

# Pocket Wireless Access Point (WL-330)



# **Quick Start Guide**

Copyright © 2003 ASUSTeK COMPUTER INC. All Rights Reserved.

# **Package contents**

Check the following items in your ASUS Pocket Wireless AP package. Contact your retailer if any item is damaged or missing.

- ASUS Pocket Wireless AP (WL-330)
- Compact universal power adapter and plug (100V ~ 240V)
- USB adapter and plug
- RJ-45 connector and cable
- Support CD
- Quick Start Guide
- Soft case

**IMPORTANT!** Use only the power adapter and plug that came with the ASUS Pocket Wireless AP package. Using other power adapter and plug may damage the device.

131

**NOTE.** Refer to the **User Guide** in the support CD for detailed information on the ASUS Pocket Wireless AP.

# System requirements

Before installing the ASUS Pocket Wireless AP, make sure that your system meets the following requirements:

- An Ethernet (10Base-T or 100Base-TX) adapter for wired client
- At least one 802.11b (11Mbps) or 802.11g (54Mbps) wireless adapter for wireless mobile client
- An installed TCP/IP and Internet browser

# **Installing the device**

Follow these instructions to install the ASUS Pocket Wireless AP.

#### Access point mode (DC power)

- 1. Connect one end of the RJ-45 cable to the Ethernet port of the device.
- 2. Connect the other end of the RJ-45 cable to the 10Base-T port of a network hub, switch, router, or wall patch panel.
- 3. Insert the universal power adapter plug to the DC-IN socket of the device.
- 4. Connect the universal power adapter to a wall socket.



- 5. Insert the power plug to the DC-IN socket of the network hub, switch, or router.
- 6. Plug the power adapter of the network hub, switch, or router to a wall socket.

## Ethernet adapter mode (USB bus power)

- 1. Connect one end of the RJ-45 cable to the Ethernet port of the device.
- 2. Connect the other end of the RJ-45 cable to the Ethernet port of your computer.
- 3. Insert the USB cable plug to the DC-IN socket of the device.
- Insert the other end of the USB cable to any available USB port of your computer.



After installation, check the Power and Ethernet LEDs. These LEDs light up to indicate that the device is on and has physical connection to an Ethernet network.



**NOTE.** For notebooks with limited power supply, we recommend that you use the supplied universal power adapter and plug instead of the USB adapter and plug.

# **LED indicators**

The ASUS Pocket Wireless AP comes with a Power, Wireless, and Ethernet LED indicators. Refer to the table below for LED indications.



LED	Status	Mode*	Indication	
Power	On Off Blinking	AP/EA AP/EA AP/EA	The device in on and ready. The device is off or performing boot sequence Firmware upgrade failed.	
Wireless	On Off	<ul> <li>AP The device is on and ready.</li> <li>EA The device is associated with an AP or other wireless device.</li> <li>AP The device is off.</li> </ul>		
	Blinking	EA AP/EA	The device is not associated with an AP or other wireless device. The device is transmitting or receiving data.	
Ethernet	On	AP/EA	A The device is off or not connected to an Ethernet	
	Off	AP/EA	network. The device is connected to an Ethernet network.	

\*Modes:

AP - Access point

EA - Ethernet adapter

# Installing the utilities

The support CD contains the utilities for configuring the ASUS Pocket Wireless AP.

To install the device utilities in your computer:

- 1. Insert the support CD to the optical drive.
- 2. Click "Install ASUS WLAN AP Utilities" when the ASUS Wireless LAN Access Point WL-330 installation window appears.
- 3. The device utilities are copied into your computer.





If Autorun is NOT enabled in your computer, browse the contents of the support CD and double click the Setup.exe file to run the CD.

#### Other support CD options

**Uninstall ASUS WLAN Card Utilities/Driver**. Click this option to uninstall the ASUS Pocket Wireless AP utilities from your system.

