

Wireless Portfolio



Users Manual

Draft

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Wireless Portfolio







Introduction

About the Wireless Portfolio

Welcome to the world of wireless data. The Wireless Portfolio is a compact, wireless data solution that uses a Cellular Digital Packet Data (CDPD) modem, allowing the transfer of 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.

The Wireless Portfolio also incorporates the power of the Global Positioning Satellite (GPS) system with a built in GPS module and antenna; enabling mobile professionals to utilize mapping software to establish travel routes while simultaneously retrieving mission critical data from a company database via the Wireless Portfolio's CDPD modem.

Enfora's Wireless Portfolio is the first wireless IP modem/GPS device designed to work exclusively with the IR port of any Personal Data Assistant (PDA). With the power of wireless data and GPS, Enfora is revolutionizing the world of Palm, PocketPC, handheld PC devices.

About this Manual

This Users Manual describes the use of Enfora's Wireless Portfolio with a Palm device. The Wireless Porfolio is compatible with Palm OS 3.5+. Please read all instructions carefully before installing the Wireless Portfolio.

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

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

Contents of Basic Package

The Wireless Portfolio package from Enfora includes:

- Wireless Portfolio (CDP0901).
- Wall transformer (AC adapter) for imbedded battery charger.
- Installation and Documentation CD-ROM.





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 Wireless Portfolio 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 services.



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 rate and structure. Your carrier should explain these items to you in detail when you consult them about registration.

Battery Operation

Prior to using the Wireless Portfolio, charge the new battery for at least 1 ¹/₂ hours. The Wireless Portfolio derives all off its power from a self-contained battery pack, thereby ensuring no adverse effects on battery life of the host Palm device. The Li-ion (Lithium-ion) polymer battery is composed of Lithium, the lightest metal possessing the highest electrochemical potential. Because of its light weight and high energy density, Lithium-ion batteries are ideal for portable devices. Lithium-ion batteries have no memory effect or poisonous metals, and they have a long battery life (1290 mA hours).

Once charged the Wireless Portfolio should operate for hours under normal transmit and receive operating conditions, although sustained transmition inherently reduces the time between charge. In the event of a low battery, connect the included charger to the Wireless Portfolio's power jack. The Wireless Portfolio is fully charged when the power indication LED displays green.

CD Installation Process

Before installing your modem, ensure that HotSync® 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 Wireless Portfolio. If the program 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 port of the host computer.
- 2. Insert the Installation CD-ROM. Choose Install for Palm.
- 3. A window appears noting that the **Portfolio** file will be installed onto the Palm device upon the next HotSync® operation. Click **Done** to close this window.



4. 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 the Wireless Portfolio is now installed onto the Palm device.

Palm OS Setup

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

This section explains how to setup the Wireless Portfolio for use with the Palm OS 3.5 platform. The purpose of this application is to setup the Wireless Portfolio and create an appropriate dial-up networking entry. This section describes only the basic Wireless Portfolio 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 network parameters are changed.

- 1. Place the Palm device into the Wireless Portfolio on the right side of the binder. Position the Wireless Portfolio's IR Transceiver in line with the IR port of the Palm device (about 1 inch away).
- 2. Access the Palm **Applications** screen on the Palm device by tapping the **(a)** icon. Open Portfolio Manager by tapping on the **Portfolio** program icon (shown below).





3. To access the options menu, tap the **Portfolio Manager** menu bar at the top left of the screen, or by tapping the Palm menu icon.

Portfolio Ma	nager	
Status : No Date	1	
Signal Power :		
Channel: 0 SPNI:	0	
Transmitted by	tes: 0	
Received by tes:	0	
Receive Error: 0		
Transmit Error:	0	
Tap the Menu b	ar for op	tions
	•	

4. Before a wireless connection can be made, the Wireless Portfolio's modem settings must be configured. To configure network modem settings for the Wireless Portfolio, tap **Settings** then **Modem** in the options menu.

File View	Settings	Help
Status : No Da	Modem	
Sianal Power :	Channel	
Channel: 0 SPN	GPS	
Transmitted b	ytes: 0	
Received by tes	5:0	
Receive Error: ()	
Transmit Error	:0	
Tap the Menul	bar for optio	ns
\bigcirc°	+	
	•	1 ²³

5. The Modem Info of the Wireless Portfolio is automatically detected, including the EID number, Modem IP address, Primary DNS and Secondary DNS numbers. 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. Carrier Preferences must be manually entered via the drop-down menu. Apply Changes to accept the detected modem settings.

