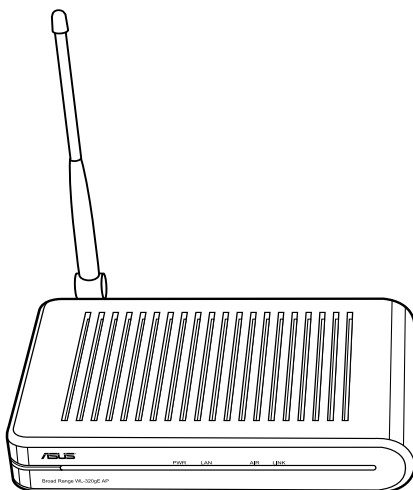




## WL-320gE Access Point



## Quick Start Guide

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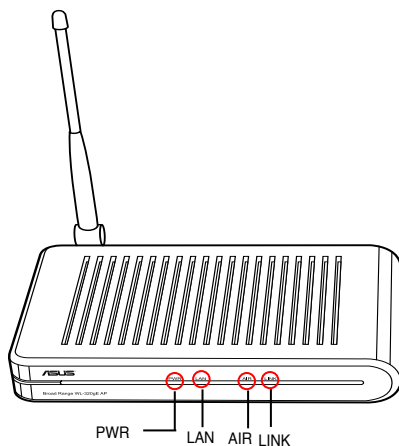
## 1. Package contents

- WL-320gE wireless access point x 1
- Power adapter x 1
- Support CD x 1 (Utilities and User Manual)
- RJ45 cable x 1
- Quick Start Guide x 1
- 5dBi dipole antenna x 1

## 2. Getting to know the Wireless Access Point

### 1) Front panel

The ASUS WL-320gE Access Point includes LED indicators which show the system, LAN, wireless network, and link status.





### PWR (Power)

OFF	No power or performing boot sequence
ON	System ready
Blinking	Firmware upgrade failed

### LAN (Ethernet Network)

OFF	No power
ON	Physical connection to Ethernet network
Blinking	Transmitting or receiving data (through Ethernet cable)

### AIR (Wireless Network)

OFF	No power
ON	Wireless function ready
Blinking	Transmitting or receiving data (through wireless)

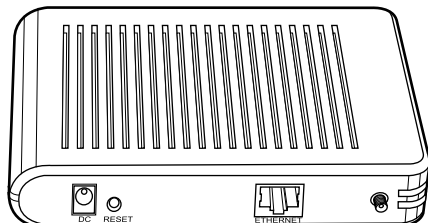
### LINK (Link Status)

Operation Mode	AP/Repeater/Bridge/Gateway	Client
OFF	Client not associated	Not associated to AP
ON	Client associated	Associated to AP with strong signal
Blinking quickly	--	Associated to AP with better signal
Blinking slowly	--	Associated to AP with weak signal



## 2) Back panel

The rear panel contains the Ethernet, the DC port, and the Reset button.



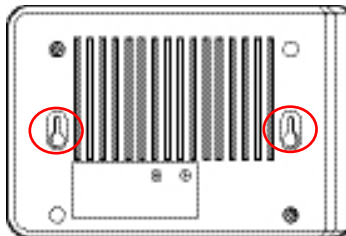
LABEL	Description
ETHERNET	The Ethernet port connects to an Ethernet device, such as to a switch or a router.
RESET	Press the Reset button to restore to factory default settings.
DC	The DC port connects the Access Point power adapter.

## 3) Wall mount option

The ASUS WL-320gE Access Point is designed to sit on a raised flat surface like a file cabinet or book shelf. The unit may also be converted for mounting to a wall or ceiling.

Follow these steps to mount the ASUS Wireless Router to a wall:

1. Look on the underside for the two mounting hooks.
2. Mark upper holes in a flat surface.
3. Tighten two screws until only 1/4" is showing.
4. Latch the hooks of the ASUS Access Point onto the screws.



**Note:** Re-adjust the screws if you cannot latch the ASUS Wireless Router onto the screws or if it is too loose.



## 3. Configuring the Wireless Access Point

The ASUS WL-320gE Access Point can meet various working scenarios with proper configuration. The default settings of the wireless router may need change so as to meet your individual needs. Therefore, before using the ASUS Access Point, check the basic settings to make sure they all work in your environment.



**Note:** Wired connection for initial configuration is recommended to avoid possible setup problems due to wireless uncertainty.

