

Partner-N64PC Interface Board

Installation Manual

D.C.N NUS-06-0299-001-A

This document contains confidential and proprietary information and is also protected under the copyright laws of the United States and foreign countries. No part of this document may be released, distributed, transmitted or reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without the written permission of Nintendo.

© 1999 Nintendo of America, Inc.

Nintendo, N64, and the "N" logo are registered trademarks of Nintendo.

Partner-N64PC and Partner-N64NW are trademarks of Kyoto Micro Computer Co., LTD.

Windows, Windows 95, Windows 98 and Windows NT are trademarks of Microsoft Corporation.

All other products or brand names mentioned are trademarks or registered trademarks of their respective holders.

Table of Contents

CHAPTER 1	5
Introduction	5
About This Manual	5
Handling Precautions	6
Setup Overview	6
Interface Board Specifications	7
CHAPTER 2	9
Connecting the Interface Board	9
Connecting the ISA Bus (DOS/V) Interface Board	9
Connecting the C Bus (PC-9800) Interface Board	13
Connecting the PC (PCMCIA) Card	16
Connecting the PCI Bus Interface Board	17
CHAPTER 3	21
Installing the Partner-N64PC Debugger Software	21
Before Installing the Software	21
Installing the Software	21
Uninstalling the Software	23
CHAPTER 4	25
Installing the Device Driver	25
Windows 95 Environment	25
Windows 98 Environment	30
Windows NT 4.0 Environment	31
CHAPTER 5	33
Starting Up Partner-N64PC	33
Configuring the Partner-N64PC Environment File	33
Startup Error Messages	33

Chapter 1

Introduction

About This Manual

Partner-N64PC Version 1.1 has added support for the PCI interface board and for Windows 98 and NT. This installation manual explains how to: **1.** install the PCI and other interface boards for Partner-N64PC, **2.** set up the Partner-N64PC debugger software, and **3.** install the interface board's device driver for your operating system (OS).

This manual is intended to be used in conjunction with the *Partner-N64PC User's Guide*. Where necessary, this manual makes reference to sections of the User's Guide.

Types Of Interface Boards Described in This Manual

- ISA Bus (DOS/V)
- C Bus (PC-9800)
- PC (PCMCIA) Card
- PCI Bus

Types Of Operating Systems Described in This Manual

- Windows 95
- Windows 98
- Windows NT 4.0

Please completely fill out the user registration card and return it immediately. Provision of user support for this product (technical inquiries and information on version updates, etc.) is based on receipt of this card.

Typographical Conventions Used in This Manual

The following typographical conventions are used throughout this manual:

- | | |
|----------|--|
| [System] | Square brackets are used to denote names of icons, menu command and objects on windows, dialog boxes, etc. |
| <OK> | Elbow brackets are used to denote names of button. |

Product Warranty

1. If this product becomes defective, we will repair it free of charge for 1 year from the date of purchase. Please return the product to our service department.
2. This warranty is not valid even within the warranty period in the following cases:
 - 1) Cases of improper use (handling in ways counter to the procedures and cautions described in this manual), for example reversing insertion of the connector and cable, and using a non-regulated voltage.
 - 2) Repairs, modifications, adjustments and disassembly conducted anywhere other than at our company.
 - 3) Malfunctions and damage due to improper handling, such as dropping or impacting during transportation or moving.
 - 4) Failure to submit the user registration card at the time of purchase, or failure to properly fill out the card.
 - 5) Malfunction due to fire, natural disasters, movements of the earth, etc.
 - 6) This warranty is effective only in Japan.
3. The warranty only covers the basic hardware. Accessories (various cables) and software are not guaranteed.
4. The company takes no responsibility for incidental damage caused by use of this product or due to malfunctions of hardware.

Handling Precautions

1. Do not place heavy objects or put pressure on the interface board.
2. Do not drop the board or subject it to vibrations or impacts.
3. Do not pull on the cord when removing the cable or the board.
4. Be careful of damage caused by static electricity when handling the board.
5. Avoid using or storing under conditions of high temperature, humidity, dusty environments, or direct sunlight.
6. Avoid sudden changes in environment (temperature and humidity).
7. Do not spill beverages or water on the board and the accessories.
8. Do not connect to other interface boards or to the wrong kind of connector.

Setup Overview

To set up Partner-N64PC for the first time, follow the procedure outlined below. Make sure to follow instructions in the order they are described.

1. Connect the Interface Board to Your PC

Please see Chapter 2, *Connecting the Interface Board* (p. 9).

2. Install the Partner-N64PC Debugger Software

Please see Chapter 3, *Installing the Partner-N64PC Debugger Software* (p. 21).

3. Install the Device Driver

Depending on the type of interface board and OS you will be using, you may need to install a device driver. For more detailed instructions, please see Chapter 4, *Installing the Device Driver* (p. 25). Table 5 in the chapter outlines device driver requirements.

4. Start Up Partner-N64PC

Before starting up Partner-N64PC you must specify the type of interface board installed and set the proper I/O address. For more information, please see the section for your interface board in Chapter 2, *Connecting the Interface Board* (p. 9).

If your OS is Windows 95/98, you must modify the Partner-N64PC environment file (EPTN64.CFG). For detailed instructions, please see *Configuring the Partner-N64PC Environment File* in Chapter 5 (p. 33).

If your OS is Windows NT 4.0, you must install a device driver regardless of the interface board you connect to your PC. For detailed instructions, please see Chapter 4, *Installing the Device Driver* (p. 25).

Interface Board Specifications

Machine Compatibility

ISA Bus:	DOS/V computers with an ISA bus
C Bus:	PC-9800 Series computers with a C bus slot
PC Card:	DOS/V computers and PC-9800 Series computers with a PC card slot conforming to the PCMCIA Version 2.1/JEIDA Version 4.2 or above standard
PCI Bus:	DOS/V computers and PC-9800 Series computers with a PCI slot conforming to the PCI-SIG PCI Version 2.1 standard

If you are running Windows NT on a PC-9800 Series computer, you cannot use the PC card.

Hardware Resources

ISA/C Bus

I/O Address:	Uses an unused 8 bytes on an 8-byte boundary
Interrupt:	Not used

The I/O address is specified with the switches on the board

PC (PCMCIA) Card

I/O Address: Uses an arbitrary 8 bytes on an 8-byte boundary

Interrupt: Not used

The I/O address is set automatically by Plug & Play

PCI Bus

I/O Address: Uses an arbitrary 16 bytes on a 16-byte boundary

Interrupt: Not used

The I/O address is set automatically by Plug & Play

Current Drain

ISA/C Bus: Standard 200mA

PC (PCMCIA) Card: Standard 80mA

PCI Bus: Standard 300mA

Chapter 2

Connecting the Interface Board

Connecting the ISA Bus (DOS/V) Interface Board

There are three DIP switches on the ISA Bus interface board that can be set by the user: SW1, SW2 and SW3. Set these switches to match the configuration of the system being used. Their locations are shown in Figure 1.

