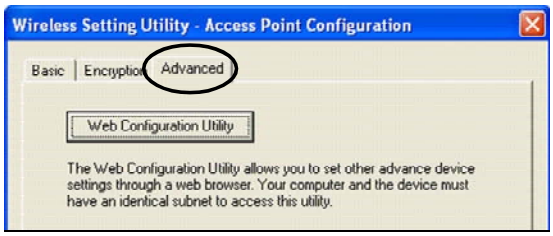
3.3.2 Launching the Web Configuration utility

Using the Wireless Settings Utility

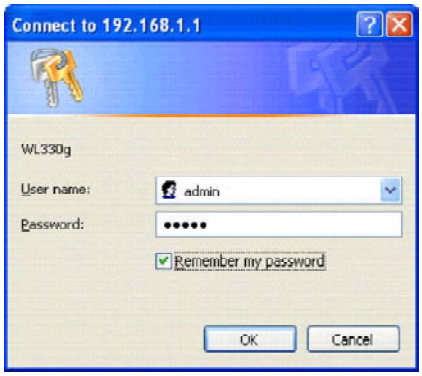
You can only launch the Web Configuration utility from the Wireless Settings Utility when the device is in AP mode. Switch the device to AP mode using the mode switch before launching the Wireless Settings Utility.

To launch the Web Configuration utility using the Wireless Setting Utility:

1. Click **Start** > **All Programs** > **Wireless AP** > **Wireless Settings.**
2. Click **Configure** when the Wireless Setting Utility window appears.
3. Log on to the configuration window using the password (**admin**), then click **OK**.
4. Disable your proxy settings, if any.
5. Click the **Advanced** tab, then click the **Web Configuration Utility** button.



6. A web browser appears. When prompted, enter the default password (**admin**), check the **Remember my password option**, then click **OK**. The Web Configuration utility page appears.



Using an Internet browser

To launch the Web Configuration utility using an Internet web browser:

1. Open a web browser.
2. Disable your proxy settings, if any.
3. Type **http://192.168.1.1** on the address bar of the browser, then press <Enter>.

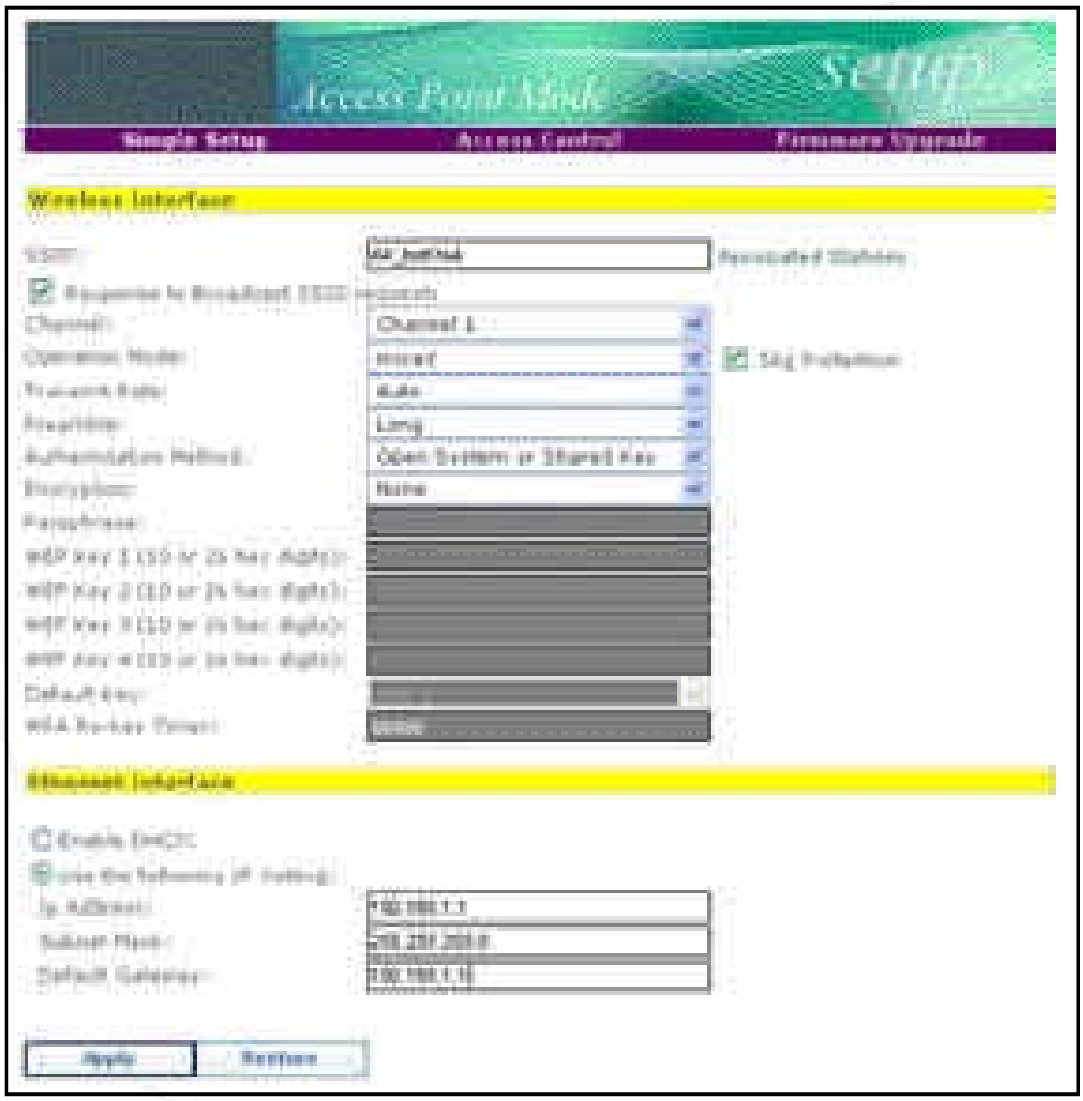
This option requires you to change the IP address of the LAN adapter where the SAA04-05224A is connected. Make sure the IP address of the SAA04-05224A and your computer is on the same subnet.

3.3.3. Changing the access point (AP) configuration

Simple Setup page

The Simple Setup page displays the default AP settings of the SAA04-05224A. Use this page to set the AP channel, operation mode, and security.

Clicking the button displays available options for that field. If you wish to load the default settings, press the device reset button for more than five seconds, then refresh your browser to display the default values.



SSID (Service Set Identifier). This field displays the SSID of the device. Enabling the **Response to Broadcast SSID requests** option allows the device to broadcast its SSID in a wireless network. This allows other wireless devices to scan and establish communication with the device. Unchecking this option hides the SSID to prevent other wireless devices from recognizing and connecting to the device.

Click the **Associated Stations** link (beside the SSID) to displays the list of wireless device(s) associated with the SmartAnt SAA04-05224A. The list includes the wireless device(s) MAC address and connection status.

Channel. Allows you to specify the channel the device uses to communicate with other wireless device(s) in the network.

The 802.11g specification supports up to 13 overlapping channels for radio communication. If several SmartAnt SAA04-05224As are operating in the same area, assign a non-overlapping channel to each device to avoid interference. Refer to page 3-21 for channel information.

Operation Mode. You can adjust the SAA04-05224A operating mode to support wireless devices using IEEE 802.11b or IEEE 802.11g standards. Setting the operating mode to **mixed** allows the SAA04-05224A to support both wireless standards.

