

InfoNet Operating Guide

InnoMedia Inc. 4800 Great America Parkway Suite 400 Santa Clara, CA. 95054

Preface

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InfoNet Operating Guide, First Edition (September 1998) This document describes the InfoNet wireless module from InnoMedia Inc. This document is the official reference source for all revisions/releases of this product until rescinded by an update.

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To contact InnoMedia, call 1.408.562.3535 (U.S.), or 65-872-0828 (Singapore), or 011-886-3564-1299. For more information on this product, contact out web site at: <u>www.innomedia.com</u>

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Manual Organization

chapters: This manual is the primary reference guide for the InfoNet module cordless network system and contains the following

Chapter 1, *Introduction*, provides an overview of the InfoNet system and describes the different types of applications. The kit contents and component requirements are also provided.

Chapter 2, *Hardware Installation*, describes the basic InfoNet connections and hardware installation procedure.

Chapter 3, Software Installation, describes the software installation procedures.

1 Introduction

This chapter describes general information about the InfoNet system. It contains the following sections:

1.1 Overview

1.2 InfoNet Applications

1.3 InfoNet Kit Contents

1.4 InfoNet System Requirements

1.1 Overview

InfoNet is a cordless data network that is ideal for families or small offices needing to share resources between two computers. Simply connect a modem, printer, and InfoNet unit to one computer, which will function as the *server computer*. Then connect another InfoNet module to a second computer, which will function as the *client computer*. Two users can then simultaneously, and independently, surf the Internet over the same phone line and the same ISP account. They can also print, fax, e-mail, and exchange files from anywhere in the home or office.

The InfoNet system offers a high degree of mobility, allowing units to be placed up to 800 ft. from one another. Two InfoNet units are required to create a simple cordless network linking personal computers, laptop computers, printers, and modems. The InfoNet system is ideal for the portable nature of laptop and notebook computers, eliminating the need for the computer to be close to a printer or telephone line.



Figure 1.1 InfoNet System

The application software provided in this package supports the following versions of Microsoft Windows:

- Windows 98
- Windows 95

The InfoNet system uses the Direct Sequence Spread Spectrum Technology (DSSS). This technology was developed by the U.S. Army for secure data transmission in open spaces, hence it offers the highest level of security and reliability.

1.2 InfoNet Applications

There are three basic applications for the InfoNet system:

- Simultaneous Internet sharing
- Network file sharing
- Network printer sharing

1.2.1 Remote Internet Sharing

The InfoNet system allows shared modem and Internet access at client computer up to 800 feet from the server computer. This enables two users to simultaneously surf the internet, totally independent of each other, over the same phone line and the same ISP account.

1.2.2 Network File Sharing

The InfoNet system enables two users to share files and applications between two computers. This provides convenience for users and saves disk space between two computers.

1.2.3 Network Printer Sharing

The InfoNet system allows client computer to use the printer connected to the server computer. This enables two users to share printer resources from anywhere in the home or office.

1.3 InfoNet Kit Contents

The InfoNet system kit includes the following components. Please check the contents to ensure that you have all required items.

- Two InfoNet units
- Two power adapters
- One keyboard power cord
- Two serial cables
- One installation diskette

• One InfoNet operating guide

1.4 InfoNet System Requirements

When connecting the InfoNet modules, the following system components are required.

- One client computer (desktop, laptop, or notebook). The client computer is connected only to the InfoNet module.
- One server computer (desktop, laptop, or notebook). The server computer is connected to the printer, modem, and InfoNet module.
- Both computers must be running Windows 98 or 95 operating systems.
- The server computer must have at least two spare COM ports when using an external modem. (One port for the external modem, and the other port for the InfoNet module.) If the server computer has an internal modem, only one COM port is required for the InfoNet.

2 Hardware Configuration

This chapter describes the InfoNet hardware installation procedures. It contains the following sections:

2.1 Infonet Module Interfaces

2.2 InfoNet Hardware Installation

2.1 InfoNet Module Interfaces

	1 u <i>u u u u u u u u u u</i>	ei Onii Descripiion
Referen	Function	Description
ce		
1	Power Indicator	Indicates power is on when lit
2	DCD Indicator	Indicates unit is connected
		when lit. Light blinks when
		transferring data and turns off
		after 4 minutes of inactivity.
3	DTE/DCE	Indicates unit is set to Reset
	Indicator	mode when lit. Unit is set to
		Data mode when not lit.
4	Antenna	Receives signal from another
		unit.
5	Power Switch	Press into the lock position to
		turn on the unit. Press again to
		turn off the unit.
6	DTE/DCE Switch	Slide to the left for Reset mode.
		Slide to the right for Data
		mode.
7	DC Power Input	+5V DC power input. Positive
		polarity is in the center.
8	9-pin Serial Port	Female 9-pin connector for
		serial connection to a PC or
		serial communication device.

