

MP-B-IP-00 Configuration Utility User Guide

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Introduction

The Wireless LAN Configuration Utility is a powerful application that helps you to configure USI MP-B-IP-00 WLAN Mini-PCI card and monitor the statistics of the communication status. Unlike the standard method of configuring the card via the operating system utilities, this application permits the dynamic modification of the configuration parameters while the card is operating. It also offers more configuration options.

INPROCOMM offers the Wireless LAN Configuration Utility for Windows 98SE/Me/2000/XP.

Evaluation Board Mini-PCI



USI MP-B-IP-00 Mini-PCI

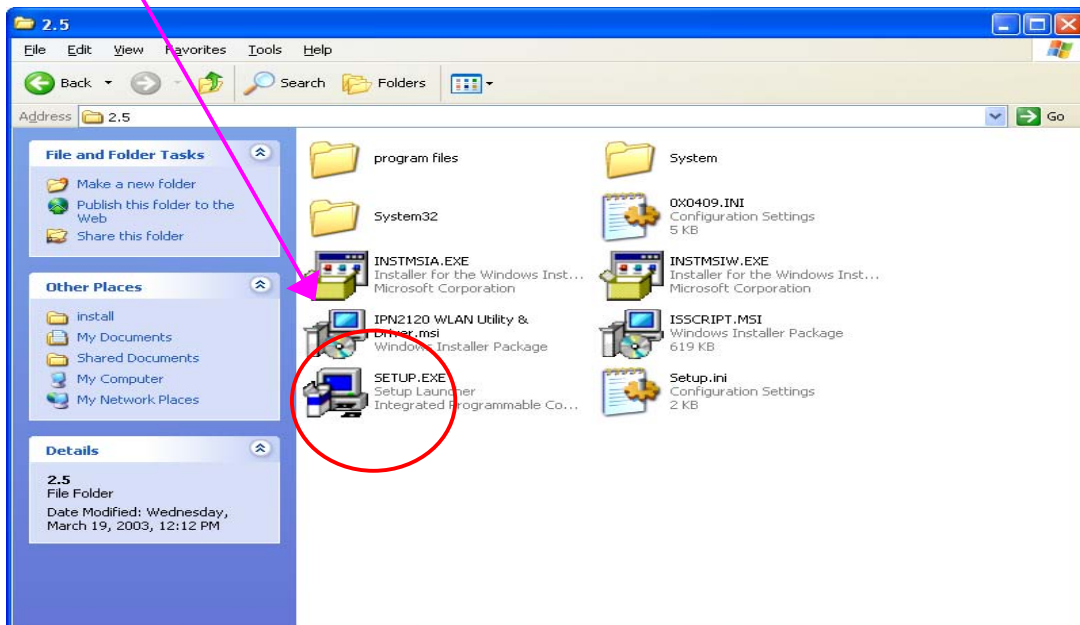
1. Read this First

If your hardware came with an installation CD or floppy disk, choose **“Install the software automatically (Recommended)”** and press **cancel**.

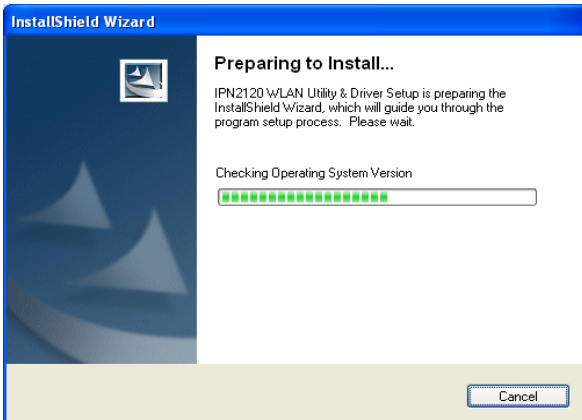


1.1 How to Install IPN2120 WLAN Utility & Driver in Windows XP environment

1.1.1 Double click the **“setup”** located in **“\Wireless LAN Configuration Utility\”**



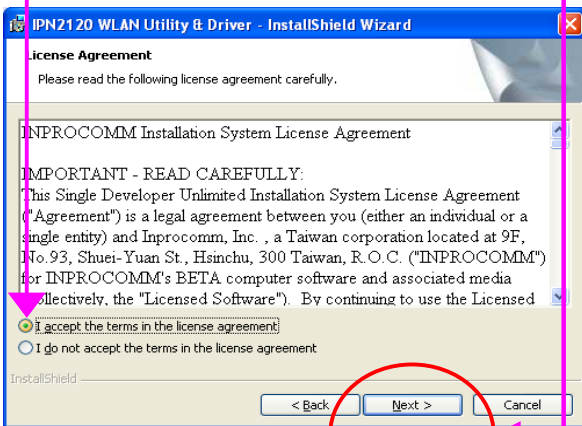
1.1.2 The program will automatically proceed with installing



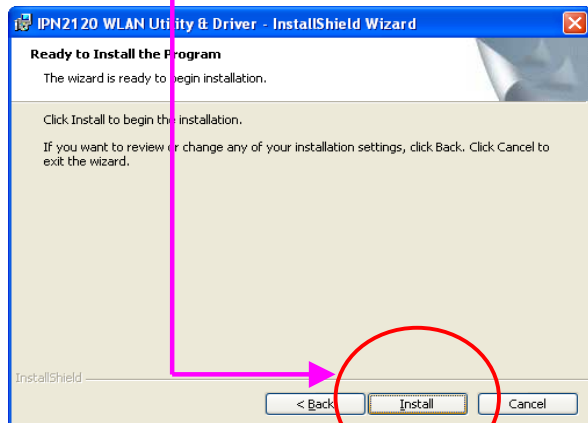
1.1.3 Press “Next” to continue



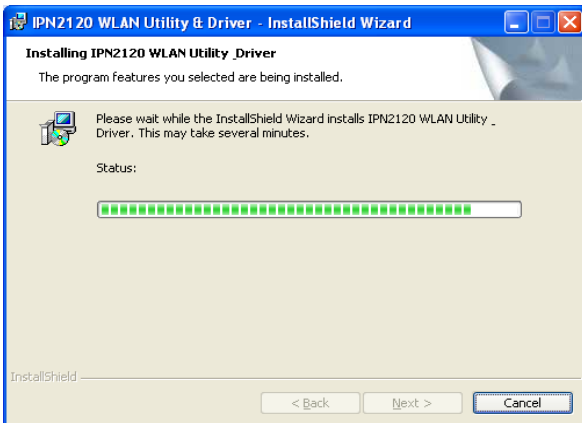
1.1.4 Review “The License Agreement” then press “Next”



