✳✳ USER'S MANUAL ✳✳

FCC   ID : E6P5J9AT2400BT

Federal Communications Commission (FCC) 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 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.

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.

Sources of Information

This guide gives the instructions for installation of a single AT-2400T/BT PCI Ethernet adapter card in a Microsoft Windows environment. More information is available for other applications of the adapter card.

- *HELP2400 program*—The CardAssistant diskette contains text files with installation and configuration information for each environment. Use the program HELP2400.EXE to find the information you need for your situation. *(To view information files, insert the CardAssistant diskette in the floppy drive and type a:\HELP2400.)*

- *Documentation on the Web*—The Allied Telesyn Web site, http://www.alliedtelesyn.com, provides a searchable instruction guide in .PDF format for configuring and troubleshooting the AT-2400T/BT PCI Ethernet adapter card. *(Browse to the manual list in the Technical Support section of the ATI Web site.)*

If you are using the AT-2400 PCI card in a different environment refer to "Advanced Topics" on page 6 of this guide.

Preparing for Installation

These instructions assume the computer operating system is installed according to your computer's documentation. For the majority of applications, installing the AT-2400T/BT PCI Ethernet adapter card involves plugging the card into a PCI slot in your computer and installing the driver software. The driver files for the AT-2400 PCI card are found on the Allied Telesyn CardAssistant diskette, which you will be prompted to insert into the floppy drive.

Install the card

Warning—*High voltages inside the computer present a safety hazard. Make sure the power is off before removing the cover. This LAN adapter card is for use only with IBM or compatible UL-listed personal computers that have installation instructions detailing installation of card-cage accessories. Installation should be performed with precautions to prevent damage to static-sensitive components.*

Follow your computer's instruction manual for specific information on installing peripheral devices in your computer.

Once the adapter card is seated in a PCI slot and the computer's cover is back on, plug in the UTP cable, turn on the power, and reboot into Windows.

Important Cable Considerations

The AT-2400T/BT PCI Ethernet adapter card is for use with 10BaseT LAN segments, using an 8-pin (4-pair) RJ45 jack for the network cable. Be sure that all cabling used with the AT-2400 PCI card in a 10BaseT segment is of category 3, 4, or 5.

Install the drivers

Windows 95

With the AT-2400 PCI card installed, start Windows 95. The *New Hardware Found* dialog box appears, and you are prompted for the driver.

Insert the CardAssistant diskette, and direct Windows 95 to the root directory of the diskette; type a:\.

Make sure *ATI AT-2400 Ethernet card* appears in the driver found dialog box. Follow the Windows 95 instructions, supplying Windows 95 files as needed.

Windows 95 prompts you to restart the computer. You are ready to access your network.

Windows NT

With the AT-2400 PCI card installed and Windows NT started, you are ready to install the driver.

1. Open the add adapter dialog box as follows:
   NT 3.5x—open the Main program group by double-clicking its icon; then double-click the Control Panel icon, double-click the Network icon, and click *Add Adapter* from the *Network* box.
   NT 4.x—double-click the Network icon in the Control panel. Then select the *Adapters* tab and click the *Add* button.

2. Choose install from manufacturer's diskette as follows:
   NT3.5x—choose <OTHER> REQUIRES DISK from Manufacturer in the Network Adapter Card drop-down list. Then click Continue. NT 4.x—click the Have Disk button in the Select Network Adapter pop-up window.

3. Insert the AT-2400 CardAssistant diskette into your floppy drive. In the text field of the dialog box, type: a : \ and choose OK.

4. Verify that ATI AT-2400 10 MB PCI Ethernet card appears in the Select OEM option dialog box and choose OK.

5. In the Network Settings dialog box, verify that ATI AT-2400 Ethernet card appears in the Installed Adapter Cards list. If you wish, you can configure network protocols you will be using for network communications. Select the protocols used on your network, and when you are done, click OK (Close in Windows NT 4.0).

6. From the Network Settings Change dialog box, click Restart Now. After the Windows NT operating system shuts down, restart your computer.

This completes the installation. You are ready to access your network.

Note—If you're installing multiple cards on the same computer, see CardAssistant information file for Windows NT. (To view information files, insert the CardAssistant diskette in the diskette drive and type a : \HELP2400).

Windows for Workgroups (WFW) 3.11

With the AT-2400 PCI card installed, start Windows for Workgroups. You are ready to install the driver.

