

# Asus WL-330GE - Wireless Access Point User Manual

Enhanced 802.11g pocket wireless access point

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See also: Setup Manual , Manual



# Enhanced 802.11g Pocket Wireless Access Point (WL-330gE) User Guide

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### Related Manuals for Asus WL-330GE - Wireless Access Point

Wireless Access Point Asus WL-330gE Manual Enhanced 802.11g portable wireless access point (229 pages) Wireless Router Asus WL-330GE M Setup Manual Setup guide (13 pages) Wireless Access Point ASUS WL-330GE User Manual Enhanced 802.11g portable wireless 4-in-1 router (10 pages) Wireless Access Point Asus WL-330gE Manual Wi-fi video surveillance system (2 pages) Wireless Access Point Asus (WL-330) User Manual Asus user guide pocket wireless access point (wl-330) (74 pages) Wireless Access Point Asus WL-330 Quick Start Manual Asustek pocket wireless access point quick start quide (17 pages) Wireless Access Point Asus WL-330 Quick Setup Manual Unlimited wireless access point (14 pages) Wireless Access Point Asus 54Mbps Pocket Wireless Access Point WL-330g User Manual 54mbps pocket wireless access point (wl-330g) user guide (70 pages) Wireless Access Point Asus WL-330G User Manual 54mbps pocket wireless access point (60 pages) Wireless Access Point Asus WL-HDD2.5 User Manual Asustek computer inc. user's manual wl-hdd2.5 (91 pages) Wireless Access Point Asus WL 320gE - Wireless Access Point User Manual 802.11g access point (71 pages) Wireless Access Point Asus WL-320gE Quick Start Manual (361 pages) Wireless Access Point Asus WL-320gE Quick Start Manual (172 pages) Wireless Access Point Asus WL-320gE Quick Start Manual (20 pages) Wireless Access Point Asus WL-320gP Quick Start Manual (172 pages) Wireless Access Point Asus WL-300 Quick Start Manual

Spacelink access point (13 pages)

Summary of Contents for Asus WL-330GE - Wireless Access Point Page 1 Enhanced 802.11g Pocket Wireless Access Point (WL-330gE) User Guide...

Page 2 Product warranty or service will not be extended if: (1) the product is repaired, modified or altered, unless such repair, modification of alteration is authorized in writing by ASUS; or (2) the serial number of the product is defaced or missing.

#### Page 3: Table Of Contents

Notices ......v Safety statements .....vi About this guide ......viii ASUS contact information ......ix WL-330gE specifications summary .....x Ch apt e r 1 : P r o d u c t int rod u ct i on Welcome! .....1-2 Package contents .....

#### Page 5: Notices

Notices Federal Communications Commission Statement This device complies with Part 15 of the Federal Communications Commission (FCC) Rules. Operation is subject to the following two conditions: • This device may not cause harmful interference, and • This device must accept any interference received including interference that may cause undesired operation.

#### Page 6: Safety Statements

Safety statements Regulatory Information/Disclaimers Installation and use of this Wireless LAN device must be in strict accordance with the instructions included in the user documentation provided with the product. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

**Page 7** Safety statements Caution Statement of the FCC Radio Frequency Exposure This Wireless LAN radio device has been evaluated under FCC Bulletin OET 65C and found compliant to the requirements as set forth in CFR 47 Sections 2.1091, 2.1093, 15.247(b)(4) addressing RF Exposure from radio frequency devices. The radiation output power of this Wireless LAN device is far below the FCC radio frequency exposure limits.

#### Page 8: About This Guide

AP. This part also presents the package contents, LED indicators, and recommended network settings. • Chapter 2: Hardware installation This chapter provides information on how to install the ASUS Portable Wireless • Chapter 3: Utilities This chapter provides information on how to configure the ASUS Portable Wireless AP using the utilities available from the support CD.

