Soft Gate

SoftGate Wireless AP/Router solution

(PCMCIA/PCI/USB interface)

User's Guide

AP Anywhere

Version 2.0 DEC 2003

www.astarte.com.tw

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Chapter 1 Introduction

This Chapter provides an overview of the SoftGate AP/Router's features and specifications.

Thank you for purchasing the SoftGate Wireless Solution Adapter. SoftGate is the first AP less series family product developed by Astarte to turn the existing Computers into a wireless AP. It includes four features (4- in-1): Router, AP, Bridge, and WLAN Client. Users can share PC resources such as files, internet connection, video streaming and multimedia title, instantly without the requirement of preinstall or pre-configure wireless base station. SoftGate is the first technology that truly removes the limitation from wireless base station.

1.1 Features

- **4 in 1 Device**— Integrates Router, AP, Bridge, and Client into your PC/NB
- **Easy Installation & Expansion**—Simple, affordable and flexible solution break through your wired limitation
- **Complete Mobility**—Small size, portable wireless base station
- **Security**—64-bit or 128 bit encryption
- **Intelligent device**— Auto-detect and configure for client or infrastructure AP.

1.2 Specifications

Standard	IEEE802.11b
Adapter Type	PCMCIA, PCI, miniPCI, USB
Multi Mode	Router, AP, Bridge, and Client
Modulation Technology	DSSS
Data Encryption	64/128bit WEP encryption; TKIP (Temporal Key Integrity Protocol)
Frequency Band	2.412 ~ 2.462 GHz (US) 2.412 ~ 2.484 GHz (Japan) 2.412 ~ 2.472 GHz (Europe) 2.457 ~ 2.462 GHz (Spain) 2.457 ~ 2.472 GHz (France)
Channels	11 (US, Canada), 13 (Europe), 14 (Japan), 2 (Spain), 4 (France)
Date Rates & Modulation	11Mbps: CCK 5.5Mbps: CCK 2Mbps: DQPSK 1Mbps:DBSK
Media Access Protocol	CSMA/CA (Carrier sense multiple access with collision avoidance)
Supported OS	Windows ME, 2000, XP
LED Indicators	Power, Link, Activity
Receive Sensitivity	11Mbps@-84dBm 5.5Mbps@-86dBm 2Mbps@-91dBm 1Mbps@-93dBm
Transmit Output Power	Up to 17dBm
Operational Voltage	3.3/5V
Temperature	Operating : -0℃ to 55℃ (32℉ to 131℉) Storage : -5℃ to 70℃ (23℉ to 158℉)
Humidity	Operating: 0% to 90% Non-Condensing Storage: 0% to 90% Non-Condensing
Certifications	FCC, CE, SAR
Warranty	One year

1.3 Interface description

The SoftGate AP/Router solution provides several kinds of interface:

- **PCMCIA: for PC card type II**
- **PCI: for 32 bit PCI 2.2**
- **USB: for USB 2.0**

Chapter 2 Installation Overview

You should estimate around several minutes to complete the installation.

Before you begin the installation process, make sure you have the proper SoftGate Wi-Fi adapter and installation CD and that the Laptop/PC which you are installing onto has a proper open slot.

◆ The machine installing SoftGate needs to have supported OS running.
◆ Make sure a proper internet connection is available on the installation machine by using the Microsoft Internet Explorer.
◆ If you have another active Wi-Fi card, disable it before installing SoftGate by going to Start Menu: Control Panel: System: Hardware Tab: Device Manager: Network adapters, select Wi-Fi adapter you are running, right mouse click, disable the device.

Once you are ready to install, follow these steps:

STEP 1. Insert the SoftGate autorun CD and choice the adapter installation icon.
STEP 2. Insert the SoftGate Wi-Fi adapter (PCMCIA/PCI/USB).
STEP 3. Check the connection from a wireless client.