### 1) Wired connection

The ASUS WL-320gE Access Point is supplied with an Ethernet cable in the package. Since the ASUS Wireless Router has integrated auto-crossover function, therefore, you can use either straight-through or crossover cable for wired connection. Plug one end of the cable to the LAN port on the rear panel of the router and the other end to the Ethernet port on your PC.

### 2) Wireless Connection

For establishing wireless connection, you need an IEEE 802.11b/g compatible WLAN card. Refer to your wireless adapter user manual for wireless connection procedures. By default, the SSID of ASUS Access Point is "default" (in lower case), encryption is disabled and open system authentication is used.

### 3) Setting IP address for wired or wireless client

To access the WL-320gE Access Point, you must have correct TCP/IP settings on your wired or wireless clients. Set the IP addresses of the clients within the same subnet of WL-320gE.

#### Setting up IP address Manually

To set IP address manually, you need to know the default settings of the ASUS Access Point:

- IP address 192.168.1.1
- Subnet Mask 255.255.255.0

To set up the connection with a manually assigned IP address, the address of your PC and the wireless router must be within the same subnet:

- IP address: 192.168.1.xxx (xxx can be any number between 2 and 254. Make sure the IP address is not used by other device)
- Subnet Mask: 255.255.255.0 (same as WL-320gE)
- Gateway: 192.168.1.1 (IP address of WL-320gE)
- DNS: 192.168.1.1 (WL-320gE), or assign a known DNS server in your network.

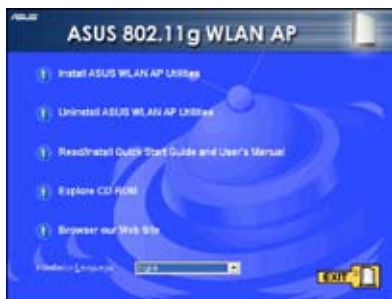




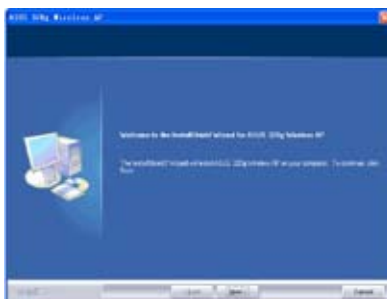
## 4) ASUS WLAN Utilities

### Installing the Utility

Follow these steps to install the ASUS WLAN Utilities in Microsoft® Windows. Insert the support CD. Double-click setup.exe (in the root of the support CD) if your autorun has been disabled.



(1) Click **Install...Utilities**.



(2) Click **Next** after reading the welcome screen.



(3) Click **Next** to accept the default destination folder or click **Browse** to specify another path.

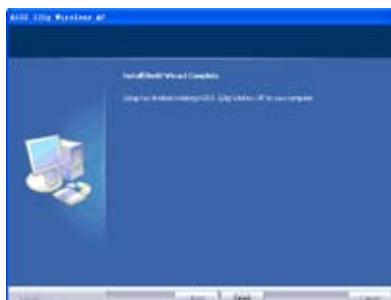


(4) Click **Next** to accept the default program folder or enter another name.



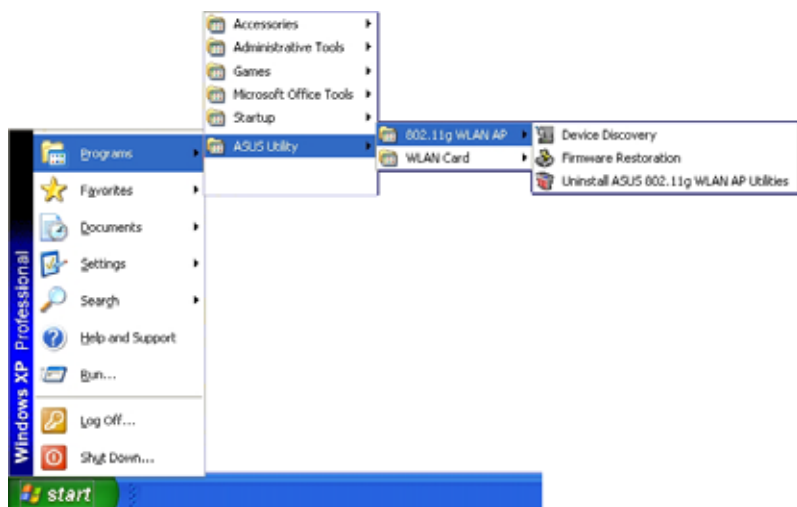


- (5) Click **Finish** when setup is complete.



## Launching the ASUS WLAN Utilities

After installation, you can launch the utilities from the Start menu.



