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Pocket Spider® IIc
for Palm OS

User's Manual

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Introduction

About the Pocket Spider® IIc

Welcome to the world of wireless data. Your Pocket Spider® IIc is a compact, wireless data modem that uses the Cellular Digital Packet Data (CDPD) wireless communication system, allowing you to transfer data on the go (i.e., without wires). Wireless IP (Internet Protocol) supports browser-based applications, giving you feature rich capability with the Internet in your hand.

With this modem, you are taking advantage of the latest development in wireless data technology. The Pocket Spider® IIc modem offers the convenience of wireless data, the benefits of the CDPD network, ease of use, and minimal power consumption.

The Pocket Spider® IIc is the first wireless IP (CDPD) modem designed exclusively for a compact flash slot. With the power of wireless data and GPS, Enfora is revolutionizing the world of PocketPC®, Palm and handheld PC devices.

Contents of Basic Package

The Pocket Spider® IIc package from Enfora includes the following items:

- Pocket Spider® IIc
- Internal rechargeable battery
- Battery Charger/Wall transformer (AC adapter)
- Installation CD-ROM

About this Manual

This Users Manual describes the use of the Pocket Spider® IIc modem with a Palm device. The Pocket Spider® IIc is compatible with Palm OS 3.5.1. and above. Please read all instructions carefully before installing your Pocket Spider® IIc modem.

If you have any questions regarding installation, set up, or operation of the PocketSpider, please contact Enfora Technical Support.

Website: http://www.enfora.com
Voice: (972) 578-CDPD
Email: techsupport@enfora.com

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Registering with a Carrier

CDPD Basics

CDPD, short for Cellular Digital Packet Data, is also known as "Wireless IP". It is a data transmission technology developed for use on cellular phone frequencies. CDPD uses cellular channels (in the 800 to 900 MHz range) to transmit data in packets. This technology offers data transfer rates of up to 19.2 Kbps, quicker call set up, and better error correction than using modems on an analog cellular channel. CDPD is based on TCP/IP, the same protocols that power the Internet. See the document **All About CDPD** on CD-ROM for a detailed overview of CDPD technology.

Activating Your Service

Just as you would do with a cell phone, you must first register for service with a local CDPD carrier. The PocketSpider will work with any CDPD carrier. Decide which carrier offers the best plan to meet your CDPD needs, then register with that carrier.

Typically, two service carriers will be available to a CDPD user. One will be known as the **A-side carrier** and the other is know as the **B-side carrier**. You may register with the A-side carrier, the B-side carrier, or both of the carriers.

Registration

When you register with a CDPD carrier, the carrier should give you the following information:

- **Internet Protocol** (IP) address
- **Carrier Side Identification** (Either **A** or **B**)
- **Service Provider Network Identifier** (**SPNI**) Number

Be sure to **record this information**. This information may be needed in order to receive customer service and/or technical support.

Your cellular carrier may also provide you with additional information that is needed for use with your third-party protocol stacks(s). Consult your protocol stack documentation for information or call Enfora Technical Support regarding stack configuration and use.

The cellular carrier has the responsibility to warn you of any charges the carrier may make to its operations and/or procedures that would affect your usage of the service. You will be advised of your right to issue a complaint to the FCC regarding these changes.

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CDPD Charges

For information about your CDPD charges, you will need to contact your CDPD carrier service. Charges will vary according to the CDPD service provider you choose and the plan you select. Most carriers will offer several CDPD plans that vary in rates and structure. Your carrier should explain these items to you in detail when you consult them about registration.

Battery Operation

Prior to using the Pocket Spider® IIc, **charge the new battery for at least 2 hours**. Additional details on the battery charger and charging process are provided in section **Battery Power Indication** of this manual.

The Pocket Spider® IIc derives all off its power from a self-contained internal battery, thereby ensuring no adverse effects on battery life of the host handheld device.

Once charged, clip the battery into the back of the Pocket Spider® IIc housing and you are ready to go. The Pocket Spider® IIc should operate for hours under normal transmit and receive operating conditions, although sustained transmitting inherently reduces the time between charge. In the event of a low battery, the device may continue to be used with tits external adapter power supply.

Pocket Spider® IIc Installation

Before installing your modem, ensure that Palm Desktop is installed on the host computer to connect to your Palm device. HotSync®, a feature that allows file transfer from desktop to Palm device, is required to install the software needed to install and operate the Pocket Spider® IIc. If the service is not installed, please consult your Palm device manual and install Palm desktop on the host computer.

