DSL700P

Version 1.2

ADSL MODEM CARD

User's Manual

(Configured for SingTel Magix Service)



Product warranty does not apply to damage caused by lightning, power surges or wrong voltage usage.



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Introduction

Congratulations on your purchase of DSL700P ADSL Modem card!

ADSL, which stands for **Asymmetric Digital Subscriber Line**, is the latest communication technology that offers faster and uninterrupted Internet access.

The **DSL700P** is a PCI based Controller-less ADSL modem. It is capable of data rate in both Full-Rate and G.Lite, with **Full Rate transmission up to 8 Mbps downstream, 640 Kbps upstream** and **G.Lite transmission up to 1.5 Mbps downstream, 512 Kbps upstream**.

The ADSL modem makes use of your existing phone line for Internet surfing and at the same time, allows you to talk on the phone! As your phone line is dedicated to your home, your connection to the Internet will also be highly secured and reliable!

DSL700P definitely meets more than comfortably, the demands of today's bandwidth intensive applications!

1.1 Package

Check that you have the following listed items inside your DSL700P package. For any missing items, please contact your dealer immediately.

- 1 DSL700P ADSL Modem Card
- 1 DSL700P Installation CD
- Micro-Filter (optional can be purchased separately from your dealer)
- 1 RJ-11 Telephone Extension cable
- This User Manual



Before You Begin

This chapter contains information that you need to know before installing your modem card. Please go through them before proceeding with the installation.

2.1 Minimum System Requirements*

2.1.1 Hardware

• IBM PC-based computer with Pentium® MMX 233 processor or equivalent

- 1 CD-ROM drive
- 1 free PCI-Bus slot
- 32MB RAM
- 30MB free hard disk space[#] for system files and modem drivers (Windows CD-ROM may be required during installation, depending on your system configurations.)

* The information listed are minimum system requirements needed to install your ADSL modem card. Please check and ensure that your system also meets the minimum system requirements set by the ADSL Service Provider you subscribed to. Your system should meet the higher requirements of the two.

[#]Additional free hard disk space may be required for your ADSL Service Provider installation program and browser installation. Please check with your Service Provider.

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2.1.2 Software - Operating System

- Windows[®] 98
- Windows[®] 98 Second Edition
- Windows® Me
- Windows[®] XP
- Windows[®] 2000

2.2 Safety Precaution

- Do not remove your card from its protective bag until you are ready to install it.
- Always try to hold your card by its edges. Avoid touching any electronic components on your card.
- Static electricity can cause permanent damage to your card. To prevent such a damage, you must ground yourself during the installation:
 - » Use a grounding strap a coiled wire with a clip at one end and an elastic strap at the other. Wear the strap around your wrist and attach the clip to any non-painted metal surface of your computer chassis.
 - » If you do not have a grounding strap, touch any non-painted surface of your computer chassis before you begin installation, and again every minute or so until the installation is completed.

2.3 Installation Notes

- The graphics and screen illustrations shown in this manual may differ from what you see in your system, but the steps still apply.
- A Philips screwdriver is required.
- The documentation for your computer should come in handy during the installation. Have it ready by your side.
- You may be prompted for your Windows CD-ROM during the driver installation. Have it ready by your side.



Setting Up Your ADSL Modem

This chapter contains information on how to install and connect your modem card to your computer.

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3.2 Connecting Your ADSL Modem



Carry out the connections as illustrated above.

This completes the ADSL modem card connection. Please proceed with the next chapter to install the driver for your modem.



The connection to the **Telephone set** is **optional**. The **Phone** jack provides convenience to users who need to use the phone when accessing the computer.

The Micro-Filter can be purchased separately from your dealer. The use of Micro-Filter is not required if you are not connecting to a **Telephone set**. For more details on the Micro-Filter usage, you may refer to the **Frequently Asked Questions**, '*Do I need to use Micro-Filter when using ADSL?*'.



