
P-660RU-T v2

ADSL2+ Ethernet / USB Router

Quick Start Guide

Version 3.40

Edition 1

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The logo for ZyXEL, featuring the word "ZyXEL" in a bold, blue, sans-serif font. The "Zy" is in a smaller font size than "XEL".

ZyXEL

Overview

The P-660RU-T v2 ADSL2+ Ethernet / USB router is the ideal device for small networks or individual computers connecting to the Internet via ADSL. Featuring USB and Ethernet ports, computers can share local resources (such as printers and files) and access to the Internet - simultaneously.

This Quick Start Guide shows you how to:

1 Connect the hardware

2 Set up Internet access

See your User's Guide for background information on all features.

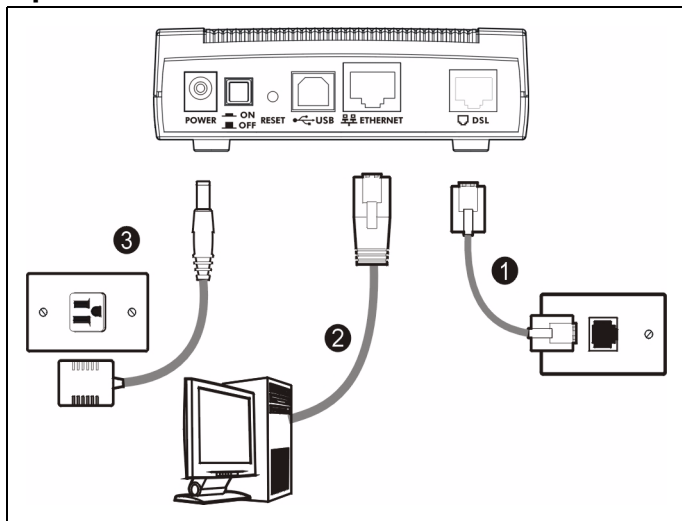
1 Connect the Hardware

There are two ways to connect your computer or computer network to the P-660RU-T v2:

Option A: Connect via Ethernet. See [page 2](#).

Option B: Connect via USB (you will need to install the USB driver). See [page 4](#).

Option A: Connect via Ethernet



- 1 ETHERNET:** Use an Ethernet cable to connect a computer to the **ETHERNET** port for Internet access.
- 2 DSL:** Use a telephone wire to connect your P-660RU-T v2's **DSL** port to a telephone jack (or to a splitter, if one is already installed).
- 3 POWER:** Use only the included power adaptor to connect the **POWER** socket to an appropriate power source.

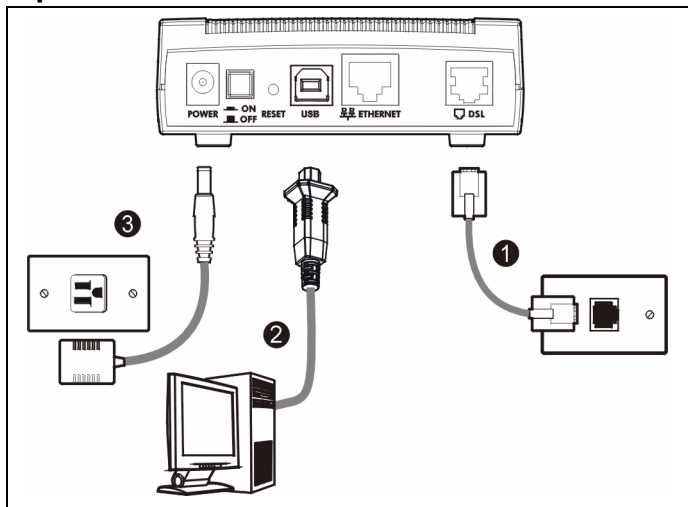
After you've made the connections, push in the power button to turn on the P-660RU-T v2. Look at the lights on the front panel.