Run Setup Wizard Utility. Click this option to run the Setup Wizard utility.

**Read/Install User Documentation.** Click to view the installation and quick setup guides in PDF format.

Explore this CD. Click this option to explore the support CD contents.

Browse our Web Site. Click this option to visit the ASUS website.

Click **EXIT** to close the installation window.

English

# Using the Setup Wizard utility

The Setup Wizard utility allows easy configuration of the ASUS Pocket Wireless AP settings in both access point and Ethernet adapter modes. You may launch the Setup Wizard utility directly from the support CD or from the Windows<sup>®</sup> desktop.

## Launching the Setup Wizard utility

To launch the Setup Wizard utility from the support CD:

- 1. Insert the support CD to the optical drive.
- 2. Click the **Run Setup Wizard Utility** option from the installation window.
- 3. The Setup Wizard utility window appears.

To launch the Setup Wizard from the Windows<sup>®</sup> desktop:

- 1. Install the device utilities following the steps in section 3.1.
- From the Windows<sup>®</sup> desktop, click Start > All Programs > ASUS Utility > Wireless AP WL-330 > Setup Wizard.
- 3. The Setup Wizard utility window appears.







#### Setting up your access point (AP mode)

To setup your access point (AP):

🖀 ASUS Setup Wizard - Ac	cess Point Status 🛛 🕅
Pock	et Wireless AP WL-330
SED:	AP_6430
Olamel:	
Encryption :	WEP Disabled
MAC Addess:	00.00:6E:8D:F3:F0
IP Address :	192168.1.1
Search Again	Cotigue Cancel

1. The Setup Wizard auto-detects and displays the device SSID, channel, encryption, MAC, and IP addresses. Click Configure to change these settings.

ASUS AP Setup Wizard - Access Peint Configuration Besic Enception Connect Configuration Internet Inter	
WEP Search/Igain Ob Cancel	

2. Enter the Network Name (SSID) and channel you wish to use. Click the WEP link or the **Encryption** tab to set the WEP encryption.

		n ( <u>w</u> EP enabled)	_	
_	hentication :		-	
	eless Network			
Kay		Hexadecinal digits	- 1 🕲	
Ley		64 bits (10 digits)	- a -	
6	Menual Assig			
	Key1:			
	Key 2 :			
	Kep 2 :			
	Kep <u>4</u> :			
C		neation		
	Campbrane :			
	ectione as pos	a Default Key => Key 1		

3. Configure the AP WEP encryption. Click **OK** when done.

Pocket Wireless AP to establish connection.

**IMPORTANT!** A wireless client must have the same SSID and WEP encryption settings with the ASUS

English

# Connecting to an AP or other wireless devices (Ethernet adapter mode)

The Setup Wizard utility also allows you to use your ASUS Pocket Wireless AP as an Ethernet adapter that connects to an AP or other wireless device(s).

To connect the ASUS Pocket Wireless AP to an AP or wireless device(s):

- 1. Switch the ASUS Pocket Wireless AP to Ethernet adapter mode using the mode switch on the bottom of the device.
- From the Windows<sup>®</sup> desktop, click Start > All Programs > ASUS Utility > Wireless AP WL-330 > Setup Wizard.
- 3. The Ethernet Adapter Status window appears and displays the auto-detected Ethernet adapter settings. Click **Configure** to connect to an AP or wireless device (s).



4. Select a wireless network from the **Available Networks** list, then click **Configure**.



**NOTE.** The available networks are indicated by icons for easy identification. Refer to the icon indications table in the User Guide for details.



- 5. Enter the **network name** (SSID) of the wireless network you wish to connect.
- 6. Select the channel of the wireless network you wish to connect.



**NOTE.** You may select the channel if you set the device in an Ad-hoc network environment. In Infrastructure network, the channel is automatically selected.