#### Page 9: Asus Contact Information

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#### Page 10: WI-330Ge Specifications Summary

WL-330gE specifications summary Ethernet Port LAN, 1 x RJ45 for 10/100 BaseT Support Ethernet and 802.3 with max bit rate 10/100Mbps and auto cross-over function (MDI-X) Wireless Port Transmit Power: 11b 19+-1.5dBm, 11g 17+-1.5 dBm at nominal temperature Receiver Sensitivity: -95+-1dBm@1Mbps, -85+-1dBm@11Mbps, -73+-1dBm@54Mbps Antenna Gain in 1.25dBi 2 x internal IFA antenna...

<u>Page 11</u> WL-330gE specifications summary Port Trigger - Open certain TCP or UDP ports to communicate with the computers connected to the ASUS WL-330gE. Virtual Server - Provides services like WWW, FTP by a server in the local network accessible for outside users...

Page 13 Chapter 1 This chapter describes the physical features of the ASUS Portable Wireless AP. This part presents the package contents, LED indicators, and recommended network settings.

#### Page 14: Chapter 1: Product Introduction

Wireless AP comes with a 64-bit/128-bit Wired Equivalent Privacy (WEP) encryption and Wi-Fi Protected Access (WPA) features. With these and many more, ASUS Portable Wireless AP is sure to keep you ahead in the world of wireless computing. Package contents Check the following items in your ASUS Portable Wireless AP package.

#### Page 15: Features

Features The ASUS Portable Wireless AP employs the DSSS and OFDM technologies to transmit and receive signals through radio waves on the 2.4 GHz band. Here are other ASUS Portable Wireless AP features: • Reliable data transfer rates of up to 135% of 54Mbps •...

#### Page 16: Bottom View

1.3.2 Bottom view Mounting hook: Use the mounting hook to install the device on concrete or wooden surfaces using a roundhead screw. Mounting Air vents: These vents provide hook ventilation to the device. Air vents 1.3.3 Rear view Ethernet port: This port connects the supplied RJ-45 plug and cable.

#### Page 17: Led Indicators

The WL-330gE is on and ready. Router/AP/EA/ Flashing The WL-330gE is under "reset to default" mode. Router/AP/EA/ The device is off. \*Modes: AP: Access Point mode EA: Ethernet adapter mode URE: Universal repeater mode ASUS WL-330gE Portable Wireless Access Point...

#### Page 18: Recommended Network Settings

In the Quick Setup Wizard, you can only configure WEP for security (open system). You can complete the share key and advanced security setup in the Advanced Settings page. The ASUS Portable Wireless AP can be configured in one of these modes: 1. Router/Gateway mode 2. Access Point (AP) mode 3.

#### Page 19: Ethernet Adapter Mode

In the Ethernet Adapter mode, you can enable any Ethernet-capable device to go wireless. " Internet WL-330gE 1.5.4 Repeater mode In the Repeater mode, you can use the ASUS WL-330gE to connect with your root router at home to extend your wireless coverage. " WL-330gE Internet ASUS WL-330gE Portable Wireless Access Point...

Page 20 Chapter 1: Product introduction...

<u>Page 21</u> Chapter 2 This chapter provides information on how to install the ASUS Portable Wireless AP.

#### Page 22: Chapter 2: Hardware Installation

System requirements Before installing the ASUS Portable Wireless AP, make sure that your system/ network meets the following requirements: • An Ethernet RJ-45 port (10Base-T/100Base-TX) • At least one IEEE 802.11b/g device with wireless capability • An installed TCP/IP and Internet browser 2.2 Device installation...

#### Page 23: Using Dc Power

Connect the WL-330gE power adapter to a wall socket. Connect the modem/switch power adapter plug to the DC-IN socket of the device. Connect the modem/switch power adapter to a wall socket. Modem/Switch/PC WL-330gE Wall socket ASUS WL-330gE Portable Wireless Access Point...

#### Page 24: Using Usb Bus Power

2.2.3 Using USB bus power Insert one end of the supplied RJ-45 cable to the WL-330gE Ethernet port. Insert the other end of the RJ-45 cable to the Ethernet port on your computer, notebook, modem or switch. Insert one end of the supplied USB cable to the DC-IN socket of the device. Insert the other end of the USB cable to any available USB port on your computer, notebook, network hub, modem/switch, or router.

