



802.11n VDSL2 4-port Gateway

Firmware v1.00 Edition 1, 9/2009

DEFAULT	LOGIN DETAILS
IP Address:	http://192.168.1.1
Username:	admin
Password:	1234





www.zyxel.com

Device Panels



2

Introduction

The P-870HN-51b is a VDSL2 gateway that provides super high-speed Internet access. You can have multiple ADSL (ADSL, ADSL2, ADSL2+) connections or multiple VDSL (VDSL, VDSL2) connections over a telephone line. You cannot have ADSL and VDSL connections at the same time. The P-870HN-51b also provides IEEE 802.11b/g/n wireless networking capability.



Overview

- Before You Begin, on page 4
- Hardware Connections, on page 5
- Initial Configuration, on page 7
- WLAN Setup with WPS, on page 11

Before You Begin

Make sure you have the following things before you set up your P-870HN-51b.

- Internet access account information provided by your ISP, such as user name, password, and so on.
- Internet Explorer 6.0 or later or Netscape Navigator 7.0 or later, with JavaScript enabled.

See the User's Guide for all configuration details including file sharing and setting up a shared printer.

To read the User's Guide insert the CD that came in the box into your CD-ROM drive. A screen should pop up. Navigate to the User's Guide from this screen. If a screen does not pop up, open Windows Explorer (click My Computer), click on the CD-ROM drive (usually drive D) and navigate to it from there.

Hardware Connections

This section shows you how to set up your P-870HN-51b.



- **1.** Point the antenna up.
- 2. DSL: Use a telephone wire to connect this port to a telephone jack (or the DSL or MODEM jack on a splitter, if one is already installed).
- **3. ETHERNET 1-4**: Use an Ethernet cable to connect a computer to this port for initial configuration and/or Internet access.
- **4.** Use the power adaptor provided with your P-870HN-51b to connect an appropriate power source to this socket.
- 5. Push the power switch to the on position.

Checking the LEDs

Look at the LEDs at the front panel of the P-870HN-51b.

- The **POWER** LED blinks during start-up and is green once the P-870HN-51b is ready.
- Each ETHERNET LED turns on if the corresponding ETHERNET port is properly connected. The LEDs blink when the P-870HN-51b is sending or receiving data through the corresponding ETHERNET port.
- The **DSL** LED stays on if a physical DSL connection exists.
- The **INTERNET** LED is green when Internet access is available and blinks when transmitting data.
- The WLAN/WPS LED stays green when the wireless LAN is ready. It blinks when the P-870HN-51b is sending/receiving data through the wireless LAN.



If none of the LED are on, check your connections. Make sure that you have the power adaptor connected to the P-870HN-51b and plugged into an appropriate power source. Make sure the power source is turned on. Turn the P-870HN-51b off, wait for a few seconds and turn it back on. If the LEDs are still off, contact your local vendor.

Testing Internet Connection

After you have connected the hardware and turned on the P-870HN-51b, open a web browser on your computer and go to any web site (for example, www.zyxel.com) to test your Internet connection.

If you are prompted for a user name and password, enter the account information as given by your Internet service provider (ISP).

If the **INTERNET** LED is off but the **DSL** LED is on, go to the Initial Configuration section to configure your Internet access settings.

Initial Configuration

1. Open your browser and enter http:// 192.168.1.1 (the P-870HN-51b's default IP address) as the address.

]	Eile	Edit	⊻iew	F <u>a</u> vorites	<u>T</u> ools	Help
A	<u>d</u> dres	ss 🙆	http://1	92.168.1.1/		

2. Enter the admin user name admin and password 1234 (default). Click OK.

Connect to 192.	168.1.1
R	GR.
DSL Router	
User name:	😰 admin 💌
Password:	••••
	Remember my password
	OK Cancel

If the login screen does not display, make sure you allow web browser pop-up windows, JavaScripts and Java permissions. Your computer should also be set to get an IP address automatically from a DHCP server. See the appendices in your User's Guide for more information.

Internet Setup

Go to **Network > WAN > Internet Connection**. Enter the Internet access information exactly as given to you by your ISP in the **Internet Connection** screen and click **Apply**. See your User's Guide for detailed information.

When your ADSL Internet connection is setup, the **DSL** LED should be green. When your VDSL Internet connection is setup, the **DSL** LED should be orange. The **INTERNET** LED lights green when either one of the Internet connection is correct.



If you cannot access the Internet and the INTERNET LED is off, make sure you enter the correct information in the WAN screens.

If you are using a new Internet account, contact your ISP to make sure it is active.

If you are trying to access the Internet wirelessly, make sure the wireless and security settings in your wireless client are the same as the settings in the P-870HN-51b.

Wireless Setup

To create a wireless network, the P-870HN-51b and your wireless computer(s) must all use the same SSID (network name), channel and security settings.

- 1. Go to Network > Wireless LAN.
- 2. Enable wireless LAN, enter a name to identify your wireless network (such as "ZyXEL") in the SSID field, and select a channel which is not used by neighboring wireless devices.
- 3. Select your security mode and configure wireless security settings. In this example, the P-870HN-51b uses WPA2-PSK for data encryption.

If you do not set wireless security, anyone within range could use your P-870HN-51b to access your network and the Internet.

Make sure your wireless security settings are compatible with your existing wireless devices. See the User's Guide for more information on wireless networks.

General More AP WPS W	PS Station WDS Advanced Setup
Wireless Setup	
🔽 Active Wireless LAN	
Channel Selection	6 💌
Bandwidth:	20MHz 💌
Control Sideband:	Lower 💌
Common Setup	
Network Name(SSID)	ZyXEL01
🗌 Hide Network Name(SSID)	
🗖 Disable WMM Advertise	
BSSID	00:23:F8:B3:D0:CD
Security Mode	WPA2-PSK
🗖 Active Compatible	WPA-PSK Compatible
Encryption	AES 💌
Pre-Shared Key	
Group Key Update Timer	0 sec
MAC Filter	Edit
	Apply Reset

Go to the WLAN Setup with WPS section if you do not want to use the wireless LAN screen to set up your wireless network.

WLAN Setup with WPS

You can use Wi-Fi Protected Setup (WPS) to set up a secure wireless network and add wireless devices to your wireless network at the touch of a button. The other wireless devices must also support WPS. Look for the **WPS/WLAN** button on the rear panel of your device.

- 1. Place a WPS-enabled device within range of the P-870HN-51b.
- Press the WPS/WLAN button on the P-870HN-51b for five seconds. Press the WPS button on another WPS-enabled device. It doesn't matter which button is pressed first. You must press the second button within two minutes of pressing the first one.

Your P-870HN-51b allows the PBC (Push Button Configuration) method, as well as the PIN (Personal Identification Number) configuration via the web configurator. See your User's Guide for more information. Other WPS-enabled devices should provide at least one similar method.

- **3.** The **WLAN/WPS** LED on the P-870HN-51b blinks for a few seconds, then shines steadily, indicating your devices are connected.
- To add another WPS-enabled device to your wireless network, press the WPS buttons on your P-870HN-51b and your next WPS-enabled device.

Congratulations! You are now ready to connect to the Internet wirelessly through your P-870HN-51b.

How to View a Product's Certification(s)

- 1. Go to www.zyxel.com.
- **2.** Select your product from the drop-down list box on the ZyXEL home page to go to that product's page.
- 3. Select the certification you wish to view from this page.