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## **Congratulations!**

You are about to accelerate into ADSL technology. Your new ADSL modem card is an internal Asymmetric Digital Subscriber Line (ADSL) PCI modem card, which conveniently plugs into your computer system. The modem connects directly to your telephone line via a standard connector.



This guide is designed to walk you through installation of your ADSL Modem card in the easiest and quickest way possible. Please follow the instructions carefully.

## Step 1 – Know Your PC's Operating System

You will need to know the exact version of Microsoft Windows installed in your computer. If you do not know or are unsure, please proceed as follows to determine your version of the Microsoft Operating System.

On your desktop, <u>right</u>-click on **My Computer**, and select **Properties**. The version number of the Microsoft Windows Operating System installed in your computer will be displayed on the **General** tab. Refer to the following table for more detailed information.



Windows OS	System Properties Description	Release (Microsoft Web)
Win 95A	4.00.950A	Windows 95 OSR1
Win 95B	4.00.950B	Windows 95 OSR2
Win 98	4.10.1998	Window 98
Win 98SE	4.10.2222A	Windows 98 2nd Edition
Win Me	4.90.3000	Windows Millennium
Win NT	4.00.1381	Windows NT 4.0
Win 2000	5.00.2195	Windows 2000
Win XP	Version 2002	Windows XP

If you have questions regarding your PC system and the Microsoft Windows Operating System, please contact your original PC manufacturer or Microsoft for assistance.

Before installing the ADSL PCI Modem Card, it is important to verify that the ADSL data port RJ-11 jack is configured so that the center two pins, pins 3 and 4, are used for ADSL data. If the ADSL data port installation uses pins 2 and 5 for data, consult the Connector & Jumper-pin Configuration Guide located in the Appendix.





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## Step 2 – Determine Your Connection Settings

You need to know your PC system's **Windows OS** and **Internet Protocol** supplied by your ADSL service provider. Refer to the following chart for your ADSL Driver.

	Protocol Selection						
	<b>RFC1483</b> ⇒ Bridged Ethernet over ATM						
	<b>RFC1577</b>	⇔	С	lassical Intern	et Protocol o	ver ATM	
	RFC2364	⇔	P	oint-to-Point I	Protocol over	ATM	
	RFC2516	⇒	P	oint-to-Point I	Protocol over	Ethernet	
ADSI	ADSL Driver Selection RFC1483 RFC1577 RFC2364 RFC2516						
Win 95A & 95B			1483w95	1577w95	2364w95	2516w95	
Win 98 & 98SE				1483w98	1577w98	2364w98	2516w98
Win 2000			1483w2K	1577w2K	2364w2K	2516w2K	
Windows Millennium			1	1483wMe	1577wMe	2364wMe	2516wMe
Win NT 4.0			1483wNT	1577wNT	2364wNT	2516wNT	
Win XP			1483wXP	1577wXP	2364wXP	2516wXP	

Having determined the ADSL Driver you will be installing, you now need to gather the connection information supplied by your ADSL service provider. **VPI value**: \_\_\_\_\_

VCI value: \_\_\_\_\_ Framing: Q VC/MUX Q LLC/SNAP Mode: ANSI T1.413 ITU G.lite ITU G.dmt

For RFC1483 or RFC1577	For RFC2364 or RFC2516
Host:	User Name:
Domain:	Password:
Gateway:	Host or IP Address:
IP Address:	
Subnet Mask:	
DNS or server address:	



### Step 3 – Install the ADSL Modem Card

*Caution:* To avoid possible damage to your modem card, touch the metal chassis of your *PC* system to remove any static charge that may exist from your fingers, and then remove your *ADSL* modem card from the protective anti-static bag.

- 1. Shut down your computer and switch the power off.
- 2. Unplug the power cord for your computer from the electrical outlet.
- 3. Remove the cover from your systems chassis (see your PC manufacturer's manual).





4. Unscrew "metal slot cover bracket" from an unused PC motherboard PCI connector (a PCI connector is usually white in color).





5. Gently and evenly **insert the PCI modem card** into your empty PCI slot.



6. Make sure the card is firmly seated, and then secure the card with the bracket screw.



7. **Replace the cover** of your computer system and **connect your ADSL phone line** to the connector port on the modem card. Then plug the other end of the cable into your ADSL -phone service.







#### Step 4 – Install the Drivers and Make a Connection

You will be installing drivers and then proceeding to make an Internet connection. This process requires you to enter information as prompted by the Microsoft Installation Wizard.

**NOTE**: You may need the Microsoft Windows Operating System installation files (CAB files) to complete the installation. The CAB files are contained in the Microsoft's system CD-ROM. Some systems may have already installed the CAB files to the hard drive, but you should have the Microsoft Windows CD-ROM handy just in case.

Proceed now to the installation procedure for the Windows Operating System installed in your computer.

Windows 95A	6
Windows 95B	9
Windows 98, 98SE	
Windows Millennium	
Windows NT – RFC1483 and RFC1577	
Windows NT – RFC2364 and RFC2516	
Windows 2000	
Windows XP	



? X

#### Windows 95A

After installing the ADSL modem card, plug the power cable back into the PC system and turn the power on.

Before you proceed to install drivers, you may need to upgrade your Dial-Up Networking (DUN) application to version 1.3 or above. The Microsoft DUN is conveniently contained on your ADSL Driver CD-ROM.

New Hardware Found

C Windows default drive

3

PCI Network Controller

Select which driver you want to install for your new hardware

Driver from disk provided by hardware manufacturer

O Do not install a driver (Windows will not prompt you again)

- 1. After restart, the New Hardware Found window will detect the ADSL modem as a PCI Network Controller. At this time, CANCEL the New hardware found window.
- 2. At your desktop, click **Start**, and then select **Run**.
- The Run window appears. Click on Browse and locate the drive that contains your ADSL CD-ROM. Then locate and select the MSDUN13.EXE file. The MSDUN13.EXE appears in the Open box. Click OK.
- 4. The Microsoft Dial-Up Networking 1.3 window appears with the message This will install Microsoft Dial-Up Networking 1.3 for Windows 95. Do you wish to continue? Click Yes.
- 5. An End-User License Agreement will appear. To accept, click Yes.

6. Again in the Microsoft Dial-Up Networking 1.3 window, you will be asked: **Do you want to restart your computer now?** Click Yes.

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**NOTE:** You may need the Microsoft Windows Operating System installation files (CAB files) to complete the installation. The CAB files are contained in the Microsoft's system CD-ROM. Some systems may have already installed the CAB files to the hard drive, but you should have the CD-ROM handy just in case.

7. The New Hardware Found window will again detect the ADSL modem card as a PCI Network Controller. This time, select the Driver from disk provided by hardware manufacturer option. Click OK.

New Hardware Found	? ×
PCI Network Controller	
Select which driver you want to install for your new hardware:	
C Windows default driver	
Driver from disk provided by hardware manufacture	
C Do not install a driver (Windows will not prompt you again)	
Select from a list of alternate drivers	
OK Cancel Help	

# Insert the ADSL Driver CD-ROM into your systems CD drive now.

 The Install From Disk window appears. Click Browse to locate the driver on your CD-ROM for the protocol supported by your ADSL provider: 1483w95, 1577w95, 2516w95 or 2364w95. (The example uses "D" as the CD-ROM drive letter. Your drive letter may differ.) Then click OK.

> **NOTE**: During the installation process you may be asked to insert your **Windows 95** CD. Insert the **Windows 95** CD into the CD drive and click **OK**.

> **NOTE**: If during the file copying process a file is reported as "not found" enter the path with the CD Drive letter and :\Win95 (Ex: D:\Win95).

