Benq Wireless LAN PCMCIA Adapter

AWL100

User Manual

Version 1.0

MPE Statement (Safety Information)

Your device contains a low power transmitter. When device is transmitted it sends out Radio Frequency (RF) signal.

Safety Information

In order to maintain compliance with the FCC RF exposure guidelines, this equipment should be installed and operated with minimum distance 2.5cm between the radiator and your body. Use only with supplied antenna. Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.

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, and 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. Nevertheless, this device shall be used in such a manner that the potential for human contact during normal operation as a mobile or portable device but use in a body-worn way is strictly prohibit. When using this device, a certain separation distance between antenna and nearby persons has to be kept to ensure RF exposure compliance. In order to comply with the RF exposure limits established in the ANSI C95.1 standards, the distance between the antennas and the user should not be less than 2.5cm.

In order to avoid from mutual interference, this device must not be co-located or operating in conjunction with any other antenna or transmitter.

Federal Communications Commission (FCC) Requirements, Part 15

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

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. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

---Reorient or relocate the receiving antenna.
---Increase the separation between the equipment and receiver.
---Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
---Consult the dealer or an experienced radio/TV technician for help.

The identification of the product:
Product Name : BenQ WLAN PCMCIA Adapter
Model : AWL100

BenQ Wireless LAN Technical Support:
BenQ Corporation
Address : 8, Jihu Rd., Nei-hu Dist., Taipei 114, Taiwan, R.O.C.
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Fax : 1-909-569-0701
WWW : www.benq.com

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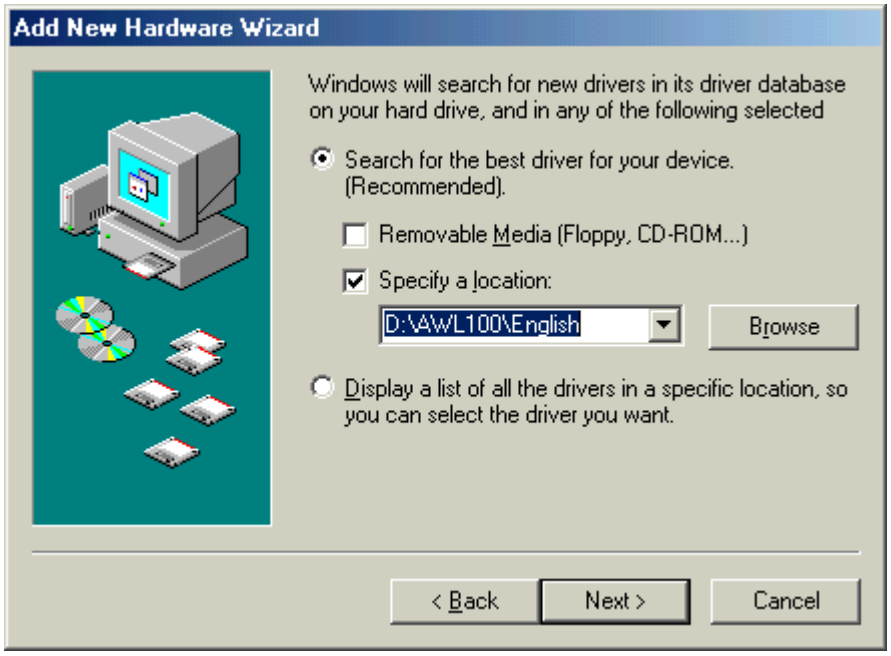
1. Installation