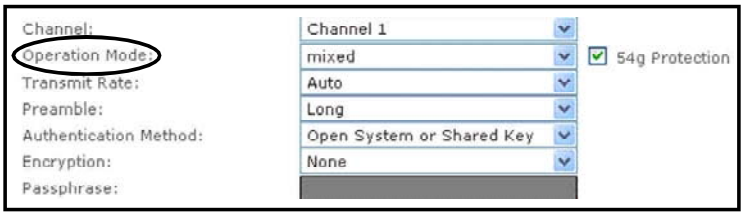


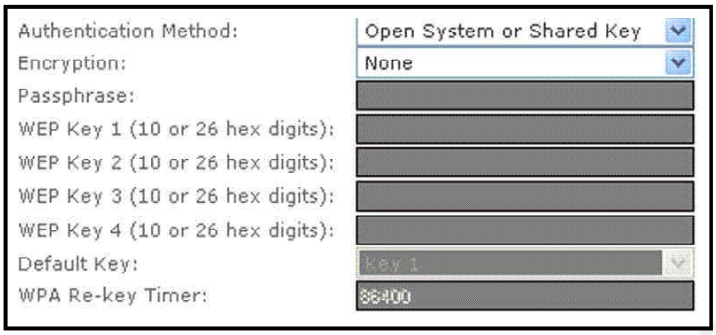
Table 3-2: SAA04-05224A operating modes

Operation mode	Supported wireless client(s)
B only	IEEE802.11bclient(s)only
G only	IEEE802.11gclient(s)only
Mixed	IEEE802.11bandIEEE802.11gclients

Transmit Rate. This option allows you to specify the data transmission rate for both IEEE 802.11b and IEEE 802.11g devices. Select from 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2 and 1Mbps data transfer rate.

Preamble. Allows you to set the preamble mode for a 2.4GHz/11Mb network to Long, Short, or Auto. The default preamble mode is **Long**.

The following fields allow you to configure the SmartAnt SAA04-05224A security settings.



Authentication Method. This option allows you to select the encryption method for securing your wireless communication. Refer to the table below for details.

Table 3-3: Authentication methods

Method	Description
Open system or shared key	This method allows the device to accept connection requests from any wireless device within its operating range.
Shared Key	Only wireless device(s) with the same encryption are allowed to connect to the AP.
WPA-PSK	Only wireless device(s) with the same TKIP encryption settings are allowed to connect to the AP.

Encryption. The encryption field allows you to set the encryption for your selected authentication method. Refer to the table below for a comparison of the encryption settings. specify a 64-bit or a 128-bit WEP key. A 64-bit encryption contains 10 hexadecimal digits or 5 ASCII characters. A 128-bit encryption contains 26 hexadecimal digits or 13 ASCII characters.

Table 3-4: Encryption settings

Method	Encryption	Description
Open system	None	No encryption
Shared Key	64-bit WEP* 128-bit WEP	Contains 10 hexadecimal digits or 5 ASCII characters Contains 26 hexadecimal digits or 13 ASCII characters
WPA-PSK	TKIP**	Contains 8 to 63 alpha-numeric characters

* Wired Equivalent Privacy

** Temporal Key Integrity Protocol

Securing your wireless communication using WEP encryption

To secure your wireless communication using the WEP encryption:

1. Assign the WEP encryption keys by manual or automatic generation.

   Manual Assignment. For a 64-bit encryption, enter 10 hexadecimal digits (0~9, a~f, A~F) or 5 ASCII characters in each of the four WEP keys. For 128-bit encryption enter 26 hexadecimal digits (0~9, a~f, A~F) or 13 ASCII characters in each of the four WEP keys.

   Automatic Generation. Type a combination of up to 64 letters, numbers, or symbols in the **Passphrase** field. The Web Configuration utility uses an algorithm to generate four WEP keys based on the typed combination.

2. Specify the default WEP encryption key in the **Default Key** field.
3. Click the **Apply** button when finished.

¡C 64-bit and 40-bit WEP keys use the same encryption method and can interoperate on wireless networks. This lower level of WEP encryption uses a 40-bit (10 hexadecimal digits assigned by the user) secret key and a 24-bit Initialization Vector assigned by the device. 104-bit and 128-bit WEP keys use the same encryption method.

¡C Keep a record of the WEP encryption keys

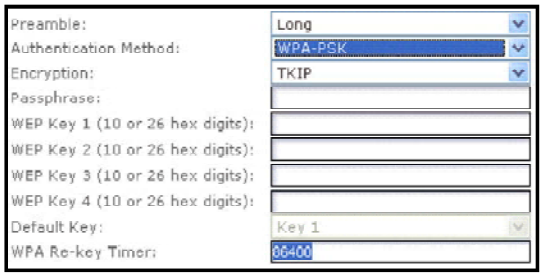
¡C All wireless clients in a network must have identical WEP keys with the access point to establish connection.

Securing your wireless communication using TKIP (WPA) encryption

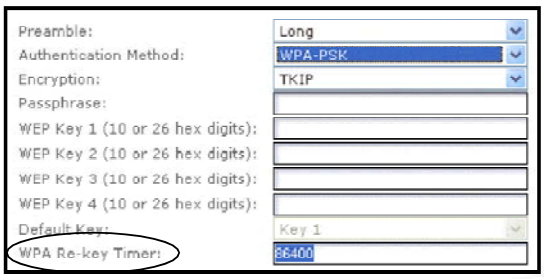
The SAA04-05224A implements the Wi-Fi Protected Access (WPA)-PSK authentication method to secure communication to and from wireless devices. This method uses the Temporal Key Integrity Protocol (TKIP) encryption.

To secure your wireless communication using the TKIP:

1. Select **WPA-PSK** as the **Authentication Method**.
2. Type 8 ~ 63 alpha-numeric characters in the **Passphrase** field.



3. Set the **WPA Re-key Timer** (1 ~ 2147483647 seconds). The re-key timer allows you to set the time interval before the WPA group key is changed.

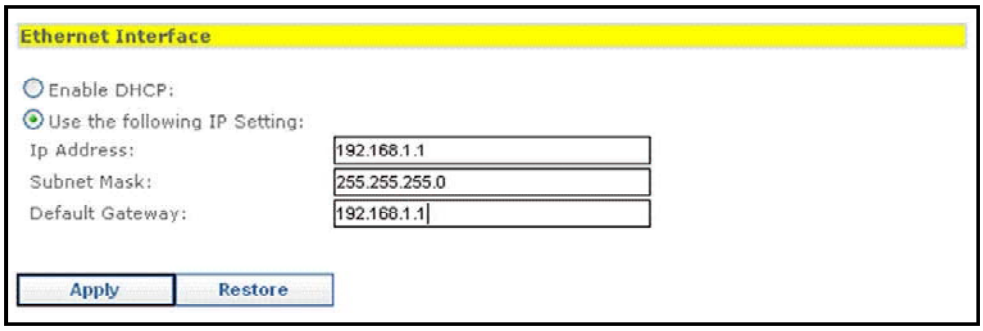


A shorter re-key interval provides a more secure wireless network.

Changing the network settings

The **Ethernet Interface** fields allow you to configure the SmartAnt SAA04-05224A.

Inquire the correct network settings with your network administrator before changing any Ethernet interface settings.



