

ISDN PCI Card

Quick Start Guide

This product is designed for the ISDN with Basic Rate Interface.



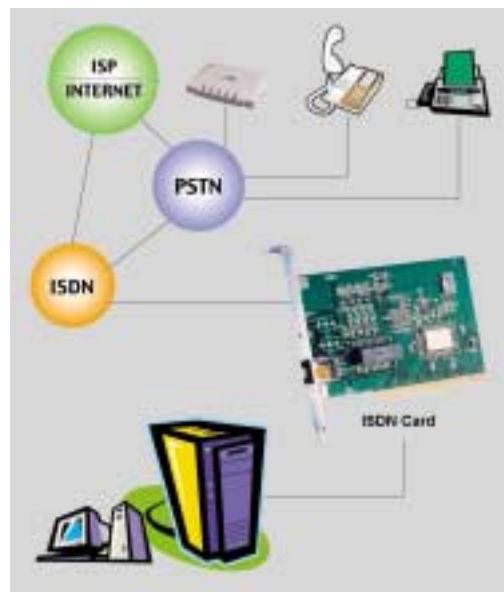
For more detailed instructions on configuring and using the ISDN card, please refer to the on-line manual.

Package Contents

- One ISDN card
- One ISDN card installation CD with drivers, utility and bundled application software programs
- One RJ-45 ISDN cable
- This Quick Start Guide

Installing the ISDN card

Connect your ISDN line to the ISDN S₀ RJ-45 jack.

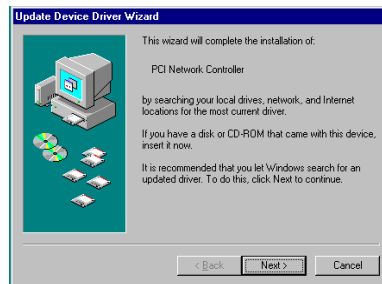


For Windows 95, OEM Service Release 2 (OSR2) or Windows 98:

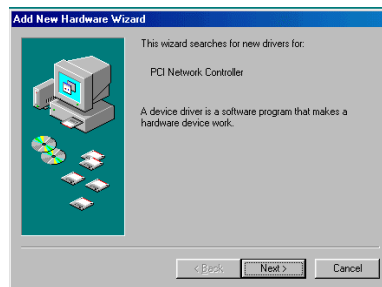
1. Start Windows. After the opening banner, Windows will tell you that your ISDN card has been detected. You will then see the following screen for Windows 95:



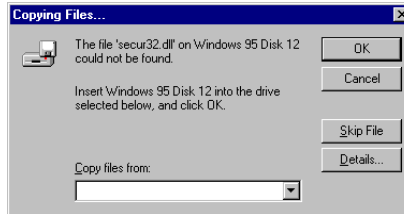
Or you will see the following screen for OSR2:



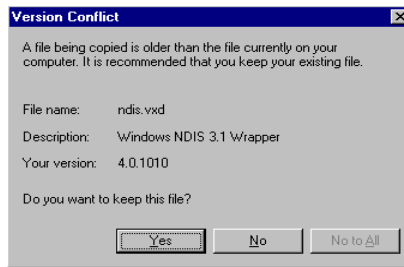
Or you will see the following screen for Windows 98:



2. Insert the installation CD into the CD-ROM drive (D: or E: , etc.).
3. For Windows95, select “Driver from disk provided by hardware manufacturer”. For OSR2, click “Next >” to go on. For Windows 98, click “Next >”. Then, check “Specify a location:” and browse for “D:\Driver\Win98” (D: represents your CD-ROM drive).
4. Follow the instructions on the screen. Windows will copy the driver files to Windows sub-directories.
5. Then, Windows will start copying system files and you might see the following screen prompting for the path of the Windows source files. Please specify the location of your Windows source files and click “OK”.



6. For Windows 95 or OSR2, if the Microsoft ISDN Accelerator Pack 1.1 or Dial-Up Networking 1.3 has been installed before, Windows will detect some files with newer version. Press “Yes” to keep the newer files.



7. For Windows 95 or OSR2, if the Microsoft ISDN Accelerator Pack 1.1 or Dial-Up Networking 1.3 is not installed before, you should see the following screen.

ISDN PCI card

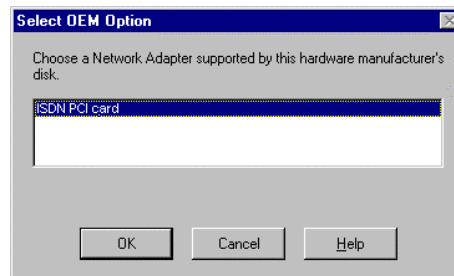


8. After complete installing the ISDN card driver, you will be prompted to restart the computer. Press "Yes" to restart your computer.