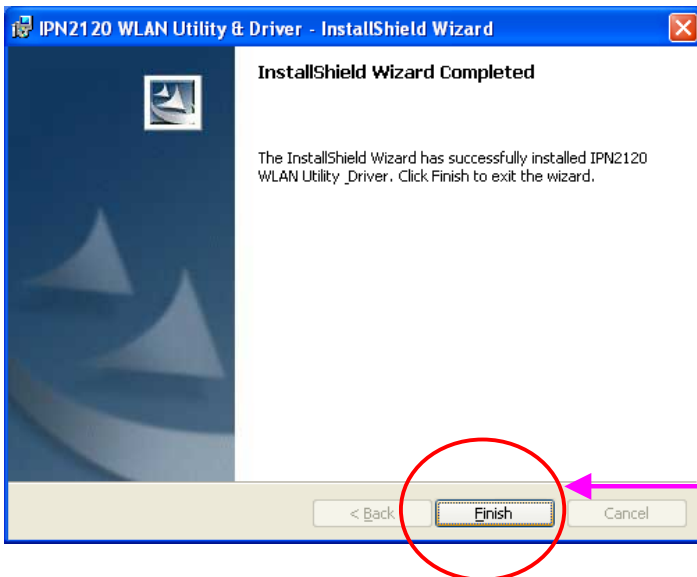
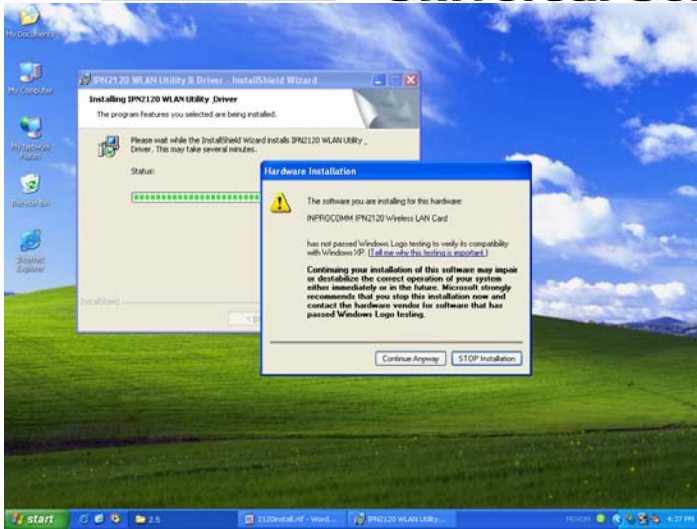
1.1.5 Press “Install” to continue the install program



1.1.6 Please wait for the installing

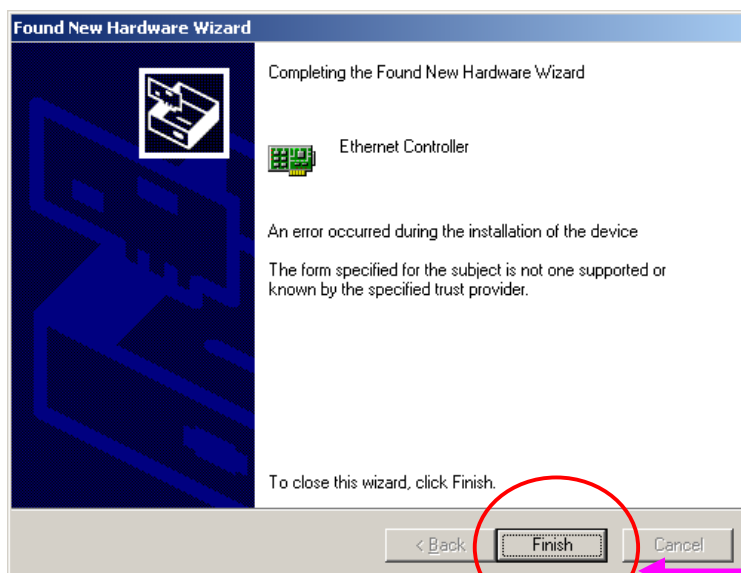
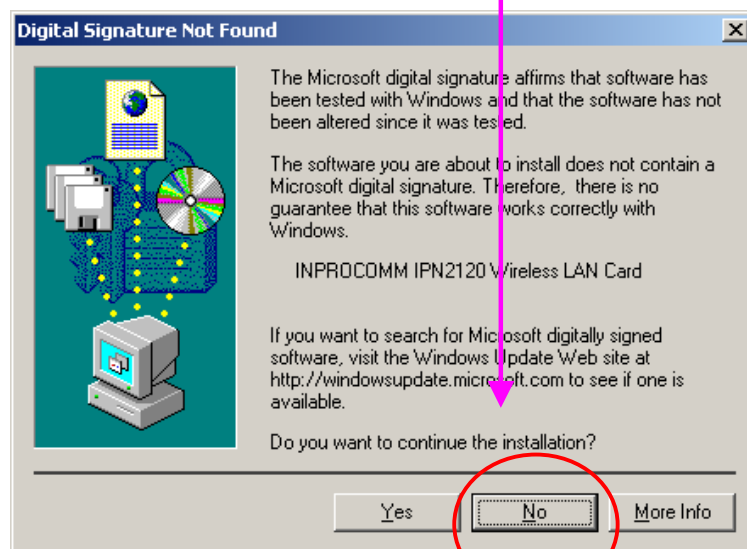
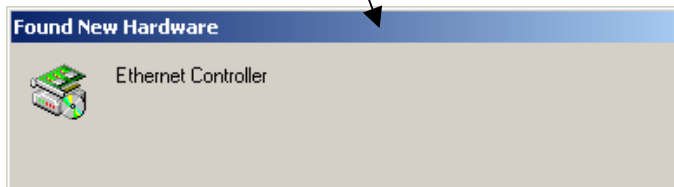


