Siselectron
TECHNOLOGY

User Manual

SWE1210

Multi Function Access Point

Siselectron TECHNOLOGY

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1 Introduction

The **SWE1210** is a Gigabit wired multi-functioned 802.11b/g/n product with 3 major functions. It is designed to operate in every working environment for enterprises.

The SWE1210 is a Wireless Network device that delivers up to 6x faster speeds and 7x extended coverage than 802.11b/g devices. The SWE1210 supports use in the home/office network with superior throughput, performance, and unparalleled wireless range.

To protect data during wireless transmissions, the SWE1210 encrypts all wireless transmissions through WEP data encryption and supports WPA/WPA2 encryption. Its MAC address filter allows users to select stations to access the network. The SWE1210 is an ideal product to ensure network safety for both home and SMB environments.

1.1 Features and Benefits

Features	Benefits
High Speed Data Rate Up to 300Mbps	**Capable of handling heavy data payloads such as MPEG video streaming.**
10/100/1000 Fast Ethernet	**Support up to 1Gbps networking speed.**
IEEE 802.11n draft Compliant and backward compatible with 802.11b/g	**Fully compatible with IEEE 802.11b/g/n devices.**
Multi-Function, 3 functions	**Allowing users to select AP, WDS AP or WDS Bridge mode in various applications.**
Point-to-point, Point-to-multipoint Wireless Connectivity	**Allow transferring data from building to building.**

Support Multi-SSID function (4 SSID) in AP mode	**Allows clients to access different networks through a single access point and assign different policies and functions for each SSID through the built in software.**
WPA2/WPA/ IEEE 802.1x support	**Powerful data security.**
MAC address filtering in AP mode	**Ensuring secure network connection.**
User isolation support (AP mode)	**Protecting the private network between client users.**
Power-over-Ethernet (IEEE802.3af)	**Flexible Access Point locations and saving cost.**
Save User Settings	**Firmware upgrade does not delete user settings.**
SNMP Remote Configuration Management	**Allows remote connection to configure or manage the SWE1210 easily.**
QoS (WMM) support	**Enhancing user performance and density.**

1.2 Package Contents

The package contains the following items. In case of return, please keep the original box set, and the complete box set must be included for full refund.

- SWE1210
- 12V/1A 100V~240V Power Adapter
- RJ-45 Ethernet LAN Cable
- CD-ROM with User's Manual
- Quick Guide

1.3 System Requirements

The following are the minimum system requirements in order configure the device.

- Computer with an Ethernet interface or Wireless Network.
- Windows, Mac OS, or Linux based operating systems.
- Web-Browsing Application (example: Internet Explorer, FireFox, Safari, or other similar software)

1.4 Applications

Access Point products are easy to install and highly efficient. The following list describes some of the many applications made possible through the power and flexibility of the use of Wireless Access Points:

a) **Difficult-to-Wire Environments**

There are many situations where wires cannot be laid easily. Historic buildings, older buildings, multiple buildings, and/or open areas make the installation of a Wired LAN impossible, impractical, and/or expensive.

b) **Temporary Workgroups**

Consider situations in open areas such as parks, athletic arenas, exhibition centers, temporary offices, and construction sites where one wants a temporary Wireless LAN established and easily removed.

c) **The Ability to Access Real-Time Information**

Doctors/Nurses, Point-of-Sale Employees, and/or Warehouse Workers can access real-time information while dealing with patients, serving customers, and/or processing information.

d) **Frequently changed environments**

Show rooms, meeting rooms, retail stores, and manufacturing sites where the network connection needs to frequently be taken down.

e) Small Office and Home Office (SOHO) Networks

SOHO users need a cost-effective, easy and quick installation of a small network.

f) Wireless Extensions to Ethernet networks

Network managers in dynamic environments can minimize the overhead caused by moves, extensions to networks, and other changes with wireless LANs.

g) Wired LAN backup

Network managers implement wireless LANs to provide backup for mission-critical applications running on wired networks.

h) Training/Educational facilities

Training sites at corporations and students at universities use wireless connectivity to ease access to information, information exchanges, and learning.

2 Before you Begin

This section will guide you through the installation process. Placement of the Siselectron SWE1210 is very important to maximize the SWE1210's performance. Avoid placing the SWE1210 in an enclosed space such as a closet, cabinet, or wardrobe.

2.1 Considerations for Wireless Installation

The operating distance of all wireless devices cannot be pre-determined due to a number of unknown obstacles in the environment that the device is deployed in. These could be the number, thickness, and location of walls, ceilings, or other objects that the wireless signals must pass through. Here are some key guidelines to ensure that you have the most optimal wireless range.

- Keep the number of walls and/or ceilings between the SWE1210 and other network devices at minimum. Each wall and/or ceiling can reduce the signal strength, resulting in lower signal strength.

- Building materials makes a difference. A solid metal door and/or aluminium stubs may have a significant negative effect on the signal strength of the SWE1210. Locate your wireless devices carefully so the signal can pass through a drywall and/or open doorways. Materials such as glass, steel, metal, concrete, water (example: fish tanks), mirrors, file cabinets, and/or brick can also lower your wireless signal strength.