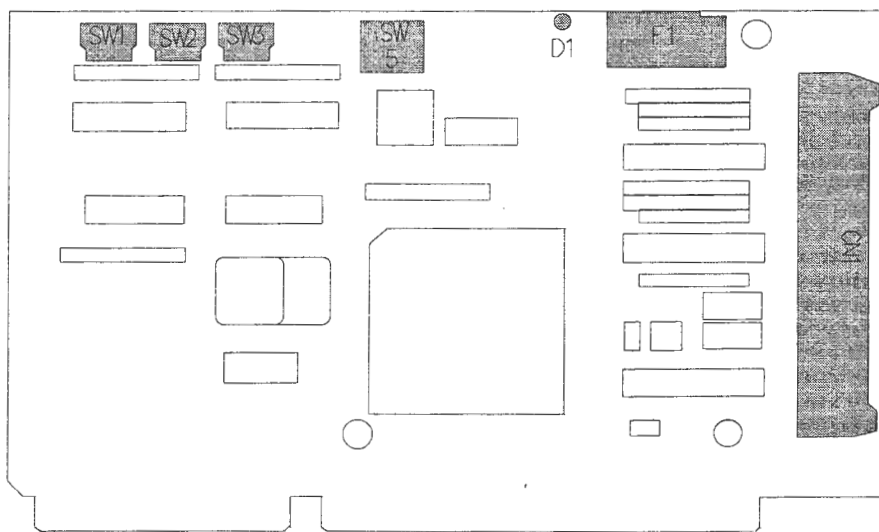


Figure 1: ISA Bus Dedicated Parallel Interface Board

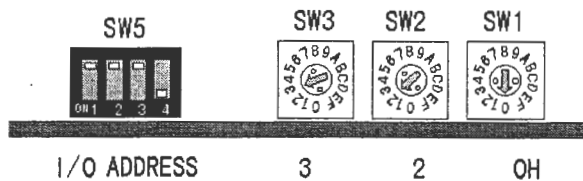


Figure 2: Default Switch Settings For the ISA Bus Interface Board

Figure 2 shows the default switch settings for the ISA interface board. You must adjust these switch settings according to the system that you are using.

When not connected to an external power supply, power is supplied to the Partner-N64PC from the personal computer through a fuseless breaker. In the event of an abnormal current condition,

the white button on the breaker pops out and the current is interrupted. Once the cause of the abnormal current condition has been eliminated, press the white button back in. The LED on the board (D1 in Figure 1) is on when the breaker is in the normal state and off when an abnormal current condition has occurred.

A type of auto-recovery might be mounted on the board instead of the circuit breaker. If this is the case, please cut off all power and wait a few minutes before powering up again.

Setting Switches for the ISA Bus (DOS/V) Interface Board

SW1, SW2, SW3

These switches set the I/O address used for communication between the Partner-N64PC and the PC. Specify bits A3 through A11 of an empty address on the PC. The 8 bytes from the specified I/O address are used by the board (i.e. 320-327 for the default setting of 320).

SW1 refers to A3, SW2 refers to A4 through A7 and SW3 refers to A8 through A11. The value that can be set for SW1 is 0 or 8. Any other values are rounded to 0 or 8 (bits A0 through A2 are ignored by SW1). In addition, the upper 4 bits of the address (A12-A15) are fixed at 0 (full 16-bit decoding).

The factory setting for the I/O address is 320H.

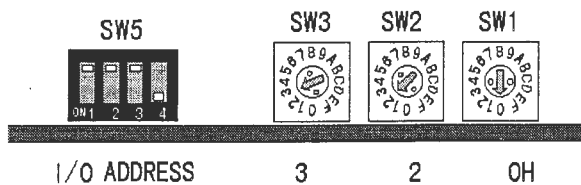


Figure 3: Setting the I/O Address For the ISA Bus Interface Board

Switch Name	Address	Range	Default Setting
SW3	A9-A8	0-F	3
SW2	A7-A4	0-F	2
SW1	A3-A0	0 or 8	0

Table 1: ISA Bus Interface Board Switch Settings

The I/O address settings that can normally be set by the user in an IBM-PC compatible machine are listed in Table 2. Set the I/O address to an address that will not conflict with another board in this range. Specify this I/O address in the PORT ADDRESS field of the Partner-N64PC environment file (EPTN64.CFG), except in the case of Windows NT. For details, please see *Configuring the Partner-N64PC Environment File* in Chapter 5 (p. 33) and Chapter 4, *Startup*, in the *Partner-N64PC User's Guide*.

Address
100h-1EFH
220h-26FH
280h-2AFH
300h-35FH
3E0h-3EFH

**Table 2: Map of Usable I/O Addresses
For the ISA Bus Interface Board**

SW5

Use this switch in its default state. Do not change its settings. When the board is shipped, SW5-1 through SW5-3 are OFF and SW5-4 is ON.

Installing the ISA Bus (DOS/V) Interface Board

Once the interface board switches have been set, install the board in an available 16-bit ISA expansion slot in the PC according to the following procedure. Appropriate ESD precautions must be observed while performing these steps.

1. Check the switch settings on the interface board. If they are not set to match the personal computer being set up, check *Setting Switches for the ISA Bus (DOS/V) Interface Board* in this chapter (p. 10) and change the settings.
2. Turn off the power to the computer and remove the chassis cover (refer to the manual for the PC for a description of how to remove the chassis cover). Then remove the expansion slot cover as shown in Figure 4.

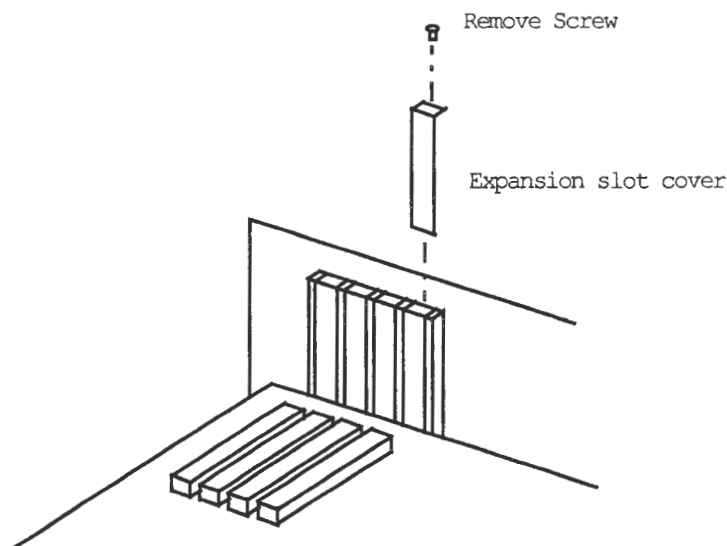


Figure 4: Removing the Expansion Slot Cove (ISA Bus)

3. Install the interface board. Be sure to secure the board with a screw, or the board may be pulled loose when the interface cable is removed (see Figure 5). Use the screw provided with the PC for this purpose.