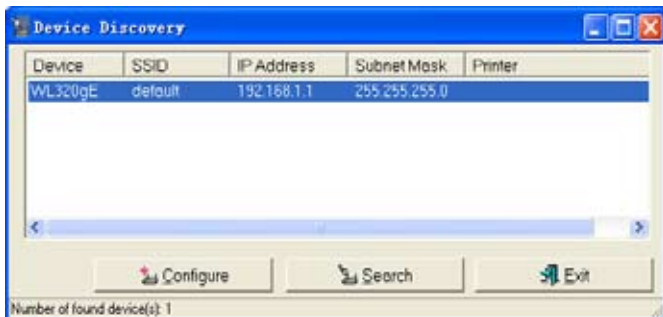


## ASUS WLAN Device Discovery

The ASUS WLAN Device Discovery tool enables you to change the TCP/IP settings of the WL-320gE.

To launch the ASUS WLAN Device Discovery:

Run the ASUS WLAN **Device Discovery** from the **Start** menu and click **Config** on the device.



## 5) Accessing the web page

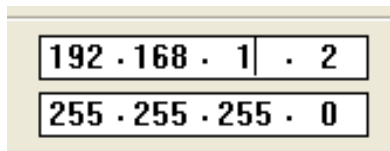
### Manually Entering the Address

To manually enter the default IP address of the WL-320gE, enter this URL in a web browser: <http://192.168.1.1>



(This is the wrong setting.)

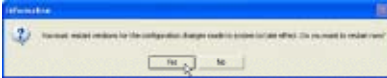
If your computer's IP is not on the same subnet as the ASUS WL-320gE (192.168.1.X), you will be asked to change it. The IP address can be any number from 2 to 254 that is not used by another device. Gateway is not required.



(This is the correct setting.)



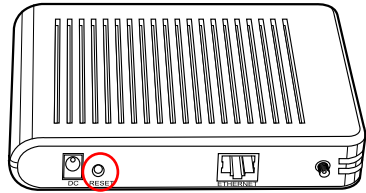
**Note:** You can also change your TCP/IP settings through Windows network properties as shown earlier.



Restart your Windows if you are asked to.



Note: If are having problems with the IP settings, restore the WL-320gE's settings to its default. To do this, push and hold for five seconds the Reset button using a pointed object.



## User Name and Password

Once connected, a window will ask for the User name and Password in order to log in. The factory default values are "admin" and "admin".



## Home Page

After logging in, you will see the ASUS WL-320gE AP home page. The default page will be for the Access Point mode. You can also change to Gateway mode through **System Setup -> Operation Mode**. Both AP and Gateway mode support Bridge (WDS), Repeater (URE) and Client (Station) mode.



Click **<Next>** to start Quick Setup. Follow the instructions to set up the ASUS Access Point.



## 6) Quick Setup in Access Point mode

1. Click **Next** to enter the Quick Setup page. Follow the instructions to set up the ASUS Access Point.
2. Set mode to AP or WDS(Bridge), Station(Client) or URE(Repeater).
3. Setting up your wireless interface. Specify to your wireless router an SSID (Service Set Identifier), which is a unique identifier attached to packets sent over WLAN. This identifier emulates a password when a device attempts to communicate with your wireless router via WLAN.

If you want to protect transmitted data, select a **Security Level** to enable encryption methods.

**Medium:** Only users with the same WEP key settings can connect to your wireless router and transmit data using 64bits or 128bits WEP key encryption.

**High:** Only users with the same WPA pre-shared key settings can connect to your wireless router and transmit data using TKIP encryption.

4. Input four sets of WEP keys in the WEP Key fields (10 hexadecimal digits for WEP 64bits, 26 hexadecimal digits for WEP 128bits). You can also let the system generate the keys by inputting a Passphrase. Record the Passphrase and the WEP keys in your notebook, then click Finish.

For example, if we select WEP 64bits encryption mode and input 11111 as the Passphrase, the WEP Keys are generated automatically.

5. Click **Save&Restart** to restart the wireless router and activate the new settings.



## 7) Quick Setup in Gateway mode

1. Click **System Setup -> Operation Mode -> Home Gateway**. In the Home Gateway mode, you will be able to connect to the Internet through ADSL or cable modem.

2. Click **Apply** to enter the Gateway mode.

3. Select your time zone or the closest region. Click **Next** to continue.

4.. ASUS WL320gE Access Point supports five types of ISP services— cable, ADSL (PPPoE, PPTP, static IP address), and Telstra BigPond. Since each service has its own protocols and standards, therefore, during the setup process, there are different identity settings demanded by WL-320gE. Select the correct connection type and click **Next** to continue.