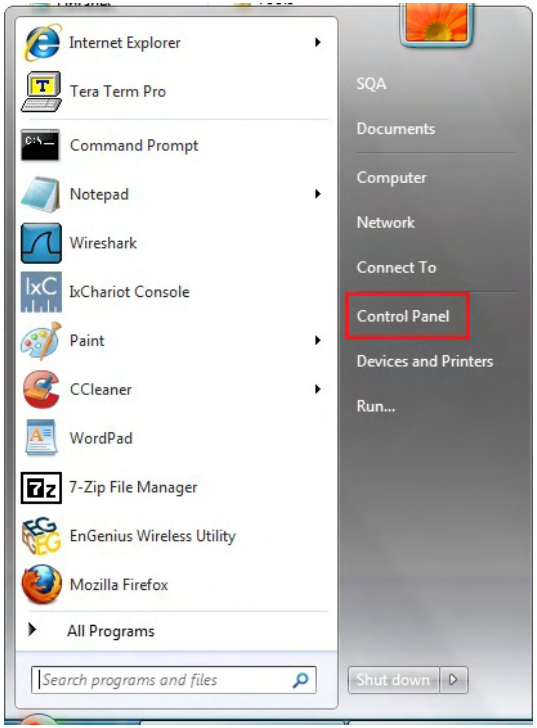
- Interferences can also come from other electrical devices and/or appliances that generate RF noise. The most usual types are microwaves and cordless phones.

2.2 Computer Settings (Windows XP/Windows 7)

In order to use the SWE1210, you must configure the TCP/IPv4 connection of your computer system.

- Click **Start** button and select **Control Panel**.

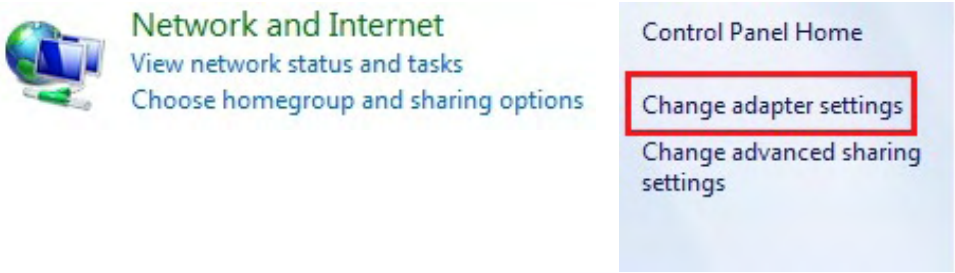
Windows XP



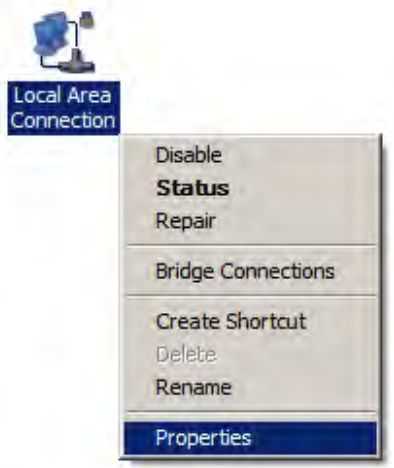
Windows Vista/Windows 7

- In **Windows XP**, click **Network Connections**

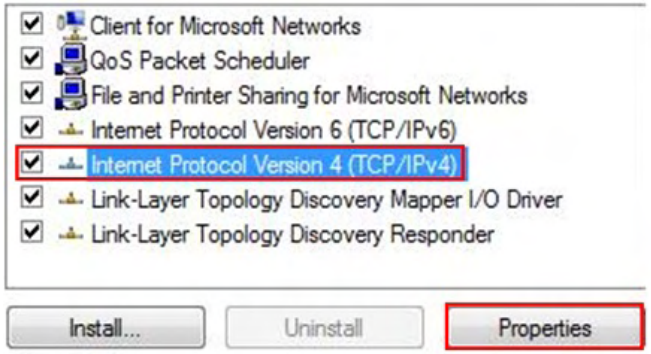
- In **Windows 7**, click **View Network Status and Tasks** in the **Network and** Internet section, then select **Change Adapter Settings**



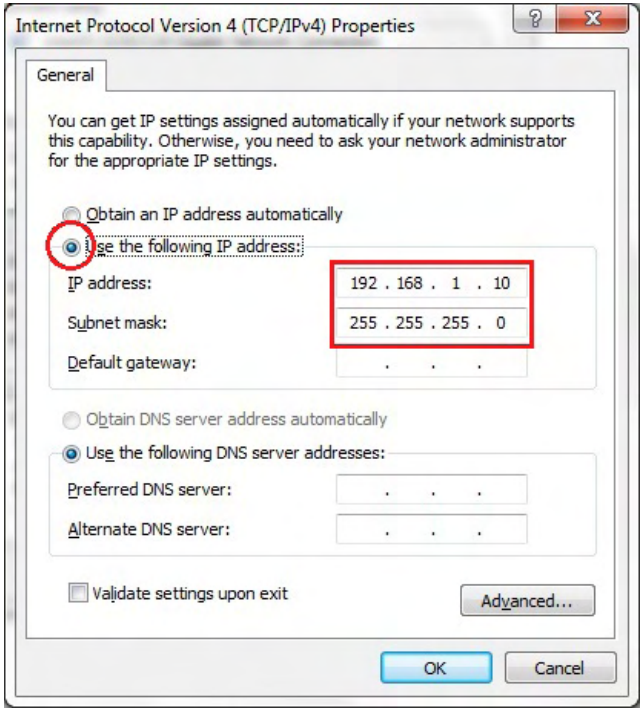
- Right click on **Local Area Connection** and select **Properties**



- Highlight **Internet Protocol Version 4 (TCP/IPv4)** and select **Properties**



- Select **Use the following IP address** and enter IP address and subnet mask then press **OK**.
  Note: Ensure that the IP address and subnet mask are on the same subnet as the device.
  For example: Device IP address: 192.168.1.1
  PC IP address: 192.168.1.2 - 192.168.1.999
  PC subnet mask: 255.255.255.0