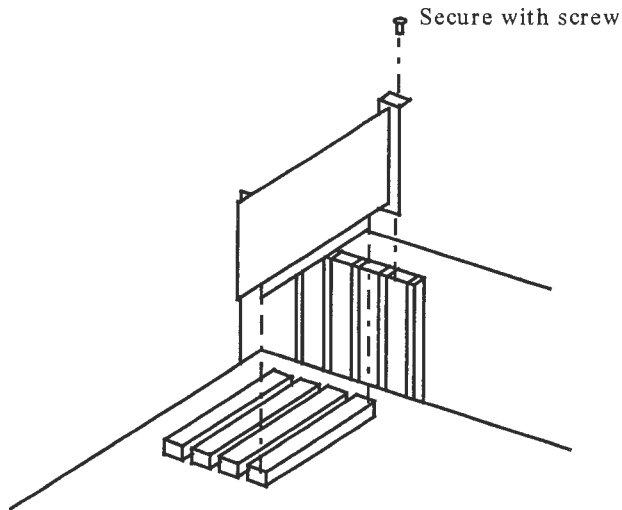


Figure 5: Installing the Interface Board (ISA Bus)

4. Connect one end of the 40-pin flat cable to the 40-pin connector on the interface board. Connect the other end of the cable to the 40-pin connector on the back of the ROM Emulator Cartridge.
5. Plug the ROM Emulator Cartridge into the Game Pak slot of the modified N64 Control Deck. When the ROM Emulator Cartridge is properly inserted, the 40-pin cable connector will face the rear of the modified N64 Control Deck.
6. Connect the included N64 AC Adapter to the modified N64 Control Deck, and connect the included standard N64 Controller to socket number 1 of the Control Deck.
7. Turn on power first to the PC, then to the N64 Control Deck. Check whether the PC boots up. If it doesn't, check the DIP switch settings and confirm that the board has been properly installed. If no installation abnormalities can be found, contact the Nintendo support group at (206) 861-2715.
8. After confirming that the PC boots up normally, replace the chassis cover.
9. After installing the Partner-N64PC debugger software (see *Installing the Partner-N64PC Debugger Software*, p. 21), start Partner-N64PC. If the debugger starts, everything is normal.

If the following message is displayed, either the power to the modified N64 Control Deck is not turned on, or there is a faulty connection between the ISA interface board and the modified N64 Control Deck.

```
Waiting N64 Power Up
```

If the following message is displayed, check the DIP switches and connections.

```
Hardware abnormality. Check DIP switches, cables, etc.
```

If the DIP switch settings have been changed, the environment (CFG) file must also be changed before starting Partner-N64PC. For more information, refer to *Configuring the Partner-N64PC Environment File* in Chapter 5 (p. 33.)

Connecting the C Bus (PC-9800) Interface Board

There are four DIP switches on the C Bus interface board that can be set by the user: SW1, SW2, SW3 and SW4. Set these switches to match the configuration of the system being used. Their locations are shown in Figure 6.

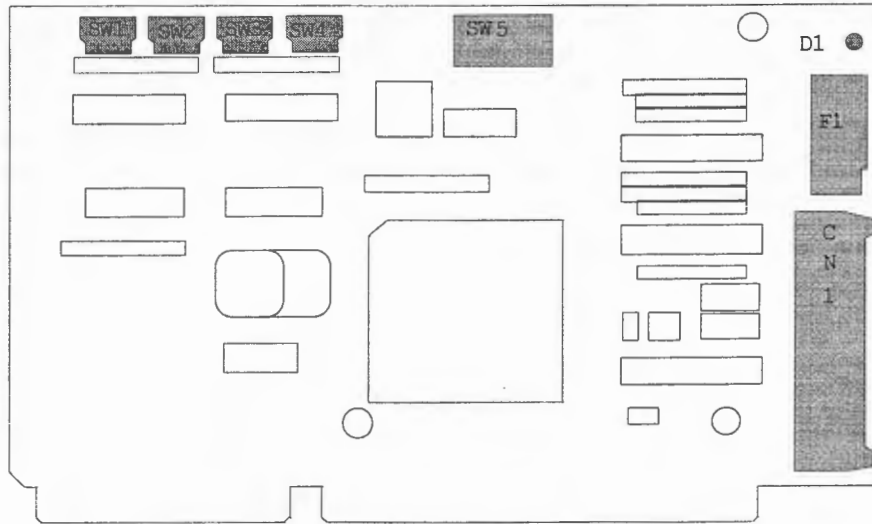


Figure 6: C Bus Dedicated Parallel Interface Board

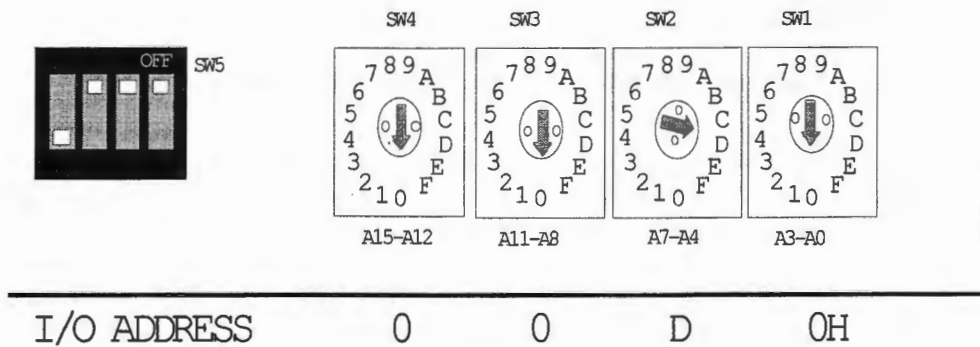


Figure 7: Default Switch Settings For the C Bus Interface Board

Figure 7 shows the default switch settings for the C Bus interface board. You must adjust these switch settings according to the system that you are using.

When not connected to an external power supply, power is supplied to the Partner-N64PC from the PC through a fuseless breaker. In the event of an abnormal current condition, the white button on the breaker pops out and the current is interrupted. Once the cause of the abnormal current condition has been eliminated, press the white button back in. The LED on the board (D1

in Figure 6) is on when the breaker is in the normal state and off when an abnormal current condition has occurred.

A type of auto-recovery might be mounted on the board instead of the circuit breaker. If this is the case, please cut off all power and wait a few minutes before powering up again.

Setting Switches for the C Bus (PC-9800) Interface Board

SW1, SW2, SW3, SW4

These switches set the I/O address used for communication between the Partner-N64PC and the PC. Specify bits A3 through A15 of an empty address on the PC. This board uses the contiguous 8 bytes from the specified I/O address. The I/O address is fully decoded from A15 through A3.