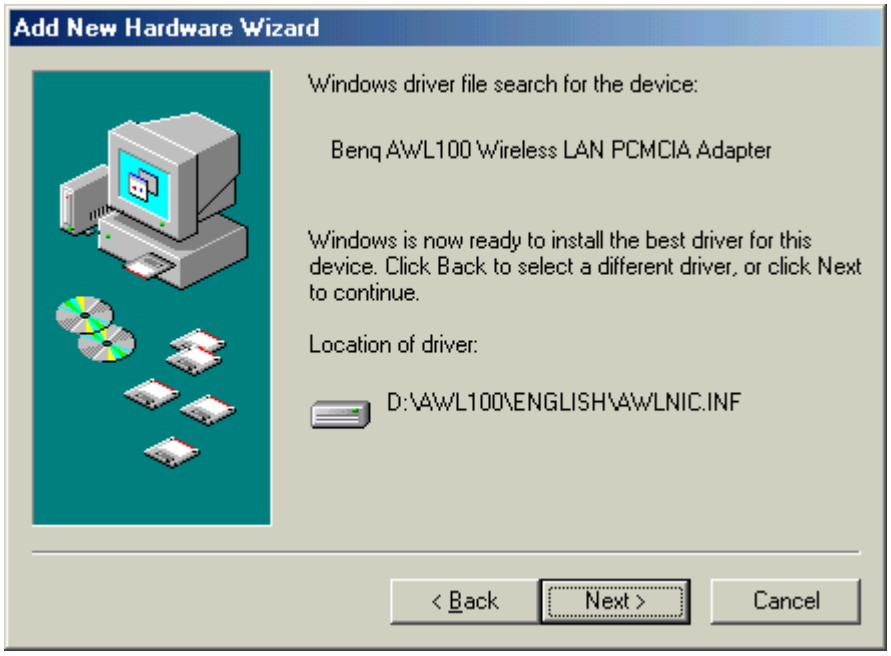
1.1 Driver Installation

Insert AWL100 PCMCIA Adapter into your PC, and then Windows will show the dialog – ‘ Add New Hardware Wizard’ .

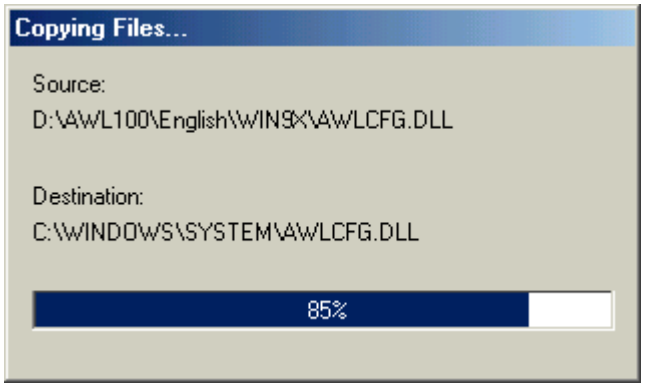
Select ‘ Search the location of the driver’ and press Next button.



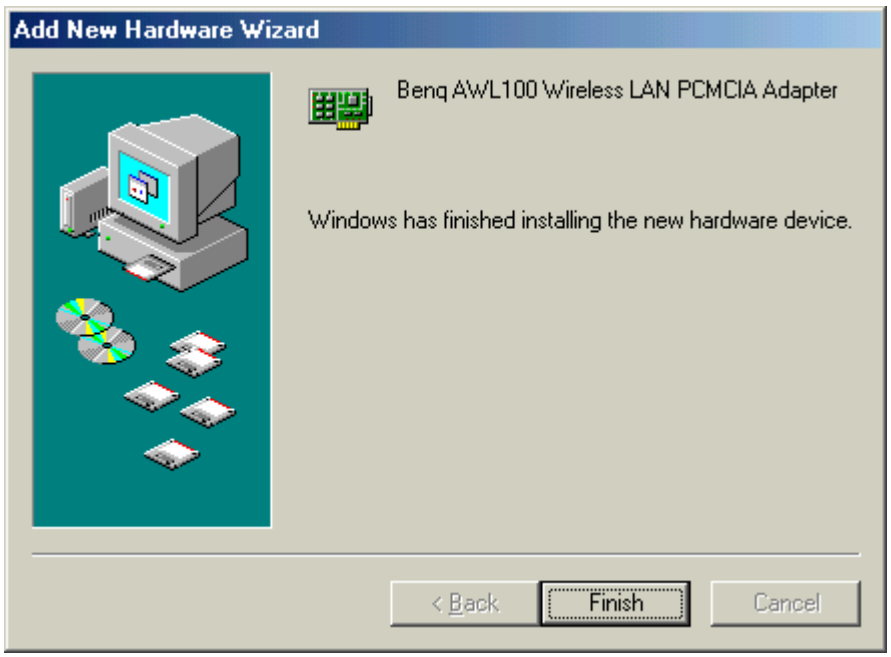
Select ‘Specify a location’ and browse the Benq Wireless LAN CD to find AWL100. For example, if your CD-ROM is drive D and you want to install the English version of driver, the location is D:\AWL100\English.