- The **POWER** light blinks while performing system testing. It then turns steady on if the testing is successful.
- The **DSL** light blinks then turns steady on, and blinks when there is traffic.
- The **ETHERNET** light turns on if the **ETHERNET** port is properly connected, and blinks when there is traffic.



If none of the LEDs are on, unplug the device and recheck your hardware connections.

Option B: Connect via USB



Note: Do NOT connect the same computer to both the **USB** and **ETHERNET** ports on the P-660RU-T v2.

- 1 USB:** Connect the provided USB cable to the P-660RU-T v2's **USB** port.
- 2 DSL:** Use a telephone wire to connect your P-660RU-T v2's **DSL** port to a telephone jack (or to a splitter, if one is already installed).
- 3 POWER:** Use only the included power adaptor to connect the **POWER** socket to an appropriate power source.

After you've made the connections, push in the power button to turn on the P-660RU-T v2. Look at the lights on the front panel.

- The **POWER** light blinks while performing system testing. It then turns steady on if the testing is successful.
- The **DSL** light blinks then turns steady on, and blinks when there is traffic.
- The **USB** light turns on if the USB port is properly connected, and blinks when there is traffic.



If none of the LEDs are on, unplug the device and recheck your hardware connections.

Install the USB Software

Follow the steps below to install the USB driver.

- 1 Save your work and close all applications.
- 2 Connect the P-660RU-T v2 to a USB port on your computer. A **Found New Hardware Wizard** screen displays.



If the wizard screen does not display do one of the following: **a)** Disconnect the USB cable and reconnect it. **b)** Use the Windows Device Wizard to manually add the device. **c)** Restart your computer.

3 Insert the support CD into your computer CD-ROM drive and select **Install the software automatically (Recommended)** and click **Next** to continue.

4 Windows starts installing the USB driver.

Windows 2000/XP: If a warning screen displays, click **Yes** or **Continue Anyway**.

Windows 98 SE: If prompted, insert the Windows 98 SE CD and click **OK**.

5 Click **Finish** to complete the wizard.

2 Set Up Internet Access

You can configure the P-660RU-T v2 for Internet access in any one of three ways:

A: Configuration Genie. See page [8](#).

B: Zero Configuration. See page [8](#).

C: Web Configurator Internet Access Wizard. See page [9](#).



Configuration genie and Zero configuration are only able to configure the device automatically for Internet access if you are using **PPPoE**, **PPPoA** or **ENET ENCAP** encapsulation with a dynamically-assigned IP address from your ISP. If you are not using these Internet access settings, then use the **Web Configurator Internet Access Wizard** to manually configure the device.

You will need your Internet access information such as user name and password, if provided by your ISP.

INFORMATION FROM ISP	YOU ARE USING		
	ENCAPSULATION METHOD	MODE	IP ADDRESS
None	RFC1483	Bridge	N/A
	ENET ENCAP	Routing	Dynamic
An IP address only	RFC1483	Routing	Static
A user name and password	PPPoA or PPPoE	Routing	Dynamic
	PPPoA	Bridge	N/A
A user name, password and an IP address	PPPoA or PPPoE	Routing	Static

INFORMATION FROM ISP	YOU ARE USING		
	ENCAPSULATION METHOD	MODE	IP ADDRESS
An IP address, subnet mask and a gateway IP address	ENET ENCAP	Routing	Static

A: Configuration Genie

From the included CD, click **Multimedia Auto Provisioner** (the installation and configuration assistant) and then click **Installation Tutorial**. After you have viewed the tutorial, click **Configuration Genie** at the end of the installation tutorial or from **Multimedia Auto Provisioner** on the CD.

B: Zero Configuration

Launch your web browser and navigate to any web site (for example, www.zyxel.com). The P-660RU-T v2 automatically detects and configures your Internet connection. This may take about two minutes.



If you have a **PPPoE** or **PPPoA** connection, a screen displays prompting you to enter your Internet account information. Enter the username, password and/or service name exactly as provided. Click **Log on to the Internet!**.

