# Wireless Gaming Adapter

## IEEE 802.11b
## 11Mbps

## User's Manual

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# Chapter 1 Introduction

This product is a Wireless Gaming Adapter for IEEE 802.11b 2.4GHz wireless network. You can use this Wireless Gaming Adapter to make a game console or network device with wired Ethernet have wireless LAN access capability. This Wireless Gaming Adapter provides a button to switch between “Head to Head mode (or Ad Hoc mode)” and “Infrastructure mode” that help users quickly and easily setup this device.

This Wireless Gaming Adapter supports most popular game consoles, like X-Box, PlayStation 2, Nintendo and Game Boy ……etc.

The product supports WEP and ESSID functions to consolidate the wireless network security. With ESSID authentication and 64/128 bit WEP encryption you can prevent unauthorized wireless stations from accessing your wireless network.

The product’s dipole antenna is detachable by connecting to a RP-SMA connector. Users can install a high gain antenna to the connector for better network link quality so that you can build wireless network with more flexibility.

This product provides easy to use user interface and allows users to do advanced configuration from web browser or Windows utility. With the versatile of features, this product is the best choice for you to integrate your wireless and wired network seamlessly.

## 1.1 Package Contents

The Wireless Gaming Adapter package includes the following items:

- One Wireless Gaming Adapter
- One Power Adapter
- One CD-ROM
- One Quick Installation Guide

## 1.2 Features

- Let network device with wired Ethernet have wireless LAN access capability.
- Supports X-Box, PlayStation 2, Nintendo and Game Boy ……etc.
- Complies with the IEEE 802.11b (DSSS) 2.4GHz specification.
- High data rate 11, 5.5, 2 and 1Mbps network speed.
- Auto rate fallback in case of obstacles or interferences.
- Provide 64/128-bit WEP Data Encryption function to protect the wireless data transmissions.
- Provides Windows Utility and Web-based configuration.

## 1.3 Specifications

- Standards: IEEE 802.11b (Wireless), IEEE 802.3 (Wired)
- Data Rate: 11/5.5/2/1Mbps auto fallback
- Security: 64/128-bit WEP Data Encryption
- Frequency Band: 2.400~2.4835GHz (Industrial Scientific Medical Band)
- Modulation: CCK@11/5.5Mbps, DQPSK@2Mbps and DBPSK@1Mbps
- Radio Technology: Direct Sequence Spread Spectrum (DSSS)
- Antenna: External detachable dipole antenna (with RP-SMA connector)
- Connectors: 10/100Mbps RJ-45 x 1
- Button: Switch between “Head to Head mode (or Ad Hoc mode)” and “Infrastructure mode”
- Power: 12VDC, 0.5A
- Transmit Power: 18dBm (Typical)
- LEDs: Power, LAN Link/Activity, Wireless Activity
- Dimension: 30(H) x 127(W) x 96(D) mm

- Temperature:
  Operating: 32~131°F (0~55°C)
  Storage: -4~158°F(-20~70°C)
- Humidity: 10-90% (Noncondensing)
- Certification: FCC, CE

## 1.4 Physical Description

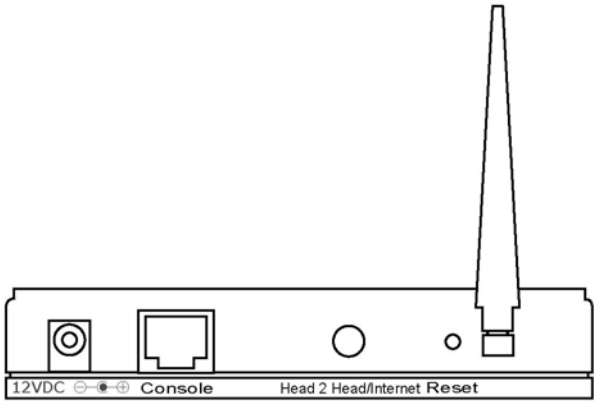
### Front Panel

On the Wireless Gaming Adapter's front panel there are LED lights that inform you of the Wireless Gaming Adapter's current status. Below is an explanation of each LED.


| LED | Color | Status | Description |
|---|---|---|---|
| Power | Green | Lit | Power is supplied. |
| | | Flash | System is booting |
| | | Off | No Power. |
| Status | Yellow | Flash | No Access Point detected. |
| | Yellow | On | PC configuration required (static IP detected or multiple access points detected). |
| | Green | On | Ready to use. |
| Head 2 Head | Green | On | Working in "Head to Head mode (or Ad Hoc mode)". |
| | | Off | Working in "Infrastructure mode". |
| Console | Green | On | A valid link is established. |
| | | Flash | It is transmitting or receiving data. |
| | | Off | No link is established. |

## Back Panel

Wireless Gaming Adapter's connection ports are located on the back panel. Below is the description of each connection port.




- Antenna Connector
  This round connection is standard Reverse SMA connector where any antennas with Reverse SMA connector can connect to the Access Point.

- DC Adapter Port
  Insert the power jack of the power adapter into this port.

- Console Port
  The Wireless Gaming Adapter's console port is where you connect to your game console or other device with wired Ethernet.

- Head 2 Head / Infrastructure button
  Press this button once and the Wireless Gaming Adapter will switch from "Head to Head mode" to "Infrastructure mode" if it is currently in "Head to Head mode" or will switch from "Infrastructure mode" to "Head to Head mode" if it is currently in "Infrastructure mode".

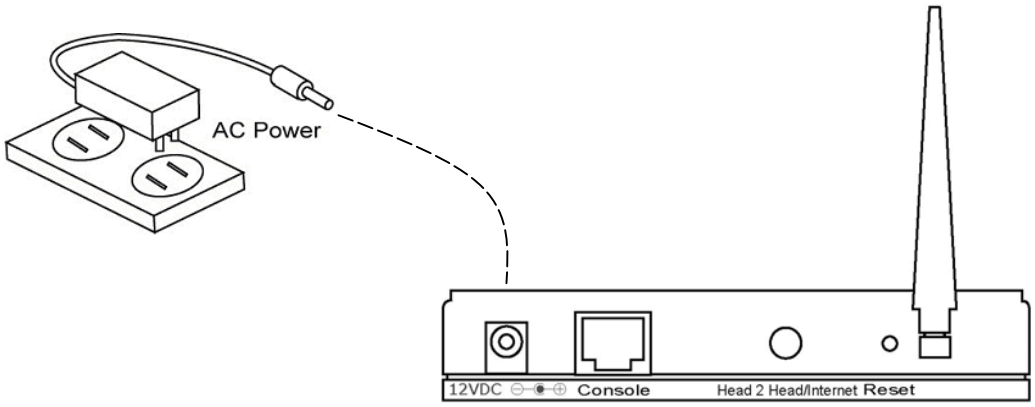
- Reset
  The Reset button allows you to do one of two things.

  1) If problems occur with your Wireless Gaming Adapter, press the reset button with a pencil tip (for less than 4 seconds) and the Wireless Gaming Adapter will re-boot itself, keeping your original configurations.

2) If problems persist or you experience extreme problems or you forgot your password, press the reset button for longer than 4 seconds and the Wireless Gaming Adapter will reset itself to the factory default settings (warning: your original configurations will be replaced with the factory default settings).

# Chapter 2 Quick Installation

## 2.1 Hardware Installation




Connect to a game console


1. **Connect the Wireless Gaming Adapter to your game console.**
   Connect one end of standard UTP cable to the Wireless Gaming Adapter's Console Port and connect the other end of the cable to your game console.

2. **Connect the DC Power Adapter to the Wireless Gaming Adapter's Power Socket.**
   Only use the power adapter supplied with the Wireless Gaming Adapter. Using a different adapter may damage the product.

3. **Check the LED.**

After power on both Wireless Gaming Adapter and your game console, the "PWR" and "CONSOLE" LEDs of the Wireless Gaming Adapter should be light.

**The Hardware Installation is complete.**

## 2.2 Getting Started

### Play head to head games

1. If you have more than one game console and want to connect these game consoles together to play head to head games, you have to switch the Wireless Gaming Adapter to "Head to Head mode". If the "Head 2 Head" LED is light, then the Wireless Gaming Adapter is already in "Head to Head mode" and your game consoles can start to communicate with wireless network now. If the "Head 2 Head" LED is not light, press the "Head 2 Head/Infrastructure" button once and the Wireless Gaming Adapter will switch to "Head to Head mode" automatically.
2. When the Wireless Gaming Adapters are successfully connected, the "STATUS" LED will be light and green.
3. After all the Wireless Gaming Adapters being set to "Head to Head mode" and are connected to your game consoles, you can start to enjoy head to head games through wireless LAN.

### Play Internet games

1. Make sure that you already have an Internet connection and can be access from the wireless LAN.
2. If you want your game console to connect to the Internet game servers and play Internet game through wireless LAN, you have to set the Wireless Gaming Adapter to "Infrastructure mode". If the "Head 2 Head" LED is off , then the Wireless Gaming Adapter is already in "Infrastructure mode" and your game consoles can start to communicate with wireless network now. If the "Head 2

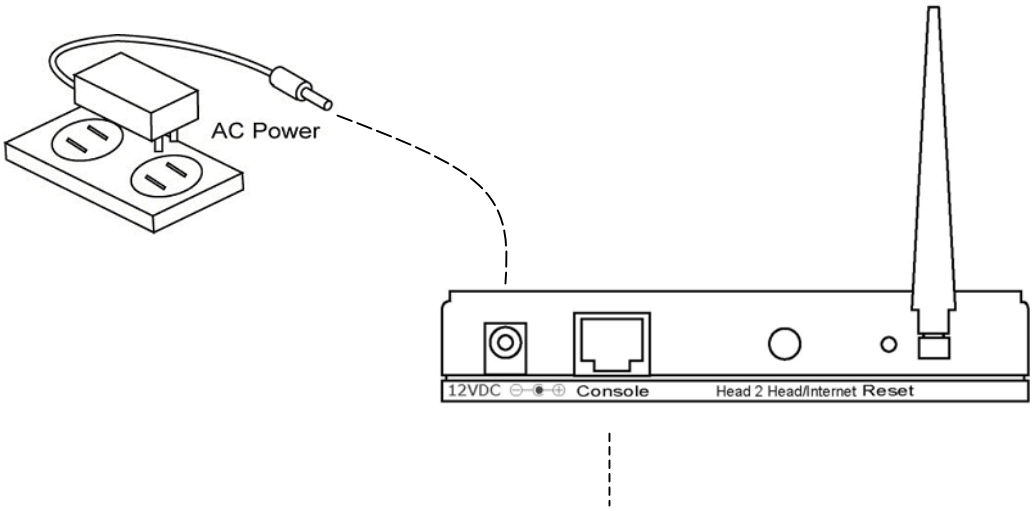
Head" LED is light, press the "Head 2 Head/Infrastructure" button once and the Wireless Gaming Adapter will switch to "Infrastructure mode" automatically.