Windows has found AWL100 PCMCIA Adapter. Press Next button.



Please wait while coping files.

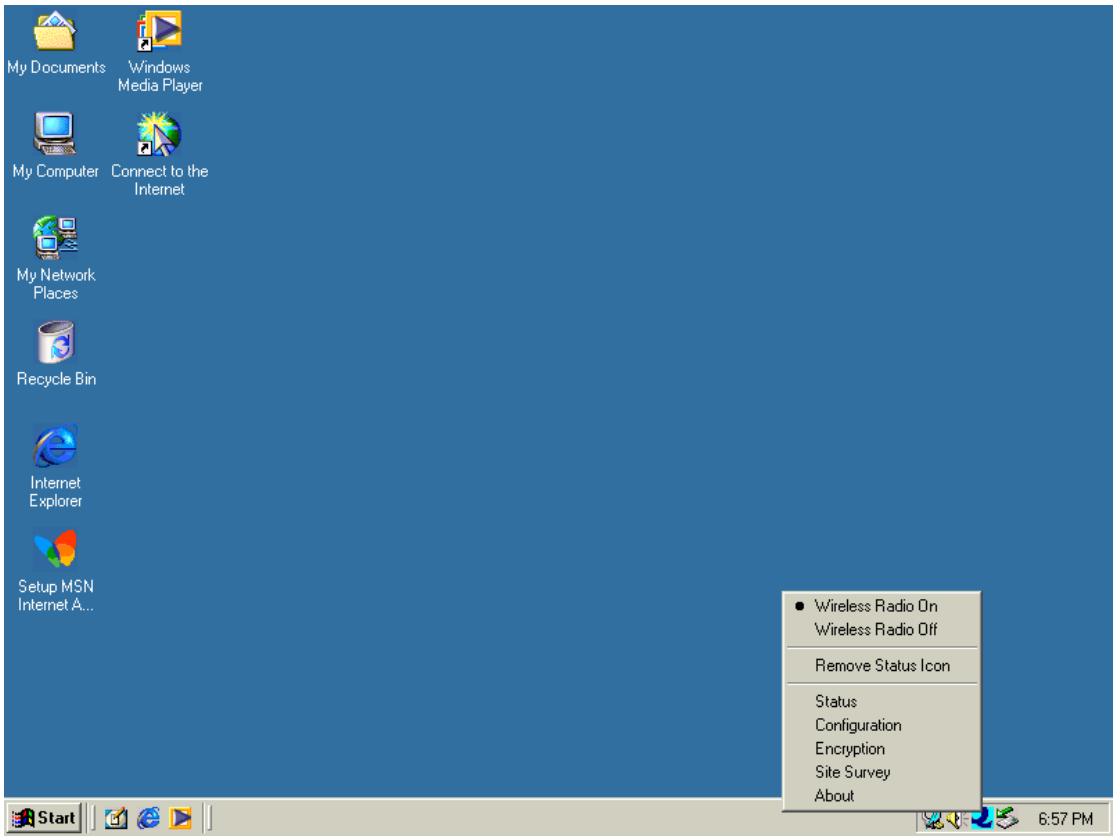


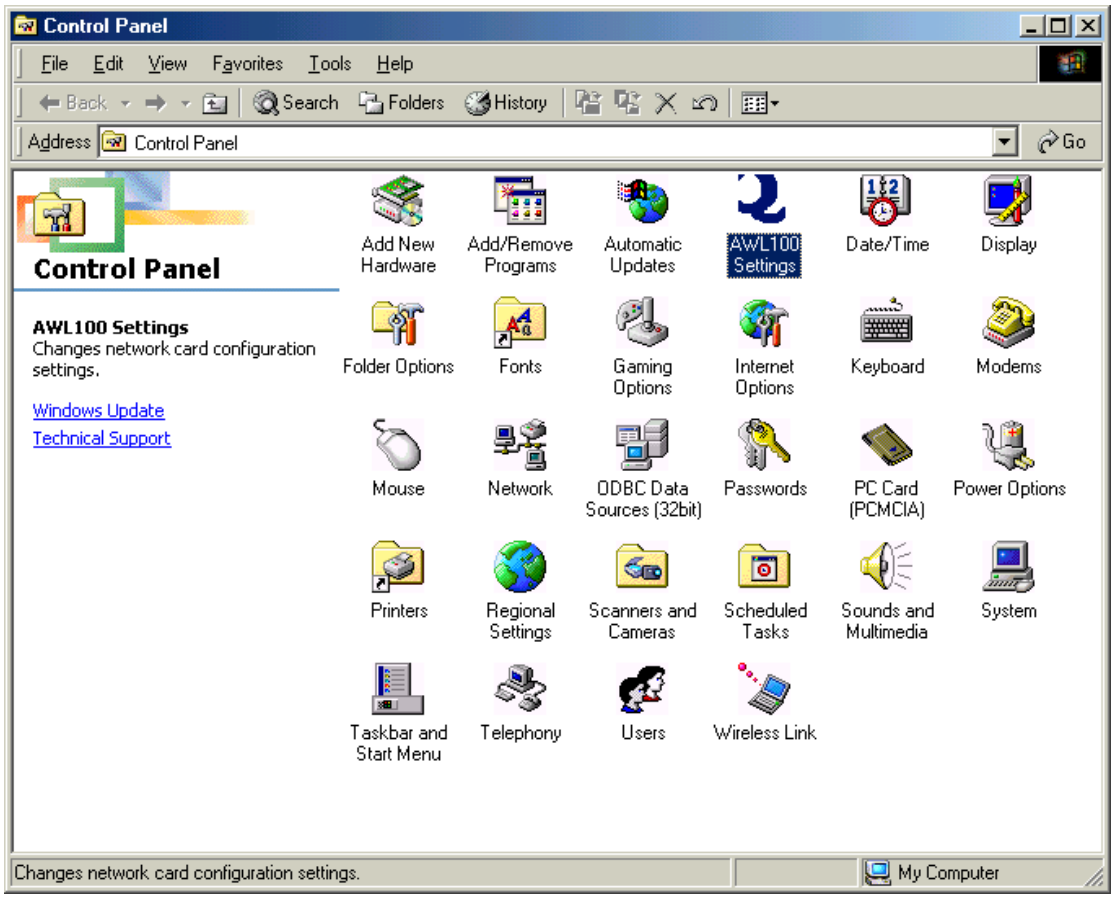
Press Finish.