Installing Your ADSL Modem Driver

This chapter contains information on how to install the driver for your modem card in Windows[®] 98, Windows[®] 98 Second Edition, Windows[®] Me, Windows[®] XP and Windows[®] 2000.



The screens illustrations in this chapter assume that your **CD-ROM Drive** is '**D**'. Please change the letter according to your own CD-ROM drive.

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- 2. Depending on your system configurations, you may be prompted for the Windows CD-ROM during the driver installation. Have it ready by your side.
- 3. The screen shots, screens information and steps illustrated in this manual serve only as a guide. The exact information and steps you see on your system may vary, depending on your system configurations. For any dissimilarities, follow closely to the instructions as prompted on your PC screen !

4.1 Installing Your ADSL Modem Driver -For Windows[®] 98 / Windows[®] 98 Second Edition

Power on your computer to start Windows. It will detect your newly-installed ADSL modem card and prompt for its driver.







Depending on your system configurations, you *may* be prompted for your **Windows 98 / 98 Second Edition CD-ROM** for some missing files. Replace the **DSL700P Installation CD** in your CD-ROM drive with your Windows CD-ROM and click **OK**.

Insert Disk	X
Please insert the disk labeled 'Windows 98 Second	d Edition CD-ROM', and then click Soc
<u> </u>	ndows 9/ Second Edition LU-RUM cannot be and
In the text box, enter the path	Insert Windows 98 Second Edition CD-ROM in the selected drive, and click OK.
of your Windows CD-ROM	<u>Skip</u> File
and click OK.	Copy files from: D:\w/IN98 ▼
	·

(The path shown here is only an example)



Upon system rebooted, you will be prompted with the following dialog box.

TCP/IP & PVC Setting F Enable DNS Host: ADSL Domain: DNS Server Search Order 165.21.83.88 165.21.100.88 Remove	Ga AE	ter the IP Address and New Address as given by your DSL Service Provider. Address as given by your address as given by your by
IP Address Image: Constraint of the second		Restart your system when prompted. (Allow some time for your system to restart.)
OK Cancel		Upon system rebooted, please proceed with the following chapter to verify if your card has been installed properly.

4.2 **Installing Your ADSL Modem Driver** - For Windows® Me

Power on your computer to start Windows. It will detect your newly-installed ADSL modem card and prompt for its driver.





Upon system rebooted, you will be prompted with the following dialog box.

	Ne giv Pre	ter the IP Address and ew Gatewa y Address as yen by your ADSL Service ovider. ick OK .	
✓ Specify an IP address ✓ Gateway IP Address:		Restart your system when prompted. (Allow some time fo your system to restart.)	r
OK Cancel		Upon system rebooted, please proceed with the following chapter to verify if your card ha been installed properly.	S

4.3 Installing Your ADSL Modem Driver - For Windows[®] XP

Power on your computer to start Windows. It will detect the newly-installed ADSL modem card and prompt for its driver.





Proceed with the following steps to configure the TCP/IP Properties.

< Back

Finish

Cancel

Click Finish to close the wizard.

From your Windows desktop, click Start > All Programs > Accessories > Communications > Network Connections.

Right-click on the Local Area Connection icon that reflects DSL700P model and click Properties.



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Select Internet Protocol (TCP/IP) and click Properties.

Internet Protocol (TCP/IP) Properties						
General						
You can get IP settings assigned autor this capability. Otherwise, you need to the appropriate IP settings.						
🔘 Obtain an IP address automatical	ly .					
💿 Use the following IP address: —						
IP address:	N · ·					
Subnet mask:	255.255.255.0					
Default gateway:	· · ·					
Obtain DNS server address autor	natically					
─⊙ Use the following DNS server add	dresses:					
Preferred DNS server:	165 . 21 . 83 . 88					
Alternate DNS server:	165 . 21 . 100 . 88					
	Advanced					
-	OK Cancel					

Enter the **IP address** and **Default gateway** addresses as given by your ADSL Service Provider. For the rest of the fields, enter as follow:

Subnet mask: 255.255.255.0

Preferred DNS server: 165.21.83.88

Alternate DNS server: 165.21.100.88

Click OK.

