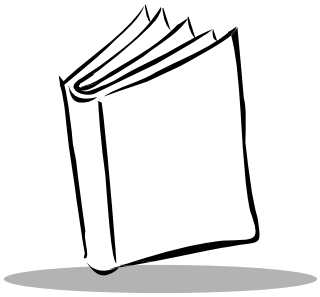
Options Menu

When you select the Options menu, its commands display on the screen.



Conduit List	Allows you to choose which conduits run during ScoutSync.
ScoutSync	Automatically attempt a ScoutSync connection.
Preferences	Opens the Scout Preferences screen, where you can enter the Scout Server name, port number, profile, and password.
Network Settings	Opens the Preferences screen, where you set up your service and connection preferences.
About	Provides version information.

IPR2024-01221 Exhibit 2009 Page 210 of 322



Chapter 12
Applications: AirBEAM

Chapter Contents

Chapter Contents 12-1
Introduction 12-3
AirBEAM Package Builder 12-3
AirBEAM Client 12-4
AirBEAM License 12-4
Configuring the AirBEAM Client 12-4
Synchronizing with the Server 12-9

IPR2024-01221 Exhibit 2009 Page 212 of 322

Introduction

The AirBEAM product allows specially designed software packages to be transferred between a host server and Symbol wireless handheld devices. Before transfer, AirBEAM checks and compares package version, so that only updated packages are loaded.

AirBEAM resides on radio-equipped client devices, and allows them to request, download and install software, as well as to upload files and status data. Both download and upload of files can be accomplished in a single communications session. The ability to transfer software over a radio network can greatly reduce the logistical efforts of client software management.

In an AirBEAM system, a network-accessible host server acts as the storage point for the software transfer. The AirBEAM client uses the industry standard FTP or TFTP file transfer protocols to check the host system for updates, and if necessary, to transfer updated software.

AirBEAM Package Builder

In a typical distributed AirBEAM system, software to be transferred is organized into packages. In general, an AirBEAM package is simply a set of files that are assigned attributes both as an entire package and as individual component files. The package is assigned a version number, and the transfer occurs when an updated version is available.

An AirBEAM package can optionally contain developer-specified logic to be used to install the package. Installation logic is typically used to update client device FLASH images or radio firmware. Examples of common AirBEAM packages would include packages for custom client application software, radio firmware and AirBEAM client software.

Once these packages are built, they are installed on the host server for retrieval by the handheld device. The AirBEAM Package Builder is a utility used to define, generate and install AirBEAM packages to a server. The packages are then loaded from the server onto a client device equipped with an AirBEAM client executable.

For detailed instructions on how to define, generate and install AirBEAM packages to the server, refer to the *AirBEAM Package Builder Product Reference Guide*, p/n 72-55769-xx, available at www.symbol.com/manuals.

AirBEAM Client

The AirBEAM Client is installed on your handheld terminal. It needs to be configured with the server access information, the names of the packages to be downloaded and other controlling parameters. When the Client is launched, the device connects to the specified FTP server and checks the packages it is configured to look for. If the package version has been updated, the client requests the transfer.

AirBEAM License

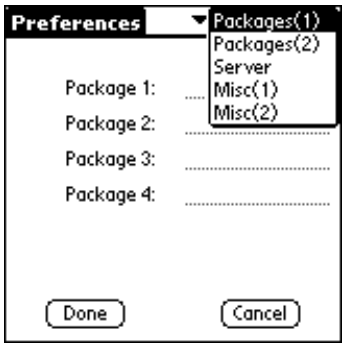
The AirBEAM client is a licensed software product. The AirBEAM client's version synchronization functionality is enabled through a license key file that is stored on the client device. The license key file can be built into AirBEAM client's image, or downloaded in a special AirBEAM package.

The AirBEAM license key file contains a unique key and a customer specific banner that is displayed when the AirBEAM client version synchronization logic is invoked.

Configuring the AirBEAM Client

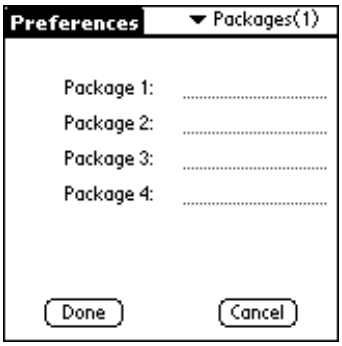
1. Tap the icon on the SPT 1800 terminal screen to open the Applications Launcher.
2. Tap the AirBEAM icon. The main AirBEAM screen is displayed.
3. Tap the icon to open the AirBEAM menus and select Preferences.

The AirBEAM Preferences screen is used to view and edit AirBEAM client configurations. This screen has five selections in the category pick list that you can modify - Packages(1), Packages(2), Server, Misc(1) and Misc(2).



IPR2024-01221 Exhibit 2009 Page 214 of 322

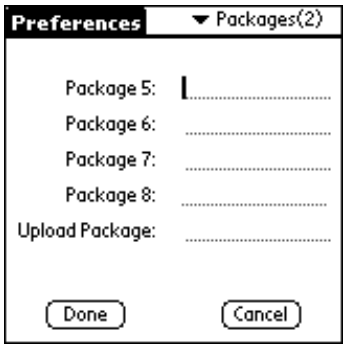
Packages(1) Screen



Select Package(1) from the category pick list. This screen is used to specify the package name of the first four of eight packages that are to be loaded during the AirBEAM synchronization process. The specified package name must correspond to a package that is available on the specified package server.

Field	Description
Package 1	Package name of the first of eight packages. This is an optional field.
Package 2	Package name of the second of eight packages. This is an optional field.
Package 3	Package name of the third of eight packages. This is an optional field.
Package 4	Package name of the fourth of eight packages. This is an optional field.

Packages(2) Screen



Select Package(2) from the category pick list. This screen is used to specify the package name of the last four of eight packages that are to be loaded during the AirBEAM synchronization process. The specified package name must correspond to a package that is available on the specified package server.

Field	Description
Package 5	Package name of the fifth of eight packages. This is an optional field.
Package 6	Package name of the sixth of eight packages. This is an optional field.
Package 7	Package name of the seventh of eight packages. This is an optional field.
Package 8	Package name of the eighth of eight packages. This is an optional field.
Upload Package	Package name of a package that is to be processed for “upload files” during the AirBEAM synchronization process. The specified package name must correspond to a package that is available on the specified package server. This is an optional field.

Server Screen

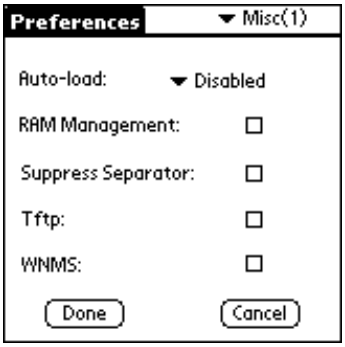
Select Server from the category pick list. This screen is used to specify the configurations of the server to which the client will connect during the package synchronization process.

Field	Description
IP Address	The IP Address of the server. It may be a host name or a dot notation format.
Directory	The directory on the server that contains the AirBEAM package definition files. All AirBEAM package definition files are retrieved from this directory during the package synchronization process.
User	The FTP user name that will be used during the login phase of the package synchronization process.
Password	The FTP password that corresponds to the FTP user specified in the **User** field. The specified password will be used during the login phase of the package synchronization process.

IPR2024-01221 Exhibit 2009 Page 216 of 322

Misc(1) Screen

Select Misc(1) from the category pick list. This screen is used to configure various miscellaneous features.



Field	Description
Auto-load	This drop-down menu is used to specify how the AirBEAM client is to be invoked automatically when the client device is rebooted. The selections are: Disable: the AirBEAM client is not invoked automatically during the boot sequence. Interactive: the AirBEAM client is invoked automatically during the boot sequence. The package synchronization process is started automatically. The *Synchronization Dialog* box is displayed, and the user is required to press the **OK** button when the process is complete. Non-interactive: the AirBEAM client is invoked automatically during the boot sequence. The package synchronization process is started automatically. The *Synchronization Dialog* box is displayed, but the user is not required to press the **OK** button when the process is complete. The Synchronization Dialog box terminates automatically.
RAM Management	This checkbox specifies whether the automatic RAM management will be enabled during the package synchronization process. If enabled, RAM management logic will be invoked when there is not enough free disk space to download a package. The RAM management logic will attempt to remove any discardable AirBEAM packages resident on the client.

Field	Description
Suppress Separator	This checkbox specifies whether the automatic insertion is a file path separator character should be suppressed when the client generated server package definition file names. When enabled, the parameter also disables the appending of .apd to the package. This feature is useful for AS/400 systems, in which the file path separator character is a period. When this feature is enabled, the server directory (Directory) and package name (Package 1, Package 2, Package 3 and Package 4) are appended “as is” when building the name for the server package definition file. When this feature is disabled, a standard file path separator is used to separate the server directory (Directory) and package name (Package 1, Package 2, Package 3 and Package 4) when building the name for the server package definition file. In addition, an .apd extension is appended automatically.
TFTP	This checkbox specifies whether the TFTP protocol is to be used to download files. By default, the AirBEAM client will use the FTP protocol.
WNMS	This checkbox specifies whether the AirBEAM client will upload a WNMS information file at the end of each version synchronization.

IPR2024-01221 Exhibit 2009 Page 218 of 322

Misc(2) Screen

Select Misc(2) from the category pick list. This screen is used to configure various miscellaneous features.

Field	Description
Auto-retry	This field is used to specify whether the AirBEAM client will automatically retry if there is a failure during the synchronization process. If this feature is enabled, the AirBEAM Client will display a popup dialog indicating that a retry will be attempted. The popup dialog is displayed for the number of seconds specified in the Retry delay field. The valid values for this field are: -1: the AirBEAM client will automatically retry indefinitely. 0: the AirBEAM client will not automatically retry. >0: the AirBEAM client will automatically retry up to the number of times specified.
Retry Delay	This field specifies the amount of time, in seconds, that the AirBEAM client will delay before automatically retrying after a synchronization failure.

Synchronizing with the Server

When the synchronization process is initiated, the AirBEAM client attempts to open an FTP session using the AirBEAM Client configuration. Once connected, the client processes the specified packages. Packages are loaded only if the server version of a given package is different from the version loaded on the client. Once the upload process is complete, the AirBEAM client closes the FTP session with the server.

The AirBEAM client can launch an FTP session with the server either manually, when initiated by the user or automatically.

Manual Synchronization

1. Configure the AirBEAM Client. See *Configuring the AirBEAM Client* on page 12-4.
2. From the main AirBEAM screen, tap the icon to open the AirBEAM menus and select Synchronize.
3. The Service Connection Progress dialog box appears.
4. Once connected, the AirBEAM Synchronization screen appears.
   a. The Status List displays status messages that indicate the progress of the synchronization process.
   b. The Done button returns to the Main Menu. This button remains inactive until the synchronization process is complete.
   c. The Retry button restarts the synchronization process. This button is activated only if there is an error during the synchronization process.

Automatic Synchronization

The AirBEAM client can be configured to launch automatically using the Misc(1) Preference screen (see *Misc(1) Screen* on page 12-7). When setting this screen, use the Auto-load drop-down menu is to specify how the AirBEAM client should be invoked automatically when the client device is rebooted. The selections are:

- Disable: the AirBEAM client is not invoked automatically during the boot sequence.
- Interactive: the AirBEAM client is invoked automatically during the boot sequence. The package synchronization process is started automatically. The *Synchronization Dialog* box is displayed, and the user is required to press the **OK** button when the process is complete.
- Non-interactive: the AirBEAM client is invoked automatically during the boot sequence. The package synchronization process is started automatically. The *Synchronization Dialog* box is displayed, but the user is not required to press the **OK** button when the process is complete. The Synchronization Dialog box terminates automatically.

IPR2024-01221 Exhibit 2009 Page 220 of 322

Chapter 13
Applications: Preferences

Chapter Contents

Introduction 13-3
Buttons Preferences 13-3
Pen Preferences 13-5
HotSync Buttons Preferences 13-6
Connection Preferences 13-7
Digitizer Preferences 13-9
Formats Preferences 13-9
Country Default 13-9
Time, Date, Week Start and Numbers Formats 13-10
Date & Time Preference 13-10
Setting the Date 13-11
Setting the Time 13-11
Setting the Time Zone 13-12
General Preferences 13-13
Auto-Off 13-13
Stay On In Cradle 13-13
System, Alarm and Game Sounds 13-14
Beam Receive 13-14
Kerberos Preferences 13-14
Network Preferences 13-14
Selecting a Service 13-15
Entering a User Name 13-16
Entering a Password 13-16
Adding Connection Settings 13-17
Connecting to Your Service 13-20
Creating Additional Service Templates 13-20

Adding Detailed Information to a Service Template. 13-21
Idle Timeout 13-22
Defining Primary and Secondary DNS. 13-23
IP Address 13-24
Creating a Login Script 13-25
Deleting a Service Template 13-27
Network Preferences Menu Commands 13-27
Service Menu 13-27
Options Menu 13-28
TCP/IP Troubleshooting. 13-28
Owner Preferences 13-29
ShortCuts Preferences 13-30
Creating a ShortCut 13-30
Editing a ShortCut 13-31
Deleting a ShortCut 13-31
Symbol Preferences 13-32
Trigger Wake 13-32
High Beep 13-32
Trigger Sled 13-32

IPR2024-01221 Exhibit 2009 Page 222 of 322

Introduction

The Preferences screens enable you to customize the configuration options on your SPT 1800 terminal.

With the Preferences screens, you can:

- Set the current date and time, the auto shut-off interval, and the overall, system, alarm and game sounds.
- Set the display format for dates, times and numbers.
- Configure your SPT 1800 series terminal for use with a modem.
- Assign your name, phone number and other owner information to your SPT 1800 series terminal.
- Assign different applications to the buttons on the front panel of your SPT 1800 series terminal.
- Define a list of Graffiti 2 abbreviations.
- Calibrate the screen on your SPT 1800 series terminal.
- Configure your SPT 1800 series terminal for use with a network, including Spectrum24 (SPT 184x only) and CDPD (SPT 1833).

To open the Preferences screens:

1. Tap the icon to open the Applications Launcher.
2. Tap the icon to display the last Preferences screen you used.
3. Tap the pick list in the upper-right corner to select the Preferences screen you want to view.

Buttons Preferences

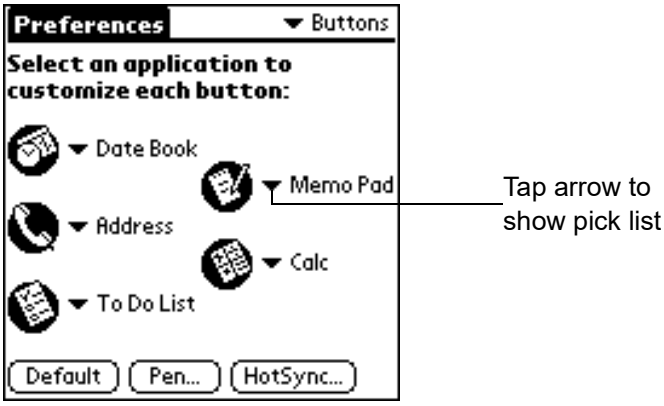
The Buttons Preferences screen enables you to associate different applications with the buttons on the front of the SPT 1800 terminal. For example, if you find that you seldom use the To Do List application and often use the Expense application, you can assign the To Do List button to start the Expense application.

Any changes you make in the Buttons Preferences screen become effective immediately; you do not have to switch to a different screen or application.

If you assign a different application to a button, you can still access the original application using the Applications Launcher. Refer to *Applications* on page 3-3.

To change the Buttons Preferences:

1. On the General Preferences screen choose Buttons from the pick list. This displays a list of all the applications installed on your SPT 1800 terminal.



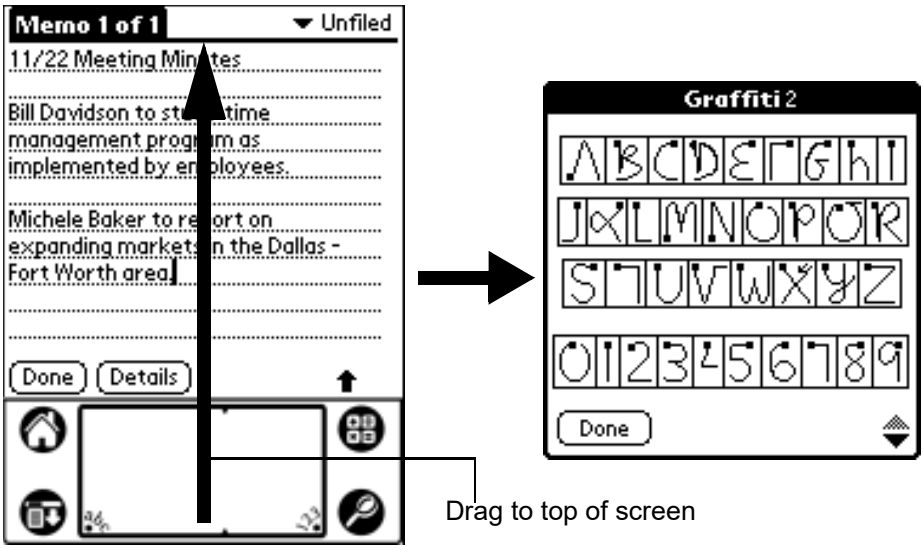
2. Tap the pick list next to the application you want to re-assign a button.
3. Select the new button.

Note: *To restore all of the buttons to their factory settings, tap the Default button.*

IPR2024-01221 Exhibit 2009 Page 224 of 322

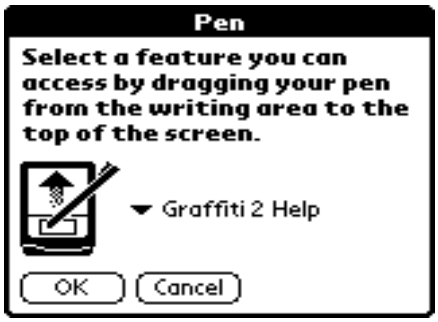
Pen Preferences

The Buttons Preferences screen enables you to change the Button assignment of the full-screen pen stroke. By default, the full-screen pen stroke activates the Graffiti 2 Help screen.



To change the Pen preferences:

1. Tap the *Pen* button in the Buttons Preferences screen to open the Pen screen.



2. Tap the pick list and select one of the following settings for the full-screen pen stroke:

Backlight	Activates the backlight feature of the SPT 1800 terminal. You can use this setting instead of the power button to turn the backlight on and off.
Keyboard	Activates the on-screen keyboard for entering text characters.