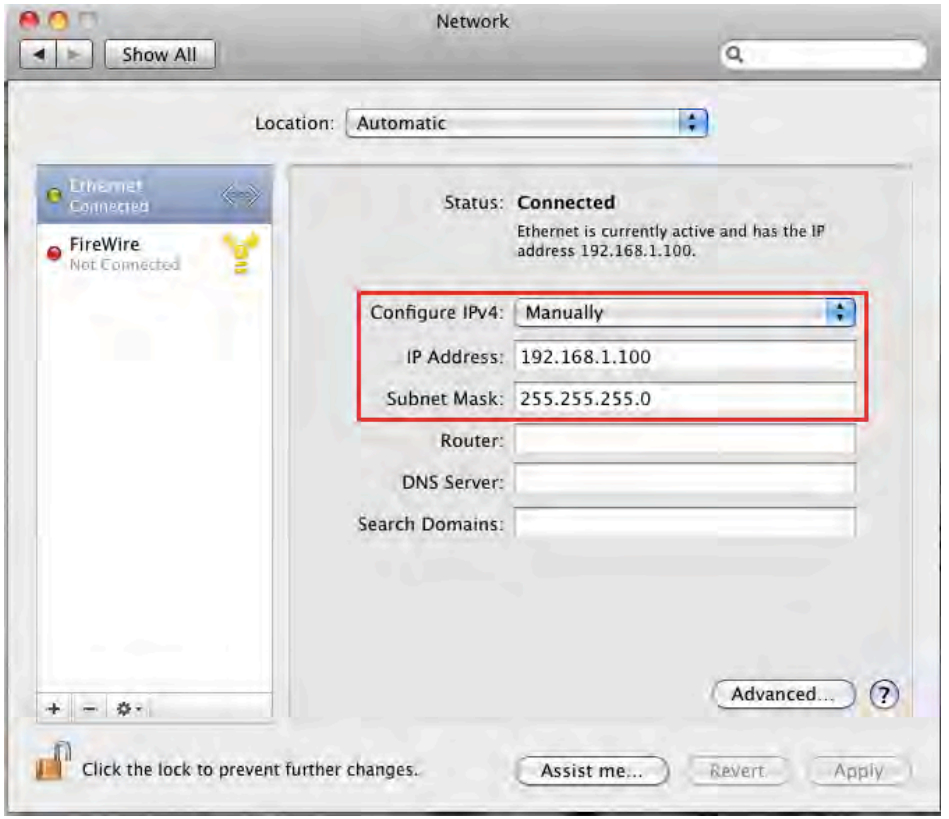


2.3 Apple Mac X OS

- Open the **System Preferences** (can be opened in the **Applications** folder or selecting it in the Apple Menu)
- Select **Network** in the **Internet & Network** section
- Highlight **Ethernet**
- In **Configure IPv4**, select **Manually**
- Enter IP address and subnet mask then press **OK**.

  Note: Ensure that the IP address and subnet mask are on the same subnet as the device.

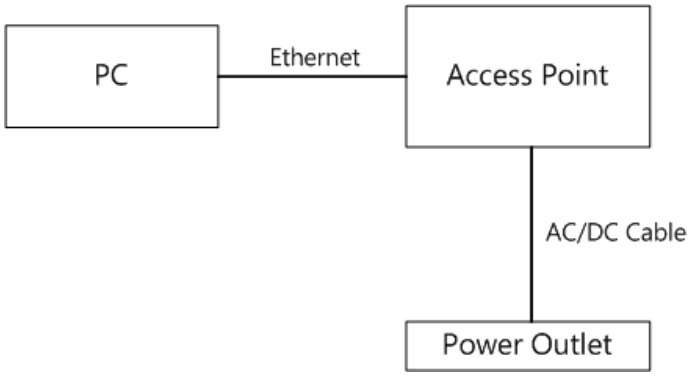
  For example: Device IP address: 192.168.1.1
  PC IP address: 192.168.1.2 - 192.168.1.999
  PC subnet mask: 255.255.255.0
- Click **Apply** when done.



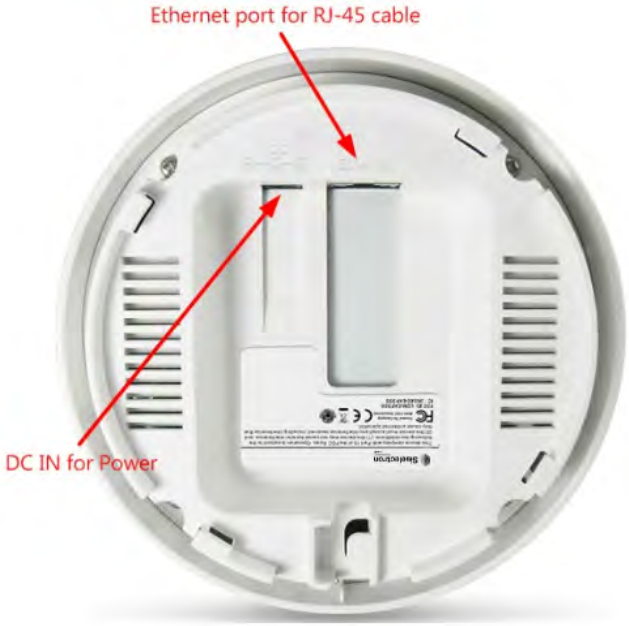
2.4 Hardware Installation

1) Ensure that the computer in use has an Ethernet Card (RJ-45 Ethernet Port). For more information, verify with our computer user manual.
2) Connect one end of the Category 5 Ethernet cable into RJ-45 port of the SWE1210 and the other end to the RJ-45 port on the computer that will use the SWE1210. Ensure that the cable is securely connected to both the SWE1210 and the Computer.
3) Connect the Power Adaptor DC Inlet to the **DC-**IN port of the SWE1210 and the Power Adaptor to the electrical out. Once both connections are secure, verify the following:
    a) Ensure that the **Power** light is on (it will be blue).
    b) Ensure that the **Wireless** light is on (it will be blue).
    c) Ensure that the **LAN (Computer/SWE1210 Connection)** light is on (it will be blue).
    d) Once all three lights are on, proceed to setting up the computer.