SW1 refers to A3, SW2 refers to A4 through A7, SW3 refers to A8 through A11 and SW4 refers to A15 through A12. The values 0 or 8 can be set for SW1. If some other value is set, it is rounded to either 8 or 0. SW1 ignores bits A0 through A2.

The factory setting for the I/O address is 00D0H.

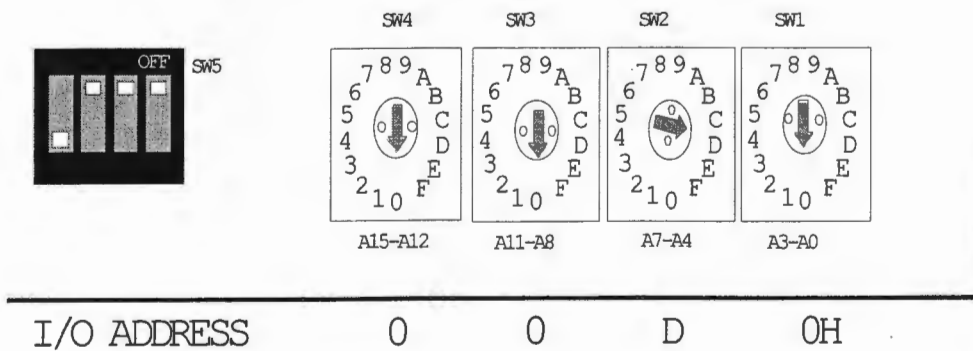


Figure 8: Setting the I/O Address For the C Bus Interface Board

Switch Name	Address	Range	Default Setting
SW4	A12-A15	0-F	0
SW3	A8-A11	0-F	0
SW2	A4-A7	0-F	D
SW1	A0-A3	0 or 8	0

Table 3: Switch Settings for the C Bus Interface Board

With PC-9800 Series machines, the Partner-N64PC interface board uses 8 bytes of I/O space. For the I/O address, please specify an address that does not compete with other boards in the expansion slot. The factory setting for the I/O address is 00D0H (using 00D0H through 00D7H).

The interface board fully decodes the I/O address in 16 bits. If another board using the 8-byte range from address 00D0H is in the slot, please change the I/O address. When the address has been changed, it is also necessary to change the PORT ADDRESS field of the Partner-N64PC environment file (EPTN64.CFG) except in the case of Windows NT. For more information please see *Configuring the Partner-N64PC Environment File* in Chapter 5 (p. 33) and *Chapter 4, Setup* in the *Partner-N64PC User's Guide*.

Although it is possible to set an arbitrary value if the I/O address is an unused address, as a general rule, please set the addresses within the ranges shown in Table 4.

I/O Address	SW4	SW3	SW2	SW1
00D0H	0	0	D	0
00D8H	0	0	D	8
01D0H	0	1	D	0
01D8H	0	1	D	8
02D0H	0	2	D	0
.
07D8H	0	7	D	8
00E0H	0	0	E	0
00E8H	0	0	E	8
01E0H	0	1	E	0
01E8H	0	1	E	8
.
07E8H	0	7	E	8

Table 4: Recommended Switch Settings for the C Bus Interface Board*

* The factory setting for the I/O address is 00D0H.

SW5

Please use this switch with its factory setting. You must not change this switch. When the board is shipped, SW5-1 through SW5-3 are OFF and SW5-4 is ON.

Installing the C Bus (PC-9800) Interface Board

After the interface board switches have been set, install the interface board in the PC's expansion slot as follows:

1. Unplug the power cord of the computer before starting the installation.
2. Remove the cover of the expansion slot at the rear of the computer. Any slot can be used.
3. Turn the board so the component side is up, then fit the board in the card guide groove and insert. Push the board in firmly until you hear a click. Then lightly pull on the board to confirm it cannot be pulled out.
4. Use the accompanying I/F cable to connect CN1 of the interface board with the HOST I/F connector of Partner-N64PC. Refer to Figure 6 for the location of CN1.
5. Turn on the power to the computer and start up Windows or MS-DOS. If something unusual occurs at this time, immediately turn the power off to check whether the board has been mounted correctly.

If there is some problem at step 5, please start the procedure again very carefully from step 1. If the system still does not work correctly, please contact the point of purchase or this company.

Connecting the PC (PCMCIA) Card

To connect the PC (PCMCIA) card, please follow the instructions below:

1. Connect the I/F adapter cable to the PC card. At this time, please take note of the top and bottom of the connector. The side with a triangular mark is the top of the connector.
2. After turning off the computer, insert the PC card in the computer's slot. Make sure the product name printed on the PC card is facing upward. If the computer has multiple slots, you can insert the card in any one of the slots.
3. Connect the Partner-N64PC interface cable to the 40P connector of the interface adapter.
4. Turn the computer back on.
5. Insert the external power adapter into the DC jack of the interface adapter. The power to the Partner-N64PC is supplied from the DC jack. At this time, please confirm that the POWER LED on Partner-N64PC has turned on.

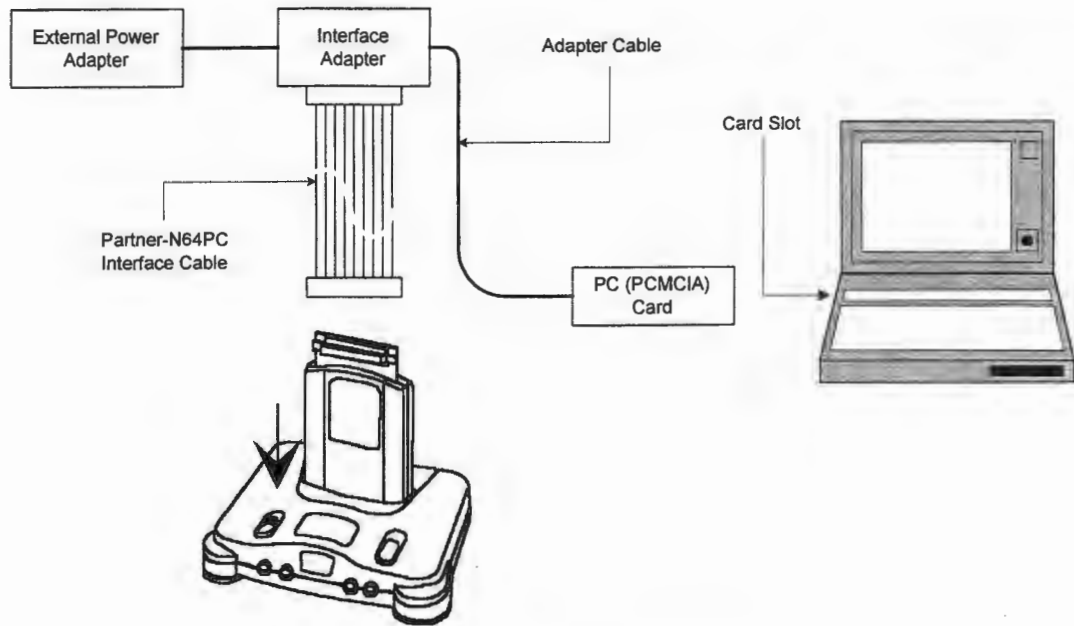


Figure 9: Connecting the PC Card

To protect against abnormal current conditions, the interface adapter has a built-in circuit breaker located where power is supplied from the DC jack. If for some reason an abnormal current condition occurs, the breaker works to stop the power supply to Partner-N64PC. If the circuit breaker trips, find out the cause and then insert something like a paperclip into the breaker hole of the interface adapter to push the white button and reset the breaker.

