Prestige 630

ADSL USB Modem

User's Guide

Versions 1.0.2.1 and 1.0.2.2 for Mac OS 8.6, 9.1 and 9.2 October 2002



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Information for Canadian Users

The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective operation and safety requirements. The Industry Canada does not guarantee that the equipment will operate to a user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

For their own protection, users should ensure that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution

Users should not attempt to make such connections themselves, but should contact the appropriate electrical inspection authority, or electrician, as appropriate.

Note

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the radio interference regulations of Industry.

Federal Communications Commission (FCC) Interference Statement

This device complies with Part 15 of 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 operations.

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 commercial environment. 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.

If this equipment does cause harmful interference to radio/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 the receiving antenna.

Increase the separation between the equipment and the 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.

Notice 1

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Certifications

Refer to the product page at www.zyxel.com.

FCC v

Customer Support

When contacting your Customer Support Representative, please have the following information ready:

- Product model and serial number.
- Warranty Information.
- ♦ Date you received your Product.
- Brief description of the problem and the steps you took to solve it.

METHOD	E-MAIL SUPPORT/SALES	TELEPHONE/FAX	WEB SITE/ FTP SITE	REGULAR MAIL
LOCATION				
WORLDWIDE	Support@zyxel.com.tw	+886-3-578-3942	www.zyxel.com	ZyXEL Communications Corp., 6
	Support@europe.zyxel.com		www.europe.zyxel.com	Innovation Road II, Science- Based Industrial Park, Hsinchu, 300. Taiwan
	Sales@zyxel.com.tw	+886-3-578-2439	ftp.europe.zyxel.com	
NORTH AMERICA	Support@zyxel.com	+1-714-632-0882 800-255-4101	www.zyxel.com	ZyXEL Communications Inc., 1650 Miraloma Avenue,
	Sales@zyxel.com	+1-714-632-0858	ftp.zyxel.com	Placentia, CA 92870, U.S.A.
SCANDINAVIA	Support@zyxel.dk	+45-3955-0700	www.zyxel.dk	ZyXEL Communications A/S, Columbusvej 5, 2860 Soeborg,
	Sales@zyxel.dk	+45-3955-0707	ftp.zyxel.dk	Denmark
GERMANY	Support@zyxel.de	+49-2405-6909-0	www.zyxel.de	ZyXEL Deutschland GmbH.
	Sales@zyxel.de	+49-2405-6909-99		Adenauerstr. 20/A4 D-52146 Wuerselen, Germany

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Preface

This User's Guide provides instructions for using the Prestige 630 ADSL USB modem with Macintosh computers using Mac OS 8.6, 9.1 and 9.2 and later, but before OS X.

Features

The ZyXEL Prestige 630 ADSL USB Modem provides the following features:

- Compliant with Universal Serial Bus Specification Revision 1.1
- USB bus-powered; an external power supply is not required
- Compatible with all G.DMT compliant Central Office (CO) Digital Subscriber Line Access Multiplexer (DSLAM) equipment
- Software upgradable
- Includes a user interface screen for checking the status of the connection
- An RJ-11 port for ADSL connection
- Support for DSL downstream data rates of up to 8 Mbps
- Support for DSL upstream data rates of up to 800 Kbps.

Related Documentation

Included CD

This disk contains the installation driver, release note, support note, supporting software and information on product registration.

Glossary and ZyXEL Web Site

Please refer to <u>www.zyxel.com</u> for an online glossary of networking terms or the ZyXEL download library for additional support documentation.

About This Manual

This manual provides information about modem installation and operation.

Syntax Conventions

- Mouse action sequences are denoted using a comma. For example, "click the Apple icon, Control
 Panels and then Modem" means first click the Apple icon, then point your mouse pointer to Control
 Panels and then click Modem.
- "Select" or "Choose" means for you to use one of the predefined choices.