This diagram depicts the hardware configuration.



Front Panel



Rear Panel

Front Panel	
Reset Button	Press and hold the "Reset" button by 10 seconds to reset SWE1210 to factory default.
LED Lights	LED lights for Wireless, Ethernet LAN port, and Power.
Rear Panel	
DC IN	DC IN for Power.
Ethernet Port	Ethernet port for RJ-45 cable.

3 Configuring Your Access Point

This section will show you how to configure the device using the web-based configuration interface.

3.1 Default Settings

Please use your Ethernet port or wireless network adapter to connect the Access Point.

Default Settings

IP Address	192.168.1.1
Username / Password	admin / admin
Operation Mode	Access Point
Wireless SSID	Siselectronxxxxxx
Wireless Security	None

Note: xxxxxx represented in the wireless SSID above is the last 6 characters of your device MAC Address. This can be found on the device body label and is unique for each device.

3.2 Web Configuration

- Open a web browser (Internet Explorer/Firefox/Safari) and enter the IP Address: **http://192.168.1.1**

  Note: If you have changed the default LAN IP Address of the Access Point, ensure you enter the correct IP Address.

- The default username and password are **admin**. Once you have entered the correct username and password, click the **Login** button to open the web-base configuration page.

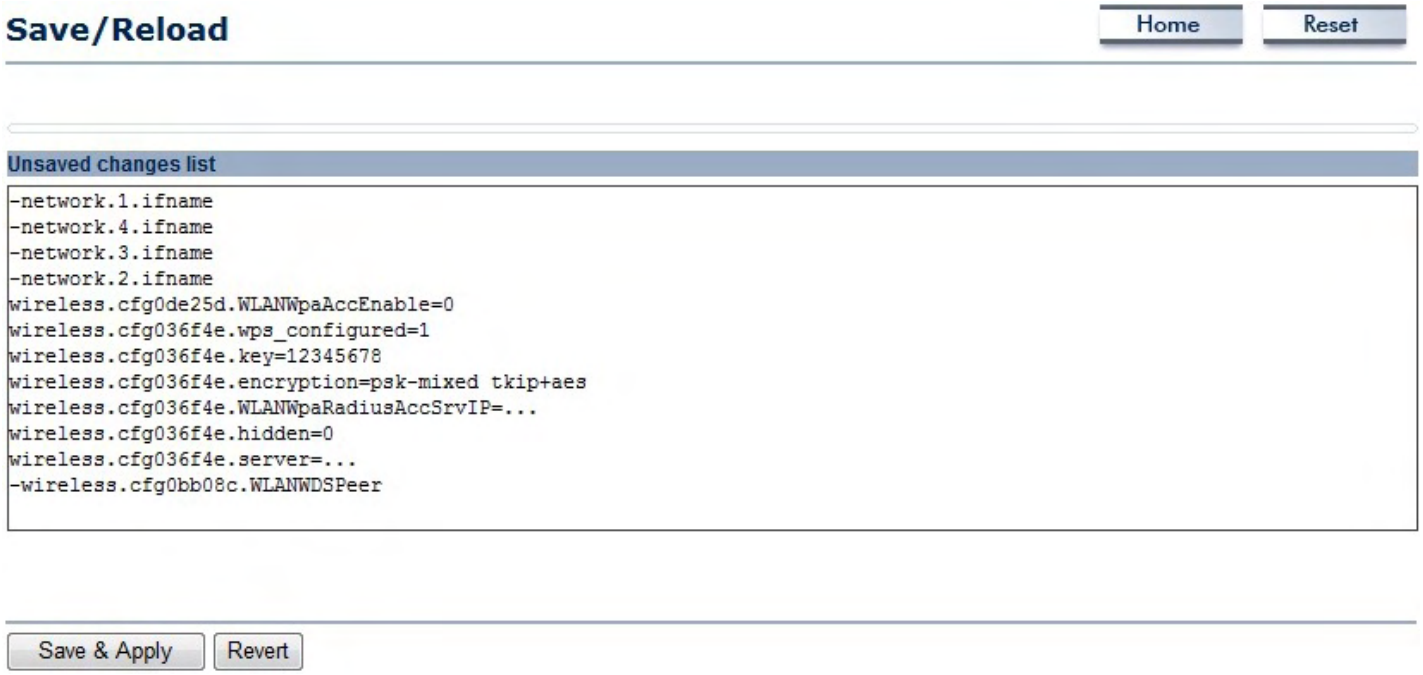
- If successful, you will see the SWE1210 User Menu

4 Status

The **Status** section contains the following options: Save/Reload, Main, Wireless Client List, and System Log. The following sections describe these options.

4.1 Save/Reload

This page let you save and apply settings shown under **Unsaved changes list**, or allow you to cancel unsaved changes and revert to the previous settings that were in effect.



4.2 Main

Clicking the **Main** link under the **Status** menu or clicking **Home** at the top-right of the Web Configurator shows status information about the current operating mode.

- The **System Information** section shows general system information such as device name, MAC address, current time, firmware version and management VLAN ID.

System Information

Device Name	SWE1210	
Ethernet Main MAC Address	00:93:00:00:00:06	
Wireless MAC Address (SSID/MAC)	1	88:DC:96:41:CD:6C
	2	N/A
	3	N/A
	4	N/A
	5	N/A
	6	N/A
	7	N/A
	8	N/A
Country	United States	
Current Time	Wed Nov 25 08:19:48 UTC 2015	
Firmware Version	2.0.1	
Management VLAN ID	Untagged	

- The **LAN Settings** section shows Local Area Network setting such as the LAN IP address, subnet mask, and DNS address.