Chapter 3 What's in the Box

The following items should be included
- 1 SoftGate Wi-Fi adapter (PCMCIA/PCI/USB)
- 1 Installation Autorun CD: contents in the CD include
  - SETUP.EXE: SoftGate installer
  - Softgaterev1.1: User's Guide
  - SoftGate_Qinstall: Quick installation guide

If any of the above items are damaged or missing, please contact your dealer immediately.
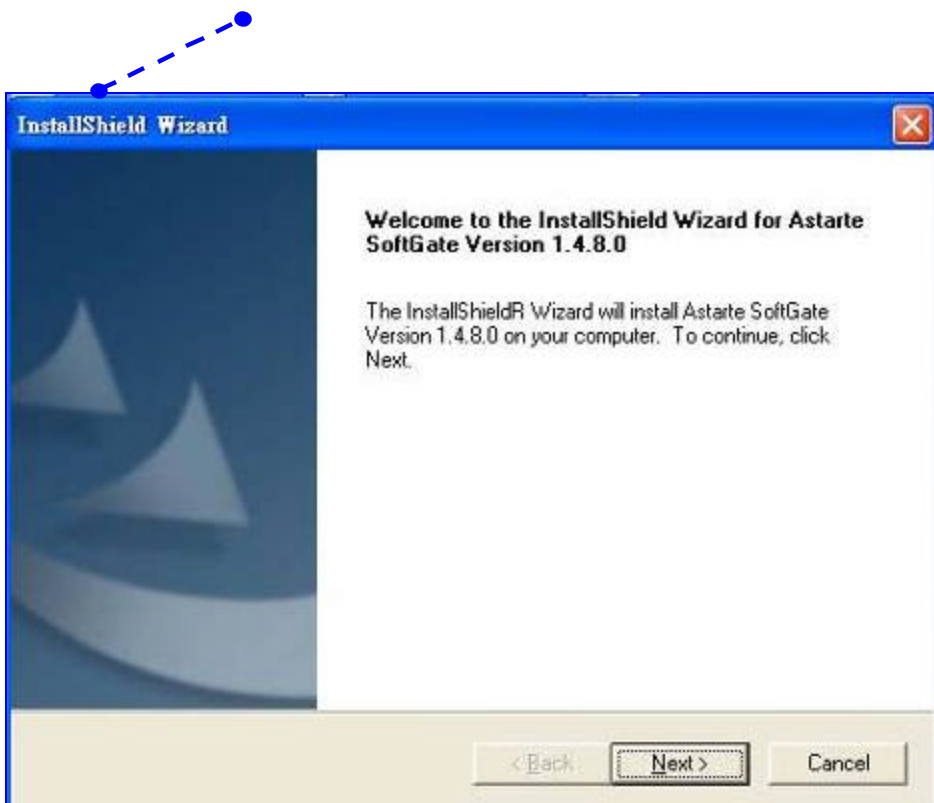
Chapter 4 Check Your System

Please make sure again that the computer you are installing the SoftGate meets as following minimum system requirements:

- Computer with CPU PII 366MHz or better
- 128MB RAM or better
- Windows ME, 2000, XP
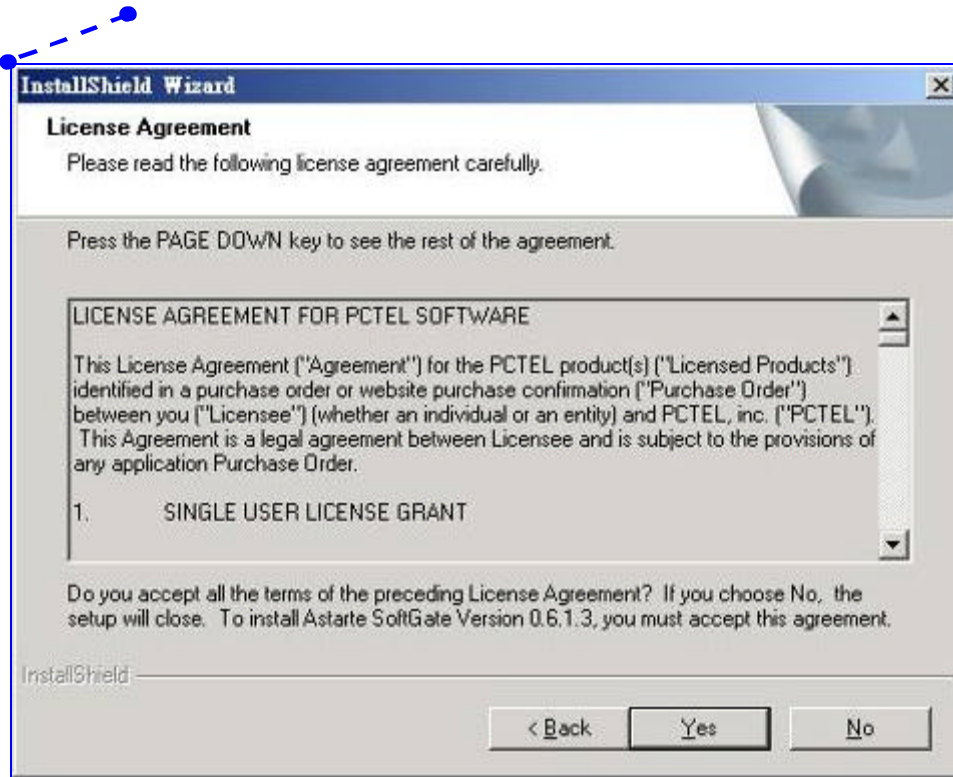- An open slot based on the adapter in the package
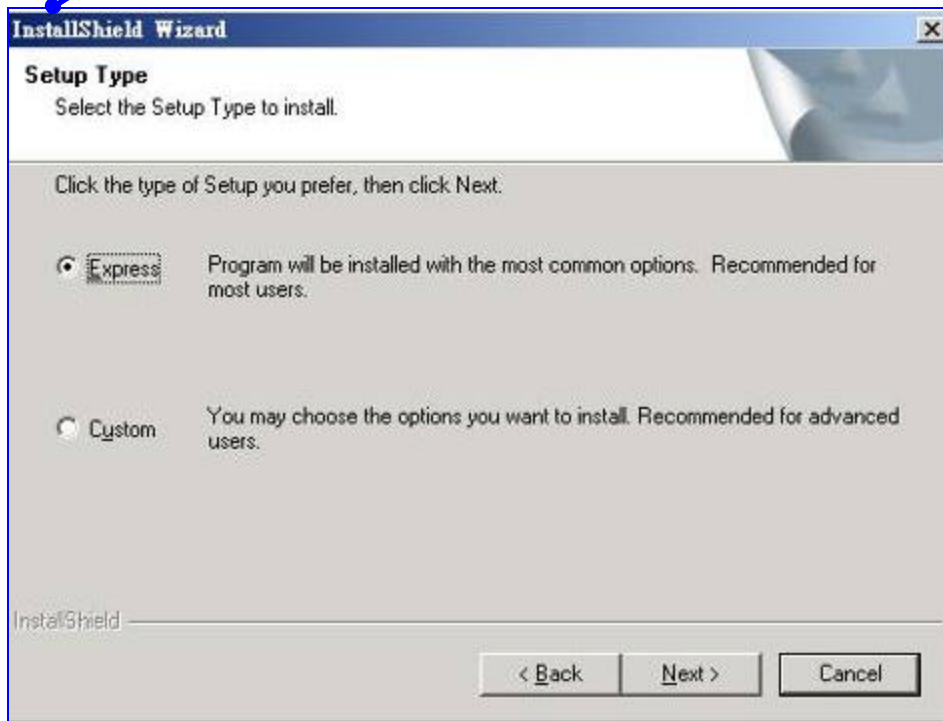- CDROM drive

Chapter 5 SoftGate Installation

-Insert the autorun CD to the computer and the welcome screen is displayed.