3. When the Wireless Gaming Adapter is successfully connected to the wireless LAN, the "STATUS" LED will be light and green.
4. After the Wireless Gaming Adapter being set to "Internet mode" and is connected to your game consoles, you can start to enjoy Internet games through wireless LAN.

# Chapter 3 Windows Setup Wizard

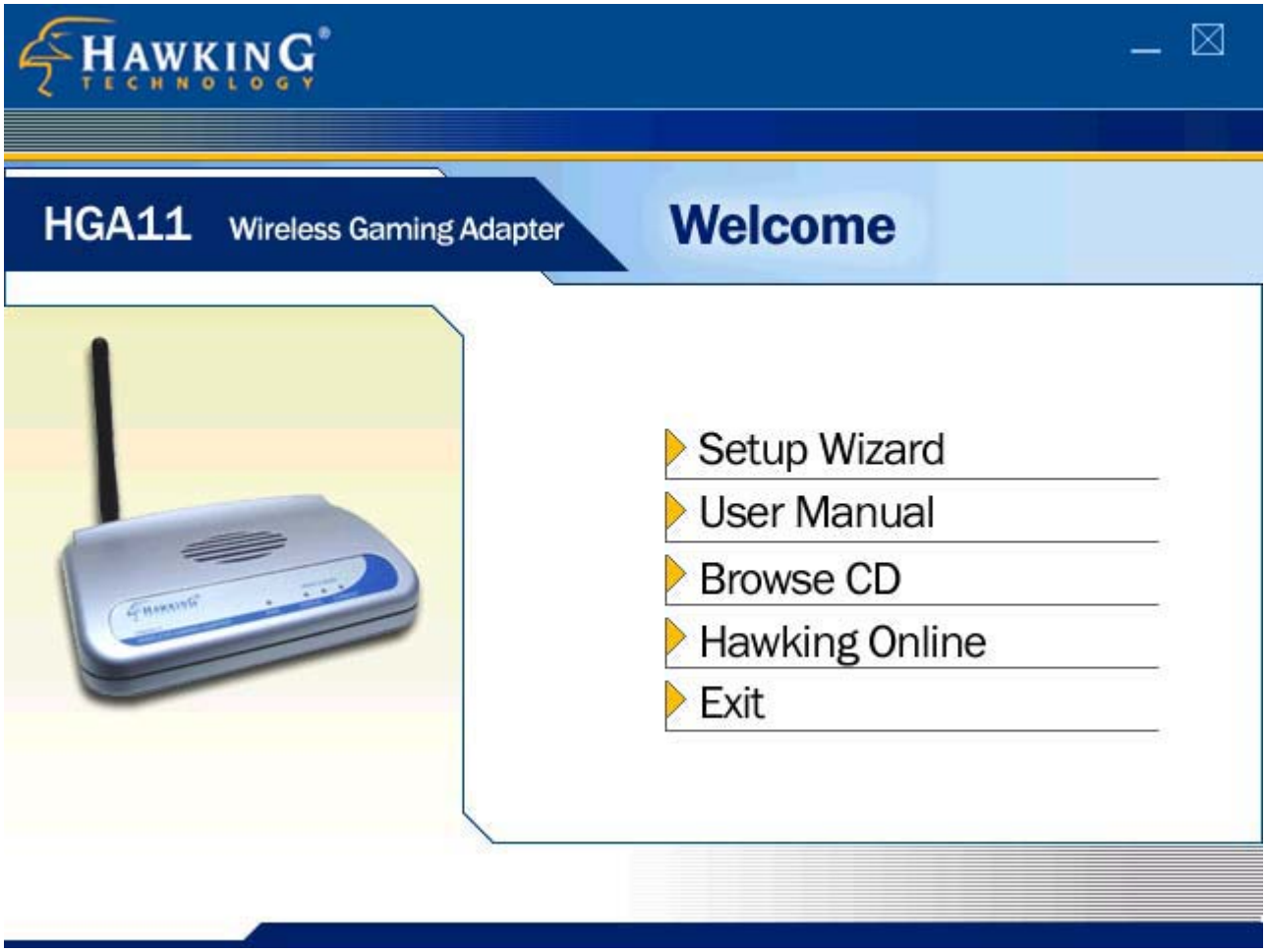
The Wireless Gaming Adapter provides Windows setup wizard that can guide you through the configuration process step by step. Please follow the instructions below to get started configuration:

1. Follow the picture below to connect the Wireless Gaming Adapter to your administration PC.




Connect to an administration PC

2. Insert CD-ROM for Wireless Gaming Adapter into the administration PC. The installation program will be executed automatically and the window below will pop up. If the installation program is not executed automatically, please manually execute the setup.exe file in the CD-ROM.




3. Click “Setup Wizard” to start the setup process.

4. Click “Search” and this setup wizard will start to search for all accessible Wireless Gaming Adapters. After a few seconds, you can see a list of all accessible Wireless Gaming Adapters. Select the one you want to configure and click “Configure”.

5. Select the mode for the Wireless Gaming Adapter. If you want to play Internet game, select the “Internet Gaming Mode (Infrastructure)” and click “Next” and jump to step 6. This mode let the Wireless Gaming Adapter connect to an access point, and through this access point connect to the Internet. If you want to play head to head game, select the “Head to Head Gaming Mode (Ad Hoc)” and click “Next” and jump to step 8. This mode let the Wireless Gaming Adapter peer-to-peer connect to another Wireless Gaming Adapter or other wireless devices with Ad Hoc mode.

6. In the “Internet Gaming Mode (Infrastructure)”, the Wireless Gaming Adapter has to connect to an access point before going to the Internet. You can select “Scan For Your Local Wireless Network” to let the Wireless Gaming Adapter automatically scan for an available access point and jump to step 7. If already know the SSID of the available access point, you also can select “Assign Your Wireless Network Manually”, enter the SSID of the access point and jump to step 10.

7. The Wireless Gaming Adapter automatically scans for all available access points and lists their SSID. If the Wireless Gaming Adapter does not find any access point, click “Scan” to let it search again. You can select one access point and click “Next”. Jump to step 10.

8. In the “Head to Head Gaming Mode (Ad Hoc)”, the Wireless Gaming Adapter can peer-to-peer connect to another Wireless Gaming Adapter or other wireless devices with Ad Hoc mode. You can select “Scan For Your Local Wireless Network” to let the Wireless Gaming Adapter scan for all wireless devices available for connection and jump to step 9. If you already know the configuration of the wireless device you want to connect, select “Assign Your Wireless Network Manually” and enter the SSID and Channel number manually and jump to step 10. You also can select “Automatically Select Channel” to let the Wireless Gaming Adapter automatically scan and select a suitable channel.

9. The Wireless Gaming Adapter automatically scans for all available wireless devices, including Wireless Gaming Adapters, with Ad Hoc mode and lists their SSID. If the Wireless Gaming Adapter does not find any wireless device, click "Scan" to let it search again. You can select one wireless device you want to connect to and click "Next".

10. The Wireless Gaming Adapter needs an IP for you to configure by Web interface. You can select “Automatically Obtain IP Settings (DHCP)” to let the Wireless Gaming Adapter get IP settings from a DHCP server. You also can select “Set Your IP Manually” to manually assign static IP settings for the Wireless Gaming Adapter.

11. The WEP is used to encrypt the data communication of your wireless network. If you do not use WEP, select “OFF” and click “Next”. If you want to use the WEP to protect your wireless network, click “ON” and select correct key length, 64 bit or 128 bit, and enter for encryption keys and then click “Next”. Note that the key length and the four encryption keys should be the same among all wireless network device to make the wireless connection success.

12. After you have done the previous setting process, this page shows all the configuration parameters. If all the settings are correct, click “Finish” to confirm the settings. You also can click “Back” to modify the previous settings.


13. You have finished the configuration for the Wireless Gaming Adapter.

# Chapter 4 Web Configuration

## 4.1 Getting Started

This Gaming Adapter provides web-based configuration tool allowing you to configure from wired or wireless stations. We suggest you Web Configuration only when you have already set static IP to the Gaming Adapter. Follow the instructions below to get started configuration.