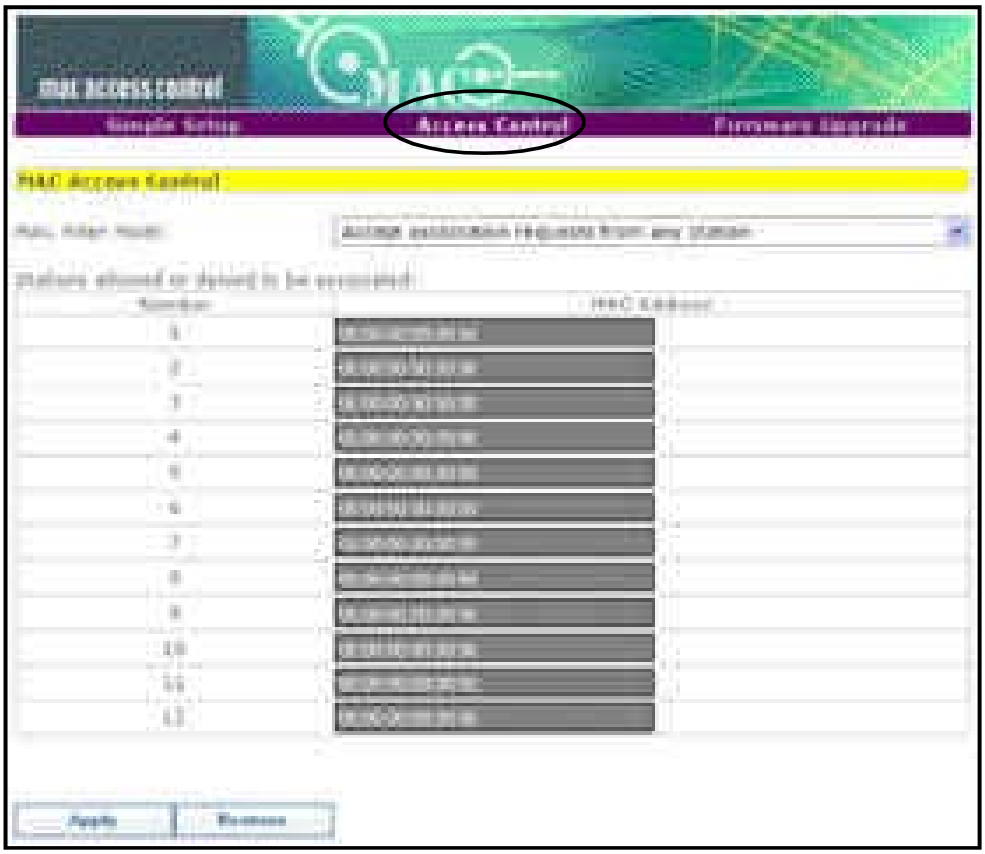
Enable DHCP. When enabled, the Dynamic Host Configuration Protocol (DHCP) server automatically assigns the IP address, Subnet Mask, and Default Gateway of the SmartAnt SAA04-05224A.

Use the following IP setting. Select this option to manually assign the IP address, Subnet Mask, and Default Gateway the SmartAnt SAA04-05224A.

Click **Apply** after configuring the network settings. Otherwise, click **Restore** to load the default values.

Access Control page

The MAC Access Control page allows you to control the wireless network traffic by specifying the MAC addresses of wireless clients allowed to establish connection to the SAA04-05224A.



To specify the wireless clients allowed to establish connection to the SAA04-05224A:

1. Click , then select the **Only allow Stations with MAC listed below to access this device** option. The MAC address fields are activated

2. Type the MAC address(es) of the wireless clients allowed to establish connection to the SAA04-05224A, then click **Apply**.

Selecting the Accept association requests from any station option allows all wireless clients operating within the SAA04-05224A range to establish connection.

Firmware Upgrade page

The **Firmware Upgrade** page displays the product ID, firmware version, and regulation domain. This page allows you to:

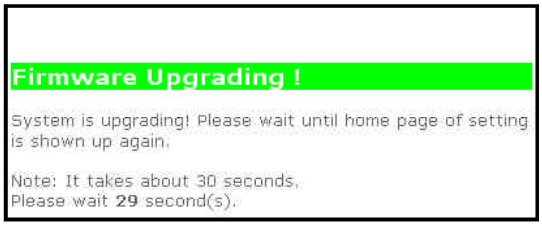
1. upgrade the firmware when it becomes outdated or corrupted, and
2. change the log on password.

To upgrade the firmware:

The Power LED blinks continuously when the firmware is corrupted or when the firmware upgrade fails.

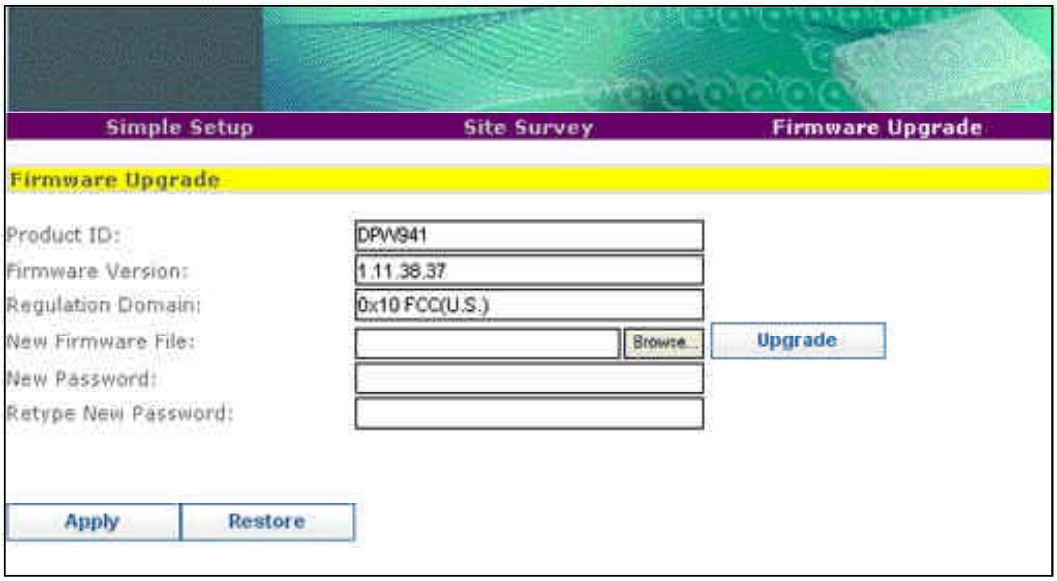
1. Download and save the latest firmware from the website.
2. Launch the Web Configuration Utility, then go to the **Firmware Upgrade** page.
3. Click the **Browse** button to locate the new firmware file.
4. Click **Upgrade**. **A Firmware Upgrading!** message appears.

   The browser refreshes after the firmware upgrade process is completed.



To change the log on password:

1. Type the new password in the **New Password** and **Retype New Password** fields, then click **Apply**.



2. A message appears indicating that you have successfully changed the log on password.

   The browser refreshes with the new password.

Use your new password when launching both the Wireless Setting configuration window and Web Configuration utilities.

Regulation Domain

IEEE 802.11b/g networks are regulated worldwide since these networks use the 2.4GHz ~ 2.5GHz ISM (Instrumentation, Scientific, and Medical) Band. The SmartAnt SAA04-05224A is shipped with a default regulation domain allowed in your country/location.

The FCC (US) and ETSI (Europe) specify operation from 2.4 GHz to 2.4835 GHz. For Japan, operation is specified as 2.4 GHz to 2.497 GHz. For each supported regulatory domain, all channels marked with “Yes” are supported. The channel center frequencies and CH ID numbers are shown on the next page.

Table 3-5: DSSS PHY frequency channel plan

CH ID	Frequency	Regulatory Domain		
		X'10' FCC	X'30' ETSI	X'40' MKK
1	2412MHz	Yes	Yes	Yes
2	2417MHz	Yes	Yes	Yes
3	2422MHz	Yes	Yes	Yes
4	2427MHz	Yes	Yes	Yes
5	2432MHz	Yes	Yes	Yes
6	2437MHz	Yes	Yes	Yes
7	2442MHz	Yes	Yes	Yes
8	2447MHz	Yes	Yes	Yes
9	2452MHz	Yes	Yes	Yes
10	2457MHz	Yes	Yes	Yes
11	2462MHz	Yes	Yes	Yes
12	2467MHz	–	Yes	Yes
13	2472MHz	–	Yes	Yes
14	2484MHz	–	–	Yes

In a multiple cell network topology, overlapping and/or adjacent cells using different channels can operate simultaneously without interference if the distance between the center frequencies is at least 30 MHz. Channel 14 is specifically for operation in Japan.

Table 3-6: Regulating bodies and allowed channels

Country	Regulating body	Allowed channels
Unites States	FCC	1-11
Europe	ETSI	1-13
Japan	MKK	1-14

Use only the allowed channels when you set the SmartAnt SAA04-05224A in access point mode.