Install Fr	om Disk	×
_	Insett the manufacturer's installation disk into the drive selected, and then click OK.	Cancel
	Copy manufacturer's files from:	<u>B</u> rowse







 At the conclusion of the ADSL modem driver installation, the Add New Hardware Wizard window appears and displays your newly installed ITeX ADSL PCI NIC software. Click Finish.



Yes

No

11. The System Settings Change window appears. For the PC system to set up the ITeX ADSL PCI NIC, a system Restart is required. Click Yes.

**NOTE:** After restarting the system, the Diagnostic Tool icon (See Appendix) is active and monitoring connectivity.

12. You must now set the ADSL Configuration. Go to page 15.





#### Windows 95B

After installing the ADSL modem card, plug the power cable back into the PC system and turn the power on. Before you proceed to install the driver you may need to upgrade your Dial-Up Networking (DUN) application to version 1.3 or above. The Microsoft DUN is conveniently contained on your ADSL Driver CD-ROM.

Update Device Driver Wi

- 1. After restart, the **Update Device Driver Wizard** will detect the ADSL modem card as a **PCI Network Controller.** At this time, **CANCEL** the **Update Device Driver Wizard** window.
- 2. At your desktop, click **Start**, and then select **Run**.
- The Run window appears. Click on Browse and locate the drive that contains your ADSL CD-ROM. Then locate and select the MSDUN13.EXE file. The MSDUN13.EXE then appears in the Open box. Click OK.
- 4. The Microsoft Dial-Up Networking 1.3 window appears with the message This will install Microsoft Dial-Up Networking 1.3 for Windows 95. Do you wish to continue? Click Yes.
- 5. An End-User License Agreement will appear. To accept, click Yes.

6. Again back in the Microsoft Dial-Up Networking 1.3 window, you will be asked Do you want to restart your computer now? Click Yes.

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**NOTE**: You may need the Microsoft Windows Operating System installation files (CAB files) to complete the installation. The CAB files are contained in the Microsoft's system CD-ROM. Some systems may have already installed the CAB files to the hard drive, but you should have the CD-ROM handy just in case.

7. The **Update Device Driver Wizard** will again detect the ADSL modem card as a **PCI Network Controller**, click **Next**.

Insert the ADSL Driver CD-ROM into your systems CD drive now.

- 8. The Update Device Driver Wizard will appear and indicate that Windows was unable to locate a driver for this device. Click Other Locations.
- The Select Other Location window appears. Click Browse to locate the driver on your CD-ROM for the protocol supported by your ADSL provider: 1483w95, 1577w95, 2364w95 or 2516w95. (The example uses "E" as the CD-ROM drive letter. Your drive may have a different letter.) Then click OK.
- 10. The Update Device Driver Wizard will then find the ITeX ADSL PCI NIC. Click Finish.

**NOTE:** During the installation process you may be asked to insert your Windows 95 CD-ROM. Insert the CD-ROM into the drive. Click **OK**.

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PCI Network Controlle

Select Other Location		×
Type the name of the folder that of Browse.	contains the driver you want. To sear	ch for a folder, click
Location E.V		Biowse
	OK	Cancel

< Back Finish

Cancel





	<b>NOTE:</b> If during the file copying process a file is reported as <b>not found</b> , enter the path (this example uses "E" as the CD-ROM drive letter, your drive letter may differ) and: \ <u>Win95</u> (Ex: E:\Win95).	Copying Files  The file 'hosts sam' on Windows 95 CD-ROM Could not be found.  Insert Windows 95 CD-ROM into the drive selected below, and click OK.  Skip File  Copy files from:  Copy files from:
12.	At the conclusion of the ADSL modem driver installation, the Add New Hardware Wizard window appears and displays your newly installed ITeX ADSL PCI NIC software. Click Finish.	Add New Hardware Wizard  If & ADSL PCI NC  Wndows has finished installing the software that your new hardware device requires.  ( Back Finish Cancel
13.	The <b>System Settings Change</b> window appears. For the PC system to set up the <b>ITeX ADSL PCI NIC</b> driver, a system <b>Restart</b> is required. Click <b>Yes</b> .	System Settings Change       Image: Change         Image: Computer Computer       To finish setting up your new hardware, you must restart your computer.         Do you want to restart your computer now?         Image: Yes

NOTE: After restarting the system, the Diagnostic Tool icon (See Appendix) is active and monitoring connectivity.

14. You must now set the ADSL Configuration. Go to page 15.





### Windows 98, 98SE

After installing the ADSL modem card, plug the power cable back into the PC system and turn the power on.

1. The Add New Hardware Wizard window will automatically appear to indicate that a new PCI Network Controller has been found. Click Next.

# Insert the ADSL Driver CD-ROM into your systems CD-ROM drive now.

- Still in the Add New Hardware Wizard, you will be asked What do you want Windows to do? Select the Search for the best driver for your device option, then click Next.
- 3. Select **Specify a location** and click **Browse** to locate the driver on your CD-ROM for the protocol supported by your ADSL provider: **1483w98**, **1577w98**, **2364w98** or **2516w98**. Click **Next**.
- 4. The Add New Hardware Wizard will appear and indicate the ITeX ADSL PCI NIC has been recognized and will install a new driver. Click Next.



ITeX ADSL PCI NIC

Location of driver:

Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click to continue.

< Back Next > Cancel

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Next > Cancel

- 5. If prompted to insert your Windows CD, do so at this time, then click **OK**.
- Enter the CD drive letter (the example uses "E" as the CD-ROM drive letter, your drive letter may differ) and then <u>:\Win98</u> (Ex: E:\Win98) and click OK.
- At the conclusion of the ADSL modem driver installation, the Add New Hardware Wizard window appears again and displays your newly installed ITeX ADSL PCI NIC software. Click Finish
- 8. The System Settings Change window appears. For the PC system to set up the ITeX ADSL PCI NIC driver, a system Restart is required. Click Yes.

**NOTE**: After restarting the system, the **Diagnostic Tool** icon (See Appendix) is active and monitoring connectivity.

9. You must now set the ADSL configuration. Go to page 15.







### Windows Millennium

NOTE: After installing the ADSL modem card, plug the power cable back into the PC system and turn the power on.

Add New Hardware Wizard

Add New Hardware Wi

1. The Add New Hardware Wizard window will automatically appear to indicate that a new PCI Network Controller has been found. Select the Specify the location of the driver option. Click Next.

Insert the ADSL Driver CD-ROM into your systems CD-ROM drive now.

- 2. Still in the Add New Hardware Wizard, click the scroll arrow to locate the driver on your CD-ROM for the protocol supported by your ADSL provider: 1483wMe, 1577wMe, 2364wMe or 2516wMe. (The example uses "D" as the CD-ROM drive letter. Drive letters may vary.) Then click Next.
- 3. The Add New Hardware Wizard has now finished installing the new hardware device. Click Finish
- 4. The System Setting Change window appears. Click Yes to restart your PC system to allow the new changes to take effect.



Windows has found the following new hardw

Specify the location of the driver (Advanced)

Windows will search for new drivers in its driver dat on your hard drive, and in any of the following selec

Search for the best driver for your device.

Removable Media (Floppy, CD-ROM...) Specify a location

D:\1483wMe

< Back Next > Cancel

PCI Network Controller

What would you like to do? Automatic search for a better driver (Reco

- System Setti ns Cha To finish setting up your new hardware, you must restart your computer. ?) Do you want to restart your computer now? Yes No
- 5. You must now set the ADSL configuration. Go to page 15.





## Setting the ADSL Configuration Win95, Win98, WinMe

1. After your PC has rebooted, <u>right</u>-click on the **Diagnostic Tool Icon** (see Appendix), and select the **Configuration** option.