**From Wired Station**

1. Make sure your wired station is in the same subnet with the Gaming Adapter. The default IP Address and Sub Mask of the Gaming Adapter is:
   **Default IP Address: 192.168.2.1**
   **Default Subnet: 255.255.255.0**

   **Configure your PC to be in the same subnet with the Access Point.**
   1a) Windows 95/98/Me
   1. Click the *Start* button and select *Settings*, then click *Control Panel*. The *Control Panel* window will appear.
   2. Double-click *Network* icon. The *Network* window will appear.
   3. Check your list of *Network Components*. If TCP/IP is not installed, click the *Add* button to install it now. If TCP/IP is installed, go to **step 6**.
   4. In the *Network Component Type* dialog box, select *Protocol* and click *Add* button.
   5. In the *Select Network Protocol* dialog box, select *Microsoft and TCP/IP* and then click the *OK* button to start installing the TCP/IP protocol. You may need your Windows CD to complete the installation.
   6. After installing TCP/IP, go back to the *Network* dialog box. Select *TCP/IP* from the list of *Network Components* and then click the *Properties* button.
   7. Check each of the tabs and verify the following settings:
      - **Bindings**: Check *Client for Microsoft Networks* and *File and printer sharing for Microsoft Networks*.
      - **Gateway**: All fields are blank.
      - **DNS Configuration**: Select *Disable DNS.*
      - **WINS Configuration**: Select *Disable WINS Resolution.*

- **IP Address**: Select *Specify an IP Address.* Specify the IP Address and Subnet Mask as following example.
  - ✓ IP Address: 192.168.2.3 (any IP address within 192.168.2.2~192.168.2.254 is available, **do not setup 192.168.2.1**)
  - ✓ Subnet Mask: 255.255.255.0

8. Reboot the PC. Your PC will now have the IP Address you specified.

## 1b) Windows 2000

1. Click the *Start* button and select *Settings*, then click *Control Panel*. The *Control Panel* window will appear.
2. Double-click *Network and Dial-up Connections* icon. In the *Network and Dial-up Connection* window, double-click *Local Area Connection* icon. The *Local Area Connection* window will appear.
3. In the *Local Area Connection* window, click the *Properties* button.
4. Check your list of *Network Components*. You should see *Internet Protocol [TCP/IP]* on your list. Select it and click the *Properties* button.
5. In the *Internet Protocol (TCP/IP) Properties* window, select *Use the following IP address* and specify the IP Address and Subnet mask as following.
   - ✓ IP Address: 192.168.2.3 (any IP address within 192.168.2.2~192.168.2.254 is available, **do not setup 192.168.2.1**)
   - ✓ Subnet Mask: 255.255.255.0
6. Click *OK* to confirm the setting. Your PC will now have the IP Address you specified.

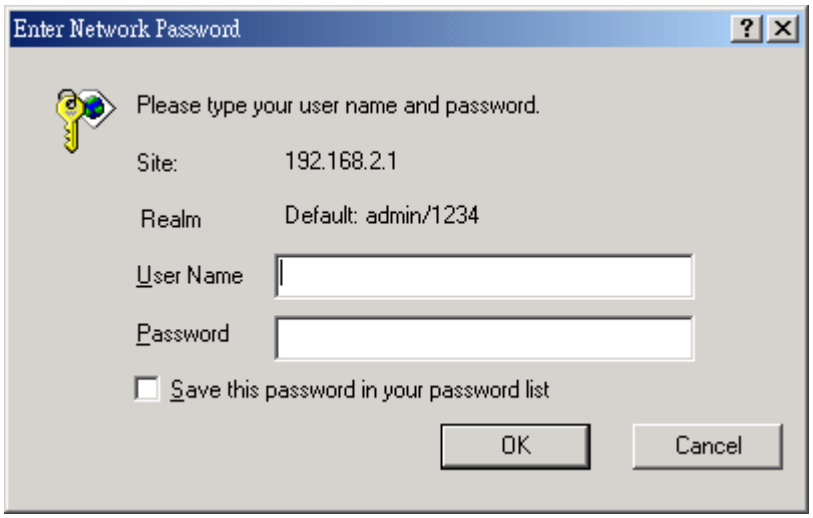
## 1c) Windows NT

1. Click the *Start* button and select *Settings*, then click *Control Panel*. The *Control Panel* window will appear.
2. Double-click *Network* icon. The *Network* window will appear. Select the *Protocol* tab from the *Network* window.
3. Check if the *TCP/IP Protocol* is on your list of *Network Protocols*. If *TCP/IP* is not installed, click the *Add* button to install it now. If *TCP/IP* is installed, go to **step 5**.
4. In the Select *Network Protocol* window, select the *TCP/IP Protocol* and click the *Ok* button to start installing the *TCP/IP protocol*. You may need your Windows CD to complete the installation.
5. After you install *TCP/IP*, go back to the *Network* window. Select *TCP/IP* from the list of *Network Protocols* and then click the *Properties* button.
6. Check each of the tabs and verify the following settings:

- **IP Address:** Select *Specify an IP address.* Specify the IP Address and Subnet Mask as following example.
  - ✓ IP Address: 192.168.2.3 (any IP address within 192.168.2.2~192.168.2.254 is available, **do not setup 192.168.2.1**)
  - ✓ Subnet Mask: 255.255.255.0
- **DNS:** Let all fields are blank.
- **WINS:** Let all fields are blank.
- **Routing:** Let all fields are blank.

7. Click *OK* to confirm the setting. Your PC will now have the IP Address you specified.

2. Enter **192.168.2.1** from Web Browser to get into the Gaming Adapter's configuration tool.
3. A screen will be popped up and request you to enter user name and password. The default user name and password is as follows.
   User Name: admin
   Password: 1234
   Enter the default user name and password, then press **OK** button directly.