### Cable User

If you are receiving services from cable or other ISP assigning IP addresses automatically, please select **Cable Modem or other connection that gets IP automatically**. If you are using cable services, your ISP may have provided you with hostname, MAC address, and heartbeat server, if true, please fill these information into the boxes on the setting page; if not, click **Next** to skip this step.



## PPPoE User

If you are PPPoE service user, please select the second line. You would be required to input the username and password provided by your ISP.

The image shows two screenshots of the 'Quick Setup' wizard. The first screenshot, titled 'Select Internet Connection Type', shows four options. The second option, 'ADSL or other connection type that requires username and password. It is known as PPPoE', is selected. A red arrow points from this option to the second screenshot. The second screenshot, titled 'Set Your Account to ISP', shows fields for 'User Name' and 'Password'. The 'User Name' field contains 'henk00@adsl-comfort' and the 'Password' field contains '8888888888888888'. Both fields have red asterisks indicating they are required. At the bottom of the second screenshot, there are 'Back' and 'Next' buttons.

## PPTP User

If you are using PPTP services, you would be asked to input the username, password, as well as the IP address provided by your ISP.

The image shows two screenshots of the 'Quick Setup' wizard. The first screenshot, titled 'Select Internet Connection Type', shows four options. The second option, 'ADSL or other connection type that requires username and password. It is known as PPPoE', is selected. A red arrow points from this option to the second screenshot. The second screenshot, titled 'Set Your Account to ISP', shows fields for 'User Name' and 'Password'. The 'User Name' field contains 'henk00@adsl-comfort' and the 'Password' field contains '8888888888888888'. Both fields have red asterisks indicating they are required. At the bottom of the second screenshot, there are 'Back' and 'Next' buttons. A red arrow points from the 'Next' button to the third screenshot. The third screenshot, titled 'WAN IP Setting', shows a table with the following information: 'Get IP automatically?' (Yes), 'IP Address' (192.168.1.11), 'Subnet Mask' (255.255.255.0), 'Default Gateway' (192.168.1.1), 'Get DNS Server automatically?' (Yes), 'DNS Server 1' (192.168.1.1), and 'DNS Server 2' ( ). At the bottom of the third screenshot, there are 'Back' and 'Next' buttons.

## Static IP User

If you are using ADSL or other connection type that uses static IP addresses, please select the fourth line, then input the IP address, subnet mask, and default gateway provided by your ISP. You could choose to specify certain DNS servers, or select to get DNS automatically.

The image shows two screenshots of the 'Quick Setup' wizard. The first screenshot, titled 'Select Internet Connection Type', shows four options. The fourth option, 'ADSL or other connection type that uses static IP address', is selected. A red arrow points from this option to the second screenshot. The second screenshot, titled 'WAN IP Setting', shows a table with the following information: 'Get IP automatically?' (No), 'IP Address' (192.168.1.11), 'Subnet Mask' (255.255.255.0), 'Default Gateway' (192.168.1.1), 'Get DNS Server automatically?' (Yes), 'DNS Server 1' (192.168.1.1), and 'DNS Server 2' ( ). At the bottom of the second screenshot, there are 'Back' and 'Next' buttons.

## 8) Operation Modes

## 1) Bridge Mode (WDS)

ASUS WLAN Wizard

1. Select Bridge  
2. Basic Setup  
3. Wireless  
4. Remote Bridge List  
5. Remote Bridge Setup  
6. Summary

### Wireless - Bridge

Wireless Bridge (also known as Wireless Extinction System or WDS) function allows you to connect to one or many APs through wireless.

RF Mode: 11G Only  
Channel: Auto  
Connect to APs in Remote Bridge List? Yes  
Allow discovery? Yes

#### Remote Bridge List

WDS Address

Previous Finish Apply

**Restart:** Clear the above settings and restart the settings in effect.  
**Finish:** Confirm all settings and restart WLAN card.  
**Apply:** Confirm above settings and apply.

### WDS Only

## Hybrid

## Channel

13



## **Connect to APs in Remote Bridge List (Yes/No)**

Select Yes to connect to access points in the remote bridge list.

## **Allow anonymous? (Yes/No)**

Select Yes to allow users without accounts to connect. 2) Client Mode (Station)



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Note: If “Connect to APs in Remote Bridge List” and “Allow Anonymous” are both set to “No”, it means that this AP will not connect with other APs and therefore the AP mode setting will return to “AP Only”.