Disconnect ADSL Status Diagnostic ADSL Statistic Configuration Exit
ADSL Status Diagnostic ADSL Statistic Configuration Exit
Diagnostic ADSL Statistic Configuration Exit
ADSL Statistic Configuration
Configuration Exit
Exit

2. When the Configuration window appears, scroll through the **PVC setup** section to locate the service you will be connecting to. Then click **Set As Active.** 

2
•
Set As Active
Set Mode
<u>C</u> lose

- 3. In the **Select ADSL Mode** section, select the mode(s) recommended by your ADSL service provider. Then click **Set Mode**.
- 4. When you have set both the PVC Setup and ADSL Mode, click Close.



**NOTE**: To modify, add, or remove ISP settings from the **Configuration** window, in the **PVC Setup** section, click on the **PVC Table** button. The **PVC Table** window then appears for the Protocol you are using.



PVC Tabl

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 The PVC Setup window appears. Click Yes to restart your PC system and to allow the new changes to take effect.

PVC Setu	IP		×
٩	Connection address system restarts. Clic	changes take effe k "Yes" to restart	ect after the system.
	( <u>Y</u> es	No	

6. You must now make an ADSL connection, proceed to the section for the protocol you are using as follows:

RFC1483 and RFC1577 RFC2364 and RFC2516 Go to page 17. Go to page 20.

Apollo ADSL Modem

## Making an ADSL connection

## RFC1483 or RFC1577 - Win95, Win98, WinMe

- From the Start menu on the tool bar, select Settings, Control Panel, and then <u>double</u>click on the Network icon.
- 2. The Network window appears. Select the component window and verify that ITeX ADSL PCI NIC is present.

Network
Configuration Identification Access Control
The following network components are installed:
Client for Microsoft Networks
B 3Com Fast EtherLink XL 10/100Mb TX Ethernet NIC (3C9
ITeX ADSL PCI NIC
TADSL Monitor and Management Interface → ITeX ADSL F
Add Remove Properties
Primary Network Logon:
Client for Microsoft Networks
Eile and Print Sharing
Description
OK Cancel

 Scroll the installed network component window and select TCP/IP →ITeX ADSL PCI NIC. Then click the Properties button.

Network
Configuration Identification Access Control
The following network components are installed:
IPX/SPX-compatible Protocol -> Dial-Up Adapter     IPX/SPX-compatible Protocol -> ITeX ADSL PCI NIC     TCP/IP -> 3Com Fast EtherLink XL 10/100Mb TX Etherne
TCP/IP → Dial-Up Adapter
Add Permana Proportion
Primary Network Logon:
Client for Microsoft Networks
<u>File and Print Sharing</u>
Description TCP/IP is the protocol you use to connect to the Internet and wide-area networks.
OK Cancel



#### 47-060023-005



The TCP/IP Properties window will 4. appear. Select the **IP Address** tab and then **TCP/IP Pro** select the Specify an IP Address option. Enter the IP Address and Subnet Mask settings supplied by your ADSL provider.

5. To setup a new gateway, select the

select the <b>Specify an IP Address</b> option. Enter the <b>IP Address</b> and <b>Subnet Mask</b> settings supplied by your ADSL provider.	Bindings         Advanced         NetBIOS           DNS Configuration         Gateway         WINS Configuration         IP Address           An IP address can be automatically assigned to this computer.         If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.         C         Obtain an IP address automatically           C         Obtain an IP address
To setup a new gateway, select the <b>Gateway</b> tab, and then enter the setting in the <b>New Gateway</b> section. Click <b>Add</b> .	OK     Cancel       ICP/IP Properties       Bindings     Advanced     NetBIOS       DNS Configuration     Gateway     WINS Configuration     IP Address       The first gateway in the Installed Gateway list will be the default.     The address order in the list will be the order in which these machines are used.       New gateway:

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Advanced NetBIOS

Add

Cancel

ill take effect.

X

D<u>o</u>main:

- Select the DNS Configuration tab. Select TCP/IP Prop 6. the Enable DNS option. NOTE: You now need to have available the DNS Configuration Gateway WINS Configuration IP Address Host, Domain and DNS settings supplied by your ADSL service provider.
- 7. Enter your host name into Host: box.
- 8. Enter your domain name into **Domain:** box.
- 9. Enter **DNS** number into **DNS** Server Search Order box and click Add. If you have more than one **DNS** number, repeat this step.
- 10. After setting all the necessary TCP/IP properties, click OK.
- 11. The Network window appears Click OK.

10.	The setting an me necessary 101/11	Domain Sumy Search Order
	properties, click OK.	Add
11.	The <b>Network</b> window appears (not shown). Click <b>OK</b> .	Remove
		OK
12.	The <b>System Setting Change</b> window appears. You will be asked if you want to restart your computer. Click <b>Yes</b> .	System Settings Change You must restart your computer before the new settings Do you want to restart your computer now? Yes No

Bindings

O Disable DNS • Enable DNS

DNS Server Search Order

.

Host:

Congratulations, you are done. Your ADSL Internet connection is established!

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## Making an ADSL Connection

#### RFC2364 or RFC2516 - Win95, Win98, WinMe

1. After your PC restarts, the **Location Information** window may appear (See NOTE below). Enter the area code and phone number given to you by your ADSL service provider.

**NOTE:** This screen may not appear on Windows operating systems 95 or 98.

- 2. <u>Double</u>-click on the **ADSL Connect** icon that appears on your desktop.
- 3. The **Connect To** window appears. Enter the **User Name**, **Password** and **Phone number** supplied by your Internet service provider (ISP). Then click **Connect**.
- 4. The **Connecting to My Connection** window appears. The message Logging on to network confirms a valid connecting process.
- 5. The **Connection Established** window appears. Internet service is now established. Click **Close** and then the Diagnostic tool icon will appear on the task bar.



hat your calls can be dialed co

Ione dialing

d States of America srea (or citu) code are vou in now?

C Eulse dialing



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ss an outside line, what is it?

Close

## Windows NT4.0 - RFC1483 or RFC1577

Net

Select N

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d:\

rk Adapte

Scom Sci503 ISA ISbit Ethernet Adapter
 Scom Sci503 ISA ISbit Ethernet Adapter
 Scom Etherink III Adapter (also II/16 and II/16 TP)
 Scom Etherlink III SA/PCMCIA Adapter
 Scom Etherlink III PCI Bus-Master Adapter (3C590)
 Scom Etherlink ISF Etherlink IS TP Adapter
 Scom Exet Etherlink ISF PL 10/0000 ASE T. Adapter

. for

Network Adapters:

Identification Services Protocols Adapters Bindings

OK Cancel

OK

Click the Network Adapter that matches your hardware, and then click UK. If you have an installation disk for this component, click Have Disk

ied by th

- 1. <u>Right</u>-Click on the **Network Neighborhood** icon, and select **Properties.**
- 2. The Network window appears. Select the **Adapters** tab and then click **Add**.

Insert ADSL Driver CD-ROM into your system's CD drive now.

3. The Select Network Adapter window appears. Click Have Disk.

 The Insert Disk window appears. In the driver folder location, type in the protocol supported by your ADSL provider: Ex. 1483wNT or 1577wNT. (The example uses "d" as the CD-ROM drive letter. Your drive may have a different letter.) Click OK.



Select DEM Option 
Choose a software supported by this hardware manufacturer's disk.
ITeXADSL PCI NIC
OK Cancel Help

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5.



? ×

? ×

**\_** 

En 💌 💌

Cancel

OK

Cancel

7.

8.



6. The Network window will appear. Click the Adapters tab to verify that ITeX ADSL PCI NIC has been found. Click on the **Protocols** tab and verify that ADSL Management and Monitor Interface is present. When you have verified these items, click Close.