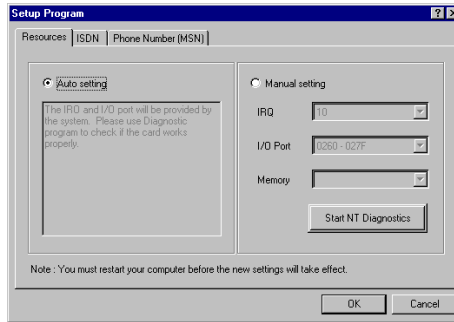


For Windows NT 4.0:

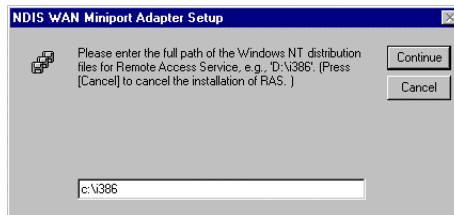
1. Start Windows. Insert the installation CD into the CD-ROM drive (D: or E: , etc.).
2. Run "Setup.exe" in the root directory of installation CD.
3. Press "Windows NT Driver" button. Then, the following window appears.



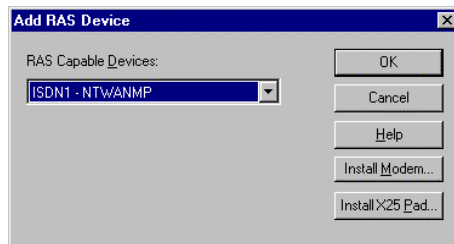
4. Click "OK" to begin copying files. After that, the "Setup Program" will start.



5. If your PC has PnP BIOS, you can choose "Auto setting". Then the IRQ and I/O Port of the ISDN card will be configured by the system.
6. After setting the properties of the ISDN card, you might see the following screen prompting for the path of the Windows NT source files to installing the Remote Access Service (RAS).

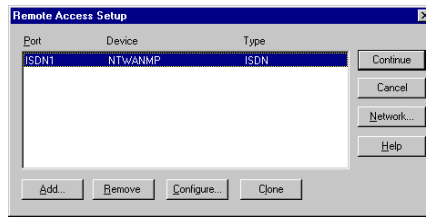


7. When the RAS is installed, you will see the following screen for configuring ISDN ports as RAS devices.

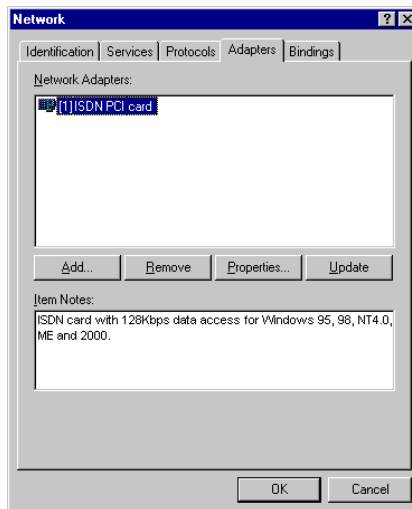


ISDN PCI card

- Press “OK” to select “ISDN1-NTWANMP” as one of the “RAS Capable Devices”, you should then see the following screen.



- Click “Add...” for adding “ISDN2-NTWANMP” to the list of RAS communication ports. The “ISDN1” and “ISDN2” ports make the ISDN card be capable of dialing or receiving multilink calls. For more details about configuring the multilink support in Windows NT 4.0, please refer to the on-line help of RAS.
- Click “Continue” to complete RAS setup, and you should see the ISDN card has been installed as a network adapter.



11. Click “Close”. Then, you will be prompted to restart the computer.
12. Press “Yes” to restart your computer and finish the driver installation.

For Windows ME:

1. Start Windows. After the opening banner, Windows will tell you that your ISDN card has been detected.



2. Insert the installation CD into the CD-ROM drive (D:, or E:, etc.). Select “Specify a location:” and browse for “D:\Driver\WinME” (D: represents your CD-ROM drive). Click “Next >”.



ISDN PCI card

3. After pressing “Next >” button for the next screen, then press “Finish”.



4. If the next screen appears when Windows finishes installing the drivers, press “Yes” to restart the computer.



For Windows 2000:

1. Start Windows. After the opening banner, Windows will tell you that your ISDN card has been detected. Press “Next>”



2. Insert the installation CD into the CD-ROM drive (D:, or E:, etc.). Select “Specify a location” and browse for “D:\DriverWin2000” (D: represents your CD-ROM drive). Click “OK”.



