

Wireless LAN USB Adapter

AWL300

User Manual



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BENQ Corporation



Notice I

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Notice II

FCC Warning

The AWL300 compiles with Part 15 of the FCC rules.

Operation is subject to the following two conditions.

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Note:

The AWL300 has been tested and found to comply with the limits for a Class B digital device and a low power transmitter, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.



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Chapter I. Introduction

Thank you for purchasing a BenQ AWL300 Wireless LAN USB Adapter. The AWL300 Wireless LAN USB Adapter lets you connect to your network and the Internet without needing to be tethered to a fixed location by a physical cable, while still getting the same data transfer rates as with traditional Ethernet. You can use it with any desktop or notebook PC with a USB port. In addition to allowing you to enjoy the wonders of wireless networking, the AWL300 provides two operating modes—ad-hoc mode (peer-to-peer) and infrastructure mode (station-to-AP)—to meet to your varying needs at different purposes.





I-I Product Kit

Before installation, make sure that you have the following items:

- AWL300 Wireless LAN USB Adapter
- USB cable
- Software CD containing user manual and utility
- Quick Start Guide
- Warranty card

I-2 System Requirements

Before using your AWL 300, please check that you have the following required items:

- PC/Notebook with USB port and CD-ROM drive
- Microsoft Windows 98SE/ME/2000/XP operating system

I-3 Mechanical Description

Top panel of the Access Point

The following table provides an overview of each LED activity:



	Activity	Description
PWR	Steady Green	When connecting to PC
LINK	Steady Green	when connecting to PC



Chapter 2. Installation

2.1 Installation for Win98SE/WinME/Win2000

Execute Setup.exe in the AWL300 directory in BENQ Wireless LAN CD. For example, if your CD-ROM has a drive D, please execute D:\AWL300\Setup.exe.



Press Next button



InstallShield Wizard	×
Choose Destination Location Select folder where Setup will install files.	N
Setup will install AWL300 in the following folder.	
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.	
Destination Folder C:\Program Files\BenQ\AWL300	
InstallShield Car	ncel

Press **Browse**, if you want to change destination location of applications, and then press **Next** button.

InstallShield Wizard	X
Select Program Folder Please select a program folder.	
Setup will add program icons to the Program Folder listed belo name, or select one from the existing folders list. Click Next to	
Program Folders:	
AwL300	
E <u>x</u> isting Folders:	
Accessories Online Services StartUp	
InstallShield	<u>N</u> ext > Cancel

The folder name will be AWL300. Press Next button if you don't want to change it.



InstallShield Wizard	
	InstallShield Wizard Complete
	Setup has finished installing AWL300 on your computer.
	< Back Finish Cancel

Press **Finish** and restart your computer.





After complete installation, you will get the following icon in your PC Start Menu.



2.2 Installation for WinXP

Insert AWL300 USB Adapter into your PC, and then Windows will show the dialog – 'Found New Hardware Wizard'.



Select 'Install from a list or specific location (Advanced)' and press Next button.



Found New Hardware Wizard
Please choose your search and installation options.
⊙ Search for the best driver in these locations.
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
Search removable media (floppy, CD-ROM)
✓ Include this location in the search:
D:\AWL300\WinXP Browse
O Don't search. I will choose the driver to install.
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.
< <u>B</u> ack <u>N</u> ext > Cancel

Select 'Include this location in the search' and browse the BENQ Wireless LAN CD to find AWL300. For example, if your CD-ROM is drive D, the location is D:\AWL300\WinXP.

Hardwa	re Installation
1	The software you are installing for this hardware: BENQ & WL300R/& WL400R Wireless LAN USB & Adapter has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway

Press Continue Anyway



Found New H	Hardware Wizard
Please wa	it while the wizard installs the software
⊞ ⊉	BENQ AWL300R/AWL400R Wireless LAN USB Adapter
	vnetusbr.sys To C:\WINDOWS\System32\DRIVERS
	< <u>B</u> ack <u>N</u> ext > Cancel

Please wait while coping files.

Found New Hardware Wiz	ard
	Completing the Found New Hardware Wizard
	The wizard has finished installing the software for:
	BENQ A WL300R/A WL400R Wireless LAN USB Adapter
	Click Finish to close the wizard.
	< <u>B</u> ack Finish Cancel

Press Finish.



Chapter 3. Uninstallation

To uninstall AWL300, you can remove AWL300 from Add/Remove Programs Properties in Control Panel as the following figure.

Add/Remo	ove Programs Properties	? ×
Install/Uni	install Windows Setup Startup Disk	
2	To install a new program from a floppy disk or CD-RO drive, click Install.	м
	<u>I</u> nstall	
3	The following software can be automatically removed Windows. To remove a program or to modify its install components, select it from the list and click Add/Remove.	
ATI Disp AWL30	play Driver	
		- 11
	Add/ <u>R</u> emove.	
	OK Cancel Ap;	yle

Press Add/Remove



Press **OK** if you really want to remove AWL300.



InstallShield Wizard	
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed AWL300. Before you can use the program, you must restart your computer. (*) Yes, I want to restart my computer now. (*) No, I will restart my computer later. Remove any disks from their drives, and then click Finish to complete setup.
	< Back. Finish Cancel

Press **Finish** when uninstall successfully completed and then you must restart your computer.