NOTE: To review the Network window properties at any time, right-click the Network Neighborhood icon and select **Properties.** 

The Microsoft TCP/IP Properties window appears. Select Specify an IP

address. Enter in the IP Address,

supplied by your ADSL service

The Network Settings Change

your computer for the settings to take

provider. Click OK.

effect. Click Yes.

Subnet Mask, and Default Gateway

- Identification Services Protocols Adapters Bindings Network Adapters: 11 IT eX ADSL PCI NIC Remove Properties... Update ( Add.. Item Notes: IT eX ADSL PCI NIC Close crosoft TCP/IP Properties ? X IP Address DNS WINS Address Routing An IP address can be automatically assigned to this network card by a DHCP server. If your network does not have a DHCP server, ask your network administrator for an address, and then type it in the space below. Adapter [1] ITeX ADS -O Obtain an IP address from a DHCP server • Specify an IP address IP Address: Subnet Mask: Default Gateway: window appears. You must now re-start Advanced... OK Cancel
- You must now set the ADSL configuration. Go to page 26. 9.



## Windows NT4.0 - RFC2364 and RFC2516

- 1. <u>Right</u>-click on the Network Neighborhood icon, and select Properties.
- 2. The Network window appears. Select the Adapters tab and then click Add.

Insert the ADSL Driver CD-ROM into your system's CD drive now

3. The Select Network Adapter window appears. Click Have Disk.

- The Insert Disk window appears. In the driver folder location, type in the protocol supported by your ADSL provider: 2364wNT or 2516wNT. (The example uses "d" as the CD-ROM drive letter. Your drive may have a different letter.) Click OK.
- 5. The Select OEM Option window will find ITeX ADSL PCI NIC. Click OK.

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<i>3</i> 9	Inset disk with software provided by the software or hardware manufacturer. If the files can be found at a different location, for example on another drive type a new path to the files below.
	di
<u>e 1 1 6</u>	
Choose	e a software supported by this hardware manufacturer's disk.
lTeX.	ADSL PCI NIC
	OK Cancel Help

Com Status 1640 Ethemet Adapter
 Soom Etherink II Adapter (also II/16 and II/16 TP)
 Com Etherink III Adapter (also II/16 and II/16 TP)
 Com Etherink III SA/Petherink IIA Adapter
 Com Etherink III SA/Petherink 16 Adapter
 Com Etherink III SA/Petherink 16 TP Adapter
 Com Etherink IIS/Etherink 16 TP Adapter
 Com Case Ethering and Etherink 16 TP Adapter

Insert Disk



? ×

En I

 $\times$ 

pter that matches your hardware, and then an installation disk for this component, click

OK



 $\times$ 

- 6. The **Setup Message** window appears. Click **OK**.
- The Windows NT Setup window appears. Insert your NT4.0 CD-ROM into the PC system CD drive, and type in "D:\i386". Click Continue.
- 8. The **Remote Access Setup** window appears. Click **Add.**
- 9. The Add RAS Device window appears. Scroll to locate and select IDSN1itexwana. Then Click OK.
- 10. The **Remote Access Setup** window appears. Click **Continue.**

ð	Setup needs to c Setup will look for If you want Setup new location. Wh Continue.	opy some Windows NT files. the files in the location specifie to look in a different place, typ en the location is correct, click	d below. Cancel
Remote Ac	cess Setup		×
Port	Device	Туре	
ISDN1	itexwana	ISDN	Continue
<u>A</u> dd	Bemove	Configure. Qone	Cancel
Add RAS	Device		×
RAS Ca	pable <u>D</u> evices: • itexwana	¥	OK Cancel Help Install Modem Install X25 Pad

Remote Access Services (RAS) will now be installed. Ple in RAS setup to enable you to use RAS over itexwana.

Windows NT Setup

0K

december 2	100011	
BOAPTOFIC	ISDN	Continue
		Cancel
		Network.
		Help

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 The Network window will appear. Click the Adapters tab to verify that ITeX ADSL PCI NIC has been found. Click on the Protocols tab and verify that the ADSL Management and Monitor Interface is present. Then click Close.

**NOTE**: To review the **Network** window properties at any time, <u>right</u>-click the **Network Neighborhood** icon and select **Properties**.

12. The **Network Settings Change** window appears. You must now re-start your computer for the settings to take effect.

Click Yes.

etwork			?
Identification Ser	vices Protocols	Adapters Bindin	igs
Network Adapters	r.		
1] ITeX ADS	EL PCI NIC		
Add	<u>R</u> emove	Properties	<u>U</u> pdate
		Close	Cancel
twork Sattings Chap	10		
when a benangs chang	<u>, , , , , , , , , , , , , , , , , , , </u>		

Yes No

13. You must now set the ADSL configuration. Go to page 26.

Apollo ADSL Modem



## Setting the ADSL Configuration – Win NT4.0

1. After your PC has rebooted, <u>right</u>-click on the Diagnostic Tool Icon (see Appendix), and select the Configuration option.

Open	
Disconnect	
ADSL Status Diagnostic	
ADSL Statistic	
Evit	
Lok	

C

2. When the **Configuration** window appears, scroll through the **PVC setup** section to locate the service you will be connecting to. Then click **Set as Active.** 

onfiguration	×
- PVC Setup	
ADSL Service Provider	
PVC Table	Set As Active
Select ADSL Mode	
ANSI T1.413 Issue 2	
📕 ITU G.992.2 Annex A (G.lite)	
TU G.992.1 Annex A (G.dmt)	Set Mode
	<u>C</u> lose

- 3. In the **Select ADSL Mode** section, select the mode(s) recommended by you ADSL service provider. Then click **Set Mode**.
- 4. When you have set both the **PVC Setup** and **ADSL Mode**, click **Close**.

Configuration	×
PVC Setup	
ADSL Service Provider	<b>_</b>
ADSL Service Provider	
PVC Table	Set As Active
Select ADSL Mode	
ANSI T1.413 Issue 2	
TU G.992.2 Annex A (G.lite)	
TU G.992.1 Annex A (G.dmt)	Set Mode
	<u>C</u> lose

**NOTE**: To modify, add, or remove ISP settings from the **Configuration** window, in the **PVC Setup** section, click on the **PVC Table** button. The **PVC Table** window then appears for the Protocol you are using.

ISP Nam	ne 🗸 V	pi/Vci Proto	col Fran	ning Status
ADSL Se	rvice Provider 0.	35 1483	Bridge LLC.	/SNAP Active
- H.				
TR:				

ISP Name Vpi / Vci Protocol Framing Status ADSL Service Provider 0.35 2364 (PPPoA) VC MUX Active

Apollo ADSL Modem

5. The **PVC Setup** window appears. Click **Yes** to restart your PC system and to allow the new changes to take effect.

PVC Setu	ıp		×
٩	Connection address system restarts. Clic	changes take e k "Yes" to resta	ffect after the rt system.
	Yes	No	

ITeX

6. You must now make an ADSL connection. Go to page 28.



## Windows NT4.0

#### **Creating a Dial-up Network Connection**

1. <u>Double</u>-click on the **ADSL Connect** icon that appears on your desktop.



? ×

Location...

More -

Dial Close

New

**ADSL Connect** 

MuDial InS

Dialing from:

- 2. The **Dial-Up Networking** window appears and prompts for the phone number of the dial-up server. Unless instructed to enter a phone number by the ADSL service provider, enter zero "0". Click Dial.
- 3. The **Connect to MyDialUpServer** window appears. Enter the **User name**, **Password** and **Domain** supplied by your ADSL service provider. Click **OK**.

**Note:** If this screen persists and a connection logon error is reported, confirm that the correct User name and Password are entered and try the connection again. Also verify that the connection address is correct.