Graffiti Help	Activates a series of screens that show the complete Graffiti pen stroke character set.
Turn Off & Lock	Turns off and locks the SPT 1800 terminal. You must assign a password to lock the SPT 1800 terminal. When locked, you need to enter the password to unlock and use your SPT 1800 terminal.
Beam Data	Beams the current entry to another terminal.

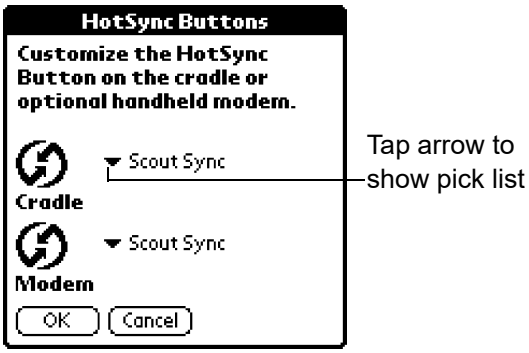
3. Tap the *OK* button to complete your selection and return to the Buttons Preferences screen.

HotSync Buttons Preferences

The Buttons Preferences screen also enables you to associate different applications with the HotSync button on the CRD1700-1000S. Any changes that you make in the HotSync Buttons screen are effective immediately; you do not have to change to a different screen or application.

To change the HotSync Buttons preferences:

1. Tap the *HotSync* button in the Buttons Preferences screen to open the HotSync Buttons screen.
2. Tap the pick list next to the button you want to assign to display a list of all the applications installed on your SPT 1800 terminal.



3. Tap the application that you want to assign to each button. The default setting for each button is the HotSync setting, which means the cradle and optional device accessory perform their normal HotSync functions.

IPR2024-01221 Exhibit 2009 Page 226 of 322

Connection Preferences

The Connection Preferences screen enables you to define the settings for the serial, modem, and IR communications.

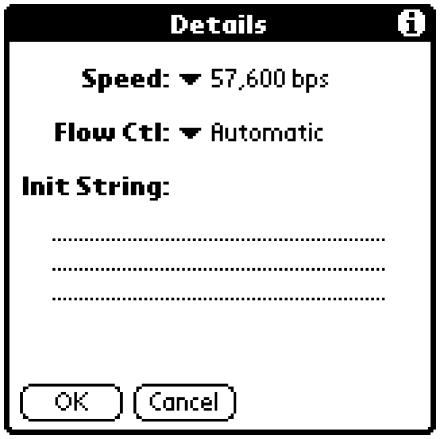
To define the Connection Preferences:

1. Tap the icon to display the last Preferences screen you used.
2. Tap the pick list in the upper-right corner and select Connection. The following screen displays:

3. Tap the modem you want to configure and tap *New* for a new configuration, or *Edit* to re-configure an existing one. The Edit screen displays:

Name	If the configuration is new, enter the name of the modem connected to the SPT 1800 terminal using the onscreen keyboard. If it is an existing configuration, the modem name displays.
Connection Method	The preferred method of communication. **Note**: The SPT 1833 terminal can connect via Merlin to PC.
Dialing	Select either Touch Tone or Rotary. Select Rotary only if you are certain that your telephone service does not support Touch Tone dialing.
Volume	Speaker volume for the modem. **Note**: The Dialing and Volume settings are not configurable for all Connection Methods and may not display your screen.

4. Tap the *Details* button. The following screen displays:



5. Tap the Speed pick list and select the speed for communication.
6. Tap the Flow Ctl (Flow Control) pick list and select either Automatic, On or Off Flow Control for the modem connection.
7. If necessary, edit the Init String text to change the modem setup string.

IPR2024-01221 Exhibit 2009 Page 228 of 322

Digitizer Preferences

The Digitizer Preferences screen activates the digitizer calibration screen. This is the same screen that displays when you start your SPT 1800 terminal for the first time. Tap each target that appears on the screen.

Formats Preferences

Use the Formats Preferences screen to set the display format of the country, dates, times and numbers on your SPT 1800 terminal.

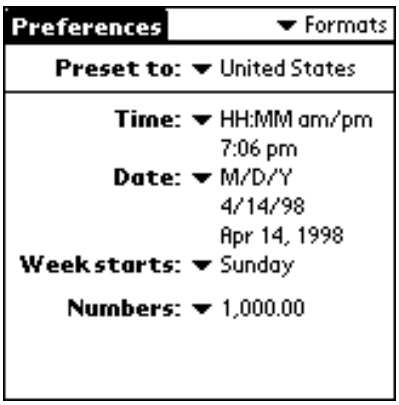
Country Default

The country default sets date, time, week start day and number conventions based on geographic regions where you might use your SPT 1800 terminal. For example, in the United Kingdom, time often is expressed based on a 24-hour clock. In the United States it is based on a 12-hour clock with an AM or PM suffix.

All your SPT 1800 terminal applications use the Country default settings. You can, however, customize your own preferences as described in *Time, Date, Week Start and Numbers Formats* on page 13-10.

To set the country default:

1. In the Formats Preferences screen, tap the Preset To pick list. The following screen displays:



2. Tap the country you want to use.

Time, Date, Week Start and Numbers Formats

These settings define the defaults. Note that the format that you select appears in all applications on your SPT 1800 terminal.

To select the Time, Date, Week start and Numbers format:

1. Tap the Time pick list in the Formats Preferences screen, and select the format that you want for your SPT 1800 terminal.
2. Tap the Date pick list and select the format that you want for your SPT 1800 terminal.
3. Tap the Week starts pick list and select whether you want the first day of the week to be either Sunday or Monday.
4. Tap the Numbers pick list and select the format that you want for your SPT 1800 terminal.

Note: *This setting controls the Day, Week and Month views in the Date Book application and all other aspects of your SPT 1800 terminal that display a calendar.*

Date & Time Preference

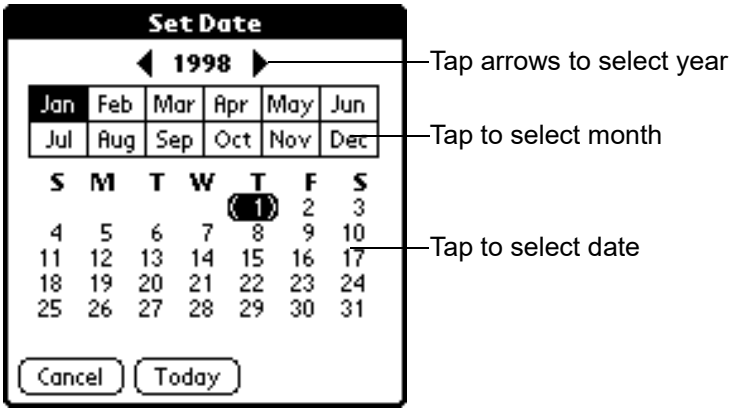
The Date & Time Preferences screen lets you set the date, time and time zone for your device.

IPR2024-01221 Exhibit 2009 Page 230 of 322

Setting the Date

To set the date:

1. Tap the Applications Launcher icon, then tap the Prefs icon.
2. From the pick list in the upper right corner, tap Date & Time.
3. On the Date & Time screen, tap the Set Date box; then tap the arrows at the top of the Set Date screen to select the current year.



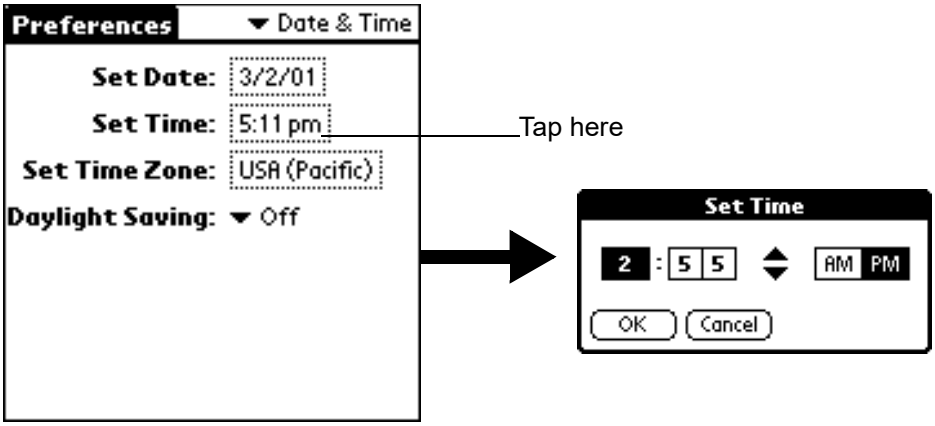
4. Tap the month; then tap the current date.

The screen closes and the dates you selected are displayed in the Set Date box.

Setting the Time

To set the time:

1. Tap the Applications Launcher icon; then tap the Prefs icon.
2. From the pick list in the upper right corner, tap Date & Time.
3. On the Date & Time screen, tap the Set Time box; then tap the Up or Down arrow to change the hour.



4. Tap each minute number, and then tap an arrow to change the number.
5. If available, tap AM or PM.
6. Tap OK to set the new time and return to the Date & Time screen.

Note: *To display time based on a 24-hour clock, change the time format.*
See Time, Date, Week Start and Numbers Formats on page 13-10.

Setting the Time Zone

To set the time zone:

1. Tap the Applications icon; then tap the Prefs icon.
2. From the pick list in the upper right corner, tap Date & Time.
3. On the Preferences screen, tap the Set Time Zone box.
4. Use the up and down arrows to scroll to your country and time zone. The hardware scroll buttons can be used to scroll the list a page at a time.
5. Make sure your time zone is highlighted, then tap OK.

   Tip: Choose the time zone from the list that corresponds to where you are. When you travel, use this dialog to change time zones. If you're not sure what time zone you are in, find out what time it is, and select the time zone which shows the current new time. Do not use the time zone dialog to switch between daylight savings time and standard time. Use the Daylight Savings pick list.

The screen closes and the dates you selected are displayed in the Date & Time screen.

To set daylight savings time:

1. Tap the Applications Launcher icon, then select Date & Time from the pick list in the upper right corner of the screen.

IPR2024-01221 Exhibit 2009 Page 232 of 322

2. Tap on the Daylight Saving pick list to toggle this feature on or off.

General Preferences

The General Preferences screen is where you set the auto shut-off interval and sounds for your SPT 1800 terminal.

Auto-Off

Your SPT 1800 terminal has an automatic shutoff feature that turns off the power and backlight after a period of inactivity. This feature helps conserve battery power in case you forget to turn off your SPT 1800 terminal.

If you find that your SPT 1800 terminal shuts itself off before you finish reviewing the information on the screen, increase the time setting of the automatic shutoff feature.

To set the Auto-off delay:

1. Tap Auto-off After in the General Preferences screen to open the pick list.
2. Tap the setting you want to use for the automatic shutoff feature. You can choose a delay of 30 seconds, 1 minute, 2 minutes or 3 minutes.

Stay On In Cradle

This option is used to control whether the SPT 1800 terminal stays powered on while it is in the cradle. To force the terminal to stay on while it is seated in the cradle, check this box.

System, Alarm and Game Sounds

Your SPT 1800 terminal uses a variety of sounds. The System, Alarm and Game Sound settings enable you to turn the sounds on or off, and on to adjust the volume level.

To set the System, Alarm and Game sounds, tap each option's pick list and select the sound level.

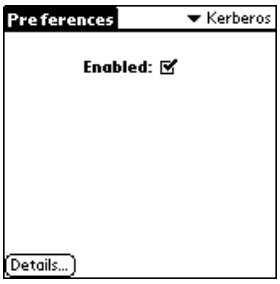
Note: *When you turn off the System Sounds, you also turn off the "chime" tones associated with the HotSync operation. The Game Sound setting works only with games that are programmed to respond to this setting. Older games typically do not respond to this setting.*

Beam Receive

The Beam Receive preference controls the IRDA receiving. Refer to *Beaming Information to Other SPT 1800 Terminals* on page 3-27 for details.

Kerberos Preferences

The Kerberos Preferences enables you to configure the Kerberos Authentication settings on the terminal. You can also enable Kerberos in the Network Preferences. To enable Kerberos, tap the *Enabled* checkbox.



Refer to *SPT 1846 Configuration* on page 2-7 for setting Kerberos detail information.

Network Preferences

The Network Preferences settings enable you to use the TCP/IP software that comes with your SPT 1800 terminal operating system to connect with Internet Service Providers (ISPs) or dial-in (remote access) servers. For instructions on configuring your terminal for use with a Spectrum24 or CDPD network refer to *Chapter 2, Network Setup.*

IPR2024-01221 Exhibit 2009 Page 234 of 322

To use TCP/IP, you must first create a configuration in Connection Preferences and then create Network preference settings.

Note: *Connection preferences settings enable your SPT 1800 terminal to use an external modem to communicate with remote devices. For example, you can communicate with your computer if you are away on travel or your ISP server. Refer to* *Connection Preferences on page 13-7* *for a complete explanation on how to configure modem parameters.*

After you configure both the Network and Connection (modem) Preferences, you can establish a PPP (Point-to-Point Protocol), SLIP (Serial Line Internet Protocol) or CSLIP (Compressed Serial Line Internet Protocol) connection with your ISP or dial-in server, by using menu commands from the Network Preferences screen or by using a third-party application.

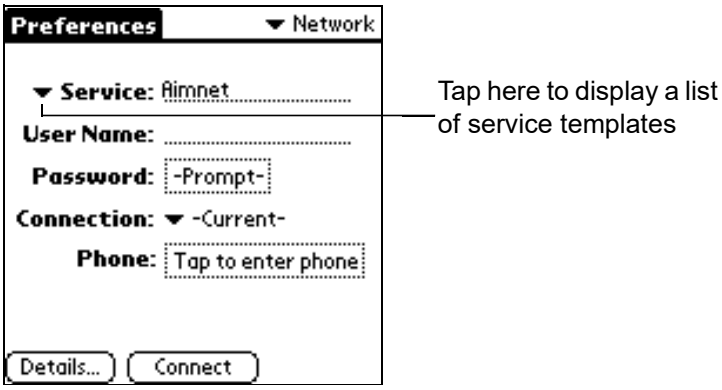
Note: *TCP/IP provides the ability to connect to your ISP or dial-in server, however, it does not come with any applications to view the transmitted data. Visit the Symbol website (http://www.symbol.com/palm) for information on third-party applications that take advantage of TCP/IP.*

Selecting a Service

Use the Service setting to choose the service template for your Internet Service Provider or a dial-in server. Service templates are a set of ISP and dial-in server configuration settings that you can create, save and reuse.

To select a service:

1. Tap the Service pick list in the Network Preference screen to display a list of all the predefined service templates.



2. Tap the service you want to use.

Entering a User Name

The User Name setting identifies the name you use when you log into your Internet Service Provider or your dial-in server. Although this field can contain multiple lines of text, only two lines display on the screen.

To enter a user name:

1. Tap the User Name line in the Network Preferences screen to move the cursor to that field.
2. Enter your user name.

Note: *Most dial-in servers do not accept spaces in the user name.*

Entering a Password

The Password field identifies the password you use to log into your server or ISP. Your entry in this field determines whether your SPT 1800 terminal prompts you to enter a password each time you log into your network.

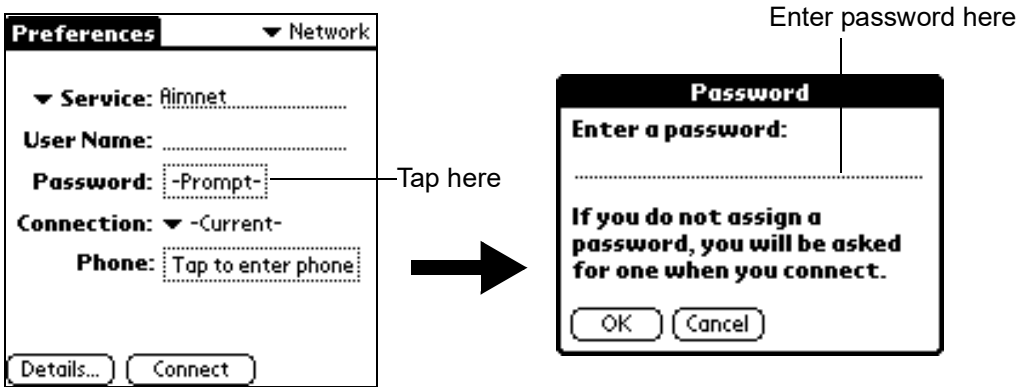
If you do not enter a password, your SPT 1800 terminal displays the word “Prompt” in this field and asks you to enter a password during the login procedure. If you enter a password, your SPT 1800 terminal displays the word “Assigned” in this field and does not prompt you to enter a password during the login procedure.

IPR2024-01221 Exhibit 2009 Page 236 of 322

Note: *If you are concerned about security, select the Prompt option and do not enter a password.*

To enter a password:

1. Tap the Password box in the Network Preferences screen to open the Password screen.



2. Enter the password you use to log into your server.
3. Tap *OK* to confirm your entry and return to the Network Preferences screen.

Note: *The Password field updates to display the word "Assigned."*

Adding Connection Settings

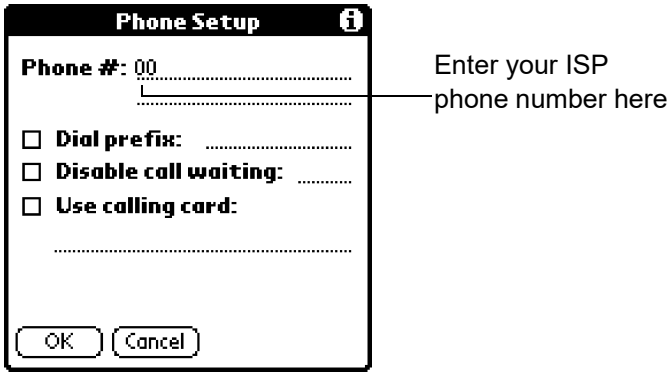
Use the Connection pick list to choose your modem.

When you select the Phone field, your SPT 1800 terminal opens a screen where you define the telephone number you use to connect with your ISP or dial-in server. In addition, use this screen to define a prefix, disable Call Waiting and give special instructions for using a calling card.