Modern Info				
Device: Habanero Wireless IP Modem				
EID: 00-B0-D	B-00-29-89			
HW Ver A	SW Verv1.1.4			
Protocol	Rel Num 20010402			
Modem IP	166.128.113.234			
Primary DNS	199.88.234.61			
Secondary DNS 199.88.234.125				
Carrier Preference 🔻 Side A Only				
Pwr Down -1 Min SPNI 0				
(Cancel) (Apply Changes)				
\bigcirc°	+ 4) (***			
	123			

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6. To verify how the Wireless Portfolio will scan for CDPD channels, select **Channel** from the Portfolio Manager **Settings** list. The Portfolio Manager will automatically detect the modem's channel settings. The default setting for **CDPD Channel Information** is **None**.

CDPD C	anı	nel Inf	orm	ation
None		List		Range
🗆 List Only		Range	Only	
LED status:	•	r Select	t	
	Can	:el) (Apply	Changes
\bigcirc°		+		
		•		,23 Ø



7. LED status may also be configured on the CDPD Channel Information screen. Use the LED status drop-down menu to toggle the Wireless Portfolio's modem registration LED on and off, and also to vary the frequency of modem status LED pulses. Tap Apply Changes if any settings werechanged.

CDPD C	iani	nel Int	formation
🗹 None		List	🗆 Range
🗆 List Only		Range	e Only
LED status:	•	Blink	Medium
	Can	:el) (Apply Changes
		+	
			_1 ²³

8. To configure the Wireless Portfolio's GPS settings, choose **GPS** from the **Settings** menu. Enfora's Wireless Portfolio can be set to receive GPS information. The types of GPS messages received, specific National Maritime Electronics Association (NEMA) messages received, and time interval between GPS reports are user-definable. Tap **Apply Changes** if any were settings were changed.

GPS Settings			
🗹 Remote GPS data			
To IP : <u>166.128.113.229</u> In <u>5</u> Sec			
To Port 0 From Port 0			
Send the following messages :			
🗹 Location 🗖 Time 🛛 🗹 Height			
🗆 Speed 📋 Direction 🗋 Sat Info			
Corresponding NEMA Messages			
GPZDA (Cancel) (Apply Changes)			



Connecting to a Network

After the appropriate modem and carrier preferences have been selected, the modem is ready to connect to the network.

1. To make a network connection, tap the **Portfolio Manager** menu bar, tap **File**, and then tap **Connect**.

File View Settings Help
Connect
. Disconnect
, Upgrade Firmware
Exit
Received by tes: 0
Receive Error: 0
Transmit Error: 0
Tap the Menu bar for options

2. After a connection has been established, the Modem Data screen will display registration **Status**, **Signal Power** reading, **Channel** information, amount of information **Transmitted** and **Received**, as well as any **Receive Error** or **Transmit Error**.

Portfolio Manager
Status : Registered
Signal Power : Average(48 %)
Channel: 294 SPNI: 3232
Transmitted by tes: 0
Received by tes: 0
Receive Error: 0
Transmit Error: 0
Tap the Menu bar for options

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3. Real-time data received by the Wireless Portfolio's GPS module can be viewed by tapping the **Portfolio Manager** tool bar, then **View**, and **Raw GPS Data**.

File	View Settings Help
Status	Modem Data
Sianal	RAW GPS data
Channe	el: 294 SPNI: 3232
Transr	nitted bytes: 0
Receiv	ed bytes: 0
Receiv	e Error: 0
Transr	nit Error: O
<u>Tap th</u>	e Menu bar for options
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4. To disconnect the wireless modem, tap the **Portfolio Manager** tool bar, **File**, and **Disconnect**.

File View Settings Help
Connect
Disconnect
, Upgrade Firmware
Exit
Received by tes: 0
Receive Error: 0
Transmit Error: 0
Tap the Menu bar for options

5. To exit Portfolio Manager, tap the **Portfolio Manager** tool bar, **File**, and **Exit**.

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Third-Party Applications

Internet and E-mail

The Wireless Portfolio's CDPD modem can be used in conjunction with Internet browsers and e-mail programs. To use Enfora's Wireless Portfolio with third-party wireless applications, follow the instructions provided with the software to specify the Wireless Portfolio as the default wireless modem connection.

GPS Mapping Software

The Wireless Portfolio's GPS Receiver can be used in conjunction with GPS mapping software. To use Enfora's Wireless Portfolio with third-party GPS applications, follow the instructions provided with the software to specify the Wireless Portfolio as the default GPS receiver.

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 Modem Settings screen of the Portfolio Manager software.



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 CDPD device has been tested for FCC RF exposure and SAR compliance in the host hand-held, hand-operated electronic organizer/PC. During operation, a 1cm separation distance must 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 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 r easonable 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 communication. However, there is no guarantee that interference will not occur in a particular installation. If the equipment does cause harmful interference in 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.





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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