Please do not remove or insert the PC card while the debugger control software is operating on Windows 95 or 98. If the card is removed by accident, reinsert it and then reinitialize by executing the debugger's INIT command. We cannot guarantee operation of the debugger and target board when the PC card is removed.

When running Windows NT, the PC card must be inserted before power is supplied to the PC. Also, you must not remove or insert the PC card after Windows NT is launched.

Connecting the PCI Bus Interface Board

No switches or jumpers need to be set on the PCI Bus interface board and the board's I/O address is automatically set by the Plug & Play function of the PC.

The LED on the board indicates that power can be supplied to Partner-N64PC. If an abnormal current condition occurs, the internal protection circuit operates and the LED turns off. If this happens, turn off the power, eliminate the problem, then turn the power back on.

It takes several minutes for the protection circuit to reset automatically. Please wait a few minutes before turning the power back on.

1. Turn off the power to your PC and remove the chassis cover (refer to your PC's manual for a description of how to remove the cover). Then remove the expansion slot cover as shown in Figure 10.

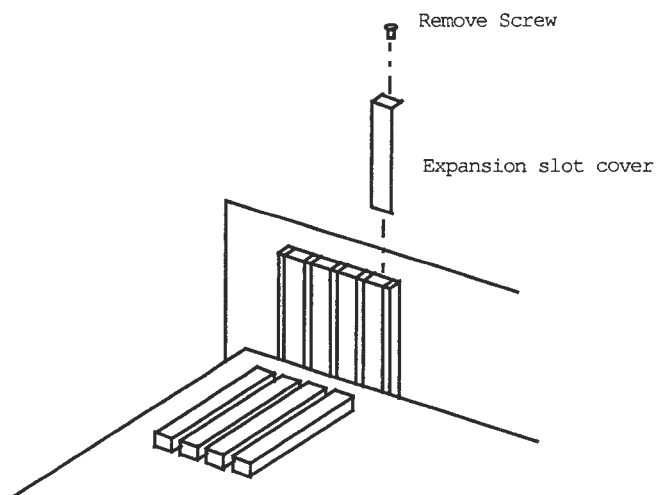


Figure 10: Removing the Expansion Slot Cover (PCI Bus)

2. Install the PCI card in your computer. Be sure to secure the card with a screw as shown in Figure 11.

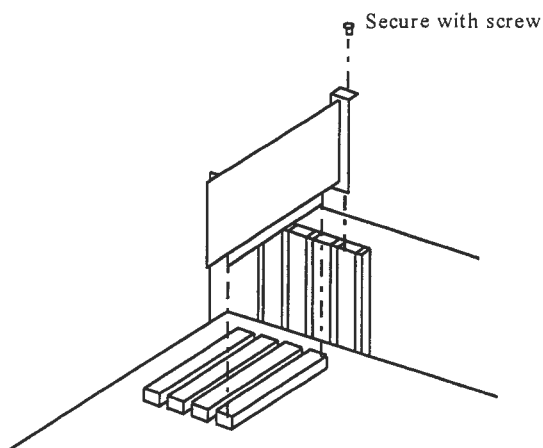


Figure 11: Installing the Interface Board (PCI Bus)

3. Connect one end of the 40-pin flat cable to the 40-pin connector on the PCI card. Connect the other end of the cable to the 40-pin connector on the back of the ROM Emulator Pak.
4. Plug the ROM Emulator Pak into the Game Pak slot of the modified N64 Control Deck. When the ROM Emulator Pak is properly inserted, the 40-pin cable connector will face the rear of the modified N64 Control Deck.

5. Connect the included N64 AC Adapter to the modified N64 Control Deck, and connect the included standard N64 Controller to socket number 1 of the Control Deck.
6. Turn on power first to the PC, then to the N64 Control Deck. If Partner-N64PC does not start up, please check your installation. If you cannot find any problems, please contact our support department.
7. After verifying that the PC starts up, put the PC chassis cover back on.

Chapter 3

Installing the Partner-N64PC Debugger Software

Before Installing the Software

Follow the steps outlined below before installing the Partner-N64PC debugger software.

1. Connect to Partner-N64PC

Confirm that the PC has been properly connected to Partner-N64PC.

If you are installing only the debugger software, you can perform the installation without being connected to Partner-N64PC.

2. Connect the interface board

Connect the Partner-N64PC dedicated interface board. Refer to Chapter 2, *Connecting the Interface Board* (p. 9) for instructions on connecting your board.

3. Check free disk space

Make sure there is enough free disk space on your hard drive to install Partner-N64PC. You will need at least 5MB of free hard disk space.

4. Run Windows

Under Windows 95/98, the Plug & Play system will automatically recognize the PC card and the PCI interface board when the OS starts up for the first time after the boards have been connected. At this time, the Device Driver Wizard will run or the New Hardware Found dialog box will be displayed. To install the device driver, refer to Chapter 4, *Installing the Device Driver* (p. 25).

Installing the Software

To install the Partner-N64PC debugger software, follow the steps outlined below.

1. Run Windows 95/98/NT 4.0

2. Insert the software's setup disk in the appropriate drive on the PC (diskette or CD-ROM)

3. Read the ReadMe file

If there is a README.TXT file on the setup disk, please read this file before installing the software. Supplemental information concerning the installation procedure is contained in this file.

4. Run the setup program

Installation of Partner-N64PC is performed by running the setup program (SETUP.EXE) stored on the setup disk. You can run SETUP.EXE in one of two ways:

a. Run from the Windows Start Menu

1. Select [Run ...] from the Start Menu.
2. Enter the drive path and the setup program's filename (SETUP.EXE) in the Run dialog box.

OR

Click <Browse ...> and select SETUP.EXE from the setup disk's drive path in the Browser dialog box.

3. Click <OK>.

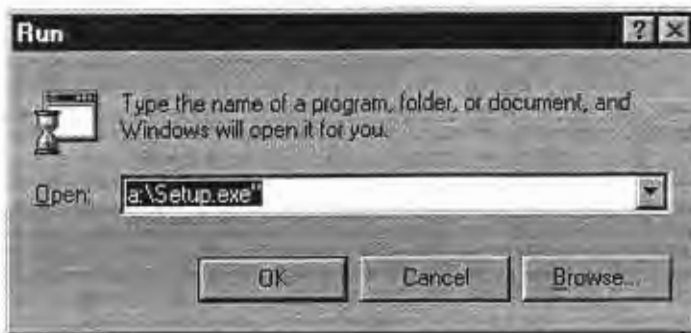


Figure 12: Running the Partner-N64PC Setup Program From the Start Menu

b. Run from Windows Explorer

1. Run Windows Explorer.
2. Select the setup disk's drive path to display the disk's contents.
3. Double-click SETUP.EXE to run the setup program.