1. From the Network group in Program Manager, choose Network Setup.

2. In the Network Setup dialog box, choose Networks.

3. In the Networks dialog box, verify that Install Microsoft Windows Network is selected. Then choose OK.

4. In the Network Setup dialog box, choose Sharing.

5. In the Sharing dialog box, select whether to allow file and/or printer sharing with other users.

6. In the Network Setup dialog box, choose Drivers. Then, in the Network Drivers dialog box, choose Add Adapter.

7. In the Add Network Adapter dialog box, select Unlisted or Updated Network Adapter. Then choose OK.

8. Insert the AT-2400 CardAssistant diskette into your floppy drive. In the text box of the Install Driver dialog box, type: a : \ and choose OK.

9. In the Network Adapters list of the Unlisted or Updated Network Adapter dialog box, verify that ATI 2400 Ethernet is highlighted. Then choose OK.

10. In the Network Drivers dialog box, verify that ATI 2400 and its default protocols, Microsoft NetBEUI and IPX/SPX Compatible Transport with NetBIOS, appear in the Network Drivers list. Then choose Close.

11. In the Network Setup dialog box, choose OK.

12. If prompted, insert the required WFW diskette(s) into your floppy drive and then choose OK. (WFW occasionally loses its place at this point; if you get a message from Windows that it can't find a file, try inserting WFW install diskettes 7 and 8.)

13. If prompted, reinsert the CardAssistant diskette into your floppy drive. In the text box of the Install Driver dialog box, choose OK.

14. From the Windows Setup dialog box, choose Restart Computer.

This completes the installation. You are ready to access your network.

The Configuration and Diagnostics Utility: SET2400

In PCI Ethernet adapter cards, most operating parameters are under PCI-bus control. The Allied Telesyn SET2400 configuration and diagnostics program allows you to:

- View the configuration
- Run diagnostic tests on the EEPROM, on adapter card/computer communications, and on network communications
- View context-sensitive configuration and diagnostics help
- View configuration-information files about many different network operating systems

Although not required for operation, it's a good idea to run diagnostic tests every time you install an adapter; first test the adapter card off the network, then again after attaching it to the network. If you are installing the AT-2400 PCI card in a network operating system not covered in this guide, you also may wish to consult one of the information files available through HELP2400.

To launch and run HELP2400:

1. Reboot the computer in DOS with no drivers loaded. (In Windows 95, boot into the Command prompt only option. Press the F8 key when the message Starting Windows 95 appears, and select Startup Menu choice 6. Command prompt only.)

2. Insert the CardAssistant diskette in the floppy drive and launch HELP2400; type a:\HELP2400.

To run the network diagnostics:

The CardAssistant Network test is a live send/receive exercise, involving sending packets to a respondent (or more) on the network and counting the responses. You set up at least one computer to act as responder first then set up and start the sender. For each computer:

1. Make sure the cable is connected to the network and you get a valid Link indication.

2. Launch SET2400, choose a card from the opening screen, and from the main menu select Diagnostics and then select Network test.

3. Press F5 to start the sending machine. The sender counts packets sent and received. The number of packets received should be the number sent times the number of respondents.

AT-2400 PCI Ethernet Adapter Card Status LED

The status of the AT-2400 is indicated by the LNK LED which is ON when a Link pulse is detected on the network segment.

Advanced Topics

Allied Telesyn supplies information files on the CardAssistant diskette and an on-line guide on our Web site.

If you are installing the card in one of the following situations, you may wish to refer to this additional information for the particular network software you are using.

	CardAssistant	Web
Multiple card installation	✓	✓
Novell server support	✓	✓
ODI support	✓	✓
UNIX support	✓	✓
Removing a driver	✓	✓
Files needed for install listed	✓	
Advanced cabling considerations		✓
Sample configuration files	✓	✓
PCI bus considerations	✓	✓

To view HELP2400 topics

Insert the CardAssistant diskette in the diskette drive and type:
`a:\HELP2400`

To view the on-line guide

Point your browser to http://www.alliedtelesyn.com. The manuals are located in the Technical Support section in .PDF format.

Troubleshooting Tips

A networked computer system is a complex combination of hardware and software, all of which must function for data communication to work. Although most problems occur when the card is first being installed or when someone changes something in the network, a problem could be caused by your computer software, by cabling, or by many components elsewhere in the network. The following list offers some general guidelines for troubleshooting the AT-2400 PCI card.

1. Carefully observe the behavior of the system and identify the exact symptoms. Gather information about the system and its components, such as device drivers, memory and extensions (e.g., QEMM), other peripheral cards and the use of I/O ports and IRQs. Record your interaction with the computer, noting the conditions, your actions and the responses. Analyzing this information will help you diagnose the cause of the failure. Experiment with possible solutions. As you experiment, vary only one factor at a time.

