

**Your Installation Guide to**

**LevelOne**

**WNC-0101USB**

**11Mbps Wireless USB Adapter**

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## **1. Welcome**

Thank you for purchasing our LevelOne WNC-0101USB 11Mbps Wireless USB Adapter. It will be interoperable among IEEE 802.11b standard compliant products from other manufacturers and allows you to build a wireless LAN. Besides, you can use your PC to connect with an access point wirelessly to share the wired network resource. After installing the LevelOne WNC-0101USB 11Mbps Wireless USB Adapter, you can:

- a. Share your Internet access by using just one connection
- b. Share printers and other peripheral devices
- c. Share data and image files between networked PCs
- d. Play multi-player games

The LevelOne WNC-0101USB 11Mbps Wireless USB Adapter can wirelessly transmit and receive data, minimizing the need for wired connections, at a speed of up to eleven megabit per second. With the LevelOne WNC-0101USB 11Mbps Wireless USB Adapter you can locate your PC wherever you want without wires and cables.

The LevelOne WNC-0101USB 11Mbps Wireless USB Adapter provides LAN users with an access to real-time information anywhere in their organization. The mobility provides productivity and service, which are not available under wired networks.

The LevelOne WNC-0101USB 11Mbps Wireless USB Adapter configuration is easy to change from peer-to-peer networks, suitable for a small number of users, to full infrastructure networks of thousands of users that allow roaming around a broad area.

Please read this manual to get familiar with the LevelOne WNC-0101USB 11Mbps Wireless USB Adapter. This manual contains detailed instructions in operation of this product. Please keep this manual for future reference.

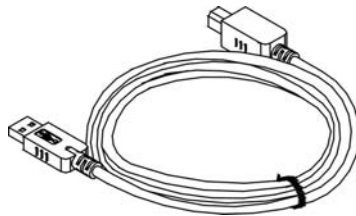
## 1.1 Kit Contents

The LevelOne WNC-0101USB 11Mbps Wireless USB Adapter kit should include the following items:

- a. USB Adapter



- b. USB Cable.



c. CD including:



1. LevelOne 11Mbps Wireless USB Adapter Utility & Driver software

2. Acrobat Reader 4.05

3. User Manual PDF file

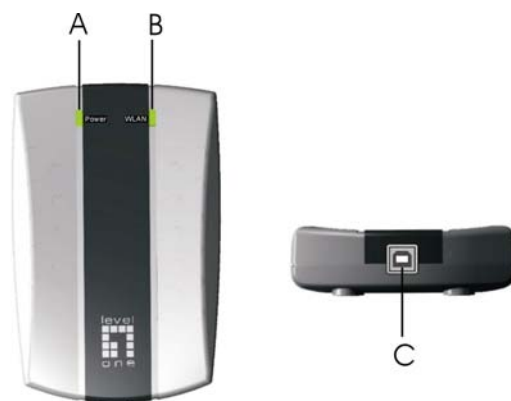
d. Quick Start Guide

e. The User's Manual (this document)

If any of the items mentioned above are damaged or missing, please contact your distributor.



## 1.2 Main Feature of LevelOne Wireless USB Adapter



A. Power ON/OFF LED

B. Status LED

- Off: No wireless activity
- Blinking: Sensing/transmitting wireless data
- Solid Yellow Green: Standard operational mode

C. USB Connector

USB WLAN Adapter features:

1. High-speed wireless connection, up to 11 Mbps
2. IEEE802.11b (DSSS) standard for 2.4 GHz Wireless LAN
3. Plug-and-Play installation
4. Solid design with an integrated antenna
5. Full mobility and seamless cell-to-cell roaming
6. Automatic scale back at per packet level

USB WLAN Adapter supports:

1. Automatic load balancing for optimized bandwidth
2. Advanced power management
3. Supports Windows98SE/2000/ME

## **1.3 Wireless Networking Scenarios**

As our LevelOne Wireless USB Adapter is interoperable and compatible with other IEEE 802.11b compliant products from other manufacturers, it offers you the most freedom to establish your ideal wireless network. Therefore, after installing the LevelOne wireless USB adapter, you can connect your computer to:

- a. A Peer-to-Peer Workgroup of IEEE802.11b compliant wireless devices.
- b. A LAN (Local Area Network) constructed by Access Point(s) or other IEEE802.11b compliant systems.
- c. Share your Internet access by using just one connection, share printers and other peripheral devices, share data and image files between networked PCs, play multi-player games, and use other network enabled sharing resources.

A. Peer-to-Peer Networking:

An Ad Hoc Network could be easily set up with some PCs and the LevelOne wireless USB adapter(s) or our other WLAN device(s). Therefore, it is very suitable to build a network for temporary use, for example, for new sales point/branch, for demonstration in exhibition, and alike.

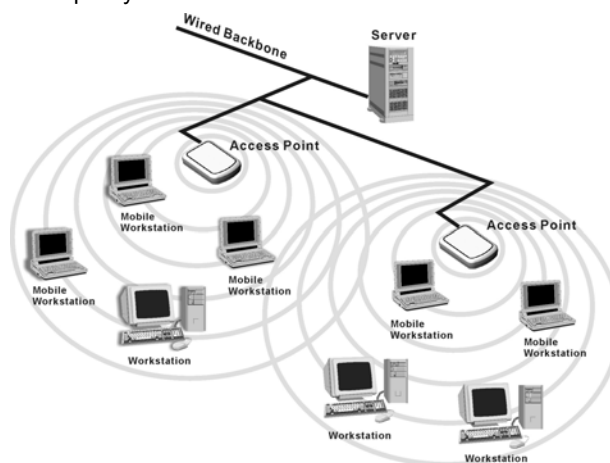


## B. Cooperate LAN (Local Area Networking):

With some LevelOne Wireless USB Adapters and Access Points, it is easy to construct a LAN with access to Internet for enterprise use.

The construction is quite easy that WLAN card and Access Point will automatically work at the most suitable frequency when Access Point is set within the proper range.

In addition, commonly manufacturers will bundle the Site-Survey tool for users to check the communication quality.



## 1.4 Advantages for Using Wireless Network

The LevelOne 11Mbps Wireless USB Adapter can wirelessly transmit and receive data, minimizing the need for wired connections, at a speed of up to eleven megabit per second. With a LevelOne 11Mbps Wireless USB Adapter you can locate your PC wherever you want without wires and cables.

The LevelOne 11Mbps Wireless USB Adapter provides LAN users with an access to real-time information anywhere in their organization. The mobility provides effectiveness and efficiency, which are not available under wired networks.

The LevelOne 11Mbps Wireless USB Adapter configuration is easy to switch between peer-to-peer networks, suitable for a small number of users, and full infrastructure networks of thousands of users that allow roaming around a broad area.

