

ENGLISH

**Trust Communicator 33K6
PC Card**

User's Manual

Version 1.0 / general

TELECOMMUNICATION

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Preface

This manual provides information to the user on installing the PCMCIA fax/modem. No special skills are required.

Extra information for the user is given like this:

Note

Do not format the floppy.

Caution

This is dangerous.

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Chapter 1: Introduction

Congratulations on purchasing the Trust Communicator 33K6 PC Card fax/modem for your computer. All you need to turn your notebook computer into a communications centre is this PCMCIA fax/modem and a standard analog phone line.

Features

Key features of the fax/modem include:

- Easy installation, no switches
- High speed 33,600 bps data connection
- Ability to fax documents at 14,400 bps
- MNP 5 and V.42bis compression and error correction
- Low power consumption
- Plug and remove while power is on.

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Chapter 2: Before installation

The fax/modem requires a PCMCIA Type II slot.

2.1 System requirements

Minimum and recommended system requirements for the PCMCIA fax/modem card are shown below. Generally speaking, the fax/modem card has been designed for installation on laptop computers with PCMCIA Type II card slots.

To locate the PCMCIA Type II slot, refer to the reference manual that came with your computer. Read any additional information in the manual regarding the PCMCIA slot.

Equipment	Requirement
Computer	Any computer with a PCMCIA compliant Type II card slot
PCMCIA Type II Card Slots	Card and socket services software necessary
Compatible Operating Systems	DOS, Windows 3.1, Windows for Workgroups 3.11 and Windows 95
Computer memory	4 MB
Hard disk space	Less than 2 MB
Phone line	Normal analog line

2.2 Card and socket services software

Verify that you have card and socket services software on your computer. If you are not sure, check the reference manual that came with your computer. To determine if you have card and socket services software, insert the PCMCIA fax/modem after you have finished booting your computer. If the computer beeps, the card and socket services software is loaded. If the computer does not beep, check the computer screen as it is booting. If you see "Card Services" or a similar term, proceed with the installation.

2.3 Phone line requirements

The PCMCIA fax/modem requires a standard phone line.

Caution

Do not connect through a PBX or a digital phone line. This may damage the PCMCIA fax/modem or phone equipment.

Many businesses and hotels use PBX or digital lines for their phone systems. Check with the administrator before connecting the modem.

Note

If you are using a line with Call Waiting, disable it before continuing to ensure it does not interrupt your communication session.

2.4 Package contents

The package should contain the following items:

- This manual
- PC Card
- Telephone cable
- Telephone plug (for some countries)
- Driver disk
- Connection box (for some countries).

Contact your dealer if any of these parts are missing.

Chapter 3: Installation

This section contains instructions on installing your fax/modem. Before you begin, find out which operating system you are using.

Note

You should configure your fax/modem before loading any communication software.

3.1 Hardware installation

Step 1 Insert the fax/modem firmly into the PCMCIA socket on your computer, with the 68-pin connector facing the card socket (see figure 1). Use the arrow on the label as a guide for proper alignment. The keyed guide slots do not allow incorrect insertion.

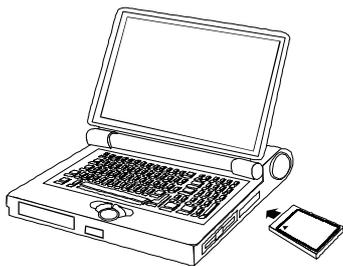


Figure 1: Inserting the card into the PC Card slot

Step 2 Insert the enclosed cable into the card (the end with the large connector, with the arrow facing up). See figure 2. The keyed connector does not allow incorrect insertion. Insert the other end of the cable into a phone jack.

This completes the hardware installation. Now go to Section 3.2, Software Installation.



Figure 2: Attaching the modem cable

3.2 Software installation

After installing the fax/modem, you need to install the software necessary to communicate with the fax/modem. This section includes instructions for the following operating systems:

- DOS
- Windows 3.1 and Windows for Workgroups 3.11
- Windows 95.

3.2.1 DOS

DOS does not require any special drivers to communicate with the PCMCIA fax/modem if you are using your system's card and socket services software. You only need to install the communication software. Refer to the manual of the communication software for more information.

3.2.2 Windows 3.1 and Windows for Workgroups 3.11

Windows 3.1 and Windows for Workgroups 3.11 do not require any special drivers to communicate with the PCMCIA fax/modem if you are using your system's card and socket services software. You only need to install the communication software. Refer to the manual of the communication software for more information.

3.2.3 Windows 95

This operating system requires special drivers to communicate with the PC Card fax/modem. They are on the disk.

Step 1 With Windows 95 running, insert the fax/modem into the PCMCIA slot. Windows 95 will display a box saying 'New Hardware Found'.

Step 2 Insert the installation disk into your computer and Choose 'Driver from disk provided by hardware manufacturer' Click the 'OK' button.

