# ZyXEL G-1000 v2

Wireless-11g Access Point

## **Quick Start Guide**

Version 3.6 Edition 1 2/2006



#### Overview

The ZyXEL G-1000 v2 is a wireless LAN access point with integrated wireless security features.

This Quick Start Guide introduces the G-1000 v2 and shows you how to use the web configurator wizard. See your User's Guide for configuration details and background information on all G-1000 v2 features.

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#### 1 Hardware Installation

Follow the steps below to connect the supplied antennas.

- 1 Locate the antenna connectors on the sides of your G-1000 v2.
- **2** Screw the antennas clockwise onto the antenna connectors. The antennas should be perpendicular to the ground and parallel to each other.
- **Note:** Make sure the antennas are securely screwed onto the antenna connectors.

#### 2 Hardware Connections

- **1 ETHERNET**: Use an Ethernet cable to connect at least one computer for initial G-1000 v2 configuration. These ports are auto-negotiating (can connect at 10 or 100Mbps) and autocrossover (automatically adjust to the type of Ethernet cable you use (straight-through or crossover)).
- **2 POWER 12VDC**: Use the included power adaptor to connect the power socket to an appropriate power source.

**RESET**: You only need to use this button if you've forgotten the G-1000 v2's password. It returns the G-1000 v2 to the factory defaults (password is 1234 and LAN IP address 192.168.1.2). Refer to the User's Guide for more information.



After you've made the connections look at the front panel lights.

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- The **PWR** light turns steady on when the power adaptor is connected.
- The **SYS** light blinks while performing system testing and then turns steady on if the testing is successful.
- The **ZyAIR** (breathing) light turns steady on while the wireless card on the G-1000 v2 is working.
- The **ETHN** light turns on, if the port is properly connected. If the light is not on, check your connections and inspect your cables for damage. If you still have problems, contact your local vendor.



## 3 Accessing the Web Configurator.

The default IP address of the G-1000 v2 is 192.168.1.2. Before directly entering the G-1000 v2 IP address into your web browser, you must make sure that your computer and the G-1000 v2 are in the same subnet. This section shows you how to set your Windows NT/2000/XP computer to have an IP address in the same subnet as the G-1000 v2. Refer to your User's Guide for detailed IP address configuration for other Windows, Macintosh and Linux computer operating systems.

- 1 In Windows XP, click Start, Control Panel. In Windows 2000/NT, click Start, Settings, Control Panel.
- 2 In Windows XP, click Network Connections. In Windows 2000/NT, click Network and Dial-up Connections.
- 3 Right-click Local Area Connection and then click Properties.

- 4 Select Internet Protocol (TCP/IP) (under the General tab in Win XP) and click Properties.
- **5** The **Internet Protocol TCP/IP Properties** screen opens (the **General** tab in Windows XP).
- 6 Select Use the following IP address and enter an IP address from 192.168.1.1 to 192.168.1.254 excluding 192.168.1.2 (the G-1000 v2) and any other IP addresses in the range already being used by a device on your network.
- 7 Click OK to close the Internet Protocol (TCP/IP) Properties window.
- 8 Close the Local Area Connection Properties window and then the Network Connections screen.

Internet Protocol (TCP/IP) Propertie	es <u>? ×</u>
General	
You can get IP settings assigned auton this capability. Otherwise, you need to a the appropriate IP settings.	natically if your network supports ask your network administrator for
O Obtain an IP address automatical	ly 🔤
☐ Use the following IP address: —	
<u>I</u> P address:	192.168.1.5
S <u>u</u> bnet mask:	255.255.255.0
Default gateway:	192.168.1.2
C Obtain DNS server address autor	natically
	dresses:
Preferred DNS server:	· · ·
<u>A</u> lternate DNS server:	
	Advanced
	OK Cancel

**9** Open your browser, and enter "192.168.1.2" as the website address.

#### 4 Web Configurator Login

1 Enter the password 1234. Then, click Login.

ZyXEL	
G-1000v2	
Welcome to your router Configuration Interface	
Enter your password and click "Login"	
💡 Password : 🏧	
(max. 30 alphanumeric, printable characters and no spaces)	
Note: Please turn on the Javascrint and ActiveX control setting on Internet	
Explorer when operating system is Windows XP and service pack is SP2.	
Login Reset	

#### 2 Follow the directions in this screen.

Address 🙆 http://192.168.1.2/



**3** On this screen you can access the wizard setup or the advanced setup.

Click **Go to Wizard setup** for initial configuration of your G-1000 v2.