Therefore, you may see many advantages for adopting Wireless Networking as follows:

**Less Space Limits:** The LevelOne wireless USB Adapter provides access to network services without wires; therefore, it gives you more freedom to allocate and style your living and working space. In addition, in some areas where is hard or expensive to connect to wired networks, such as historic buildings, classrooms or mobile connectivity, then you can count on wireless networking.

***Flexible Workgroups and Lower Cost:*** For workspaces that are frequently reconfigured for temporarily use such as demo in exhibitions, wireless networking is easy to set up of lower total cost—and all equipments are recyclable. You do not have to remove the old wires and then build up the new ones again and again.

***Networked Conference Rooms:*** Users can access the network as they move from a meeting to another, getting the access to information/data and the ability to communicate decisions while “on the go”.

***802.11 Ad Hoc Networking:*** On site consulting and small workgroups may increase productivity with quick network setup and collaboration software.

***Branch office Networking:*** With an Access Point to bridge between the LAN and Internet, wireless networking provides an easy to install, use and maintain network for a remote or sales office.

***Campus-Wide Network Mobility:*** The roaming capabilities allow enterprise to set up easy to use wireless networks that cover the entire campus transparently.

## 2. Quick Start to Wireless Networking

1. Insert the installation CD, and it will automatically start the setup program for WLAN Utility and driver.

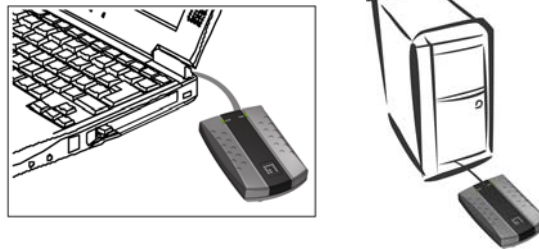


2. Follow the installation wizard to complete the software installation process, and then reboot your PC/notebook after the software installation is done. (See P.19~23: Step 2~8)

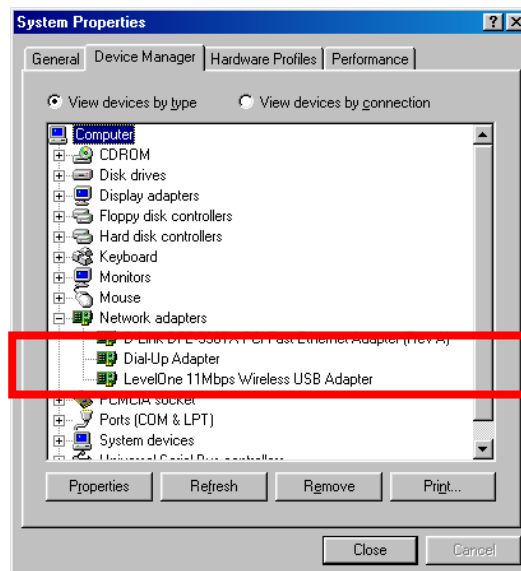




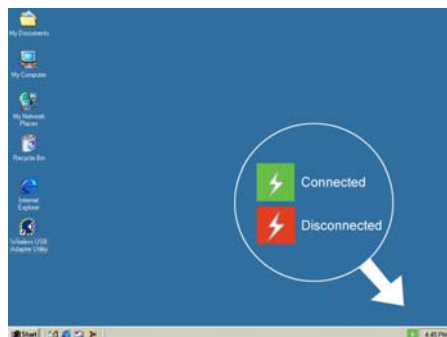
3. After restarting your PC/notebook, insert USB adapter into USB connector of the notebook or desktop.



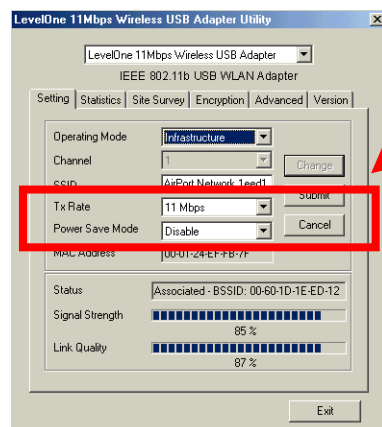
4. Operation System will detect new device and prompt the driver automatically.



5. Double click the shortcut icon of WLAN USB, and then check the toolbar at the bottom of the screen—there is a small icon to indicate the connection status. Red color means no connection and green color means connected (If red color appears, please repeat from step1).



6. Please choose “Infrastructure” mode and type “WLAN” in SSID column.



7. Now you may enter “Internet Explorer” to surf the Internet. Freely without wires



### **3. Step-by-Step Installation Guide**

This section will lead you through the installation of the LevelOne Wireless USB Adapter and its software in details. People who are familiar with the installation and settings of wireless device may refer to quick start guide for to establish a network in a snap.

To establish your wireless network connection, the following steps should be executed:

1. Install the software by using the installation CD.
2. Install the LevelOne Wireless USB Adapter.
3. Install the required network protocols to communicate with your network. Mostly, you will need to set the TCP / IP protocol.

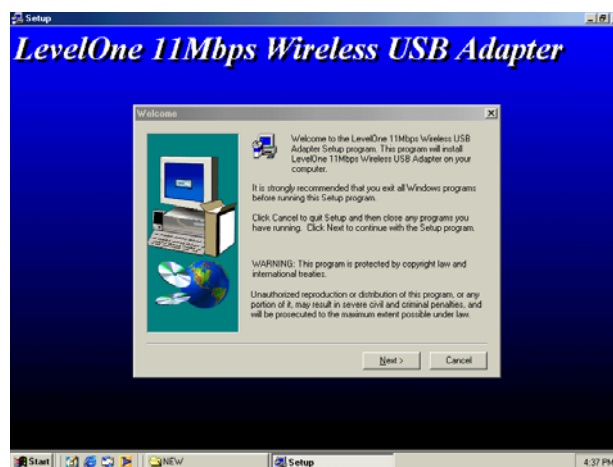
The product is designed to operate under Windows 98, Windows Me, and Windows 2000. Thus the installation procedure is about the same. Please follow up the installation wizard that provided by your system to install the software. The example here is based on Windows 98SE.

### 3.1 Install the LevelOne Wireless USB Adapter Utility / Driver

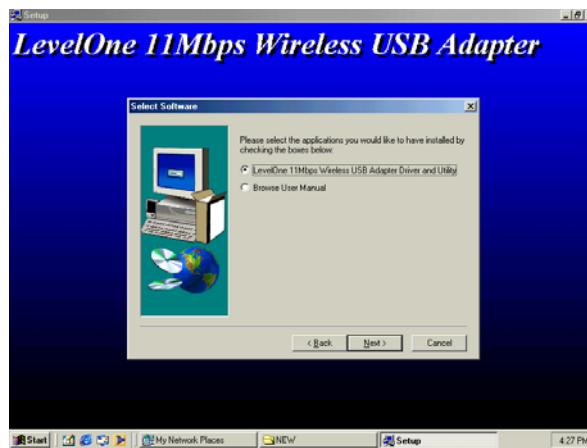


**NOTE:** Please install the LevelOne 11Mbps Wireless USB Adapter Utility / Driver first prior to inserting the LevelOne 11Mbps Wireless USB Adapter.