This completes the driver installation for your ADSL modem card in Windows® XP.

You may now proceed with the following chapter to verify if your card has been installed properly.

4.4 Installing Your ADSL Modem Driver - For Windows[®] 2000

Power on your computer to start Windows. It will detect your newly-installed ADSL Network Modem Card and prompt for its driver.



4. Installing Your ADSL Modem Driver



You may be prompted with New Signature Not Found dialog box. This occurs when Windows detected a newer version of your driver. Click Yes to proceed.



Proceed with the following steps to configure the TCP/IP Properties.

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From your Windows desktop, right-click on **My Network Places** icon and select **Properties**.

At the **Network and Dial-up Connections** window, right-click on the **Local Area Connection** icon and select **Properties**.

💼 Network and Dial-up Connectio	ns			
File Edit View Favorites To	ools Advance	d Help		
📙 🖶 Back 👻 🔿 👻 💽 🛛 🥘 Searc	h 🔁 Folders	History	🕆 🕆 🗡	n 🛙
Address 🔁 Network and Dial-up Co	nnections			
	æ	⊑∎ւ է	⊑₽ր է	
Network and Dial- up Connections	Make New Connection	Local Area Connectior		
Local Area Connection 2				

	Connection	2 Properti	es		?
	- 1				
Connect	using:				
🕎 D	SL700P AD SI	. Network M	odem		
					Configure
Compon	ents checked	are used by	this conne	ction:	
	Client for Micro	soft Networl	<s< td=""><td></td><th></th></s<>		
🛛 📮	File and Printe	r Sharing for	Microsoft I	Networ	ks
✓ %	TeX ADSL M	anagement a	and Monito	r Interf	ace
	Internet Proto	ol (TCP/IP)			
l lr	istall	Unins	all		Properties
Descri	ption				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	mission Contri area network i				

Internet 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.						
C Obtain an IP address automatic	ally					
 Use the following IP address: — 						
IP address:	· · ·					
Subnet mask:	255.255.255.0					
Default gateway:						
C Obtain DNS server address aut	omatically					
Use the following DNS server a	ddresses:					
Preferred DNS server:	165 . 21 . 83 . 88					
Alternate DNS server:	165 . 21 . 100 . 88					
	Advanced					
	OK Cancel					

Check that the Connect using field reflects DSL 700P ADSL Network Modem.

(This is important if you have more than one Local Area Connection icons displayed. If you do not see your modem model listed, right-click another Local Area Connection icon and check.)

Select Internet Protocol (TCP/IP) and click Properties.

Enter the **IP address** and **Default gateway** addresses as given by your ADSL Service Provider. For the rest of the fields, enter as follow:

Subnet mask: 255.255.255.0

Preferred DNS server: 165.21.83.88

Alternate DNS server: 165.21.100.88

Click **OK**.

This completes the driver installation for your ADSL modem card in Windows[®] 2000.

You may now proceed with the following chapter to verify if your card has been installed properly.



Verifying Your ADSL Modem

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This chapter contains instructions to help you check whether the driver for your modem has been installed properly, as well as to check the status of your ADSL line.

Make sure that you have carry out your connections and driver installation as described in **Chapter 3 and 4**.

You should see a **MAPI Icon**¹ and displayed at your Windows system tray. This implies that your modern driver has been installed successfully. The following illustrates the initial transition stage of the **MAPI Icon**.

Initial transition stage:	
(red,red) (yellow,black) (black,yellow)	
establishing a connection —	

If you see a 'strike-off' MAPI icon¹ a, it means that you did not install the modem driver properly. Please re-install your driver as described in Chapter 4 - Installing Your ADSL Network Modem Driver.

1 A MAPI Icon et is displayed at your Windows system tray when your modem driver is installed successfully. This icon allows you to monitor your ADSL line connection, configure your VPI/VCI values, run diagnostics test and so on. The different MAPI LEDs light indicates different connection states. For details, please refer to Appendix A - ADSL MAPI Icon.