Note: *The phone setup screen works correctly for AT&T and Sprint long-distance services. However, MCI customers need to put the calling card number in the Phone field and the phone number in the Calling Card field.*

To enter your server phone number:

1. Tap the Phone field to open the Phone Setup screen.



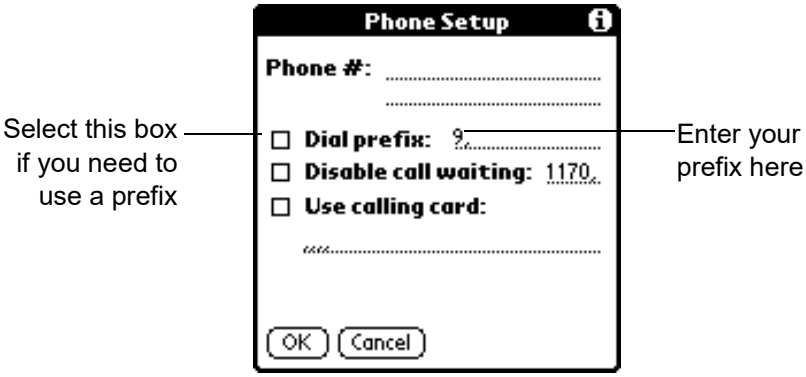
2. Enter the phone number you use to reach your ISP or dial-in server.

Entering a Prefix

A prefix is a number that you dial before the telephone number to access an outside line. For example, many offices require that you dial “9” to dial a number outside the building.

To enter a prefix:

1. Select the Dial Prefix check box to activate this feature.



2. Enter the prefix you need on the Prefix line.
3. Tap *OK* to confirm your selection and return to the Network Preferences screen.

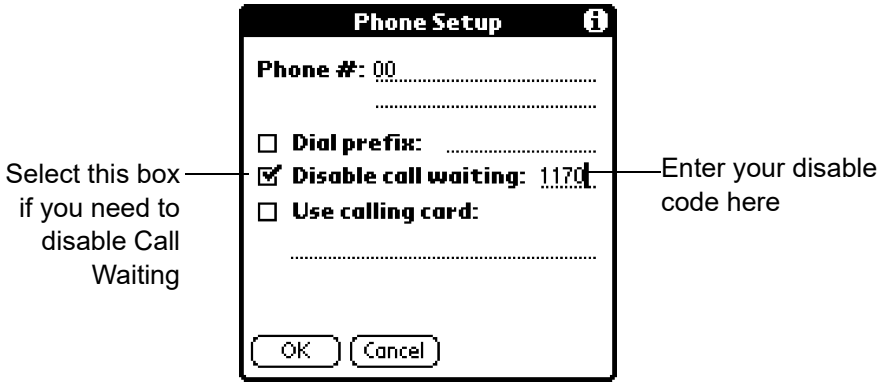
IPR2024-01221 Exhibit 2009 Page 238 of 322

Disabling Call Waiting

Call Waiting can cause your session to terminate if you receive a call while you are connected. If your telephone has Call Waiting, disable this feature before logging into your ISP or dial-in server.

To disable Call Waiting:

1. Select the Disable call waiting check box to activate this feature.



2. Enter the code to disable Call Waiting on the Disable call waiting line.

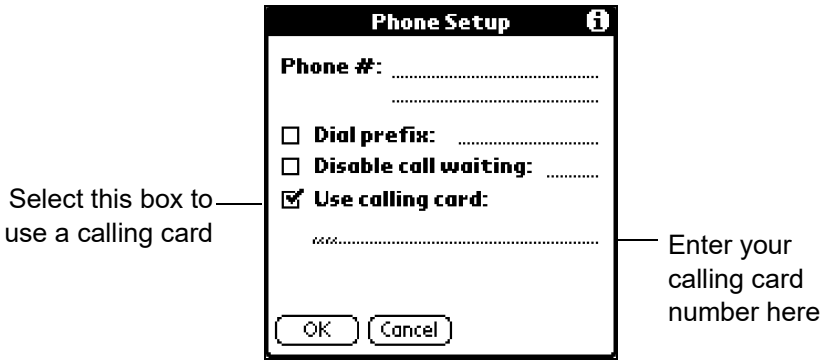
Note: *Each telephone company assigns a code to disable Call Waiting. Contact your local telephone company for the code that is appropriate for you.*

Using a Calling Card

The Use Calling Card field enables you to use your calling card when dialing your ISP or Intranet server. There is usually a delay before you enter your calling card number. When you define your calling card number, add commas at the beginning to compensate for this delay. Each comma delays transmission of your calling card number for two seconds.

To use a calling card:

1. Select the Use Calling Card check box to activate this feature.



2. Enter your calling card number on the Use Calling Card line.

Note: *It's a good idea to add at least three commas at the beginning of your calling card number to compensate for the cue delay.*

---

3. Tap *OK* to confirm your selection and return to the Network Preferences screen.

Connecting to Your Service

After you set your Modem and Network Preferences, establishing a connection to your ISP or dial-in server is easy.

Remember that you need a third-party application, such as a web browser or news reader, to take advantage of this connection. Check the Symbol website (http://www.symbol.com/palm) for the latest information about third-party applications that support SPT TCP/IP.

To establish a connection, tap the *Connect* button in the Network Preferences screen to dial the current service and display the Service Connection Progress messages.

> **Tip:** To see expanded Service Connection Progress messages, press the lower half of the scroll button.

To close a connection, tap the *Disconnect* button in the Network Preferences screen to terminate the connection between your SPT 1800 terminal and your service.

Creating Additional Service Templates

You can create additional service templates from scratch or by duplicating existing templates and editing information. After you create a new or duplicate template, you can add and edit settings.

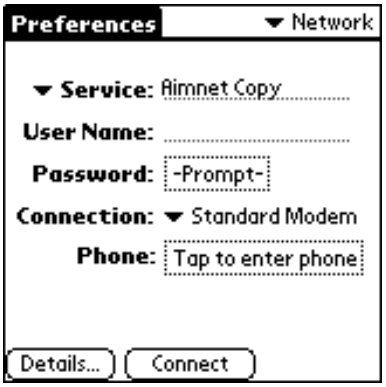
IPR2024-01221 Exhibit 2009 Page 240 of 322

To add a new service template:

1. Tap the icon in the Network Preferences screen to open the menus.
2. Tap *New* from the Service menu to create a new service template (called Untitled) to the Service pick list and display it in the Network Preferences screen.

To duplicate an existing service template:

1. Tap the Service pick list in the Network Preference screen to open a list of all the predefined service templates.
2. Tap the service you want to duplicate.
3. Tap the icon to open the Network Preferences menus.
4. Tap Duplicate from the Service menu to add a copy of the service template to the Service pick list and display it in the Network Preferences screen.

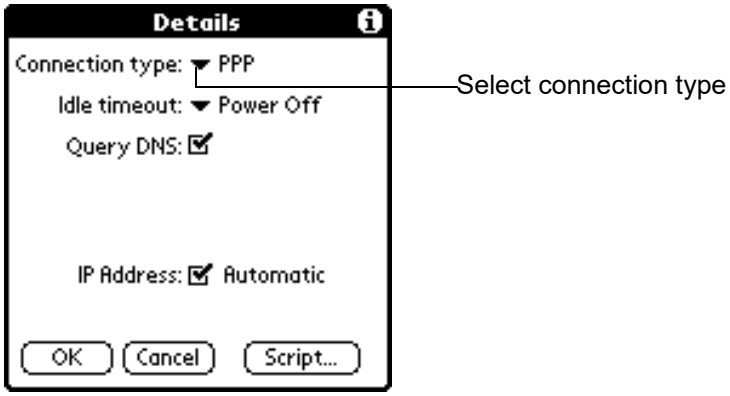


Adding Detailed Information to a Service Template

If you are using one of the predefined service templates, you will probably only need to enter your user name and telephone number. If you are creating a new Service Templates, you may need to provide additional information to your ISP or dial-in server. Use the Details screen to add additional information to a selected service template.

To select a connection type:

1. Tap the service you want to use in the Network Preferences screen.
2. Tap the *Details* button to open the Details screen.



3. Tap the Connection type pick list and select one of the following connection types:

PPP	Point-to-Point protocol
SLIP	Serial Line Internet Protocol
CSLIP	Compressed Serial Line Internet Protocol

Note: *If you are not sure, try PPP; if that doesn't work, ask your Internet Service Provider or your System Administrator for the correct connection type.*

Idle Timeout

The Idle Timeout setting defines how long your SPT 1800 terminal waits before dropping the connection with your ISP or dial-in server when you switch out of a TCP/IP application.

To set the Idle Timeout:

1. Tap the Idle Timeout pick list and select one of the following options:

Immediate	Your SPT 1800 terminal drops the connection to your ISP immediately when you switch to another application.
1 minute	Your SPT 1800 terminal waits one minute for you to open another application before it drops the connection.

IPR2024-01221 Exhibit 2009 Page 242 of 322

2 minutes	Your SPT 1800 terminal waits two minutes for you to open another application before it drops the connection.
3 minutes	Your SPT 1800 terminal waits three minutes for you to open another application before it drops the connection.
Power Off	Your SPT 1800 terminal keeps your PPP or SLIP connection until you power off your SPT 1800 terminal (or until it times out). This option works best with the PalmPilot Modem.

2. Tap the *OK* button to confirm your selection and return to the Network Preferences screen.

Defining Primary and Secondary DNS

The Domain Naming System (DNS) is a mechanism in the Internet for translating names of host computers into IP addresses. When you enter a DNS number (or IP address), you are identifying a specific server that handles the translation services.

Each IP address has four sections, separated by periods. In the Details screen, enter each section separately. Each section of an IP address is made up of a number from 0 to 255; numbers are the only allowable characters in this field.

Note: *Ask your Internet Service Provider or System Administrator for the correct Primary or Secondary DNS IP numbers.*

Tip: Many systems do not require that you enter a DNS. If you are not sure, leave the DNS field blank. Note that if your ISP or dial-in server requires a DNS number and you did not enter that information in the Network Preferences screen, it will appear that you successfully logged into your network. However, when you try to use an application or look up information, the connection fails. If this occurs, try adding a DNS number. Ask your ISP or your System Administrator for the correct Primary and Secondary DNS IP numbers.

To enter a primary and secondary DNS:

1. Make sure the Query DNS check box is not selected.

Note: *If the Query DNS check box is selected, it queries the connection (modem) for the saved DNS information.*

---

2. Tap the space to the left of the first period in the Primary DNS field, then enter the first section of the IP address.

Note: *Each section must be a number from 0 to 255.*

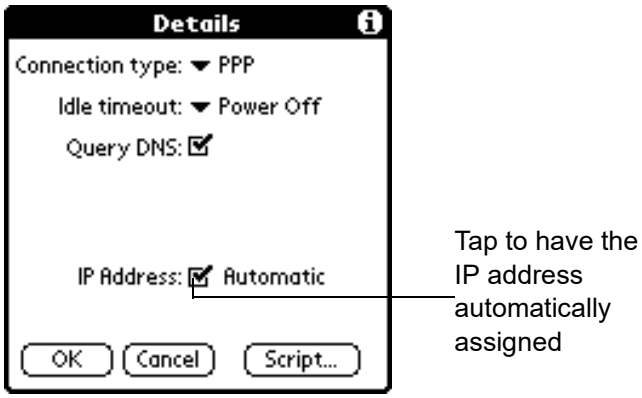
3. Tap the second section of the Primary DNS field, then enter the second section of the IP address, and so on until the sections are completed.
4. Repeat steps 2 and 3 for the Secondary DNS number.
5. Tap the *OK* button to confirm your selection and return to the Network Preferences screen.

IP Address

Everyone who logs on to the Internet needs to have a unique identifier (an IP address), whether permanent or temporary. Some networks dynamically assign a temporary IP address when clients log in. The IP Address field lets you identify whether your network provides automatic (dynamic) temporary IP addressing.

Note: *If your IP address is permanently assigned, you will need to get that information from your System Administrator. If you are not sure, select Automatic.*

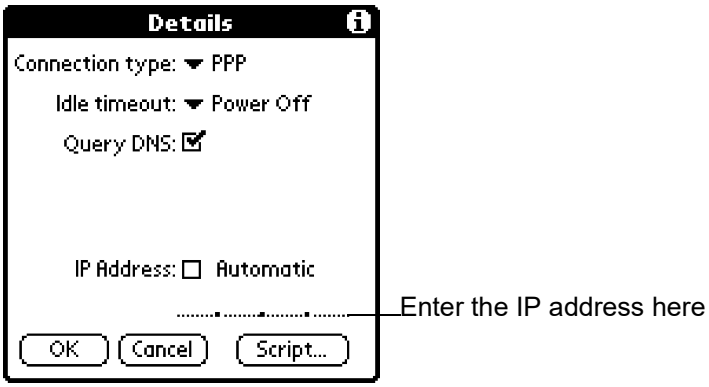
To identify dynamic IP addressing, select the IP Address check box to activate this option.



IPR2024-01221 Exhibit 2009 Page 244 of 322

To enter a permanent IP address:

1. Clear the IP Address check box to disable this option and display a permanent IP address field below the check box.



2. Tap the space to the left of the first period then enter the first section of the IP address.

Note: *Each section must be a number from 0 to 255.*

---

3. Tap and enter the remaining sections of the IP address.
4. Tap the *OK* button to confirm your selection and return to the Network Preferences screen.

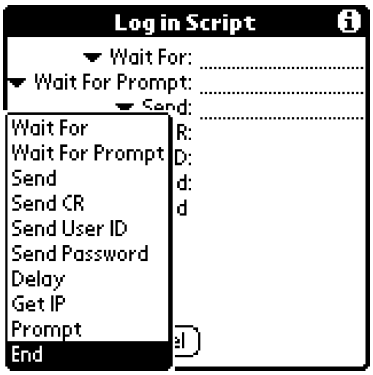
Creating a Login Script

A login script is a series of commands, similar to an autoexec.bat file, that automates logging into your ISP. You can create login script files by selecting commands from the Command pick list in the Login Script screen. Some of these commands, such as Send, require you to supply additional information and have a parameter field for the necessary data.

Note: *You can also use non-ASCII and literal characters in your login script. Refer to Appendix A, Non-ASCII Characters for Login Scripts for additional information.*

To create a login script:

1. Tap the *Script* button in the Details screen to open the Login Script screen.
2. Tap the End pick list to open the Command list.



3. Tap the command(s) you want from the Command list.
4. If the command requires additional information, a field displays to the right of it for you to enter the information. The following commands are available:

Wait For	Tells your SPT 1800 terminal to wait for specific characters from the TCP/IP server before executing the next command.
Wait For Prompt	Tells your SPT 1800 terminal to wait for a prompt before executing the next command.
Send	Transmits specific characters to the TCP/IP server to which you are connecting.
Send CR	Transmits a carriage return or LF character to the TCP/IP server to which you are connecting.
Send User ID	Transmits the User ID information entered in the User ID field of the Network Preferences screen.
Send Password	Transmits the Password entered in the Password field of the Network Preferences screen. If you did not enter a password in the Password field, this command prompts you to enter one. The Password command is usually followed by a Send CR command.
Delay	Tells your SPT 1800 terminal to wait a specific number of seconds before executing the next command in the login script.
Get IP	Reads an IP address and uses it as the IP address for your SPT 1800 terminal. This command is used with SLIP connections.

IPR2024-01221 Exhibit 2009 Page 246 of 322

Prompt	Opens a screen and prompts you to enter text of some kind (for example, a password or a security code).
End	Identifies the last line in the login script.

5. Repeat steps 2 and 3 until the login script is complete.
6. Tap *OK* to confirm your selection and return to the Details screen.

Deleting a Service Template

To delete a service template:

1. Tap the Service pick list in the Network Preference screen to open a list of available service templates.
2. Tap the service you want to delete.
3. Tap the icon to open the menus for the Network Preferences screen.
4. Tap Delete from the Service menu to display the Delete Service alert.
5. Tap the *OK* button to confirm that you want to delete the service template.

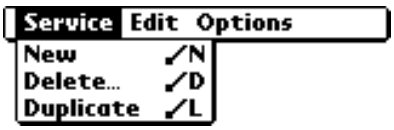
Network Preferences Menu Commands

The Network Preferences screen includes menu commands to make it fast and easy to create and edit service templates. This section explains the menu commands that are specific to the SPT TCP/IP application.

Refer to *Using Menus* on page 3-18 for information about menu commands that are common to all of your SPT 1800 terminal applications.

Service Menu

When you select the Service menu, its commands display on screen.



New	Creates a new (empty) service template and adds it to the Service pick list.
Delete	Deletes a selected service template from the Service pick list.
Duplicate	Copies the selected service template and adds it to the Service pick list.

Options Menu

When you select the Options menu, its command displays on screen:

View Log Displays the Network Log screen.

TCP/IP Troubleshooting

If you are having a problem establishing a network connection using the Desktop TCP/IP, check this section and try the suggestions listed.

Displaying Expanded Service Connection Progress Messages

It's helpful to identify at what point in the login procedure the connection fails. An easy way to do this is to display the expanded Service Connection Progress messages, which describe the current stage of the login procedure.

To display the expanded Service Connection Progress messages:

1. From the Network Preferences screen, tap Connect.
2. During login, press the lower half of the scroll button to display the messages.

Viewing the Network Log

If viewing the expanded Service Connection Progress messages does not give you enough information to find out why you cannot connect to your ISP or dial-in server, look at the Network Log. The Network Log lists all communication that occurs between your modem and your dial-in server during the login procedure. The information in the Network Log can help your ISP or your System Administrator pinpoint where the login procedure communication fails and why.

To view the Network Log:

1. From the Network Preferences screen, tap View Log from the Options menu to display the Network Log screen.
2. Tap the up and down arrows of the scroll bar to see the entire Network Log.
3. After you finish, tap the *Done* button to return to the Network Preferences screen.

IPR2024-01221 Exhibit 2009 Page 248 of 322

Owner Preferences

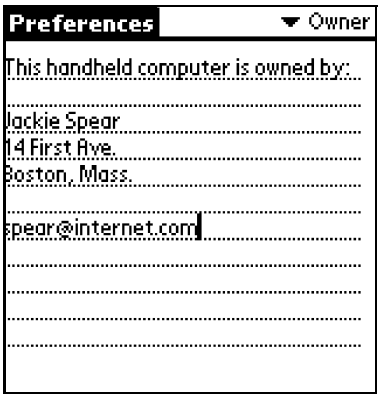
The Owner Preferences screen enables you to record a name, company name, phone number or any other information that you want associated with your SPT 1800 terminal.

If you use the Security application to turn off and lock your SPT 1800 terminal with a password, information that you put in the Owner Preferences displays the next time you turn on your SPT 1800 terminal. Refer to Chapter 14, *Applications: Security* for more information.

To personalize your SPT1800 terminal:

1. Tap the Applications icon, followed by the Prefs icon.
2. Select Owner from the Preferences pick list.

   Enter the text that you want to associate with your SPT 1800 terminal in the Owner Preferences screen. If you enter more text than will fit on one screen, a scroll bar automatically displays on the right side of the screen.