-Click on "Next", a license agreement will be displayed,
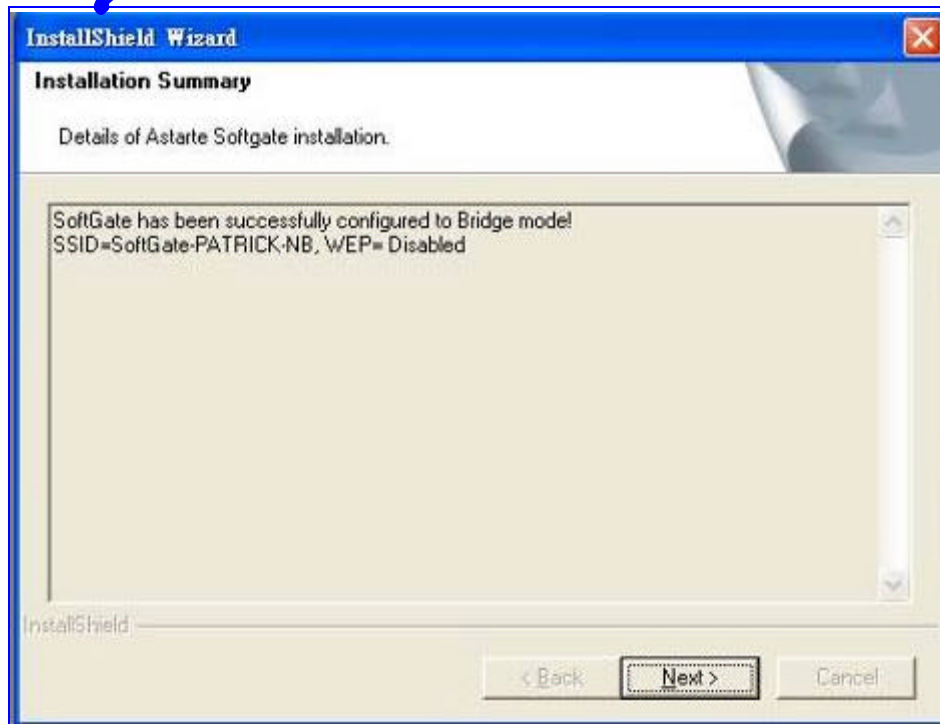   click on "Yes" if you agree and continue the installation.

-Click the type you prefer, and then click "Next" to continue.
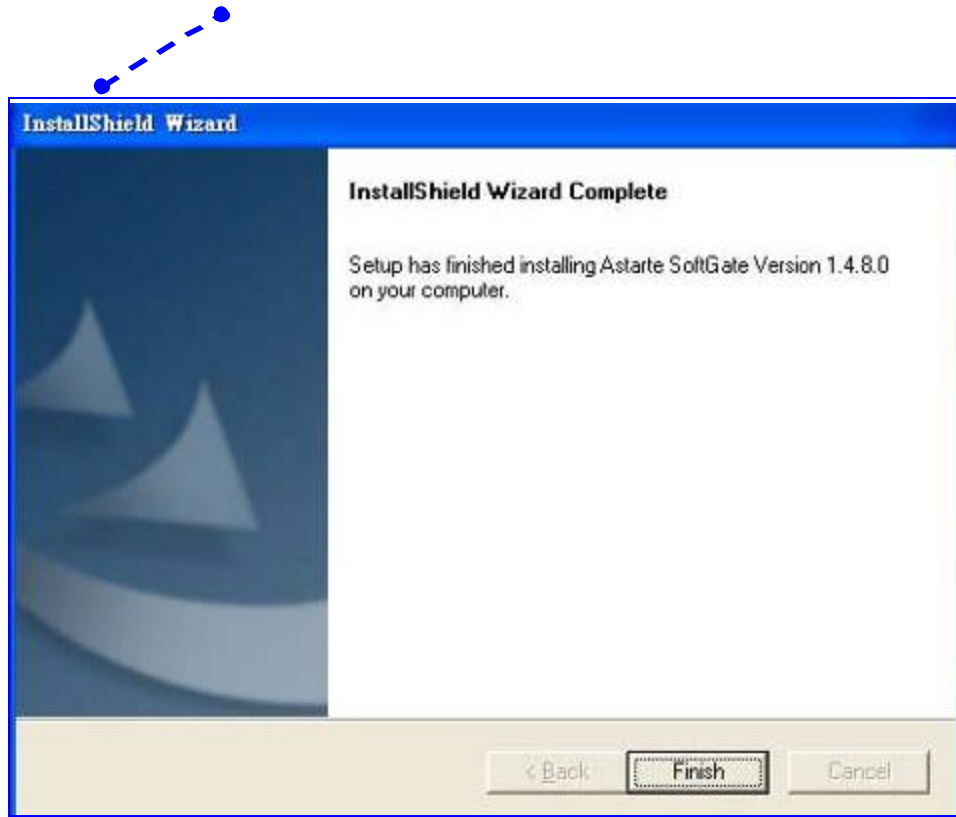(We recommend that you choice the "Express" at this moment)