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- Button and field labels, links and screen names are in **Bold Times New Roman** font.
- Predefined choices are in **Bold Arial** font.
- The "ZyXEL Prestige 630 ADSL USB Modem" is also referred to as the "modem" in this manual.
- Driver version 1.0.2.1 is the RFC 1483 driver.
- Driver version 1.0.2.2 is the PPPoA driver.

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Chapter 1 Installing Your Modem

This chapter shows you how to install your modem and USB driver and introduces the ports and LED indicators

1.1 Operating Systems

The modem drivers are compatible with the Macintosh operating system versions 8.6, 9.1 and 9.2 and later (but not X).

Click the Apple icon and then **About This Computer** in order to see which OS version is on your Macintosh



Figure 1-1 About This Computer

The screens you see may differ slightly from the screens shown depending on the version of your operating system.

1.2 Needed Information

Fill in the table below with information from your Internet Service Provider (ISP) and telephone company before installation. You may not need to fill in every blank.

Table 1-1 Needed Information

REQUIRED INFORMATION	FILL IN THE BLANKS
Driver Type: RFC 1483 or PPPoA.	
User Name: For PPPoA, this lets your ISP know which account you are logging into.	
Password: For PPPoA, this protects your account from unauthorized use.	

Your modem supports **RFC 1483** and **PPPoA** (Point to Point Protocol over ATM) drivers. These refer to the underlying data transport protocols. Use the RFC 1483 driver with always-on accounts and the PPPoA driver with dial-up PPPoA accounts.

1.3 Installation

The following sections describe how to install your modem driver and modem. Install the modem driver first and then the modem hardware.

Save and close all other running programs before installing the modem driver.

1.3.1 Modem Driver Installation

- **Step 1.** Insert the included CD into the CD-ROM drive. An icon for the CD appears.
- **Step 2.** Double-click the CD's icon.
- **Step 3.** Double-click the Mac 8.9 folder.
- **Step 4.** The Mac 8.9 folder contains two folders, one for RFC 1483 and one for PPPoA. Double-click the RFC 1483 folder if you need a RFC 1483 driver. Double-click the PPPoA folder if you need a PPPoA driver.
- Step 5. The folder contains either the USB ADSL Modem App icon (for RFC 1483) or the ADSL PPP Modem App (for PPPoA) icon. Double-click the USB ADSL Modem (or ADSL PPP Modem) icon.

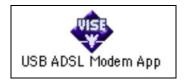


Figure 1-2 USB ADSL Modem App Icon



Figure 1-3 ADSL PPP Modem App Icon

- **Step 6.** Click Continue in the Readme Text screen.
- **Step 7.** Click **Agree** in the **License Agreement** screen.
- **Step 8.** Click Continue in the Install screen.
- **Step 9.** Make sure you have saved and closed all other running applications and click **Continue** in the screen that tells you to restart your after you install this driver.
- **Step 10.** Click **Restart** to restart your computer.

1.3.2 Modem Hardware Installation

Step 1. Connect the square end of the USB cable to the back of your modem and then connect the rectangular end of the USB cable to your computer's USB port.

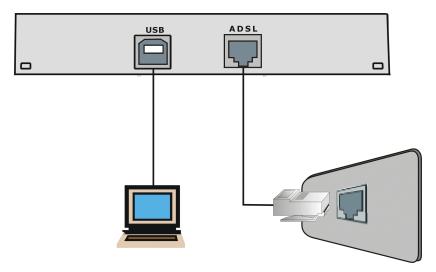
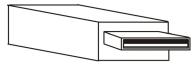


Figure 1-4 Back Panel Connections





Connect this cable end to your modem.

Connect this cable end to your computer.

Figure 1-5 USB Cable Connectors

Step 2. Use a telephone wire to connect the ADSL port to a telephone wall jack.

You may opt to buy a telephone microfilter to install between the wall jack and your telephone(s). A microfilter acts as a low pass filter that screens out possible interference.

Use a splitter (optional) in order to plug a phone into the same telephone line. See the following figure.