ASUS Setup Wizard - Ethernet Adapter Configuration
Banic Encryption
Network Name (\$\$10)
THE REAL PROPERTY AND A DESCRIPTION OF A
Ovegeel
1
Encryption :
WEP
Network Type
C Johnstructure @ Ad Hoc
-MAC Cloning
P Enabled
Dk Cancel

- 7. Set the **Network Type**. Select **Infrastructure** if you wish to connect to an AP. Select **Ad Hoc** if you wish to connect to another wireless device.
- 8. Enable or disable MAC Cloning.
- 9. Click the **WEP** link or the **Encryption** tab.
  - The SSID and WEP encryption keys of the ASUS Pocket Wireless AP must be the same with that of the AP or wireless device to establish connection.
    - If you are trying to connect to an AP (Infrastructure), make sure the MAC address of the ASUS Pocket Wireless AP is included in the AP authorization table.
- 10. Configure the Ethernet adapter WEP encryption settings.

Click **OK** when done.



**IMPORTANT!** Change the device WEP encryption settings only when your selected network has an enabled WEP encryption.

ASUS Setup Wizard - Ethernet Adapter Configuration	
Basic Encryption	
gate enception (wEP enabled)     Authentication	
'witeless Network: Key (wEP)	
Key Envist: Hexadecinal digit:	
Manual Assignment     Kny 1:	
Key 2: Key 3:	
Kayá:	
Bauphane:	
Select one as your Default Key => Key 1	
	_
Ok Cancel	

ASUS Pocket Wireless Access Point (WL-330)

# Web Configuration utility

The Web Configuration utility allows you to configure the ASUS Pocket Wireless AP using a web browser on your computer. The following sections provide information on how to launch this utility.

## Launching the Web Configuration utility

To launch the Web Configuration utility using the **Device Discovery** utility:

- Click Start > All Programs > ASUS Utility > Wireless AP WL-330 > Device Discovery.
- 2. The Device Discovery window appears.
- 3. Click **Config** to launch the Web Configuration utility.

Device	55ID	IP Address	Subret Mark	Printer	
#WL330	menin	192,168,1.1	295.255.255.0		
e					

To launch the Web Configuration utility using a web browser:

- 1. Open a web browser.
- 2. Disable your web proxy, if you are using one.
- 3. Type http://192.168.1.1 on the address bar, then press <Enter>.



**NOTE.** This option requires you to change the TCP/IP settings of the network adapter where the ASUS Pocket Wireless AP is connected. Refer to the User Guide in the support CD for instructions on how to change the TCP/IP configurations.

#### Access point mode

When you set the ASUS Pocket Wireless AP in AP mode, the Web Configuration window displays the default values. You may change the AP settings in this page. If you wish to load the default values after changing these settings, press the reset button for more than 5 seconds, then refresh your browser to display the default values.

Simple Setup Ac	<u>cess Control</u> <u>Firmware Upgrade</u>
Wireless Interface	
SSID: Associated Stations	AP_123456
Response to Broadcast SSID reque	
Channel:	Channel 1 💌
Basic Rate Set:	☑1 ☑2 ☑ 5.5 ☑ 11 Mbps
Preamble:	Long M
Authentication Method:	Open System or Shared Key 💌
Encryption(WEP):	None M
Pass Phrase:	
WEP Key 1 (10 or 26 hex digits):	
WEP Key 2 (10 or 26 hex digits):	
WEP Key 3 (10 or 26 hex digits):	
WEP Key 4 (10 or 26 hex digits):	
Default Key:	Kaye 1 🖂
Ethernet Interface	
© Enable DHCP:	
Our Use the following IP Setting:	
Ip Address:	192.168.1.1
Subnet Mask:	265.255.255.0
Default Gateway:	
Setting Status: Please Enter Valid Data	L
Restore	Launch

#### Wireless Distribution System

The Wireless Distribution System allows your ASUS Pocket Wireless AP to communicate simultaneously with wireless clients (AP mode) and with other APs (wireless bridge mode) in your location. The WDS is a cost-effective and easy way of integrating multiple wireless networks.