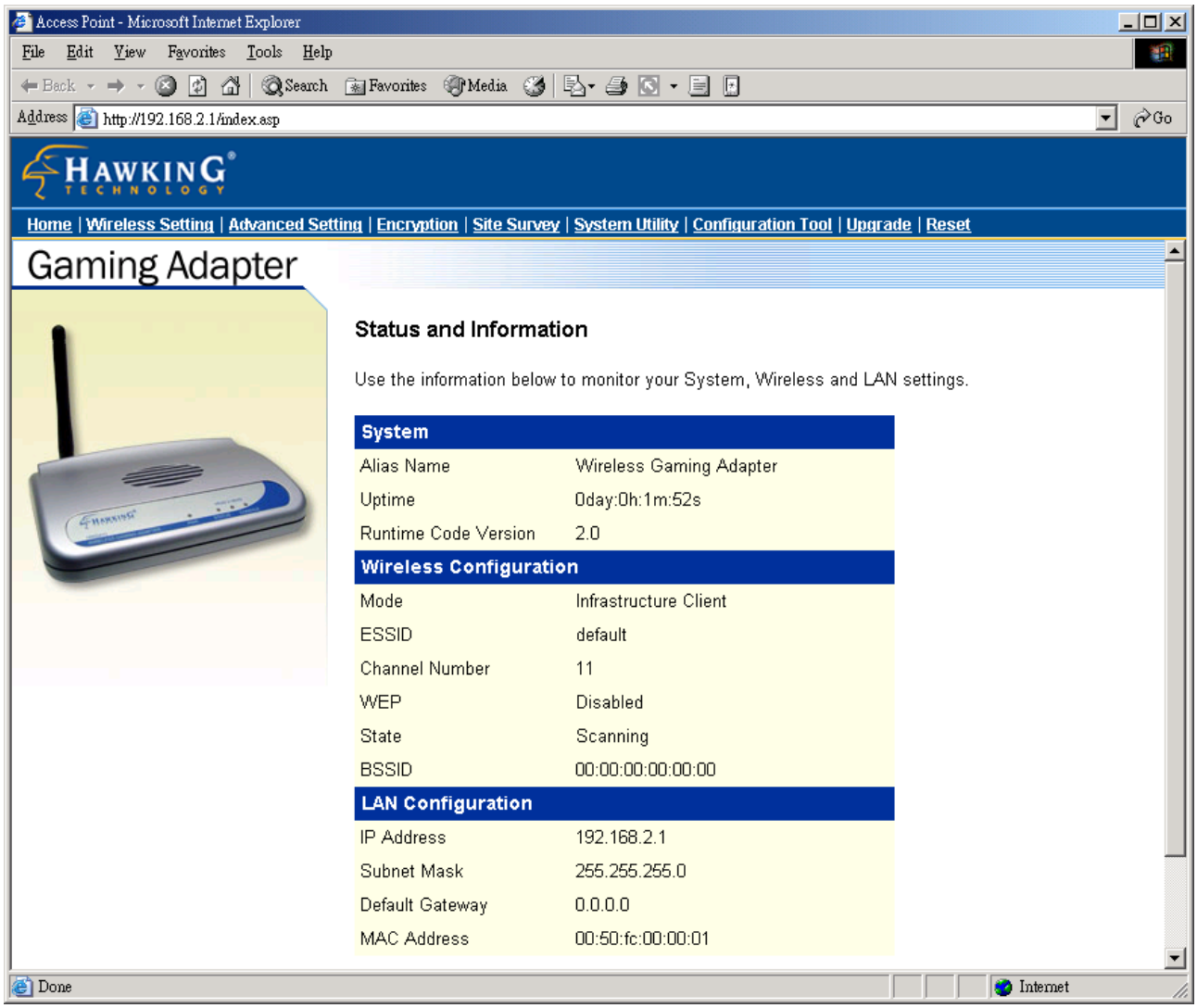



4. You can start configuring the Gaming Adapter.

# 4.2 Configuring the Gaming Adapter

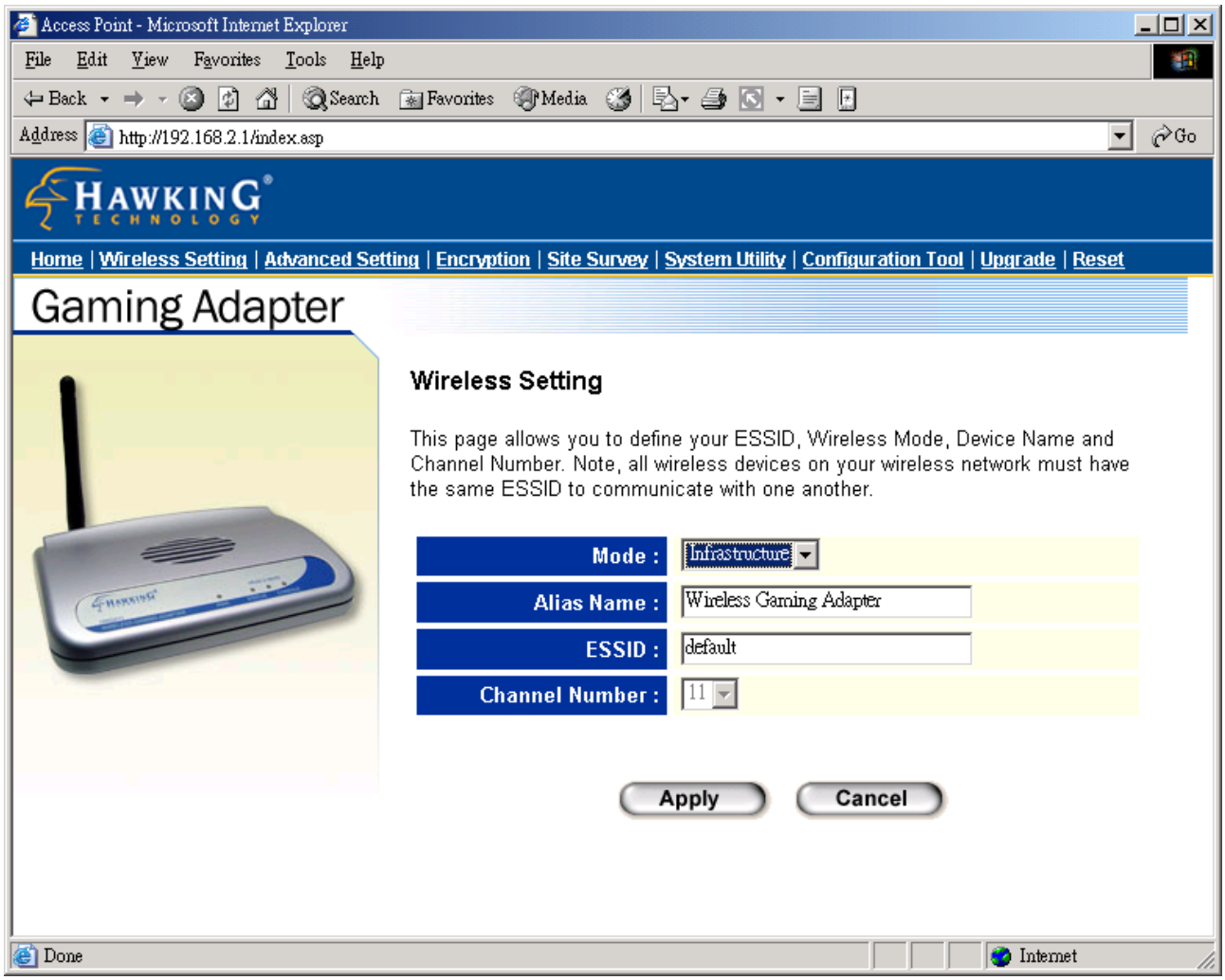
## 4.2.1 Status and Information

On this screen, you can see the general information of the Gaming Adapter including Alias Name, Firmware Version, ESSID, Channel Number, Status, IP Address, MAC Address, etc.



## 4.2.2 Wireless Setting

This Gaming Adapter provides both “Ad Hoc mode” and “Infrastructure mode”. With “Ad Hoc mode”, it can let your game console join a wireless LAN with peer-to-peer communication. With “Infrastructure mode”, it can let your game console join a wireless LAN through an access point.



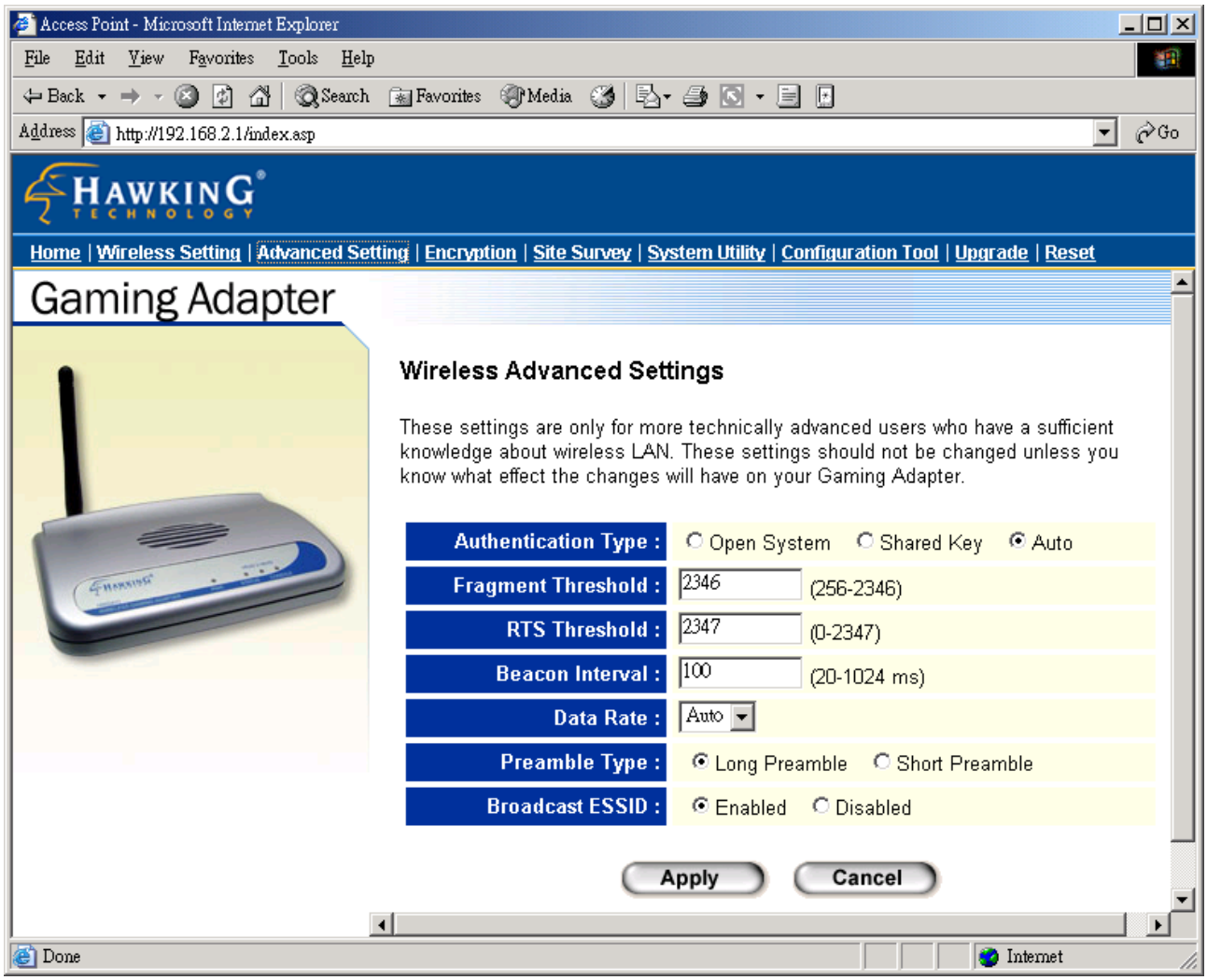

| Parameter | Description |
|---|---|
| Mode | The operation mode of this Gaming Adapter. You can select “Ad Hoc” if you use peer-to-peer wireless LAN connection to play head to head games. You can select “Infrastructure” if you are using a access point to build up a wireless LAN. |
| Alias Name | The alias name of this Gaming Adapter. |

| | |
|---|---|
| ESSID | The ESSID (up to 31 printable ASCII characters) is the unique name identified in a WLAN. The ID prevents the unintentional merging of two co-located WLANs. Please make sure that the ESSID of all stations in the same WLAN network are the same. The default ESSID is "**default**". |
| Channel Number | Select the appropriate channel from the list provided to correspond with your network settings. Channels differ from country to country.<br>Channel 1-11 (North America)<br>Channel 1-14 (Japan)<br>Channel 1-13 (Europe)<br>There are 14 channels available. |

Click **Apply** button at the bottom of the screen to save the above configurations. You can now configure other advance sections or start using the Gaming Adapter.

### 4.2.3 Advanced Setting

You can set advanced parameters of this Gaming Adapter. The parameters include Authentication Type, Fragment Threshold, RTS Threshold, Beacon Interval, Data Rate, Preamble Type, Broadcast ESSID. You should not change these parameters unless you know what effect the changes will have on this Gaming Adapter.