Restoring the default values

The following are the default values of the SmartAnt SAA04-05224A (in AP mode). You can restore the default values by pressing the reset button for more than five seconds.

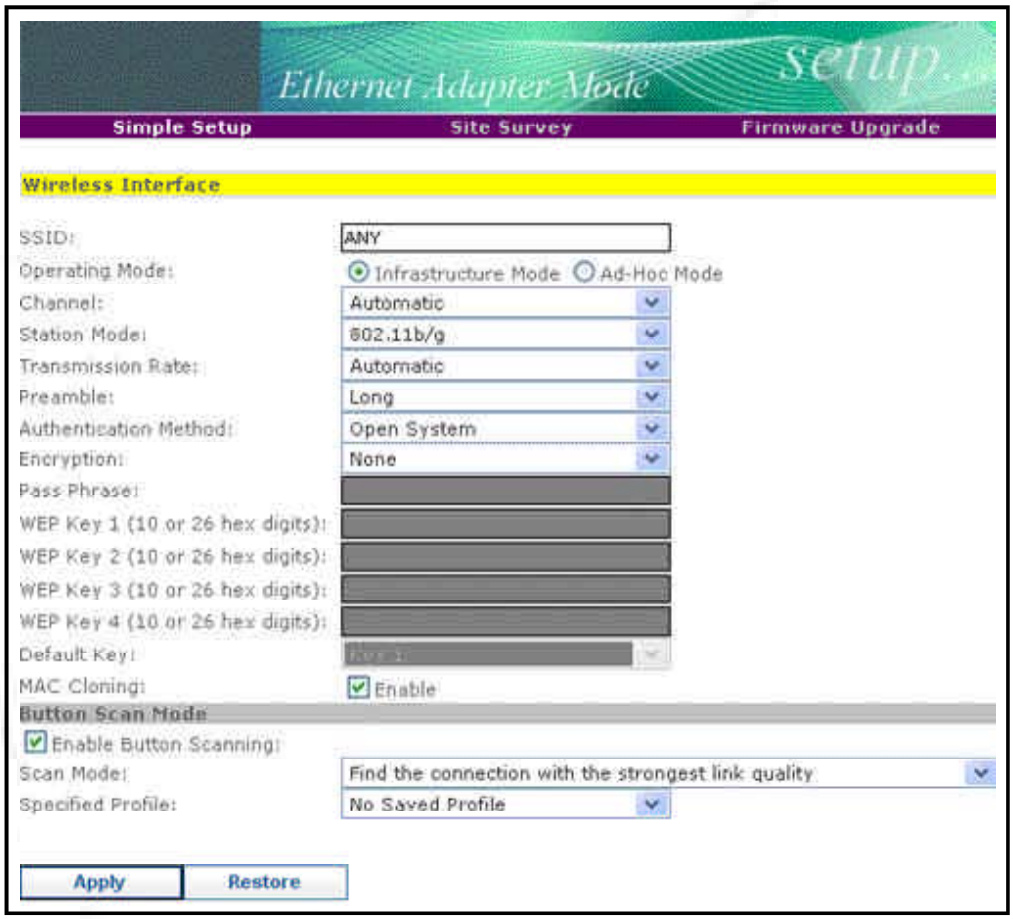
Parameter	Default value
WirelessInterface	
SSID	AP_XXXXXX
Response to broadcast SSID requests	Enabled
Channel	Channel1
Operation mode	mixed
Transmit Rate	Auto
Preamble	Long
Authentication Method	Open System or Shared Key
Encryption	None
EthernetInterface	
Enable DHCP	No(Disabled)
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
Default Gateway	Blank
AccessControl	
Accept association requests from any station	Enabled

3.3.4 Changing the Ethernet adapter configuration

You must switch the device to Ethernet adapter mode using the mode switch before changing any Ethernet adapter settings.

Simple Setup page

The Simple Setup page allows you to change the basic Ethernet adapter settings. You can use this page when setting the SAA04-05224A SSID, station mode, transmission rate, security, and when enabling the MAC cloning and button scan mode features.



SSID (Service Set Identifier). This field allows you to specify the SSID of the SmartAnt SAA04-05224A in Ethernet adapter mode.

Operating Mode. This field allows you to select the operating mode for the Ethernet adapter. In an **Infrastructure** mode, the SmartAnt SAA04-05224A connects to an available AP. In **Ad-hoc** mode, the SmartAnt SAA04-05224A connects to other wireless devices in the wireless network. Select Ad-hoc mode when there is no available AP in your location.

Channel. Select the channel used by the AP (Infrastructure) or the wireless device (Ad-hoc) to establish connection.

Station Mode. This field allows you to select the device wireless standard while in Ethernet adapter mode. Selecting 802.11b/g allows the device to connect to both wireless standards.

Transmission Rate. This field allows you to adjust the data transmission rate between the SAA04-05224A and the AP/wireless device.

Preamble. See page 3-14.

Authentication Method. See page 3-15.

Encryption. See page 3-15.

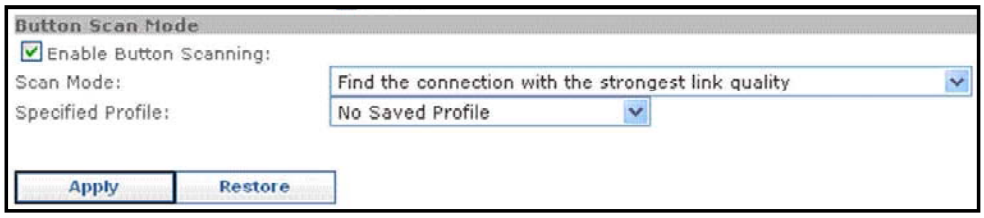
Pass Phrase. See page 3-16.

Default Key. See page 3-16.

MAC cloning. MAC cloning allows the SmartAnt SAA04-05224A to use the MAC address of the host computer in communicating with other wireless devices. MAC cloning supports certain software applications and devices such as Xbox and PlayStation® 2 game consoles.

Using the Button Scan Mode feature

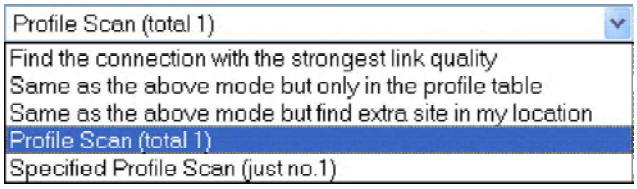
The **Button Scan Mode** allows you to use the reset button to connect to an access point (Infrastructure mode) or wireless device (Ad-hoc mode) saved in the **Profile Table** of the configuration utility or in your location.



Save the profile of the wireless connection using the **Site Survey** window. See the next section for details.

You must save at least one wireless connection profile before using the Button Scan Mode.

Scan Mode. This field allows you to select the scan mode for button scanning. Click to display available options.



Find the connection with the strongest link quality- When the reset button is pressed for less than 5 seconds, the SmartAnt SAA04-05224A connects to an AP or wireless device with the strongest link quality.

Same as the above mode but only in the profile table - When the reset button is pressed for less than 5 seconds, the SmartAnt SAA04-05224A searches for an AP or wireless device in the Profile Table, then connects to the one with the strongest link quality.

Same as the above mode but find extra site in my location- When the reset button is pressed for less than 5 seconds, the SmartAnt SAA04-05224A searches for an AP or wireless device in the Profile Table and in your location, then connects to the one with the strongest link quality.

Profile Scan (total x)- This mode allows you to connect to a saved wireless network by their sequence in the Profile Table. Press the reset button once to connect to the first wireless connection in the Profile Table. Press again to connect to the second wireless connection, and so on.

For example, if you have three saved profiles in the profile table, the SmartAnt SAA04-05224A automatically connects to the first profile. Press the reset button to connect to the second saved profile. Press the reset button again to connect to the third saved profile.