If you assign a Password (with the Security application), the information in the Owner Preferences screen “locks” and cannot be changed. In this case, an *Unlock* button displays at the bottom of the screen.

To unlock the Owner Preferences screen:

1. Tap the *Unlock* button in the Owner Preferences screen. The Unlock Message screen displays.
2. Enter the password that you defined in the Security application, and tap the *OK* button.

ShortCuts Preferences

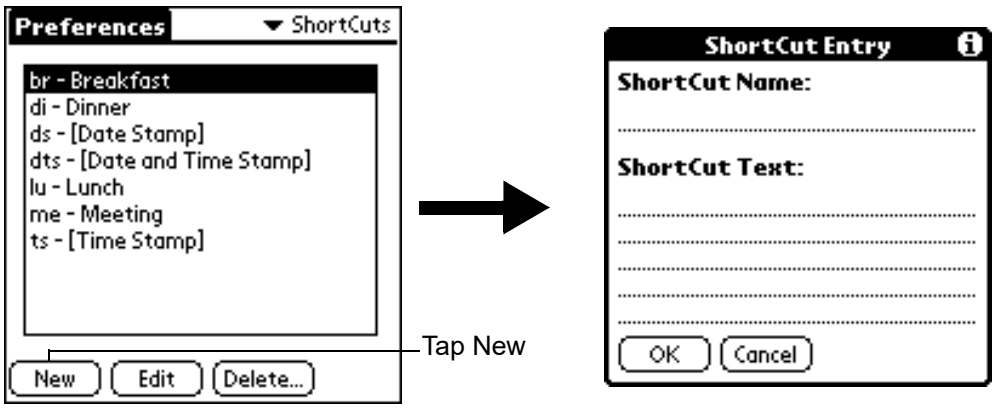
The ShortCuts Preferences screen enables you to define abbreviations for entering text with Graffiti. This section describes how to create, edit and delete a shortcut. For details on the use of ShortCuts, refer to the *Using Graffiti 2 ShortCuts* on page 3-13.

Creating a ShortCut

You can create a ShortCut for any words, letters or numbers. All ShortCuts you create display on the list in the ShortCut Preferences screen. All the ShortCuts are available in any of your SPT 1800 terminal applications and are backed up on your computer when you perform a HotSync operation.

To create a ShortCut:

1. In the General Preferences screen tap, tap Shortcuts in the pick list and tap *New* to open the ShortCut Entry screen.



2. On the ShortCut name line, enter the letters you want to use to activate the ShortCut.
3. Tap the ShortCut Text area and enter the text that you want to appear when you write the ShortCut characters.

   Tip: You may want to add a space (space character) after the last word in your ShortCut text. This way, a space automatically follows the ShortCut text.

4. Tap the *OK* button to close the ShortCut Entry screen and define your ShortCut.

IPR2024-01221 Exhibit 2009 Page 250 of 322

Tip: To use a ShortCut, draw the ShortCut stroke followed by the ShortCut characters. When you draw the ShortCut stroke, the ShortCut symbol appears at the insertion point to show that you are in ShortCut mode.

ShortCut	

Editing a ShortCut

After you create a ShortCut, you can modify it at any time.

To edit a ShortCut:

1. Tap the ShortCut you want to edit in the ShortCuts Preferences screen.
2. Tap the *Edit* button to display the ShortCut Name and ShortCut text in the ShortCut Entry screen.
3. Make the changes you want and tap the *OK* button.

Deleting a ShortCut

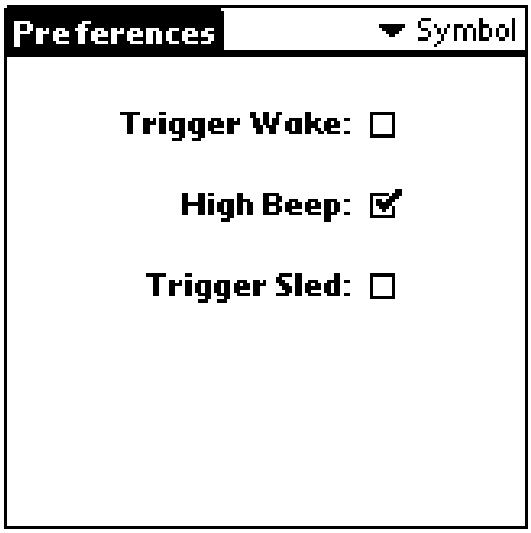
If you no longer need a ShortCut, you can delete it from the list of ShortCuts.

To delete a ShortCut:

1. Tap the ShortCut you want to delete in the ShortCuts Preferences screen.
2. Tap the *Delete* button to display an alert screen.
3. Tap the *Yes* button to confirm that you want to delete the ShortCut.

Symbol Preferences

The Symbol Preferences screen enables you to change specific terminal settings.



Trigger Wake

Your SPT 1800 terminal can be “awakened” or powered on by pressing any one of the scanner buttons. If you want this feature enabled, tap the Trigger Wake check box. If you do not check this option, the scanner buttons will not awaken the terminal.

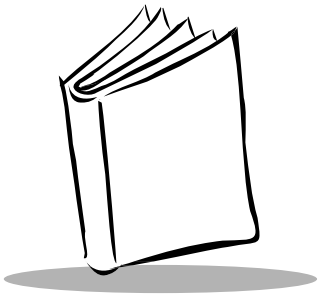
High Beep

The High Beep settings enable you to increase the volume of the system, alarm and game sounds. To enable high volume, tap the check box.

Trigger Sled

The Trigger Sled setting enables or disables the Trigger Handle accessory when attached to the terminal.

IPR2024-01221 Exhibit 2009 Page 252 of 322



Chapter 14
Applications: Security

Chapter Contents

Introduction 14-3
Assigning a Password 14-3
Hiding Private Entries 14-4
Showing Private Entries. 14-5
Masking Private Entries 14-5
Locking Your SPT 1800 Terminal 14-6
Changing or Deleting a Password 14-7
Recovering from a Lost Password. 14-8

IPR2024-01221 Exhibit 2009 Page 254 of 322

Introduction

Your SPT 1800 terminal comes with a Security application so that unauthorized users cannot view the entries you wish to protect.

With the Security application you can:

- Hide record entries you mark as “Private.” You can hide private entries with or without a password. Without a password, private entries are hidden until you set the Security application to show them. With a password, you must enter the password to view the private entries.
- Turn off and lock your SPT 1800 terminal so that it does not operate until you enter the correct password.

To open the Security application:

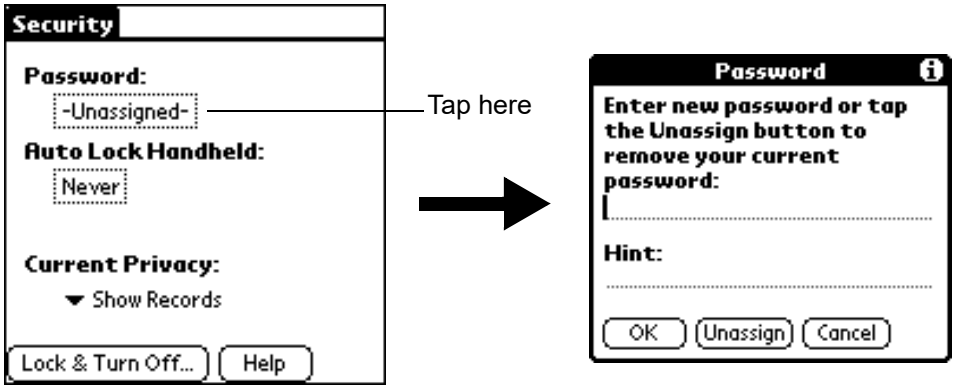
1. Tap the icon to open the Applications Launcher.
2. Tap the icon to display the Security screen.

Assigning a Password

You can assign a password to protect your private entries and to lock your SPT 1800 terminal.

To assign a password:

1. Select the Security icon, then tap the Password box to open the Password screen.



2. Enter the password that you want for your SPT 1800 terminal.
3. Enter a word or phase that will give you a hint if you forgot your password.
4. Tap the *OK* button to open a confirmation screen.

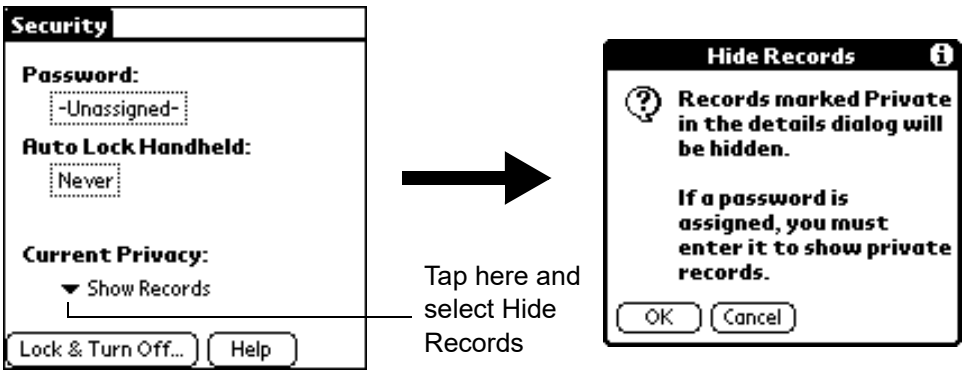
5. Enter the *same* password a second time, and tap the *OK* button to assign that password to your SPT 1800 terminal.

Hiding Private Entries

You can hide the entries that you mark as private. When hidden, they are not visible anywhere in the list. If you assign a password, you must enter it to show entries you mark as private. Note that your SPT 1800 terminal merely hides the entries; it does not delete them.

To hide Private entries:

1. Select Hide Records from the Current Privacy pick list. The Hide Records screen displays:



2. Tap Hide to hide entries you mark Private and to close the Hide Records screen.

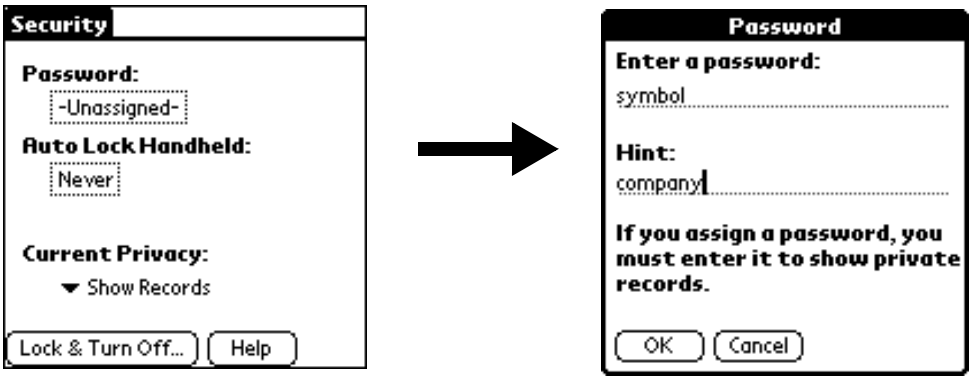
IPR2024-01221 Exhibit 2009 Page 256 of 322

Showing Private Entries

After you hide Private entries, you can use the Security application to display them again.

To show Private entries:

1. Select Hide Records from the Current Privacy pick list. If you did not assign a password, your Private entries should be visible. If you assigned a password, the Show Private Records screen displays:



2. Enter your password.
3. Tap the Show box to close the Show Private Records screen and display Private entries in your SPT 1800 terminal applications.

Masking Private Entries

When a private record is masked, a visual placeholder appears where a record would normally be displayed.

To mask private entries:

1. Ensure that the record or records you want to mask are defined as Private. To make a record private, select the record, tap *Edit*, *Details*, and then *Private*.
2. Select the Security icon.
3. Tap Mask Records from the Current Privacy pick list.

Return to the application. Messages marked as Private are masked with a gray bar.

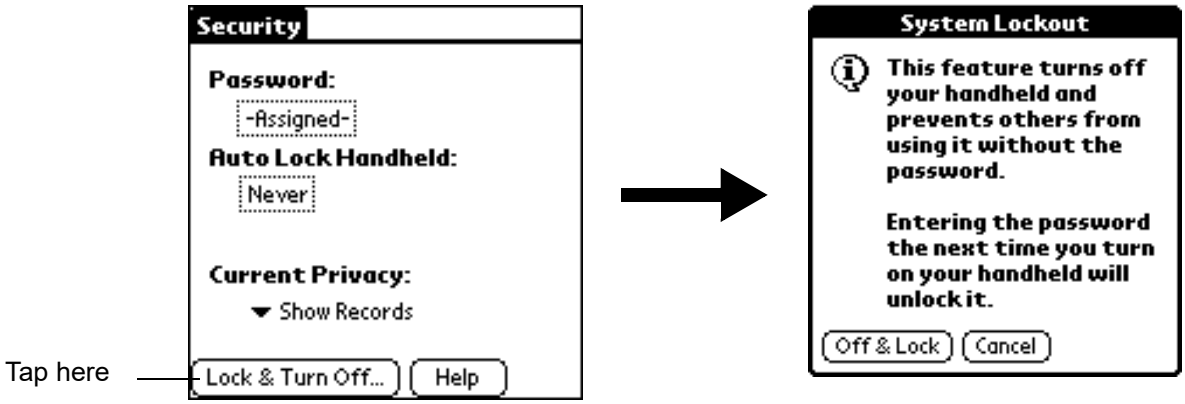
Locking Your SPT 1800 Terminal

You can also lock your SPT 1800 terminal, so that you need to enter your password to operate it.

Important: If you lock your SPT 1800 terminal as described in the following procedure, you need to enter the exact password to re-activate your SPT 1800 terminal. If you forget the password, you must perform a hard reset to resume using your SPT 1800 terminal. Using the reset button deletes all the entries in your SPT 1800 terminal; however, you can restore all synchronized data at the next HotSync operation. For information about how to use the reset button, See *Performing a Hard Reset* on page 18-5.

To lock your SPT 1800 terminal with a password:

1. Use the HotSync application to synchronize the data between your SPT 1800 terminal and your computer. Refer to Chapter 10, *Applications: HotSync®* for information about how to use the HotSync application.
2. Assign a password as described in *Assigning a Password* on page 14-3.
3. Tap the *Lock & Turn Off* button in the Security screen to open the System Lockout screen.



4. Tap the *Off & Lock* button to turn off the power for your SPT 1800 terminal.
5. Start your SPT 1800 terminal and enter the password.

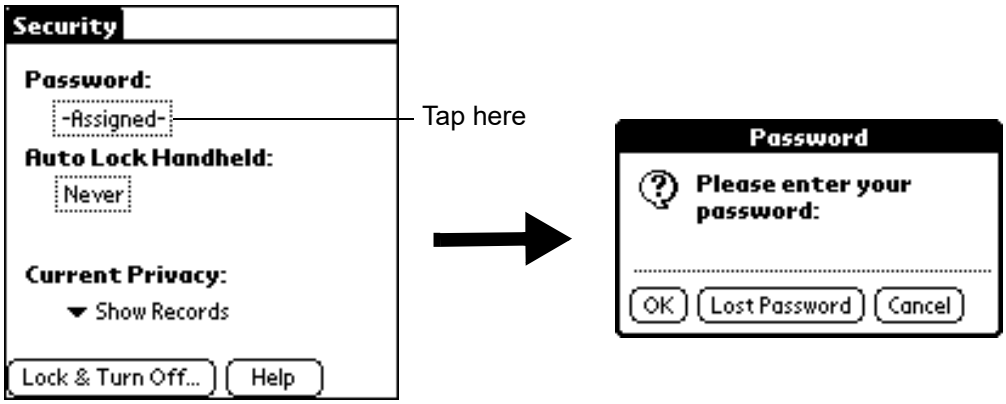
IPR2024-01221 Exhibit 2009 Page 258 of 322

Changing or Deleting a Password

Once you define a password for your SPT 1800 terminal, you can change or delete it at any time. You must enter the current password before you can change or delete it.

To change or delete your password:

1. Tap the Assigned box in the Security screen to open the Password screen.



2. Enter the current password.
3. Tap the *OK* button to open a screen that prompts you for a new password.

4. To change the password, enter the new password and tap the *OK* button. To delete the password, tap the *Unassign* button.

Recovering from a Lost Password

If the Off & Lock option is not active and you forget or lose your password, you can delete the password from your SPT 1800 terminal. Deleting a lost password also deletes all entries and files marked as Private.

Important: If you synchronize with your computer before deleting a lost password, your SPT 1800 terminal restores your private entries the next time you perform a HotSync operation, but it does not restore the password.

To delete a lost password:

1. Tap the *Lost Password* button in the Security screen to open the Delete Password dialog.
2. Tap the *Yes* button to delete the password, as well as all records and entries marked “Private.”

IPR2024-01221 Exhibit 2009 Page 260 of 322

Chapter 15
Applications: Laser Scanner

Chapter Contents

Introduction 15-3
Scanning with the SPT 1800 15-3
SScan Application 15-3
    SScan Menu Commands 15-3
Demo Scan Application 15-4
    Demo Scan Menu Options 15-6
    Scanning 1-D Bar Codes Using Demo Scan 15-7
    Barcode Application 15-7
Scanning Problems 15-8
    Battery Implications While Using the Laser Scanner 15-9

IPR2024-01221 Exhibit 2009 Page 262 of 322

Introduction

The SPT 1800 has an integrated scanner which allows you to collect data by scanning bar codes, provided you have a scanning application loaded on your terminal. The laser is emitted from the top of the unit.

Scanning with the SPT 1800

Included on the Symbol Palm Terminal Utility CD are two demonstration programs: SScan and Demo Scan. These programs are designed to assist the applications developer in writing an application for the scanner. Source code for these programs is located in the Samples subdirectory of the Scanner SDK directory, and the prc files are located in the prc subdirectory of the Scanner SDK directory. If your terminal does not contain these demonstration programs, contact your distributor.

To add SScan.prc or ScanDemo.prc to the SPT 1800, use the SPT Install Tool to designate the files to be added to the SPT 1800 during the next HotSync.

SScan Application

The SScan application is a basic scanning application. To scan bar codes with the SPT 1800 using SScan:

1. Tap the icon to open the Applications Launcher.
2. Tap the icon to open SScan.
3. Aim the terminal at the bar code.
4. Tap the *Scan* button, or use the left or right trigger to activate the scan beam.