Press Yes and restart your computer.

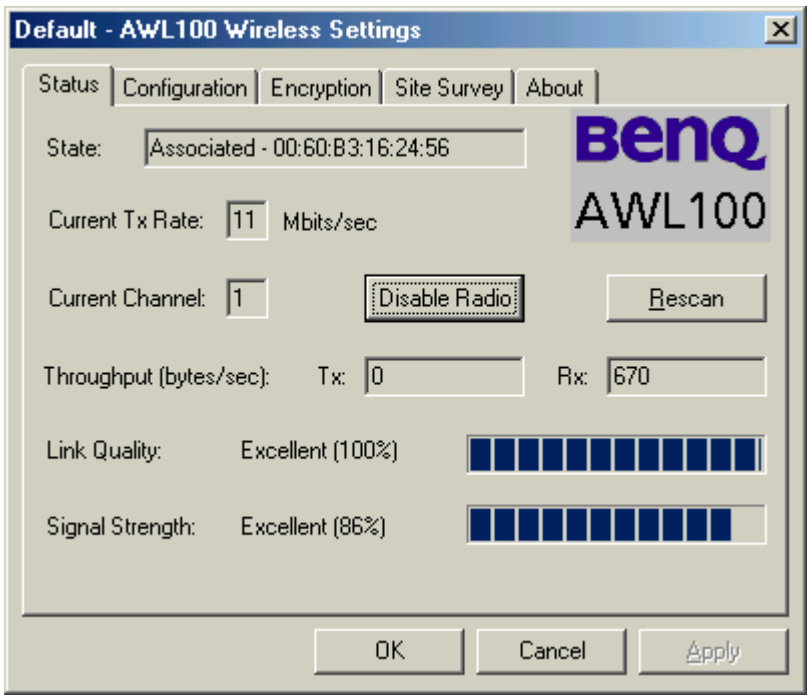
2. AWL100 Wireless Settings

You can launch AWL100 Wireless Settings utility by clicking the icon or from Control Panel.