#### Page 25: Placement

AP. You can configure the data rates that a device uses. If you limit the range of data rates available to the ASUS Portable Wireless AP, you may reduce the effective range of the wireless LAN coverage.

#### Page 26: Roaming Information

ID, known as the SSID or ESSID. Wireless client must be configured with the same SSID as that of the ASUS Pocket APs on the network since it can only roam between ASUS Pocket APs sharing the same SSID.

<u>Page 27</u> Chapter 3 This chapter provides information on how to configure the ASUS Portable Wireless AP using the utilities available from the support CD.

#### Page 28: Chapter 3: Utilities

Installing the utilities The support CD contains the utilities for configuring the ASUS Portable Wireless AP. To install the ASUS WLAN Utilities in Microsoft Windows, insert the support ® CD in the CD drive. If Autorun is disabled, run setup.exe from the root directory of the support CD.

#### Page 29: Launching The Utilities

3.1.1 Launching the utilities To launch the utilities, click Start > All Programs > ASUS Utility from the Windows desktop. Device Discovery Device Discovery is an ASUS WLAN utility which detects an ASUS 802.11g AP device, and enables you to configure the device.

#### Page 30: Firmware Restoration

Restoration utility to find and upload a new firmware. The process takes about three to four minutes. This is not a firmware upgrade utility and cannot be used on a working ASUS 802.11g AP. Normal firmware upgrades must be done through the web manager.

<u>Page 31</u> Chapter 4 This chapter provides instructions how to configure the ASUS Portable Wireless AP using the Web Configuration Manager.

#### Page 32: Overview

4.1.1 Adjusting the TCP/IP settings By default, the IP address of the ASUS Portable Wireless AP is 192.168.1.1, and the Subnet Mask is 255.255.255.0. To access the configuration utility, assign a different IP address to the network adapter where the ASUS Portable Wireless AP is connected.

Page 33 254 that is not used by another device.) Set the Subnet Mask to 255.255.255.0. Click OK when finished. Changing the TCP/IP settings may require system restart. Switch on the WL-330gE immediately after rebooting. ASUS WL-330gE Portable Wireless Access Point...

#### Page 34: Operation Modes

Gateway, Access Point (AP), Ethernet Adapter, and Universal Repeater. 4.2.1 Router/Gateway mode In the Router/Gateway mode, the ASUS WL-330gE connects to the Internet via an ADSL or a cable modem, and your network environment has multi-users using the same IP to ISP.

#### Page 35: Access Point (Ap) Mode

(LAN). WL-330gE Wireless computer To configure the ASUS WL-330gE in Access Point/AP mode: In the Mode Quick Setup page, click the AP tab. The Access Point (AP) page is displayed. ASUS WL-330gE Portable Wireless Access Point...

<u>Page 36</u> Specify an SSID (Service Set Identifier), which is a unique identifier attached to packets sent over WLAN. Select a security level to enable encryption methods: Low(None): No security level. Medium (WEP-64bits): Medium (WEP-128 bits) High (WPA-PSK/WPA-PSK) Click Finish to save the configuration. You can set up the advanced functions.

#### Page 37: Ethernet Adapter Mode

<sup>"</sup> Internet WL-330gE To configure the ASUS WL-330gE in Ethernet Adapter mode: In the Mode Quick Setup page, click the Adapter tab. The Adapter page is displayed. From the available list of devices in LAN, select the device you want to connect to.

#### Page 38: Repeater Mode

4.2.4 Repeater mode In the Repeater mode, you can use the ASUS WL-330gE to connect with your root router at home to extend your wireless coverage. "WL-330gE Internet To configure the ASUS WL-330gE in Repeater mode: In the Mode Quick Setup page, click the Repeater tab. The Repeater page is displayed.

#### Page 39: Advance Settings

Quick Setup page, the screen shown below is displayed. 4.3.1 Navigation menu The navigation menu, located at the left of the screen, contains the main menu and sub-menu items. Use the navigation menu to configure the various features of the ASUS WL-330gE. ASUS WL-330gE Portable Wireless Access Point...