1. Using the appropriate cable or Sync cradle (normally furnished with you Palm device) connect the device to the appropriate COM port of the host computer.

2. Insert the Installation CD-ROM. **Choose Install for Palm**.

3. A window appears noting that the **SpiderMgr** file will be installed onto the Palm device upon the next HotSync® operation. Click **Done** to close this window (see figure on next page).

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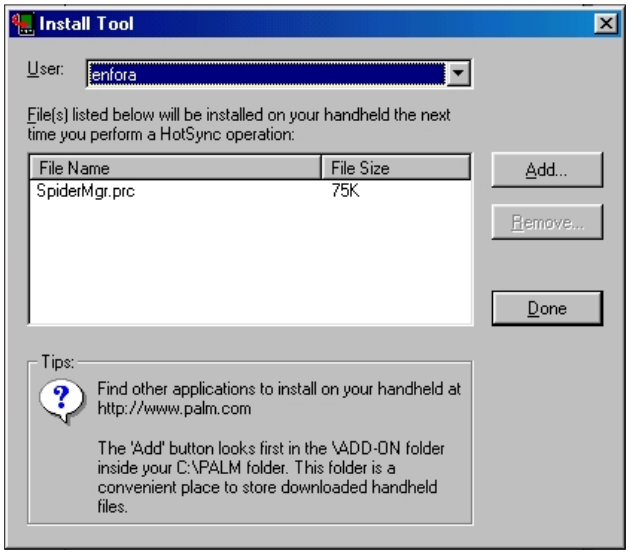
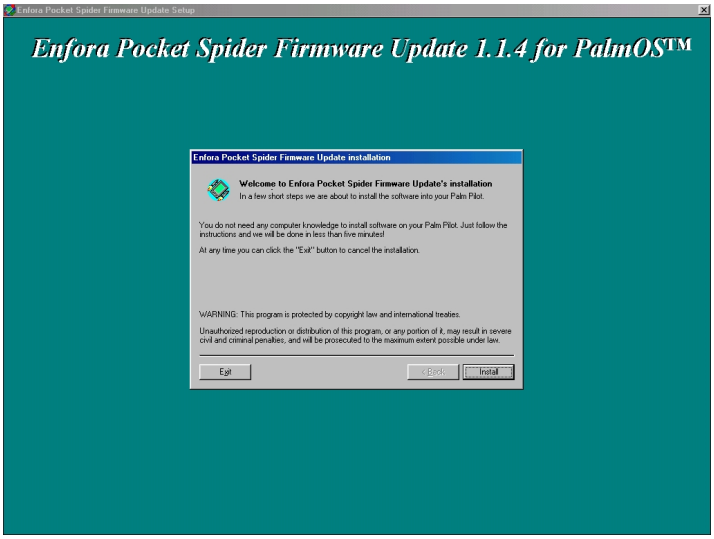
4. A window appears noting that the **SpiderMgr** file will be installed onto the Palm device upon the next HotSync® operation. Click **Done** to close this window.



5. Return to the CD-ROM Installation program and choose **Install Auto Upgrade**. When installed onto the Palm device, this program will automatically upgrade the Pocket Spider® IIc modem. Choose **Install** in the Firmware Update Setup dialog box.



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5. Click **Finish** on the Auto Upgrade Installation program.

6. Open HotSync® Manager on the host computer. Place the Palm device in its HotSync® cradle and press the HotSync® button on the cradle. After the tranfer of files, the software needed to operate and upgrade the Pocket Spider® IIc is now installed on the Palm device.

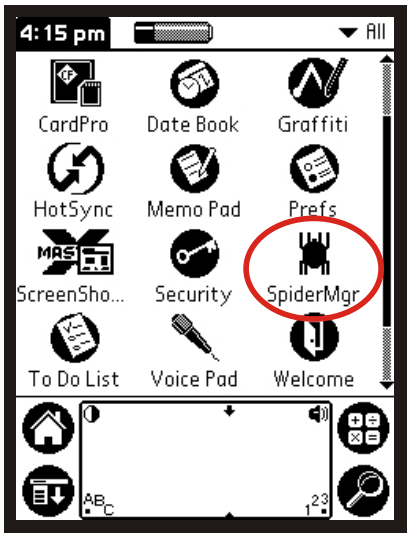
Modem Setup

Please ensure that the exact sequence for the following setup is followed:

This section explains how to setup the Pocket Spider® IIc Modem for use with the Palm OS 3.5 platform. The purpose of this application is to setup the Pocket Spider® IIc and create an appropriate dial-up networking entry. This section describes only the basic Pocket Spider® IIc parameters required for registering the modem with the CDPD carrier. For information on setting additional parameters, see the Modem Setup application. This should also be run when switching from one Pocket Spider® IIc modem to another, or when the network parameters are changed.