4. The **Connection Complete** window is displayed at the completion of a successful Dial-Up logon. Choose a display behavior and click **OK** to close.



Congratulations, you are done. Your ADSL connection is established!





#### Windows 2000

After installing the ADSL modem card, plug the power cable back into the PC system and turn the power on.

 After installing the ADSL modem card, power on the PC system. After start-up, the Found New Hardware Wizard will appear. Click Next.

# Insert the ADSL Driver CD-ROM into your system's CD drive now

2. Still in the Found New Hardware Wizard, select the Search for a suitable driver for my device option. Click Next.

- 3. Next you will be prompted for software drivers. Select **Specify a location.** Click **Next**.
- Click Browse to locate the driver on your CD-ROM for the protocol supported by your ADSL provider: 1483w2K, 1577w2K, 2364w2K or 2516w2K. (The example uses "D" as the CD-ROM drive letter. Your drive may have a different letter.) Click OK



Copy manufacturer's files from

D:V

Welcome to the Found New Hardware Wizard

This wizard helps you install a device driver for a hardware device.

Apollo ADSL Modem

29

▼ Browse...



5. The Found New Hardware Wizard will then display the driver you selected, click Next.

6. The Digital Signature Not Found window appears, and shows ITEX ADSL PCI NIC. You will be asked; Do you want to continue installation? Click Yes.

Found New Hardware Wizar	d			
Driver Files Search Res The wizard has finished	Driver Files Search Results The wized has finished searching for driver files for your hardware device.			
The wizard found a drive	er for the following device:			
🤹 ITeX ADSL PI	CI NIC			
Windows found a driver	for this device. To install the driver Windows found, click Next.			
₫\2364w2k\v	netiles inf			
(Back Next) Cancel				
Digital Signature Not For	und 💌			
•	The Microsoft digital signature affirms that software has been tested with Windows and that the software has not been altered since it was tested.			
	The software you are about to install does not contain a Microsoft digital signature. Therefore, there is no guarantee that this software works correctly with Windows			
	ITeX ADSL PCI NIC			
	If you want to search for Microsoft digitally signed software, visit the Windows Update Web site at http://windowsupdate.microsoft.com to see if one is			

Do you want to continue the installation?

Completing the Found New Hardware Wizard

winard olick Finish

Finish

۲

Yes No More Info

7. The Found New Hardware Wizard will prompt that Windows has finished installing the software for this device. Click Finish.

**NOTE:** You may be asked if you want to restart your computer, if so click **Yes.** If you are not asked, you need to restart your computer manually at this time.

8. You must now set the ADSL configuration. Go to page 31.





## Setting the ADSL Configuration – Win 2000

1. After your PC has rebooted, <u>right</u>-click on the **Diagnostic Tool Icon** (see Appendix), and select the **Configuration** option.

Open	
Disconnect	
ADSL Status Diagnostic ADSL Statistic	
Configuration	
Exit	

2. When the **Configuration** window appears, scroll through the **PVC setup** section to locate the service you will be connecting to. Then click **Set As Active**.

onfiguration		×
PVC Setup		
ADSL Service Provider	•	
PVC Table	Set As Active	
Select ADSL Mode		
ANSI T1.413 Issue 2		
🔲 ITU G.992.2 Annex A (G.lite)		
🔲 ITU G.992.1 Annex A (G.dmt)	Set Mode	
	<u>C</u> lose	

С

PVC Tab

- 3. In the **Select ADSL Mode** section, select the mode(s) recommended by you ADSL service provider. Then click **Set Mode**.
- 4. When you have set both the **PVC Setup** and **ADSL Mode**, click **Close**.

Configuration	×
PVC Setup	
ADSL Service Provider	-
ADSL Service Provider	
PVC Table	Set As Active
Select ADSL Mode	
ANSI T1.413 Issue 2	
🔲 ITU G.992.2 Annex A (G.lite)	
TU G.992.1 Annex A (G.dmt)	Set Mode

**NOTE:** To modify, add, or remove ISP settings from the **Configuration** window, in the **PVC Setup** section, click on the **PVC Table** button. The **PVC Table** window then appears for the Protocol you are using.



Apollo ADSL Modem



5. The **PVC Setup** window appears. Click **Yes** to restart your PC system and to allow the new changes to take effect.

P¥C Setu	IP		×
٩	Connection address of system restarts. Click	hanges take effe ."Yes" to restart	ct after the system.
	Yes	No	

6. You must now make an ADSL connection, proceed to the section for the protocol you are using as follows:

RFC1483 or RFC1577	Go to page 33.
RFC2364 or RFC2516	Go to page 35.



2.

3.

Properties.

Properties.



1. Right - click My Network Places and select Properties.







? ×

- 4. The Internet Protocol (TCP/IP) Properties window appears. Under the General tab, enable Use the following IP address. The default settings for IP configurations will turn from gray to white. Enter in the IP address, Subnet Mask, and Default Gateway supplied by your ADSL service provider. Click OK.
- 5. The previous **General Tab** window appears. Click **OK**.
- Obtain an IP address automatic
   Obtain the following IP address: -IP address: Subnet mask: Default gatewa Use the following DNS server addres Preferred DNS server: Alternate DNS server Advanced... OK Cancel Local Area Co ? × General Connect using: ITeX ADSL PCI NIC Configure Components checked are used by this connection Client for Microsoft Networks
   Silent for Microsoft Networks
   Sile and Printer Sharing for Microsoft Networks
   Sile ADSL Management and Monitor Interface
   Internet Protocol (TCP/IP) Properties Install. Uninstall Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks. Show icon in taskbar when connected ΟK Cancel 📴 Network and Dial-up Connections - 🗆 × Edit View Favorites Tools Adv. >> File 🖶 Back 👻 🤿 👻 🛐 🔯 Search 🛛 🖓 Folders Address 🔃 Network and Dial-up Connections 💌 🔗 Go <u>F</u> և 🚜 Make New Local Area Connection onnection ITeX ADSL PCI NIC

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Internet Pro

General

6. The Network and Dial-up Connections window appears. Close this window and your connection is complete.

Congratulations, you are done. Your ADSL Internet connection is established!



## Making an ADSL Connection - RFC2364 or RFC2516

1. <u>Double</u>-click on the **ADSL Connect** icon that appears on your desktop.



Connect My connection

?×

2. The Connect My connection window will appear. Enter your User Name, Password and Phone Number supplied by your ADSL service provider. You are now ready to make a network connection. Click Dial.

User name: Password:	Administrator
Dial:	
Dial	Cancel Properties Help

3. The Connection complete window appears, click OK.

onnection Complete			
	'Dial-up Connection' is now connected.		
	To check the status of this connection or disconnect, right-click its icon in the Network Connections folder, or click its icon on the taskbar (if present).		
	Do not display this message again		

Congratulations, you are done. Your ADSL connection is established!

Apollo ADSL Modem



#### Windows XP

After installing the ADSL modem card, plug the power cable back into the PC system and turn the power on.

# Insert the ADSL Driver CD-ROM into your system's CD drive now

1. Upon your system's reboot, the Found New Hardware Wizard appears. Click Next.

2. Select the correct protocol, for Windows XP, given to you by your ADSL service provider. Click **Next.** 

A Microsoft window may appear at this time. Click "**Continue Anyway**".

- 3. Completing the Found New Hardware Wizard appears. Click Next to complete the installation of your ITeX Apollo Modem.
- 4. You must now set the ADSL configuration. Go to page 37.