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## **2) Client Mode (Station)**

Wireless client(Station) mode allows WL-320gE works as performance wireless client card as long as the device supports wired connection(with Ethernet port), like Game console, PC or NB. You need to set up the wireless setting and encryption before association.

Specify the SSID and Encryption of target AP accordingly under Wireless - Interface sub menu then click Finish button to Save and Restore setting. After system restarting, connect the Ethernet cable to WL-320gE ETHERNET port and other device, then WL-320gE will work as wireless client card.

## **3) Repeater Mode (URE)**

Wireless Repeater Mode allows WL-320gE works as range extender. You can set up the wireless setting under Wireless-Interface sub menu(same as Client Mode) the same as root AP then the wireless coverage can be boost.

## **9) Wireless**

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### **1) Site Survey(AP SCAN)**

Site Survey will help WL-320gE associate appropriate AP while in Station (Client) or URE(Repeater) mode. Make sure WL-320gE in Client or URE mode, click “AP SCAN” button in Wireless -> Interface will pop up a window. AP Scan will collect complete AP around information including MAC, SSID, Security, Channel and RSSI(AP wireless signal strength) value.





### 3) Multi-SSID and VLAN

The Access Point can work with a primary wireless network and up to three Virtual Local Area Networks (VLAN). You must enable Multi-SSID and VLAN first then setup each VLAN property. Each VLAN can work with its own VLAN ID and security level independently.

[illegible]

The screenshot shows the ASUS BIOS Setup Utility with the 'Main' tab selected. The left sidebar contains a tree view with options: Load Setup Defaults, Main, Advanced, Boot, Security, Exit, and Load Setup Defaults. The 'Main' tab is active, displaying the following settings:

- WPA/WPA2 Encryption:** Disabled
- WPA/WPA2 Pass:** (password field)
- WEP Encryption:** Disabled
- WEP Key 1 (26 or 54 bits):** (password field)
- WEP Key 2 (26 or 54 bits):** (password field)
- WEP Key 3 (26 or 54 bits):** (password field)
- WEP Key 4 (26 or 54 bits):** (password field)
- Key Index:** 1
- Network Key Rotation Interval:** (password field)

Below these settings is the **Multi-BIOS List** section, which includes a table of BIOS information:

Index	Model	Serial	CLM ID	Status
Primary BIOS	default			
14-0-0001	default2	Open System or Shared Key	OFF	Disabled
14-0-0002	default2	Open System or Shared Key	OFF	Disabled
14-0-0003	default2	Open System or Shared Key	OFF	Disabled
14-0-0004	default2	Open System or Shared Key	OFF	Disabled

At the bottom of the screen, there are three buttons: **Previous**, **Enter**, and **Apply**. Below the buttons, there are three status messages:

- Buttons:** Use the above settings and restore the settings in effect.
- F10:** Confirm all settings and save the settings.
- F5:** Confirm all settings and restore the settings.



## 10) System Setup

### 1) Global Settings

This page can change login password and select your favorite language.

The screenshot shows the 'System Setup - Global Settings' page. It has a title bar with 'ASUS WL-320gE' and a subtitle 'System Setup - Global Settings'. Below the subtitle, it says 'This page can change login password and select your favorite language.' There are two main sections: 'Change Password' and 'Select Language'. The 'Change Password' section has fields for 'New Password:', 'Repeat New Password:', and a 'Confirm' button. The 'Select Language' section has a 'Language:' dropdown menu set to 'English' and a 'Save' button.

### 2) SNMP

SNMP is a popular network monitoring and management protocol. It provides network administrators with the ability to monitor the status of the Access Point and receive notification of any critical events as they occur on the Access Point. You can setup AP property for SNMP control needed in System Setup-> SNMP webpage then click Save to apply your change.

The screenshot shows the 'System Setup - SNMP' page. It has a title bar with 'ASUS WL-320gE' and a subtitle 'System Setup - SNMP'. Below the subtitle, it says 'This section allows you to set up and control the SNMP.' There are several sections: 'SNMP System' with fields for 'System Name' and 'Location'; 'Community' with a 'Community Name' field; 'Change Community Name' with fields for 'Community Name' and 'Confirm Community Name'; 'Change Read-Only Name' with fields for 'Read-only Name' and 'Confirm Read-only Name'; 'SNMP Authentication' with fields for 'Authentication Type' (set to 'MD5'), 'Authentication Password', and 'Confirm Authentication Password'; and 'SNMP Privacy' with fields for 'Privacy Type' (set to 'DES'), 'Privacy Password', and 'Confirm Privacy Password'. There are 'Save' and 'Cancel' buttons at the bottom right.