Alternatively, you may check your **Device Manager** for the listing of **DSL700P ADSL Network Modem**.

For Windows® 98 / Windows® 98 Second Edition / Windows® Me

- a) From your Windows desktop, right-click on My Computer. Select Properties.
- b) Select Device Manager tab. Double-click on Network adapters.



You should see DSL700P ADSL Network Modem listed as shown.

If the modem device is not listed, re-install your modem driver as described in **Chapter 4 - Installing Your ADSL Modem Driver**.

If the modem device is listed, but with an exclamation mark on it, select the device and click **Remove**. Re-install your driver as described in **Chapter 4** - **Installing Your ADSL Modem Driver**.

You may now proceed with the following chapter to launch your browser.

For Windows® XP / Windows® 2000

a) Windows® XP: From your Windows desktop, click Start. Right-click on My Computer and select Properties.

Windows® 2000: From your Windows desktop, right-click on My Computer and select Properties.

- b) Click Hardware tab. Select Device Manager button.
- c) Double-click on **Network adapters**.

You should see DSL700P ADSL Network Modem listed as shown.



If the modem device is not listed, re-install your modem driver as described in Chapter 4 - Installing Your ADSL Modem Driver.

If the modem device is listed, but with an exclamation mark on it, right-click on the device and click **Remove**. Re-install your driver as described in **Chapter 4** - **Installing Your ADSL Modem Driver**.

You may now proceed with the following chapter to launch your browser.



Ready to Go!

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6.1 Connection Ready

You are now connected to the Internet. (You should see the MAPI Icon displaying **2 black LED**s **and** as described in **Chapter 5**.)

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Launch your Internet Browser (Internet Explorer / Netscape Navigator / Netscape Communicator and so on) and start surfing!

6.2 Checking Your ADSL Line Status

To check the ADSL connection status, at the corner of your Windows taskbar, rightclick on the MAPI Icon

Select **ADSL Status**. The **ADSL State** will indicate **Connected** if you are still connected to the ADSL.

Onen	ADSL Status	×
Open Disconnect ADSL Status Diagnostic ADSL Stating : Configure 1 Exit	ADSL Status ADSL Connection Information ADSL State Protocol T1.413 issue 2 Transmit / Receive Rate (Kbps) Data Rate Upstream 448	X
	Downstream 3488	e.

(The figures shown are examples. Your transmission rates may not be as shown.)



Uninstalling Your ADSL Modem Driver

This chapter contains information on how to uninstall your modem driver in Windows[®] 98, Windows[®] 98 Second Edition, Windows[®] Me, Windows[®] XP and Windows[®] 2000.



Ensure that your ADSL Modem Card is in your computer (in the PCI-Bus Slot) before you proceed with the following uninstallation process.

From your Windows taskbar, click **Start** > **Programs** > **DSL700P** > **Uninstallation**.

Follow the on-screen instructions to complete the uninstallation process. Restart the system when prompted.

(For Windows[®] 2000 and Windows[®] XP, system restart is not required. Uninstallation completes when you see the MAPI Icon removed from the system tray

However, if you are re-installing DSL700P modem driver, you need to restart your system before doing so.)





This chapter explains the functions on the MAPI Icon.

The MAPI Icon allows you to monitor your ADSL connection, ATM/ADSL states, configure the PVC values and run a few diagnostics tests.

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Upon successful driver installation, the MAPI Icon \blacksquare will be displayed at the your Windows system tray.

A-1 MAPI LEDs

The **left LED** indicates **information being transmitted** and the **right LED** indicates **information being received**. The following table summaries the LED activities.

LED	Description
Red, Red	No ADSL connection
Black, Yellow is flashing or Yellow, Black is flashing	Establishing ADSL connection
Black, Black	ADSL Connection established - no data traffic
Green, Green	ADSL Connection established - modem is transmitting and receiving data
Green, Black	ADSL Connection established - modem is transmitting data
Black, Green	ADSL Connection established - modem is receiving data
Ø	Modem is disconnected, or a problem exists

A-2 MAPI Menu

Right-click the **MAPI Icon .** The **MAPI Menu** will be displayed. A-2-1 to A-2-5 will describe each of the option.