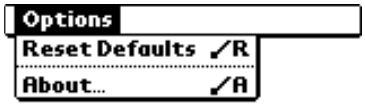
The scan LED lights and the laser beam is emitted from the top of the terminal. Make sure the beam covers the entire bar code. A successful decode is indicated by a green LED and a beep. The bar code data is displayed on the screen. In the Bar Type field, the type of symbology (e.g., Code 39) is displayed. In the Bar Data field, the actual collected bar code data displays.

SScan Menu Commands

Tap the icon to display the available menu.

Options Menu

When you select the Options menu, its commands display on screen:



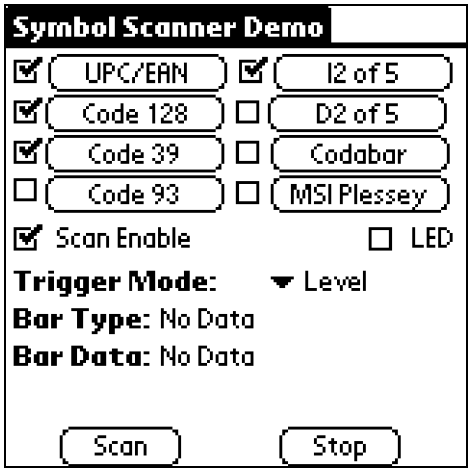
Reset Defaults	Allows you to reset the default values.
About	Provides version information.

Demo Scan Application

The Demo Scan application allows you to customize your scanner's features and scan bar codes.

To open the Demo Scan application:

1. Tap the icon to open the Applications Launcher.
2. Tap the icon to open Demo Scan.
   The Symbol Scanner Demo screen displays:



IPR2024-01221 Exhibit 2009 Page 264 of 322

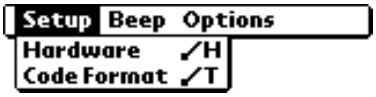
Available Symbologies	Allows you to select the symbologies to be recognized by the scanner by tapping on the box next to the name of the desired symbology. When selected, the box has a check mark.
Scan Enable	When this option is clicked, and the trigger is pressed, the laser scanner beam activates. The beam remains on for approximately 3 seconds. Alternatively, tapping on the Scan button on the bottom of the screen performs the same action.
LED	When this box is checked, the green LED lights. This serves as a test of the LED. To stop the LED test, tap the LED box again.
Trigger Mode	Level: only the SPT 1800 scan trigger initiates the scan; the laser is turned off when the trigger is released or the decode was successful. Pulse: only the SPT 1800 scan trigger initiates the scan; the laser is turned off when laser_on_time is reached or when the decode was successful. Host (default): The SPT 1800 scan trigger or the application's ScanCmdStartDecode command initiates the scan; the laser is turned off when the trigger is released, or when laser_on_time is reached, the ScanCmdStopDecode command is called, or the decode was successful.
Bar Type	Once a bar code is decoded, displays the type of the decoded bar codes (i.e., Code 39, Code 128, Code 93, etc.)
Bar Data	Once a bar code is decoded, displays the decoded data.

Demo Scan Menu Options

Tap the icon to display the available menus.

Setup Menu

When you select the Setup menu, its commands display on screen:



Hardware Setting

Beep on Good Decode	Determines if the terminal beeps to indicate a successful decode.
Redundancy	Determines if the scanner uses redundancy.
Linear Security	Defines the linear security level to be used by the scanner; level 1, 2, 3, or 4.
Scan Angle	The SPT 1800 has a single set scan angle. This option is not used.
Decode LED On Time	Defines the length of time (in seconds) the decode LED remains on when a symbol is decoded.
Laser On Time	Defines the length of time (in seconds) the laser beam remains on when the trigger is pressed.
Aim Duration	Defines the length of time the laser pointer beam remains on when the trigger is pressed or the scan button is tapped.

Code Format Setting

Code ID Char	Defines the CodeID Character. The options are None, AIM and Symbol.
Tx Format	Defines the data transmission format.
Prefix/Suffix	Defines the Prefix and Suffix values.

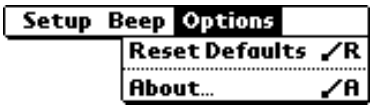
Beep Menu

This menu option allows you to customize the Frequency, Duration and Pattern of the scanner's beep.

IPR2024-01221 Exhibit 2009 Page 266 of 322

Options Menu

When you select the Options menu, its commands display on screen:

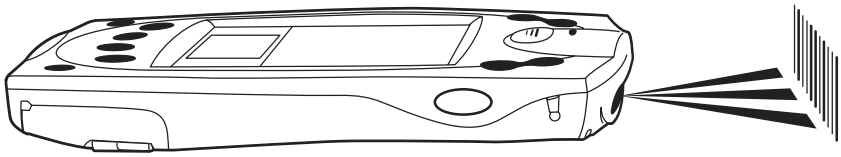


Reset Defaults	Allows you to reset the default values.
About	Provides version information.

Scanning 1-D Bar Codes Using Demo Scan

To scan 1-D bar codes:

1. Tap the icon to open Demo Scan.
2. Customize your scanner's features by selecting from the various options described previously.
3. Aim the scanner at the bar code.
4. Press either the right, left or center scan trigger or tap the Scan Button. Make sure the red scan beam covers the entire bar code. The green scan LED lights and a beep sounds to indicate a successful decode.

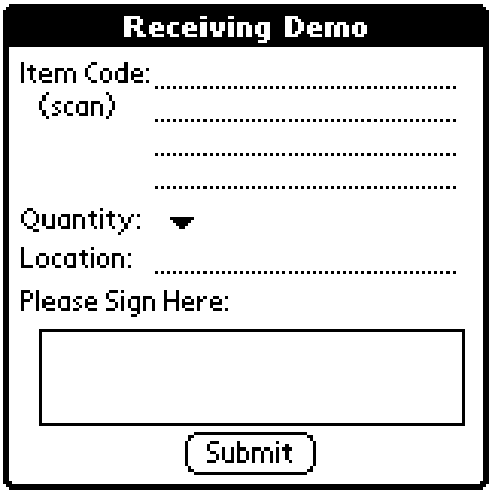


Barcode Application

The Barcode application is a basic receiving application, which demonstrates the terminal's scanning and signature capture capabilities. To use Barcode:

1. Select the Barcode icon from your main application screen.

The Receiving Demo Screen displays:



Item Code	Contains the data for an item code once it is scanned. A one or two-dimensional bar code can be scanned to fill this field.
Quantity	This drop-down menu allows you to select the appropriate quantity.
Location	Contains the location data for a location bar code once it is scanned. You can also use Graffiti to enter the location data in this field. Only one-dimensional bar codes can be used to fill this field.
Please Sign Here	Sign your name here using the stylus.

To submit the collected data, tap the Submit option. When the submission is complete, the fields clear and you can continue collecting data.

Scanning Problems

If the bar code is not being decoded, check the following:

- Make sure the bar code label is not defaced.
- Make sure the bar code is of a symbology which can be read by the scanner.

IPR2024-01221 Exhibit 2009 Page 268 of 322

- Check that the scanner window is not dirty. If it is, gently clean it using a tissue or other non-abrasive material. Do not spray any cleaner directly on the scanner window.
- Try another bar code. It is possible that your bar code is bad.
- Check your application code.
- Make sure the parameters are set correctly for the bar code being scanned; i.e., lengths, symbology, etc.

If you do not hear a beep after a good decode, check that the system sound option is set in the general preferences screen, and that Beep on Good Decode is set in the hardware setup. Refer to *Demo Scan Menu Options* on page 15-6 for details.

If you have checked all of these things and are still experiencing problems decoding your bar codes, please contact Symbol Technologies Technical Support Center. Refer to *Symbol Support Center* on page xv for contact information.

Battery Implications While Using the Laser Scanner

If your battery becomes low while the scanning application is active, the scanning application deactivates and you receive the message, “Battery Low Error”. The remaining desktop applications continue to work until you receive further low battery warnings. You should perform a HotSync at this point to avoid data loss. If you attempt to scan when your battery is low, you receive the message, “Your battery level is too low for scanning”. Recharge the battery and attempt scanning again.

IPR2024-01221 Exhibit 2009 Page 270 of 322

Chapter 16
Installing and Removing Applications

Chapter Contents

Introduction 16-3
Installing Applications 16-3
Removing Applications 16-6
Removing the Symbol Palm Terminal Desktop Software 16-7

IPR2024-01221 Exhibit 2009 Page 272 of 322

Introduction

This chapter explains how to install and remove applications on your SPT 1800 terminal and how to remove the Symbol Palm Terminal Desktop software from your computer.

Installing Applications

Your SPT 1800 terminal comes with the Date Book, Address Book, To Do List, Memo Pad and Calculator applications installed and ready to use. You can also install additional applications on your SPT 1800 terminal. The SPT Install Tool makes it quick and easy to install software on your SPT 1800 terminal during a HotSync operation.

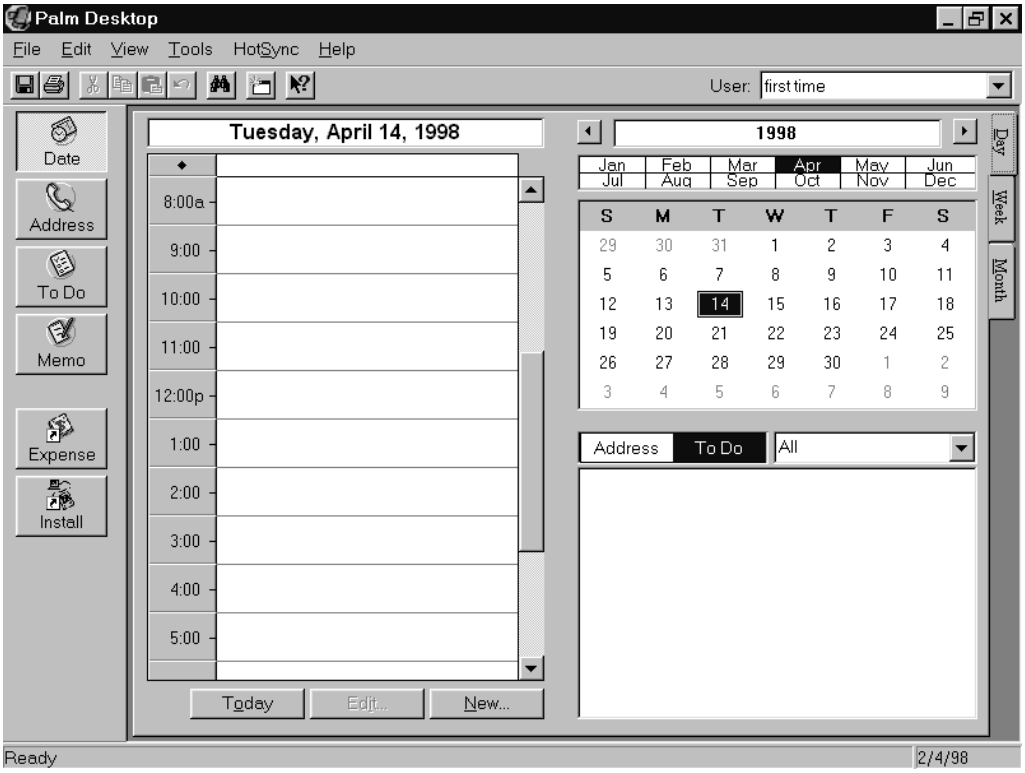
Note: *Any application that you install on your SPT 1800 terminal resides in RAM memory. A hard reset on the SPT 1800 terminal automatically deletes these applications; you can also delete them manually.*

To install software on your SPT 1800 terminal:

1. Copy the application you want to install into the Add-on subfolder in your SPT folder on your computer.

Note: *If you prefer to copy the application into another folder, navigate to that folder before you complete step 5.*

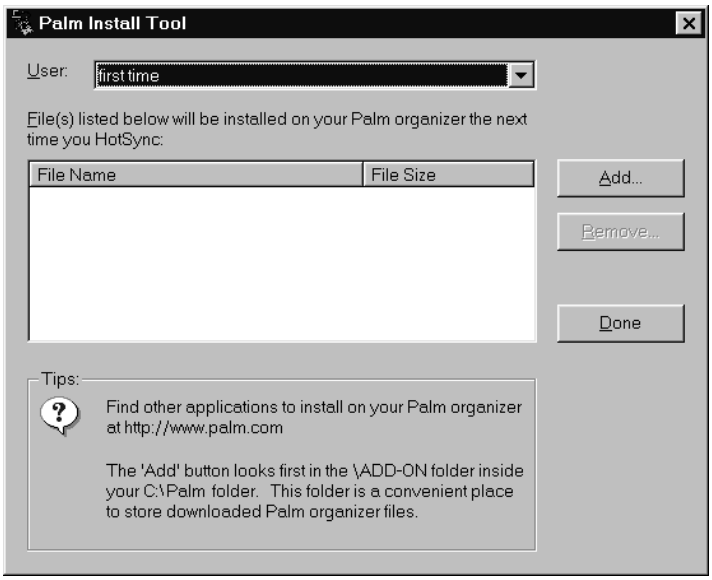
2. Double-click the Symbol Palm Terminal Desktop icon on your Windows desktop (or select Symbol Palm Terminal Desktop from the Start menu) to open the Symbol Palm Terminal Desktop software.



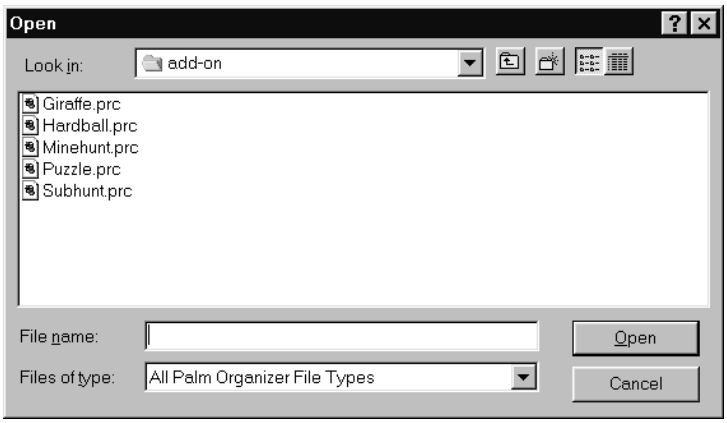
3. Click the *Install* button to open the SPT Install Tool screen.

IPR2024-01221 Exhibit 2009 Page 274 of 322

Tip: You can also access the Install Tool dialog by selecting Install Tool from the Symbol Palm Terminal Desktop program group or by double-clicking any file with a prc file extension.



4. Select the user name that corresponds to your SPT 1800 terminal in the User drop-down list.
5. Click the *Add* button to open the Open dialog.



6. Click the application(s) that you want to install on your SPT 1800 terminal.
7. Click the *Open* button to return to the Install Tool dialog.

Note: *Review the list of applications you selected in the Install Tool dialog. If you do not want to install an application, click it, then click the Remove button. (This does not remove the application from your computer, it simply removes it from the list of applications to install.)*

8. Perform a local HotSync operation to install the application(s) you selected. Refer to *Conducting a Local HotSync Operation* on page 10-9 for details.

Removing Applications

If you run out of memory or decide that you no longer need an application you installed, you can remove applications from your SPT 1800 terminal. You can remove only add-on applications, patches and extensions that you install; you cannot remove the applications that reside in the ROM portion of your SPT 1800 terminal, including Date Book, Address Book, To Do List, Memo Pad and Calculator applications. To remove an add-on application:

1. Tap the icon on the SPT 1800 terminal screen to open the Applications Launcher.
2. Tap the icon on the SPT 1800 terminal screen to open the Applications Launcher menus.
3. Tap Delete from the App menu to open the Delete screen.

4. Tap the application that you want to remove.
5. Tap the *Delete* button to display a confirmation message.

Note: *If you change your mind and do not want to delete an application, do not select an application and tap Done.*

IPR2024-01221 Exhibit 2009 Page 276 of 322

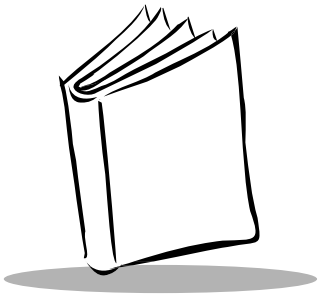
6. Tap the *Yes* button to indicate that you want to remove the application from your SPT 1800 terminal.
7. Tap the *Done* button to close the Delete screen and return to the Applications Launcher.

Removing the Symbol Palm Terminal Desktop Software

If you no longer want to use the Symbol Palm Terminal Desktop software, you can remove it from your computer. To remove the Symbol Palm Terminal Desktop software:

1. Select Settings, then Control Panel from the Start menu to open the Windows Control Panel.
2. Double-click the Add/Remove Programs icon.
3. On the Install/Uninstall tab, select Symbol Palm Terminal Desktop from the list.
4. Click the *Add/Remove* button.
5. Click *Yes* to confirm that you want to remove the application.

IPR2024-01221 Exhibit 2009 Page 278 of 322



Chapter 17
Getting Help With Your SPT 1800 Terminal

Chapter Contents

Introduction 17-3
Displaying Online Tips 17-3
Symbol Information 17-4
SPT 1800 Diagnostics Utility 17-4
System Information. 17-5
Bar Code Scanner Test 17-6
Serial Port Test. 17-7
Digitizer Alignment Test 17-8
System Diagnostics Test 17-8
Troubleshooting 17-9
Technical Support, Service and Repair 17-15
Technical Support 17-15

IPR2024-01221 Exhibit 2009 Page 280 of 322

Introduction

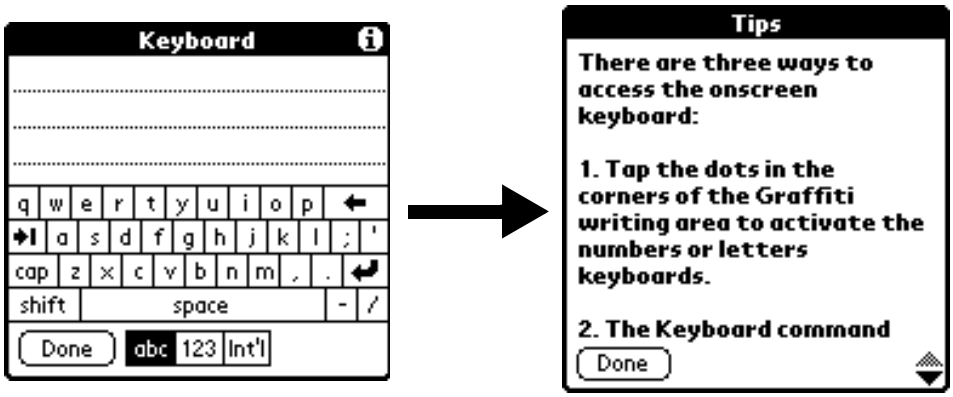
There are several ways to get help with your SPT 1800 terminal. You can display online tips on your SPT 1800 terminal and you can review the troubleshooting section in this chapter and on your Symbol Palm Terminal Desktop Software CD. If you need additional assistance, there are several ways to contact Symbol Technical Support. This chapter provides details on each of these methods.