1. Insert the Pocket Spider® IIc into the Compact Flash (CF) slot at the top of the Palm device. ***Important: if a "New Firmware Available" prompt appears after modem insertion, proceed to the section "Auto Upgrade" in this manual. Complete the Firmware Upgrade before moving on with this setup.***

2. Access the Palm **Applications** screen on the Palm device and open Spic Manager.



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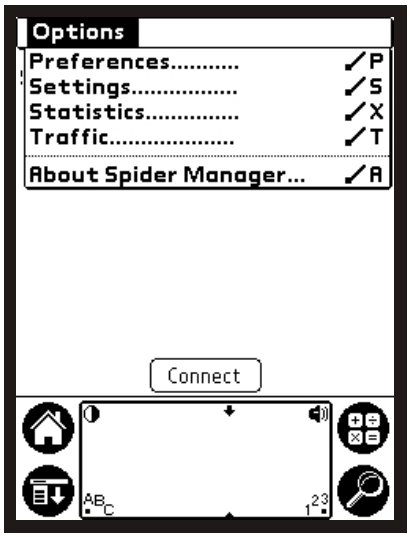
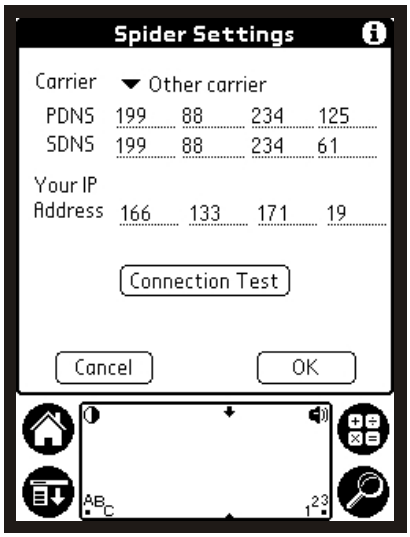
3. Access the **Options** menu and configure network settings for the Pocket Spider® IIc.



4. Configure network settings for the Pocket Spider® IIc. The IP Address of the Pocket Spider® IIc is automatically detected. Select carrier preference from the **Carrier Preference** menu. After carrier selection the applicable Primary DNS (**PDNS**) and Secondary DNS (**SDNS**) numbers are listed. The DNS addresses can be edited at any time if they have changed. Also, the Modem IP Address must be manually entered if not initially detected. These settings will be used to modify the network preferences of the Palm device. The **Connection Test** option can be selected to verify the settings.



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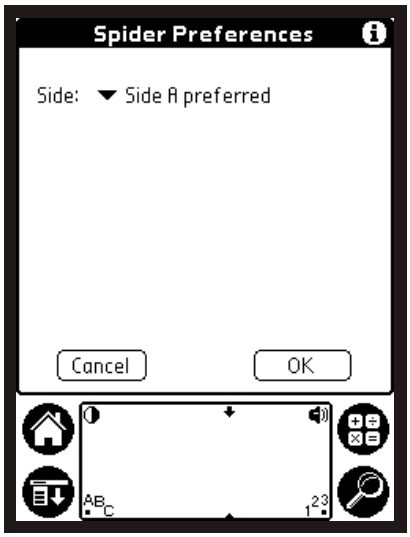
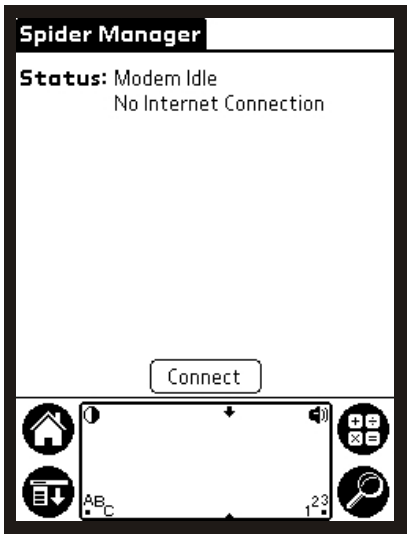
5. Verify which side the Pocket Spider® IIc will scan for channels. After a selection has been made, exit the Spider Manager Options prior to establishing a connection. The Pocket Spider® IIc is now ready to connect to the network.