My Documents
Windows Media Player
My Computer
Connect to the Internet
My Network Places
Recycle Bin
Internet Explorer
Setup MSN Internet A...
Wireless Radio On
Wireless Radio Off
Remove Status Icon
Status
Configuration
Encryption
Site Survey
About
Start
6:57 PM


Control Panel
File Edit View Favorites Tools Help
Back Search Folders History
Address Control Panel
Go
Control Panel
AWL100 Settings
Changes network card configuration settings.
Windows Update
Technical Support
Add New Hardware
Add/Remove Programs
Automatic Updates
AWL100 Settings
Date/Time
Display
Folder Options
Fonts
Gaming Options
Internet Options
Keyboard
Modems
Mouse
Network
ODBC Data Sources (32bit)
Passwords
PC Card (PCMCIA)
Power Options
Printers
Regional Settings
Scanners and Cameras
Scheduled Tasks
Sounds and Multimedia
System
Taskbar and Start Menu
Telephony
Users
Wireless Link
Changes network card configuration settings.
My Computer

2.1 Status



State

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 can not 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.

Rescan

The driver will restart and begin its Connection Procedure if the rescan button is pressed. In general, the connection procedure will be different according to the Mode of the driver.

Enable / Disable Radio

This button is used to enable or disable the radio of AWL100

Current Tx Rate

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

Current Channel

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

Throughput

The instantaneous wireless Receive and Transmit throughput are displayed in bytes per second in this field. Every two seconds, these values are updated.

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. Over the bar graph, a label summarizes the quality of the link which can take on one of the following values:

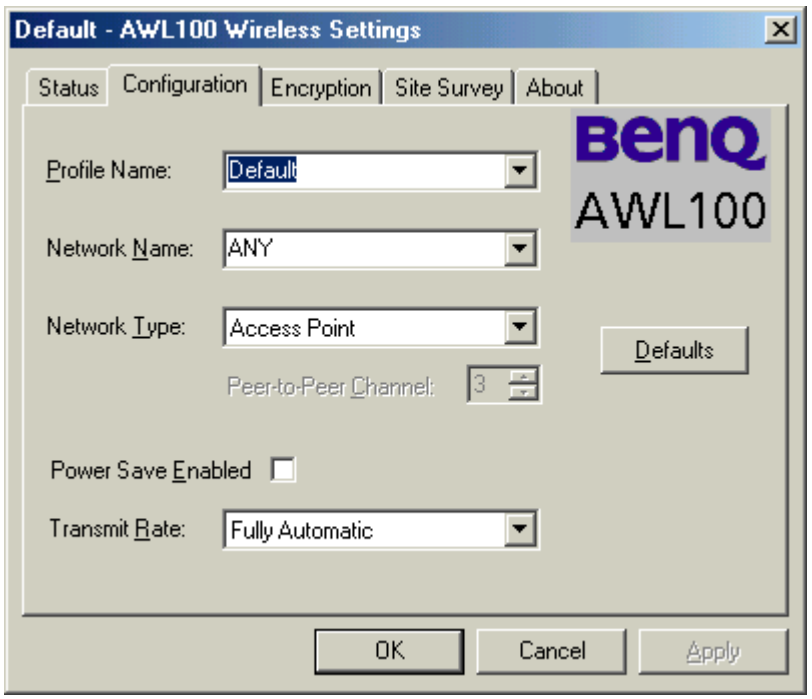
"Not Applicable"
"Poor"
"Fair"
"Good"
"Excellent"

When the Link Quality becomes "Poor," the driver will start to look for a better Access Point. As a result, the Link Quality is a very good measure of receiving and transmitting errors over the radio.