Specified profile scan (just no. x)- When the reset button is pressed for less than 5 seconds, the SmartAnt SAA04-05224A automatically connects to the specified profile. The saved profiles are numbered from 1 ~ x. You must select the profile number using the Specified Profile field.

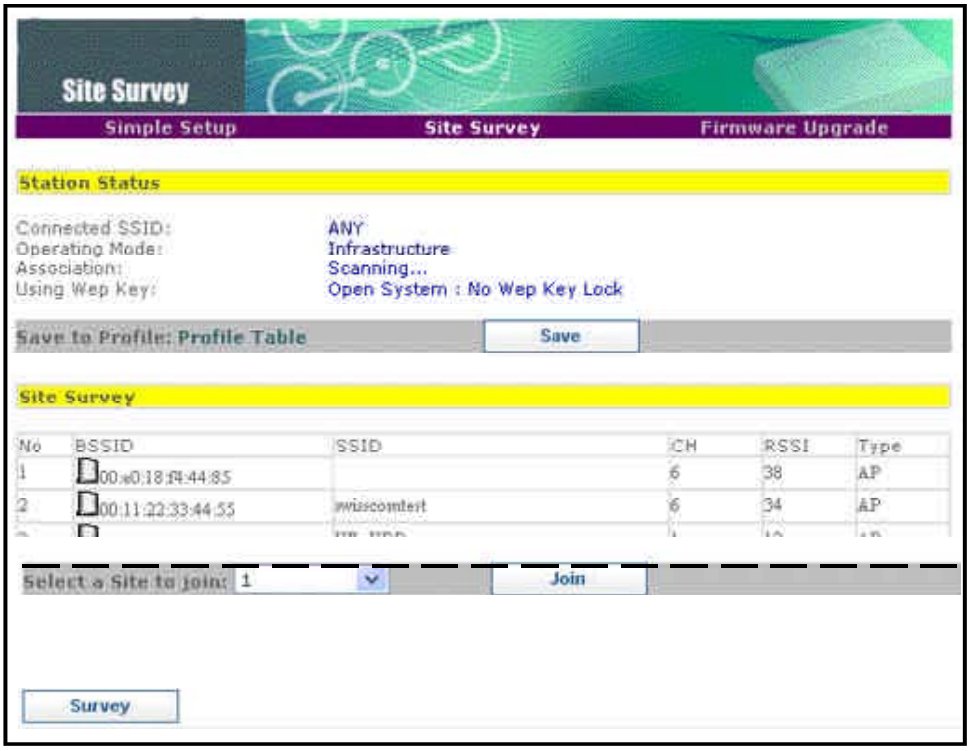
When using the Alphabet Scan, the AP or wireless device you wish to connect to must have a disabled WEP encryption and available SSID.

Specified Profile. This field allows you to select a saved wireless network in the Profile Table. The SmartAnt SAA04-05224A automatically connects to the selected profile when **Scan Mode** is set to **Specified profile scan**.

Click **Apply** when done. Otherwise, click **Restore** to load the default values.

Site Survey page

The Site Survey page displays the **Station Status**, and allows you to scan and connect to available wireless networks within the SAA04-05224A range. This page also allows you to save a wireless connection in the **Profile Table** for the **Button Scan Mode** feature.



Station Status

The **Station Status** fields displays the device wireless network connection SSID, operating mode, and encryption settings. You can use these information when you connect to an available wireless connection in the Site Survey table.

Site Survey

The **Site Survey** table lists the available wireless networks within the device range. The table displays the following wireless network information.

BSSID. The Basic Service Set Identifier (BSSID) is the IEEE MAC address of the wireless network.
SSID. SSID refers to the service set identifier of the wireless network.
CH. The direct sequence channel used by the wireless network.
RSSI. Received Signal Strength Indicator (RSSI) is a measurement of connection strength in dBm.
Type. Tells whether a wireless network is in access point (AP) or station (STA) mode.

To scan available wireless network(s) in your location:

1. Click the **Survey** button on the bottom of the page. A **Site Scanning** window appears.
2. The utility displays the available wireless network(s) in the **Site Survey** table.

To connect to an available wireless network with known SSID and disabled encryption:

1. From the Site Survey table, select the wireless network you intend to join.

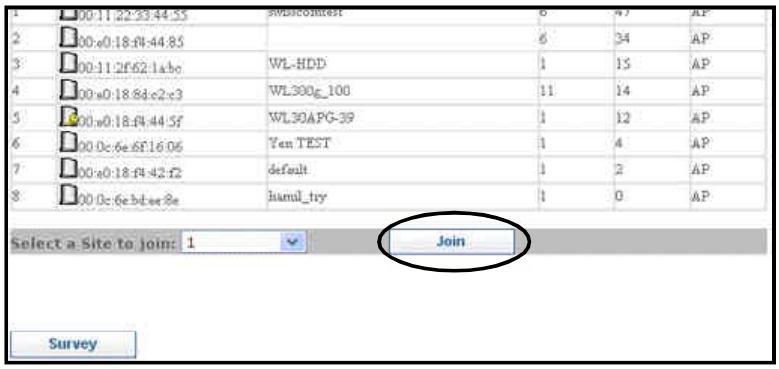
Take note of the icon preceding the wireless network for easy identification. Refer to page 3-8 for details on wireless network icons.

2. Click to select the number of the wireless network you intend to join, then click the **Join** button.

A message appears in the browser indicating that you have successfully joined the wireless network.

To connect to an available wireless network with a hidden SSID and disabled encryption:

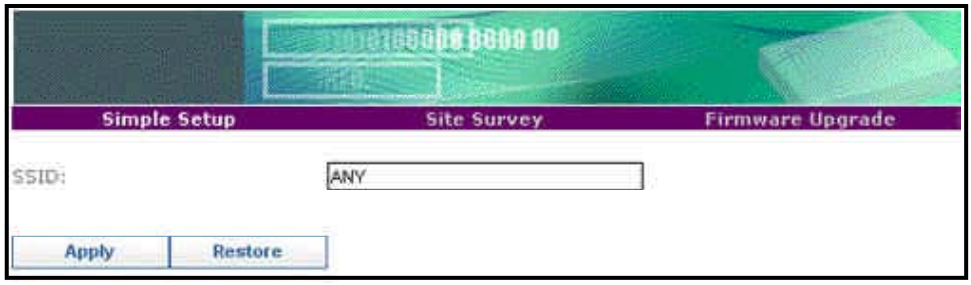
1. From the Site Survey table, select the wireless network (with a hidden SSID and disabled encryption) you intend to join.
2. Click to select the number of the wireless network you intend to join, then click the **Join** button.



3. Click **OK** when this window appears.

Inquire the wireless network SSID with the network administrator.

4. Enter the SSID of the wireless network in the SSID field, then click **Apply**.



A message appears in the browser indicating that you have successfully joined the wireless network.

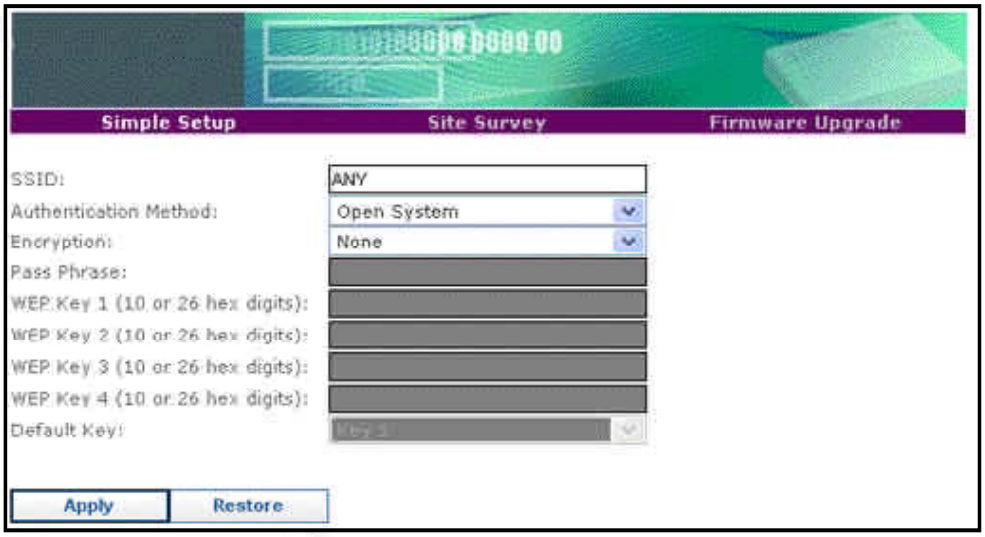
To connect to an available wireless network with a hidden SSID and enabled encryption:

1. From the Site Survey table, select the wireless network (with a hidden SSID and enabled encryption) you intend to join.
2. Click to select the number of the wireless network you intend to join, then click the **Join** button.