1.1.7 Press “finish” to complete the installation.

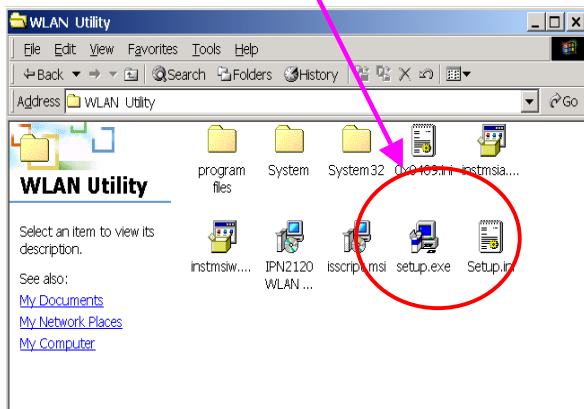


1.2 How to Install IPN2120 WLAN Utility & Driver in Windows 2000 environment

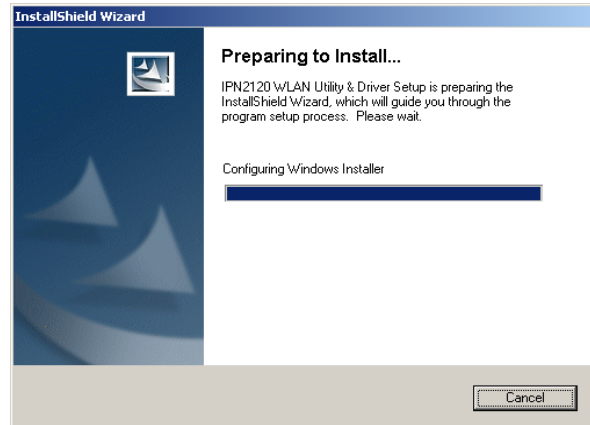
1.2.1 Detecting for a new hardware, press "finish" to run automatically installation



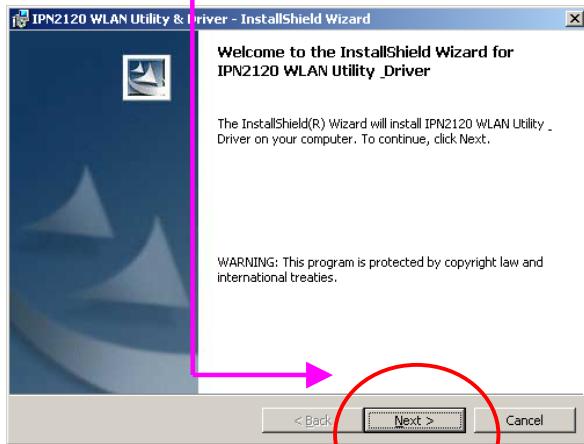
1.2.2 Double click the “**setup**” located in “\Wireless LAN Configuration Utility\”



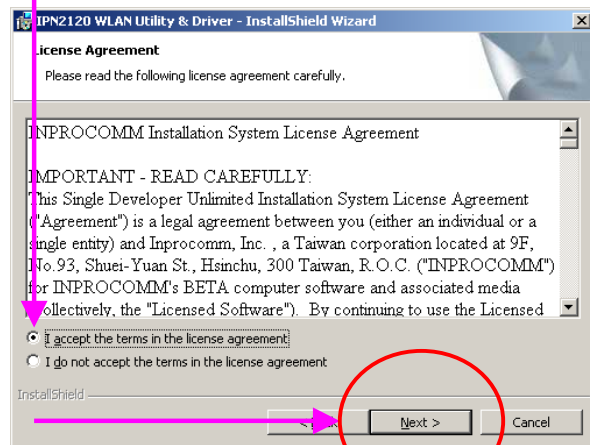
1.2.3 Install Shield is installing the program.