DSL Connection Successful

Your router has established a DSL connection to your local exchange. To log on to the Internet, the router needs the Internet user name and password provided by your ISP.

Enter your details below and click the Log On button [\[Instructions\]](#)

Router Configuration Password


User Name

Password

C: Web Configurator Internet Access Wizard

Note: Enter the Internet access information given to you by your ISP exactly in each wizard screen. If not given, leave the fields set to the default.

1 In your browser, go to <http://192.168.1.1>.

Address  <http://192.168.1.1/>

2 Enter the default password 1234.

P-660RU-T1 v2

Enter Password and click Login.

Password:



If your browser cannot find this screen, see **Troubleshooting** on page 18.

3 It is strongly recommended that you change the default password in the next screen. If you change it, you will not see this screen the next time you log in.

Use this screen to change the password.

We recommend that you personalize the system administrator password by changing it to something besides the default '1234'.

The administrator password should must be between 1 - 30 characters.

New Password:

Retype to Confirm:

- 4 See the User's Guide for field descriptions of the **Site Map** screen. In the navigation panel on the left of the screen, click **Wizard Setup**. You will need information supplied by your Internet service provider (ISP).



- 5 Configure Internet access settings in this step. The wizard screens vary depending on the **Mode** and **Encapsulation** you choose in the first wizard screen.

Enter the Internet access information supplied by your ISP exactly in each wizard screen. If not given, leave the fields at the default setting.

PPPoA

- A) Select **Routing** if your ISP allows multiple computers to share an Internet account. Otherwise, select **Bridge**. Then select **PPPoA**.

B) Click **Next**.

Wizard Setup - ISP Parameters for Internet Access

Mode Routing

Encapsulation PPPoA

Multiplex LLC

Virtual Circuit ID

VPI 8

VCI 35

Wizard Setup - ISP Parameters for Internet Access

User Name user

Password

IP Address

Obtain an IP Address Automatically

Static IP Address

0.0.0.0

Connection

Connect on Demand: Max Idle Timeout 0 sec

Nailed-Up Connection

Network Address Translation

SUA Only

Back Next

C) Enter the username and password given by your ISP.

D) If your ISP gave you an IP address, select **Static IP Address** and enter it. Otherwise, select **Obtain an IP Address Automatically**.

E) Select **Nailed-Up Connection** to have your connection up all the time. Otherwise, select **Connect on Demand**

and specify an idle time-out period (in seconds) in the **Max. Idle Timeout** field.

F) If you selected **Routing**, select **SUA Only** when you have one public IP address, **Full Feature** when you have more than one public IP address (for translation) or **None** to disable NAT.

G) Click **Next**.

RFC 1483

A) Select **Routing** if your ISP gave you an IP address and allows multiple computers to share an Internet account. Otherwise, select **Bridge**. Then select **RFC 1483**.

B) Click **Next**.

Wizard Setup - ISP Parameters for Internet Access

Mode **A** Routing

Encapsulation RFC 1483

Multiplex LLC

Virtual Circuit ID

VPI 8

VCI 35

B Next

Wizard Setup - ISP Parameters for Internet Access

IP Address **C** 0.0.0.0

Network Address Translation

D SUA Only

E

Back Next

C) If you selected **Routing**, enter the IP address given by your ISP.

D) If you selected **Routing**, select **SUA Only** when you have one public IP address, **Full Feature** when you have more than one public IP address (for translation) or **None** to disable NAT.

E) Click **Next**.

ENET ENCAP

A) Select **Routing**, then **ENET ENCAP**.

B) Click Next.

Wizard Setup - ISP Parameters for Internet Access

Mode (A)

Encapsulation (A)

Multiplex

Virtual Circuit ID

VPI

VCI

Next (B)

Wizard Setup - ISP Parameters for Internet Access

IP Address

Obtain an IP Address Automatically (C)

Static IP Address

IP Address

Subnet Mask

ENET ENCAP Gateway

Network Address Translation

(D)

Next (E)

C) If your ISP gave you an IP address, subnet mask and gateway address, select **Static IP Address** and enter them. Otherwise, select **Obtain an IP Address Automatically**.