LAN Settings

IP Address	192.168.1.201
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
Primary DNS	0.0.0.0
Secondary DNS	0.0.0.0
DHCP Client	Disabled
IPv6 IP Address	None
IPv6 Link-Local Address	FE80::293:FF:FE00:6

- The **Current Wireless Settings** section shows wireless information such as operating mode, frequency and channel. Since the SWE1210 supports multiple-SSIDs, information about each SSID, such as its ESSID and security settings are displayed.

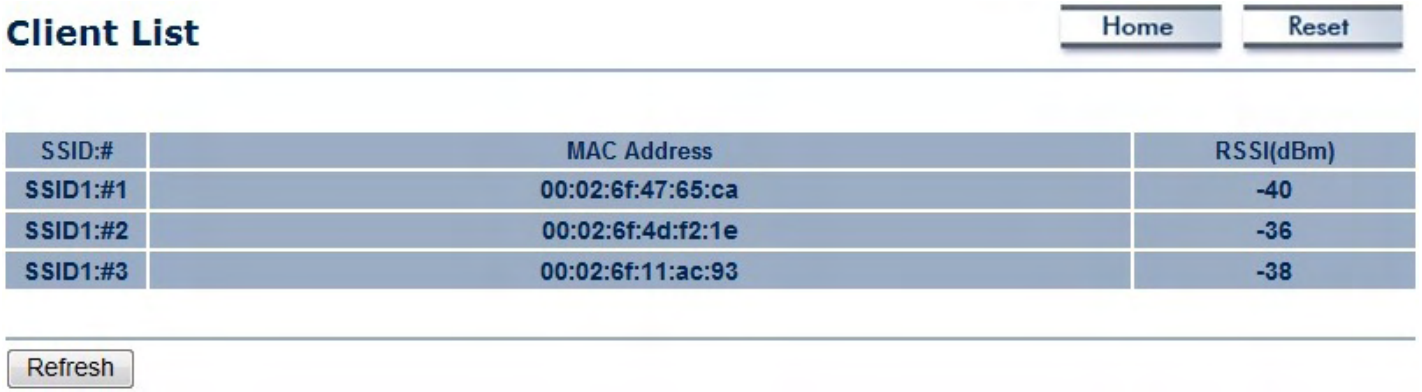
Current Wireless Settings

Operation Mode	Access Point	
Wireless Mode	IEEE 802.11b/g/n Mixed	
Channel Bandwidth	20-40 MHz	
Frequency/Channel	2.462 GHz (Channel 11)	
Profile Settings (SSID/Security/VID/802.1Q)	1	Siselectron000006/None/1/OFF
	2	N/A
	3	N/A
	4	N/A
	5	N/A
	6	N/A
	7	N/A
	8	N/A
Spanning Tree Protocol	Disabled	
RX(Packets)	522.534 KB (2603 PKts.)	
TX(Packets)	18.4907 MB (162769 PKts.)	

4.3 Wireless Client List

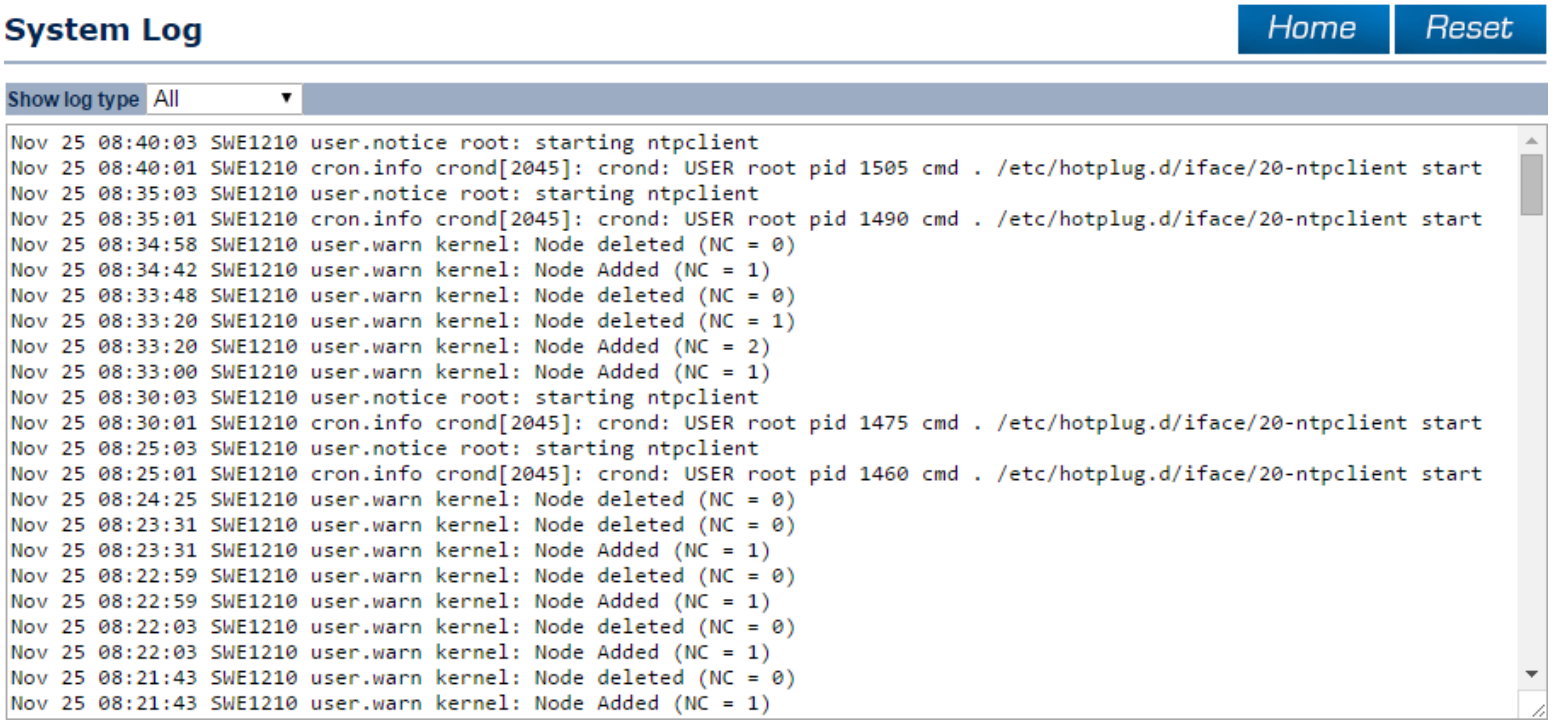
Clicking the **Wireless Client List** link under the **Status** menu displays the list of clients currently associated to the SWE1210, along with the MAC addresses and signal strength for each client. Clicking the [**Refresh**] button updates (refreshes) the client list.

