

Fax Modem

Quick Installation Guide

Ver. A 3519-0005

FCC Compliance

To comply with the applicable sections of FCC Rules and Regulations, Parts 68 and 15, please follow these instructions:

- Do not connect your modem to a party line or to a coin-operated telephone.
- If your modem should cause a problem on the telephone line, it should be disconnected from the line until it can be determined whether the modem or another device on the phone line caused the problem.
- Only the manufacturer can make repairs to the modem. Other repair methods will void your warranty.
- If you have an external modem, use a properly constructed shielded cable to connect it to your computer.
- If your telephone company asks for the following information, please make it available:
 - Modem manufacturer
 - Model of modem

FCC Part 15

Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

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 when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate 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 the 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.

Any changes or modifications not expressly approved by the grantee of this device could void the user authority to operate the equipment.

FCC Part 68 Notice

This equipment complies with Part 68 of the FCC rules. On the base of this unit is a label that contains, among other information, the FCC registration number and Ringer Equivalence Number (REN) for this equipment. If requested, this information must be given to your telephone company.

The REN is used to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your number is called. In most, but not all areas, the sum of the RENs of all devices should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the total RENs, you should call your local telephone company to determine the maximum RENs for your calling area.

If the telephone company suspects a problem with your telephone line is related to an add-on electronic device, such as your modem, they have the right to temporarily suspend your service. It is your responsibility to remove from the telephone line any malfunctioning electronic communications equipment to avoid damage to the telephone system.

If your equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC. Your telephone company may make changes to its facilities, equipment, operations, or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subjected to state tariffs.

If you experience trouble with this telephone equipment, please contact your place of purchase for information on obtaining service or repairs.

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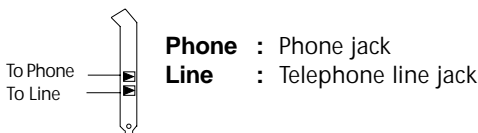
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Introduction

The Voice/Fax/Data PCI Modem connects your computer to Internet, all kinds of BBS, and other fax modems. This manual describes the features, installation procedures and AT commands.



Features

This modem supports the following communication standards. ITU-T is known as CCITT.

Data

- ITU-T V.90.
- ITU-T V.34, V.32bis, V.32, V.22bis, V.21, V.22.
- Bell 103 & 212A.
- V.42bis & MNP 5 (Data compression).
- V.42 & MNP2-4 (Error correction).

Fax

- V.17 (14400bps FAX).
- V.29 (9600bps FAX).
- V.27ter (4800bps FAX).

Voice

- Voice/Audio mode.

System Requirements

- Windows NT 4.0, Windows 95, Windows 98, Windows 2000.

Package Checklist

The package contains the following items:

- One fax modem.
- One piece of phone cable.
- One CD.
- The fax modem Quick Installation Guide.

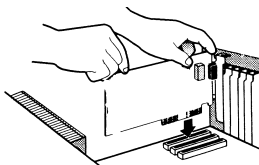
If any of these items is missing or damaged, please contact your dealer or sales representative for assistance.

Installations

This chapter describes how to install and power on you fax modem.

Hardware Installation

1. Make sure that your computer is switched off. Unplug the power cord from the wall socket. Also turn off all other peripherals you may have attached to your computer.
2. Select a free PCI slot. Remove the cover from the slot. Keep the screw. You will be using it in the next step.
3. Carefully slide the internal modem into the chosen slot. Press firmly on the top of the modem to seat it. Fasten the modem to your system with the screw you removed in the previous step. Replace the computer's cover.



4. Plug one end of the phone cable into the Line jack on your fax modem. The other end of the phone cable should be connected directly to the phone outlet.

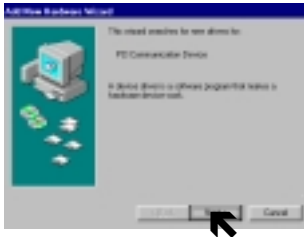
5. If you desire, you could connect your phone to the modem's Phone jack.
6. Turn on your computer.

Installation Procedures for Windows NT4.0

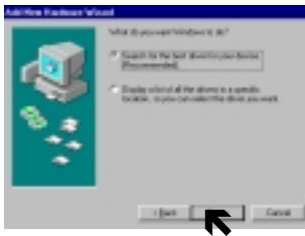
1. Please put the CD into your CD-ROM, then select Ambient→WinNT40, press Setup. A message of install a new modem appar, please select the item of "Don't select my modem, I will select in from a list", then click Next.
2. From the Manufacturer item, select the "Ambient Technologies", then the "Ambient HaM Data Fax Voice" message will appear, then click Next.
3. Please select the specify Com Port (COM 4), then click Next.
4. The installation has been compltted click Finish.

Installation Procedures for Windows 98

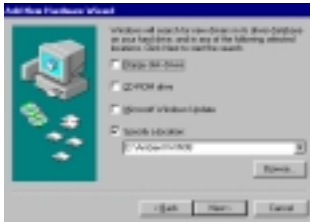
1. Once you have completed the hardware installation, power on your computer. When running Win98, your system will detect a new device and the following message will appear. click Next.