3. After pressing “Next >” for the next screen, click “Yes” if windows titled “Digital Signature Not Found” appear. Then, press “Finish” to end the installation.



For Windows XP:

1. Start Windows. After the opening banner, Windows will tell you that your ISDN card has been detected. Press “Next>”



2. Click "Continue Anyway" to continue the installation.



3. Press "Finish".



For Linux:

1. The Linux support for the ISDN PCI card comes with the Isdn4Linux package. First, you have to reconfigure the kernel to make the HiSax module be compiled with "Support for HFC PCI-BUS cards".
2. You can patch your kernel with the latest ISDN kernel tree using the current CVS sources. Please refer to

<http://www.linuxdoc.org/HOWTO/Kernel-HOWTO.html>

if you are not familiar with configuring and compiling the Linux kernel.

3. If you compiled the HiSax driver as kernel module, you have to load it with the following commands:

```
/sbin/insmod/lib/modules/2.2.10/misc/isdn.o
```

```
/sbin/insmod/lib/modules/2.2.10/misc/hisax.o  
id=HiSax type=35 protocol=2
```

4. If the kernel loads the HiSax driver, output in the message file will show up. Then, the hardware is installed.

ISDN Utility and Diagnostic Program

The ISDN Utility includes helpful programs for the ISDN card, such as a diagnostic program, a status program, an uninstallation program, and an on-line manual.

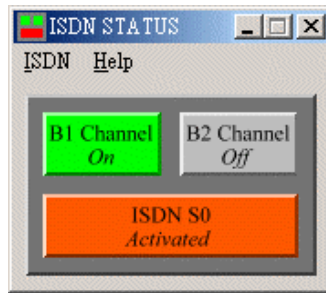
You are highly recommended to run the diagnostic program to make sure the ISDN card, its drivers and the ISDN line are all properly installed and connected. Please follow these instructions:

1. Open the “Programs” folder on the “Start” menu and click on the “ISDN Utility” program folder.
2. Click on the “Diagnostic Program” item to start the program.
3. In the “Own ISDN Number” box, type in the subscriber number of your ISDN line.
4. Press “Loopback Test” to begin the diagnostic procedure. It will make a call from the B1 channel that returns through the B2 channel. The D and B channels will be tested for line integrity.



You can also run the ISDN Status program to check the status of ISDN S0 line, B1 channel and B2 channel. Please follow these instructions:

1. Open the “Programs” folder on the “Start” menu and click on the “ISDN Utility” program folder.
2. Click on the “ISDN Status” item to start the program.
3. You should see the status like below.



Uninstalling the ISDN card

1. Click “Start”, “Programs” and click the “ISDN Utility” item.
2. Click the “Uninstall DRV & UTL” item. The following ISDN Uninstallation Program window opens.



3. Check the items that you want to completely uninstall the driver and/or utility from the Windows system and click “OK”.

Troubleshooting

If your ISDN card is not functioning properly, run the Diagnostic Program to help you identify the problem.

Here are some basic faults that are often overlooked by users. Follow these procedures for troubleshooting the ISDN card.

| Error Indication | Possible Cause | Remedy |
|---|---|---|
| You are not allowed to run this program. | The CAPI2032.DLL is not from the ISDN package. | Uninstall and then reinstall the ISDN device. |
| A required DLL file, CAPI2032.DLL, was not found. | The CAPI2032.DLL is missing. | Uninstall and then reinstall the ISDN device. |
| CAPI driver is not loaded. | The Registration key has been destroyed. | Uninstall and then reinstall the ISDN device. |
| Please input your own number. | The subscriber number of your own ISDN line has not been entered. | Key in the subscriber number of your ISDN line in the <i>Own ISDN Number</i> box. |
| Cannot activate S0 interface | The ISDN line is not connected. | Ensure that the ISDN S ₀ line is securely connected to the RJ-45 jack. |
| Cannot establish LAPD link. | The ISDN line may be malfunctioning. | Ensure that the ISDN S ₀ line is in good condition. |

| Error Indication | Possible Cause | Remedy |
|---|--|---|
| Connecting fail. (error code = xxxx) | 1. <i>Own ISDN Number</i> is incorrect. | 1. Ensure that your ISDN number is correct. |
| | 2. Other devices on the same S_0 line are occupying the B channel. | 2. Be sure no other device is on the same S_0 line and occupying the B channel. |
| | 3. The ISDN protocol is wrong. | 3. Check to see if the ISDN protocol configuration is correct. |
| Data transfer error. | The ISDN line is not in good condition | Check the ISDN line. |