

Networks

Digital RoamAbout 915/2400 DS/PC Card Network Adapter

Quick Start



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Reader's Comments

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FCC NOTICE - Class B Computing Device

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

CE NOTICE – Class A Computing Device:

Warning!

This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

Achtung!

Dieses ist ein Gerät der Funkstörgrenzwertklasse A. In Wohnbereichen können bei Betrieb dieses Gerätes Rundfunkstörungen auftreten, in welchen Fällen der Benutzer für entsprechende Gegenmaßnahmen verantwortlich ist. **Attention!**

Ceci est un produit de Classe A. Dans un environment domestique, ce produit risque de créer des interférences radioélectriques, il appartiendra alors à l'utilisateur de prendre les mesures spécifiques appropriées.

Introduction

This document provides the step-by-step procedure to install the Digital RoamAbout 915/2400 DS/PC Card Network Adapter.

Installing the PC Card involves the following six tasks:

- Installing the PC Card Network Adapter
- Configuring your wireless device
- Installing the network drivers
- Verifying communications
- Changing your operating frequency

For complete installation and configuration instructions, refer to the *Digital RoamAbout 915/2400 DS/PC Card Network Adapter Installation and Configuration* manual.

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Kit Contents

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The network adapter kit contents are shown in Figure 1.

Figure 1 Kit Contents

Description



LKG-8695-93I

1	Radio module
2	Digital RoamAbout PC Card
3	Radio module mounting clip
4	The Digital RoamAbout 915/2400 DS/PC Card Network Adapter Quick Start
5	The Digital RoamAbout 915/2400 DS/PC Card Network Adapter Installation and Configuration manual

6 Digital RoamAbout PC Card Network Adapter software



Distribution Diskette Contents

Table 1 lists the files contained on the Digital RoamAbout PC Card Network Adapter software distribution diskette and provides a brief description of each file.

Table 1 RoamAbout Network Adapter Software

Files	Description of Files	
README.TXT	Supplementary information, including a list of the files on jthe diskette and a brief descrtiption of each file.	
WVLAN05.COM NET.CFG	ODI Network driver for NetWare	
WVLAN05.INS	OEM file for Personal NetWare	
OEMSETUP.INF	OEM file for Windows for Workgroups	
INSTALL.EXE	Installation program used with Card and Socket Services	
ENABLER.SYS	Point Enabler program for PCs that do not use Card and Socket Services	
SETCONF.EXE INSTCONF.EXE	Configuration utilities	
PTPDIAG.EXE	Point-to-Point Diagnostics utility	
WVLAN09.DOS	NDIS driver	
PROTOCOL.INI	PROTOCOL.INI file	
WMONITOR.EXE	Site survey tool	
WFREQSEL.EXE	Frequency select utility for the Digital RoamAbout 2400 DS/PC Card Network Adapter	



Task 1 – Installing the PC Card Network Adapter

To install the PC Card Network Adapter, follow these instructions:

- 1. Connect the radio module cable to the PC Card.
- 2. Slide the PC Card into the PCMCIA slot in the PC. Figure 2 illustrates how the PC Card is inserted into the front slot of a notebook computer.

Note

A slight resistance is felt as you slide the card into the PCMCIA slot. Push the card firmly into the slot until it is completely seated.

Figure 2 Inserting the PC Card (front slot)



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You can use the mounting bracket (shipped with the PC Card Network Adapter) to affix the radio module to your personal computer as shown in Figure 3. First slide the radio module onto the mounting bracket. After you select the placement the radio module, remove the protective strip from the adhesive pad on the mounting bracket and press the bracket firmly in position. You can now remove and remount the radio module whenever you wish.





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Task 2 – Installing the Network Drivers

The NDIS driver supplied with the PC Card Network Adapter software allows any NDIS-compatible clients or servers to use the PC Card Network Adapter.

The ODI driver supplied with the PC Card Network Adapter can be used to run your computer as a client or server in a NetWare [™] Lite or Personal NetWare environment, or as a workstation in other NetWare environments.

To install your network driver, select the network operating system from Table 2 and run the appropriate installation program.

Table 2 Network Operating Systems

Network Operating System	Run this Program
PATHWORKS V5	pwsetup, Or a:\setup
PATHWORKS V4	netsetup
Windows for Workgroups	OEMSETUP.INF
NetWare Lite	a:install from Program diskette
Personal NetWare	a:install from Personal Netware diskette 1
NetWare V4	a:install from WSDOS diskette
NetWare V3	DOS/ODI support files from WSGEN diskette

Task 3 – Configuring Your Wireless Device

There are two programs to configure your device; use INSTALL.EXE for Card and Socket Services, or use ENABLER.SYS for non–C&SS.

You must load the INSTALL.EXE or ENABLER.SYS utility before any drivers or other utilities can access the card.

The following procedure explains how to use the INSTALL.EXE utility. If you are using ENABLER.SYS to configure your device, refer to the *Digital RoamAbout* 915/2400 DS PC Card Network Adapter Installation and Configuration manual for procedures to use the ENABLER.SYS utility.