D) Select **SUA Only** if you have one public IP address, **Full Feature** if you have more than one public IP address (for translation) or **None** to disable NAT.

E) Click **Next**.

PPPoE

A) Select **Routing**, then **PPPoE**.

B) Click **Next**.

Wizard Setup - ISP Parameters for Internet Access

Mode Routing

Encapsulation PPPoE

Multiplex LLC

Virtual Circuit ID

VPI 8

VCI 35

Service Name

User Name user@domain

Password

IP Address

Obtain an IP Address Automatically

Static IP Address

0.0.0.0

Connection

Connect on Demand: Max Idle Timeout 0 sec

Nailed-Up Connection

Network Address Translation

SUA Only

Back Next

C) Enter the service name, username and password supplied by your ISP.

- D)** If your ISP gave you an IP address, select **Static IP Address** and enter it. Otherwise, select **Obtain an IP Address Automatically**.
- E)** Select **Nailed-Up Connection** to have your connection up all the time. Otherwise, select **Connect on Demand** and specify an idle time-out period (in seconds) in the **Max. Idle Timeout** field.
- F)** Select **SUA Only** if you have one public IP address, **Full Feature** if you have more than one public IP address (for translation) or **None** to disable NAT.
- G)** Click **Next**.
- 8** To change the LAN information on the P-660RU-T v2, click **Change LAN Configuration**. Otherwise, verify your LAN and WAN settings and click **Log on to the Internet!**.

Wizard Setup - ISP Parameters for Internet Access

WAN Information:
Mode: **Routing**
Encapsulation: **ENET ENCAP**
Multiplexing: **LLC**
VPI/VCI: **8/35**
IP Address : **Obtain an IP Address Automatically**
Network Address Translation: **SUA Only**

LAN Information:
IP Address: **192.168.1.1**
IP Mask: **255.255.255.0**
DHCP: **ON**
Client IP Pool Starting Address: **192.168.1.33**
Size of Client IP Pool: **32**

- 9** To test the connection from the P-660RU-T v2 to the ISP, click **Start Diagnose**. Otherwise click **Return to Main Menu** to go back to the main screen.

Wizard Setup - ISP Parameters for Internet Access

Your DSL Gateway is now configured. Your device is capable of testing your DSL service. The individual tests are listed below. Click "Start Diagnose" button if you want to test, otherwise, click "Return to Main Menu" button.

LAN connections

Test your Ethernet Connection	PASS
-------------------------------	-------------

WAN connections

Test ADSL synchronization	PASS
Test ADSL(ATM OAM) loopback test	PASS
Test PPP/PPPoE server connection	PASS
Ping default gateway	PASS

Start Diagnose Return to Main Menu

Troubleshooting

- 1** If you cannot access the web configurator using Internet Explorer in Windows XP or Windows Server 2003, take the following steps.
- A)** Check the cable connection from your computer to the P-660RU-T v2.
- B)** Make sure you enter the password correctly (the field is case sensitive). If you have forgotten the P-660RU-T v2's password, use the **RESET** button. Press the button in for about 10 seconds (or until the **POWER** light starts to blink), then release it. It returns the P-660RU-T v2 to the factory defaults (IP address 192.168.1.1, password 1234).

- C)** Make sure your computer's IP address is in the same subnet as the P-660RU-T v2's IP address (see page 20).
 - D)** Ping the P-660RU-T v2 from a computer on the LAN. Make sure your computer's Ethernet adapter is installed and functioning properly. In the computer, click **Start, (All) Programs, Accessories** and then **Command Prompt**. In the **Command Prompt** window, type "ping" followed by the P-660RU-T v2's LAN IP address (192.168.1.1 is the default) and then press [ENTER]. The P-660RU-T v2 should reply; if it does not, see page 20.
 - E)** If the P-660RU-T v2's IP address has changed, enter the new one as the URL. If you have forgotten the new IP address, use the **RESET** button (see step B).
 - F)** Make sure you allow pop-up windows, JavaScripts and Java permissions or set the Internet security level lower than **High** in Internet Explorer (in Internet Explorer, click **Tools > Internet Options > Security > Custom Level...**). See the appendix in the User's Guide for more information.
 - G)** If your computer is connected to the **USB** port, reinstall the USB driver. Make sure that your computer is running one of the following operating systems: Windows 98SE / ME / 2000 / XP or Mac OS X.
- 2** If you cannot access the Internet when your computer is connected to the **ETHERNET** or **USB** port, follow these steps.