## Setting the ADSL Configuration – Windows XP

- Open 1. <u>Right</u>-click on the Diagnostic Tool Icon (see Appendix), and select Disconnect Configuration. ADSL Status Diagnostic ADSL Statistic Configuration Exit Configuration When the Configuration window 2. appears, scroll through the PVC setup PVC Setup section to locate the service you will be ADSL Service Provider connecting to. Then click Set As Active. PVC Table Set As Active 3. In the Select ADSL Mode section, select Select ADSL Mode the mode(s) recommended by you ADSL ANSI T1.413 Issue 2 service provider. Then click Set Mode. TU G.992.2 Annex A (G.lite) 4. When you have set both the PVC Setup TU G.992.1 Annex A (G.dmt) Set Mode and ADSL Mode, click Close. <u>C</u>lose VC Table NOTE: To modify, add, or remove ISP 
   ISP Name
   Vpi / Vci
   Protocol
   Framing
   Status

   ADSL Service Provider
   0.35
   2364 PPPoA
   VC MUX
   tive
   settings from the Configuration window, in the PVC Setup section, PVC Table click on the PVC Table button. The ISP Name Vpi / Vci Protocol Framing ADSL Service Provider 0,35 1483 Bridge LLC/SNAP PVC Table window then appears for Status Active
- 5. You must now make an ADSL connection, proceed to the section for the protocol you are using as follows:

Edit Add Remove Activate

<b>RFC1483 or RFC1577</b>	Go to page 38.
RFC2364 or RFC2516	Go to page 40.

Apollo ADSL Modem

the Protocol you are using.



Close



## Making an ADSL Connection - RFC1483 or RFC1577

an 1. <u>Right</u> – click on My Network select Properties.

<ol> <li><u>Right</u> – click on <b>My Network Places</b> and select <b>Properties</b>.</li> </ol>	Open           Explore           Search for Computers           Map Network Drive           Disconnect Network Drive           Create Shortcut           Delete           Rename           Properties
<ol> <li><u>Right</u> – click the Local Area Connection that contains the ITEX ADSL PCI NIC. Select Properties.</li> </ol>	Local Area Connection 3 Network cable unplumned ITEX AI Disable Status Repair Bridge Connections Create Shortcut Delete Rename
3. The Local Area Connections Properties window appears. Click Internet Protocol (TCP/IP). Click Properties.	Properties      Properties      Central Authentication Advanced      Connect using:      If teX ADSL PCI NIC           Configure      This connection uses the following items:           Client for Microsoft Networks           Client for Microsoft Networks           Client for Microsoft Networks           Client for Microsoft Networks           Client and the sharing for Microsoft Networks           Client are network protocol (ICP/IP)           Igstall           Install           Properties           Properties           Shog icon in notification area when connected

Apollo ADSL Modem



- 4. Select "Use the following IP address:" Enter the IP Address, Subnet mask, and Default gateway given to you by your ADSL service provider.
- 5. After you have entered the information, click **OK** and **Close** any remaining connection windows.

nternet Protocol (TCP/IP) Properties 🛛 💽 🔀				
General				
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.				
O Dbtain an IP address automatically				
Use the following IP address:				
IP address:				
Sybnet mask:				
Default gateway:				
O Dbtain DNS server address autom	natically			
Use the following DNS server add	resses:			
Preferred DNS server:				
Alternate DNS server:				
	Advanced			
	OK Cancel			

Congratulations, you are done. Your ADSL connection is established!



## Making a Connection - RFC2364 or RFC2516

1. <u>Double</u> – click the ADSL connection icon that appears on the desktop.



2. Enter the User name, Password, and Dialup number given to you by your ADSL service provider. Click Dial.

Connect ITeX	PPP Connection	? 🗙
User name: Password:		
Save this us Me only Anyone t	er name and password for the following use	irs:
Dial:	0	*
Dial	Cancel Properties He	elp

Congratulations, you are done. Your ADSL connection is established!



#### Standard ADSL Utility

#### Win 98, Win Me, Win 2000, Win NT 4.0

#### To access the ADSL Utility window:

- 1. Click on the Start menu and select Programs.
- 2. Select the ITeX option.
- Four options appear if you have installed protocols RFC2364 or RFC2516: ADSL Diagnostic Tools, Dial-Up Connection, Read Me, and Un-Installer (protocols RFC1483 and RFC1577 display Diagnostic Tools, Read Me, and Un-installer only).



**Un-Installer** – This option un-installs the modem from your PC. For the correct instructions on how to use this utility, see the **Standard Un-Installer** section.

**ADSL Diagnostic Tools** – If, in the event you have deleted the **Diagnostic Tools** icon on the taskbar, this option launches the **Diagnostic Tools** utility icon back onto the taskbar. For the correct instructions on how to operate the **Diagnostic Tools**, see the **Diagnostic Tools** section.

Read Me – The Read-Me file supplies more information about ITeX and the Apollo driver.

**Dial-Up Connection (RFC2364 and RFC2516 only)** – If, in the event you have deleted the Dial-up connection icon on your desktop, this option launches the Dial-Up connection application.



#### **Standard Un-Installer**

#### Win 98, Win Me, Win 2000, Win NT 4.0

- 1. On the desktop, click the START Menu on the Task Bar.
- 2. Select **Programs**. The programs window appears.
- 3. Select the ITeX tab, and then click on the Un-Installer Tab.



4. A Warning window appears. Click Yes to proceed.

The Uninstall Finished window

appears. Click Yes to restart your computer and allow the changes to

Do you really want to uninstall ADSL driver ?

Yes
No

Uninstall Finished

Please reboot system to finish.

Click "Yes" to restart system.

Warning

Apollo ADSL Modem

take effect.

5.



 $\times$ 

#### **Standard Diagnostic Tools**

#### Win 98, Win Me, Win 2000, Win NT 4.0

The **Diagnostic Tool** icon allows the user to monitor the ADSL connectivity and run diagnostic tests. The **Diagnostic Tool** icon is displayed on the task bar as shown.

1. <u>Right</u> - click the ADSL modem diagnostic tool icon, and then select **Open**.

Open	
Disconnect	
ADSL Status Diagnostic ADSL Statistic Configuration	
Exit	

The ADSL Diagnostic Tool window appears on your desktop. The three tabs of the Diagnostic Tool appear: ADSL Status, Diagnostic, and ADSL Statistics.

The **ADSL Status** tab displays the current status of the ADSL connection, including the current ADSL State, ADSL Protocol in use, and the Transmit/Receive Rate for upstream and downstream data.

ADSL Diagnostic Tools	×
ADSL Status Diagnostic ADSL Statistic	
ADSL Connection Information ADSL State Detecting	
Protocol [G.dmt Transmit / Receive Rate (Kbps) Data Rate	
Upstream 0 Downstream 0	





- 2. To run diagnostics click on the **Diagnostic** tab. The blank **Diagnostic** window appears.
- 3. Click **Run Diagnostics** to begin the diagnostic test.

4.	A Warning Message appears. Click Yes to
	run the test and disconnect your modem.
	Click <b>No</b> if you do not wish to disconnect
	or run the test.

5. The **Diagnostic Report** appears with the test results. All tests must "pass" for a functional test of the Apollo modem card.

ADSL Status Diagnostic ADSL Statistic
✓ Product Info Run Diagnostics
Warning Message
Running this Test will disconnect the modem. Proceed?
100004:
<u>Yes</u> <u>N</u> o
, ADSL Diagnostic Tools
ADSL Status Diagnostic ADSL Statistic
XXX Discussion Depart XXX
Hardware Test : "ADSL Bridge - PCI I/0 Test" ==> Pass Hardware Test : "190135 Benjisters Test" ==> Pass
Hardware Test : "30135 Memory Test" ==> Pass Hardware Test : "40SL Bridge - PCLDM4 Loophack"
Fast ==> Trial:20, Pass:20
Hardware Test : "190135 Utopia Loopback" Fast ==> Trial:20, Pass:20 Interleave ==> Trial:20, Pass:20
*** End Of Report ***

ADSL Diagnostic Tools

6. You may obtain driver information as well by clicking the **Product Info** tab.

**NOTE:** To reconnect your modem <u>right</u> - click the **Diagnostic Tool** icon on the task bar, and select **Connect**.