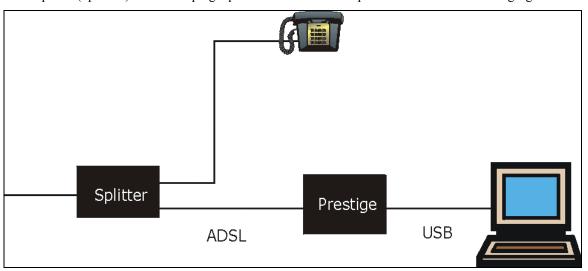


Figure 1-6 Splitter

1.4 Front Panel LEDs

The LEDs on the front panel of your modem indicate operational status. The table after the following figure describes the LED functions.

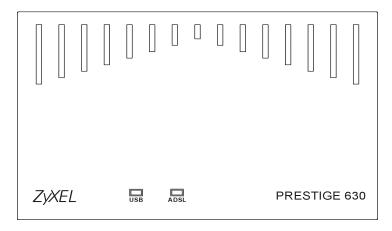


Figure 1-7 Front Panel LEDs

1.5 Front Panel LED Descriptions

Table 1-2 LED Descriptions

LED	FUNCTION	DESCRIPTION
	USB Interface and Modem	This LED is off when the modem's USB port is not connected or not receiving power.
Power Connection		The LED is on when the USB is connected, receiving power, and the driver software is installed.
		This LED blinks during data transfer or whenever the ADSL link is up.
ADSL	ADSL Interface	This LED is off when the software driver has not been installed or after you click the Disconnect button in the CSA interface.
		This LED is on when the ADSL link is up.
		This LED blinks when the ADSL link is connecting or waiting to connect.

Chapter 2 Configuring Your Macintosh for Internet Access

The following sections describe how to configure your Macintosh computer for ADSL Internet access using the RFC1483 or PPPoA driver you installed in 1.3.1.

2.1 Configuring Your Mac for RFC1483 and Making a DSL Connection

Use the following steps to configure your Macintosh when using a RFC1483 driver.

Step 1. Click the Apple icon, Control Panels and TCP/IP.

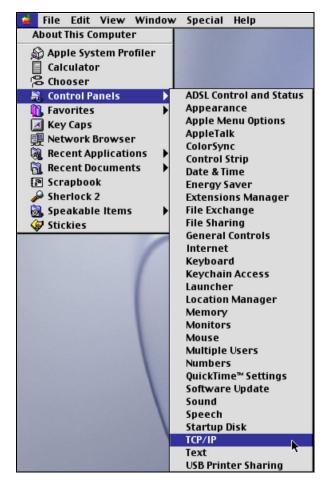
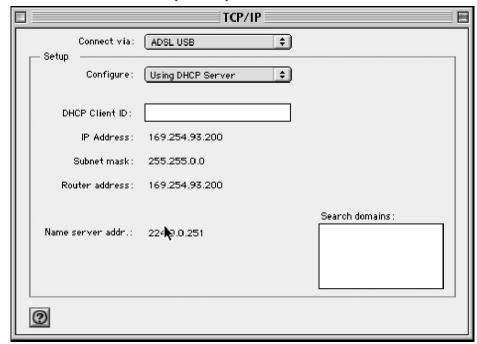


Figure 2-1 Path to TCP/IP Configuration

Step 2. Select ADSL USB in the Connect via field. Select Using DHCP Server in the Configure field if your ISP has will dynamically (automatically) assign your IP address. Follow your ISP's instructions if it tells you to enter an IP address.



Step 3. Enter the **DHCP Client ID** if your ISP provided one. Close the screen.

Figure 2-2 TCP/IP Settings for RFC1483

Step 4. Refer to section 3.1.1 for how to access the Control and Status interface. Use the Connect button (see section 3.2.4).

2.2 Configuring Your Mac for Making a PPPoA Connection

Use the following steps to configure your Macintosh when using a PPPoA driver. PPPoA is a dial-up connection, so after you configure the driver, you also have to create a dial-up connection to use. This is not necessary with RFC 1483.

Step 1. Click the Apple icon, Control Panels and then Modem.