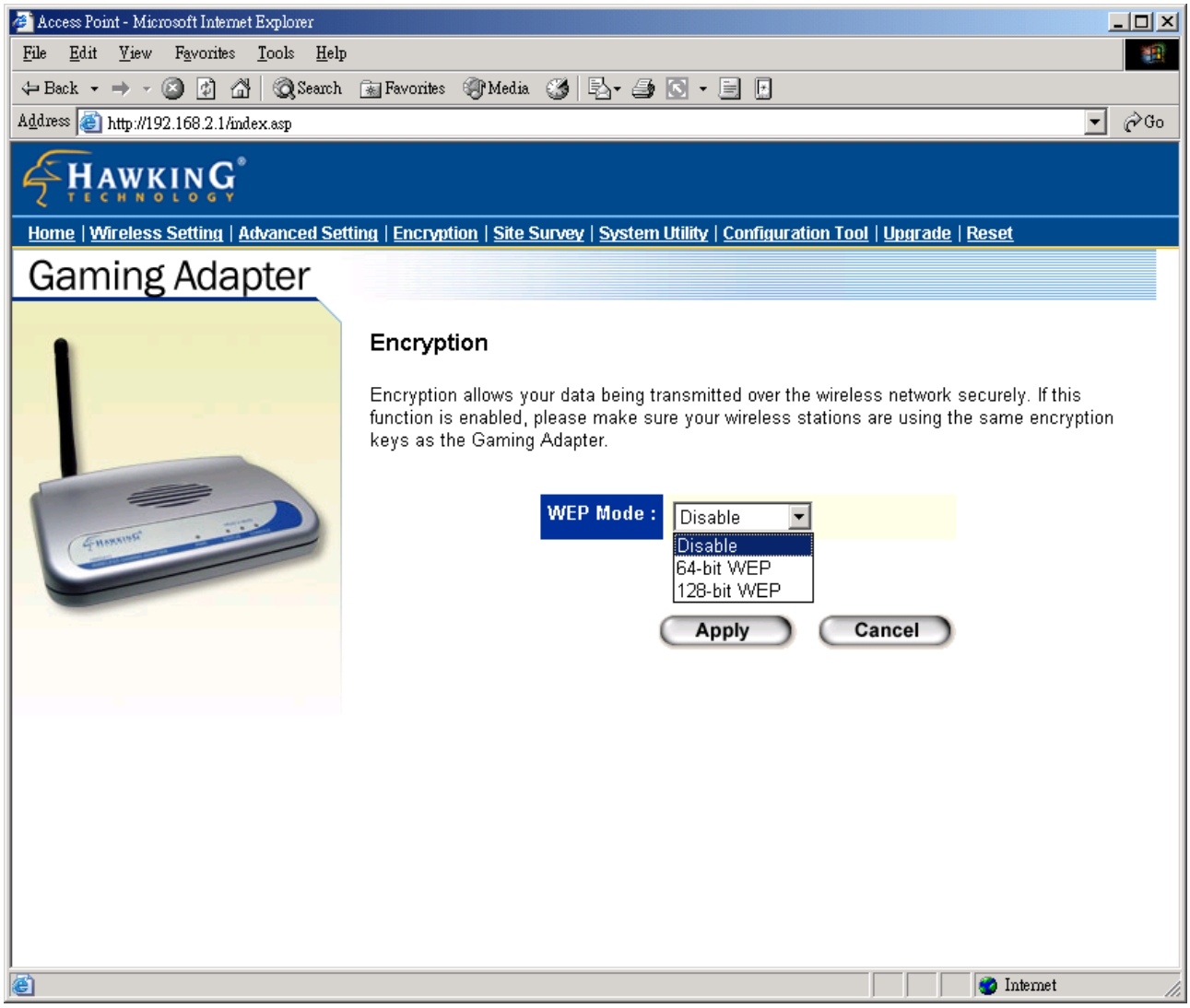

| Parameter | Description |
|---|---|
| Authentication Type | There are two authentication types: “Open System” and “Shared Key”. When you select “Open System”, your access point allows this Gaming Adapter to associate with it without WEP encryption. When you select “Shared Key”, you should also setup WEP key in the “Encryption” page. This Gaming Adapter will use WEP encryption in the authentication phase to associate with your access point. If you select “Both”, the |

| | |
|---|---|
| | Gaming Adapter can associate with your access point or other wireless devices by using any one of these two authentication types. |
| Fragment Threshold | “Fragment Threshold” specifies the maximum size of packet during the fragmentation of data to be transmitted. If you set this value too low, it will result in bad performance. |
| RTS Threshold | When the packet size is smaller the RTS threshold, the Gaming Adapter will not use the RTS/CTS mechanism to send this packet. |
| Beacon Interval | The interval of time that this Gaming Adapter broadcast a beacon. Beacon is used to synchronize the wireless network. |
| Data Rate | The “Data Rate” is the rate this Gaming Adapter uses to transmit data packets. The Gaming Adapter will use the highest possible selected transmission rate to transmit the data packets. |
| Preamble Type | Preamble type defines the length of CRC block in the frames during the wireless communication. “Short Preamble” is suitable for high traffic wireless network. “Long Preamble” can provide more reliable communication. |
| Broadcast ESSID | If you enable “Broadcast ESSID”, every wireless station located within the coverage of this Gaming Adapter can discover this Gaming Adapter easily. Disabling “Broadcast ESSID” can provide better security. |

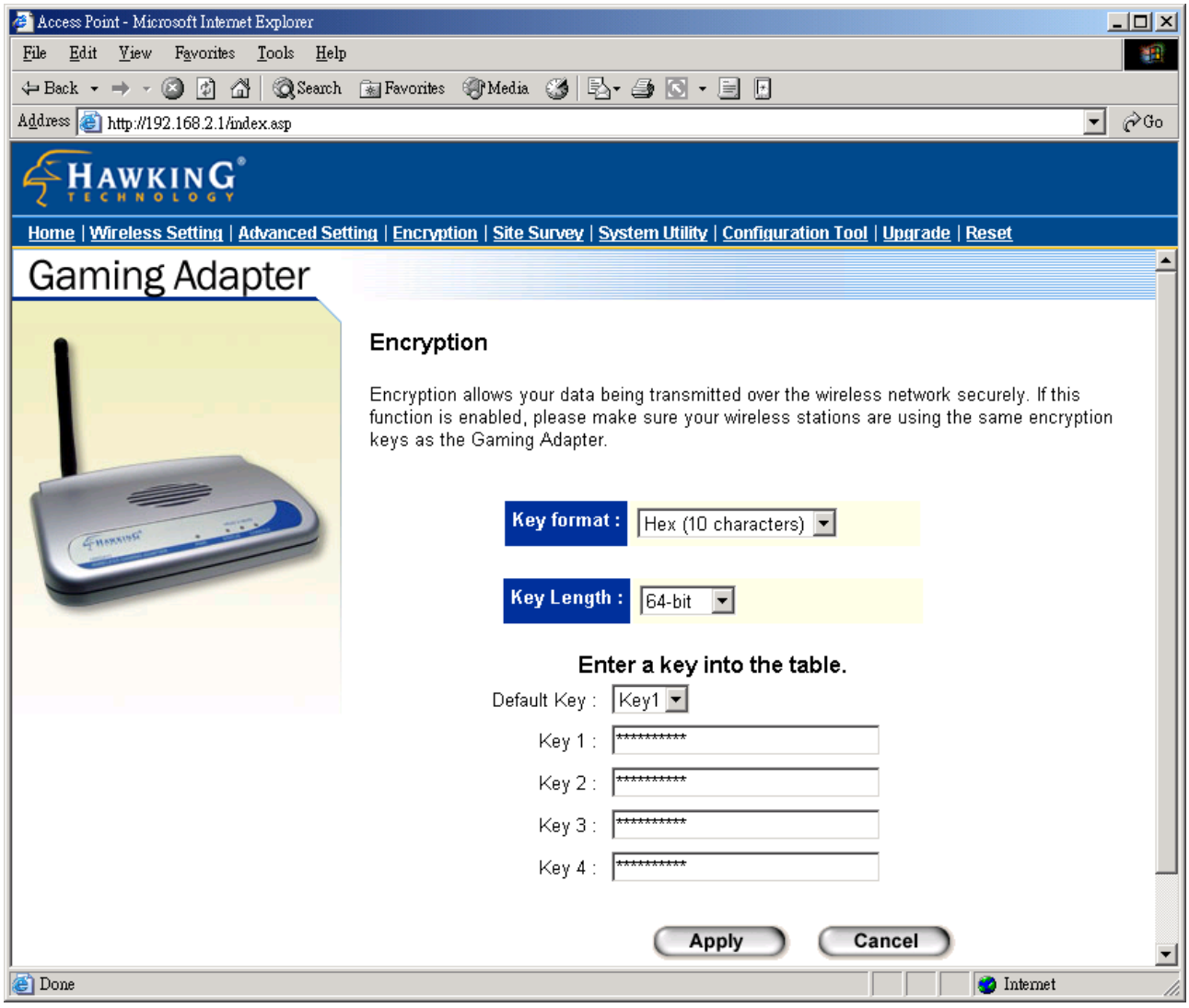
Click **Apply** button at the bottom of the screen to save the above configurations. You can now configure other advance sections or start using the Gaming Adapter.