#### Page 40: Quick Setup In Ap Mode

Quick Setup page, the default page is the Access Point (AP) mode. Click Next to enter the Quick Setup page. Follow the instructions to set up the ASUS Access Point. S e t mo d e t o A P o r WDS(Bridge), Station(Client) or URE(Repeater).

#### Page 41: Quick Setup In Home Gateway Mode

Click Next to continue. The ASUS 802.11g AP 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 the Access Point.

<u>Page 42</u> Cable User If you are receiving services from cable or other ISP assigning IP addresses automatically, select Cable Modem or other connection that gets IP automatically. If you are using cable services and your ISP have provided you with the hostname, the MAC address, and the heartbeat server, fill these information into the boxes on the setting page.

Page 43 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. ASUS WL-330gE Portable Wireless Access Point 4-13...

#### Page 44: Wireless

ASUS 802.11g AP is deployed in the same area. In that case, you should use a different SSID and a radio channel for each ASUS 802.11g AP. All ASUS Wireless APs/Routers and ASUS 802.11g/802.11b WLAN client adapters must have the same SSID to allow a wireless mobile client to roam.

Page 45 Based on your site survey of your network facility, make sure that all the ASUS 802.11g APs sharing the same channel, or channels in close number frequency, are located far from each other as possible.

<u>Page 46</u> Together these two schemes make a 64-bit (40 + 24) encryption scheme. Some vendors refer to this level of WEP as 40-bit and others refer to this as 64-bit. ASUS WLAN products use the term 64-bit when referring to this lower level of encryption.

Page 47 If the ASUS 802.11g AP and ALL of its wireless clients use the same four WEP keys, select "key rotation" to maximize security. Otherwise, choose one key in common as the default key.

#### Page 48: Access Control

Disable (no info required) Accept (need to input information) Reject (need to input information) For security, the ASUS 802.11g AP allows you to accept or reject wireless mobile clients. The default setting of "Disable" allows any wireless mobile client to connect.

#### Page 49: Radius Setting

To add a MAC address to the Access Control List, simply select MAC address from the list then click "Copy" button. Note: Click the "Finish" button to save your new settings and restart the ASUS 802.11g AP or click "Save" and restart later.

#### Page 50: Guest Account

ASUS 802.11g AP's SSID and associate with your Access Point. If you select "Yes", your ASUS 802.11g AP will not show in site surveys by wireless mobile clients and they will have to manually enter your ASUS 802.11g AP's SSID. To restrict access to your ASUS 802.11g AP, select "Yes".

<u>Page 51</u> Radio Power – Radio Power can be set between 1 to 84 but the default value is recommended. Enable WMM – This field allows you to enable WMM to improve multimedia transmission Enable WMM No-Acknowledgement – This field allows you to enable WMM No-Acknowledgement ASUS WL-330gE Portable Wireless Access Point 4-21...

#### Page 52: Ip Config

URE – This section allows you set up parameters for URE. This section only works while in URE mode. SSID – This is the SSID of root AP. The ASUS 802.11g AP can repeat the signal and boost the signal coverage while setting in URE mode.

#### Page 53: Dhcp Server

DHCP Server The ASUS WL-330gE supports up to 253 IP addresses for your local network. The IP address of a local machine can be manually assigned by the network administrator or obtained automatically from WL-330gE if the DHCP server is enabled.

<u>Page 54</u> Route This function allows you to add routing rules into the ASUS WL-330gE. It is useful if you connect several routers behind WL-330gE to share the same connection to the Internet. Miscellaneous This function allows you to configure other features such as enabling UPnP, and configure the DDNS setting.

#### Page 55: Nat Setting

This function allows you to open certain TCP or UDP ports to communicate with the computers connected to the ASUS WL-330gE. This is done by defining trigger ports and incoming ports. When the trigger port is detected, the inbound packets to the specified incoming port numbers are redirected to your computer.