Connecting to a Network

After the appropriate carrier and preferences have been selected, the modem is ready to connect to the network. The Spider Manager **Status** screen displays the current, real-time status of the modem.

1. Make a network connection using the Spider Manager **Status** screen.



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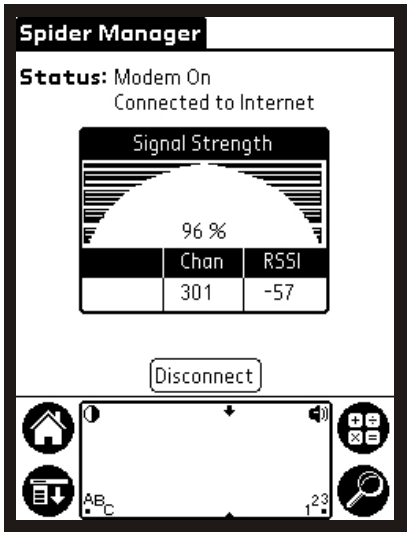
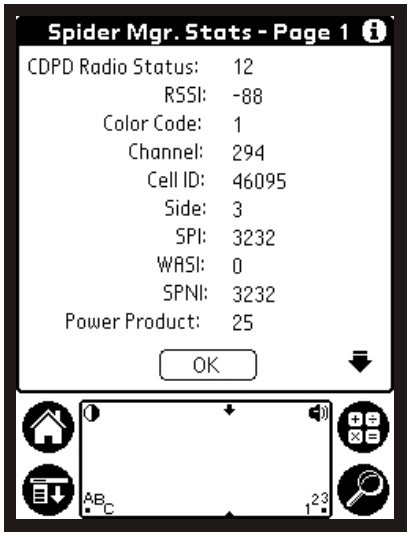
2. After a connection has been made, the Status screen will display the **Signal Strength** indicator. Within the display are real-time readings of **Signal Strength**, channel being used (**Chan**) and Receive Signal Strength Indicator (**RSSI**).



3. In the Spider Manager **Options** menu, view the Pocket-Spider modem's real-time diagnostic information. This information is useful for detailed diagnostic purposes. The statistics are retrieved from the modem approximately every 2 seconds.



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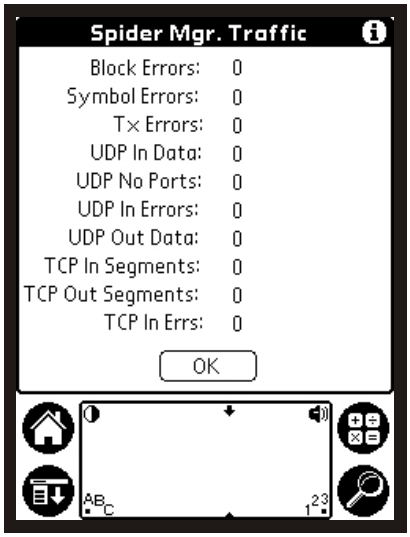
4. Access the modem traffic information. This screen shows basic information about traffic events that have occurred over the modem since it last connected to the CDPD network. This information is reset each time the modem is disconnected from the network.



5. Disconnect the modem from the network connection.

Auto Upgrade

Caution Please ensure that the Pocket Spider® II**C** and Palm device are fully charged before starting this process. **DO NOT** remove the Pocket Spider® IIc during this procedure. If this should happen and the modem is inoperable please contact our technical support at 972-578-CDPD

1. When the Pocket Spider® IIc is inserted and Spider Manager is executed for the first time, the Pocket Spider® IIc will be checked for the latest version of modem firmware. If the firmware on your Pocket Spider® IIc does not match the version that was synchronized to your device, the following screen will appear (see figure on next page):