Signal Strength

Only when the node is in Infrastructure Mode does the Signal Strength bar graph become active. This bar graph shows normalized signal strength as reported by the radio, averaged over all frames over 100 bytes long which are received from the Access Point.
Status information about the radio link is displayed in this tab. Detailed description should be placed in this field.

3.2 Configuration



Several fields illustrated as following are offered by the Configuration Tab. Operating parameters of the driver can be viewed or changed here. Under the circumstances,. changes to any of the parameters in this panel can be applied to the driver without the need to reboot the PC.

Default: It restores each field in the panel to its default value by pressing this button. However, before the default values are saved or loaded to the driver and registry, the Apply Changes button or OK button must be pressed.

Apply: Only when one of the fields has been modified does this button become active. Press this button to apply the changed values to the driver and saves them to the registry for the next time when the PC boots up.

Profile Name
These settings will be stored by the given name

Network Name
This field shows the network name or called SSID which your AWL100 will be associated with. If "ANY" is the name, it means any network name will be associated

with.

Network Type

You can select from a list of supported network types in this field. These network types displayed will have two values as following: “Access Point,” and “Peer-to-Peer”.

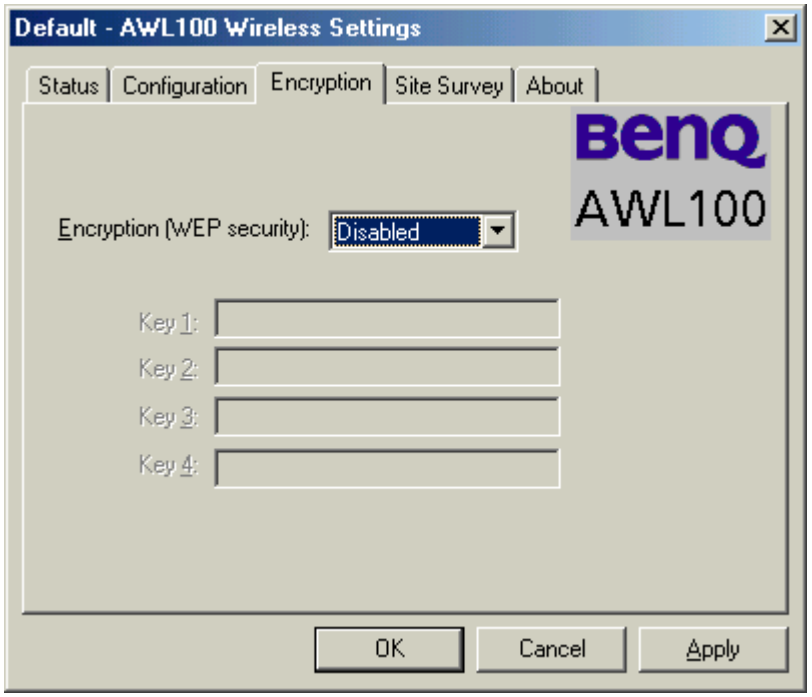
Access Point (Infrastructure)

This is an operation mode which requires the existence of an 802.11 Access Point. Owing to the existence of the Access Point, all communication is done via the Access Point which relays packets to other wireless Clients in the BSS as well as to nodes on a wired network such as Ethernet.

Peer-to-Peer (Ad Hoc)

This is a non-compliant mode which will allow AWL100 cards to talk with one another without an AP regardless any SSID.

3.3 Encryption



According to WEP function select, this page allows the entry of four keys for 64-bit encryption and one set of 128-bit key. Each key must consist of hex digits to be written to the driver and registry. This means that only digit number 0-9 and letters

A-F are valid entries. Therefore, if entered incorrectly, the program will not write keys to a driver. Alternatively a Pass-phrase can be entered which is used as a “seed” to randomly generate the four keys. Since the same keys must be entered into each node on the wireless network, this saves considerable time while setting.