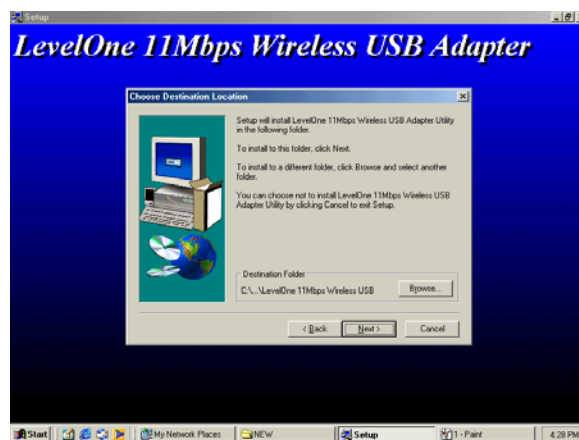
1. Insert the LevelOne Wireless USB Adapter installation CD into your CD-ROM drive. The setup program will then automatically start.
2. As the setup program starts and the setup screen appears, please select “Next” to go to the next screen.



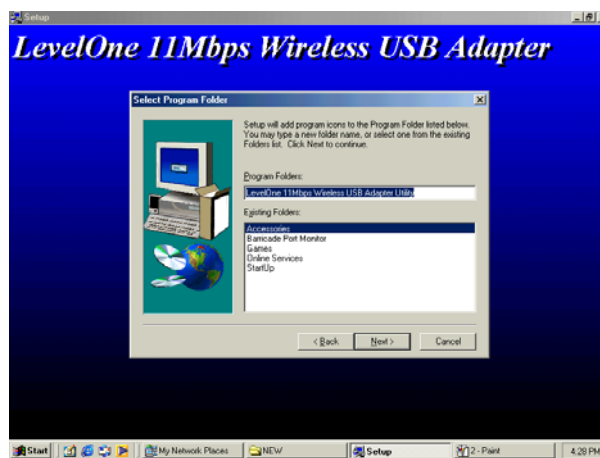
3. Please select the applications you would like to install, and click “Next”. To go on the installation, please select “Install LevelOne 11Mbps Wireless USB Adapter Driver and Utility” and then go on to Step 4. If you select “Browse User Manual”, system will prompt a message to suggest you install the Acrobat Reader—please go on to Step 7.



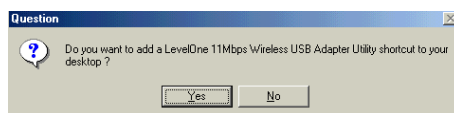
4. The default destination folder is displayed in the setup dialog column. You may change the default folder by clicking “Browse” to select the destination folder you prefer. Click “Next” to go to the next screen.



5. Select the Program Folder for LevelOne 11Mbps Wireless USB Adapter Utility and click "Next " .

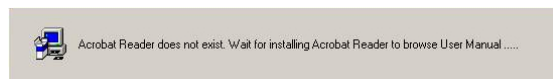


6. You will be asked if you wish to add a shortcut of LevelOne 11Mbps Wireless USB Adapter Utility to your desktop. Click "Yes " .





7. The user manual is published in Portable Document Format (PDF). If Acrobat Reader does not exist in your system, the following message will be prompted to automatically enter the Acrobat Reader installation screen. Please follow the instructions to complete the Acrobat Reader 4.05 installation.




8. The Driver and Help files will be copied to the system. Wait for the setup program to finish the LevelOne 11Mbps Wireless USB Adapter installation. Then select “Yes” and click “Finish” to complete the installation. It is recommended to close other applications before rebooting your system.

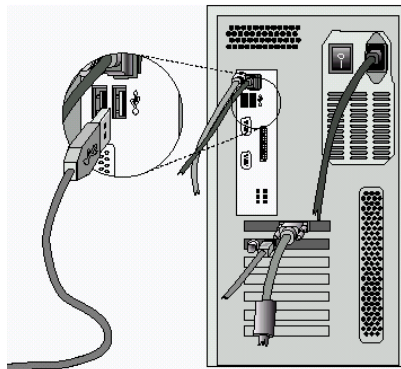


9. Regarding the installation of LevelOne Wireless USB Adapter, please refer to the next chapter 3.2 “Install the USB Adapter.”

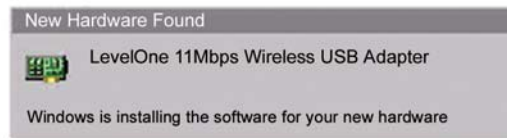
## 3.2 Install the LevelOne Wireless USB Adapter

 **NOTE:** *The LevelOne 11Mbps Wireless USB Adapter driver and utility are included in the accompanying installation CD. Please follow the installation procedures in Section 3.1. (Your USB Adapter will not work properly if the driver and utilities are not installed correctly.)*

1. After completing the software installation, please connect the USB Adapter to your PC/notebook with the USB cable.



2. After connecting the USB Adapter to your PC/notebook, the setup will automatically start.



**NOTE:** *If you are asked to insert a “Windows 98 CD-ROM” during the installation, insert your “Windows 98 CD-ROM” and click “Yes”. Once the setup task is completed, the “Microsoft Internet Explorer” should start up. Please close it.*

3. When the USB Adapter setup task is completed, you can start the LevelOne Wireless USB Adapter Utility. To start the utility, please refer to the chapter 3.3 ‘LevelOne Wireless USB Adapter Utility’.

### Additional Note for Windows 2000

If you install the LevelOne Wireless USB Adapter Utility under Windows 2000, it will be a little bit different from Windows 98SE or ME. A message will be prompted as follows, click “Yes” to complete the USB adapter setup.



### 3.3 LevelOne Wireless USB Adapter Utility

LevelOne Wireless USB Adapter has its own management software, named “LevelOne 11Mbps Wireless USB Adapter Utility”, and users can control all functions provided with it. The Utility icon will appear in the taskbar by clicking the LevelOne 11Mbps Wireless USB Adapter Utility shortcut on your desktop. The Utility screen includes six tabs: Monitor, Statistics, Site Survey, Encryption, Advanced, and Version.