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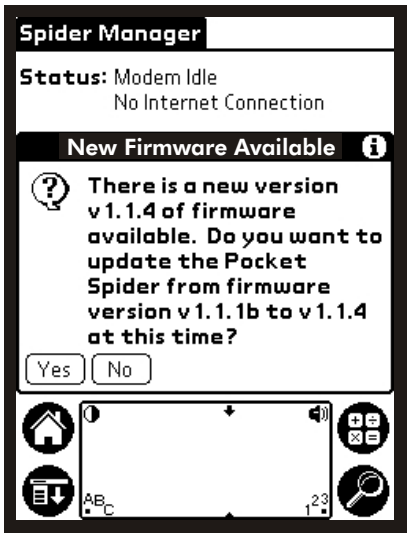
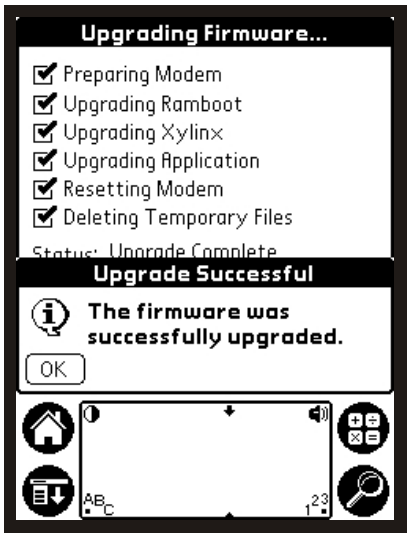


2. The upgrade program will automatically execute when enabled. The upgrade process will take approximately five minutes, during which a series of tests will be executed on screen.

3. Once the firmware upgrade process has completed, to step 2 of the **Modem Setup** section of this manual to continue configuring the Pocket Spider® IIc.



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Monitoring Modem Status

Operational status information is provided on the Pocket Spider® IIc device.

LED Display

The Pocket Spider® IIc contains 3 LED's that indicate various information for the unit's operation and battery charge condition. The LED layout (facing forward) is as follows:

Red Yellow Green

Operational Status

- Green LED= Power on
- Yellow LED= Searching for channel
- Green LED= Locked on channel

Battery Power Indication

The LED's indicate battery status by displaying the following:

- During charge cycle, the two outer LED's will slowly flash
- When battery is low, the center light will flash rapidly, and a low battery warning message will be displayed on the host device screen. Pocket Spider® IIc unit will power down in 3 minutes unless an external power source is used.

Technical Support

For problems stemming from your network access, contact your CDPD carrier service. For technical support and customer service dealing with the modem itself, contact Enfora by any of the following methods:

Website:	http://www.enfora.com
Phone:	972-578-CDPD (2373)
Email:	techsupport@enfora.com

Before contacting technical Support, please have your modem's Equipment Identification (EID) number ready for the Technical Support representative. If you did not record the EID number, you can find this in the **PocketSpider Modem** window, shown previously in this manual.

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Regulatory Information

The equipment certifications appropriate to your device are marked on the device and product specific information. The use of the equipment is subject to the following conditions:

FCC COMPLIANCE STATEMENT

This device complies with Part 15b of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device also complies with FCC Part 22.

FCC RF EXPOSURE COMPLIANCE

This device has been tested for FCC RF exposure compliance with Sharp SL5000 hand-held electronic organizer/PC. In order to comply with FCC RF exposure requirements this device must be operated with Sharp SL5000 handheld electronic organizer/PC. The use of this device in any other host configuration that has not been tested for RF exposure compliance may not comply with FCC RF exposure requirements and should be avoided. During operation, a 1.0cm separation distance should be maintained between the device and the user's/bystander's body (excluding hands, wrists, feet, and ankles) to ensure FCC RF exposure compliance.

CAUTION

Changes or modifications without the express written consent of Enfora, Inc. voids the user's authority to use the equipment.

This equipment has been tested and found to comply with the limits pursuant to Part 15 Subpart B and Part 22 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in an appropriate installation. This equipment generates, uses, and can radiate radio frequency energy and, if not used in accordance with instructions, can cause harmful radiation to radio and television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation distance between the equipment and the receiver
- Contact Enfora, Inc. Technical Support for assistance.

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Warranty Information

ENFORA, INC. 12-MONTH LIMITED WARRANTY

Enfora, Inc. warrants the products that it manufactures to be free from defects in materials and workmanship for a period of 12 months from the date of shipment from Enfora. This warranty is limited to the original purchaser of the product and is not transferable.

During the 12 -month warranty period, Enfora will repair or replace, at its option, any defective products or parts at no additional charge provided that the product is returned, shipping prepaid, to Enfora. The purchaser is responsible for insuring any product so returned and assumes the risk of loss during shipping. All replaced parts become the property of Enfora.

During the 12-month warranty period, Enfora will also provide any software updates/upgrades, at its option, at no additional charge. Any additional hardware that may be required to support the upgrade will be quoted as an option on request by the customer.

Equipment add-ons, software modules, or software upgrades purchased or provided at no charge for existing equipment are warranted for the length of the existing equipment warranty, extended warranty or 90 days (whichever is less).

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