A-2-1 Connect/Disconnect

(with reference to A-2. MAPI Menu)

This option allows you to connect or disconnect from the Telephone Exchange.

For advanced users (A-2-2 to A-2-5)

A-2-2 ADSL Status

(with reference to A-2. MAPI Menu)

This dialog box allows you to **monitor the ADSL connection** as well as the **transmit and receive line rates**.

- ADSL State displays the current status of the modem.
- **Protocol** displays which ADSL standard is being used.
- Transmit/Receive Rate shows the line rate for both the upstream and downstream.

ADSL Diagnostic Tools	×
ADSL Status Diagnostic ADSL Statistic	
, <u>-</u> , , , , , , , , , , , , , , , , , , ,	
ADSL Connection Information	
ADSL State Connected	
Protocol T1.413 issue 2	
Transmit / Receive Rate (Kbps)	
Data Rate	
Upstream 448	
Downstream 3488	
Downstieann 19400	

A-2-3 Diagnostic

(with reference to A-2. MAPI Menu)

This option allows you to view the product information and to perform hardware test on the ADSL card (e.g. ADSL Bridge test and Registers test).

Product Info lists the versions of the MAPI lcon and the protocol driver installed. The DLL version describes the software being used by both the drivers and MAPI lcon.

Run Diagnostics performs a brief hardware check and display the hardware status. (*Close all Dial-up sessions before running the diagnostic test.*)

Dia	agnostic	×
	*** Diagnostic Report ***	
	Hardware Test : "ADSL Bridge - PCI I/O Test" ==> Pass	
	Hardware Test : "1901 35 Registers Test" ==> Pass Hardware Test : "1901 35 Memory Test" ==> Pass	
	Hardware Test : "ADSL Bridge - PCI DMA Loopback"	
	Fast ==> Trial:20, Pass:20 Interleave ==> Trial:20, Pass:20	
	Hardware Test : "i90135 Utopia Loopback"	
	Fast ==> Trial:20, Pass:20	
	Product Info Run Diagnostics Close	

This information is useful whenever making a technical support call.

A-2-4 ATM/ADSL Statistic

(with reference to A-2. MAPI Menu)

This dialog box keeps tabs on **errors** that might affect overall system performance. The counts are reset whenever the PC system is restarted.

ADSL Statistic	×
ADSL Information	ATM Receive Side Statistics
Re-training Count 1	Good Received Packets 0
FEC Count 0	Bad Received Packets
CRC Count 0	
ATM HEC Count 0	ADSL Connection Information
	ADSL State Connecting
ATM Transmission Side Statistics	
Transmitted Packets 0	Close

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• **Re-training Count** tracks the *number of ADSL connections performed*. Due to unexpected line condition changes, the driver can retrain the connection causing the Re-training Count to increase.

ADSL implements Reed Solomon (RS) error checking:

- **FEC Count** tracks the forward error correction count.
- **CRC Count** tracks the accuracy of correcting data errors over each 17msec.
- **ATM HEC Count** (header error check) errors are recorded as an *indication of ATM packet accuracy*.

As a measure of packet transfer performance, the Packet Errors are counted and tracked against the total number of **Packets Received**. An error rate of less than 0.1% is reasonable under clean ADSL line conditions.

If you have received *Bad Received Packets* and are concerned about your service, multiply the Bad Received Packets count by *1000* and compare the result with the *total Packets Received* count. If the number is *smaller* than the total *Packets Received* count, then the board is operating normally.

- ATM Transmission Side Statistics displays the number of packets transmitted.
- **ATM Receive Side Statistics** displays the *number of good and bad packets received*.

A-2-5 Configuration

(with reference to A-2. MAPI Menu)

This option allows you to check or change the ADSL network modem **PVC values**.