In Ad Hoc mode, in one workgroup, the Channel and SSID of each station must be the same—therefore they can communicate with each other within the local LAN properly. Moreover, all connected computers should have the same net ID and subnet ID. You can follow the procedure below to check whether you have set the same net ID and subnet ID with other stations in the workgroup:

1. Right-click on the Network Neighborhood on your desktop and then click on “Properties”.
2. In Configuration, click on “TCP/IP -> LevelOne Wireless USB Adapter” and then click on “Properties”.
3. Click on “IP Address”.
4. Click on “Specify an IP Address” and make sure the net ID and subnet ID of all the connected computers being the same.



To open IEEE802.11b Utility, please double click the icon in the taskbar.

### 3.3.1 Setting

- Operating Mode:

If you want to connect to an Access Point, please set the mode as "Infrastructure". If you have more stations and just want to set them as a local network, please set the Mode as " 802.11 Ad Hoc".

- Channel:

It shows the radio channel number that is used for networking. The Channel number must be the same among stations, so that computers can communicate within the local LAN. It can be changed only under the 802.11 Ad Hoc Mode. If the Mode is Infrastructure, this parameter will not be active.

- SSID:

SSID is the group name shared by every member of your wireless network .You will only be able to connect with an Access Point (AP), which has the same SSID. Please note that the SSID will be case sensitive. Please note that when you are in the 802.11 Ad-hoc mode, the SSID must be the same among stations so that computers can communicate within the local LAN properly.

- Tx Rate:

The USB Adapter supports 4 transmission rates: 1Mbps, 2Mbps, 5.5Mbps, and 11Mbps. You may set the TX rate manually, or select the 'Fully Auto' mode to let it run at the most proper rate automatically.

- **MAC Address:**

It displays the MAC address of your IEEE802.11b USB device, and the parameter cannot be changed.

- **Other information:**

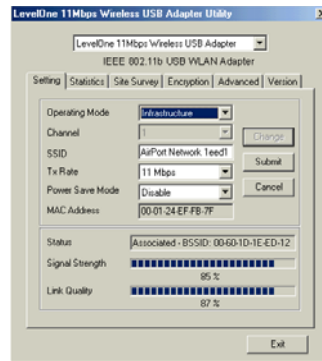
The Signal Strength and Link Quality will be shown in the screen below under the Status of your USB adapter,

- **Status:**

If you set the operation mode as “802.11 Ad Hoc”, the Status column will show the “OK” while the link quality is fine. If you set the operation mode as ‘Infrastructure’, the Status column will show the BSSID of the AP that you are associating with.

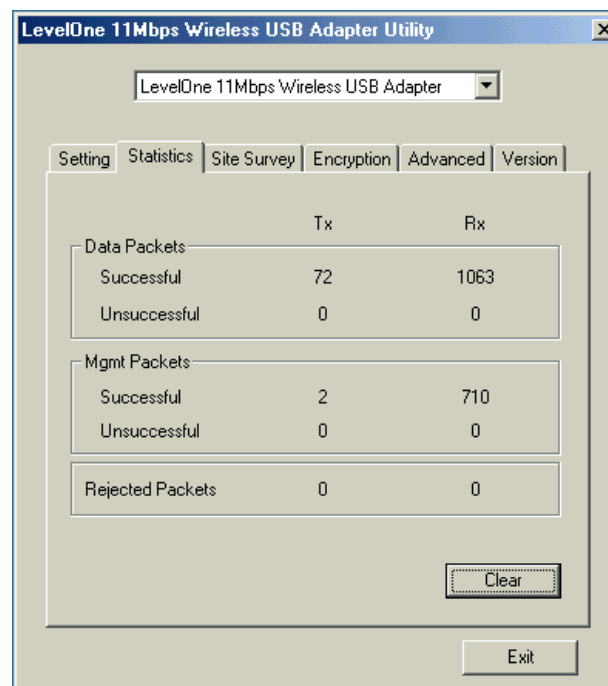
If you would like to change the parameter(s) of the “Setting”, please follow the steps as follows:

1. Click the “Change” button first.
2. Choose the parameter(s) you wish to change.
3. After changing the parameter(s), please click on the “Submit” button to finish.



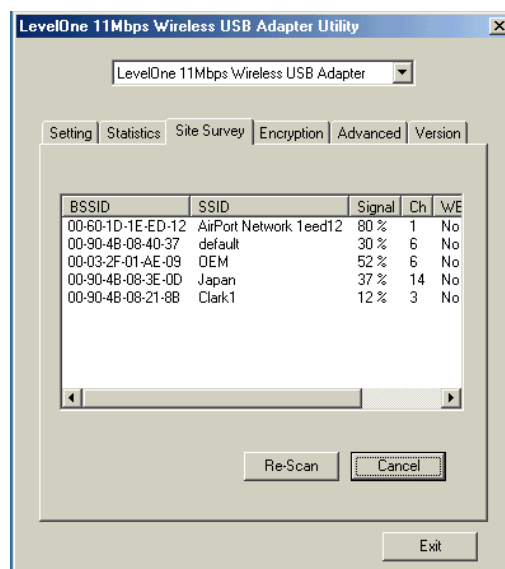
### 3.3.2 Statistics

- The following screen shows various statistics including the Data Packets, Management Packets and Rejected Packets in transmitting and receiving status.
- You can click the “Clear” button to reset the statistics data.



### 3.3.3 Site Survey

- The screen shows the messages of all the Access Points within the communication range of your LevelOne wireless USB Adapter. The messages include BSSID, SSID, Signal, the Channel used by each AP, and the Encryption status (enabled or not).
- You can click the Rescan button to search the new AP.
- You can double-click the BSSID to choose the AP that you wish to connect to.





### 3.3.4 Encryption

You may enhance the security level of wireless network by enabling the Encryption function.

- WEP Key to use:

You can choose one of the four Keys you typed (Key1~Key4) as the WEP Key.

- WEP Mode:

If you set the Mode Optional, your device can communicate with the stations with disabled WEP. Otherwise, if you set the Mode Mandatory, then your device cannot communicate with the stations with disabled WEP.

- Authentication Type:

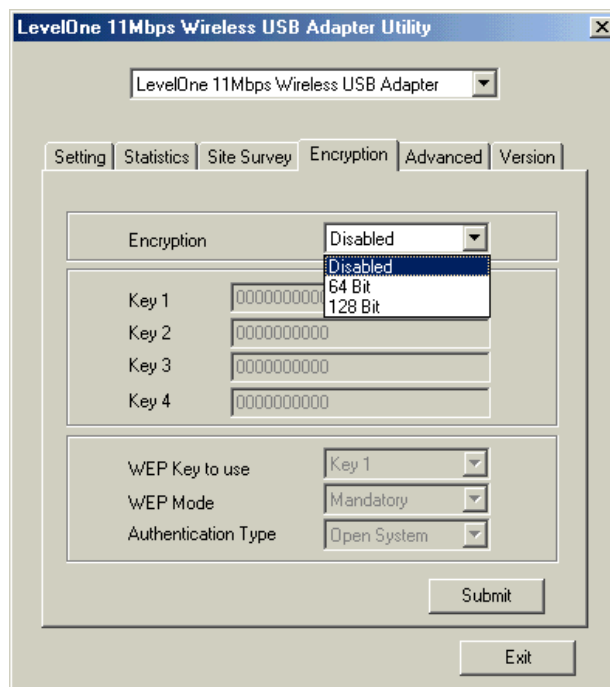
Mostly, Open System Authentication algorithm is adopted. In Shared Key Authentication algorithm, you must have WEP on, the algorithm should be different, and some steps use packets with encryption by transferring a challenge text. In order to choose which authentication algorithm will be used, you must know which one the AP supports first. Most of the APs only support Open System.