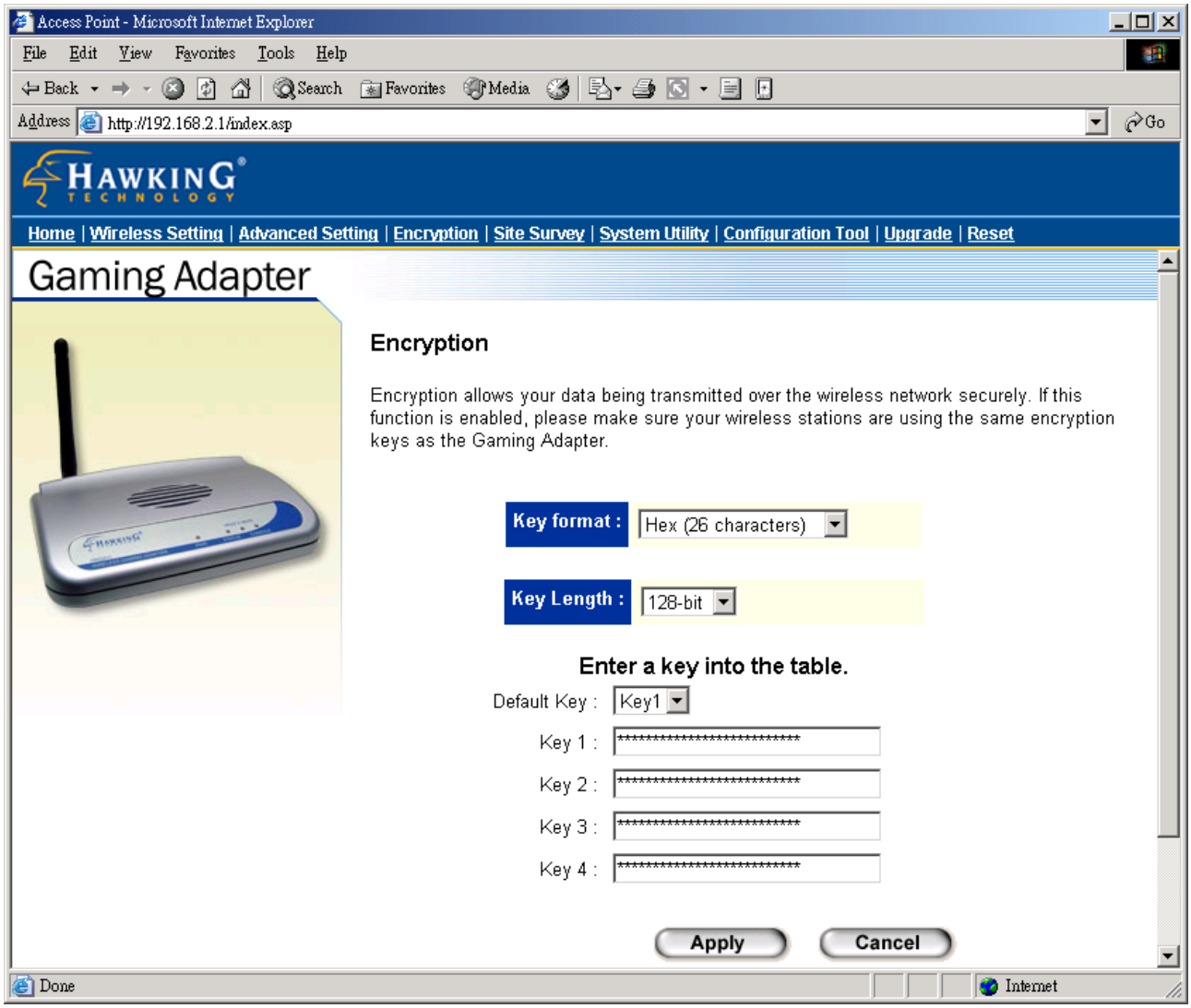
## 4.2.4 Encryption

WEP is an authentication algorithm, which protects authorized Wireless LAN users against eavesdropping. The Authentication type and WEP key of wireless stations must be the same with each other. This Gaming Adapter supports 64/128-bit WEP Encryption function. With this function, your data will be transmitted over the wireless network securely.




| Parameter | Description |
|---|---|
| WEP Mode | You can select the 64-bit or 128-bit to encrypt transmitted data. Larger WEP key length will provide higher level of security, but the throughput will be lower. You also can select **Disable** to transmit data without encryption. |


Access Point - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://192.168.2.1/index.asp
Go
HAWKING TECHNOLOGY
Home | Wireless Setting | Advanced Setting | Encryption | Site Survey | System Utility | Configuration Tool | Upgrade | Reset
Gaming Adapter
Encryption
Encryption allows your data being transmitted over the wireless network securely. If this function is enabled, please make sure your wireless stations are using the same encryption keys as the Gaming Adapter.
Key format :
Hex (10 characters)
Key Length :
64-bit
Enter a key into the table.
Default Key :
Key1
Key 1 :
Key 2 :
Key 3 :
Key 4 :
Apply
Cancel
Done
Internet



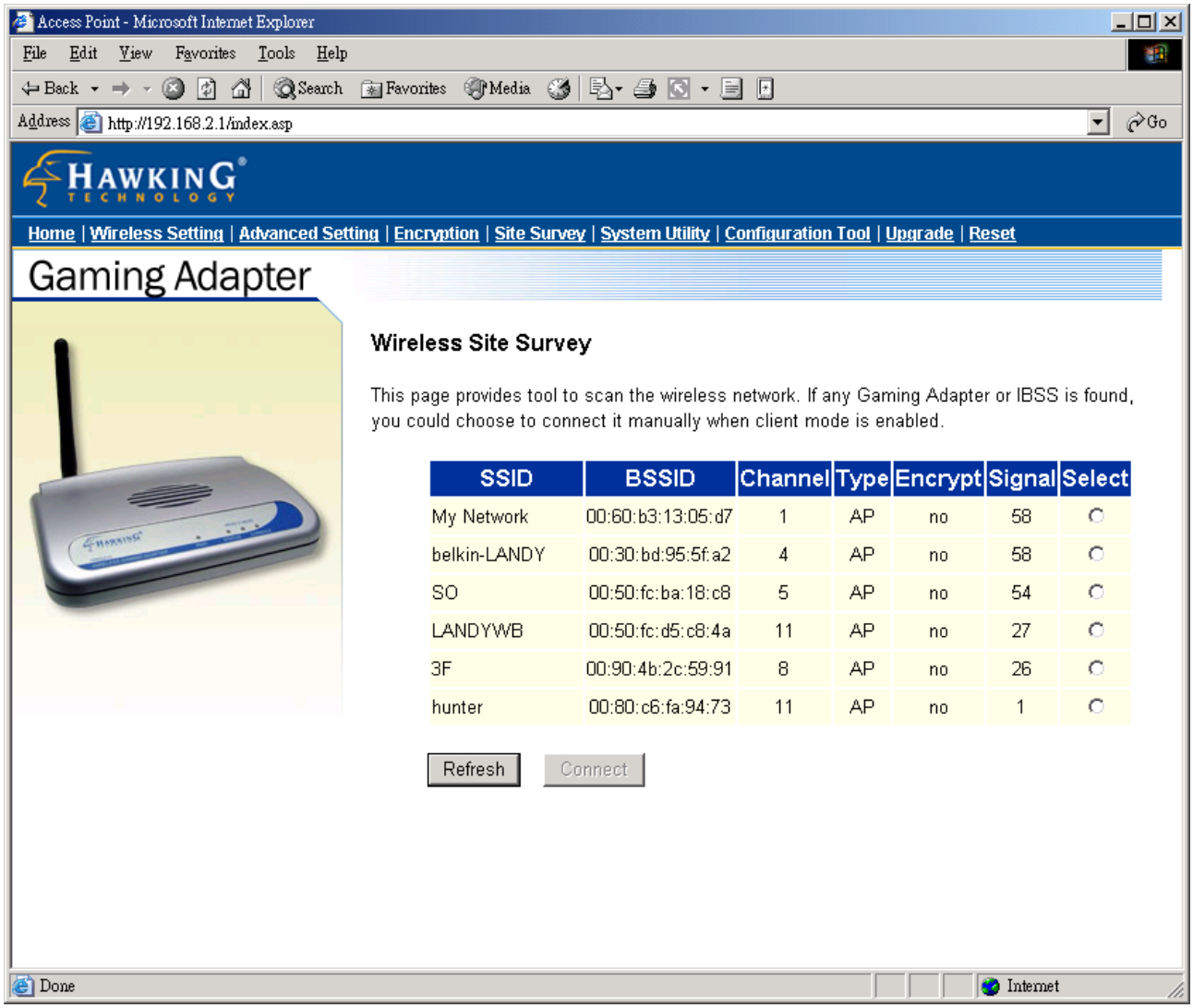

| Parameter | Description |
|---|---|
| Key Format | You may select to select ASCII Characters (alphanumeric format) or Hexadecimal Digits (in the “A-F”, “a-f” and “0-9” range) to be the WEP Key. For example:<br>ASCII Characters: guest<br>Hexadecimal Digits: 12345abcde |
| Key Length | You may disable or enable the WEP function from the setting item. The selections in the setting item are changed based on the key format. |
| Key 1 - Key 4 | The WEP keys are used to encrypt data transmitted in the wireless network. Fill the text box by following the rules below.<br>64-bit WEP: input 10-digit Hex values (in the “A-F”, “a-f” and “0-9” range) or 5-digit ASCII character as the encryption keys. |

| | |
|---|---|
| | 128-bit WEP: input 26-digit Hex values (in the “A-F”, “a-f” and “0-9” range) or 10-digit ASCII characters as the encryption keys. |
| Default Key | Select one of the four keys to encrypt your data. Only the key you select it in the “Default key” will take effect. |

Click **Apply** button at the bottom of the screen to save the above configurations. You can now configure other advance sections or start using the Gaming Adapter.