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Chapter 4. Configuration & Monitor Utility

4.1 Monitor

<u>, 1 r</u>				_	
itor Statistics S	ite Survey Encrypti	on Adva	inced Versio	n ⊣	
Operating Mode	Infrastructure	7			
Channel	3	7	Change		
SSID	Benq_Office		Submit		
Tx Rate	Fixed 11 Mbps	~	Submit		
Int. Roaming	Disabled	7	Cancel		
Radio	On	7			
Status Ass	ociated - BSSID: 00-	03-9D-40-	EE-9B		
Signal Strength					
Link Orrelity 🔲		62 %			
Link Quality 🔳	1	00 %			

Operating Mode

Infrastructure Mode

In this mode, the driver will scan all available channels continuously until one or more Access Points are found that matches its SSID. When it gets to that point, it will try to authenticate and associate with the Access Point.

Ad Hoc Mode

In this mode, the driver will scan for 5 seconds to look for an existing Ad Hoc network, which uses the same SSID.



Channel

This field shows the current radio channel used for an active connection.

SSID

Service Set Identity

Tx Rate

This field shows the current transmit rate which are being used for an active connection.

Int. Roaming (not supported by this model, AWL300)

Radio (not supported by this model, AWL300)

Status

The current state of the driver is displayed in this field. If the state reveals "Associated," it means that the normal flow of operation is in Infrastructure mode. This shows that the PC is already connected to access point and BSSID is also shown in the form of hex digits. At the same time, the networking is available for the device.

In "Scanning" state, it means that the node cannot detect the SSID to get an access point within range and is searching for an available access point. Also, if the driver failed to initialize for some unknown reasons, this field will display an error message.

Signal Strength

The Signal Strength bar graph becomes active only when the node is in Infrastructure Mode does. This bar graphic shows normalized signal strength as reported by the radio, averaged over all frames over 100 bytes long received from the Access Point.

Link Quality

This field reveals the quality of the current connection. Only when the node is in Infrastructure Mode does the Link Quality bar graph become active. The bar graph displays the link quality between the node and its Access Point.



4.2 Statistics

Q Wireless LAN Moni BENQ AWL300R/AWL40		B Adapter 👤
Monitor Statistics Site	Survey Encryption	Advanced Version
	Tx	Bx
Data Packets		
Successful	34	7
Unsuccessful	0	0
Mgmt Packets		
Successful	4	693
Unsuccessful	0	880
Rejected Packets	0	0
		Clear
		Hide

The Statistics page shows the counts of packets transmitted and received. Press Clear button to set these numbers to zero.



4.3 Site Survey

BENQ AWL300R/AWL	400R Wireless L4				/ersion
BSSID 00-03-9D-40-EE-9B 00-03-9D-4F-00-56 00-04-5A-EE-AA-47 00-03-9D-40-12-41 00-00-F0-11-00-00 00-03-9D-4F-00-13 00-04-E2-40-70-1F 00-10-91-00-21-6C	Eric_700 linksys Henry snoopy AWL700 Duke	Signal 9% 9% N/A 69% 45% 12% N/A N/A	3 6 7 7 10 11	WEP Yes No No No No No No	Infra Infra Infra Infra Infra Infra
T	Re-S	can		Cancel	<u> </u>
				н	lide

The Site Survey page shows the APs nearby. After pressing "**Re-Scan**" button to search APs nearby, users can double click on the BSSID area to associate with the AP which user wants to connect.



4.4 Encryption

NQ Wireless LAN Mor BENQ AWL300R/AWL4			3 Adapter		ਵ
, 				,	
Monitor Statistics Site	e Survey	Encryption	Advanced	I Version	
Encryption		Disabled	•]	
Key #1	******				
Key #2	******				
Key #3	*****				
Key #4	*******				
WEP Key to u	ise	Key #1	7]	
WEP Mode		Mandator		1	
Authentication	Туре	Open Sys	tem 🔽]	
			Su	bmit	
				Hide	1

According to WEP function select, this panel allows the entry of 64-bit encryption and 128-bit key. Each key must consist of hex digits to be written to the driver and registry. This means that only digit 0-9 and letters A-F are valid entries. Therefore, if entered incorrectly, the program will not write keys to a driver.

Encryption

Disabled – Disable WEP function 64 Bit – Enable WEP with 64 bit Key 128 Bit – Enable WEP with 128 bit Key

WEP Key to use

Select one of these four keys.

WEP Mode

Select WEP mode – Mandatory or Optional

Authentication Type

Select Open System type or Shared Key type



4.5 Advanced

BENQ Wireless LAN Monitor Utility						
I BI	BENQ AWL300R/AWL400R Wireless LAN USB Adapter					
M	Ionitor Statistics Site Survey	Encryption Advanced Version				
		C Long				
	Preamble Type	C Short				
		C Auto				
	Fragmentation Threshold					
	(Disabled)	2346				
	RTS/CTS Threshold					
	(Disabled)	2347				
	🗖 802.11 Power Save					
		Submit				
		Hide				

The Advanced Page sets the preamble type and threshold of fragmentation and RTS/CTS. Press Submit button to apply your changes



4.6 Version

BENQ	Wireless LAN Monitor	Utility 🔀				
BEI	BENQ AWL300R/AWL400R Wireless LAN USB Adapter					
Мо	nitor Statistics Site Sum	vey Encryption Advanced Version				
	Benq					
	Driver	1.3.4.124				
	Firmware	0.90.2.93				
	Application	3.1.4.18				
	MAC Address	00-03-FF-FF-FF-09				
		Hide				

You may learn the product version including the detail of Driver, Firmware, Application, and MAC Address from this "Version" tab. When users wish to report their problems to technical support, they must have this version number.