#### **5 Wizard Setup**

The wizard is divided into three parts. Follow the directions in the wizard to setup:

- · System information
- Wireless LAN
- · IP address assignment
- 1 Click Next to begin the wizard.



2 In this screen enter the system name and the domain name of your ISP (if necessary). Click **Next** to continue.



**3** Use the second wizard screen to set up the wireless LAN.

**Name(SSID)** is a unique name to identify the G-1000 v2 in a wireless LAN. Enter a descriptive name.

The range of radio frequencies used by IEEE 802.11b/g wireless devices is called a channel. Use the **Channel Selection** drop-down list box to select a channel that is not already in use by a neighboring device.

In the Security list box:

- Choose None to have no wireless LAN security configured.
- Choose Basic(WEP) security if you want to configure WEP Encryption parameters.
- Choose Extend(WPA-PSK with customized key) or Extend(WPA2-PSK with customized key) security to configure a pre-shared key.



**Note:** If you do not enable any wireless security on your G-1000 v2, your network is accessible to any wireless networking device that is within range.

4 If you chose **Basic(WEP)** security in the previous screen to setup WEP encryption parameters:

Enter a **Passphrase** (up to 32 printable characters) and click **Generate** and the G-1000 v2 automatically generates a WEP key.

Or

Enter a manual key in a **Key** field and select **ASCII** or **Hex** WEP key input method.

Select **64-bit WEP** or **128-bit WEP** from the **WEP Encryption** drop-down list box and click **Next** to continue or **Back** to go back to the previous screen.

Click Next to continue.

5 If you chose Extend(WPA-PSK with customized key) or Extend(WPA2-PSK with customized key), you need to configure a pre-shared key.

Enter a password made up of both numbers and letters which is at least 8 characters long.

Click Next to continue.

Connection W	'izard			ZyXEL
	STEP 1 > STE	P 2 → STEP 3		
	📔 WIRELESS	LAN		
	Passphrase			
	Use Passphrase to	automatically generates a V	/EP key.	
	Passphrase		Generate	
	WEP Key			
	The higher the WER Select 64-bit WEP, Key radio buttons t Entering a manual	P Encryption, the higher the 128-bit WEP or 256-bit WEP to use as the WEP key, key in a Key field and select	security but the slov to enable data encr ing ASCII or Hex W	ver the throughput. yption and select one of the EP key input method.
	WEP Encryption 64-bit WEP: Ente for each Key(1-4 128-bit WEP: Ent F") for each Key (Select one WEP	64-bit WEP ▼ r 5 ASCII characters or 1 i). er 13 ASCII characters o (1-4). key as an active key to (	0 hexadecimal ch r 26 hexadecimal encrypt wireless o	haracters ("0-9", "A-F") characters ("0-9", "A- lata transmission.)
		🖲 ASCII 🛛 🔍 He	×	
	🧟 Key 1			
	🔍 Key 2			
	🔍 Key 3			
Connection V	Vizard			ZyXEL
	STEP 1 > ST	EP 2 → STEP 3		
	📋 WIRELESS	S LAN		
	WPA Pre-Shared	Key Setup		
	"WPA-PSK" uses a allowed to access must know to get and made up of b from the password <b>Pre-Shared Key</b>	"Pre-Shared Key" to auther your network. Think of this p on the network. The pre-shar oth letters and numbers. This d you use to access this rout SecretKey	ticate wireless users ore-shared key as a ed key should be at pre-shared key is ri er or use to log-in to	and make sure they are shared password that you least 8 characters in length commended to be different your ISP.
			<back< td=""><td>Next &gt; Exit</td></back<>	Next > Exit

6 Select your IP address assignment.

Select Obtain IP Address Automatically if your G-1000 v2 is using a dynamically assigned IP address from a DHCP server.