Displaying Online Tips

Many of the screens that display on your SPT 1800 terminal contain an online tips icon in the upper-right corner. Online tips contain a summary of what is required by the screen, shortcuts for using the screen or other useful information. Online tips always relate to the function that you are currently performing with your SPT 1800 terminal.

To use the online tips:

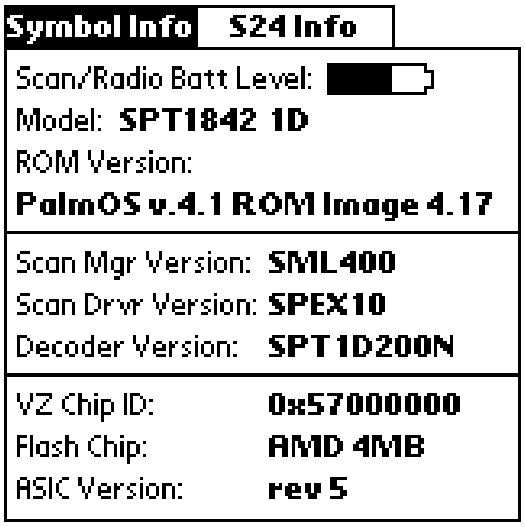
1. Tap the ⓘ icon in the upper-right corner of a screen to open the Tips screen.



2. After you review the Tips screen, tap the *Done* button.

Symbol Information

The Symbol Info application displays information about the SPT 1800 terminal. Tap the Symbol Info icon to launch the application. The S24 Info screen only appears on SPT 184X terminals.



SPT 1800 Diagnostics Utility

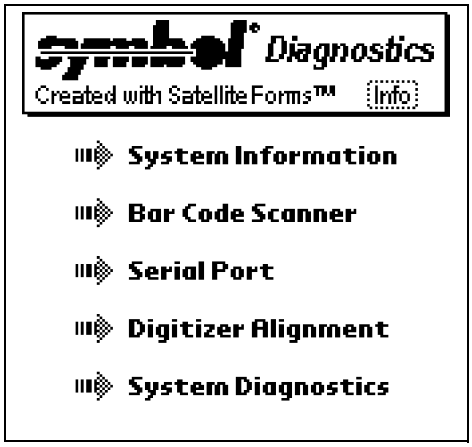
The SPT 1800 Diagnostics Utility is used to ensure that your SPT 1800 Terminal is operating properly. It can also assist you in troubleshooting problems you may encounter. The Diagnostics Utility tests the various features of the terminal, and reports whether or not they are operating properly.

To run the Diagnostics Utility, run the Diag Application, which displays on your Terminal's Main Application screen. The Main Diagnostics screen has five options:

- System Information
- Bar Code Scanner
- Serial Port
- Digitizer Alignment

IPR2024-01221 Exhibit 2009 Page 282 of 322

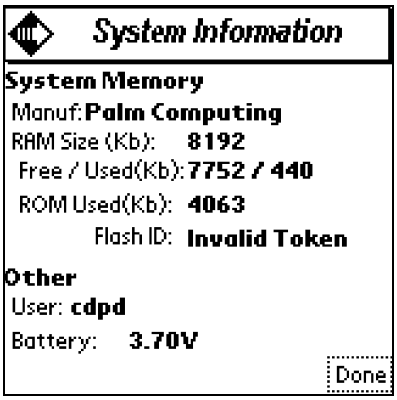
- System Diagnostics.



Tapping any of these options displays screens of related information.

System Information

The System Information option describes the system attributes of the terminal. Tapping this option displays the System Information screen.

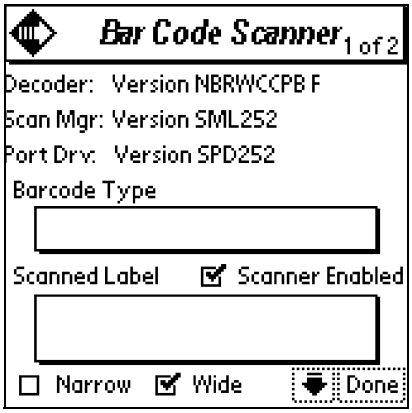


Manufacturer	The manufacturer of the terminal.
RAM Size	The amount of Random Access Memory.
RAM Free/Used	The amount of free and used Random Access Memory.
ROM Used	The amount of free and used Read-Only Memory.

Flash ID	The serial number assigned to the unit.
User	The username of the terminal.
Battery	The voltage level of the batteries.

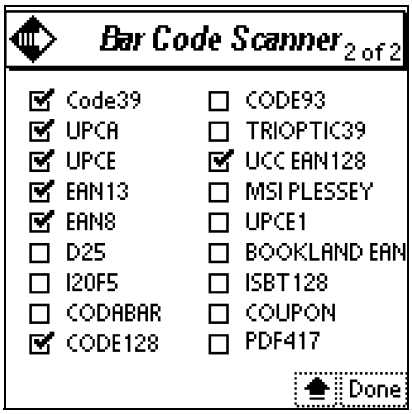
Bar Code Scanner Test

The Bar Code Scanner option tests the integrated scanner. Selecting the Bar Code Scanner option displays the Bar Code Scanner Diagnostics Screen.



To test the scanner:

1. Select the Scanner Enabled checkbox.
2. Page down to the second page by pressing the down button on the terminal, or by tapping on the arrow in the lower left corner of the screen with the stylus.

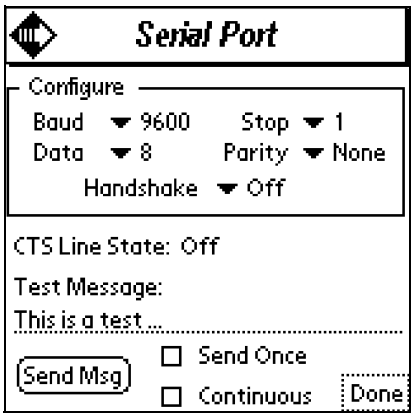


IPR2024-01221 Exhibit 2009 Page 284 of 322

3. To ensure that a specific type of bar code can be read, select the bar code types you would like to read and tap *Done*.

Serial Port Test

The Serial Port option tests the terminal's serial port by sending a test message.



To run the serial port test:

1. Place your terminal in a cradle attached to a computer.
2. Determine which communications port is used by HotSync.
   Right-click on the HotSync icon in your computer's icon tray in the lower left corner of the screen, and choose Setup.
3. Select the Local tab and look at the setting specified for the Serial Port. You will need this information in subsequent steps.
4. Click *OK* to close the window.
5. Shut down HotSync manager on the computer. Right-click on the HotSync icon in your computer's icon tray and select Exit.
6. On your computer, run HyperTerminal, which displays in the Accessories directory in the Windows Programs menu.
7. Start a new connection in HyperTerminal.
8. Set the HyperTerminal session to connect directly, and specify the communications port determined in Step 3.
9. Adjust the communications parameters in HyperTerminal and on the terminal so they are compatible (e.g., 57,600, 8 data bits, 1 stop bits, no parity).

10. On the terminal, click the *Send Msg* button to send a test message string from the terminal to HyperTerminal on the computer. You can edit the message, and can also select the Continuous check box to send the test message multiple times.

    When the serial port is functioning properly, the messages sent from the terminal are displayed in HyperTerminal.

Digitizer Alignment Test

The Digitizer Alignment option tests the tracking of the stylus on the screen. To run this test, tap the stylus in various places on the screen and crosshairs appear under the stylus. You may also move the stylus continuously across the screen and the crosshairs track the movement of the stylus.

System Diagnostics Test

The System Diagnostics option is an interactive test of all the terminal's system features. This test prompts you to perform different actions and listen for different sounds. The output of the system diagnostics is a log file.

To run system diagnostics tap the *Start* button. You are prompted to begin. Tap *OK* to start the test.

The test prompts you to press the different buttons on the terminal. Pressing the specified button results in a series of short high-pitched sounds, denoting proper functioning. Pressing an incorrect button or having the system timeout results in a low tone, denoting failure.

The test then produces a series of four tones to test the speakers and prompts you, asking whether or not you heard all the tones. If you hear all four tones, answer Yes. If you don't hear all the tones, answer No.

The test also prompts you to scan a bar code with the scanner. Press the *OK* button and then scan an item.

System Diagnostics also performs some tests which are not interactive. It reads the system information, tests the serial port, tests the memory, and tests the timer.

A series of tones denotes the conclusion of the test.

At this point, view the log file by tapping on View Log. This brings up the multi-page test results log. You can scroll through the log, one page at a time, by tapping on the arrow buttons in the lower left-hand corner of the screen. Alternately, use the scroll bar on the right-hand side of the screen.

IPR2024-01221 Exhibit 2009 Page 286 of 322

Troubleshooting

If you encounter a problem with your SPT 1800 terminal, look in this section for the description that most closely matches the symptoms you observe and try the suggestions listed.

Important: For troubleshooting tips not included in this handbook, refer to either the README.TXT file or the Help Notes file located in the Symbol Palm Terminal Desktop directory. These files are also on the installation CD-ROM.

Table 17-1. Troubleshooting

Problem	Cause(s)	Solution
Installation		
Symbol Palm Terminal Desktop installation program incorrectly detects that a modem is attached to one of your serial ports.	SPT 18000 terminal is in the cradle.	Do not place your SPT 1800 terminal in the cradle while installing the software.
Serial Cradle		
LEDs do not light when the cradle is plugged in.	Cradle is not receiving power.	Make sure the power supply is securely connected and receiving power.
LED does not light when the terminal is inserted.	Terminal is not seated firmly in the cradle.	Replace the terminal in the cradle.
Attempt by the cradle to HotSync the terminal failed.	Terminal was removed from the cradle while the LED was blinking green. Terminal's battery is dead. Active Error dialog box on terminal.	Replace the terminal in the cradle. This allows the cradle to attempt another HotSync. Recharge the battery. Error dialog box must be cleared in the terminal. Tap the *OK* button on the terminal's touchscreen.

Table 17-1. Troubleshooting (Continued)

Problem	Cause(s)	Solution
Ethernet Cradle		
The unit locks up with all LEDs flashing red.	The unit could not configure itself, or it lost its lease on one of its ID addresses.	Hook the unit up to an Ethernet network with a correctly functioning DHCP server and 6 available IP addresses.
General Issues		
SPT 1800 terminal does not turn on.	Adjust the contrast control. Make sure the battery is charged and installed properly.	Recharge the battery. If your SPT 1800 terminal still does not operate, try a soft reset; refer to *Resetting Your SPT 1800 Terminal* on page 18-5 for details.
Low battery warning after recharging the batteries.	The battery warning message may display immediately after recharging the battery. In addition, if you check the battery gauge in the Applications Launcher *immediately* after recharging the battery, the gauge may start at “empty” and slowly rise to “full.”	This is normal. It takes a few minutes for the battery gauge to accurately show the condition of the battery.
No sound.	The System Sound option may not be set correctly in the General Preferences screen.	If the option is set to off, there will be no sound. Refer to *General Preferences* on page 13-13 for more information.
No sound upon good decode.	The System Sound option may not be set correctly in the General Preferences screen.	Verify that Beep on Good Decode is set (checked) in Hardware Setup in the Scan Demo Application. Refer to *General Preferences* on page 13-13 for more information.
SPT 1800 terminal turns itself off.	Your SPT 1800 terminal is designed to turn itself off after a period of inactivity. This period can be set at one minute, two minutes or three minutes.	Check the “Auto-off after” setting in the General Preferences screen, and change the setting if you need a longer delay before the automatic shutoff feature activates. Refer to *General Preferences* on page 13-13 for more information.

IPR2024-01221 Exhibit 2009 Page 288 of 322

Table 17-1. Troubleshooting (Continued)

Problem	Cause(s)	Solution
SPT 1800 terminal doesn't recognize my handwriting.	You need to use the Graffiti 2 character strokes for your SPT 1800 terminal to recognize handwriting input with the stylus.	Refer to *Writing Graffiti 2 with the Stylus* on page 3-6 for information about how to write Graffiti 2 character strokes.
	You are making the Graffiti 2 character strokes in the display part of the screen, not on the Graffiti 2 writing area.	Make the Graffiti 2 character strokes in the Graffiti 2 writing area.
	You are writing the strokes for letters in the left-hand side, and the strokes for numbers in the right-hand side of the Graffiti 2 writing area.	Write the strokes on the proper side of the Graffiti writing area.
Tapping the screen buttons or icons does not activate the corresponding feature.	The digitizer may need to be recalibrated.	Recalibrate the digitizer. Choose Digitizer from the Preferences application pick list and follow the directions on the screen.
When I tap the icon, nothing happens.	Not all applications or screens have menus.	Try changing to a different application.
A message displays stating that your SPT 1800 terminal memory is full.	You may have too many unused records.	Delete unused memos and records. If necessary, you can save these records on your computer using the Save Backup Copy option that displays in the Delete screens.
Beamed data does not transmit.	The terminals may be too far apart.	Confirm that the SPT 1800 terminals are 1 ft. apart or less, and that the path between the two devices is clear of obstacles.
When receiving beamed data an out of memory message displays.	Your SPT 1800 terminal requires at least twice the amount of memory available as the data you are receiving. For example, if you are receiving a 30K application, you must have at least 60K free.	Verify the amount of free memory available.

Table 17-1. Troubleshooting (Continued)

Problem	Cause(s)	Solution
Applications		
Tapping the *Today* button doesn't display the current date.	Your SPT 1800 terminal is not set to the current date.	Make sure the Set Date box in the General Preferences screen displays the current date. Refer to *General Preferences* on page 13-13 for more information.
Entries seem to be missing in various applications.	The categories pick list is set for a specific category.	Check the Categories pick list (upper-right corner of the screen). Choose All to display all of the records for the application.
	Security may have been set for certain records.	Check the Security application and make sure that the Private Records setting is set to Show private records.
HotSync Operations		
A Local HotSync operation does not complete successfully.	HotSync Manager is not running.	If HotSync Manager is running, exit and restart it. Make sure you selected Local from the HotSync Manager menu or the Symbol Palm Terminal Desktop menu. Check the cable connection between the SPT 1800 terminal or cradle and the serial port on your computer. Try a lower baud rate setting on the Local tab in the Setup screen. Make sure you are not running another program — such as America On-line, CompuServe or WinFax — that uses the serial port you selected in the Setup screen. Read the HotSync Log for the user account for which you are performing a HotSync operation.

IPR2024-01221 Exhibit 2009 Page 290 of 322

Table 17-1. Troubleshooting (Continued)

Problem	Cause(s)	Solution
A Modem HotSync operation does not complete successfully.	Your modem doesn't have an auto-off feature enabled.	Make sure your modem is on, and that it does not shut down automatically as part of an energy-saving feature.
	The Setup String in the Setup screen configures your modem incorrectly. Confirm that the Speed setting in the Setup screen is appropriate for your modem.	You may need to select a different Modem Type or enter a custom Setup String. Most modems have a Setup String that causes them to send initial connection sounds to a speaker. You can use these sounds to check the modem connection. Make sure the modem connected to your computer is turned on and is connected to the outgoing phone line. Make sure you selected Modem from the HotSync Manager menu.
Security		
I forgot the password (SPT 1800 terminal is not locked).		You can use the Security application to delete the password. If you do this, your SPT 1800 terminal deletes all entries marked as Private. However, you can perform a HotSync operation *before* you delete the password: the HotSync process backs up all entries, whether or not they are marked private. Refer to *Changing or Deleting a Password* on page 14-7 for details.
I forgot the password (SPT 1800 terminal is locked).		If you assign a password and lock your SPT 1800 terminal, perform a hard reset to continue using your SPT 1800 terminal. Refer to *Resetting Your SPT 1800 Terminal* on page 18-5 for details.

Memo Pad Tips

If you cannot manually arrange the order of the memos in the List screen, check the Memo Preferences setting. Make sure that Sort by is set to Manual.

If you choose to view your memos alphabetically on Symbol Palm Terminal Desktop and then perform a HotSync operation, the memos on your SPT 1800 terminal still appear in the order defined in the Memo Preferences setting. In other words, the sort settings that you use with Symbol Palm Terminal Desktop *are not* transferred to your SPT 1800 terminal.

Date Book Tips

In the Week View, you cannot select overlapping events that have the same start time. If you have two or more events with the same start time, choose the Day View for the particular day to see the overlapping events.

IPR2024-01221 Exhibit 2009 Page 292 of 322

Technical Support, Service and Repair

If you have a problem using your SPT 1800 terminal, make sure you have reviewed the following:

- The *Troubleshooting* on page 17-9.
- The README file and Help Notes located in the folder where you installed the Symbol Palm Terminal Desktop software on your computer (or on your installation CD)
- The Symbol Palm Terminal Desktop software Online Help.

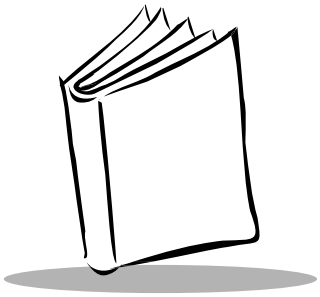
For further assistance, contact your regional technical support office by e-mail, phone or fax. Before requesting support, experiment a bit to reproduce and isolate the problem. When you do contact support, be ready to provide the following information:

- The version of Windows you are using
- The actual error message or state you are experiencing
- The steps you take to reproduce the problem.

Technical Support

Refer to *Symbol Support Center* on page xv for the Technical Support number in your country.

IPR2024-01221 Exhibit 2009 Page 294 of 322



Chapter 18
Maintaining Your SPT 1800 Terminal

Chapter Contents

Introduction 19-3
Caring for Your SPT 1800 Terminal. 19-3
Battery Considerations 19-3
Resetting Your SPT 1800 Terminal 19-5
Performing a Soft Reset 19-5
Performing a Hard Reset 19-5

IPR2024-01221 Exhibit 2009 Page 296 of 322

Introduction

This chapter provides information to help you take proper care of your SPT 1800 terminal and prolong battery life. It also discusses how to reset your SPT 1800 terminal.