	Click here to Ethernet Adapter
Simple Setup A	ccess Control Firmware Upgrade
MAC Access Control	Wireless Distribution System
Wireless Distribution System	
AP Mode:	Access Point only
Channel:	Chennel 1 👻
WDS APs allowed to be connected:	
Number	MAC Address
1	00:00:6E:69:52:E9
2	00:00:00:00:00:00
3	00:00:00:00:00:00
4	00:00:00:00:00:00
5	00:00:00:00:00:00
6	00:00:00:00:00:00
Restore	Launch
Restore: Clear the above settings a	nd restore the settings in effect.
Launch: Confirm all settings and la	unch WL330 immediately.

To setup a Wireless Distribution System network:

- 1. Click the **Wireless Distribution System** link in the **Access Control** page of the Web Configuration utility.
- 2. Set the AP mode to **Hybrid-Active**.
- 3. Enter the MAC address(es) of the target AP(s) you wish to bridge with the ASUS Pocket Wireless AP in the MAC address list.
- 4. Specify the channel to be used. All target AP(s) must specify the same channel to establish connection to the ASUS Pocket Wireless AP.
- 5. Click Launch.

English

In a typical WDS network, the ASUS Pocket Wireless AP serves as a central link to all connected APs (functioning as wireless bridge). The APs communicate with each other using the central AP, while maintaining network connections to their respective wireless clients.

In this setup, WB4 and WB5 may communicate using point-to-point connection but WB5 may not communicate with the ASUS Pocket Wireless AP, WB1, WB2, and WB3 since multipoint-to-point connection is not supported.



#### Firmware Upgrade

The **Firmware Upgrade** page displays the product ID, firmware version, and regulation domain. This page also allows you to restore or update the ASUS Pocket Wireless AP firmware when it becomes outdated or corrupted.

	US .	<b>•</b>	Click here to Etherniet Adapter
Sin	<u>iple Setup</u>	Access Control	<u>Firmware Upgrade</u>
Firmware	Upgrade		
Product ID:		WL330	
Firmware Ver	rsioa:	1.06.26.21	
Regulation D	emain:	0x40 MKK(Ja	pan)
New Firmwar	e File:		Browse
		Upgrade	
	la a ut		
Restore:		and restore the factory defaults .	
Brawse:		mion of firmware in your disk.	
Upload:	Start the upgrade	process immediately.	



**NOTE.** The Power LED blinks continuously when the firmware is corrupted or when the firmware upgrade fails.

#### Ethernet adapter mode

Click the link in the home page to configure the ASUS Pocket Wireless AP Ethernet adapter settings.



**IMPORTANT!** You must switch the device to Ethernet adapter mode using the mode switch before changing any Ethernet adapter setting. Any changes made in the Ethernet adapter configuration takes effect after switching the device in Ethernet adapter mode.

<u>/1545</u> ° <u>=</u> 🔊	Click here to Access Point
Simple Setup	Site Survey Firmware Upgrade
Wireless Interface	
SSID: (Enter "any" for joining the nearest AP)	ANY
Operating Mode:	Infrastructure Mode OAd-Hoc Mode
Channel:	Automatic 👻
Transmission Rate:	Automatic 🛩
Preamble:	Long 💌
Authentication Method:	Open System 🛩
Encryption(WEP):	None 🛩
Pass Phrase:	
WEP Key 1 (10 or 26 hex digits):	
WEP Key 2 (10 or 26 hex digits):	
WEP Key 3 (10 or 26 hex digits):	
WEP Key 4 (10 or 26 hex digits):	
Default Key:	
MAC Cloning:	Fnable
Button Scan Mode	
Enable Button Scanning:	
Scan Mode:	Find the connection with the strongest link quality
Specified Profile:	Protile 1 V
Setting Status: Please Enter Valid D	lata.
Restore	Lounch
Restore: Clear the above settings	and restore the settings in effect.
V	launch WL330 immediately.