**! Caution:**

WEP Key needs to be the same for all IEEE802.11b compliant stations.

Follow the steps below to set your WEP:

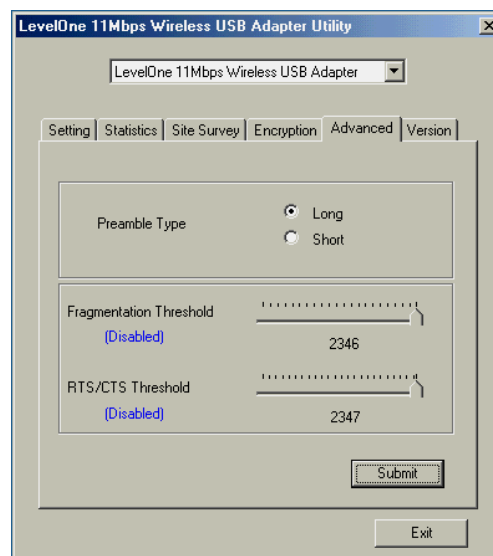
- (1) Select the Encryption type: 64bit or 128bit.
- (2) Type WEP Key: If you select 64bit, you must type 10 values in the following range (0~F) from Key1 to Key 4 space. Besides, if you select 128bit, you must type 26 values (0~F) in each WEP Key from Key 1 to Key 4. Please note that all the WEP Keys (key1~key4) have to be filled.
- (3) Select WEP Key: Select one of WEP Key from Key1 to Key4 for using.
- (4) Choose the WEP Mode: Mandatory for communicating with all stations having WEP enabled or Optional for WEP disabled.
- (5) Select the Authentication Type: Open System or Shared Key.
- (6) After all the settings are completed, click on Submit button to save the setting.



### **3.3.5 Advanced**

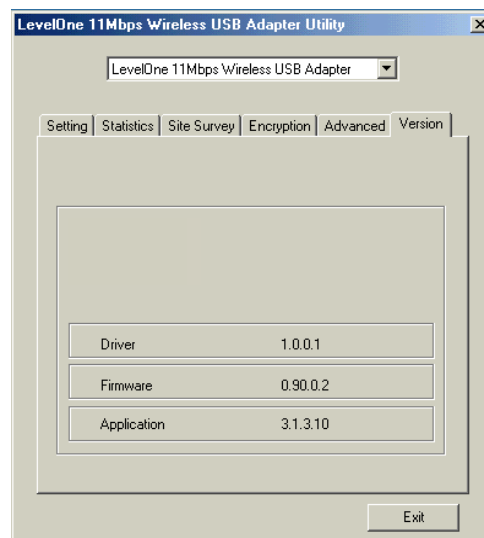
- The screen shows the advanced setting of the LevelOne 11Mbps Wireless USB Adapter Utility, and it includes Preamble Type, Fragmentation Threshold, and RTS / CTS Threshold. We suggest using the default settings—Preamble Type: Long.
- You may change the Preamble Type by ticking the two options: “Long” or “Short”.
- To change the parameters of Fragmentation Threshold, you may move the mouse pointer on the measure to adjust the value.
- To change the parameters of RTS/ CTS Threshold, you may move the mouse pointer on the measure to adjust the value.

- After adjusting the settings, please click on the “Submit” button to save all the settings.



### 3.3.6 Version

- The screen shows the version of Driver, Firmware, and Application for LevelOne 11Mbps Wireless USB Adapter Utility / Driver.



### 3.4 Remove your USB Adapter

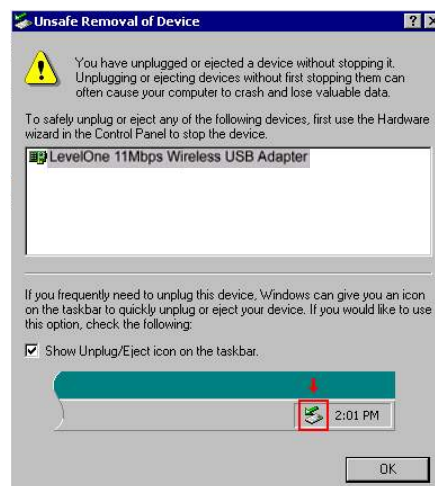
If you do not need the wireless connectivity of your LevelOne Wireless USB Adapter, you can unplug and remove your USB adapter directly.

#### ! Caution:

When removing the LevelOne Wireless USB Adapter, you will lose your connection to the network. Make sure you have closed all files and network applications (such as e-mail) prior to removing the USB Adapter.

#### Additional Note for Windows 2000

If you directly remove your USB device in Windows 2000, a message of unsafe remove device will be prompted as follows. Please click OK.

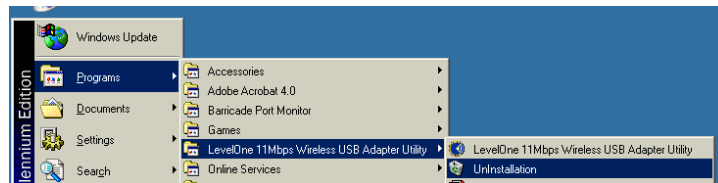


### 3.5 Uninstall the LevelOne Wireless USB Adapter Utility / Driver

If you do not need the wireless connectivity of your LevelOne Wireless USB Adapter.

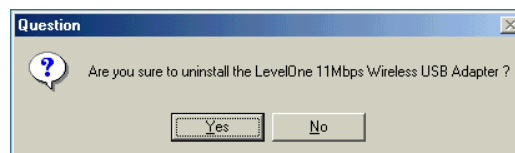
1. First you should disconnect and remove the LevelOne Wireless USB Adapter. (See 3.4)
2. To uninstall the LevelOne 11Mbps Wireless USB Adapter Utility and Driver, please follow the process as follows:

Start Menu → Programs → LevelOne 11Mbps Wireless USB Adapter Utility → LevelOne 11Mbps Wireless USB Adapter Un-Installation





3. You will be asked if you are sure to uninstall the LevelOne 11Mbps Wireless USB Adapter Utility and all of its components. Click “Yes” to run the un-installation or click “No” to exit.