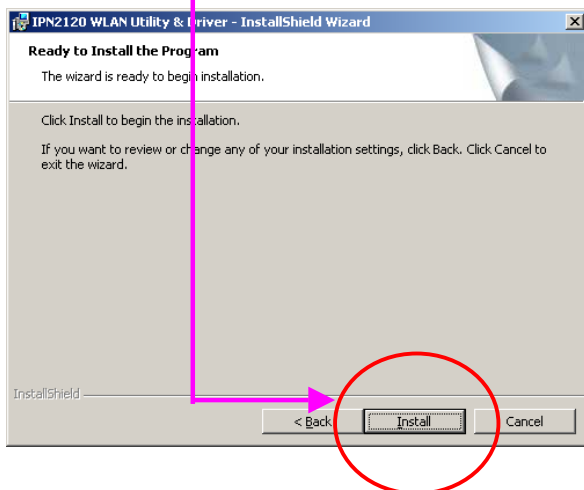
1.2.4 Press “**Next**” to continue



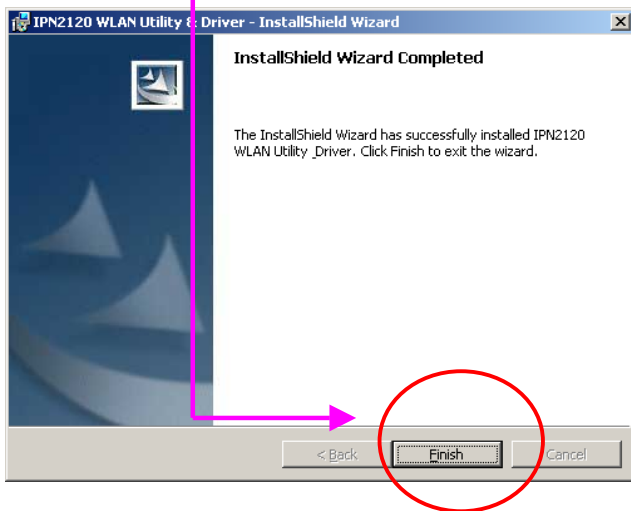
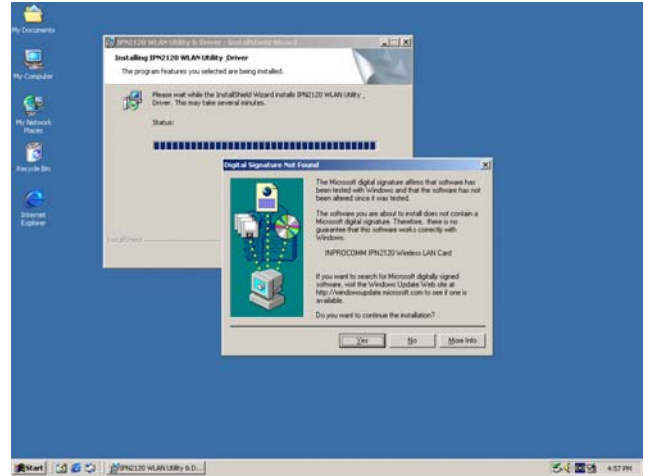
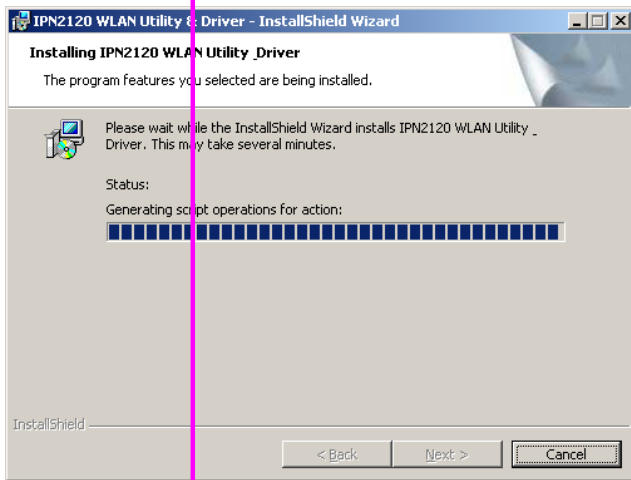
1.2.5 Review “The License Agreement” then press “**Next**”



1.2.6 Press “**Install**” to continue the install program

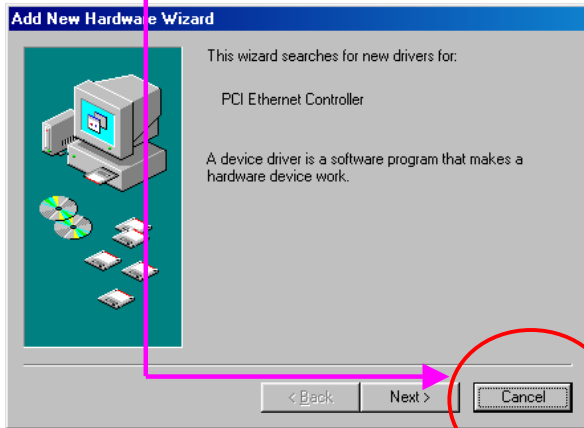


1.2.7 Press “finish” to complete the installation

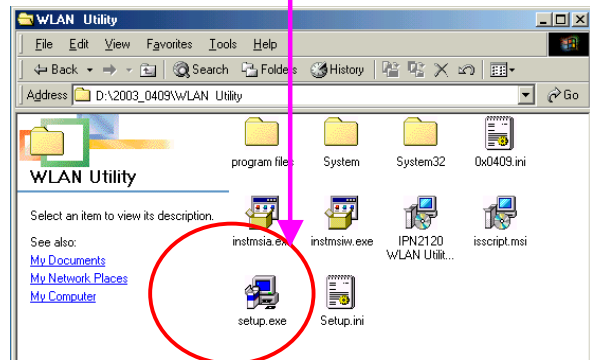


1.3 How to Install IPN2120 WLAN Utility & Driver in Windows 98SE/ME environment

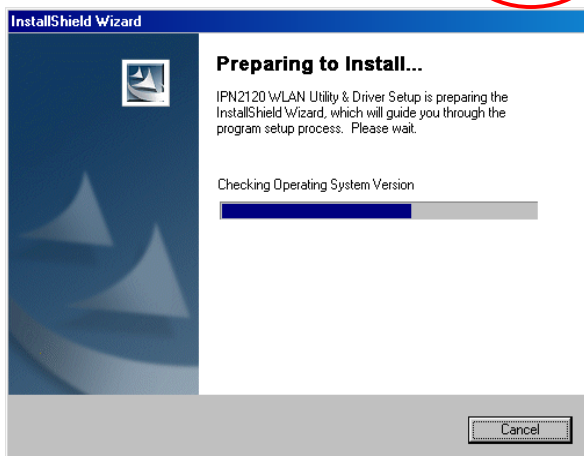
1.3.1 Press cancel to run an automatic installation