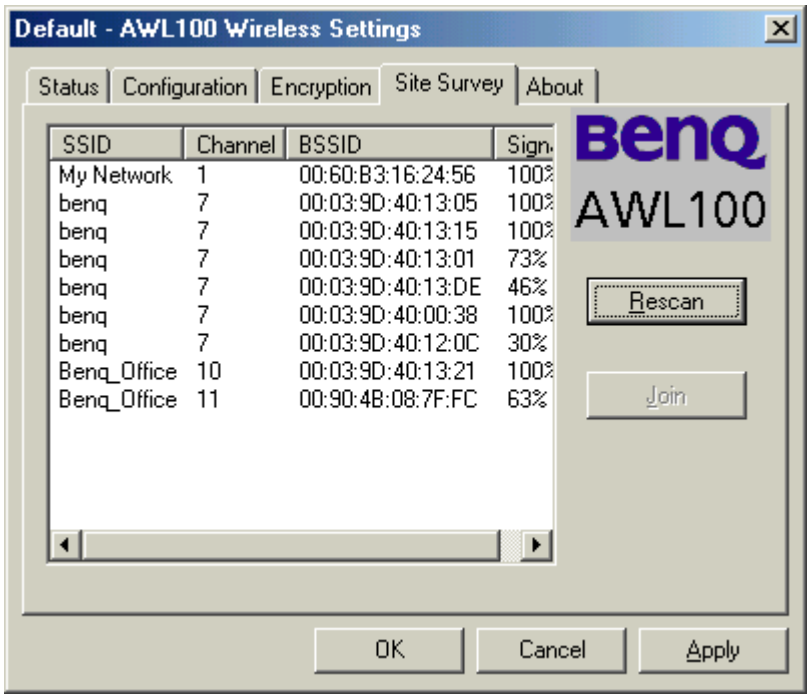
- **Key 1 – Key 4**

  When you want to enter the keys manually, you may use these four fields. If you wish this node to match keys in a different vendor’ s product, this may be necessary. These fields also display the keys when they are generated using a Pass-phrase.

- **Apply**

  You may also update the driver with the four keys displayed in Key field by pressing this button. The keys are also written to the registry for permanent storage. This button clears all the bytes in the four keys. It’ s very useful when you wish to start over or enter manually.

3.4 Site Survey



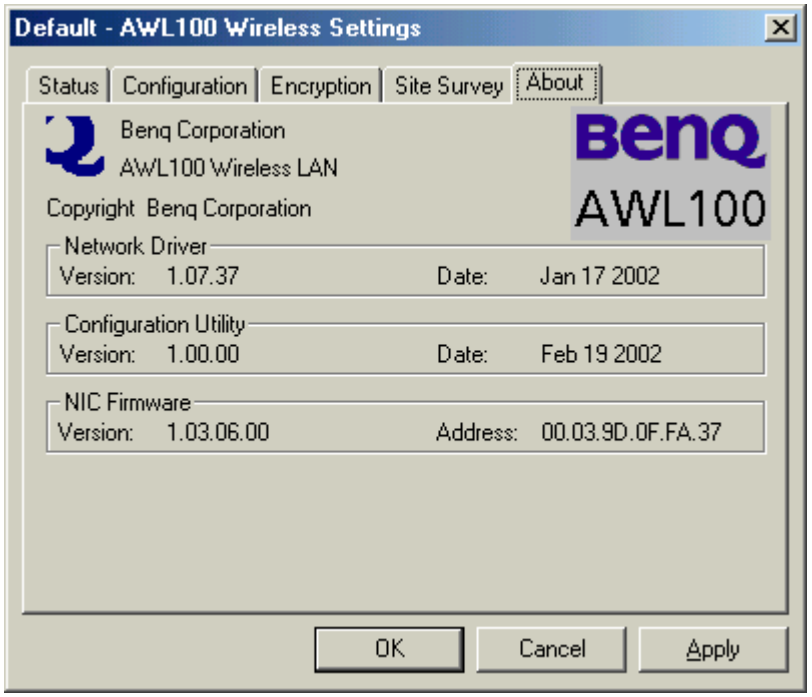
Rescan

This button will scan all available Access Points in your neighborhood and then list their SSID, channel, BSSID and signal respectively.

Join

Select the SSID you want to be associated with, and then press this Join button to join this network.

3.5 About



You may learn the product version including the detail of Network Driver, Configuration Utility, and NIC firmware version from this “About” tab. When users want to report their problems to technical support, they must use this version number.