

Wireless LAN USB Stick

AWL-400

User Manual



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BENQ Corporation



Notice I

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Notice II

FCC Warning

The AWL-400 compiles with Part 15 of the FCC rules.

- Operation is subject to the following two conditions.
- () This device may not cause harmful interference.
- () This device must accept any interference received, including interference that may cause undesired operation.

Note:

The AWL-400 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 1. Introduction

Thank you for purchasing a BenQ AWL400 Wireless LAN USB Stick. The AWL400 Wireless LAN USB Stick 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 AWL400 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.



Product Kit

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

- AWL400 Wireless LAN USB Stick
- USB cable
- Software CD containing user manual and utility
- Quick Start Guide
- Warranty card

1-2 System Requirements

Before using your AWL 400, 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

1-3 Mechanical Description

Top panel of the Access Point

The following table provides an overview of each LED activity:



	Activity	Description
PWR	Steady Blue	When connecting to PC



Chapter 2. Installation

2.1 Installation for Win98/WinME/Win2000

Execute Setup.exe in the AWL400 directory in BENQ Wireless LAN CD. For example, if your CD-ROM has a drive D, please execute D:\AWL400\Setup.exe.



Press Next button

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InstallShield Wizard	×
Choose Destination Location Select folder where Setup will install files.	
Setup will install AWL400 in the following folder.	
To install to this folder, click Next. To install to a different folde another folder.	r, click Browse and select
Destination Folder	
C:\Program Files\BenQ\AWL400	Browse
InstallShield	
< <u>B</u> ack	Cancel

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

InstallShield Wizard	×
Select Program Folder Please select a program folder.	
Setup will add program icons to the Program Fo name, or select one from the existing folders list.	lder listed below. You may type a new folder . Click Next to continue.
Program Folders:	
AWL400	
Existing Folders:	
Accessories Online Services StartUp	
InstellShield	< <u>B</u> ack <u>N</u> ext > Cancel

The folder name will be AWL400. Press Next button if you don't want to change it.



InstallShield Wizard	
	InstallShield Wizard Complete Setup has finished installing AWL400 on your computer.
	K 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 AWL400 USB Stick into your PC, and then Windows will show the dialog – ' Found New Hardware Wizard'.



Select' Specify the location of the driver' and press Next button.



und New Hardv Please choose y	rare Wizard	£
O Search for	he best driver in these locations.	
Use the ch paths and r	ck boxes below to limit or expand the default search, which include emovable media. The best driver found will be installed.	es local
🗧 🔲 Sear	ch removable <u>m</u> edia (floppy, CD-ROM)	
🗹 Inclu	de this l <u>o</u> cation in the search:	
DA	.WL400\WinXP Srowse	
O Don't searc	h. I will choose the driver to install.	
Choose this the driver y	option to select the device driver from a list. Windows does not gu ou choose will be the best match for your hardware.	arantee tha
	< <u>B</u> ack <u>N</u> ext >	Cancel

Select '**Specify a location**' and browse the BENQ Wireless LAN CD to find AWL400. For example, if your CD-ROM is drive D, the location is D:\AWL400\WinXP.

Har dwa	re Installation
<u>.</u>	The software you are installing for this hardware: BENQ AWL300R/AWL400R 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	lardware Wizard
Please wa	it while the wizard installs the software
œ œ	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 Wize	ar d
	Completing the Found New Hardware Wizard The wizard has finished installing the software for:
	BENQ AWL300R/AWL400R Wireless LAN USB Adapter
	Click Finish to close the wizard.
	K <u>B</u> ack Finish Cancel

Press Finish.



Chapter 3. Uninstallation

To uninstall AWL400, you can remove AWL400 from Add/Remove Programs Properties in Control Panel as the following figure.

Add/Remo	ove Programs Properties	? ×
Install/Un	install Windows Setup Startup Disk	
2	To install a new program from a floppy disk or CD-ROM drive, click Install.	
		nstall
3	The following software can be automatically Windows. To remove a program or to modify components, select it from the list and click Add/Remove.	removed by vits installed
ATI Dis AWL40	play Driver 0	
		_
	Add	' <u>R</u> emove
	OK Cancel	Apply

Press Add/Remove



Press OK if you really want to remove AWL400.



InstallShield Wizard	
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed AWL400. 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

nitor Statistics Si	te Survey Encryption	n Advanced Versio
Operating Mode	Infrastructure	v
Channel	3	
SSID	Benq_Office	
Tx Rate	Fixed 11 Mbps	Submit
Int. Roaming	Disabled	Cancel
Radio	On	7
Status Ass	ociated - BSSID: 00-0	3-9D-40-EE-9B
Signal Strength		
	62	2%
.ink Quality	10	n %

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, AWL400)

Radio (not supported by this model, AWL400)

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.

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.

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

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as reported by the radio, averaged over all frames over 100 bytes long received from the Access Point.

4.2 Statistics

nitor Sta	atistics Site :	Survey Encryption	Advanced Versio
		Tx	Rx
Data Pac Succe	setul	34	7
Unsuc	cessful	0	0
Mgmt Pa	ckets		
Succe	ssful	4	693
Unsuc	cessful	0	880
Rejected	l Packets	0	0

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



4.3 Site Survey

DOOID		<u> </u>		N/ED	-
855ID	Deve Offe	Signal	Ch	WEP	<u>Γype</u>
00-03-9D-40-EE-9B	Beng_Uffice	9%	3	Yes	Infra
00-03-30-41-00-35 00-04 EA EE AA 47	ETIC_/UU	J & N /A	5	No	Inna
00-04-38-EE-88-47	linksys Henry	N/A C0 %	5	NO No	infra Infra
00-03-30-40-12-41	Henry	03 % 45 %	7	NO No	Infra
00-00-F0-11-00-00	Shoopy	43 %	10	No	Infra
	AWE700 DUKE	IZ /6	11	No	Initia
00-10-91-00-21-6C	blue	N/A	11	No	Infra
221 - C					
<[]					

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



4.4 Encryption

onitor Statistics Site Survey	Encryption Advanced Version
Encryption	Disabled 💌
Key #1	
Key #2	
Key #3	
Кеу #4 🛛 🔤	
WEP Key to use	Key #1
WEP Mode	Mandatory
Authentication Type	Open System

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

nitor Statistics Site Surv	ey Encryption Advanced Version
Preamble Type	C Long
	 Short Auto
Fragmentation Threshold (Disabled) RTS/CTS Threshold (Disabled)	<u>h</u>
	2346
)
	2347
🗌 🔲 802.11 Power Save	

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



4.6 Version

onitor Statistics Site Su	rveu Encruption Advanced Version
Beng	(
Driver	1.3.4.124
Firmware	0.90.2.93
Application	3.1.4.18
MAC Address	00-03-FF-FF-FF-09
in the second se	

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.