During the set up procedure, if you see the Windows pop-up dialog show as following message, just click "continue".

-After the setup procedure, you will see as following message, and just click the "Next" button.

-If you see the as following message, it means the set up is completed.

InstallShield Wizard

InstallShield Wizard Complete

Setup has finished installing Astarte SoftGate Version 1.4.8.0 on your computer.

< Back   Finish   Cancel

You can use any other computers running Wi-Fi card to check SoftGate functionality. It should be listed as one of the available network.

Chapter 6 SoftGate Manager

After the successful installation, you can find the following items in Start menu: All Programs: Astarte: SoftGate
- Manager
- Readme

SoftGate Manager provides detailed control of SoftGate operation. This is the main screen of SoftGate.
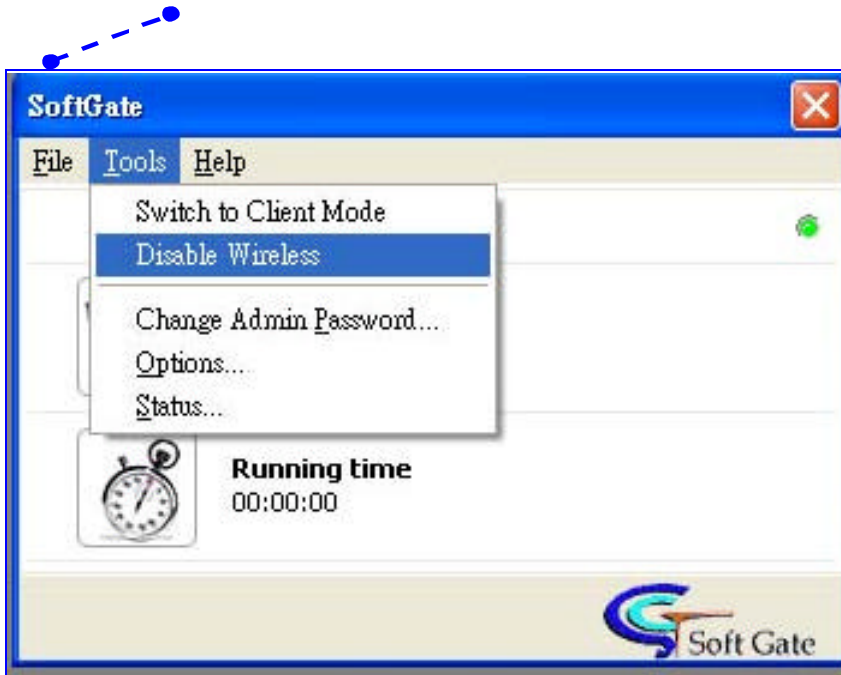
- Green light blinks on the top right corner indicates proper SoftGate operation
- Status: Network connected means proper Internet connection
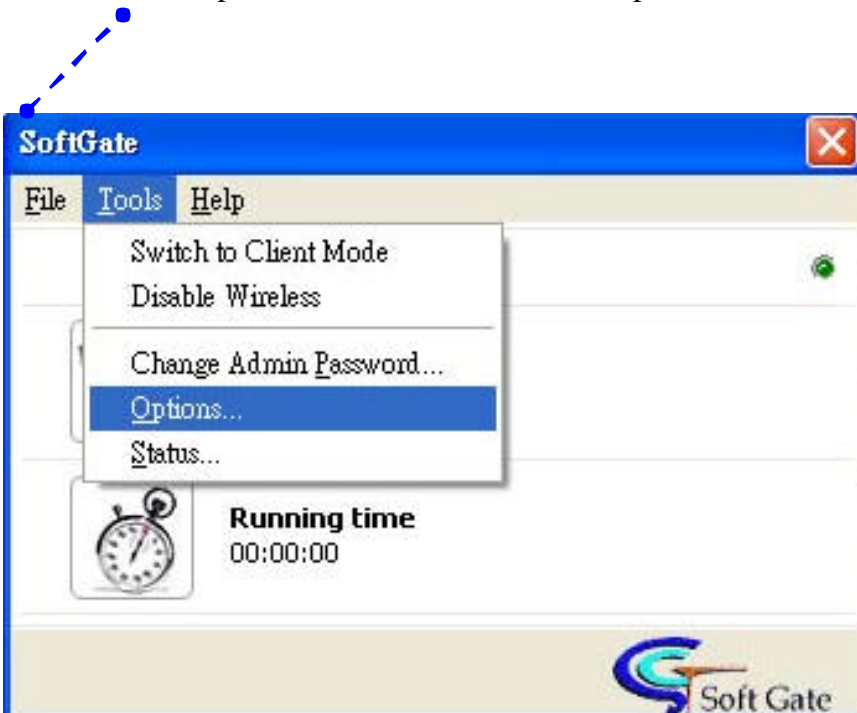- Number of clients: clients connected to SoftGate