3. Click **OK** when this window appears.

Inquire the wireless network SSID and encryption settings with the network administrator.

4. Enter the **SSID** of the wireless network, then select the **Authentication Method** and **Encryption**. When done, enter the encryption keys in the key fields, then click **Apply**.



A message appears in the browser indicating that you have successfully joined the wireless network.

To connect to an available wireless network with a known SSID and enabled encryption:

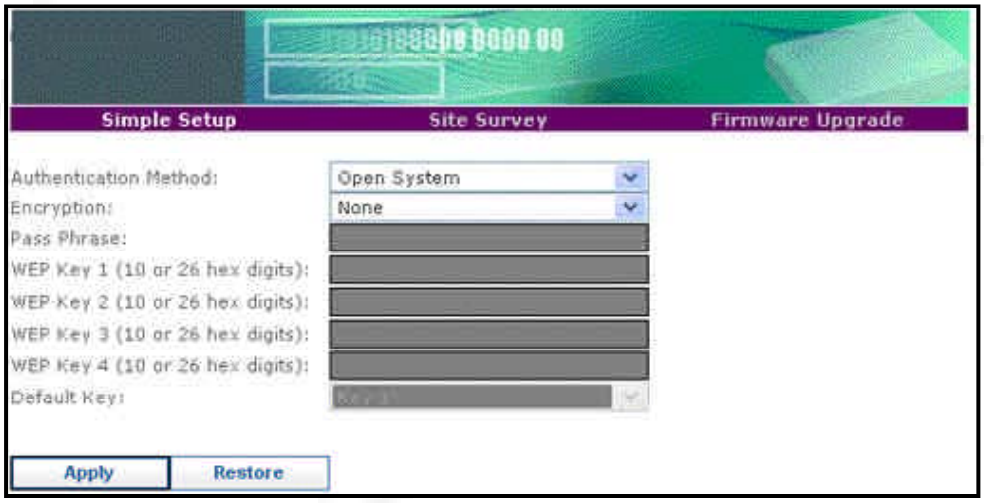
1. From the Site Survey table, select the wireless network (with a known SSID and enabled encryption) you intend to join.
2. Click to select the number of the wireless network you intend to join, then click the **Join** button.

3. Click **OK** when this window appears.

4. Click **OK** when this window appears.

Inquire the wireless network encryption settings with the network administrator.

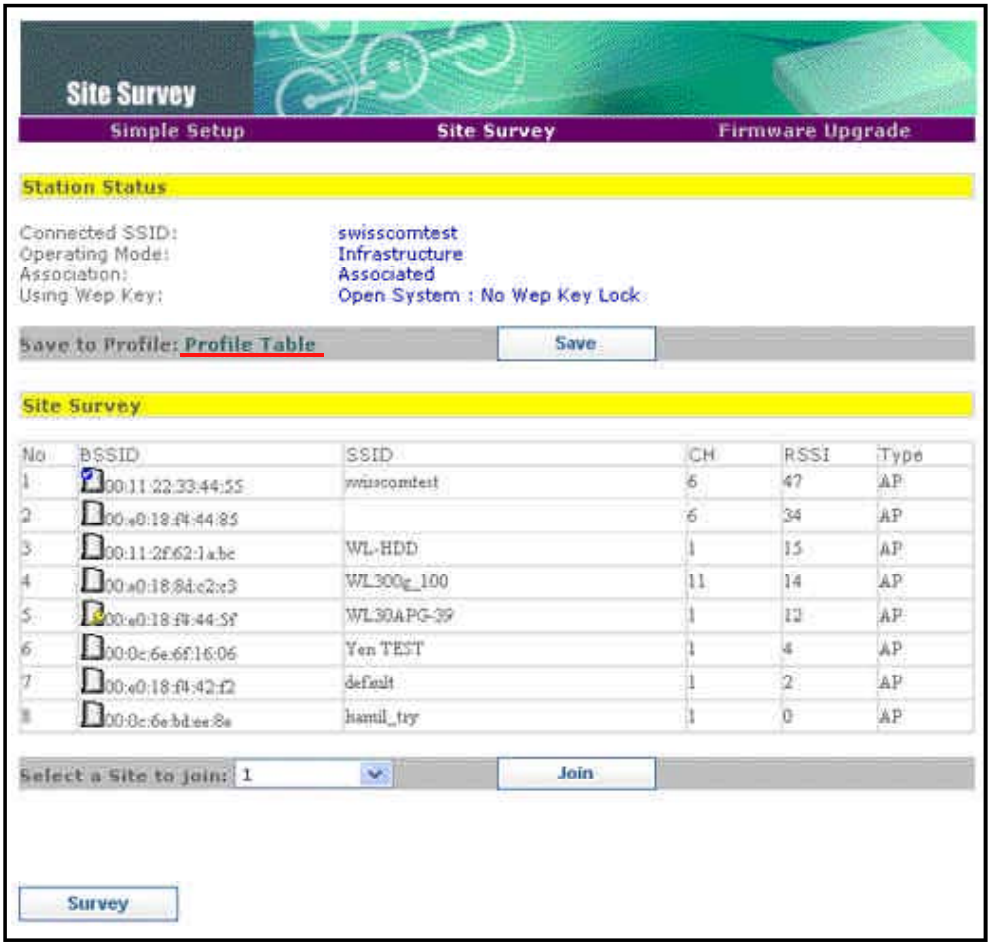
4. Select the **Authentication Method** and **Encryption** of the wireless network you intend to join, then enter the encryption keys in the key fields. Click **Apply** when finished.



A message appears in the browser indicating that you have successfully joined the wireless network.

Profile Table

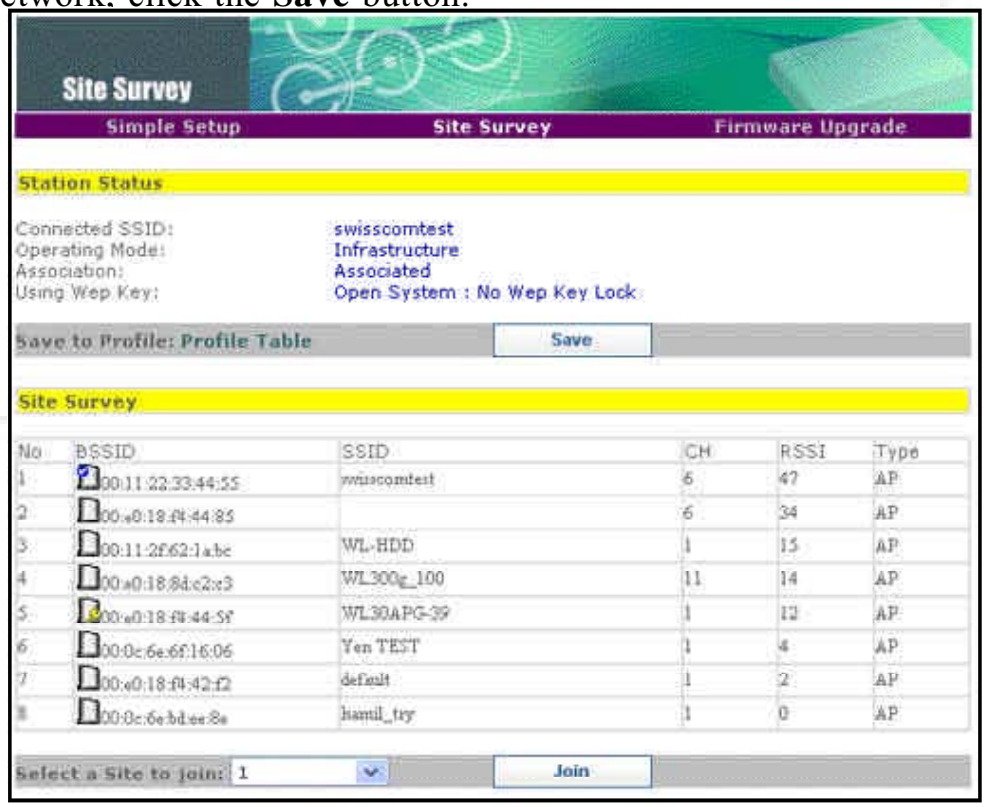
The **Profile Table** allows you to view or delete saved wireless networks. The table displays the saved wireless network SSID, channel, security settings, and network type. Click the Profile Table link to view the Profile Table.