4. Now the un-installation is completed. Please click “Finish”.



## 4. Network Application

This section consists of the network applications of the LevelOne Wireless USB Adapter, including:

- How to Survey the network neighborhood
- How to Share Your Folder with Your Network Member(s)
- How to Share Your Printer with Your Network Member(s)
- How to Access the Shared Folder(s)/File(s) of Your Network Members(s)
- How to Use the Shared Printer(s) of Your Network Member(s)

In fact, the network applications of the LevelOne Wireless USB Adapter are the same as they are in a wired network environment.

## 4.1 Surveying the Network Neighborhood

When multiple base stations are up and running in your wireless network, you can use the procedure described below to display the other computers:

1. Start Windows Explorer.
2. Scroll down the list of files and folders to look for the item **Network Neighborhood**.
3. Double-click the **Network Neighborhood** item to display all stations in your Microsoft Networking Group.
4. To display other workgroups in the network environment, double-click the **Entire Network** icon.
5. If there is a second network operating system running in your network environment (for example a Novell NetWare network), the "Entire Network" window will also display available servers running under the second network operating system. If you click on these servers, you may be asked to enter your user name and password that applies to the other network operating system. If you cannot find it, verify whether the other wireless computers are:

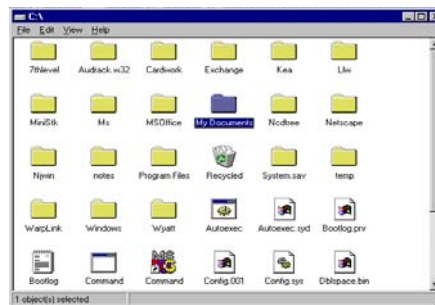
- Powered up and logged on to the network.
- Configured to operate with identical Microsoft Network settings concerning:
  - Networking Protocol.
  - Wireless Network Name.

To enable the sharing of Internet access, you should set your LevelOne 11Mbps Wireless USB Adapter mode as "Infrastructure" and connect to the access point. When the procedure is completed, an access point will appear on the Wireless LAN Neighborhood of the LevelOne 11Mbps Wireless USB Adapter Utility. Double-click it to enter the Network Neighborhood folder. This folder contains the links to all the computers in your workgroup on the entire network.

## 4.2 File Sharing in Microsoft Windows 98SE

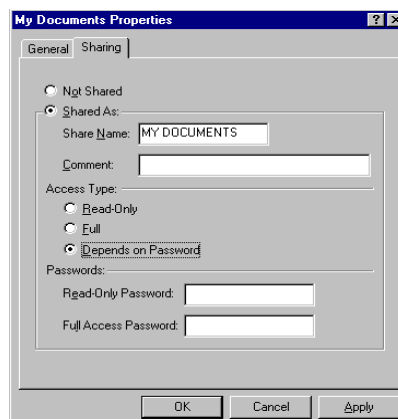
The LevelOne 11Mbps Wireless USB Adapter allows the sharing of files between computers that are logged onto the same wireless network. If you want to share your folder "My Documents" with other computers of the wireless network, please follow the steps below:

1. First, locate the folder "My Documents" and right click on it.



2. Select "Sharing" from the option list.

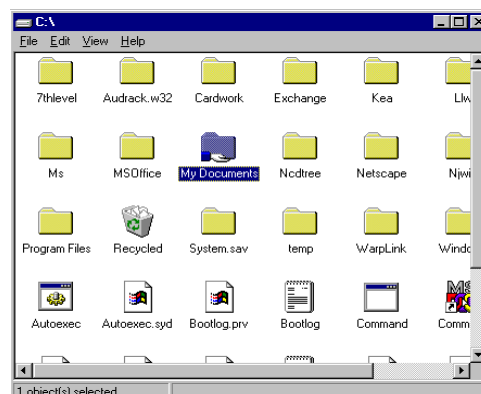
3. Select “Shared As” to open your folder for file sharing. You can also select and define the level of access for your folder.



- If “Read-Only” is selected, the other users in the wireless network can only copy files from your folder. Neither copying files into your folder nor any change of files is allowed.
- If “Full” is selected, the other users in the wireless network will have full access into your folder. They can copy to and from your folder as well as modify files.

- You can also set the option to “Depends on Password” wherein the other users in the wireless network can access to your folder through a set password. The set password will determine if the user can only read your folder or has full access to your folder.
4. Click “Apply” or “OK” to activate the options that you have set.

Now you can see the folder “My Documents” with a small hand under it. The folder is now open for file sharing.

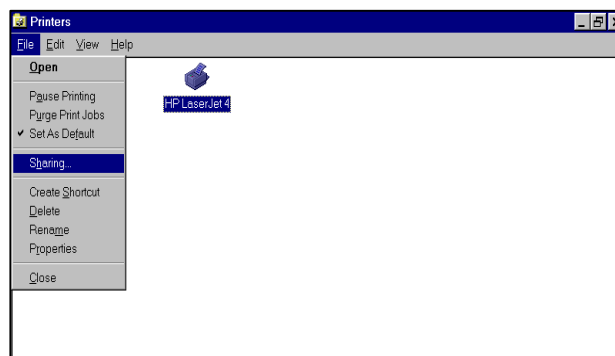


Sharing files in the IEEE802.11b wireless network will be like sharing files on a wired LAN.

## 4.3 Printer Sharing in Windows 98SE

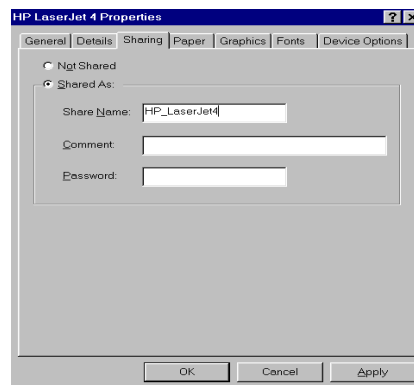
In order to share your printer with other stations of the same across the network, you have to set it as a network printer—the instructions are as follows:

1. Click the “Start” button, point to the “Settings”, and then click “Printers”.
2. In the Printers window, click the printer you want to share.
3. Click “Sharing” on the “File” menu.





4. Click the Sharing tab, and then click “Shared As”. If necessary, enter a password.



## **4.4 Using the Shared Folder**

If you would like to access a shared folder stored in other stations of same network, please follow the process below:

1. Double-click the “Network Neighborhood” icon, and then double-click the computer where the shared folder is located.
2. Double-click the folder you want to connect to.
3. Now you may open the needed file(s).

Note: If a password is required, the Windows will prompt a password column to you. Then you need to enter the password that had been assigned to this shared folder.