-If you select "Tools", "Switch to the Client Mode", and you can switch from station to client as you want.
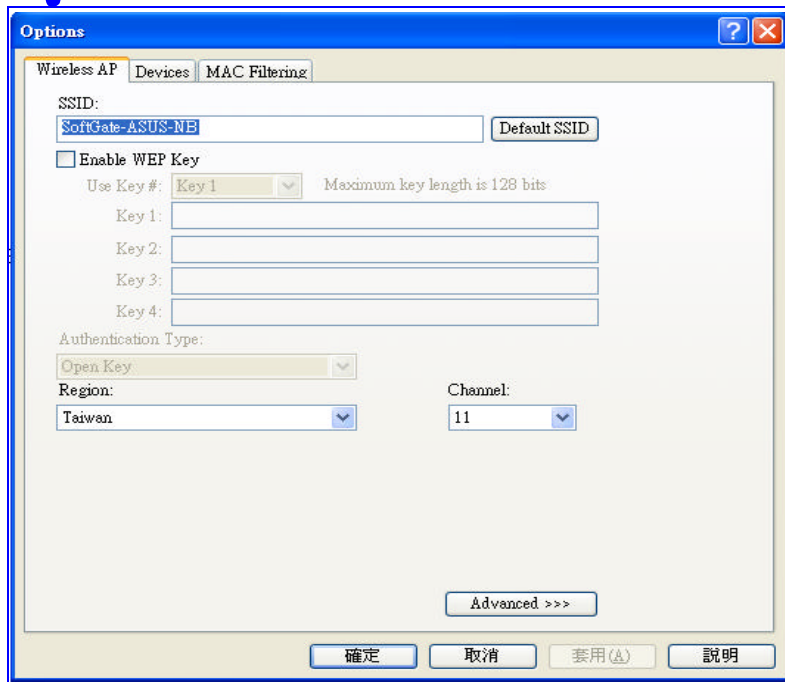
-You can select "Tools", "Disable the wireless", to disable the wireless connection. In the other hand, you can enable the wireless also.
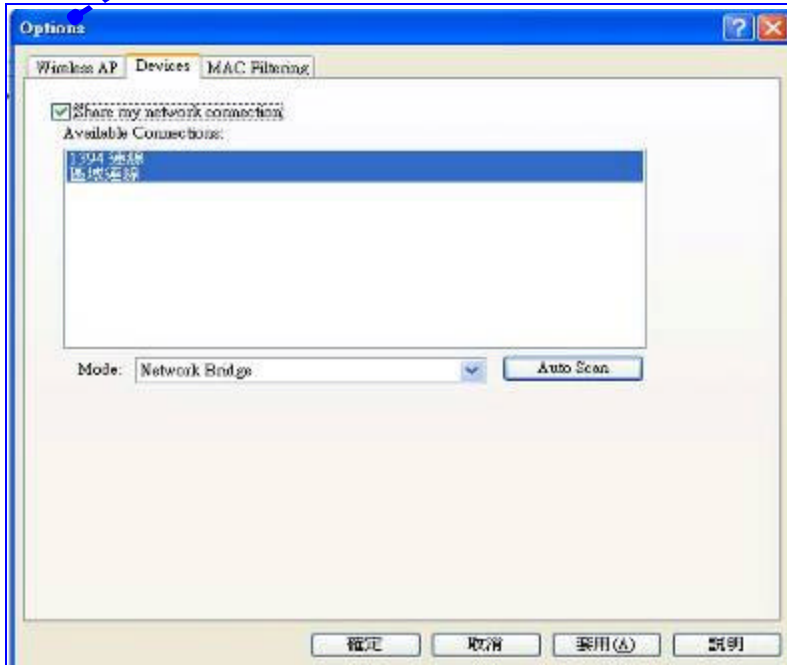