Step 3 Choose the correct drive letter (probably A:\) and click on the 'OK' button.

Step 4 When Windows 95 configures the fax/modem, you will hear a two-tone beep.

Note

Your installation is now complete. To test your modem and find the IRQ and COM port, continue on to Steps 5 and 6.

Note

If Windows 95 is unable to find any drivers on the disk, the drivers may be in a subdirectory. Use 'Browse' and select a:\win95 instead of a:\ for the location of the drivers.

Step 5 Go to the 'Control Panel' and double click on the 'Modems' icon. Check the COM port that Windows 95 assigned to your fax/modem by highlighting the fax/modem driver and clicking on the 'Properties' button.

Step 6 You may test your fax/modem by tabbing to the 'Diagnostics' page and clicking on the 'More Info' button.

This completes your installation.

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Chapter 4: Maintenance

The Trust Communicator 33K6 PC Card requires no special maintenance.

Clean the card with a damp soft cloth if cleaning is necessary. Do not use aggressive cleaners like alcohol, as these will damage the card. Be careful not to spill any cleaner on the connectors. Do not immerse the Trust Communicator 33K6 PC Card in any liquid. This can be dangerous and will seriously damage the product.

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Chapter 5: Troubleshooting

This section presents solutions to some common problems you may encounter when installing your PCMCIA fax/modem card. Some solutions may not apply to your operating system or environment. If your problem is not listed here, or you continue to have problems, contact your dealer.

Refer to the communications software *User Guide* for solutions to software problems.

Note

Also refer to the README file on the installation diskette for information not yet available when this manual went to press.

1. Problem: Modem does not respond, modem communication error, or modem not found

1. Check the following:

- Did you select the correct modem type or a Hayes compatible modem? Try any Hayes modem.
- Is the PCMCIA card fully plugged into the card slot and are all connections secure? If you insert the card while the computer is running, you should hear the computer beep to acknowledge the card insertion.
- Check your computer's BIOS set-up. You may need to disable a built-in COM port to prevent conflicts.

2. Problem: COM port not found

2. Check the following:

- Did you select the correct COM port? Try to select a different port.
- Did you mistakenly select the same COM port for both the PCMCIA socket and any other serial device? Check the configuration of your computer.
- Does the card and socket services software recognize your fax/modem? Refer to your computer's users manual for more information.

3. Problem: Modem works only for a while

3. Check the following:

- If the modem stops after the computer enters power-saving mode, you may need to disable this feature on the computer.
- If you are using DOS & Windows or Windows 95, exclude D000 through DFFF in your memory manager. i.e. DEVICE=C:\DOS\EMM386.EXE NOEMS X=D000-DFFF in the CONFIG.SYS file on your computer.

4. Problem: Modem doesn't fit

4. Check the following:

- Did you insert the correct end into the slot, with the right side up? Look for the arrow on the label to guide you.
- Check the pins inside your PCMCIA socket to make sure none of them is bent or damaged.
- Is the card slot in your computer a Type II or higher slot?
- Are you sure the slot is a PCMCIA slot, and not a memory expansion slot? (The layout of some computers can be confusing.)

5. Problem: ERROR message

5. Check the following:

- Did you select the correct modem in the software? Refer to the manual of the communication software.
- If you are in terminal mode, are you using the proper command and have you typed it correctly?

6. Problem: Modem doesn't dial or dials incorrectly

6. Check the following:

- Are your phone line and cable connections secure?
- Is there another phone extension in use on the same line?
- Are you sure you are using a standard analog phone line? This modem cannot operate with digital lines.
- Does the dial tone sound normal? If not, find another line or, in your terminal program, enter the command ATX3DT followed by the phone number.

- Is the telephone number correct?
- Is the other line busy or not answering? Make sure it is available before calling.
- Are you dialling an international connection? If so, your modem may not recognize the dial tone. Enter the command ATX3DT and the telephone number. This forces what is called a “blind dial.”

7. Problem: Modem does not send fax message

7. Check the following:

- Did you select the correct fax class? Check your software, select another fax class and try again.
- Do you have any other communication programs open? If so, close them.
- Did you select the correct printer (i.e., fax/modem) in your application?

8. Problem: No Dial Tone message

8. Check the following:

- Are all the cable connections secure?
- Is the phone line in use by someone else?
- Are you using a standard analog phone line?
- Test the line by connecting a standard phone and listening for a dial tone.

9. Problem: Modem clicks, but makes no connection

9. Check the following:

- You are trying to use a digital phone line or a PBX line. Unplug at once and find an analog line.

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Appendix A: AT Command Set

AT commands allow you to control your modem from a command line or from terminal mode. If you are using your communications software to operate your modem, the software menus will give the AT commands for you. However, if you want to operate the modem directly from the terminal mode, follow the instructions in this section, which contains the most commonly used AT commands.