**NOTE.** Refer to the User Guide in the support CD before configuring the Ethernet adapter settings.

# Simple setup

This section provides instructions on how to use your ASUS Pocket Wireless AP in various operating modes and conditions.

#### Using the device in a local network

In a local network, you may use the ASUS Pocket Wireless AP to connect a WLAN-enabled desktop PC or notebook with or without a DHCP server.

To connect a WLAN-enabled desktop PC or notebook to the ASUS Pocket Wireless AP:

- Switch the device to AP mode using the mode switch. (Default SSID: AP\_xxxxx)
- 2. Turn on the ASUS Pocket Wireless AP, then connect one end of the RJ-45 cable to the Ethernet port of the device and the other end to the Ethernet port of the local network
- 3. Use the WLAN adapter software in your desktop PC or notebook to perform a Site Survey. Make sure the desktop PC or notebook WLAN adapter is set to Infrastructure mode.
- 4. Establish connection with the ASUS Pocket Wireless AP.
- 5. Configure the IP settings of the desktop PC or notebook to establish connection to the local network.
- 6. Check your connection.



Use the Web Configuration utility only if you need to change the device SSID or WEP encryption settings.

#### Replacing the Ethernet cable of desktop PCs or notebooks

Follow these instructions to replace your desktop PC or notebook cable connection to an ADSL or cable modem with the ASUS Pocket Wireless AP.

- Switch the device to AP mode using the mode switch. (Default SSID: AP\_xxxxx)
- 2. Turn on the ASUS Pocket Wireless AP, then connect one end of the RJ-45 cable to the Ethernet port of the device and the other end to the Ethernet port of the ADSL or cable modem.
- 3. Use the WLAN adapter software in your desktop PC or notebook to perform a Site Survey. Make sure the desktop PC or notebook WLAN adapter is set to Infrastructure mode.

- 4. Establish connection with the ASUS Pocket Wireless AP.
- 5. Configure the IP settings of the desktop PC or notebook to establish connection to the Internet.
- 6. Check your connection.

## **Replacing the Ethernet cables of other devices**

Follow these instructions to replace your Xbox, PlayStation<sup>®</sup> 2, SETUP-box, or network printer Ethernet cable connection with the ASUS Pocket Wireless AP.

- 1. Switch the device to Ethernet adapter mode using the mode switch. (Default SSID: ANY)
- 2. Place the ASUS Pocket Wireless AP nearest the AP you wish to connect, then turn on the device.
- 3. Connect one end of the RJ-45 cable to the Ethernet port of the device and the other end to the Ethernet port of the Xbox, PlayStation<sup>®</sup> 2, SETUP-box, or network printer.



**IMPORTANT!** If you failed to connect to an AP, press the reset button of the device to load the Button Scan mode default settings.

- 4. Configure the IP settings of the Xbox, PlayStation<sup>®</sup> 2, SETUP-box, or network printer to establish connection.
- 5. Check your connection.

#### Connecting to another AP as an adapter or wireless bridge

Follow these instructions to set your ASUS Pocket Wireless LAN AP as a WLAN adapter to access another AP with disabled WEP encryption and valid SSID.

- 1. Switch the device to Ethernet adapter mode using the mode switch. (Default SSID: ANY in an Infrastructure network)
- 2. Place the ASUS Pocket Wireless AP nearest the AP you wish to connect, then turn on the device.
- 3. Connect one end of the RJ-45 cable to the Ethernet port of the device and the other end to the Ethernet port of your desktop PC or notebook.



**IMPORTANT!** If you failed to connect to an AP, press the reset button of the device to load the Button Scan mode default settings.

- 4. Configure the IP settings of the desktop PC or notebook to establish connection to the local network.
- 5. Check your connection.

English