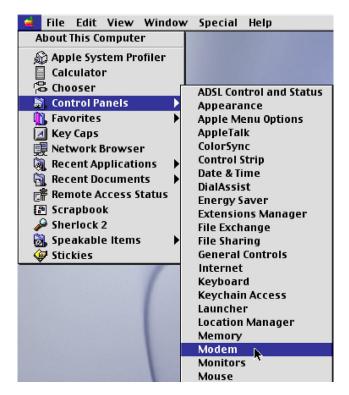


Figure 2-3 Path to Modem Configuration

Step 2. Select ADSL USB PPP for the Connect via field. Select AME USB Modem (PPP) in the Modem field, Off in the Sound field, Tone in the Dialing field, and the Ignore dial tone check box.

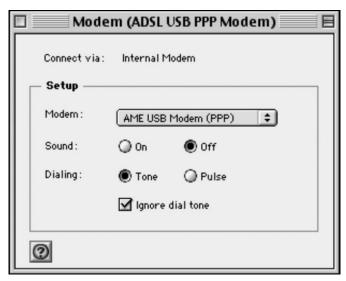


Figure 2-4 PPPoA Configuration

Step 3. Click the Apple icon, Control Panels and then TCP/IP (refer to Figure 2-1).

Step 4. Make sure that the **Connect via** field is set to **PPP** and the **Configure** field is set to **Using PPP Server** and close the window.

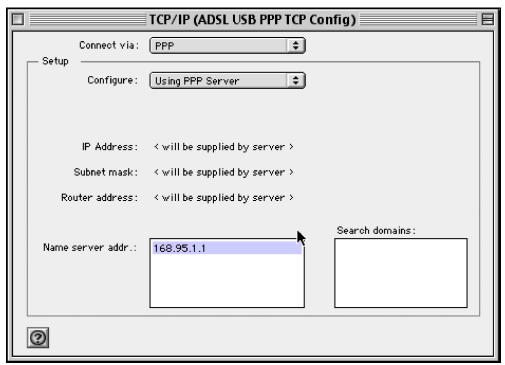
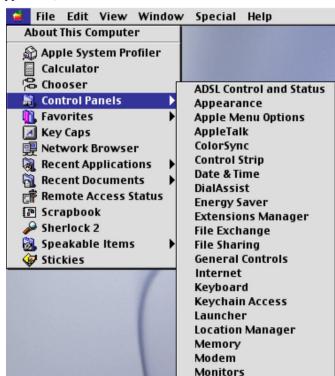


Figure 2-5 TCP/IP Settings for PPPoA



Step 5. Click the Apple icon, **Control Panels** and then **Remote Access**.

Figure 2-6 Path to Remote Access Configuration

Mouse Multiple Users Numbers

QuickTime™ Settings Remote Access Software Update

Step 6. Click the **Options** button.

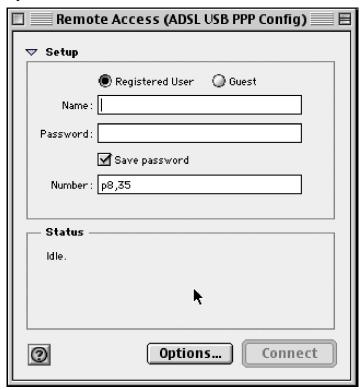


Figure 2-7 Remote Access

Step 7. In the Connection tab, select the Use verbose logging, and Flash icon in menu bar while connected check boxes. If you are using OS 8.6, go to the next step. Otherwise, click **OK** and go to section 2.3 to set up a dial-up connection.