5. Follow the setup program's instructions

When you run the setup program, the dialog box shown in Figure 13 is displayed. From this point on, follow the instructions on the screen to complete the installation.

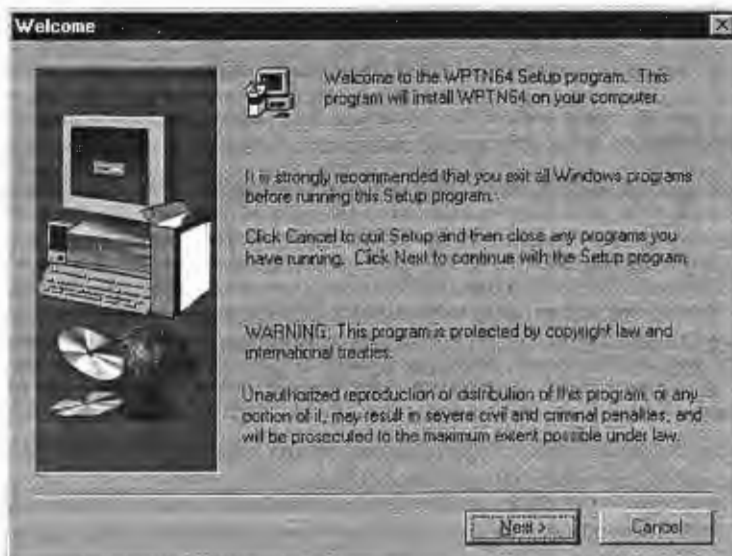


Figure 13: The Partner-N64 PC Setup Program

If you are installing the software under Windows 95/98, the setup program will check for previously installed versions of the device driver for the PC card. If you have a previously installed version of the device driver, make sure to have the setup program delete it.

After the setup program is complete and the software is installed, Windows will restart. The setup program will automatically add a Partner-N64 program folder to the Start Menu.

After installation is complete, make sure to refer to Chapter 4, *Installing the Device Driver* (p. 25) and Chapter 5, *Starting Up Partner-N64PC* (p. 33).

Uninstalling the Software

To uninstall the Partner-N64 PC software:

1. Open the Windows Control Panel and double-click the [Add/Remove Programs] icon.
2. Make sure the [Install/Uninstall] tab is selected.
3. Select Partner-N64PC from the list of installed programs, then click <Add/Remove ...>.

Chapter 4

Installing the Device Driver

Depending on the type of interface board and OS you will be using, you may need to install a device driver. Refer to Table 5 for the device driver required for your interface board and OS (if any).

Interface/OS	Windows 95/98	Windows NT
ISA/C Bus	Not required	P40
PC (PCMCIA) Card	P26	P40
PCI Bus	P26	P40

Table 5: Device Driver Requirements

This chapter describes how to installed the required device driver software under the Windows environment. The device driver software for each interface board is stored on the Partner-N64PC setup disk.

Windows 95 Environment

This section describes how to install the device driver under the Windows 95 environment and applies only to systems using the PCI interface board or the PC (PCMCIA) card. No device driver is required for Windows 95 systems using the ISA Bus or C Bus interface boards.

Before installing the device driver, make sure that the I/O address used by the board is compatible with the board's type and that the I/O address is consistent with the one entered in the PORT ADDRESS field of the Partner-N64PC environment file (EPTN64.CFG). For more information, refer to Chapter 2, *Connecting the Interface Board* (p. 9) and Chapter 5, *Starting Up Partner-N64PC* (p. 33).

Windows 95 automatically recognizes the interface board with its Plug & Play system when the OS is run for the first time after the PC card or PCI interface board is connected. If at this time the driver software (or the Partner-N64PC software) has already been installed, the driver has been installed also. If the driver software (or the Partner-N64PC software) has not been installed, please use the Partner-N64PC setup disk to install the driver when Windows 95 recognizes the new hardware.

If you are using the PC (PCMCIA) card under the Windows 95 environment, you need the 32bit PCMCIA socket driver. To install the driver, open the Windows Control Panel and double-click the [PC Card] icon to run the PC Card Wizard.

This section provides instructions for a number of Windows 95 versions. To find out the version of Windows 95 you are running, open the Windows Control Panel and double-click the [System] icon to display the [General System Properties] tab.

Windows 95 Versions 4.00.950 and 4.00.950A

Installation Via the New Hardware Found Dialog Box

When Windows 95 detects new hardware (in this case the PCI interface board of PC card), the New Hardware Found dialog box is displayed (see Figure 14).



Figure 14: New Hardware Recognition Dialog Box

1. Select [Driver from disk provided by hardware manufacturer] and click <OK>.

The Install From Disk dialog box is displayed (Figure 15).

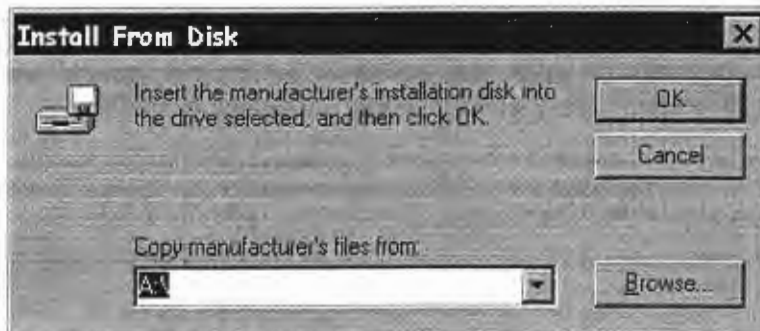


Figure 15: Install Form Disk Dialog Box

2. Insert the Partner-N64PC setup disk in your PC's drive, select the drive in the dialog box, then click <OK>.

When installation of the driver is complete, an entry for the PCI interface board's or PC card's device is created in the Windows 95 Device Manager. You can view the Windows 95 Device Manager by double-clicking the [System] icon in the Windows Control Panel and selecting the [Device Manager] tab (see Figure 16).

