

Federal Communications Commission (FCC) Statement

RADIO FREQUENCY INTERFERENCE STATEMENT

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. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any special accessories needed for compliance must be specified in the instruction manual.

Warning: A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used.

Use only shielded cables to connect I/O devices to this equipment.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

CIS

100-1-200

2-Port Switching Hub for Workgroup

FCC Compliance Statement

This device complies with Part 15 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.

NOTE

This equipment has been tested and found to comply with the limits for a Class A 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. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, 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 between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

2-Port Switching Hub for Workgroup

CE Compliance Statement

We hereby certify that the Ethernet Hub complies with the EN 50081-1 and EN 50082-1 requirements



NOTE:

- EN 50082-1 standard : IEC 801-2
(Electrostatic Discharge)
- : IEC 801-3
(Radiated Immunity)
- : IEC 801-4
(Electrical Fast Transient/Burst)

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2-Port Switching Hub for Workgroup

CONTENTS

FCC Compliance Statement 1

CE Compliance Statement 2

Introduction 4

 Summary of features 4

 Package Contents 5

 Front and Back views of the Hub 5

 LED Indicators 4

 MDI-X/MDI Switch 7

 FDX/HDX Switch 7

Installing the PCMCIA adapter..... 7

 Pre-Installation Requirements 7

Specifications 8

Appendix 9

2-Port Switching Hub for Workgroup

Section 1 Introduction

The 10/100 PCMCIA Ethernet Adapter is a high performance Ethernet adapter, that is compliant with PCMCIA release 2.1, JEIDA 4.01 and IEEE 802.3 standards. This dual-speed PCMCIA adapter provides data transfer switching between 10 and 100 Mbps operation.

The full-duplex operation helps speed the network bandwidth from 10 Mbps to 20 Mbps and from 100 Mbps to 200 Mbps. In addition, the PCMCIA Ethernet adapter includes a complete set of drivers for all popular Network Operating Systems. It also provide two LED indicators for easily monitor the operating status, as well as network troubleshooting.

Summary of features

- Compliance with 10BASE-T, 100BASE-TX specifications of the IEEE 802.3 standards
- Compliant with PCMCIA release 2.1 and JEIDA 4.01 standards
- Single RJ-45 connector for use at either speed (Category 3, 4, or 5 UTP cable for 10 Mbp operation, and Category 5 UTP cable for 100 Mbps operation)
- Automatic selection for 10 or 100 Mbps network operation
- Full-duplex operation at both 10 Mbps and 100 Mbps
- Two (2) LEDs for monitoring link, speed, and activity status
- Hot-swap insertion and removal
- Diagnostic software and network drivers on the diskette
- Built-in store-and-forward data transmission mode

Package Contents

The package of your dual-speed PCMCIA adapter should contain the following items:

2-Port Switching Hub for Workgroup

- One 10/100 Mbps PCMCIA adapter
- One media attachment cable
- One network driver diskette
- This user's manual

NOTE: If any items are missing or damaged, please contact your dealer for replacement.

Figure 1-1 shows the product view of the PCMCIA Ethernet adapter.

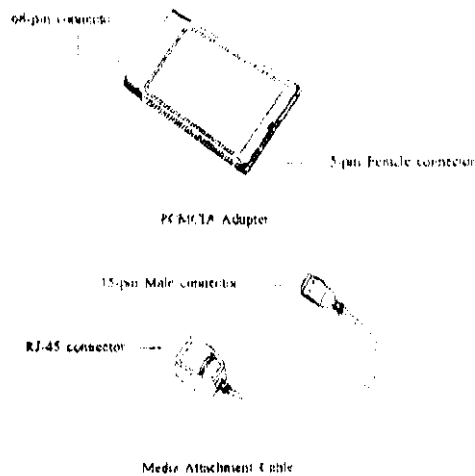


Figure 1-1 Product view of the PCMCIA adapter

LED Indicators

Your PCMCIA adapter provides two informative LEDs for easily status viewing and troubleshooting.

2-Port Switching Hub for Workgroup

Link / Act. LED

This green LED displays the linking, activity status. If a good link is detected through the RJ-45 connector, this green LED will be continuously lit, indicating a valid network connection between the PCMCIA node and the hub.

When data is transmitted through the RJ-45 connector, the green LED will flash.

100. LED

This green LED displays the data transfer rate of both ports. If a 100 Mbps (such as a 100 Mbps Ethernet adapter or 100 Mbps Ethernet hub) connection is detected on the RJ-45 port, this green LED will be continuously lit, indicating a valid 100 Mbps network connection between the network node and the switching hub.

NOTE:

Figure 1-2 shows the LEDs indication of the PCMCIA adapter

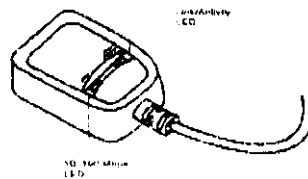


Figure 1-2 LEDs Indicator

2-Port Switching Hub for Workgroup

Section 2 Installing the PCMCIA adapter

Pre-Installation Requirements

Before you connect the 2-port switching hub to the network, make sure that you have provided the proper operating environment. To provide the proper operating condition, verify the following installation requirements:

- ▣ **Cable Requirement:** The 10/100BASE-TX PCMCIA adapter requires Category 3, 4, or 5 UTP cable wiring for the 10/100 Mbps RJ-45 port (Category 3, 4, 5 used for 10 Mbps, Category 5 used for 100 Mbps).

Category 5 Specification:

- ▣ Two pairs of wiring are required
- ▣ Cable type: Shield Twisted-Pair (STP) or Unshielded Twisted-Pair (UTP)
- ▣ Wire gauge: 18 to 26 AWG
- ▣ Nominal impedance: 100 ohms
- ▣ Maximum cable length: 300 (100m)
- ▣ Nominal attenuation: less than 11.5db

RJ-45 Pin Assignments

Pin No.	MDI-X Signal	MDI Signal
1	RD+ Receive from UTP	TD+ Transmit to UTP
2	RD- Receive from UTP	TD- Transmit to UTP
3	TD+ Transmit to UTP	RD+ Receive from UTP
6	TD- Transmit to UTP	RD- Receive from UTP

2-Port Switching Hub for Workgroup

Section 3 Specifications

IEEE 802.3 standards:	10BASE-T, 100BASE-TX
Wiring Connectors:	RJ-45
Weight:	40g
Dimensions:	54mm x 85mm
Emission Certifications:	FCC Part 15 Class A
Immunity Certifications:	IEC 801-2 (Electrostatic Discharge) IEC 801-3 (Radiated Immunity) IEC 801-4 (Electrical Fast Transient/Burst)
Power Consumption:	600mA, @12V
Operating Temperature:	0 to 55 degrees Centigrade
Operating Humidity:	10% to 90%, non-condensing
Operating Altitude:	10,000 (3,000m) maximum

2-Port Switching Hub for Workgroup

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2-Port Switching Hub for Workgroup

Section 4 Appendix A

RJ-45 pin assignments

Pin(s)	Assignment (20/8)	Assignment (MD)
1	RD + Receive Data UTP	10 + Transmit UTP
2	RD - Receive Data UTP	10 - Transmit UTP
3	TD + Transmit UTP	RD + Receive Data UTP
6	TD - Transmit UTP	RD - Receive Data UTP
4,5,7,8	Not Used	Not Used

Table A-1 RJ-45 connector pin assignments

RJ-45 pin connector



Phone Side

Plug Side

Table A-2 RJ-45 connector pin locations