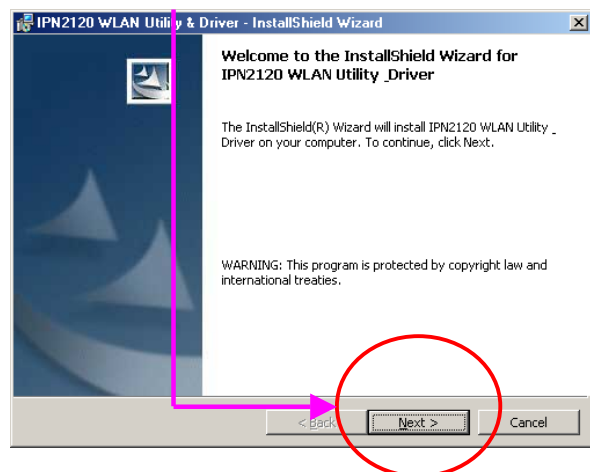
1.3.2 Double click the "setup" located in "\Wireless LAN Configuration Utility"



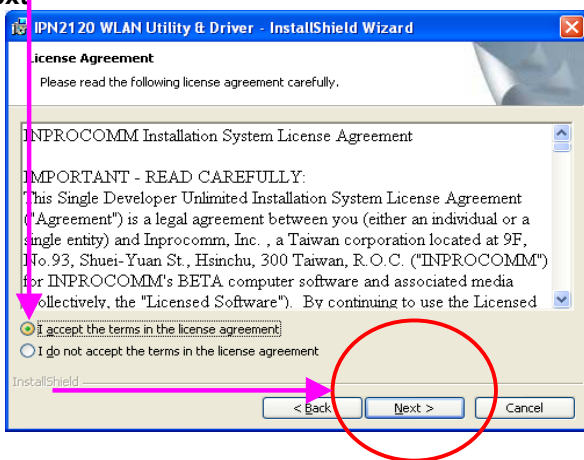
1.3.3 Install shield is installing the program



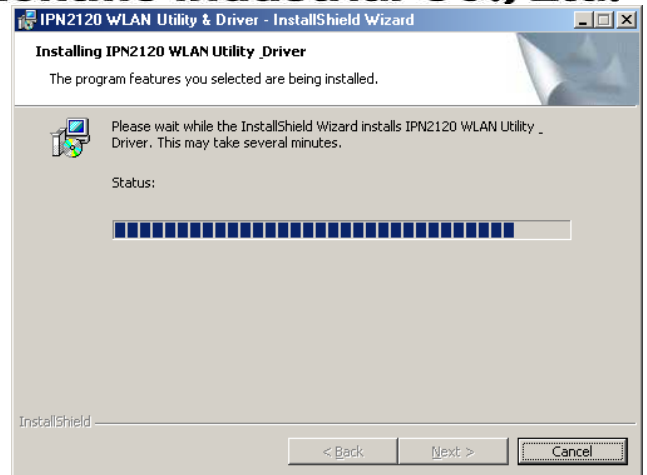
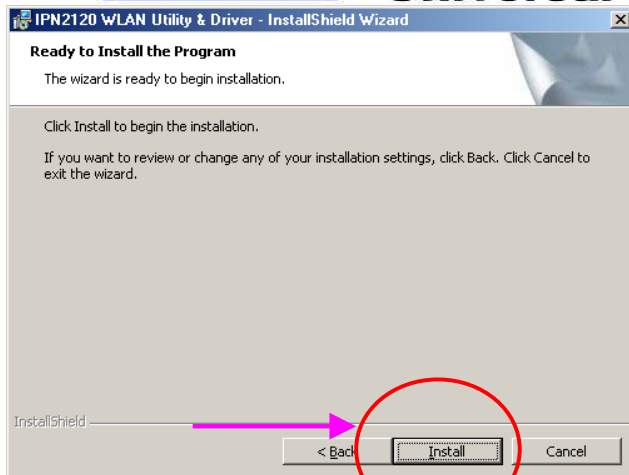
1.3.4 Press "Next" to continue



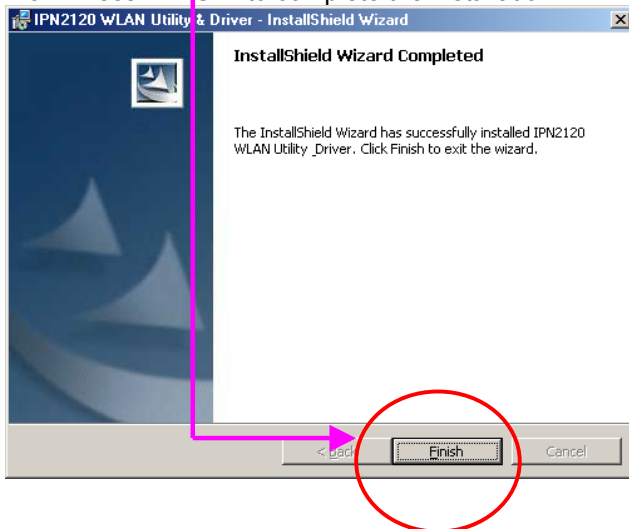
1.3.5 Review "The License Agreement" then press "Next"