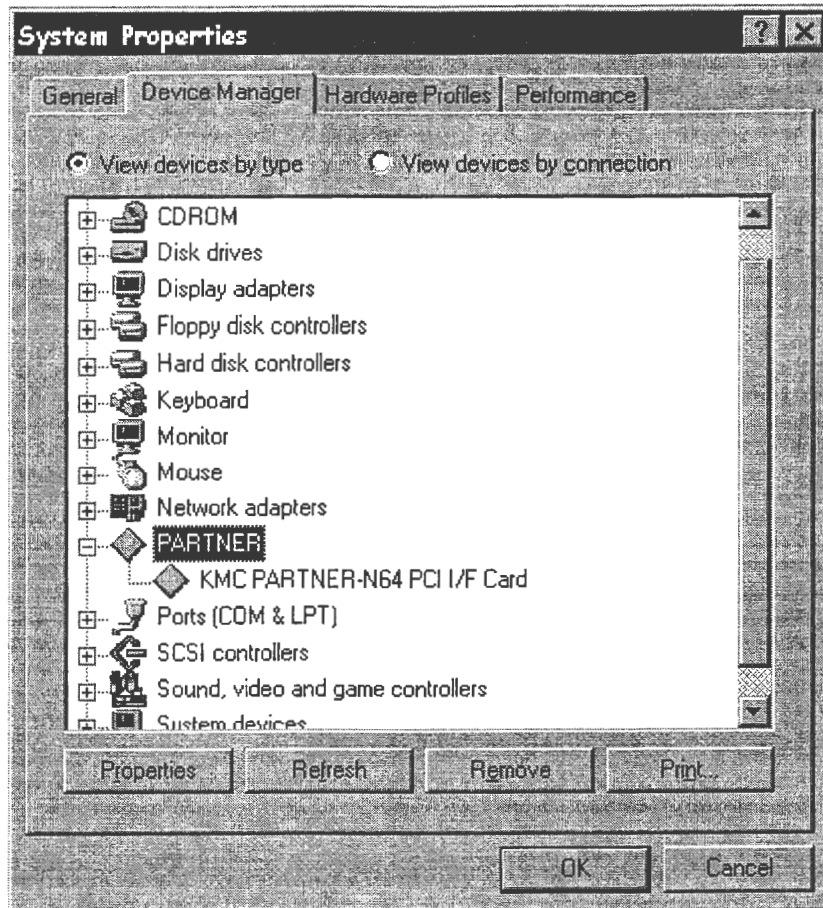


Figure 16: Windows Device Manager

Installation Via the Windows Device Manager

If the Windows 95 OS is installed with the PCI interface board already connected to the PC, Windows 95 will recognize the board as one of the [Other devices] in the Windows Device Manager. You can check the currently recognized devices using the Windows Device Manager.

To install the device driver in this situation:

1. Open the Windows Device Manager by double-clicking the [System] icon in Windows Control Panel, then selecting the [Device Manager] tab (see Figure 17).
2. Select [PCI Card] under [Other Devices] and click <Properties>.



Figure 17: The PCI Interface Board Under "Other Devices

3. Select the [Driver] tab in the PCI Card Properties dialog box and click <Change Driver ...> (see Figure 18).

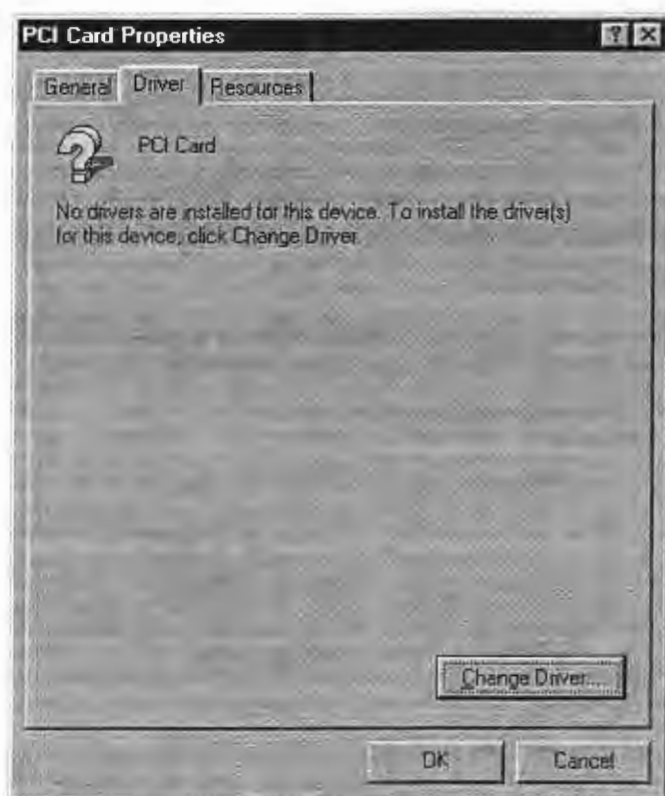


Figure 18: PCI Board Properties

4. Select [Other devices] in the Select Hardware Type dialog box and click <OK> (see Figure 19).



Figure 19: Select Hardware Type Dialog Box

5. You will be asked to specify the source of the device driver. Select [Use disk] and click <OK>.
6. When the Select Drive dialog box is displayed, enter the path of your disk drive. Insert the Partner-N64PC setup disk in the disk drive and click <OK>.
7. When either [KMC PARTNER-N64 PCI I/F Card] or [KMC PARTNER PC-Card I/F] is displayed in the Select Device dialog box, click <OK> to install the device driver (see Figure 20).



Figure 20: The Select Device Dialog Box

Windows 95 Version 4.00.950B

Installation Via the Device Driver Wizard

When Windows 95 detects new hardware (in this case the PCI interface board or PC card), the Device Driver Wizard is launched.

1. Insert the Partner-N64PC setup disk in you disk drive and click <Next>.
2. When the PCI board or PC card interface driver is detected, the wizard's next dialog box is displayed. Click <End>.

If the Copy File dialog box is displayed, enter the path of your disk drive and continue to follow the wizard's instructions.

When the driver installation is complete, and entry for the PCI interface board or PC card is created in the Windows Device Manager. To display the Device Manager, double-click the [System] icon in the Windows Control Panel and select the [Device Manager] tab.

Installation Via the Windows Device Manager

If the Windows 95 OS is installed with the PCI interface board already connected to the PC, Windows 95 will recognize the board as one of the [Other devices] in the Windows Device Manager. You can check the currently recognized devices using the Windows Device Manager.

To install the device driver in this situation:

1. Open the Windows Device Manager by double-clicking the [System] icon in Windows Control Panel, then selecting the [Device Manager] tab.
2. Select [PCI Card] under [Other Devices] and click <Properties>.
3. Select the [Driver] tab in the PCI Card Properties dialog box and click <Change Driver ...>.
4. When the Device Driver Wizard is launched, have it do an automatic search for device drivers.
5. When the device driver is detected, the wizard's next dialog box will be displayed. Click <End>.

If the Copy File dialog box is displayed, enter the path of your disk drive and continue to follow the wizard's instructions.

When the driver installation is complete, and entry for the PCI interface board is created in the Windows Device Manager.

Windows 98 Environment

This section describes how to install the device driver under the Windows 98 environment and applies only to systems using the PCI interface board or PC (PCMCIA) card. No device driver is required for Windows 98 systems using the ISA Bus or C Bus interface boards.