• To configure VPI/VCI values or add multiple ISP names or multiple VPI/VCI values, click PVC Table. The following window will be prompted.

SP Name	Vpi / Vci	Protocol	Framing	Status
ADSL Service Provide	0,101	1577	LLC/SNAP	Active
Edit Add	Remov	/e Activate	1	Close,

• To **edit** any existing configuration(s), select the ISP and click **Edit**.

At the **Edit PVC Entry** prompt, overwrite the existing values with new values as given by your ADSL Service Provider and click **Apply**, followed by **OK**.

Edit PVC En	try 🔀
ISP Name	ADSL Service Provider
Vpi	0
Vci	101
Protocol	1577
Framing	LLC/SNAP
Services	▼ Refresh
Status	
	<u>D</u> k Cancel Apply

- To add a new configuration, at the PVC Table prompt, click Add. Enter your new ISP Name, VPI, VCI values and click OK.
- To remove an existing configuration, at the PVC Table prompt, click on the ISP Name and click Remove.
- You may activate any of your configurations by selecting the ISP Name and click Activate.



Technical Specifications

This chapter contains the technical specifications of your card. The information may be more useful for technically inclined users.

B-1 Drivers Support

- Windows[®] 98
- Windows® 98 Second Edition
- Windows® Me
- Windows® XP
- Windows® 2000

B-2 Features

- 32-bit Controllerless ADSL PCI Modem
- UTOPIA Specifications Level I and Level II compliant
- ANSI T1.413 issue 2, ITU-T G.992.1 (G.dmt) and G.992.2 (G.lite) compliant
- Using Discrete Multi-Tone (DMT) line encoding scheme
- Full rate transmission at up to 8 Mbps downstream and 640 Kbps upstream
- G.lite transmission at up to 1.5 Mbps downstream and 512 Kbps upstream
- Rate Adaptive modem at 32 Kbps steps
- Up to 18,000 ft loop reach
- PCI 2.1 Power Management specification compliant
- Software upgradable for future feature enhancement
- Full RFC1483/RFC1577/ RFC2364 protocol stack support
- Spectral compatibility with POTs

B-3 ADSL Chipset

Using ITEX Apollo2 Chipset:

- I90188 ADSL PCI/UTOPIA Interface
- I90135 ADSL DMT Modem and ATM Framer
- I90134 ADSL Analog Front End
- NDIS 5.0 miniport driver

B-3-1 I90188 ADSL PCI/Utopía Interface

- PCI 32-bit Bus Master Interface compliant to PCI Specification v2.2
- UTOPIA Level I v1.0 and Level II v2.01 support for D0 and D3 hot
- I90135 Configuration Register Interface
- ANSI T1.413 issue 2, ITU-T G.992.1 (G.dmt) and G.992.2 (G.lite) compliant
- AC'97 Digital Controller compliant to AC'97 Specification 2.1
- +3.3-volt & +5-volt supplies, 1.60-pin PQFP

B-3-2 I90135 ADSL DMT Modem & ATM Framer

- ANSI T1.413 Issue 2 standard DMT modem with embedded ATM Framer
- Standard Utopia Level I and Level II ATM Interfaces
- DMT Modulation up to maximum of 256 tones (14 bits)
- ADSL/ATM cell-specific Framing and Deframing
- Generic ATM TC Layer functions
- ATM Specific TC Layer functions
- Rotor and Frequency Domain Gain Correction and Equalization
- Performs DMT Modulation, Demodulation, Reed-Solomon Encoding, Bit Interleaving, and 4D Trellis Coding
- 3.3-volt, 144-pin PQFP
B-3-3 I90134 ADSL Analog Front-End

- Integrated Analog Front End (AFE) for ADSL
- High sampling rate at 8.832 MHz for both ADC and DACs
- Two (2) 12-bit DACs, One 13-bit ADC
- Differential Analog Input/Output
- Accurate continuous-time low pass filters for channel filtering
- 3.3-volt, 64-pin LQFP

B-4 ADSL Software Support

- ATM Layer with Traffic shaping
- AAL ATM Attributes AAL5 & SAR
- RFC-2364 PPP over ATM PVCs
- RFC-1483 Routed IP over ATM PVCs
- RFC-1577 Classical IP over ATM PVCs
- UNI 3.0, 3.1 and UNI 4.0 ATM Signalling

B-5 Interfaces

B-5-1 External connectors

- 2 x RJ-11 Telephone socket for telephone line & handset



The specifications herein are subject to change without prior notification.