Note: Only in Access Point and WDS AP mode.



4.4 System Log

The SWE1210 automatically logs (records) the system events and actions of the SWE1210. To view the logged information, click the **System Log** link under the **Status** menu. If there is not enough internal memory to log all events, older events will be deleted from the log. When powered down or rebooted, the log will be cleared.



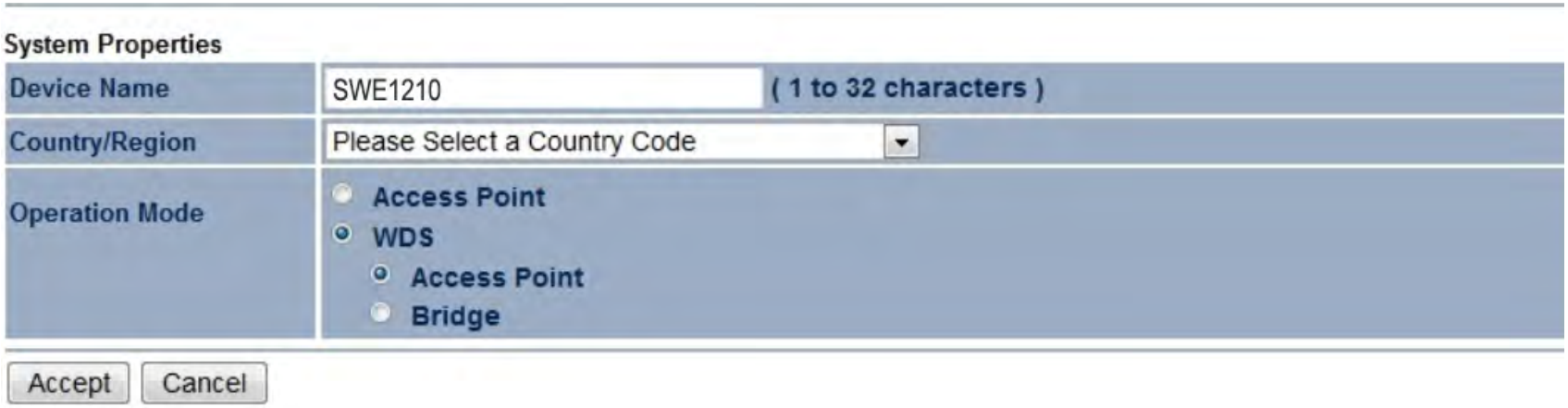
System Log	
Refresh	Update the log.
Clear	Clear the log.

5 System

5.1 Operation Mode

Each operating mode offers different features. In order to switch the operating mode, select it from the **Operation Mode** from the **System**. There are three operation modes: **Access Point**, **WDS AP**, and **WDS Bridge**.

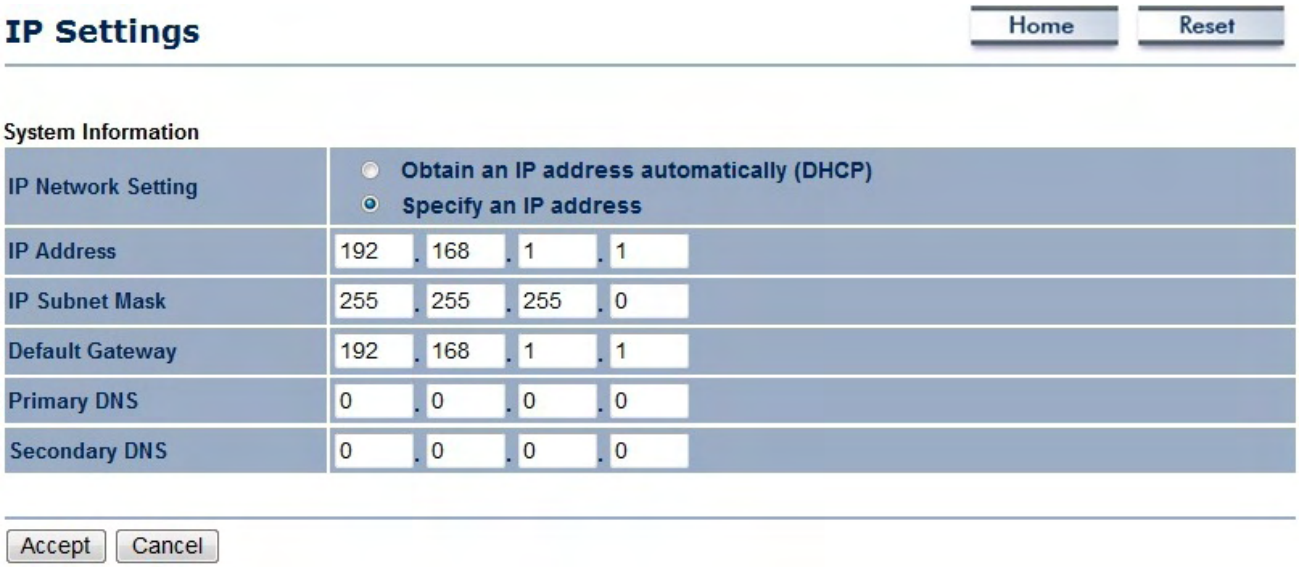
- **Access Point:** Allow devices to connect to the SWE1210 through a simple wireless connection.
- **WDS Access Point (Wireless Distribution Systems Access Point):** Interconnect access points to allow wireless communication wireless devices and access points among them.
- **WDS Bridge (Wireless Distribution Systems Bridge):** Interconnect access points to allow communication between access points only.