1.3.6 Press "Install" to continue the install program

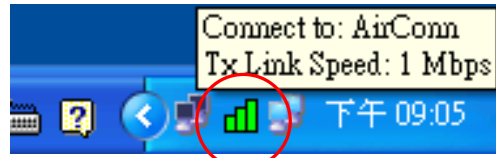


1.3.7 Press “finish” to complete the installation



1.4 Using the Wireless LAN Configuration Utility

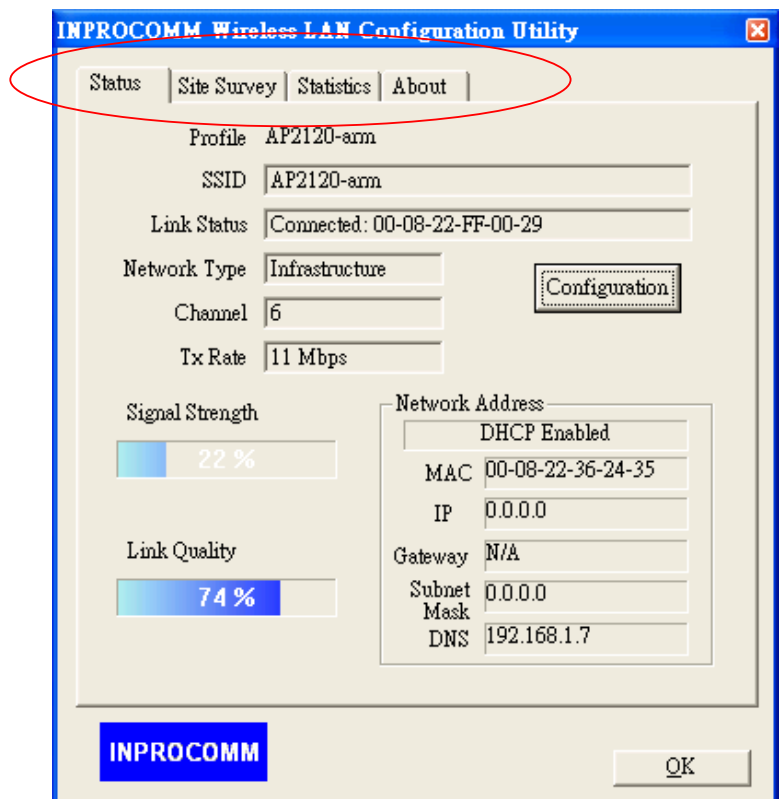
The Wireless LAN Configuration Utility appears as an icon on the system tray of Windows while the card is running. You can open it by clicking on the icon.



The icon is appeared as bar diagram with different color and level for representing different connection status. While the station is not associated with other STA/AP, the icon will appear as an empty (blank) bar diagram. Once it is associated, it will appear as different color for different level of signal strength (RSSI). There are 3 levels of icons to represent the signal strength, the green one (signal strength from 100%-50%), the yellow one (50%-25%), and the red one (below 25%).

The Wireless LAN Configuration Utility is a highly integrated application include the following main options (tabs),

- **Status**
- **Site Survey**
- **Statistics**
- **About**



Status

A typical screen of the application in Infrastructure mode is shown in Figure 1-1. The configuration parameters are shown at the top of the screen.

In order to change the configuration parameters press the “Configuration” button, then it will pop-up a dialog for you to input your settings. (Figuration 1-3, 1-4, 1-5)

1. Profile Name
2. SSID
3. Link Status
4. Network Type
5. Channel
6. Tx Rate
7. Signal strength, link quality
8. Network Address
9. Link Quality

Network Address section shows the current Network status such as the MAC address, DHCP (Enable or not), IP address, Subnet Mask address, Gateway Address and DNS server address that you can easily monitor these settings without the “IPCONFIG” provided by Windows.

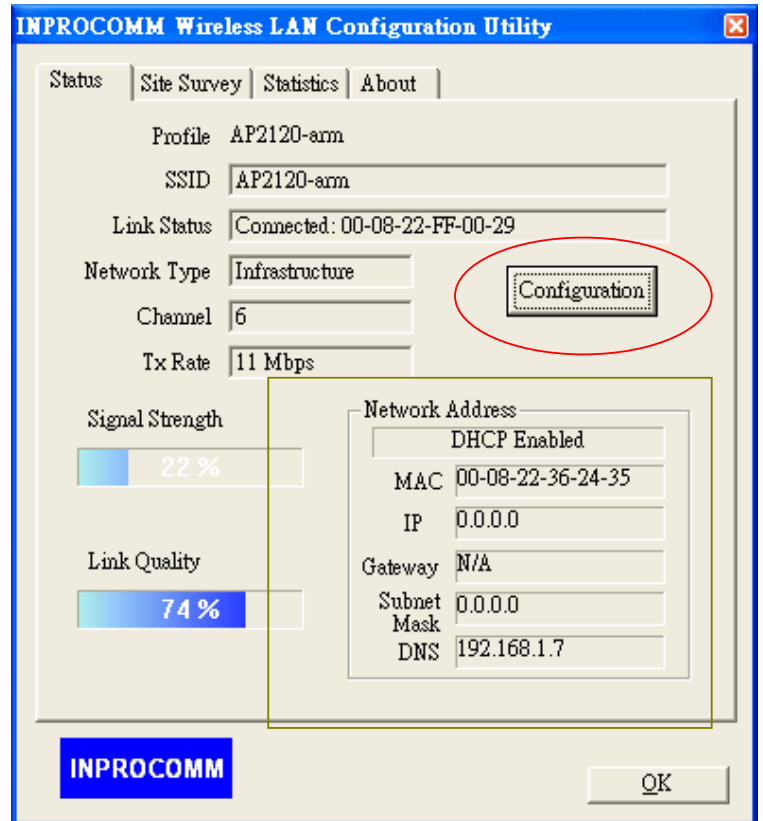


Figure 1-1. The screenshot of the Wireless LAN Configuration Utility in infrastructure mode.

Site Survey

By choosing the **Site Survey** option, you can scan all the channels to find all the access points/stations within the accessible range of your card. As shown in Figure 1-2, the list of the “Available Networks” includes the information about the BSSID, SSID, Mode (Network Type), Channel, WEP (On/Off), signal strength and Supports Rate. You may press the “**Rescan**” button dynamically in order to update this list and double-clicking at the one on the list once you want to associate with it. It will show the configuration property sheet (Figuration 1-3, 1-4, 1-5) and then you can press “**APPLY**” after complete all the settings. After this, it will switch back to the **Status** page and update the current established status.