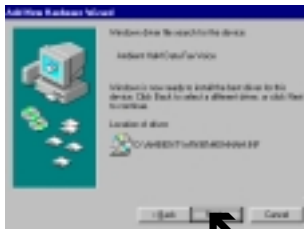
2. Select the " Search for the best driver for your device (Recommended) " option, then click Next.



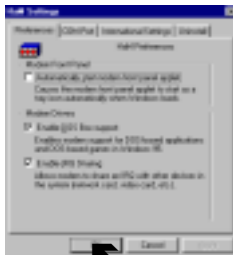
3. Place the CD containing driver for Win98 into your CD ROM drive. Specify the location of the modem driver, e.g., D:\Ambient\WIN98. then click Next.



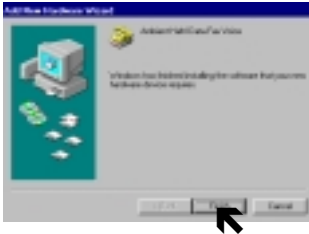
4. Windows Will locate your driver.
click Next.



5. Click OK.



6. The installation has been completed click finish.



Installation Procedures for Windows 2000

1. Once you have completed the hardware installation, power on your computer. When running Win 2000, your system will detect a new device. click Next.
2. Select the Search for the best driver for your device (Recommended) option, then click Next.
3. Place the CD containing driver for Win 2000 into your CD ROM drive. Select the Specify a location, then click Next.
4. Browse the proper location of the driver path, D:\Ambient\WIN2000, then click Next.
5. Click Next.
6. Please read the Digital Signature, then click Yes.
7. To complete the installation, click Finish.

Commands

Most people use the communication software programs to tell modems what to do. Therefore, you may not use the commands in this chapter. However, if you prefer to communicate with your modem directly, you can type the commands described below.

This chapter describes how to work in the terminal mode.

Typing Commands

- Use the BACKSPACE key to delete typing errors.
- Every command (except **A/** and **++**) must begin with the **AT** or **at** prefix and be entered by pressing the <Enter> key. For example, to execute the **V** command, you would type **ATV** and press the <Enter> key.
- When you see an **n**, replace the **n** with one of the letter or numeric options listed for that command. For example, for the **En** command, you might type **ATE1**.
- All defaults are based on the **&F** Hardware Flow Control template load in **NVRAM** when the modem is shipped.

AT Commands

- A/** Re-executes the last issued command.
Used mainly to redial.
- A** Go off-hook and attempt to answer a call.

ATS? Read Selected S-Register.

This command reads and displays the selected S-Register. An S-Register can be selected by using the **ATS*n*** command.

- D*n*** **Dial**
0-9 DTMF digits 0 to 9
P Pulse (rotary) dial
T Tone dial
W Wait for second dial tone (X3 or higher); linked to S6 register.

E*n* **Command Echo**

- E0 Disable command echo
E1 Enable command echo

H*n* **Disconnect (Hang-up)**

- H0 Hang up (goes on-hook)
H1 Go off-hook

I*n* **Identification**

- I0 Report product code
I1 Report chip firmware version.
I2 Report "OK" or "ERROR"
I3 Report chipset name.

Mn Speaker Control

- M0 Speaker is always off
- M1** Speaker ON until CONNECT
- M2 Speaker is always on.
- M3 Speaker off during dialing and receiving carrier and turn speaker on during answering.

On Return to On-Line Data Mode

- O0 Go on-line

P Set Pulse Dial

(for phone line that does not support touch-tone dialing)

Vn Result Code Form

- V0 Numeric codes
- V1** Verbal codes

Zn Soft Reset and Restore Profile

- Z0** Restore stored profile 0 after warm reset.
- Z1 Restore stored profile 1 after warm reset.

&Cn Control Carrier Detect (CD) Signal

- &C0 CD override
- &C1** Normal CD operations

&Dn DTR Option

- &D0 Ignore an on-to-off transition of DTR.
- &D1 Switch to on-line command mode without disconnection.

- &D2** Normal DTR operations.
- &D3** Modem re-initialized. &Y determines which profile is loaded.
- &Fn Load Factory Configuration (Profile)**
- &Wn Store Current Configuration**
- &W0** Store the current configuration as profile 0.

S-Register Definitions

S0 Number of Rings to Auto-Answer

The number of rings the modem waits for before it auto answers.

Range: 0-255 (rings)

Default: 0

S6 Wait Time before Blind Dialing

The time to pause after off-hook before blind dialing.

Range: 2-65 (U.S.)

Default: 2 (Country dependent)

S7 Waiting Time before Carrier Detect

The time to wait for a carrier from the remote modem before hanging up.

Range: 1-255

Default: 60 (seconds)

S8 Pause Time For Dial Delay

The time to pause for the pause dial modifier, "Comma".

Range: 0-65

Default: 2 (seconds)