 Table 2.1
 InfoNet Unit Description

2.2 InfoNet Hardware Installation

The InfoNet system comes complete with two InfoNet modules. First, connect one InfoNet module to a computer, which will function as the *client computer*. Second, connect a modem, printer, and InfoNet module to another computer, which will function as the *server computer*.

Figure 2.2 shows a basic InfoNet system hardware configuration.





Basic InfoNet Hardware Configuration

2.2.1 InfoNet/Client Computer Connection

To connect the InfoNet module to the client computer, complete the following steps:

- 1. Make sure the computer is powered off and not connected to any other peripherals.
- 2. Connect one end of the serial cable to the 9-pin male communications port on your PC.
- 3. Connect the other end of the serial cable to the 9-pin port on the back of the InfoNet module.
- 4. Power on both the computer and the InfoNet module. The green power indicator light should be on and the red DTE indicator light should be off.
- 5. Position the antenna on the InfoNet unit in the upright position. This procedure is now complete. Please refer to Section 2.3.2 InfoNet Server computer Connections.

2.2.2 InfoNet/Server Computer Connection

To connect the InfoNet module to the client computer, complete the following steps:

- 1. Make sure the computer and any attached peripherals are powered off.
- 2. Connect one end of the serial cable to the 9-pin male communications port on your PC
- 3. Connect the other end of the serial cable to the 9-pin port on the back of the InfoNet module.

- 4. If not done so already, connect a modem and printer (and fax) to the computer. (See the respective peripheral owner's guides for detailed installation instructions.)
- 5. Power on the computer, all peripherals and the InfoNet module. The green power indicator light should be on and the red DTE indicator light should be off.
- 6. Position the antenna on the InfoNet unit in the upright position. This procedure is now complete. Please refer to Chapter 3 Software Installation.

3. Software Installation

3.1 Installation and Setup of NDIS driver and Network on Server Computer

- The installation procedures of NDIS driver are described below :
- 1. In "Control Panel" window, double click on icon "Network", click on "Add..." button in "Network" window.
- 2. In "Select Network Component Type" window, select "Adapter" and click on "Add..." button.
- 3. Click on "Have Disk" button in "Select Network Adapters" window.
- 4. Insert "InnoMedia InfoWave Driver" diskette and click on "OK",
- 5. When "InnoMedia InfoWave" is shown in "Select Network adapters" window, click on "OK".
- 6. To adjust Network Address or Serial Port, select "InnoMedia InfoWave" and click on "Properties" button. The adjustable keywords are under "Advanced" bar.
- 7. Select the right COM port on the value of property of Serial Port as shown in Figure 2.

noMedia InfoWave Prope	rties	? >
Driver Type Bindings Adva	anced)	
Click the setting you want to select its new value on the r	o change on the left, and ight.	then
Property:	<u>V</u> alue:	
Baud Rate Network Address	COM2	•

Figure 3.1. NDIS Driver Advanced Settings

- If the server computer wants to share file/printer resources with client computer, the following procedures must be done.
- 1. In "Control Panel" window, double click on icon "Network", click on "Add..." button in "Network" window.
- 2. In "Select Network Component Type" window, select "Client" and click on "Add..." button.

- 3. In "Select Network Client" window, select "Microsoft" in "Manufactures" sub-window, and select "Client of Microsoft Networks" in "Network Clients" sub-window, click on "OK".
- 4. Back to "Network" window, click on "File and Printer Sharing..." button.
- 5. Check the two options in "File and Printer Sharing" window as shown in Figure 3.

want to be able to give others access to my files.	 7 I want to be able to give others access to my files. 7 I want to be able to allow others to print to my printer(s). 			
U want to be able to allow others to print to my printer(s).	I want to be able to allow others to print to my printer(s).	I want to be able	to give others access to	my files.
I Walk to be able to allow others to place to the placens.		I want to be able	to allow others to print to	my printer(s).

Figure 3.2. File and Printer Sharing Window

- 6. Back to "Network" window, select "File and Printer Sharing for Microsoft Networks", click on "Properties" button.
- 7. Select "Browse Master" in "Property" sub-window, and set "Value" to be "Enabled" as shown in Figure 4, then click on "OK".
- 8. Back to "Network" window, click on "OK" to finish the sequences.

e and printer sharing h Advanced	or Microsoft Networks Prope 😭
Click the setting you war select its new value on th	nt to change on the left, and then he right.
Boperty	⊻akar:
Browse Master	Enabled States and a
	OK Card
	- Calca

Figure 3.3. Browse Master Setting

- The file and printer sharing is available only when both the computers belong to the same workgroup. That is, the workgroup names must be the same. The workgroup name is set up by doing the following procedures below :
- 1. In "Network" window, click "Identification" bar.
- 2. Type in "Computer name", "Workgroup", and "Computer Description". Note that the client computer must has the same workgroup name as server's. An example is shown in Figure 3.4.