- A) Check the lights on the front panel. If they are different from what is described in section 1, make sure the connections are correct. If the lights are still different, turn off the device, wait a few seconds, and turn it on again.
- B) Follow the steps in section 2 again. Make sure you enter the correct information. For example, if your account has a user name and password, make sure you type it correctly. In addition, if you are not sure which encapsulation your ISP uses, contact your ISP.
- C) If you are using a new Internet account, contact your ISP to make sure it is active.
- D) If you still have problems, see **Troubleshooting** in the User's Guide.

Set Up Your Computer's IP Address

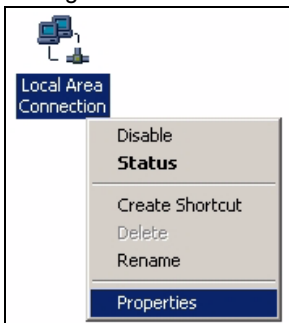
This section shows you how to set your Windows NT/2000/XP computer to automatically get an IP address. This ensures that your computer can connect with your P-660RU-T v2. Refer to your User's Guide for detailed IP address configuration for other Windows and Macintosh computer operating systems.

- 1 Click **start (Start** in Windows 2000/NT) > **Settings** > **Control Panel**.

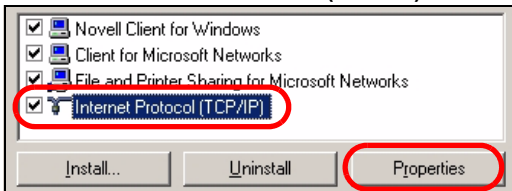
2 In the **Control Panel**, double-click **Network Connections** (**Network and Dial-up Connections** in Windows 2000/NT).



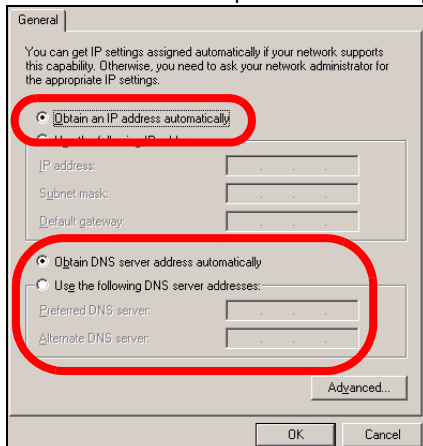
3 Right-click **Local Area Connection** then click **Properties**.



4 Select **Internet Protocol (TCP/IP)** then click **Properties**.



5 The TCP / IP Properties window appears.



Select **obtain an IP address automatically** and click **OK** to have the P-660RU-T v2 assign your computer an IP address.

- 6 If your Internet Service Provider (ISP) gave you Domain Name System (DNS) settings, enter them in the **Use the following DNS server addresses** fields. If you are not sure of your DNS settings, contact your ISP.
- 7 Click **Advanced**. Remove any previously installed gateways in the **IP Settings** tab and click **OK** to go back to the **Internet Protocol TCP/IP Properties** screen.
- 8 Click **OK** to close the **Internet Protocol (TCP/IP) Properties** window.
- 9 Click **Close (OK in Windows 2000/NT)** to close the **Local Area Connection Properties** window.

Close the **Network Connections** window (**Network and Dial-up Connections** in Windows 2000/NT).

Viewing Your Product's Certifications

- 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.