Caring for Your SPT 1800 Terminal

Your SPT 1800 terminal is designed to be reliable and to provide years of trouble-free service. However, you should observe the following tips when using your SPT 1800 terminal:

- Take care not to scratch the screen of your SPT 1800. When working with your SPT 1800, use the supplied stylus or plastic-tipped pens intended for use with a touch-sensitive screen. Never use an actual pen, pencil or other sharp metallic object on the surface of the SPT 1800 screen.
- Although your SPT 1800 is water and dust resistant, it should not be exposed to rain or moisture for an extended period of time. In general, treat your SPT 1800 as you would a pocket calculator or other small electronic instrument.
- The touch-sensitive screen of your SPT 1800 contains a glass element. Take care not to drop your SPT 1800 or subject it to any strong impact.
- Protect your SPT 1800 from temperature extremes. Do not leave your SPT 1800 on the dashboard of a car on a hot day, and keep it away from heaters and other heat sources.
- Do not store or use your SPT 1800 in any location that is extremely dusty, damp or wet.
- Use a soft lens cloth to clean your SPT 1800. If the surface of the SPT 1800 screen becomes soiled, clean it with a soft cloth moistened with diluted isopropyl alcohol (rubbing alcohol).

Battery Considerations

Please note the following considerations when charging the battery in your SPT 1800 terminal:

- Under normal conditions, your SPT 1800 terminal battery should provide approximately 8 hours of use before the battery requires recharge. You can conserve battery life by minimizing the use of the backlight feature, and selecting the “Auto-off after” setting that automatically turns the SPT 1800 terminal off after a period of inactivity (Refer to *General Preferences* on page 13-13).

Note: *When the scanner is in use, battery life is shorter, and depends on the number of scans performed per minute.*

- If the battery becomes low while using the scanner application, the scanner application de-activates, and you receive the message, “Battery low error”. The other functions still work until another low battery alert occurs. When the scanner de-activates, perform a HotSync synchronization to back up your data before charging the battery to prevent data loss. If you try to scan when your battery is low, you receive the message, “Your battery is too low for scanning”. When you receive this message, recharge your battery and attempt scanning again.
- Similarly, if the battery becomes low in the course of normal use, an alert displays on the terminal screen describing the low battery condition. The message you receive is, “Your batteries are low. Place the handheld in a hotsync cradle to recharge”. If this alert displays, perform a HotSync synchronization to back up your data before you charge the battery. As the battery life becomes extremely low, you receive the message, “Your batteries are extremely low. Place the handheld in a hotsync cradle to recharge”.
- If you remove the battery, the built-in backup power of your SPT 1800 terminal maintains memory data **for a period of up to 10 minutes.** Whenever you remove the battery, replace it with a fully charged spare battery immediately. If you encounter any difficulties in the course of battery replacement, reinstall the original battery and wait a few minutes for the backup power to recharge.
- If the battery drains to the point where your SPT 1800 terminal does not operate, it stores your data safely for an indefinite period of time. In this case, there is enough residual energy in the battery to store the data, but not enough to turn on your SPT 1800 terminal. If your SPT 1800 terminal does not turn on when you press the red power button, charge the battery immediately.
- If you leave a drained battery in your SPT 1800 terminal for an extended period of time, you can lose all of the stored data. If this happens, replace the battery and use the reset button to reset your SPT 1800 terminal. (Refer to *Resetting Your SPT 1800 Terminal* on page 18-5.) After you reset your SPT 1800 terminal, perform a HotSync operation to restore the data from your computer.
- If your battery becomes low while the terminal is still associated with a WAN, the terminal disconnects from the network. Recharge the battery using the cradle or the synchronization/charging cable, then reassociate with the network.

IPR2024-01221 Exhibit 2009 Page 298 of 322

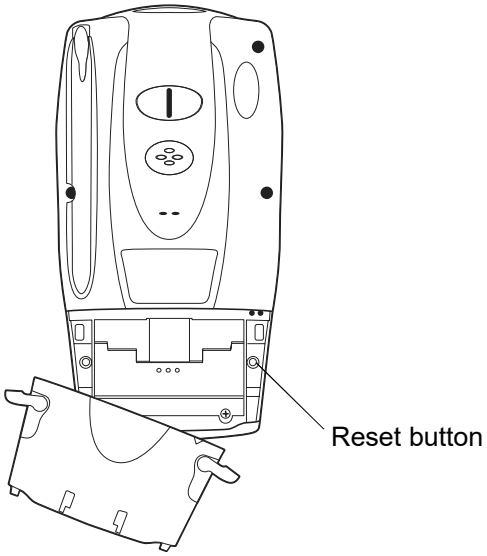
Resetting Your SPT 1800 Terminal

Under normal circumstances, you will never have to use the reset button. However, on rare occasions your SPT 1800 terminal may “hang” (no longer respond to buttons or the screen). In this case, perform a reset to get your SPT 1800 terminal running again.

Performing a Soft Reset

A soft reset tells your SPT 1800 terminal to stop what it’s doing and start over again. All records and entries stored in your SPT 1800 terminal are retained with a soft reset. After a soft reset, the Palm Computing Platform Logo screen displays followed by the General Preferences screen.

To perform a soft reset, remove the battery cover and use your stylus to gently press the reset button, which is located under the battery cover.



Performing a Hard Reset

A hard reset tells your SPT 1800 terminal to start over again and erase all records and entries stored in your SPT 1800 terminal. *Therefore, never perform a hard reset unless a soft reset does not solve your problem.*

Note: *You can restore any data previously synchronized with your computer during the next HotSync operation.*

To perform a hard reset:

1. Open and remove the battery cover.
2. Hold down the power button on the front of the SPT 1800 terminal.
3. While holding down the power button, use the tip of the stylus to gently press the reset button on the back of the terminal.
4. Release the reset button.
5. Release the power button.
6. When a message displays on the SPT 1800 terminal screen warning that you are about to erase all the data stored on your SPT 1800 terminal, do one of the following:
   - Press the upper half of either of the scroll buttons on the front panel of the SPT 1800 terminal to complete the hard reset and display the Digitizer screen.
   - Press any other button to perform a soft reset.

Note: *With a hard reset, the current date and time are retained. Formats Preferences and other settings are restored to their factory default settings.*

IPR2024-01221 Exhibit 2009 Page 300 of 322

Appendix A
Non-ASCII Characters for Login Scripts

Introduction

The following information enables you to create custom login scripts that require non-ASCII characters. It is provided for advanced users who understand the use and requirements of such characters in a custom login script.

Use of ^char

You may use the caret (^) to transmit ASCII command characters. If you send ^*char*, and the ASCII value of *char* is between @ and _, then the character is automatically translated to a single-byte value between 0 and 31. For example, ^M is converted to a carriage return. If char is a value between a and z, the character sequence is translated to a single-byte value between 1 and 26. If char is any other value, the character sequence is not subject to any special processing.

For example, the string “Joe^M” transmits Joe, followed by a carriage return.

Carriage Return and Line Feed

You may include carriage return and line feed commands as part of the login script, when entered in the following format:

<cr>Sends or receives a carriage return

<lf>Sends or receives a line feed

For example, the string “waitfor Joe<cr><lf>” waits to receive Joe followed by a carriage return and line feed from the remote computer before executing the next command in the script.

Literal Characters

The backslash (\) character defines that the *next character* is transmitted as a literal character, and is not subject to any special processing ordinarily associated with that character.

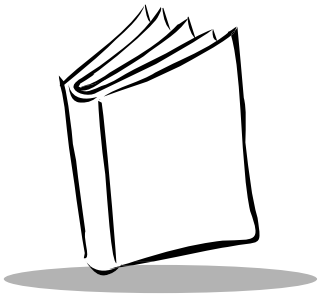
Examples:

\^Includes a caret as part of the string

\<Includes a < as part of the string

****Includes a backslash as part of the string

IPR2024-01221 Exhibit 2009 Page 302 of 322



Appendix B
Installing the Multi-Language Operating System

Introduction

This section provides the procedures for installing the multi-language Operating System onto the SPT 1800 terminal. The ROM image will contain the following languages:

- English
- French
- Italian
- German
- Spanish.

Download the Operating System

Go to http://devzone.symbol.com to download the flashtool that contains the multi-language ROM image.

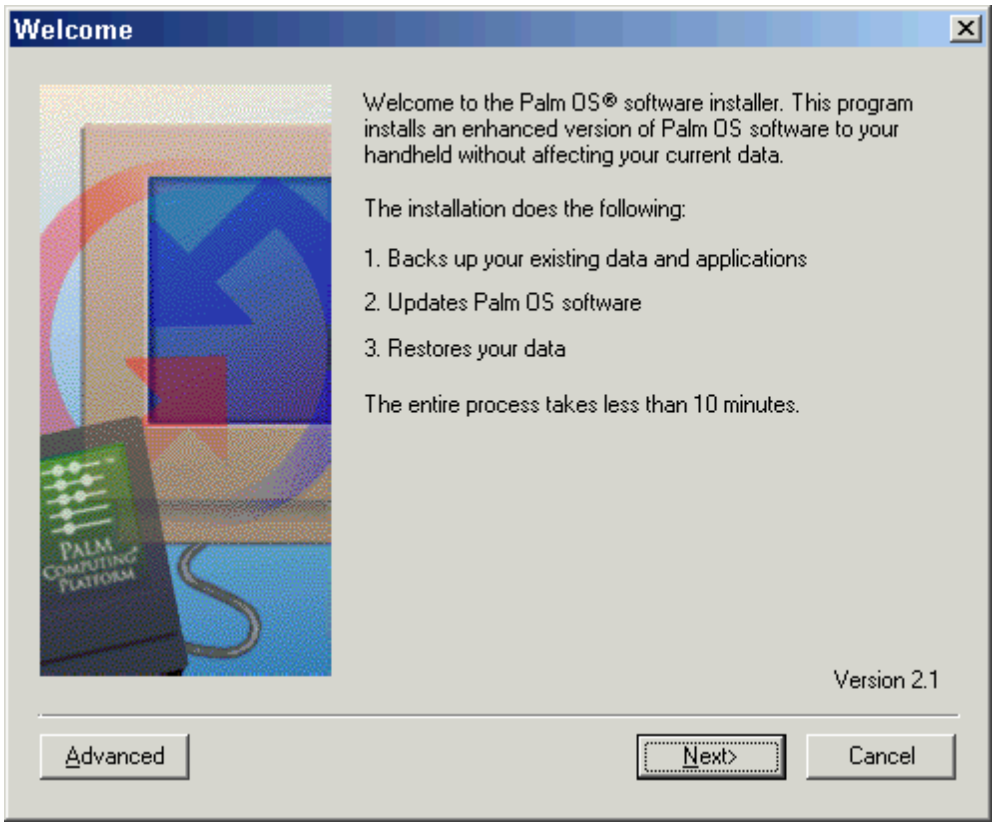
Download the Desktop Software

The SPT Palm Desktop Software is available in English, French, Italian, German and Spanish. Go to http://devzone.symbol.com to download the SPT Palm OS Desktop Software.

Installation

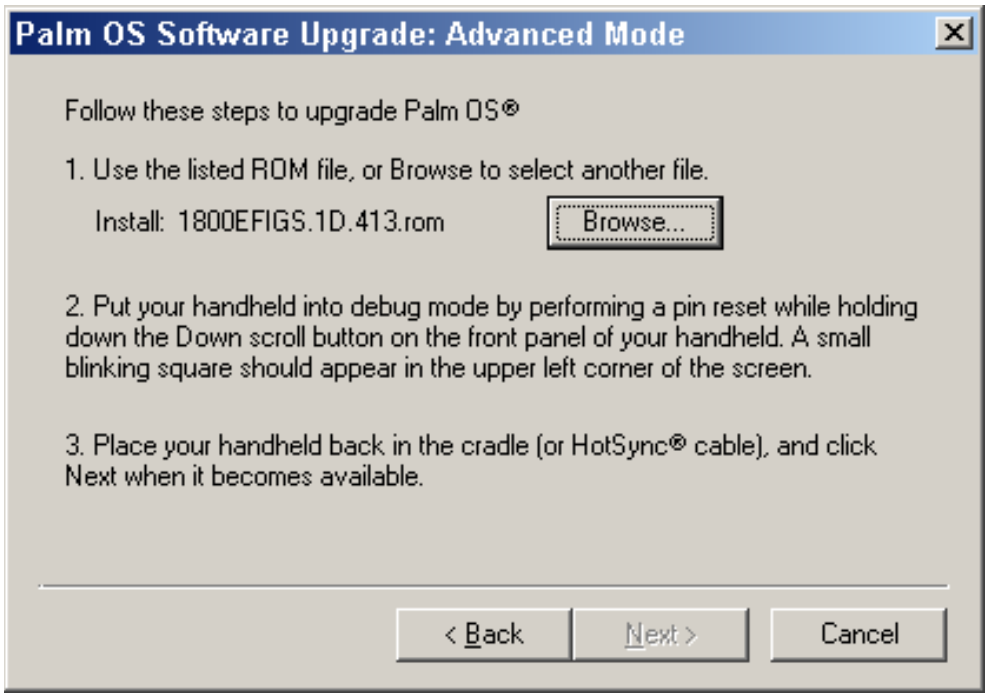
To install the ROM image:

1. Connect the terminal to the host computer.
2. Perform a HotSync operation to backup all data and applications that you want to preserve.
3. Copy the downloaded flash tool file to a directory where you will be running the flash tool.
4. Copy CondMgr.dll file to the directory where you will be running the flash tool.
5. Run the flash tool application. The *Welcome* screen appears.

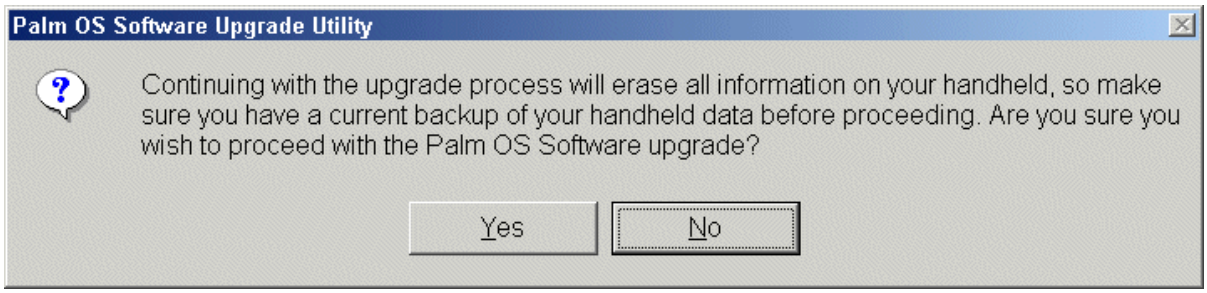


IPR2024-01221 Exhibit 2009 Page 304 of 322

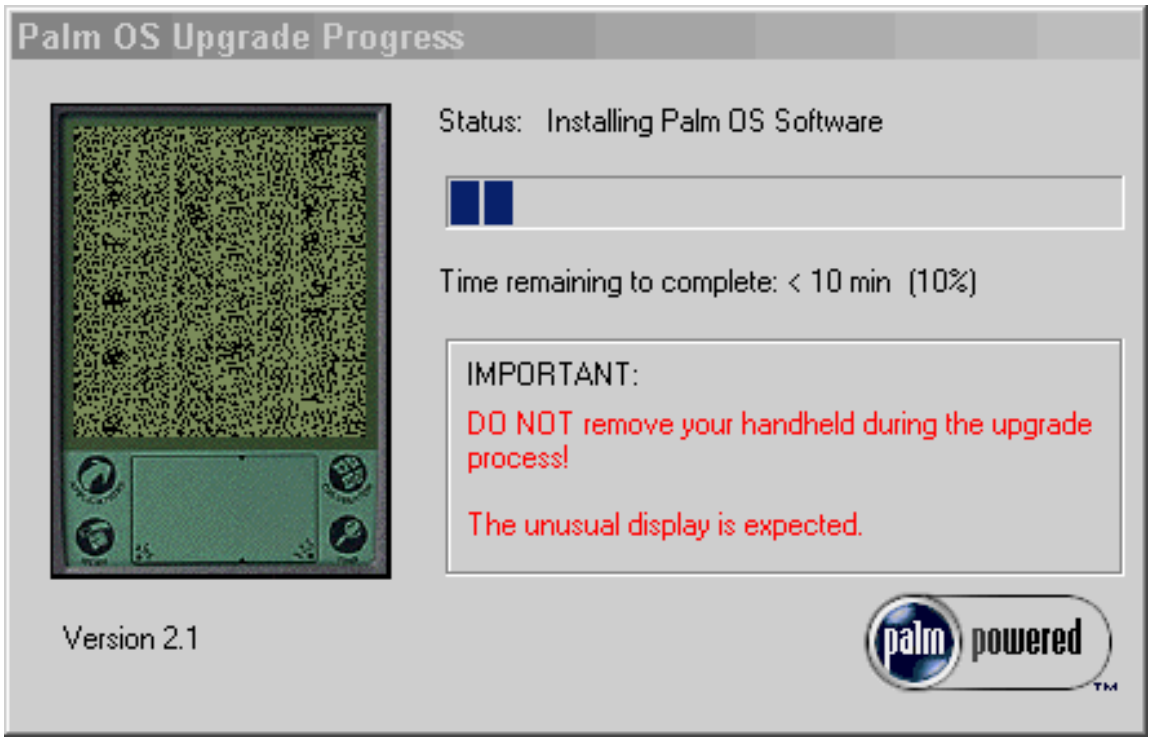
6. Click on the *Advanced* button. The *Advanced Mode* screen appears.



7. Place the terminal in the debug mode.
   a. Remove the battery door.
   b. Hold down the down scroll button and press and release the reset button.
   c. The terminal screen becomes unreadable with a blinking square in the top left corner.
   d. Replace the battery door.
8. Place the terminal in the cradle or connect the HotSync cable.
9. Click the *Next* button. The *Palm OS Software Upgrade Utility* screen appears.



10. Click the *Yes* button. The *Palm OS Upgrade Progress* screen appears.



Caution

Do not remove the terminal from the cradle or cable during the upgrade process.

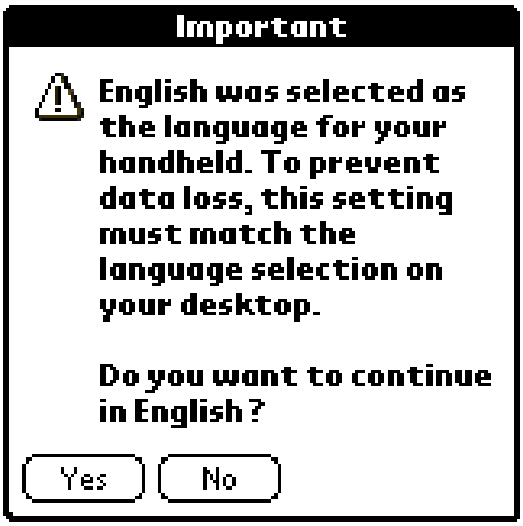
11. The software installation begins.