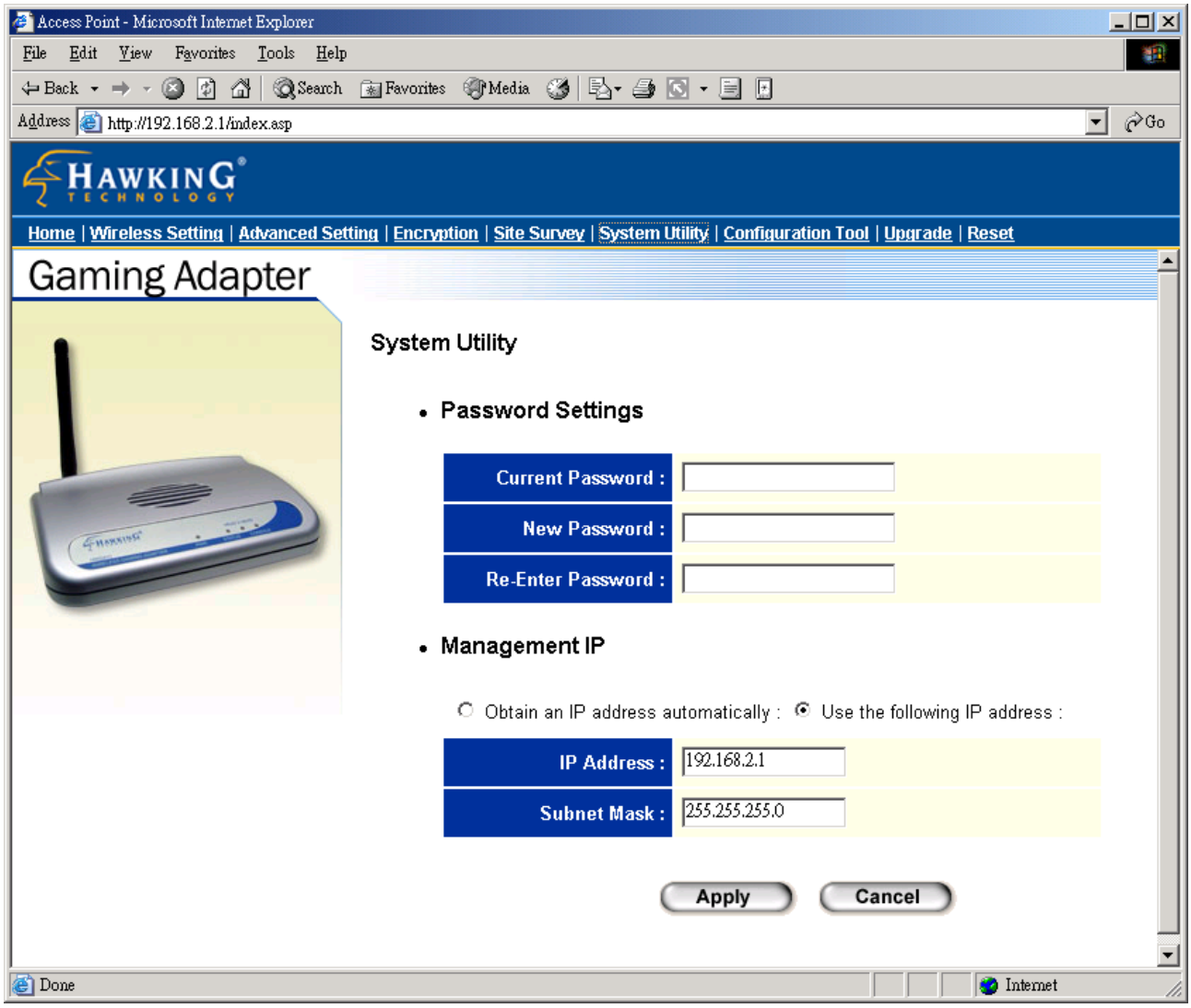
## 4.2.5 Wireless Site Survey

"Wireless Site Survey" searches for all available access points near by. You can select one access point listed in this table.



## 4.2.6 System Utility

From here, you can define the Gaming Adapter's IP Address and Login Password.



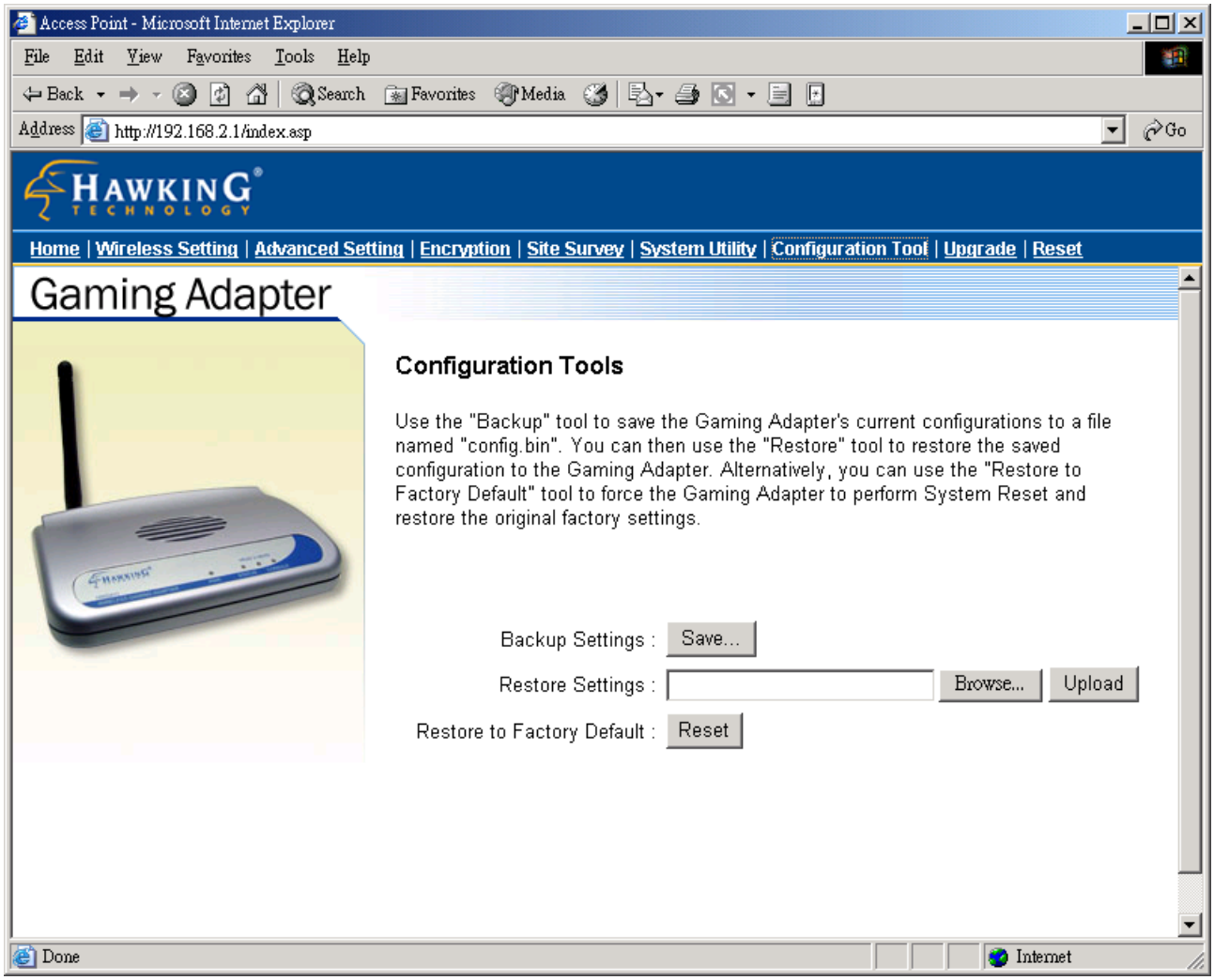

| Parameter | Description |
|---|---|
| Current Password | Enter the current password (up to 15-digit alphanumeric string) of the Gaming Adapter. The default password for the Gaming Adapter is **1234**. Note that the password is case-sensitive. |
| New Password | Enter the password (up to 15-digit alphanumeric string) you want to login to the Gaming Adapter. Note that the password is case-sensitive. |
| Re-Enter Password | Reconfirm the password (up to 15-digit alphanumeric string) you want to |

| | |
|---|---|
| | login to the Gaming Adapter. Note that the password is case-sensitive. |
| Management IP | You can select “Obtain an IP address automatically” to let this Gaming Adapter get an IP from DHCP server. If you want to manual assign an IP to this Gaming Adapter, select “Use the following IP address”. |
| IP Address | Designate the Gaming Adapter’s IP Address. This IP Address should be unique in your network. The default IP Address is **192.168.2.1**. |
| Subnet Mask | Specify a Subnet Mask for your LAN segment. |

Click **Apply** button at the bottom of the screen to save the above configurations. You can now configure other advance sections or start using the Gaming Adatper.

## 4.2.7 Configuration Tool

The Configuration Tools screen allows you to save (**Backup**) the Gaming Adapter's current configuration setting. Saving the configuration settings provides an added protection and convenience should problems occur with the Gaming Adapter and you have to reset to factory default. When you save the configuration setting (Backup) you can re-load the saved configuration into the Gaming Adapter through the **Restore** selection. If extreme problems occur you can use the **Restore to Factory Default** selection, this will set all configurations to its original default settings (e.g. when you first purchased the Gaming Adapter).