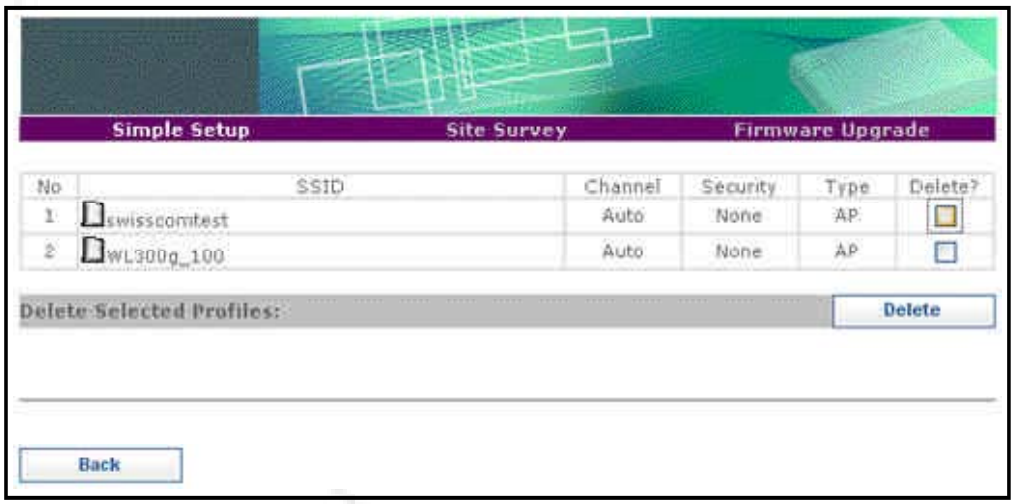
Saved wireless networks are preceded by an icon for easy identification.

To save a wireless network in the Profile Table:

1. From the **Site Survey** page, select the wireless network you intend to join.
2. Click to select the number of the selected wireless network, then click the **Join** button.
3. When the SmartAnt SAA04-05224A is associated with the wireless network, click the **Save** button.



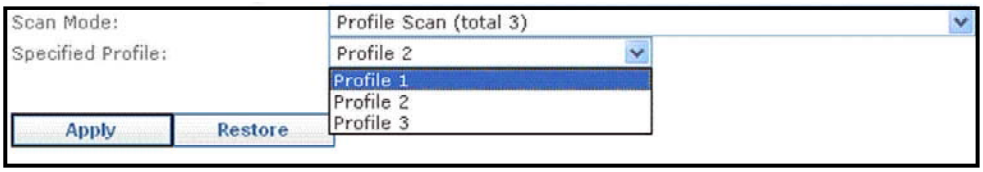
4. The Profile Table appears with the saved wireless network. Click **Back** to return to the previous page.



The saved wireless networks in the Profile Table corresponds to the number of profiles available for the Button Scan Mode feature.

For example, if you saved three wireless networks in the Profile Table,

then three profiles are available for button scanning

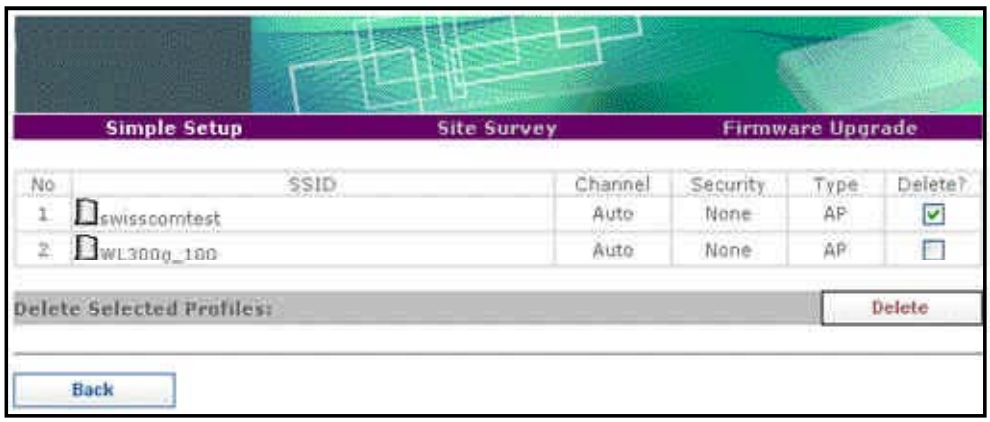


- **The profile number represents the sequence of the saved wireless networks in the profile table.**

- **Refer to page 3-24 to 3-25 for details on the Button Scan Mode feature.**

To delete a wireless network from the Profile Table:

1. Open the Profile Table by clicking the **Profile Table** link.
2. Select the wireless network you intend to delete, then check the **Delete?** box opposite it.



3. Click the **Delete** button. The browser displays the Profile Table after the wireless network is deleted.
4. Click the **Back** button to return to the previous window.

Restoring the default values

The following are the default values of the SmartAnt SAA04-05224A (Ethernet adapter mode). You may restore these values by pressing the reset button for more than five seconds.

Parameter	Default value
WirelessInterface	
SSID	ANY
OperatingMode	InfrastructureMode
Channel	Auto
StationMode	802.11b/g
TransmissionRate	Automatic
Preamble	Long
AuthenticationMethod	OpenSystem
Encryption	None
MACCloning	Disabled
ButtonScanMode	
EnableButtongScanning	Enabled
ScanMode	Find the connection with the strongest link quality
SpecifiedProfile	No Saved profile

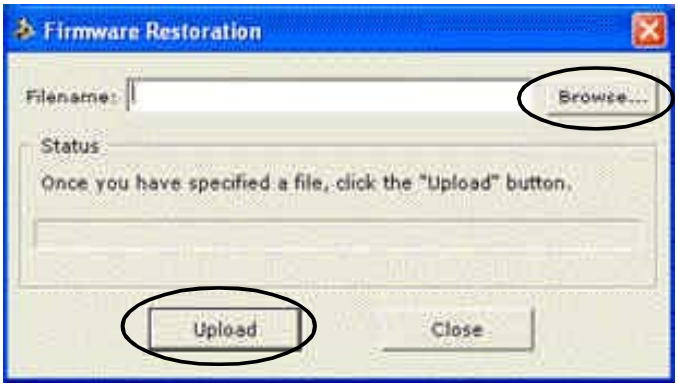
3.4 Firmware Restoration

The **Firmware Restoration** utility is a rescue tool for an SmartAnt SAA04-05224A that failed during a previous firmware upload. This utility is available in the support CD that came with the SmartAnt SAA04-05224A package.