#### Page 56: Internet Firewall

Virtual DMZ This function allows you to expose a computer to the Internet, so that all inbound traffics will be redirected to the computer you set. It is useful when you run some applications that use uncertain incoming ports. Use this function carefully. 4.3.7 Internet Firewall Basic Config...

#### Page 57: Url Filter

First, you should define the date and time that filtering will take place. Next, you should select the default action for filter in both directions and insert rules for any exceptions. URL Filter This function allows you to block specific URL access from your local network. ASUS WL-330gE Portable Wireless Access Point 4-27...

#### Page 58: System Setup

4.3.8 System Setup Click this item on the menu to reveal a sub menu. Follow the instructions to setup the ASUS 802.11g AP. Tips are given when you move your cursor over each item. Global Settings This function allows you to change your password and to select your preferred language.

#### Page 59: Operation Mode

You can select either Home Gateway or Access Point mode. Home Gateway In this mode, the ASUS WL-330gE is connected to the Internet via ADSL or a cable modem, and multi-users share the same IP to ISP in your network environment.

#### Page 60: Firmware Upgrade

802.11g AP. Periodically, a new Flash Code is available for the ASUS 802.11g APs on ASUS's Web site. You can update the ASUS 802.11g AP's Flash Code using the Firmware Upgrade page under the Advanced Setup menu of the Web Manager.

#### Page 61: Setting Management

Specify the path and name of the downloaded file in the New Setting File below. Then, click Upload. The upload process takes few minutes and then the system will reboot. New Setting File Click Browse to locate the file. ASUS WL-330gE Portable Wireless Access Point 4-31...

#### Page 62: Factory Default

You can reset all settings to their factory defaults manually by pushing the "Reset" button of the ASUS 802.11g AP while it is ON. See page 21. Push the "Reset" button with a pen or a paper clip for about 5 seconds or until the power LED starts blinking.

#### Page 63: Status & Log

ASUS 802.11g AP. Tips are given when you move your cursor over each item. Status Wireless System Up Time It shows how long the ASUS 802.11g AP has been running since the last bootup. ASUS WL-330gE Portable Wireless Access Point 4-33...

Page 64 4-34 Chapter 4: Configuration...

Page 65 Chapter 5 This chapter provides instructions on how to use the ASUS Portable Wireless AP on various network setups.

#### Page 66: Chapter 5: Using The Device

Using the device in a local network You can use the WL-330gE to connect a wireless LANenabled computer to a local network with or without a DHCP server. To connect a wireless LANenabled computer to a local network: Switch the WL-330gE to AP mode. (Default SSID: AP xxxxxx), then turn on the device.

#### Page 67: Replacing The Cable Connections Of Other Devices

Internet connection sharing with other computers in your office or home network. "Internet ADSL/Cable modem WL-330gE Wireless computer Use the mode switch to set the WL-330gE to AP mode before sharing an Internet connection with other computers in your network. ASUS WL-330gE Portable Wireless Access Point...

<u>Page 68</u> Table 4-1: Internet connection sharing matrix If your Internet Then set the IP of other Number of allowed connection is computer(s) Internet connections xDSL with dynamic IP ISP automatically assigns the Depends on the Internet (PPPoE account) IP (using PPPoE dial-up) Service Provider (ISP) xDSL with static IP to the provided static IP...

<u>Page 69</u> Appendix The Appendix features a troubleshooting guide for solving common problems you may encounter when using the ASUS Portable Wireless AP.

#### Page 70: Appendix: Troubleshooting

• When encryption is enabled, check if the ASUS Portable Wireless AP and the ASUS WLAN card have the same encryption settings. • Check if the Wireless LED of the ASUS Portable Wireless AP is on. • When the Access Control table is enabled, check if the MAC address of the ASUS WLAN card is included in the Access Control table.

Page 71 I can not access the ASUS To access the ASUS Portable Wireless AP web configuration page, Portable Wireless AP web your computer must have the same subnet as that of the ASUS configuration page. Pocket Wireless AP. Adjust your network if your computer's subnet does not match that of the ASUS Portable Wireless AP.

#### Page 72: Troubleshooting

Appendix: Troubleshooting...

This manual is also suitable for:

WI-330