Profiles section: INPROCOMM Wireless LAN Configuration Utility provides the easy to use profile function. It shows all the profiles (**Up to 32 sets**) with its configurations currently stored in the program, which includes Profile Name, Network Type, SSID, Desired Rate and Encryption Key and other advanced settings. User may **ADD, REMOVE, EDIT** anyone of it with the buttons next to the window.

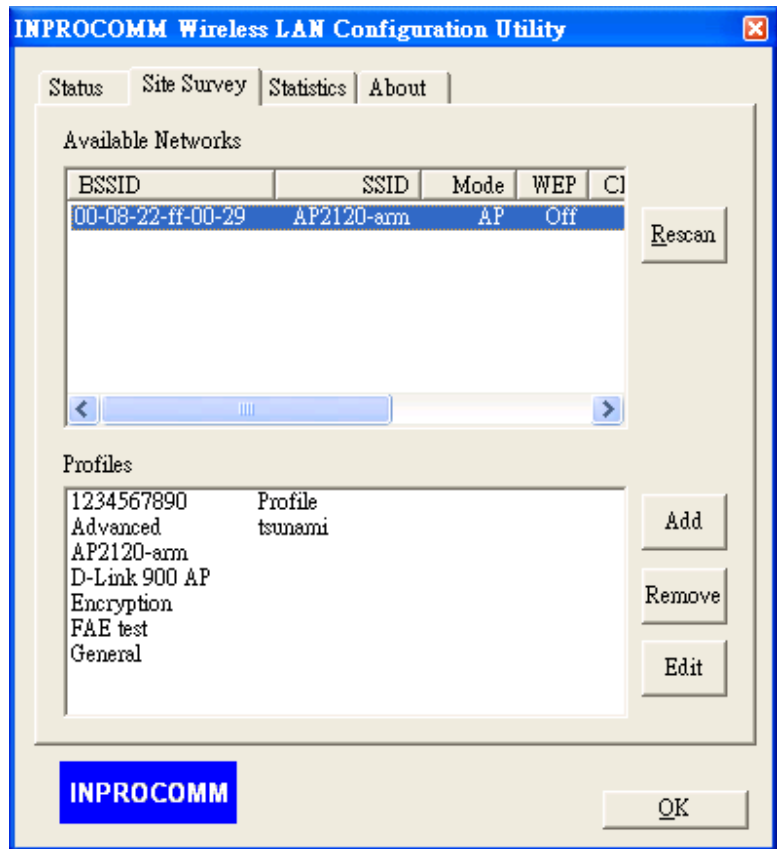
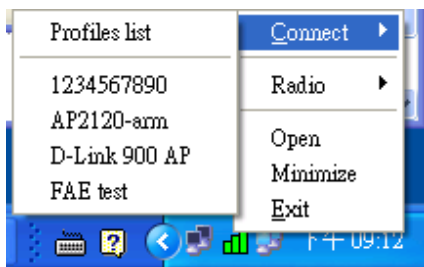


Figure 1-2. Site Survey page

Users can apply the profile by [double-clicking the item in the list](#) or [clicking on the one in the Profiles List of the icon in system tray](#).



There's 3 property pages in the *Configuration* property sheet, which includes *General*, *Encryption*, and *Advanced*

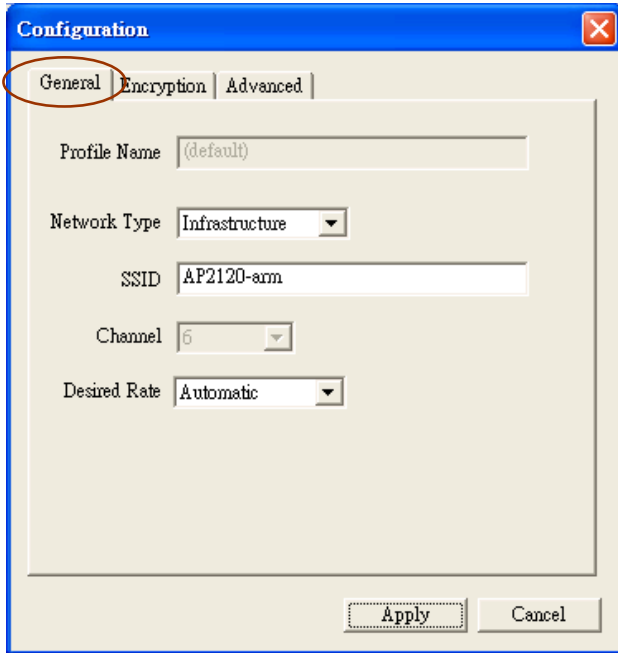


Figure 1-3. General Settings

Encryption

By choosing this option, you can set the card with its encryption mode to NONE or WEP, the authentication mode to **Open system** or **Shared key** or **Auto Switch**.