Select Use fixed IP address if your G-1000 v2 is using a static IP address.





- 7 Click Apply to complete the wizard and implement the settings on your device.
- 8 You have completed the wizard setup. Click Finish on the next screen to exit the wizard.
- Note: If you changed the SSID on your device or implemented any security, then you will have to make the corresponding changes on your wireless stations to reconnect to the AP.

If you changed the IP address of your G-1000 v2 or if an IP address is assigned to the G-1000 v2 automatically, you can access the device by using the new IP address or typing

#### "http://zyxelXXXX"



(where XXXX are the last four digits of your devices MAC address) in your browser. The MAC address can be found on the back label of your G-1000 v2.

#### 6 Deployment

1 Disconnect the G-1000 v2 from the computer and place it where you want to deploy it.

The best location is elevated, such as wall mounted, at the center of your wireless coverage area and within line of sight of all the wireless devices.

- 2 Connect an Ethernet cable from your G-1000 v2 to a LAN port on your router, switch or hub.
- **3** Connect the power adaptor to your G-1000 v2 and plug the power adaptor in to the power outlet. The **PWR**, **SYS**, **ETHN** and **ZyAIR** lights should light up.

## 7 Verify Wireless Connection

Using a computer with an 802.11g or 802.11b wireless adapter, verify wireless connection by using an Internet browser to connect to the Internet.

If you cannot connect, see the troubleshooting section of this guide.

#### 8 Hardware Mounting

In general, the best location for the access point is at the center of your intended wireless coverage area. For better performance, mount the G-1000 v2 high up free of obstructions.

#### 8.1 Wall-mounted

Follow the steps to attach your G-1000 v2 to a wall.

- 1 Locate a high position on the wall that is free of obstructions.
- 2 Connect two screws (not included) in the wall 80mm apart. You can use the diagram at the end of this guide to help you mark the screw holes correctly. Use screws with 6mm ~ 8mm (0.24" ~ 0.31") wide heads. Do not screw the screws all the way into the wall. Leave a small gap between the head of the screws and the wall.
- **Note:** Make sure the screws are securely fixed to the wall and strong enough to hold the weight of the G-1000 v2 with the connection cables.
- 3 Adjust the cables.

**4** Align the holes on the back of the G-1000 v2 with the screws on the wall. Hang the G-1000 v2 on the screws.



#### 9 Troubleshooting

PROBLEM	CORRECTIVE ACTION		
None of the lights turn on when you connect the G- 1000 v2's power.	Make sure that you have the correct power adaptor connected to the G-1000 v2 and it is plugged into an appropriate power source.		
	Check all cable connections. If the lights still do not turn on, you may have a hardware problem. In this case, you should contact your local vendor.		
Cannot access the G- 1000 v2 from my computer.	Check the cable connection from your computer to the G-1000 v2.		
	Use Internet Explorer 6.0 and later or Netscape Navigator 7.0 and later with JavaScript enabled.		
	Make sure you enter the password correctly (the field is case sensitive).		
	Make sure your computer's IP address is in the same subnet as the G-1000 v2's IP address. Refer to your User's Guide for more details on setting up your IP address.		
	If the G-1000 v2's IP address has changed, then enter the new one as the URL or enter <b>ZyXELXXXX</b> as the URL where XXXX are the last four digits of your device's MAC address. The MAC address can be found on the back label of your G-1000 v2.		
	If you've forgotten the G-1000 v2's password, use the <b>RESET</b> button. Press the button in for about 10 seconds (or until the <b>PWR/SYS</b> light starts to blink), then release it. It returns the G-1000 v2 to the factory defaults (password is 1234, LAN IP address 192.168.1.2 etc.; see your User's Guide for details).		
Cannot access the Internet.	Verify you have the same security settings and SSID as the G-1000 v2. Make sure your Internet account is active and up by connecting to the internet via a wired connection.		

#### **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.