IPR2024-01221 Exhibit 2009 Page 306 of 322

12. The *Restore Data* dialog box appears.

13. Use the stylus and tap the targets on the terminal screen. The *Select Language* screen appears.

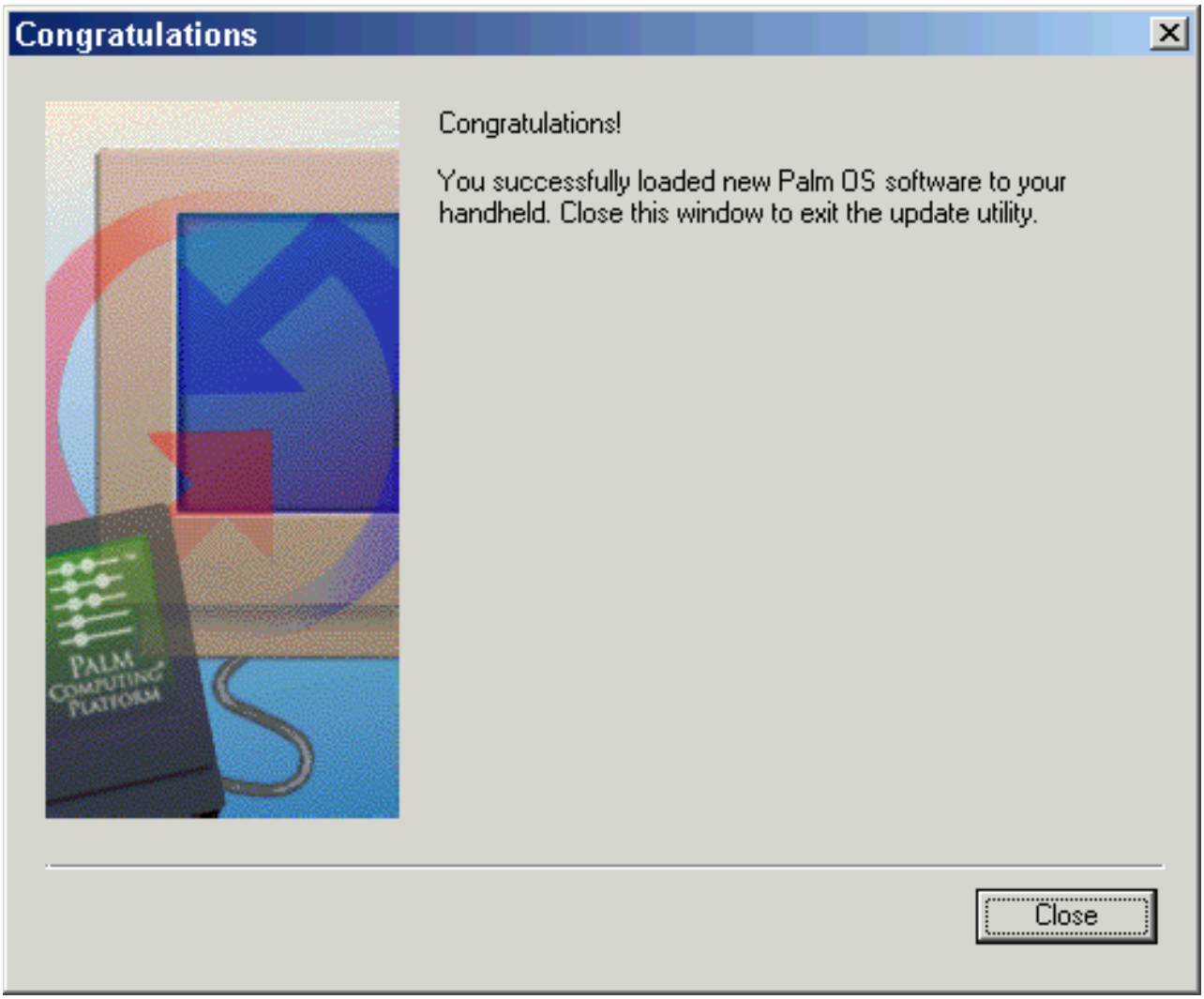
14. Select a language.
15. Tap the OK button.
16. Ensure that you are running the correct Desktop Software. For example, if you selected French on the terminal the French Desktop Software must be running on the computer.



17. Tap the Yes button.
18. Follow the instructions on the screen to set the time, time zone and date.
19. Run Hotsync. After HotSync is complete, tap the Reset button to reset the terminal.

IPR2024-01221 Exhibit 2009 Page 308 of 322

20. In the *Restore Your Data* screen, click on the *Next* button. The *Congratulations* screen appears.



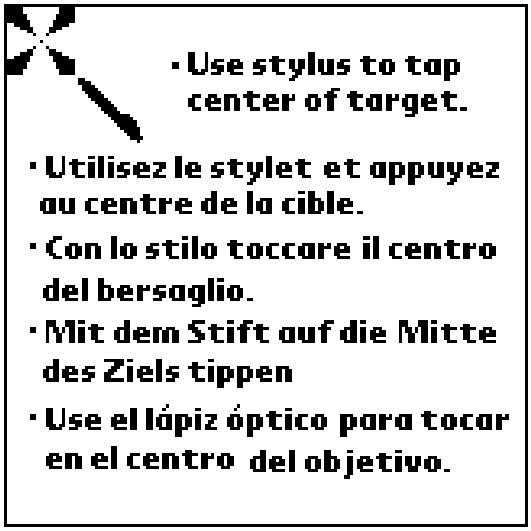
21. Click the *Close* button.

Switching Between Languages

Once the multi-language operating system is installed, you can switch between languages on the terminal. To switch between language:

1. Perform a hard reset (refer to *Performing a Hard Reset* on page 18-5).
2. The terminal resets. When the Palm logo appears, release the power button.

3. A message requesting to erase all data appears. Press the Up scroll button to erase all data and continue or press any other button to cancel.
4. After reset, the following screen appears:

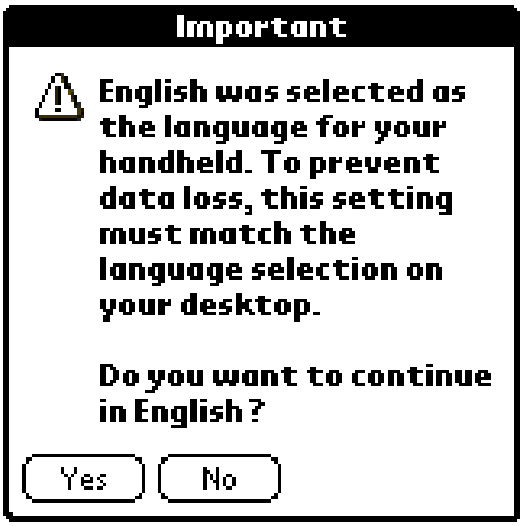


5. Use the stylus to tap the center of the target. Two more target screens appear.
6. Use the stylus to tap the center of each target. The *Select Language* screen appears:

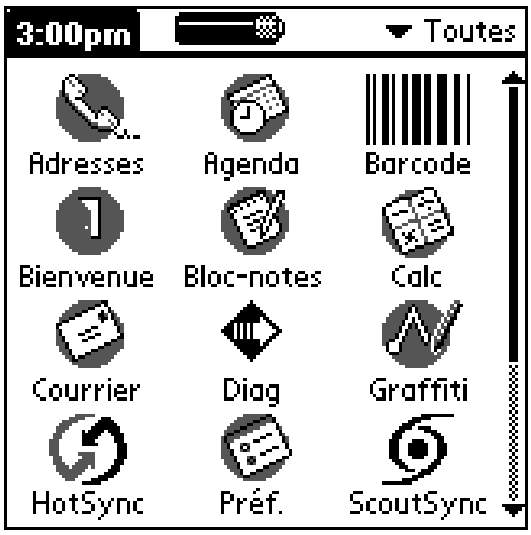
7. Tap the language that you want to appear on the terminal. Tap the OK button.

IPR2024-01221 Exhibit 2009 Page 310 of 322

8. To ensure that data is not lost, the desktop software language of the host computer must match the language that you have selected on the terminal. Tap *Yes* to continue or tap *No* to go back to the previous screen.



9. The terminal resets and the setup screen appears in the language you selected.



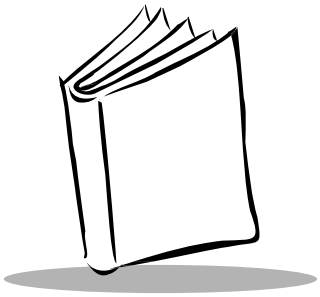
French

Italian

German

Spanish

IPR2024-01221 Exhibit 2009 Page 312 of 322



Index

Numerics

128-bit encryption 2-4
128-bit Shared Key 2-9
40-bit encryption 2-4
40-bit Shared Key 2-9

A

access point 2-4
Adding 7-4
Address Book
- beaming 7-10
- business card 7-10
- categories 7-8
- creating entry 7-4
- entry details 7-9
- features 7-3
- list by company 7-8
- lookup entries 7-7
- menu commands 7-11
- opening 7-3
- phone numbers 7-7

AirBEAM 12-1
- Client 12-4
- Configuring 12-4
- Package Builder 12-3
- Synchronization with Server 12-9

AirBEAM configuration
- Misc(1) tab 12-7
- Misc(2) tab 12-9
- Packages(1) tab 12-5
- Packages(2) tab 12-5
- Server tab 12-6

Alarm
- setting 6-8

Applications
- Address Book . . . . . xii, 7-1, 7-3
- Calculator 5-1, 5-3
  - menu commands 5-4
  - special buttons 5-3
  - using 5-3
- Date Book . . . . . xii, 6-1, 6-3
  - agenda view 6-16
  - Changing the View 6-13
  - Deleting an Event 6-12
  - event conflicts 6-15
  - Marking Private Event 6-12
  - menu commands 6-17
  - month view 6-15
  - Repeat Function 6-11
  - Rescheduling an Event 6-8
  - Scheduling an Event 6-4
  - Scheduling Repeating Events . . 6-10
  - Setting Alarm for an Event 6-8
  - Working in Agenda View 6-16
  - Working in Week View 6-13
- Demo Scan Application
  - menu commands 15-6

font style 3-20
HotSync 10-1, 10-10, 10-13
- CDPD 10-20
- Conducting locally 10-9
- conducting via modem 10-14
- performing for first time 10-3
- preparing your computer for . . 10-14
- Selecting HotSync Setup Options 10-9
- Spectrum24 10-19

Installing 16-3
Installing and Removing 16-1
Laser Scanner 15-1
Manager 3-4
Memo Pad 8-1, 8-3
Arranging Memos 8-5
choosing a memo category 8-6
Deleting a Memo 8-7
marking a memo private 8-6
menu commands 8-8
reviewing memos 8-5
Preferences 13-1
buttons 13-3
changing pen preferences 13-5
Connection 13-7
Digitizer 13-9
Formats 13-9
General 13-13, 13-14
hotsync buttons 13-6
network 13-14
Owner 13-29
owner 13-29
pen 13-5
shortcuts 13-30
time,date, week,numbers 13-10
Removing 16-6
Scout Sync Client 11-1
Configuring 11-4
menu commands 11-8
Overview 11-3
Security 14-1
setting preferences 3-5
SScan Application
menu commands 15-3
switching 3-4
To Do List 9-1
choosing a to do category 9-7
setting a due date 9-7
To Do Show Options 9-8
Working with items 9-4

B

Batteries
auto-off delay 13-13
battery considerations 18-3
Beaming
Address Book categories 7-11
Address Book entries 7-11
business card 7-10
Business Card
beaming 7-10
selecting 7-10

C

Calculator
buttons 5-3
menu commands
recent calculations 5-5
using 5-3
Calculator Application 5-3
Categories
Address Book entries 7-8
beaming 7-11
CDPD 1-12, 2-11, 2-23, 10-20
Changing the Date Book View 6-13
Conducting a HotSync Operation
via Modem 10-14
Conducting a local HotSync Operation . . . 10-9
Conduits 10-12
Connection Preferences 13-15
contacting Symbol xiv
Creating
Address Book entries 7-4
Customizing HotSync Application
Settings 10-12

D

Data Encryption 2-7
date
setting 13-11
Date Book 6-1
alarm 6-8
Changing the view 6-13
Deleting an Event 6-12
event conflicts 6-15
event duration 6-4

IPR2024-01221 Exhibit 2009 Page 314 of 322

event start time 6-4
features 6-3
Marking Private Event 6-12
menu commands 6-17
month view 6-15
opening 6-3
private events 6-12
repeat event 6-10
Rescheduling an Event 6-8
rescheduling events 6-8
Scheduling an Event 6-4
scheduling event 6-4
Scheduling Repeating Events 6-10
Setting an Alarm for an event 6-8
switching views 6-13
untimed event 6-4
week view 6-13
Working in Agenda View 6-16
Working in Week View 6-13
decrypting 2-4, 2-10
Deleting an Event 6-12
Demo Scan Application
menu commands 15-6
Details
Address Book 7-9

E

encrypting 2-4, 2-10
Entries
Address Book 7-4
beaming 7-11
Ethernet Cradle
Configuring Remote Host PC 10-23
HotSync Process 10-23
Ethernet cradle
installing NetSync
options 10-21
Event
changing to untimed 6-8
conflicts 6-15
Date Book scheduling 6-4
deleting 6-12
in week view 6-14
private 6-12
repeat 6-10
setting alarm 6-8
start and duration 6-4
untimed 6-4

F

File Link 10-8
using 10-8
Finding
Address Book entries 7-7
Finding information with 4-1

G

Getting Help with your SPT 1800 Terminal 17-1
Graffiti 2 9-4
punctuation marks 3-10
ShortCuts 3-13
Graffiti 2 Help
pen stroke 13-6

H

handstrap 1-29
HotSync 13-6, 17-7, 18-4
CDPD wireless 10-20
conducting a local operation 10-9
conducting wireless operations 10-18
conduits 10-12
customizing 10-12
customizing application settings . . . 10-12
Ethernet cradle 10-21
installing NetSync 10-21
features 10-3
File Link 10-8
HotSync Manager 10-3
local 10-9
modem 10-14
modem conduit setup 10-16
modem settings 10-11
options 10-9
performing for first time 10-3
preparing your computer for modem 10-14

Setting up for wireless 10-18
Spectrum24 wireless 10-19
user profile 10-6
using a modem 10-14
using File Link 10-8

I

IP Address 13-21

K

Kerberos 2-4, 2-9
Kerberos Authentication 2-4
Keyboard
pen stroke 13-5

L

Laser Pointer Application
using 15-9
Laser Scanner
battery implications 15-9
Look Up
Address Book entries 7-7

M

magnetic stripe reader 1-25
Marking a Private Event 6-12
Memo Pad 8-3, 8-4
arranging memos 8-5
creating new 8-4
deleting memos 8-7
reviewing memos 8-5
Menus
Address Book 7-11
Date Book 6-17
Modem 10-15, 13-6, 13-15
HotSync 10-14
modem conduit setup 10-16
Month
Date Book view 6-15

N

Network
password 13-16
primary DNS 13-23
TCP/IP 13-14
Network Setup 2-1
Configuring CDPD WAN 2-11
Setup Wizard 2-12
Configuring Spectrum24 2-5
New
Address Book entry 7-4
Non-ASCII Characters for Login
Scripts A-1, B-1
notational conventions xiii

O

Open System 2-4, 2-9
Owner Preferences 13-29

P

Palm Desktop
customizing HotSync 10-12
HotSync options 10-9
synchronization 10-3
system requirements 1-30
passwords 2-4
Performing a CDPD HotSync 10-20
Performing a Spectrum24 HotSync 10-19
Phone Numbers
choosing type 7-7
Power Off
pen stroke 13-6
Preferences
opening 13-3
preferences
setting date 13-11
ShortCuts 3-14
Preparing for a Modem HotSync
Operation 10-14
Private
events 6-12
punctuation marks, writing 3-10

IPR2024-01221 Exhibit 2009 Page 316 of 322

R

Records
- Address Book 7-4
- beaming 7-11

Removing
- Applications 16-6
- Date Book events 6-12

Repeat Function 6-11

reset
- hard 18-5
- soft 18-5

S

Scanning 15-3, 15-7
- Barcode Application 15-7
- Demo Scan Application 15-4
  - scanning using 15-7
- problems 15-8
- Sscan application 15-3

Scanning Problems 15-8

Scheduling an Event 6-4

Scheduling Repeating Events 6-10

Scout Sync Client
- Configuring 11-4
  - conduits 11-5
- Overview 11-3
- Synchronization 11-6
  - automatic 11-6

security 13-17

service information xiv

Setting Up for a Wireless HotSync 10-18

Setting up the Ethernet Cradle
  - for HotSync 10-21

Shared Key 2-4

ShortCuts
- creating 3-14
- editing 3-15
- Graffiti 2 3-13

soft reset 18-5

Sorting
- Address Book 7-8

Spectrum24 10-19

SPT 1800
- Diagnostics 17-4
  - Bar Code Scanner test 17-6
  - Digitizer Alignment test 17-8
  - Serial Port test 17-7
  - system information test 17-5
  - Systems Diagnostics test 17-8
- hard reset 18-5
- Maintaining your terminal 18-1
  - caring for 18-3
- online tips 17-3
- Parts of the SPT 1800 1-4
- resetting 18-5
  - soft reset 18-5
- Scanning with 15-3

SPT 1800 Terminal 4-1

SPT 1800 terminal
- Getting Help with 17-1

stylus
- replacing 1-14
- tapping versus clicking 1-14

Symbol info 17-4

symbol support center xv

T

tapping, using stylus 1-14

TCP/IP 13-14

Time
- alarm setting 6-8
- setting event 6-4

To Do List
- menu commands 9-10

trigger handle 1-27

U

Untimed Events 6-4

User Profile
- using 10-6

V

vehicle charging adapter 1-23

vehicle cradle 1-22

W

warranty xvii
WEP 2-4
WEP Encryption 2-4
Wired Equivalent Privacy 2-4
Wireless HotSync Operations 10-18
Working in Agenda View 6-16
Working in Month View 6-15
Working in Week View 6-13
Working with Your SPT 1800 Terminal 3-1

IPR2024-01221 Exhibit 2009 Page 318 of 322

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