Frequently Asked Questions

This chapter provides the answers to some of the commonly asked questions on your modem.



What is ADSL ?

ADSL, Asymmetric Digital Subscriber Line is a broadband communication technology designed for use on regular phone lines. It has the ability to move data over the phone lines at speeds up to 140 times faster than the analog modem available today.

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Why is it called Asymmetric ?

It is called asymmetric because more bandwidth is reserved for receiving data than for sending data. This is useful because many users of the Internet receive much more data than they send.



What are the benefits of ADSL over analog modems ?

Besides the high-speed advantage, ADSL connection is always on. There is no longer a need to log on and off, no more busy signals and no more waiting for the connection to established - it is always there. On top of these, you can use the phone even when the data connection is on. You do not need to switch between surfing the Net and talking over the phone.



Will my modem constantly connect near the maximum speed ?

At ADSL speeds, the limitations are much more of the performance of the Internet server you are trying to reach and the amount of traffic on the Internet.



Can I connect to the "SingTel Magix Service" everywhere I go?

No, you cannot. You can connect to this service, only via ADSL phone line enabled for the SingTel Magix Service provided by your ADSL Service Provider.



Can I run both dial-up modem and ADSL modem?

Yes, but it is not recommended. You may experience slowness during surfing as well as incurring additional cost of maintaining two active connections.



Do I need to use Micro-Filter when using ADSL?

Yes, if you are sharing your DSL line with your telephone. The Micro-Filter would eliminate noise on the telephone line to ensure the best possible networked phone performance. All telephone line extensions using the same telephone number will need to attach to a Micro-Filter. If the DSL uses a different line and not sharing with your telephone, then a Micro-Filter wouldn't be necessary.



How do I most efficiently connect Micro-Filters to my telephone network ?

Please refer to the diagram on the following page.

Generally, you should abide to the following rules:

- 1. There must not be any Micro-Filters between your ADSL modem card and your Telephone Wall socket.
- 2. Micro-Filters are not required if you are not connecting to your Telephone sets.
- 3. Restrict the number of Micro-Filters to a maximum of 4.



C-1. Connecting Micro-Filter to your Telephone

Appendix D

Troubleshooting Guide

You may encounter some problems while installing or using your modem. This chapter highlights some of the more common issues concerning your modem and their possible solutions.



My system does not detect the ADSL Modem when I boot up for the first time.

Make sure your ADSL Modem card is fully inserted into the PCI-Bus slot. If your system is still not able to detect the modem, your PCI-Bus slot may be faulty. Locate another available PCI-Bus slot and try again.



The MAPI Icon on the taskbar retrains (with blinking yellow LEDs) every time I use the phone while surfing on the Internet.

Make sure that you have connected the Micro-Filter as described in section 3.2 - Connecting Your ADSL Modem.



I accidentally exited from my MAPI Icon. How do I called out the icon again ?

From your Windows taskbar, click **Start** > **Programs** > **DSL700P** > **ADSL Diagnostics Tools**.



My ADSL Modem fails to establish an ADSL connection (MAPI LEDs keeps blinking).



Try one of the following suggestions:

- 1. Right-click on the MAPI Icon and select Disconnect, followed by Connect again.
- 2. Try restarting your PC system.

If the condition changes with the time of the day, there could be a possible problem with the line.

Appliances near your PC may also be introducing noise to your ADSL service. Minimise appliances around your PC.



I cannot install the modem driver successfully in Windows® 2000.

- 1. Right-click My Computer and select Properties
- 2. Click the Hardware tab and click on Device Manager... button.
- 3. Double-click on the Network Adapters device.