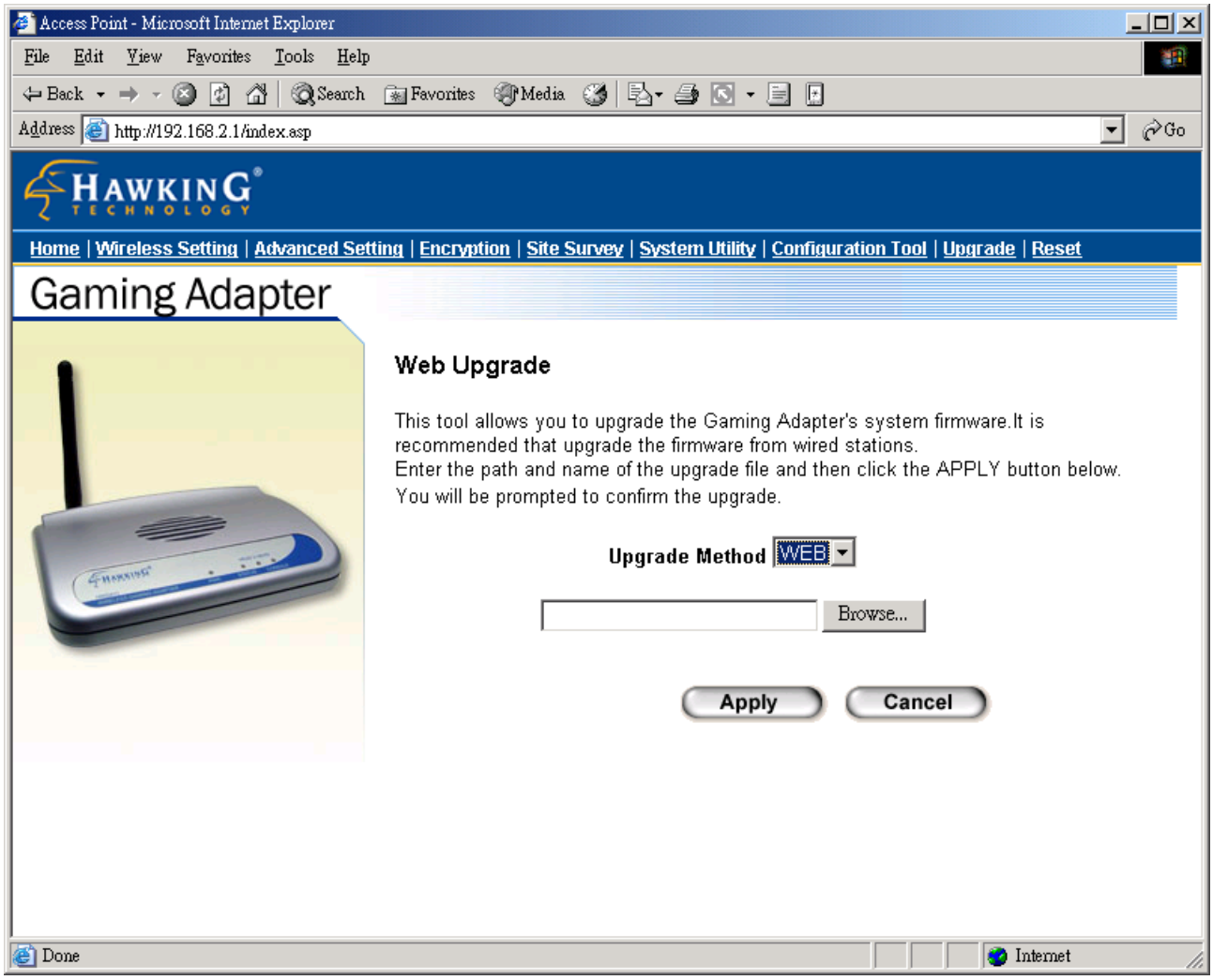



| Parameter | Description |
|---|---|
| Configuration Tools | Use the "**Backup**" tool to save the Gaming Adapter's current configuration to a file named "config.bin" on your PC. You can then use |

| | |
|---|---|
| | the "**Restore**" tool to upload and restore the saved configuration to the Gaming Adapter. Alternatively, you can use the "**Restore to Factory Default**" tool to force the Gaming Adapter to perform a power reset and restore the original factory settings. |

## 4.2.8 Firmware Upgrade

This page allows you to upgrade the Gaming Adapter's firmware.

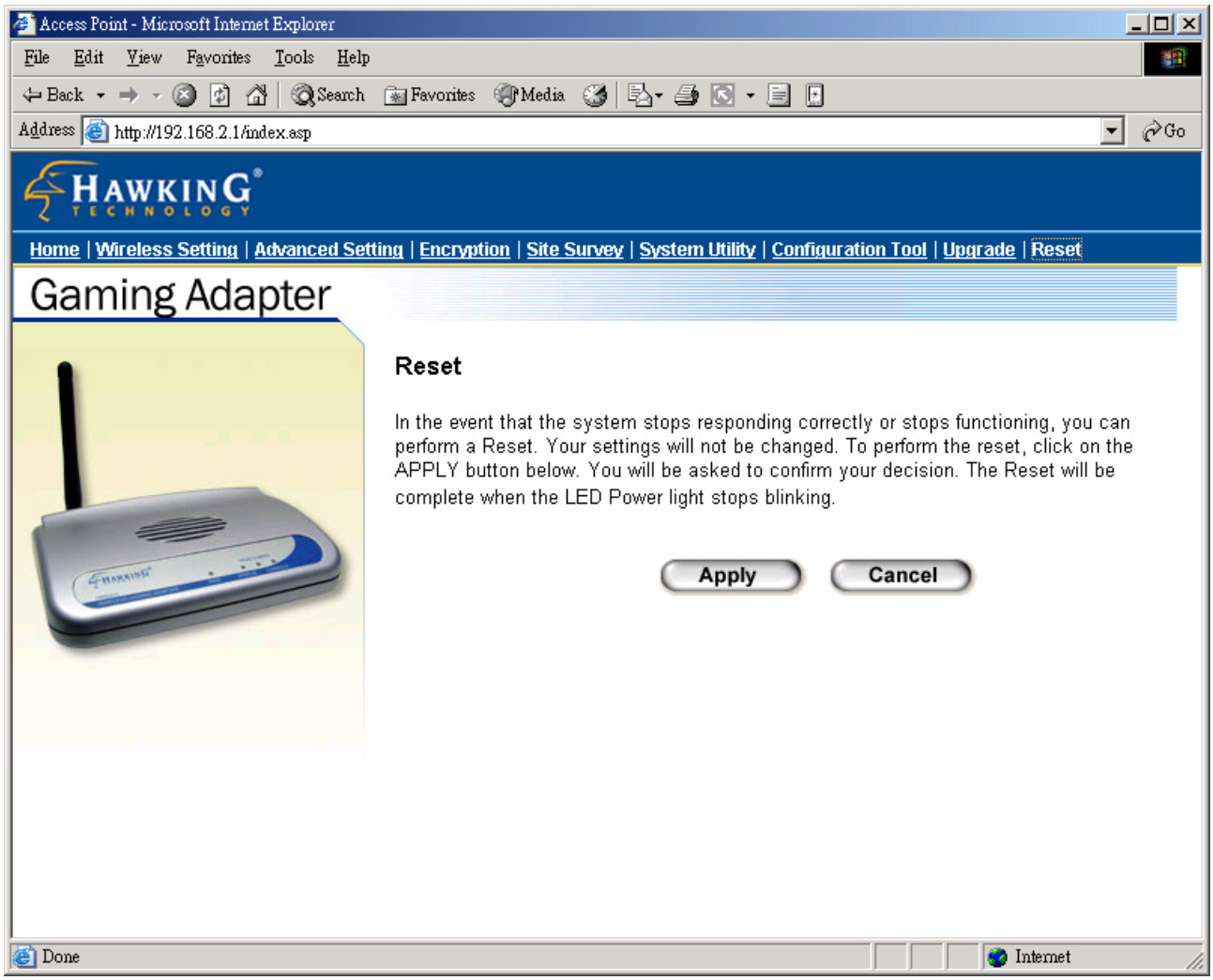



| Parameter | Description |
|---|---|
| Firmware Upgrade | This tool allows you to upgrade the Gaming Adapter's system firmware. To upgrade the firmware of your Gaming Adapter, you need to download the firmware file to your local hard disk, and enter that file name and path in the appropriate field on this page. You can also use the **Browse** button to find the firmware file on your PC. Please reset the Gaming Adapter when the upgrade process is complete. |

Once you've selected the new firmware file, click **Apply** button at the bottom of the screen to start the upgrade process. (You may have to wait a few minutes for the upgrade to complete). Once the upgrade is complete you can start using the Gaming Adapter.

## 4.2.9 Reset

You can reset the Gaming Adapter's system should any problem exist. The reset function essentially Re-boots your Gaming Adapter's system.




| Parameter | Description |
|---|---|
| Reset | In the event that the system stops responding correctly or in some way stops functioning, you can perform a reset. **Your settings will not be changed**. To perform the reset, click on the **Apply** button. You will be asked to confirm your decision. Once the reset process is complete you may start using the Gaming Adapter again. |

# Chapter 5 Troubleshooting

This chapter provides solutions to problems usually encountered during the installation and operation of the Gaming Adapter.

**1. How to manually find your PC's IP and MAC Address?**

1) In Windows, open the Command Prompt program
2) Type **Ipconfig /all** and **Enter**
   - Your PC's IP address is the one entitled **IP address**
   - Your PC's MAC Address is the one entitled **Physical Address**

**2. What is Ad-hoc?**

An Ad-hoc wireless LAN is a group of computers, each with a WLAN adapter, connected as an independent wireless LAN.

**3. What is Infrastructure?**

An integrated wireless and wired LAN is called an Infrastructure configuration.

**4. What is BSS ID?**

A group of wireless stations and an Access Point compose a Basic Service Set (BSS). Computers in a BSS must be configured with the same BSSID.

**5. What is ESSID?**

An Infrastructure configuration could also support roaming capability for mobile workers. More than one BSS can be configured as an Extended Service Set (ESS). Users within an ESS could roam freely between BSSs while maintaining a continuous connection to the wireless network stations and the Wireless LAN Access Points.

**6. Can data be intercepted while transmitting through the air?**

WLAN features two-fold protection in security. On the hardware side, as with Direct Sequence Spread Spectrum technology, it has the inherent scrambling security feature. On the software side, the WLAN series offers the encryption function (WEP) to enhance security and access control.

**7. What is WEP?**

WEP stands for Wired Equivalent Privacy, a data privacy mechanism based on a 64(40)-bit shared key algorithm.

**8. What is a MAC Address?**

The Media Access Control (MAC) address is a unique number assigned by the manufacturer to any Ethernet networking device, such as a network adapter, that allows the network to identify it at the hardware level. For all practical purposes, this number is usually permanent. Unlike IP addresses, which can change every time a computer logs on to the network, the MAC address of a device stays the same, making it a valuable identifier for the network.

**FCC Warning Statement**

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.

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 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.

**Prohibition of co-location**

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter

**Safety Information**

To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body. Use on the supplied antenna.

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

**Declaration of Conformity for R&TTE directive 1999/5/EC**

Essential requirements – Article 3
Protection requirements for health and safety – Article 3.1a
Testing for electric safety according to EN 60950 has been conducted. These are considered relevant and sufficient.

Protection requirements for electromagnetic compatibility – Article 3.1b
Testing for electromagnetic compatibility according to EN 301 489-1 and EN 301 489-17 has been conducted. These are considered relevant and sufficient.

Effective use of the radio spectrum – Article 3.2
Testing for radio test suites according to EN 300 328- 2 has been conducted. These are considered relevant and sufficient.

**CE Mark Warning**

This is a Class B product, in a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.