## 4.5 Using the Shared Network printer

To use the shared network printer(s), please refer to the following process:

1. In the “Network Neighborhood”, locate and double-click the computer where the printer you want to use is located.
2. Double-click the printer icon in the window.
3. To set up the printer, follow the instructions on the screen.

Note:

1. After you have set up a network printer, you can use it as if it were attached to your computer.
2. If a password is required, the Windows will prompt the password column to you and you need to enter the password that had been assigned to this shared printer.



Whenever printing a document through the network, be sure to select the printer that is set as the network printer.

## 5. Specifications

### 5.1 Physical Specifications

Dimensions	(L x W x H) 120 X 77 x 25mm
Weight	80g
Host Interface	USB 1.1 Compliant
Antenna	Internal Patch Antenna Supporting Diversity
Status Indicator	LED (Indicates RF/Link Activity)

## 5.2 Available Channels in Each Country

Radio Channel Selection Table

Channel_ID	Regulatory domains					
	U.S.A.	Canada	Most of Europe	Spain	France	Japan
1	X	X	X	-	-	X
2	X	X	X	-	-	X
3	X	X	X	-	-	X
4	X	X	X	-	-	X
5	X	X	X	-	-	X
6	X	X	X	-	-	X
7	X	X	X	-	-	X
8	X	X	X	-	-	X
9	X	X	X	-	-	X
10	X	X	X	X	X	X
11	X	X	X	X	X	X
12	-	-	X	-	X	X
13	-	-	X	-	X	X
14	-	-	-	-	-	X

### 5.3 Networking Compliant Standards

Standard	IEEE802.11b Wi-Fi Compliment
Host Systems	Windows98SE/2000/ME
Media Access Protocol	CSMA/CA with ACK
Network Protocol	TCP / IP, IPX, NetBEUI

## 5.4 Operating Specifications

Frequency Band	2.400 ~ 2.4835GHz (subject to local regulations)
Number of Channel:	USA and Canada -11 Most France -4 European countries -13
Operating Voltage:	5V
Spreading:	DSSS (Direct Sequence Spread Spectrum)
Date rate:	11Mbps, 5.5Mbps, 2Mbps, 1Mbps Nominal Temp Range: 17 dBm
Transmit Power:	Extended Temp Range: 14 dBm min. Transmit power, 2.7v to 3v: 14 dBm min.

Receive Sensitivity:	<b>Nominal Temp Range:</b> -1 Mbps $10^{-5}$ BER @ -90 dBm, minimum -5.5 Mbps $10^{-5}$ BER @ -87 dBm, minimum -11 Mbps $10^{-5}$ BER @ -84 dBm, minimum <b>Extended Temp Range:</b> -1 Mbps $10^{-5}$ BER @ -84 dBm, minimum -5.5 Mbps $10^{-5}$ BER @ -81 dBm, minimum -11 Mbps $10^{-5}$ BER @ -78 dBm, minimum
Modulation:	11 Mbps and 5.5 Mbps CCK; 2 Mbps: DQPSK; 1Mbps: DBPSK;
Security:	64-bit, 128-bit WEP Encryption
Temperature Range:	-10 ~ 50°C (Operating), -20 ~ 70°C (Storing)
Humidity:	Max. 95% Non-condensing



Operating Range:	Open Space: 100 - 300m; Indoor: 35m - 100m
Roaming:	Full mobility and seamless roaming from cell to cell and across access points (subject to access point)
Management Utility:	Link Configure for network join and diagnostics
EMC certification:	FCC part 15 class in US, ETSI 300.328 and CE EMC-EEC in Europe
Warranty:	1 year, optional 3 years

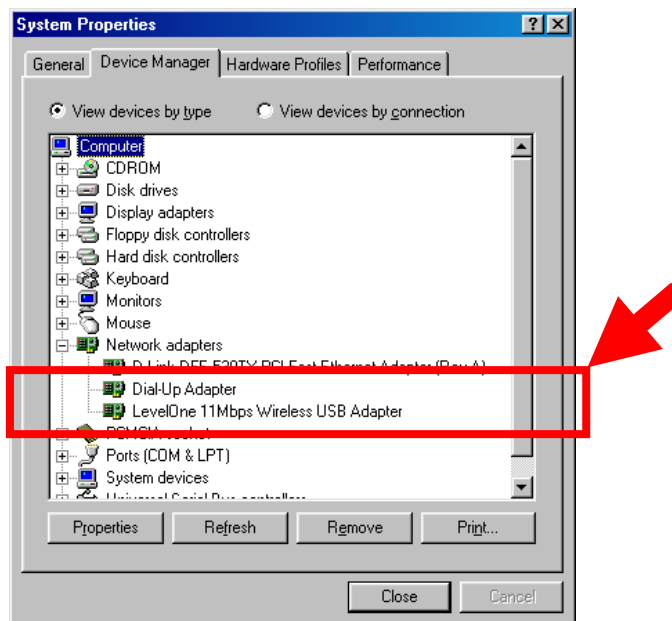
## **6. Troubleshooting**

If you encounter some problems while installing the LevelOne Wireless USB Adapter or you want to confirm whether the USB Adapter is installed properly or not, please refer to the procedure below after you have installed the USB Adapter.

## 6.1 Check the Various Properties of the LevelOne 11Mbps Wireless USB Adapter

To verify if the driver has been set in your computer properly, you can follow the procedures below.

- Right-click “My Computer” and then select “Properties”; then you will enter your system properties. Select the Device Manager and click the Network Adapter. You will find the LevelOne 11Mbps Wireless USB Adapter if it is installed successfully.



- If there is a Question-mark (?) or an Exclamation-mark (!) in yellow on your LevelOne Wireless USB Adapter in the previous picture, please make sure you have inserted the right USB Adapter, and installed the proper driver and utility as well. If you are not sure, you may follow the procedure below to reinstall (update) the driver.

- a. Enter "System Properties" and click "Device Manager" on upper menu.
- b. Click "Network Adapter" and choose LevelOne 11Mbps Wireless USB Adapter
- c. Select "Driver" on the upper menu of LevelOne 11Mbps Wireless USB Adapter properties, and then click on "Update Driver" button.
- d. Follow the Update Device Driver Wizard to complete the driver installation.