System Properties	
Device Name	Enter a name for the device. The name you type appears in SNMP management. This name is not the SSID and is not broadcast to other devices.
Country/Region	Select a Country/Region to conform to local regulations.
Operation Mode	Use the radio button to select an operating mode.
Accept / Cancel	Click [**Accept**] to confirm the changes or [**Cancel**] to cancel and return previous settings.

5.2 IP Settings

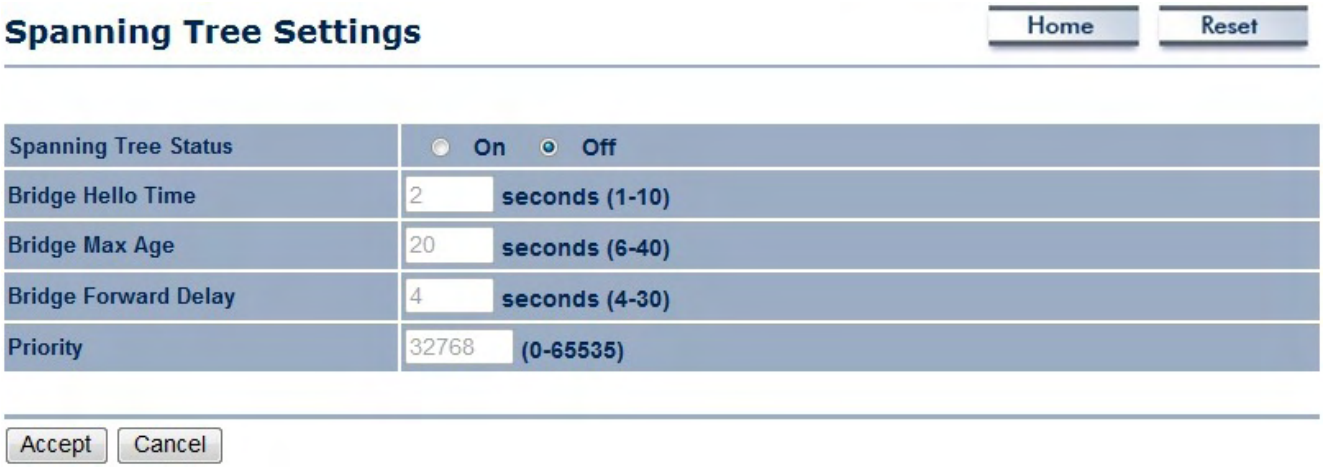
This page allows you to modify the device's IP settings.



IP Settings	
IP Network Setting	Select whether the device IP address will use static IP address specified in the IP Address field, or be obtained automatically when the device connects to a DHCP server.
IP Address	The IP Address of this device.
IP Subnet Mask	The IP Subnet Mask of this device.
Default Gateway	The Default Gateway of this device. Leave it blank if you are unsure of this setting.
Primary / Secondary DNS	The primary / secondary DNS address for this device.

5.3 Spanning Tree Setting

This page allows you to modify the Spanning Tree settings. Enabling Spanning Tree protocol will prevent network loops in your LAN network.