Guidelines

The characters AT (attention) precede most commands. Enter the commands *exactly* as they appear in the Command column. You may use either upper or lower case letters (but do not mix cases), up to a total of 40 characters in one command. Spaces are not required. Press <Enter> after you have typed the complete command string.

- A '✓' in the Default column indicates that the command is part of the factory configuration.
- Commands may use a number to change settings. Whenever you see 'n' replace it with a number. When entering zero, make sure you use the numerical '0', not the letter 'o'.
- You can execute AT commands using any modem communications software. Enter the terminal (or equivalent) mode and type the command. The modem responds with result codes, like 'OK', depending on the command you entered.

List of AT Commands

Command	Description	Default
A/	Re-execute last command.	
ATA	Answer Call or Go Off-hook. Allows you to answer calls manually.	
ATD	Dial Command. Tells the modem to dial.	
ATDT	Touch Tone Dialling.	✓
ATDP	Pulse Dialling. For rotary dial systems.	
ATDTn,n	Pause. The comma tells the modem to pause. Use when dialling calling card numbers, PBX phone prefixes, etc.	
ATDT9Wn	Wait for Dial Tone. The 'W' tells the software to wait for a dial tone before continuing. 'n' is the phone number.	
ATE0	Local Echo Off. Does not display the characters you type.	
ATE1	Local Echo On. Displays the characters as you type.	✓
ATH	Initiate Hang-up Sequence. Use only if a normal disconnect cannot occur.	
ATH1	Pick Up the Phone Line.	
ATL0	Speaker Volume Off. The speaker remains on, but you can't hear anything. PCMCIA modems use the speaker on the computer.	
ATL2	Speaker Volume On.	✓
ATM0	Speaker Control Turn Off Speaker. Turns the modem speaker off. You will not be able to hear if the modem makes a connection.	
ATM1	Speaker Control. Speaker On During Handshake Until Connect, and Off	✓

Command	Description	Default
	During Receive. Turns the speaker on until there is a connection, then turns it off for transmission.	
ATM2	Speaker Control. Speaker Always On. Keeps the speaker on during connection and transmission.	
ATV0	Report Numeric Commands - Short Form or Terse. Reports results in numeric, or short, form. Some communications software responds to words, while others read only the numeric commands.	
ATV1	Report Verbose Commands - Long Form. Reports results in word form. Examples are 'OK, Connect, Error'.	✓
ATW0	Report Modem Progress. Only Connect Speed. Tells you the type of modem you are connecting with and the speed at which you are connected.	✓
ATW1	Report Modem Progress All Information. Reports all the connection data, including carrier, protocol, and compression.	
ATW2	Report Modem Progress Only Carrier Connect. Reports only the connection speed.	
ATZ	Restore Stored Profile 0. You can store frequently used settings to one of two profiles. Designates stored profile 0 as the active profile.	
ATZ1	Restore Stored Profile 1. Designates stored profile 1 as the active profile.	
AT&F	Return to Factory Defaults. Returns the modem to factory configuration.	✓
AT&C1	Data Carrier Detect. Tells the modem to respond only when it detects a	

Command	Description	Default
	modem at the other end.	
AT&D2	Data Terminal Ready selected. Prepares the modem for normal transmission.	
AT&W	Write to Stored Profile 0. Writes a command to the modem's memory. For example, 'ATL3&W' writes 'L3' to stored profile 0.	
AT&W1	Write to stored profile 1. Writes a command to stored profile 1.	
ATS0=n	Number of Rings to Answer On. 'n' is the number of rings before the modem answers. If 'n' = 0, auto-answer is off. If 'n' = 1 or more, auto-answer is on.	2 Rings
ATS6=n	Pause Before Dialling. Specifies the amount of time the modem waits before dialling. Use if the dial tone takes several seconds to engage after dialling 9 for an outside line. You can enter from 2 to 255 seconds.	4 seconds
ATS7=n	Wait for Carrier. Specifies the amount of time the modems negotiate before hanging up the phone. You can enter from 1 to 255 seconds.	50 seconds
ATS8=n	Pause Time. Specifies the length of a comma (,) or pause, before issuing a command, dialling, etc. You can enter from 0 to 255 seconds.	2 seconds

Appendix B: Specifications

Supported data speeds (bps)

300, 600, 1200, 2400, 4800, 7200, 9600, 12000, 14400,
19200, 21600, 24000, 26400, 28800, 33600

Data protocols

ITU-T V.34, V.32bis, V.32, V.22bis, V.23, V.22, and V.21
Bell: 212A and 103

Fax protocols

ITU-T V.17, V.29, V.27ter, and V.21 ch 2

Error correction & data compression

V.42bis/MNP 5

Standards

Enhanced 'AT' command set, Fax Class 1 & Class 2
commands

Command Buffer

40 characters