Apollo ADSL Modem



**Re-training Count** tracks the number of ADSL connections performed.

**FEC Count** tracks the forward error correction count.

**CRC Count** tracks the number of CRC errors.

**ATM HEC Count** (Header Error Control) errors are recorded as an indication of ATM packet accuracy.

As a measure of packet transfer performance, the **ATM Receive Side** and **ATM Transmission Side Statistics** (Packet Errors)

are counted.

ADSL Diagnostic Tools	×	
ADSL Status Diagnostic ADSL St	atistic	
ADSL Information Re-training Count FEC Count CRC Count ATM HEC Count		
ATM Receive Side Statistics Good Received Packets		
Bad Received Packets		
ATM Transmission Side Statistics		
Transmitted Packets 0		





## **XP Utility**

To access the ADSL Utility window:

- 1. Click on the Start menu and select All Programs.
- 2. Select the ITeX option.
- Four options appear if you have installed protocols RFC2516 or RFC2364: ADSL Diagnostic Tools, Dial-Up Connection, Read Me, and Un-Installer (protocols RFC1483 and RFC1577 display Diagnostic Tools, Read Me, and Un-installer only).



**ADSL Diagnostic Tools** – If, in the event you have deleted the Diagnostic Tools icon on the taskbar, this option launches the Diagnostic Tools utility icon back onto the taskbar. For the correct instructions on how to operate the Diagnostic Tools, see the **XP Diagnostic Tools** section.



**Dial-Up Connection (for RFC2364 or RFC2516 only)**— In the event you have deleted the Dial-up connection icon on your desktop, this option launches the Dial-up connection application.



**Read Me** – The Read-Me file supplies more information about ITeX and the Apollo driver.

🙋 Read Me -

**Un-Installer** - This option un-installs the modem from your PC. For the correct instructions on how to use this utility, see the **XP Un-Installer** section.



## **XP Un-Installer**

- 1. On the desktop, click the **START** Menu on the **Task Bar.**
- 2. Select **All Programs**. The programs window appears.
- 3. Select the **ITeX** tab, and then click on the **Un-Installer** Tab.



4. A **Warning** message may appear. Click **Yes** to un-install your Apollo modem and allow the changes to take effect.

Warnin	s 🛛 🛛
2	Do you really want to uninstall ADSL driver ?
	Yes No





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## **XP Diagnostic Tools**

The **Diagnostic Tool** icon allows the user to monitor the ADSL connectivity and run diagnostic tests. The **Diagnostic Tool** icon is displayed on the task bar as shown. 1. <u>Right</u> - click the ADSL modem diagnostic tool icon, and then select **Open**.

2:16 PM	Open Disconnect ADSL Status Diagnostic ADSL Statistic Configuration Exit
The ADSL Diagnostic Tool window appears on your desktop. The three tabs of the Diagnostic Tool appear: ADSL Status, Diagnostic, and ADSL Statistics. The ADSL Status tab displays the current status of the ADSL connection, including the current ADSL State, ADSL Protocol in use, and the Transmit/Receive Rate for upstream and downstream data.	ADSL Diagnostic Tools     B       ADSL Status     Diagnostic     ADSL Statistic       ADSL Status     Diagnostic     ADSL Statistic       ADSL Status     Detecting       Protocol     T1.413 issue 2       Transmit / Receive Rate (Kbps)     Data Rate       Upstream     0       Downstream     0
<ol> <li>To run diagnostics click on the Diagnostic tab. The blank Diagnostic window appears.</li> <li>Click Run Diagnostics to begin the diagnostic test.</li> </ol>	ADSL Diagnostic Tools ADSL Status Diagnostic ADSL Statistic

#### 47-060023-005



- 4. A Warning Message appears. Click Yes to run the test and disconnect your modem. Click No if you do not wish to disconnect or run the test.
  - rt appears with the ADSL Diagnostic Tools

Warning Message

5. The **Diagnostic Report** appears with the test results. Click **No** if you do not wish to disconnect or run the test.

ADSL Diagnostic Tools	E
ADSL Status Diagnostic ADSL Statistic	
ADSL Status Diagnostic   ADSL Statistic   **** Diagnostic Report **** Hardware Test : *ADSL Bridge - PCI I/0 Test* ==> Past Hardware Test : *ADSL Controller Registers Test* ==> Pa Hardware Test : *ADSL Controller Memory Test* ==> Pa Hardware Test : *ADSL Controller Memory Test* ==> Pa Hardware Test : *ADSL Controller Uses:20 Interleave ==> Triat:20, Pass:20 Interleave ==> Triat:20, Pass:20 *** End Di Report ***	
Product Info Run Diagnos	ics
	_

Running this test will disconnect the modem. Proceed ?

<u>N</u>o

6. You may obtain driver information as well by clicking the **Product Info** tab.

**NOTE:** (to reconnect your modem <u>right</u> click the **Diagnostic Tool** icon on the task bar, and select **Connect**).



Apollo ADSL Modem



7. The ADSL Statistic tab provides you with detailed information on your ADSL modem connection.

**Re-training Count** tracks the number of ADSL connections performed.

**FEC Count** tracks the forward error correction count.

**CRC Count** tracks the number of CRC errors.

**ATM HEC Count** (Header Error Control) errors are recorded as an indication of ATM packet accuracy.

As a measure of packet transfer performance, the **ATM Receive Side** and **ATM** 

**Transmission Side Statistics** (Packet Errors) are counted.

ADSL Diagnostic Tools	X	
ADSL Status Diagnostic ADSL Statistic		
ADSL Information Re-training Count FEC Count CRC Count		
ATM HEL Count	tistics	
Good Received Packets 0		
Bad Received Packets 0		
ATM Transmission Si	e Statistics	
Transmitted Packets 0		





The A in ADSL stands for Asymmetric. Since most home users tend to be more of a consumer of data than a producer, a slower upstream (upload) speed can be traded off for a faster downstream (download) speed. ADSL is designed to run on your standard telephone line or POTS (Plane Old Telephone System) by squeezing the voice band into the low end of the frequency spectrum, and running the ADSL digital on the high end of the frequency spectrum. ADSL therefore needs a splitter to be placed during installation to separate the two.



**Line Splitter:** A splitter is a small device that captures the first 4khz of frequency and splits them off for phone use. The rest of the data is passed onto the ADSL equipment. The splitter is the first device an ADSL line meets when it arrives at the user's premises. Splitters are usually employed at the time when ADSL lines are provisioned.

This diagram is of a basic ADSL in a home. The splitter depicted here is a small box that strips off the phone signal from the line from the ADSL Service Provider, and leaves the data (indicated by the orange line), to be routed to the data equipment, on RJ11 (phone) inside wires.



**Line Filter:** A separate filter may be required if an ADSL setup does not use splitters. For a splitter setup, the filter is built into the splitter. The filter is to protect the ADSL signal from being contaminated by high frequency noise added by analog phone devices, answering machines, faxes and so on. An ADSL setup, with a filter instead of a splitter, allows the data and voice signal to flow through the house phone wires, but filters it from the telephone or fax machines.









*TIP:* Radio frequency interference, such as a television or a cordless telephone may effect you ADSL connection. If you have such a device close to the telephone line of your computer, you should move the device.