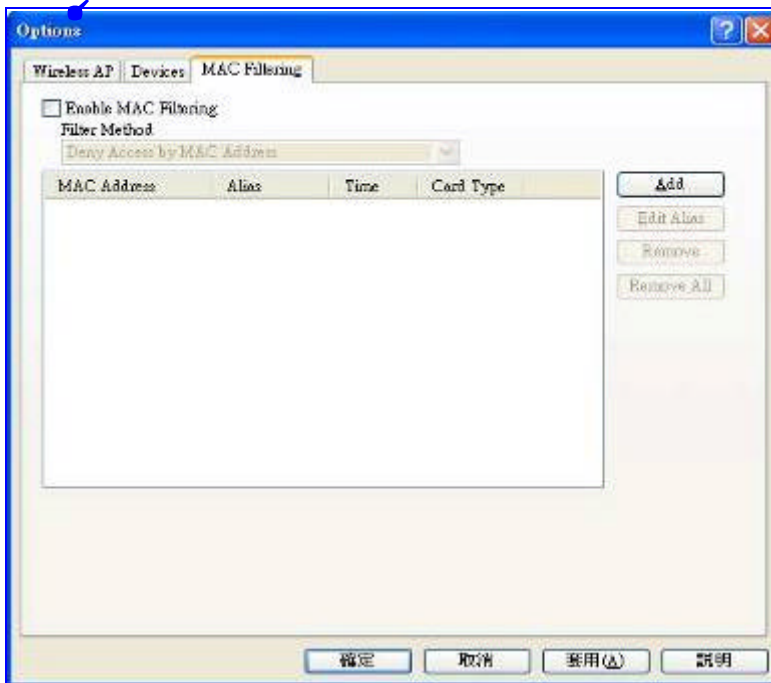-You select "Tools", "Options", to enter the detailed setup.

In the option area, you can change wireless related settings, incl. SSID, WEP, channel and SSID broadcasting. To apply any changes you made, please click on "O.K". If you need more advanced setting, please click the "Advanced >>>" button.

-You can choice to enter the "Devices" setting area to change the mode. In case you change the Internet connection, e.g. move from office to home, you can use "ICS/Bridge Settings" to redirect the network settings. And also to share the network connection.

-You can enter the "MAC Filtering setting" area to enable the MAC filtering function.

-You can choice the "Tools", "Status…" to monitor the wireless, devices status.

Chapter 7 Troubleshooting

The following are known issues with the SoftGate:

During a standby and resume cycle, SoftGate may stop functioning. If this happens, please restart the computer.

If a client machine connects to the SoftGate, but cannot access the internet, check that the SoftGate machine has internet access. Run "ipconfig" and make sure that the SoftGate has two connections, one for the internet and one for the SoftGate.

NOTE

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 radiated 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

This EUT is incompliance with SAR for general population /uncontrolled exposure limits in ANSI/IEEE C95.1-1999 and had been tested in accordance with the measurement methods and procedures specified in OET Bulletin 65 Supplement C

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