

SoftGate Wireless AP/Router solution

(PCMCIA/PCI/USB interface)

User's Guide



Version 2.0 DEC 2003

www.astarte.com.tw

1 11F, No.166, Dah-Yeh Road, Peltou, Taipei, Taiwan 112, R.O.C <u>www.astarte.com.tw</u> E-mail: <u>marketing@astarte.com.tw</u> Tel: +886-2-2898-6060 Fax: +886-2-2898-6161 ST ***** RTE

TABLE OF CONTENTS

Chapter 1 Introduction	4
1.1Features	5
1.2 Specifications	5
1.3 Interface description	6
Chapter 2 Installation Overview	7
2.1 SoftGate Setup on Laptop/Notebook or PC for PCMCIA/PCI/USB	7
2.2 Requirements	7
2.3 Procedure	8
Chapter 3 What's in the Box	9
3.1 Package content	9
Chapter 4 Check Your System	10
Chapter 5 SoftGate Installation	11
Chapter 6 SoftGate Manager	16
6.1 Óverview	
6.2 Setup	
Chapter 7 Troubleshooting	22
7.1 Standby/Resume Cycle	
7.2 Connect to SoftGate but can't access internet	
Federal Communication Commission Interference Statement 錯誤! 尚	」未定義書籤。
FCC Caution錯誤!尚	」未定義書籤。
NOTE	23
COPYRIGHT	24

Copyright 2003. All Rights Reserved. Document Version: 1.1.8



All trademarks and trade names are the properties of their respective owners.



1

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.



1.1Features

- 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 2014/04/02						
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 C to 55 C (32 F to 131 F) Storage : -5 C to 70 C (23 F to 158 F)					
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







2

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.





3

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.

stallShi	ld Wizard					
License	Agreement					
Please	read the following	g license agreer	ment carefully.			
Press	he PAGE DOWN	key to see the	rest of the agree	ement.		
LICEN	ISE AGREEMENT	FOR PCTELS	OFTWARE			<u>^</u>
This L identif betwee	icense Agreemen ied in a purchase en you ("Licenser	t ("Agreement") order or website ") (whether an	for the PCTEL purchase conf individual or an	product(s) ("Li irmation ("Pure entity) and PC	censed Product chase Order'') TEL, inc. ("PCT	ts") [EL").
any a	pplication Purchas	e Order.	erween License	e ariu is subje	ci to trie provisit	uns ui
1.	SINGLE USE	R LICENSE GF	ANT			<u>.</u>
Do you	accept all the ter	ms of the prece	ding License Ag	greement? If y	you choose No,	the
setup	Mill Close. To Insta	an Asidire Solita	ale version 0.0.	1.5, you must	accept this age	eemenk.
						2.5
tallShield						



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

nstallShield Wi	zard
Setup Type Select the Set	up Type to install.
Click the type	of Setup you prefer, then click Next.
• Express	Program will be installed with the most common options. Recommended for most users.
C Cystom	You may choose the options you want to install. Recommended for advanced users.
stallShield	
	< <u>B</u> ack <u>N</u> ext> Cancel

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

	贈支統的統領: 0.000.11b.185mbm-765.00m	2
waverius wrig	0 802.110 W19988 PCI Cap	u.
尚未通過 Windo 作。(告訴知道)	we標識過微以確認它與 W	Vindows XP 的相容
新新安装运用	(19)会在现在式做水,都	1世的系统操作不
相定改受资。 定,依实效率	liensaft 並刻建議整立	即停止运喷安
教授。		ore percenter
	(1	



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

nstallShield Wizard		
nstallation Summary Details of Astarte Softgate installation.		4
SoftGate has been successfully configured to Bridge n SSID=SoftGate-PATRICK-NB, WEP= Disabled	node!	8

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





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.

ions		711				?
SSID:	es MACI	, and and a				
SoftGate-ASUS	NB			D	efault SSID	
📃 Enable WEP	Key					
Use Key #:	Key 1	Max Max	imum key	length is 12	8 bits	
Key 1:						
Key 2:						
Key 3:						
Kev 4						
Authentication]	vpe:					
Open Key	<i>JI</i> ⁺¹	~				
Region:				Channel:		
Taiwan		~	1	11	~	



-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.

ations					
Fimless AP	Devices MAC Pila	ering			
Share n	y network connection Connections	ñ.			
1954 余					
Mode:	Network Bridge		¥ [Auto Scan	

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

ireless AP Devices	MAC Fillering	8Ú		
Enable MAC Film Filter Method	ring			
Deny Access by h	(AC Addme		1	
MAC Address	Alias	Time	Card Type	<u>A</u> dd
				Edit Alas
				Remove
				Returve All
Π.				
		確定	取消	- 新明 (A) - 新明

-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

COPYRIGHT

No part of this Publication may be reproduced, transmitted, transcribed, and stored in retrieval System, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of this company.

This company makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties, merchantability or fitness for any particular purpose. Any software described in this manual is sold or licensed "as is". Should the programs prove defective following their purchase, the buyer (and not this company, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software. Further, this company reserves the right to revise this publication and to make changes from time to time in the contents hereof without obligation to notify any person of such revision or changes.

Copyright@2003 by Astarte Technology Co., Ltd.. All rights reserved.

All brand and product names mentioned in this manual are trademarks and/or registered Trademarks of their respective holders.