Configuring with Card and Socket Services

INSTALL.EXE uses Card and Socket Services and updates your PROTOCOL.INI file for NDIS drivers or NET.CFG file for ODI drivers, CONFIG.SYS file, and asks you to select a:

- Network Operating System
- Communications driver
- Network ID
- Beacon Key
- Domain ID

To run INSTALL.EXE, perform the following steps:

- 1. Insert your Install Utility diskette into drive A.
- 2. At the A:> prompt, type install [Enter]
- 3. Follow the instructions on the screen to configure your device.
- 4. Reboot your system when the program is completed.

Disabling Roaming

By default, roaming is enabled. To disable roaming, edit the PROTOCOL.INI file (for NDIS) or NET.CFG file (for ODI) and set the Domain ID to the value shown below.

PROTOCOL.INI File	NET.CFG File
$Domain_{ID} = 0 \times 0000$	Domain ID 0000
NWID = 0X0100 - 0XFFFF	NWID 0000 - FFFF

After disabling roaming, ensure that the MES has the same Network ID as your AP.



Task 4 – Verifying Communications

The Point-to-Point Diagnostic utility allows you to verify the communications path between a Mobile End Station (MES) and an Access Point (AP), or between two mobile end stations. The Point-to-Point Diagnostic utility helps to determine if:

- PC Cards and radio modules function correctly to allow exchange of messages.
- Radio module positioning is optimal.
- Stations are within operating range of each other.

You can also use the utility to get information about local radio frequency noise and environmental suitability. You can save measurement data to a disk file.

Running the Point-to-Point Diagnostic Utility

The Point-to-Point Diagnostic utility must be run before installing your network operating software. Also, ensure that ENABLER.SYS is loaded.

To run the utility, set your default directory to the ROAMABT directory and run PTPDIAG as follows:

cd \roamabt

ptpdiag

Once you press [Return], a menu screen is displayed.

Saving the Measurement Data

By pressing [F10] you can save the measurement data to a log file. You can choose between Spreadsheet-compatible (Comma-separated Value or CSV) or ASCII file format.

You can append data to an existing file or save to a new file, and you can choose to save the data once only or at regular intervals during the test.



Command Line Parameters

When running the Point-to-Point diagnostics, you can use any of parameter options specified in Table 3.

Table 3 Point-to-Point Diagnostics Command Line Parameters

Parameter	Description
-M	Sets the Video mode to monochrome. Im- proves legibility on monochrome screens. Use this parameter if you have difficulty viewing the display.
-Sx	Specifies the PCMCIA socket to use, where <i>x</i> is any value from 1 through 4.
-N <i>xx</i>	Specifies the station's name, where <i>xx</i> is a string of as many as 20 characters.
-l <i>xxxx</i>	Specifies the Network ID to be used, where <i>xxxx</i> is any hexadecimal value from 0100 through ffff.

Following is an example of using a command line parameter to set the Network ID to ffff:

ptpdiag -Iffff

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Task 5 – Changing the Operating Frequency

Your RoamAbout 2400 DS network adapter is set to a default frequency of 2.422 GHz (the RoamAbout 915 DS network adapter supports only one frequency). If the frequency setting in your Digital RoamAbout Access Point is different than this default and you want to change the setting in your network adapter, you must run the Frequency Select Utility. Refer to **Appendix C** of the *Digital RoamAbout 915/2400 DS/PC Card Network Adapter* manual for further instructions to run this utility.

To change the operating frequency, you must run the Frequency Select Utility. The utility must be run before running your network operating software.

For devices using Card and Socket Services, type: C:> cd \roamabt\util

To initiate the utility, type: wfreqsel [Enter]

For devices using the Enabler, place the Utilities diskette into drive A: and type: wfregsel [Enter]

Follow the instructions on the screen to configure your device.

Command Line Parameter

You can use the parameter option -m on the MS–DOS command line to select a "Monochrome Display" mode. Try this parameter if you have difficulty viewing the display in normal color mode.

Example: wfreqsel -m



Using the WaveMONITOR Utility

The WaveMONITOR utility is a site survey tool that assists you in selecting the placement of your Digital RoamAbout Access Point, or for troubleshooting mobile network problems.

Starting the WaveMONITOR Utility

You must run the WaveMONITOR utility before running your network operating software.

To run the utility, set your default directory to the ROAMABT directory and run WMONITOR.EXE as follows:

cd \roamabt

wmonitor [Return]

Once you press [Return], the WaveMONITOR Main Menu appears

The first time you use the utility, you should access the options in the following order:

- Setup sets your Domain ID and Beacon Key
- Configure WaveMONITOR sets your configuration
 parameters
- Run WaveMONITOR determines the placement of your Access Point.

To run Setup, select WaveMONITOR MAIN MENU screen and Press the **F5** key. Press **[Return]** to save the changes and return to the Main Menu.

To access the configuration menu, select the Configure WaveMONITOR option from the Main Menu. The CONFIGURATION SCREEN appears

To run WaveMONITOR, select ${\tt Run}\ {\tt WaveMONITOR}$ from the Main Menu.

For specific information on any option or parameter, refer to the online Help.

Refer to **Chapter 5** of the *Digital RoamAbout 915/2400 DS/PC Card Network Adapter* manual for further instructions to run this utility.