2. Substitute known good equipment and see if the problem is eliminated.

3. Don't overlook the obvious. Make sure the card is seated in the computer and that the cables and connectors are securely attached.

4. Check your computer manual for BIOS Setup instructions (sometimes called CMOS Setup). Make sure the PCI slot is enabled. In some mixed ISA/PCI PCs you must make sure the PCI slot has a unique interrupt request (IRQ) number assigned.

5. Check the LNK indicator light. If the LNK indicator does not light, make sure the cabling is intact and connected to a functioning network port, and the network port speed and duplex settings match

those of the network card. If the LNK indicator lights but data transfer is slow, collision-prone, or non-existent, verify that your cable is of Category 3, 4, or 5. Category 1 and 2 voice-grade cable will not work properly. If the cable is more or less round in section, you probably have data grade cable, correctly paired, and no transmission problems. If, however, the cable appears flat in cross-section (as Silver Satin telephone-type cable) you probably have voice-grade cable and transmission problems. If it looks like telephone cable, double-check.

6. If you are using EMM386.EXE, verify that you have version 4.49 or higher. Lower versions of EMM386 can cause a PCI machine to lock up or reboot. Version 4.49 ships with DOS 6.22 and is available on the Microsoft forum on CompuServe.

7. If you suspect the network adapter card is not working properly, disconnect the network cable and run CardAssistant diagnostics after rebooting and with no drivers loaded. If CardAssistant software does not detect the card, it could mean a conflict between the card and another device, a card failure, or a slot failure. You may need to reconfigure the other device to avoid the conflict. Try installing the AT-2400 PCI card in another slot, then, if necessary, in another computer.

8. If the card passes diagnostics, try reconnecting the computer to the network. A failure may be caused by physical medium connections or by corrupted network software. You can test the connectors and cables by swapping them for known good ones. Replace corrupted network software.

9. If, after installing and loading the driver, an error message is returned indicating that the device could not be found, and you have verified that the BIOS setup and/or the PCI setup procedure for the slot in use is correct, then re-load the driver with the following switch in the appropriate configuration file for your driver:
   `BUSTYPE = PCI1`

   The exact format of this switch will depend upon the driver in use. For example, for the ODI workstation driver, add this line to the NET.CFG file in the LINK DRIVER section for the AT-2400 card (omit the = sign). For the NDIS 2.0 driver, add this line to the AT-2400 section of the PROTOCOL.INI file.

If your computer is supported by a system administrator or network administrator, this person can often provide the most help in resolving a problem. Allied Telesyn dealers also provide technical support for installation problems. You can contact the dealer where you bought your AT-2400T/BT PCI Ethernet adapter card for local assistance.

For Technical Support or Service

You can contact the dealer where you bought your AT-2400 PCI card for local assistance. If local help is unable to resolve your problem, Allied Telesyn offers technical support via fax or telephone.

Where To Find Us

Location	Phone	Fax
Americas United States, Canada, Mexico, Central America, South America	1(800) 428-4835	1 (425) 481-3790
Asia Singapore, Taiwan, Thailand, Malaysia, Indonesia, Korea, Philippines, China, India	(+65) 3815-613	(+65) 3833-830
Australia Australia, New Zealand	(612) 416-0619	(612) 416-9764
France France, Belgium, Luxembourg, The Netherlands, Middle East, Africa	(+33) 1-60-92-15-32	(+33) 1-69-28-37-49
Germany Germany, Switzerland, Austria, Eastern Europe	(+49) 30-435-900126	(+49) 30-435-70650
Hong Kong	(+852) 2-529-4111	(+852) 2-529-7661
Italy Italy, Spain, Portugal, Greece, Turkey, Israel	(+39) 2-416047	(+39) 2-419282
Japan	(+81) 3-3443-5640	(+81) 3-3443-2443
United Kingdom United Kingdom, Denmark, Norway, Sweden, Finland, Iceland	(+44) 1-235-442560	(+44) 1-235-442490
Technical Bulletin Board	1-425-483-7979	
Technical Support e-mail	TS1@alliedtelesyn.com	
CompuServe	Go ALLIED	
Internet, World Wide Web and FTP site	http://www.alliedtelesyn.com	

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Ethernet

E6P5J9AT2400BT

PCI Ethernet Network Adapter Card

QUICK
INSTALL
GUIDE

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