Configuration Ider	ntification Access Control
Window Comput descrip	ws uses the following information to identify your ter on the network. Please type a name for this ter, the workgroup it will appear in, and a short tion of the computer.
Computer name:	Schsieh
Workgroup:	InnoMedia
Computer Description:	Sheng-Cheng Hsieh
	OK Cancel

Figure 3.4. Identification Settings

 For the NDIS driver, set up the parameters of TCP/IP as below : Click "Start > Settings > Control Panel > Network > TCP/IP->InnoMedia InfoWave > Properties". The IP address setting is shown Figure 3.5.

Bindings	Advanced	N#BIOS
DNS Configuration	Gateway WINS Cont	iguration IP Address
An IP address can If your network do your network adm the space below	i be automatically assigne es not automatically assig nistrator for an address, a	d to this computer n IP addresses, ask nd then type it in
C <u>O</u> btain an IP	address automatically	
C Specify an IP	address	
JP Address	192.168. 0	.1
Sylonet Max	× 255.255.255	i. 0
Sypner Mar	s: [200.200.200	

Figure 3.5. TCP/IP Settings of Server Computer

3.2 Installation and Setup of NDIS driver and Network on Client Computer

- The installation procedures of NDIS driver and file/printer sharing are the same as done on server computer.
- For the NDIS driver on the client computer, set up the parameters of TCP/IP as below : Click "Start > Settings > Control Panel > Network > TCP/IP->InnoMedia InfoWave> Properties".

onurus Auvance Materia	Bindings Advenced NetBIOS
ONS Configuration Getaway WINS Configuration IP Address	DNS Configuration Getexage WINS Configuration IP Address
An IP address can be suformatically assigned to frie computer. If your retwork does not automatically assign IP addresses, ack your network administration for an address, and then type it in the space below.	C Dpeble DNS C Enable DNS Bint Scheich Domain Invorreda.com.t
C Obtain an IP address automatically	DNS Seiver Search Dider
(* i§peqiy en IP address)	<u>e</u> dd
IP Addmine 192.168.0.2	192.168.0.1 (Hernolds)
Sybret Mask 255.255.255.0	Domain Suffix Search Order
	r do
	Ferry
OK Cancel	OK. Cancel

Figure 3.6. TCP/IP Settings of Client Computer

3.3 File and Printer Sharing

- Regarding to the installation of printer, please refer to Windows 95 user's manual or the installation manual attached with the printer.
- Sharing printers could be accomplished by doing the actions as below :
- 1. Click "Start > Settings > Printers". Move mouse pointer to the printer which you want to share, click the right button of mouse, then click on "Sharing...".
- 2. Select "Shared As", enter the "Share Name", then click on "OK". Here is an example shown in Figure 3.7.

	aring Paper	Setup	
Ngl Shared			
Share Namer	4RJeokJet400		
Commune D	Ť	12	
Fourieus 1			_
Easseord			
9	5. 		

Figure 3.7. Sharing Printer with Others

- Sharing files could be achieved through the following procedures :
- 1. Click "Start > Programs", run "Windows Explorer".
- 2. Move the mouse pointer to the disk drive or folder that you want to share with others, click the right button of mouse, then click on "Sharing...".

3. Select "Shared As", enter the "Share Name", select "Access type", then click on "OK".

O Not Shared		
• Shared As: ——		
Share <u>N</u> ame: C		
<u>C</u> omment:		
Access Type:		
<u> R</u> ead-Only		
C <u>F</u> ull		
C Depends on F	Password	
Passwords:		
Read-Only Passw	vord:	
Full Access Passi	word:	

Figure 3.8. Sharing Files with Others

3.4. Using Shared File and Printer

- The access of shared files is very simple. Run "Windows Explorer", and double click "Network Neighborhood". Double click the computer you want to access, then you will see the shared resources (including files and printers) shown on it.
- Before you want to access the shared printers, you need to install it by following general procedures of installation of printers except that you must install it as network printers.

Add Printer Wizard		Browas for Printer	2 X
	How is this printer attached to your computer? If it is clinicity attached to your computer, click Local Printer II is a stached to another computer, click Network Printer C Local printer C Local printer C Network printer	Select the network printer that you want to a Note: Printers are use ally attached to compo	dd Jen
	< Back Next> Cancel		Cancel

Figure 3.9. Installation of Shared Printer

Figure 3.9 shows some key steps for installation of network printer. Any other problem, please refer to the Windows 95 user's manual.