If you see the device **DSL700P ADSL Network Modem** with an exclamation mark, please refer to *Chapter 5 - Verifying Your ADSL Modem* on how to re-install your modem driver.

If you see the device **Network Controller** with an exclamation sign, please carry out the following steps to re-install your modem driver.

- 4. Double-click on the **Network Controller** device.
- 5. Click Reinstall Driver... .
- 6. The Upgrade Device Driver Wizard window will be prompted. Click Next to proceed.
- 7. Click Next again on the next window.
- 8. On Locate Driver Files section, unselect all options except Specify a location.
- 9. Click **Browse** and navigate to the CD-ROM drive. Ensure that the DSL700P Installation CD is already loaded.
- 10. Double-click on **3_Win2K** folder and click **Open**.
- 11. Click **OK**.
- 12. Click Next to proceed with the installation.
- 13. At a **Digital Signature Not Found** prompt, click **Yes** to proceed.
- 14. Click Finish to complete the installation.



I am not able to remove the modem driver from my system (the MAPI lcon is still at my taskbar). (For Windows 2000 and Windows XP only)



This can happen if you have removed the modem card from your system **before** removing the modem driver.

Please carry out the following remedies to remove the modem driver.

1. Insert the modem card back to your PCI-Bus slot. It should be the same PCI-Bus slot that you have previously inserted for your modem card.

(If you see the MAPI icon being 'strike-off' and your system starts to re-detect for your ADSL Modem, it means that you did not insert your modem card back to correct PCI-Bus slot. At the prompt to install the ADSL Modem driver, click **Cancel**. Shut-down your system, plug out the modem card and insert the card to the correct PCI-Bus slot.)

 Click Start > Programs > DSL700P > Uninstallation to remove the driver.



My MAPI LEDs shows 2 black LEDs (indicating ADSL line established), but I am still not able to surf the Internet.

Carry out the following steps to check the configurations for your Internet connection:

- 1. Right-click on the MAPI Icon and select Configuration.
- 2. From the dialog box prompted, click PVC Table.
- Check your settings. Correct Vpi/Vci, Protocol and Framing values should be 0,101, 1577 and LLC/SNAP respectively.
 Click Edit to make changes if required. For details, you may refer to Appendix A - ADSL MAPI Icon, section A.2.5.

Another reason could be that you are not registered for the listed service. Subscribe to the service and try again.



There is no sound when video is being streamed.

Ensure that Master Volume Control under the desktop system tray (bottom right hand corner of your screen) is not set to "mute".



My ADSL connection disconnects when I run the Diagnostic program.

Running the Diagnostic program will disconnect your Modem from the ADSL Line. To re-activate the ADSL Line, right-click the **MAPI Icon** and select **Connect**.



Technical Support

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E-1 Aztech Sales Enquiries

Hotline	:	(65) 6741 7211 (Marketing and Sales Department)
Email	:	sales@aztech.com
Fax	:	(65) 6749 1198
Working Hours	:	Monday to Friday - 0900 to 1700 Saturday/Sunday/Public Holidays - Closed

E-2 Aztech Technical Support

Hotline	:	(65) 6741 7211
Email	:	support@aztech.com
Fax	:	(65) 6749 1198
Working Hours	:	Monday to Friday - 0900 to 1700 Saturday/Sunday/Public Holidays - Closed

E-3 Technical Support Considerations

Majority of enquiries can be resolved efficiently. However, there may be cases when it is beyond our technical support to assist you. We may not be able to assist you in:

Hardware conflicts

We will try to discover them and make suggestions but we are unable to repair them over the telephone.

• Software conflicts

Removal of other software and reinstalling our software may be the only solution.

• O/S problem

If you encounter problems like fatal exception or illegal operation, kindly refer to your PC vendor.

• Modifications made to your software

Our technical support officers are trained to support the software we provide as part of our service and they are knowledgable about a wide range of other programs. However, we are unable to support software that has been modified.

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