## 6.2 Microsoft Networking Checklist

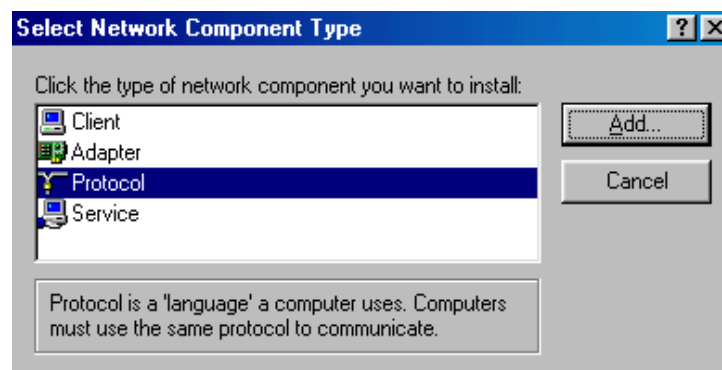
In order to run the LevelOne 11Mbps Wireless USB Adapter properly, some network items must be presented in the Microsoft “Network Neighborhood” setup. To check and activate the network setup, right-click the “Network Neighborhood” and select “Properties”. The following items should be presented in the network setup:

1. IEEE802.11b USB Wireless LAN Adapter
2. IPX / SPX-compatible Protocol → LevelOne Wireless USB Adapter
3. NetBEUI → LevelOne Wireless USB Adapter
4. TCP / IP → LevelOne Wireless USB Adapter
5. File and printer sharing for Microsoft Networks.
6. Client for Microsoft Networks

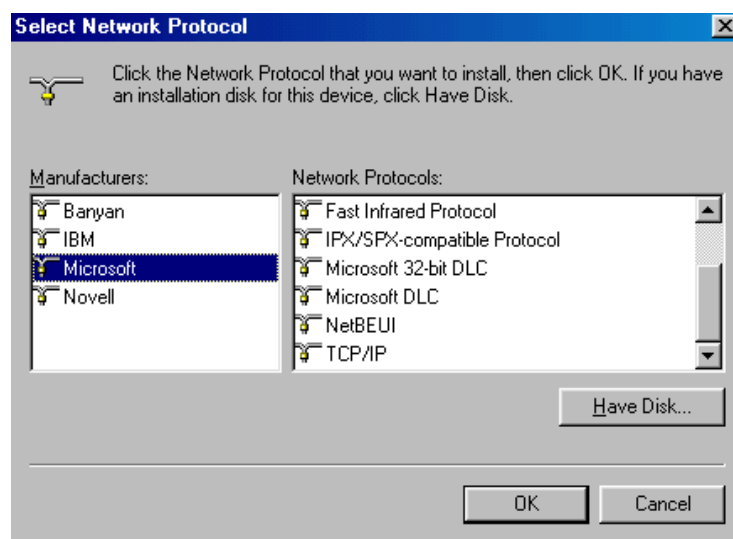
If any of these items are missing, please follow the instructions below to install them properly:

### Set up the Network Protocols:

- Refer to the picture above—Click “Add” button to enter the windows displayed below.



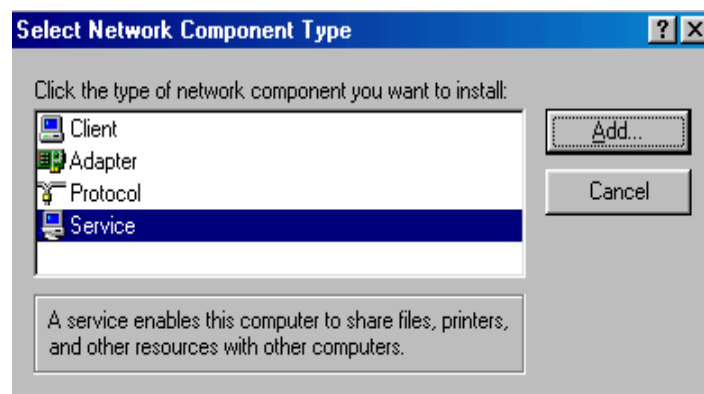
- Click “Add” and then choose the network protocol. Select Microsoft as the manufacturer and pick “NetBEUI”, “TCP/IP”, and “IPX/SPX-compatible” for the network protocols. After all, click “OK”.



- Now your network protocol should be set. Please check if your network needs any special requirements to operate in your office environment.

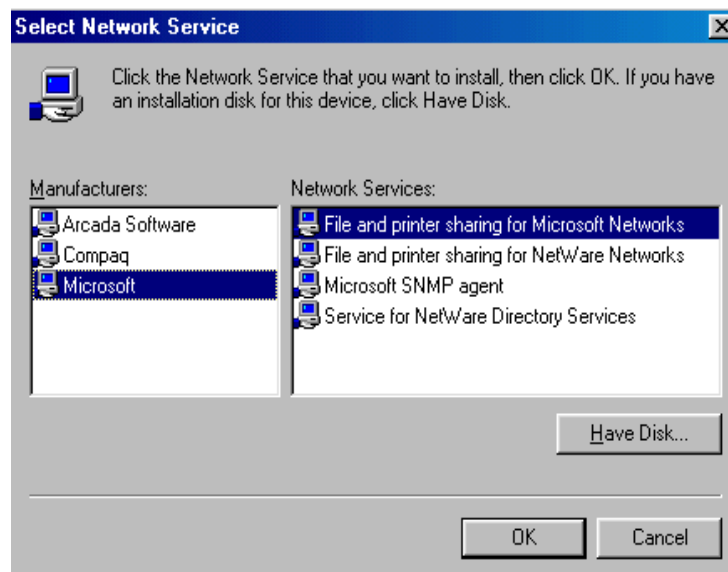
### Network Service for Microsoft Networking:

- Click “Add” and select “Service”.





- Select “Microsoft” as the manufacturer and choose “File and printer sharing for Microsoft Networks” for network service;



- Click “OK” to set the network service.

## **6.3 Others**

### **Additional Note for Windows 98 earlier edition**

If your system is running Windows 98 first edition, you may use one of the following ways to make IEEE 802.11b WLAN Utility work properly.

1. Copy and replace the file MFC42.dll from c:\windows\system of Windows 98SE to the same directory of your Windows 98 first edition.
2. Upgrade your system and IE from Microsoft web site.

## **Regulatory Information**

The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device or the substitution or attachment of connecting cables and equipment other than specified. The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user. Built-in antennas, whether installed indoors or out, should be installed only by experienced antenna installation professionals who are familiar with local building and safety codes and, wherever applicable, are licensed by the appropriate government regulatory authorities.

### **FCC Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

### **USA – Federal Communications Commission (FCC)**

This equipment has been tested and found to comply with the limits for Class B Digital Devices, 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 instruction, 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 the 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.

### **Canada – Industry Canada (IC)**

This class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations.

EU Declaration of Conformity (Europe)

USB adapter conforms to the specifications listed below, following the provisions of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC

Safety	EN60950/IEC950
EMC	EN55022/CISPR22 Class B EN50082-1 EN61000-3-2/EN61000-3-3

## Notes:

The Product is passed CE and able to be used in these countries as following:

North America: US, Canada

Europe: Germany, France, Italy, England, Spain, Austria, Danish, Finland, Iceland, Luxembourg, Netherlands, Norway, Sweden, Switzerland

Asia: Hongkong, Taiwan, Korea, Singapore

Australia, New Zealand