Before installing the device driver, make sure that the I/O address used by the board is compatible with the board's type and that the I/O address is consistent with the one entered in the PORT ADDRESS field of the Partner-N64PC environment file (EPTN64.CFG). For more information, refer to Chapter 2, *Connecting the Interface Board* (p. 9) and Chapter 5, *Starting Up Partner-N64PC* (p. 33).

Windows 98 automatically recognizes the interface board with its Plug & Play system when the OS is run for the first time after the PC card or PCI interface board is connected. If at this time the driver software (or the Partner-N64PC software) has already been installed, the driver has been installed also. If the driver software (or the Partner-N64PC software) has not been installed, please use the Partner-N64PC setup disk to install the driver when Windows 98 recognizes the new hardware.

Installation Via the Device Driver Wizard

When Windows 98 detects new hardware, the Device Driver Wizard is launched.

1. Click <Next> in the first wizard dialog box.
2. A dialog box is displayed that enables you to initiate a device driver search. Select to search for the best-suited driver for the interface board being used and click <Next>.
3. When the next dialog box is displayed, insert the Partner-N64PC setup disk in the disk drive. Select the drive in the dialog box and click <Next>.
4. The next dialog box will inform you when the PCI interface board or PC card has been detected. Click <Next>.
5. When installation of the device driver is complete, a confirmation dialog box will be displayed. Click <Next>.
6. In the next dialog box, click <End>.

Installation Via the Windows Device Manager

If the Windows 98 OS is installed with the PCI interface board already connected to the PC, Windows 98 will recognize the board as one of the [Other devices] in the Windows Device Manager. You can check the currently recognized devices using the Windows Device Manager.

To install the device driver in this situation:

1. Open the Windows Device Manager by double-clicking the [System] icon in the Windows Control Panel, then selecting the [Device Manager] tab.
2. Select [PCI Card] under [Other devices] and click <Properties>.
3. Select the [General] tab in the PCI Card Properties dialog box and click <Reinstall Driver ...>.
4. When the Device Driver Wizard is launched, have it do an automatic search for device drivers.
5. When the device driver is detected, the wizard's next dialog box will be displayed. Click <End>.

If the Copy File dialog box is displayed, enter the path of your disk drive and continue to follow the wizard's instructions.

When the driver installation is complete, and entry for the PCI interface board is created in the Windows Device Manager.

Windows NT 4.0 Environment

If you are operating under the Windows NT 4.0 environment, you need to install a device driver regardless of the type of interface board connected to the PC.

Note that the device driver software is automatically installed when the debugger software is installed with the Partner-N64PC setup disk. For information about installing the Partner-N64PC software, refer to Chapter 3, *Installing the Partner-N64PC Debugger Software* (p. 21).

The PC (PCMCIA) card cannot be used with Windows NT 4.0 running on a PC-9800 series computer.

If you are using the PCI interface board under Windows NT 4.0, you must insert the board into the PC's slot before turning on the computer's power. In addition, you must not remove or insert the PC card after the power is on.

When installation of the Partner-N64PC software is complete, a Partner-N64PC driver control icon will be created in the Windows Control Panel.

1. Double-click the icon to display the Partner-N64PC driver control dialog box.
2. Specify the type of interface board you are using.
3. Specify the I/O address you have set for the interface board.

You do not need to specify an I/O address for the PCI interface board or the PC (PCMCIA) card.

4. Specify how the Partner-N64PC driver will start the next time Windows NT 4.0 is launched. Your options are outlined below:

Automatic: Starts the driver when Windows NT is launched (use this option if the Partner-N64PC user does not have Administrator rights).

Manual: Starts the driver when the Partner-N64PC debugger is launched (use this option if the Partner-N64PC user has Administrator rights).

Disable: Prohibits control of the driver.

5. Click <Check> to confirm that the device driver is operating properly.

Chapter 5

Starting Up Partner-N64PC

This chapter includes new information and instructions on starting up Partner-N64PC. For complete startup instructions, please refer to Chapter 4, *Startup*, of the *Partner-N64PC User's Guide*.

Configuring the Partner-N64PC Environment File

If you installed the ISA Bus (DOS/V) or the C Bus (PC-9800) interface board, you need to edit part of the Partner-N64PC environment file (EPTN64.CFG). No changes are necessary if you installed the PC (PCMCIA) card or PCI Bus interface board.

Edit the PORT ADDRESS field in the environment file as shown below. Under Windows NT, this item has no meaning. However, **please do not delete this item**. Instead, set the interface board type and I/O address according to the instructions provided in *Windows NT 4.0 Environment* in Chapter 4 (p. 31).

Rewrite the field in the file as follows:

```
PORT ADDRESS          320
```

This field describes the I/O address set by the switch on the interface board. For the ISA Bus (DOS/V) board, the default is set at 320. For the C Bus (PC-9800) board, the default is D0.

For information on the other fields in the Partner-N64 environment file, please refer to *Configuration of Partner-N64PC* in Chapter 4, *Startup*, of the *Partner-N64 User's Guide*.

Startup Error Messages

To support the PCI Bus interface board and the PC (PCMCIA) card, the following error messages have been added to the Partner-N64PC startup routine. For other startup routine error messages, please refer to Chapter 4, *Startup*, of the *Partner-N64 User's Guide*.

PC-Card Driver not found

If this message is displayed under Windows 95/98, the driver has not been installed correctly, an older version of the driver has been installed, or you are using an old version of the Partner-N64PC software. Try re-installing the Partner-N64PC software again and make sure to delete the old version of the driver. Refer to *Installing the Partner-N64PC Debugger Software* (p. 21).

PCI-I/F Card Driver not found

The device driver for the PCI Bus interface board has not been set up under Windows 95. When this message is displayed, the driver has not been installed correctly or an old version of the driver has been installed.

PC-Card is not inserted

The PC (PCMCIA) card has not been inserted properly in the slot. Try reinserting the card.

PCI-I/F Card is not inserted

The PCI Bus interface board has not been inserted properly in the slot. Try reinserting the board.

Can't open PARTNER Driver

The Partner-N64PC driver has not been installed correctly under Windows NT or the driver has not been activated.

Hardware trouble. Please check DIPSW, CABLE, CONNECTOR, etc.

This message is displayed when the PC cannot recognize the Partner-N64PC hardware.

If this message is displayed when you are using the PC (PCMCIA) card or the PCI Bus interface board, something is wrong with the connection between the interface and Partner-N64PC. Please refer to Chapter 2, *Connecting the Interface Board* (p. 9) and check the Partner-N64PC connections. Under Windows 95/98, please check whether the device driver has been installed correctly. Another possibility is that you are using an older version of Partner-N64PC.

If this message is displayed when you are using the ISA or C Bus interface board, check whether the wrong I/O address has been set on the board or specified in the environment file. Also check whether the I/O address that was set is being used by another board.