General

In this page, user can configure the station card with its Network type (Infrastructure/Ad hoc), SSID (up to 32 characters), channel (only in Ad hoc mode, and its range is according to the regulatory domain setting in the EEPROM), and the Desire Tx Rate (Automatic/ 1 Mbps/ 1 Mbps/ 2 Mbps/ 5.5 Mbps/ 11 Mbps)

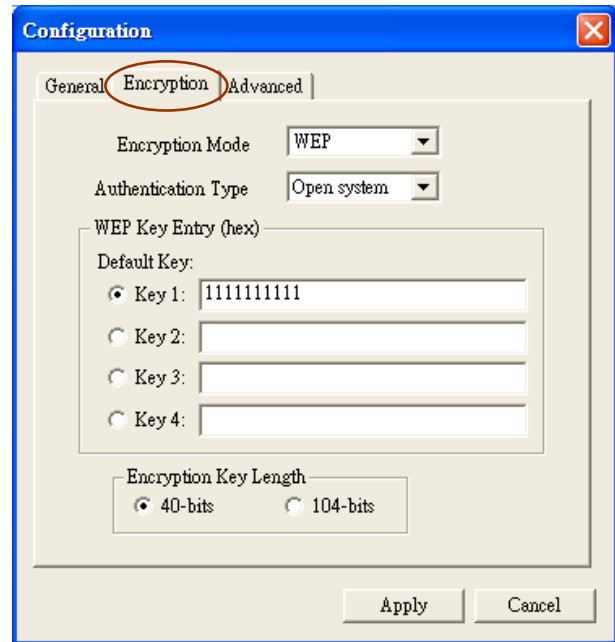


Figure 1-4. Encryption Settings

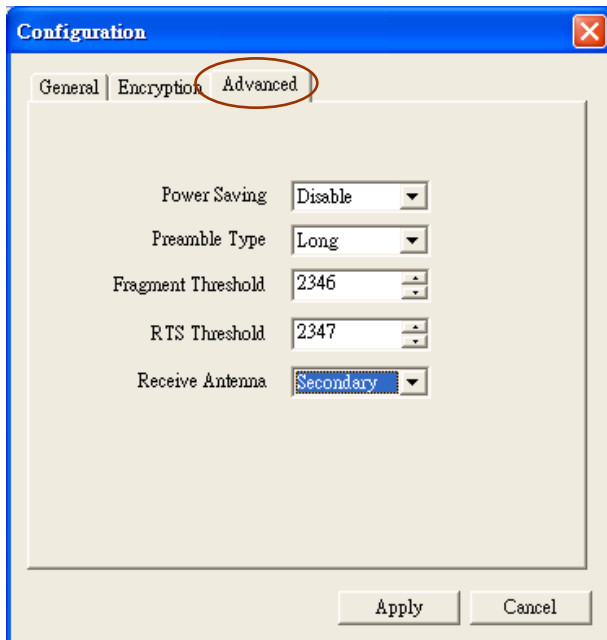


Figure 1-5. Advanced Settings

When set as WEP enabled, you have to set/complete the WEP key materials key material length and specify which one of them as the default key (1 to 4) correctly, which means 4 different keys should be in the same length or empty, and the default key radio button should be set to the set with non-empty key material. If the setting is not complete, the APPLY button will remain to be "gray" and cannot be clicked until user do correct settings of this page.

Advanced

Choosing the **Advanced** option, you can change advanced configuration settings, such as the **Power Saving mode**, **Preamble Type**, **Fragmentation Threshold**, and **RTS Threshold** (See Figure 1-5). Figure 1-5 shows the recommended configuration for the advanced settings. Before selecting Short Preamble, make sure that the other stations and APs are also supporting this feature.

Statistics

This option enables you to view the available statistic information with its Tx counts (Tx success, Tx error), Tx Throughput, and its Rx counts (Rx success, Rx error), Rx Throughput. You may reset the counters by pressing its RESET button.



Figure 1-7. About information

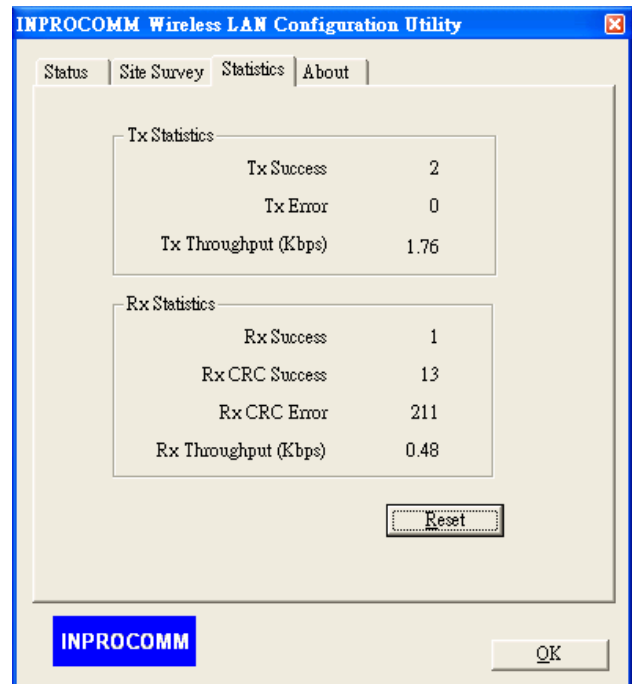


Figure 1-6. Statistics page

About

By choosing this option, you can view basic information about the Utility such as the Driver and Utility Version. And you can click the hyperlink to connect the website for technical support.

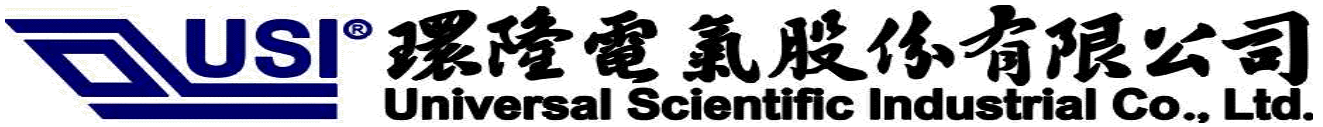
Federal Communication Commission (FCC)

Federal Communication Commission Interference Statement

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 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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:

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.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device is intended only for OEM integrators under the following conditions:

- 1) The antenna must be installed such that 20 cm is maintained between the antenna and users, and
- 2) The transmitter module may not be co-located with any other transmitter or antenna.

As long as 2 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains TX FCC ID:IXMBM6621R4".

Manual Information That Must be Included

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the users manual of the end product which integrate this module.

The users manual for OEM integrators must include the following information in a prominent location " IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.