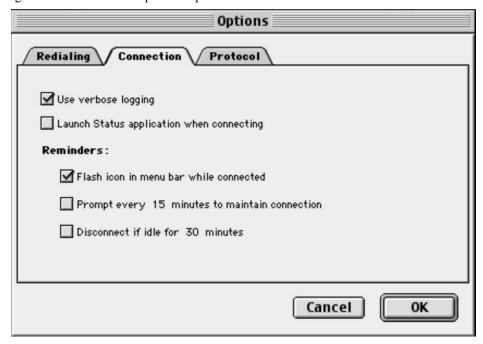


Figure 2-8 Remote Access: Connection Tab

Step 8. With OS 8.6 only, click the Protocol tab and make sure that the Use Protocol field is set to PPP. Select the Connect automatically when starting TCP/IP applications, Allow error correction and compression in modem and Use TCP header compression check boxes. Click OK. Go to section 2.3 to set up a dial-up connection.

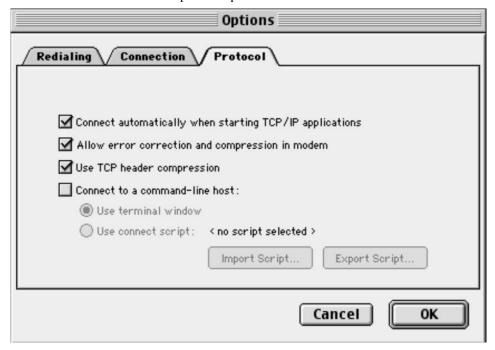


Figure 2-9 Remote Access: Protocol Tab (OS 8.6 Only)

2.3 PPPoA Dialup Connection Setup

Follow these steps to create a dial-up connection.

- **Step 1.** Use one of the following methods to open **Remote Access**.
 - Click the Apple icon, **Control Panels** and then **Remote Access** (see *Figure 2-6*).

• Double-click the **ADSL USB Modem Settings** shortcut on the desktop.



Figure 2-10 Desktop Remote Access Icon

Step 2. Enter the name and password that your ISP gave you.

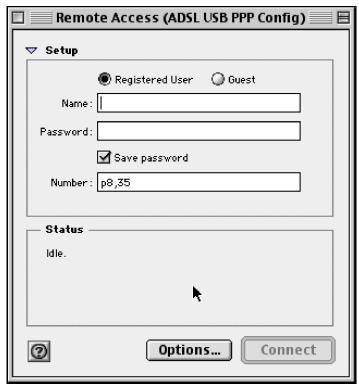


Figure 2-11 Initiate the Dial-up Connection

Step 3. Refer to section 3.1.1 for how to access the Control and Status interface. Use the Connect button (see section 3.2.4).

Chapter 3 Control And Status

This chapter introduces the Control and Status Application GUI.

3.1 CSA

The CSA (Control and Status Application) displays information about your modem's status and performance, and also allows you to connect or disconnect an ADSL connection.

3.1.1 Accessing the CSA

Click the Apple icon, Control Panels, USB ADSL Control and Status.

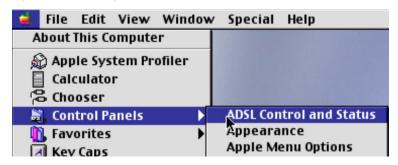


Figure 3-1 Access Path to the CSA

Control and Status 3-1

3.2 ADSL Control and Status Interface Screen

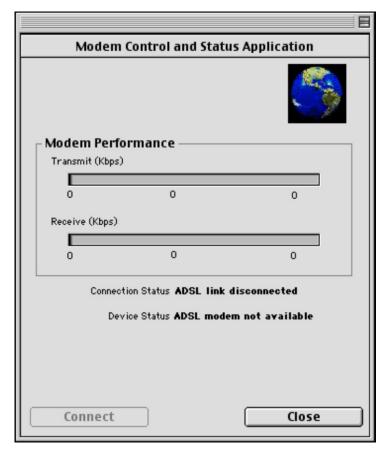


Figure 3-2 Control and Status Application

3.2.1 Modem Performance

Two bar graphs indicate the throughput rates. One indicates the transmit rate (upstream) of data being sent out from the modem and the second indicates the receive rate (downstream).

3.2.2 Connection Status

This field displays **ADSL link connected** when there is an ADSL connection. It displays **ADSL link disconnected** when there is not an ADSL connection.