A failed firmware upgrade causes the SmartAnt SAA04-05224A to enter a failure mode. Use the Firmware Restoration utility to find and upload a new firmware for the SmartAnt SAA04-05224A.

To restore the firmware:

1. Visit the website to download the latest firmware for the device.
2. Launch the Firmware Restoration utility from the Windows® desktop by clicking **Start** > **All Programs** > **Wireless AP** > **Firmware Restoration**.
3. The **Firmware Restoration** window appears.



4. Click the **Browse** button to locate the firmware file.
5. After selecting the firmware file, click the **Upload** button to begin the firmware restoration.

The restoration process takes about 3 to 4 minutes to finish. During restoration, the Power, and Wireless LEDs remain lit, while the Ethernet LED flashes slowly.

If you have problems uploading a firmware while using a network hub, try connecting your computer directly to the LAN port.

4.1 Using the device in a local network

You can use the SAA04-05224A to connect a wireless LAN-enabled computer to a local network with or without a DHCP server.

To connect a wireless LAN-enabled computer to a local network:

1. Switch the SAA04-05224A to AP mode. (Default SSID: AP_xxxxxx), then turn on the device.
2. Connect one end of the supplied RJ-45 cable to the Ethernet port of the device and the other end to the Ethernet port of the local network.
3. Use the wireless LAN adapter software in the wireless LAN-enabled computer to perform a **Site Survey**. Make sure the computer's wireless LAN adapter is set to **Infrastructure mode**.
4. Establish connection with the SAA04-05224A.
5. Set the IP configuration of the computer to establish connection to the local network. Verify your connection.

Use the Wireless Setting Utility to change the SAA04-05224A SSID or encryption settings.

4.2 Replacing the computer Ethernet cables

You can use the SAA04-05224A to replace your wireless LAN-enabled computer cable connection to an ADSL or cable modem.

To do this:

1. Switch the SAA04-05224A to AP mode. (Default SSID: AP_xxxxxx), then turn on the device.
2. Connect one end of the supplied RJ-45 cable to the Ethernet port of the device and the other end to the Ethernet port of the ADSL or cable modem.
3. Use the wireless LAN adapter software in the wireless LAN-enabled computer to perform a **Site Survey**. Make sure the computer's wireless LAN adapter is set to **Infrastructure mode**.
4. Establish connection with the SAA04-05224A.
5. Set the IP configuration of the computer to establish connection to the local network. Verify your connection.

4.3 Replacing cable connections of other devices

You can also use the SAA04-05224A to replace your Xbox, PlayStation® 2, or set-top box network cable connection. To do this:

1. Switch the SAA04-05224A to Ethernet adapter mode using the mode switch. (Default SSID: ANY)
2. Place the SAA04-05224A nearest the AP you wish to connect, then turn on the device.
3. Connect one end of the supplied RJ-45 cable to the Ethernet port of the device and the other end to the Xbox, PlayStation® 2, or set-top box Ethernet port.
4. Set the IP address of the Xbox, PlayStation® 2, or set-top box to establish connection to the local network. Verify your connection.

Make sure the SAA04-05224A MAC cloning feature is enabled when using the device in this setup. Use the Wireless Setting Utility to enable MAC cloning. See page 3-24 for details on MAC cloning.

4.4 Sharing Internet connection with other PCs

Refer to the typical network configuration below and a table on the next page for information on Internet connection sharing with other computers in your office or home network.

Use the mode switch to set the SAA04-05224A to AP mode before sharing an Internet connection with other computers in your network.

Table 4-1: Internet connection sharing matrix

If your Internet connection is	Then set the IP of other computer(s)	Number of allowed Internet connections
xDSL[1] with dynamic IP account)	ISP automatically assigns the IP (using PPPoE dial-up)	Depends on the Internet (PPPoE[2] Service Provider (ISP)
xDSL with static IP	to the provided static IP Service Provider (ISP)	Depends on the Internet
xDSL/Cable with a enable DHCP[3] server	The DHCP server automatically assigns the IP	Depends on the DHCP router and server, usually about 253

[1]**xDSL** ¡C**ADSL** (Asymmetric Digital Subscriber Line) or **DSL** (Digital Subscriber Line)

[2]**PPPoE** ¡CPoint-to-Point over Ethernet

[3]**DHCP** ¡CDynamic Host Configuration Protocol

This troubleshooting guide provides solutions to some common problems that you may encounter while installing and/or using SmartAnt SAA04-05224A. These problems require simple troubleshooting that you can perform by yourself. Contact the Technical Support if you encounter problems not mentioned in this section.

Problem	Action
The SmartAnt SAA04-05224A does not power up.	• Use a test meter to measure the voltage output of the power source through the power plug. • Check if the power plug is properly connected to the device.
Other devices cannot communicate with the SmartAnt SAA04-05224A through a wired network connection.	• Verify your network configuration to ensure that there is no IP address duplication. Turn off the device in question, then ping the assigned IP address of the device. Make sure no other device responds to that address. • Check if the cables have the proper pin outs and connectors. You may also use another LAN cable. • Make sure the hub, switch, or computer connected to the SmartAnt SAA04-05224A supports 10Mbps or 100Mbps speed. Do this by check the SmartAnt SAA04-05224A and the Hub LEDs. When you connect the SmartAnt SAA04-05224A to a 10/100 Mbps hub, both the Hub LED and the SmartAnt SAA04-05224A Ethernet LEDs should light up.

Problem	Action
	Observe the hub LED if you are not sure what speed the hub supports.
My WLAN card can not associate with the SmartAnt SAA04-05224A.	• Make sure your WLAN card has the same specifications as the SmartAnt SAA04-05224A (IEEE 802.11b/g). • Minimize the distance between the devices. The WLAN card may be out of range of the SmartAnt SAA04-05224A. • Check if the SmartAnt SAA04-05224A and the WLAN card have the same SSID. • When encryption is enabled, check if the SmartAnt SAA04-05224A and the WLAN card have the same encryption settings. • Check if the Wireless LED of the SmartAnt SAA04-05224A is on. • When the Access Control table is enabled, check if the MAC address of the WLAN card is included in the Access Control table. • Check if the SmartAnt SAA04-05224A is in Access Point mode.

Problem	Action
Thethroughputseemsslow.	Avoid placing the device behind a metal object. Clear obstacles between the AP and the device. Try moving the client closer to the SmartAnt SAA04-05224A and check if the throughput increases. Consider adding a second SmartAnt SAA04-05224A to implementroaming.
I can not access the Pocket WirelessAPwebconfiguration page.	To access the SmartAnt SAA04-05224A web configuration page, your computer must have the same subnet as that of the SmartAnt SAA04-05224A. Adjust your network if your computer's subnet does not match that of the SmartAnt SAA04-05224A. The default IP address of the SmartAnt SAA04-05224A is 192.168. 1.1 In special cases, when the SmartAnt SAA04-05224A in Ethernet adapter mode joins an AP network with the same IP address, reset the SmartAnt SAA04-05224A to access the Web Configuration utility again.
Where can I get a firmware file to upgradetheSmartAntSAA04-05224A?	You may download the latest firmware file from the website (www.smartant.com). Use the Firmware Upgrade page in the Web Configuration utility to update the SmartAnt SAA04-05224A firmware.

Problem	Action
The SmartAnt SAA04-05224A Power LED continuously blinks for more than a minute.	Turn off the SmartAnt SAA04-05224A. Turn the device again and observe if the Power LED stops blinking. If the blinking continues, you need to restore the SmartAnt SAA04-05224A firmware. Use the Firmware Restoration utility to restore or update the SmartAnt SAA04-05224A firmware.
A wireless client wants to connect to the SmartAnt SAA04-05224A but can not get the correct IP from the DHCP server. (The SmartAnt SAA04-05224A has an enabled DHCP.)	Make sure the DHCP server is working properly. Some DHCP servers can only assign one IP address at a time. In this case, assign a fixed IP address to your SmartAnt SAA04-05224A.