**NOTE**: ADSL service may introduce audible interference on some phone equipment.





## **Common Problems and Solutions**

The Diagnostic Tool icon consists of two lights side by side. The left light indicates data is being transmitted whereas the <u>right</u> light indicates data is being received. Some common problems with the connection can be determined as follows:

Color Code	Description
Red, Red	No ADSL connection or handshaking. Check your cable.
Black, Yellow	Handshaking (flashing yellow alternating position).
Black, Black	No data traffic or idle connection.
Black, Green	Modem card is receiving data (TX/off, RX/on).
Green, Black	Modem card is transmitting data (TX/on, RX/off).
💶 Green, Green	Modem card is transmitting and receiving data. (TX/on, RX/on).
<b>10</b>	Driver installation problem exists. Un-Install driver.

Problem	Solution
The ADSL modem diagnostic icon is not on the taskbar.	Restart the computer: 1. Save and close any open files and exit any open programs. 2. Click the Start button, and then click Shut Down. 3. In the Shut Down Windows window, click Restart and then click OK.
	If the ADSL modem diagnostic icon does not appear after you restart the computer, uninstall and reinstall the driver.
There are 2 ADSL modem diagnostic icons on the taskbar.	You may have inadvertently installed the driver twice without performing the ITeX Un-Installer procedure. Contact your ADSL Internet service provider before you uninstall any ADSL modem driver to ensure that you uninstall the appropriate driver.
The ADSL modem diagnostic icon lights are black and flashing yellow:	The ADSL modem is trying to connect to the Internet. If the modem fails to connect, ensure that the modem is connected to the telephone wall jack. You may have inadvertently or incorrectly installed a filter or line conditioner on the telephone cord that connects the modem to the telephone wall jack. Your ADSL service may be temporarily down. Contact your ADSL Internet service provider.



Both ADSL modem diagnostic icon lights are red.	Ensure that the modem is connected to the telephone line, and that your telephone line is connected to the wall jack. Verify that the ADSL Modes selected are ANSI and G.dmt. Your ADSL service may be temporarily down. Contact your ADSL Internet service provider. Right-click the modem diagnostic icon and then click Diagnostic to run the modem diagnostics. If all tests pass, the digital circuit is functioning properly, but the analog circuit may be defective. Contact your ADSL Internet service provider. If any of the tests fail, the digital circuit is defective. Contact your ADSL Internet service provider.
You cannot connect to the Internet.	There may be a problem with the PPPoE installation. The service is configured for Static IP. Verify that the TCP/IP Entries, gateway, and DNS are correct. Contact your ADSL service provider for further assistance. Reboot the system and make a new connection.
You can connect to the Internet but the connection unexpectedly terminates.	The telephone line that connects the ADSL modem to the telephone wall jack may be too close to a device that emits radio frequency interference, such as a television or a cordless telephone. If you have such a device close to the telephone line or your computer, try moving the device. Contact your ADSL Internet service provider.
You hear noise or static when you use the telephone.	Ensure that you have installed the wall-mount filter or a line conditioner.
<b>Ø</b>	A problem with the driver installation. Un-Install the drivers and reload them.



## **Connector & Jumper-pin Configuration Guide**

It is important to verify that the ADSL data port RJ-11 jack is configured so that the center two pins, pins 3 and 4, are used for ADSL data. Otherwise, the ADSL PCI modem card will not make a proper connection. Your ADSL modem card features pin jumpers that enable the user to set the configuration to make the proper connection. The modem card is default set to 3 and 4.

If the ADSL data port installation uses pins 2 and 5 for data, then the jumper settings on your board will need to be reconfigured. To do this, orient your board per the diagram below (the RJ-11 connector should be facing towards you) and simply lift the jumper off of the pin setting for 3 and 4, and place it onto the pin setting for 2 and 5, or visa versa.



## **ADSL Modem Card LED Indicators**

LED	Status	Signal	Description
<b>Green Bottom</b>	PWR	Flashing	Initialized, idle mode (disconnect)
		On	Power Supply OK
Green Top	SYNC	Flashing fast	Modem Connecting
		Flashing slow	Modem Connected
Yellow Top	DATA	On: TX or RX	ATM data transmission
		Off: no data	
Red Bottom	ERR	Flash on CRC error	ATM data transmission
All four		All On	Driver not installed or
			modem card is defective

### **ADSL Modem Card Bracket**



Apollo ADSL Modem

## System Requirements & Compliance Certification

#### **System Requirements**

- $\sqrt{1}$  IBM PC/AT or compatible
- $\sqrt{}$  Pentium 500Mhz or faster
- $\sqrt{30}$  Mbytes or more available hard disk space
- $\sqrt{2x}$  CD-ROM drive or better
- $\sqrt{32}$  Mbyte or more available system memory

#### **Power Requirements**

 $\sqrt{0.75 \text{A Max}} = 0.75 \text{A Max} = 0.75 \text{A Max} = 0.18 \text{ max}$ 

#### **Environmental Requirements**

- $\sqrt{}$  Operating Temperature: 0 °C to 70°C with airflow
- $\sqrt{}$  Non-operating Temperature: -10 °C to 85 °C
- $\sqrt{}$  Operating Humidity: 10% to 90% non-condensing
- $\sqrt{}$  Non-operating storage humidity: 5% to 95% non-condensing

#### **Compliance Certification**

- √ UL 1950
- $\sqrt{CE}$  approved
- √ FCC Part 15 Class B

### **Copyright & Regulatory Information**

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#### **Safety Instructions**

Use the following instructions to help protect yourself and your computer.

- For use in UL listed Personal Computers
- Caution To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.
- Disconnect telecommunication line during an electrical storm to avoid the remote risk of electric shock from lightning via the telephone line.
- To remove power from the computer, turn it off, and disconnect power cable from electrical outlet.
- To help avoid the potential hazard of electrical shock, do not connect or disconnect cable or perform installation and un-installation of this product.
- Handle this product with care. Holding it by the metal bracket.
- Important Safety Instructions- When using your telephone equipment, basic safety precautions should be always followed to reduce the risk of fire, electric shock and injury to persons, including the following:
  - Do not use this product near water. For example: near a bathtub, washbowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool.
  - 2. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lighting.
  - 3. Do not use the telephone to report a gas leak in the vicinity of the leak.
  - 4. Using only the telephone line cord indicated in this manual.





### **FCC Statement**

#### FCC Part 15 Notice

WARNING: 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 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.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: • This device may not cause harmful interference.

 This device must accept any interference received including interference that may cause undesired operation.

#### FCC Part 68 Notice

This equipment complies with Part 68 of the FCC rules. On the bottom of your computer is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for your equipment. If requested, you must provide this information to the telephone company.

The REN is used to determine the quantity of devices that may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most areas, the sum of all the RENs on your telephone line should be less than five to ensure proper service from the telephone company. To be certain of the number of devices that you may connect to a line, as determined by the total RENs, contact your local telephone company.

The registration jack Universal Service Order Code (USOC) used by this equipment is RJ-11C. An FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack that is Part 68 compliant.

This equipment cannot be used on public coin-phone service provided by the telephone company. Connection to party line service is subject to state tariffs.

There are no user serviceable parts on the modem contained in your computer.

If your telephone equipment causes harm to the telephone network, the telephone company will notify you in advance that service may be temporarily discontinued. If advance notice is not practical, the telephone company will notify you as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of this equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If you experience trouble with this telephone equipment, refer to the chapter titled "Getting Help" in your computer's troubleshooting documentation or, for some computers, the section titled "Contacting Dell" in your computer's online guide to find the appropriate telephone number for obtaining customer assistance. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

#### Fax Branding

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent, identification of the business, other entity, or individual sending the message, and the telephone number of the sending machine or such business, other entity, or individual. The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.

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#### **User License Agreement**

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