3-2 Control and Status

3.2.3 Device Status

This field displays **ADSL modem available** when the modem is properly connected to the computer and the modem driver is installed. The field displays **ADSL modem not available** when the modem is not connected to the computer or the modem driver is not properly installed.

3.2.4 Connect

The connect/disconnect functions are controlled by the **Connect/Disconnect** button. The button is disabled when the modem is unavailable. This happens when the modem driver fails to communicate properly or is disabled.

The status of the modem determines the button text. **Connect** is displayed when the modem is not connected and not cycling in order to connect. **Disconnect** is displayed when the modem is connected.

3.2.5 Close

The Close button closes only the CSA interface screen and does not have any affect on the ADSL connection.

Control and Status 3-3

Chapter 4 Uninstalling Your Modem

This chapter tells how to uninstall your modem hardware and software.

4.1 Uninstalling the Hardware

Disconnect the USB cable from your Macintosh's USB port.

4.2 Uninstalling the Driver

Use the following steps to remove your modem's software driver.

Save and close all other running programs before installing the modem driver.

- **Step 1.** Insert the included CD into the CD-ROM drive. An icon for the CD appears.
- **Step 2.** Double-click the CD's icon.
- **Step 3.** Double-click the Mac 8.9 folder.
- **Step 4.** The Mac 8.9 folder contains two folders, one for RFC 1483 and one for PPPoA. Double-click the RFC 1483 folder if you need a RFC 1483 driver. Double-click the PPPoA folder if you need a PPPoA driver.
- Step 5. The folder contains either the USB ADSL Modem App icon (for RFC 1483) or the ADSL PPP Modem App (for PPPoA) icon. Double-click the USB ADSL Modem (or ADSL PPP Modem) icon.



Figure 4-1 USB ADSL Modem App Icon



Figure 4-2 ADSL PPP Modem App Icon

Step 6. Select **Uninstall** in the upper left corner box. Click **Continue**.

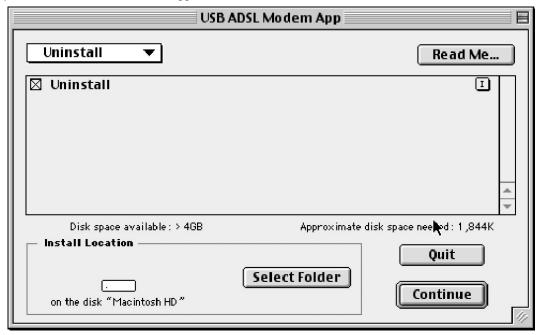


Figure 4-3 Select Uninstall

- **Step 7.** Make sure you have saved and closed all other running applications and click **Continue** in the screen that tells you to restart after you uninstall this driver.
- **Step 8.** Click **Restart** to restart your computer and complete the uninstall.

Chapter 5 Troubleshooting

This chapter covers potential problems and the possible solutions.

Table 5-1 Troubleshooting

PROBLI M	CORRECTIVE ACTION
None of the LEDs turn on when	Make sure your computer is turned on.
I start the modem.	Check the USB cable connections between the modem and your computer.
	Click the Apple icon, Control Panels . Install the software driver if ADSL Control and Status is not present.
	Carefully follow the instructions in this User's Guide to uninstall and reinstall the software driver.
I cannot access the modem via my computer.	Make sure the modem's USB port is connected to your computer's USB port.
	Disconnect the USB cable from the modem and reconnect it.
	Click the Apple icon, Control Panels . Install the software driver if ADSL Control and Status is not present. Make sure you restart your computer at the end of the installation process.
I cannot connect to the Internet.	Make sure the ADSL port is properly connected to the telephone wall jack.
	Use the Connect/Disconnect button in the ADSL Control and Status screen to reinitiate the ADSL connection.
	With PPPoA, make sure that you have configured your Macintosh for making a PPPoA connection and that you have entered the correct user name and password (see 2.2 and 2.3).
	Restart your computer.

Troubleshooting 5-1

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