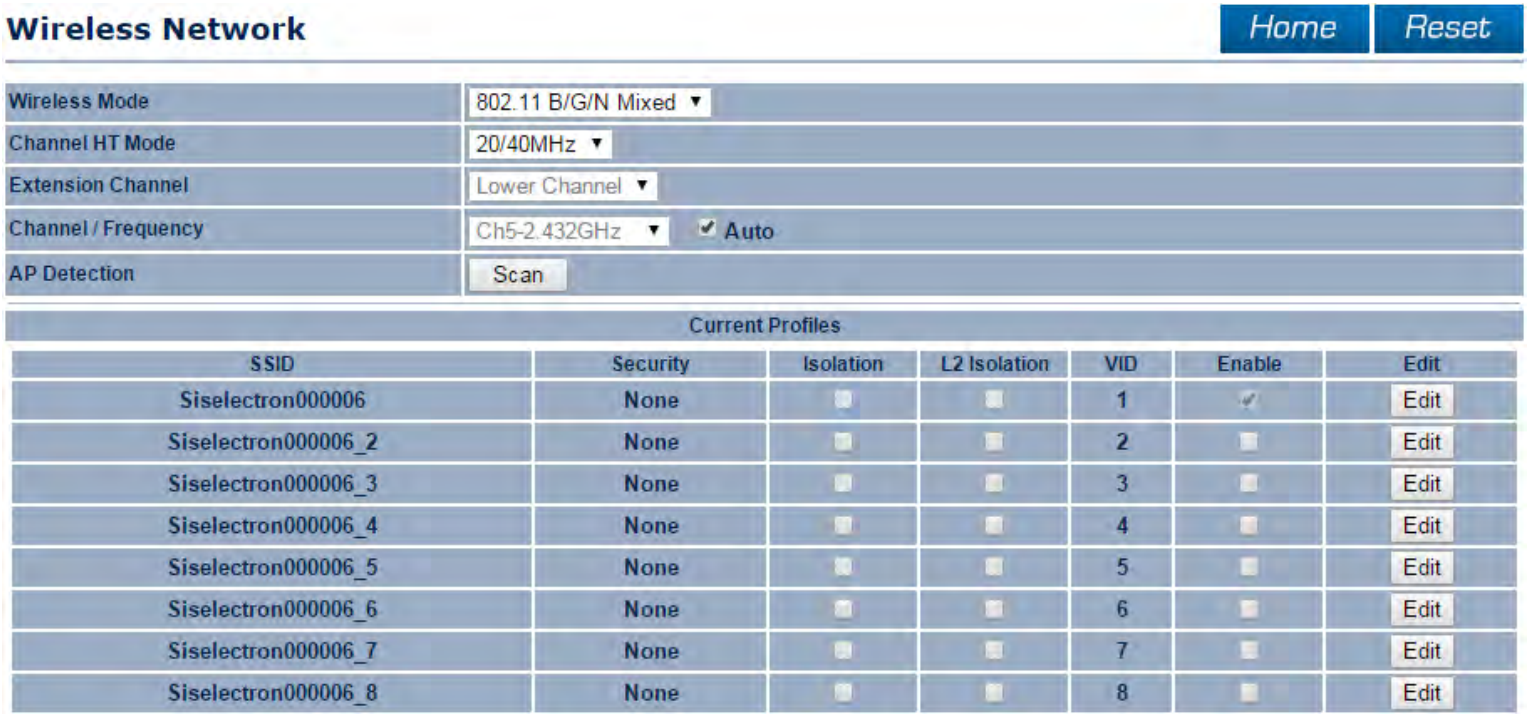
Spanning Tree	
Spanning Tree Status	Enable or disable the Spanning Tree function.
Bridge Hello Time	Specify Bridge Hello Time in seconds. This value determines how often SWE1210 sends hello packets and communicate information about the topology throughout the entire Bridged Local Area Network.
Bridge Max Age	Specify Bridge Max Age in seconds. If another bridge in the spanning tree does not send a hello packet for a long period of time, it is assumed to be dead.
Bridge Forward Delay	Specify Bridge Forward Delay in seconds. Forwarding Delay time is the time spent in each of the Listening and Learning states prior the Forwarding state was entered. This delay is provided so that when a new bridge comes on to a busy network, it looks at traffic info before participating.

Priority	Specify the Priority number. Smaller number has greater priority.
Accept / Cancel	Click [**Accept**] to confirm the changes or [**Cancel**] to cancel and return previous settings.

6 Wireless

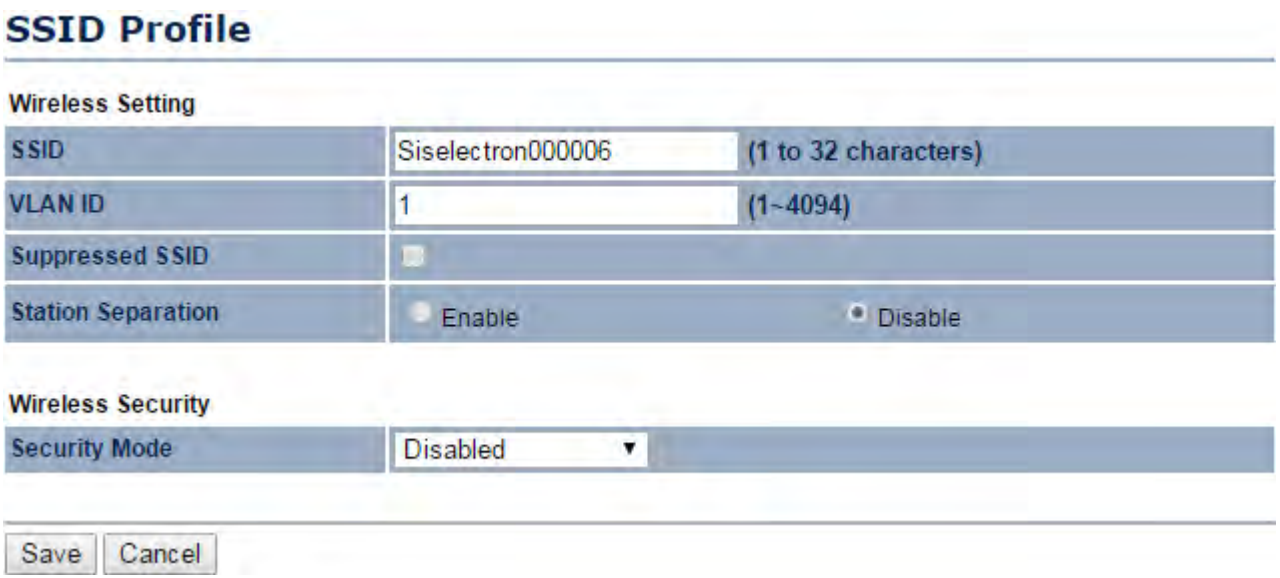
6.1 Wireless Network

This page displays the current status of the device's wireless configurations.



Wireless Network	
Wireless Mode	Wireless mode supports 802.11b/g/n mixed mode.
Channel HT Mode	The default channel bandwidth is 20/40MHz. The larger the channel, the better the transmission quality and speed.
Extension Channel	Select upper or lower channel. Your selection may affect the Auto channel function.
Channel / Frequency	Select the channel and frequency appropriate for your country's regulation.
Auto	Check this option to enable auto-channel selection.
AP Detection	AP Detection scans nearby wireless access point, and allows you to select the best channel.
Current Profile	It allows you to configure up to four different SSIDs. Click [**Edit**] to configure the profile and check whether you want to enable extra SSID.
Profile Isolation	By selecting this radio button, you can set up restriction for clients communicating with different VID.
Accept / Cancel	Click [**Accept**] to confirm the changes or [**Cancel**] to cancel and return to previous settings.

SSID Profile



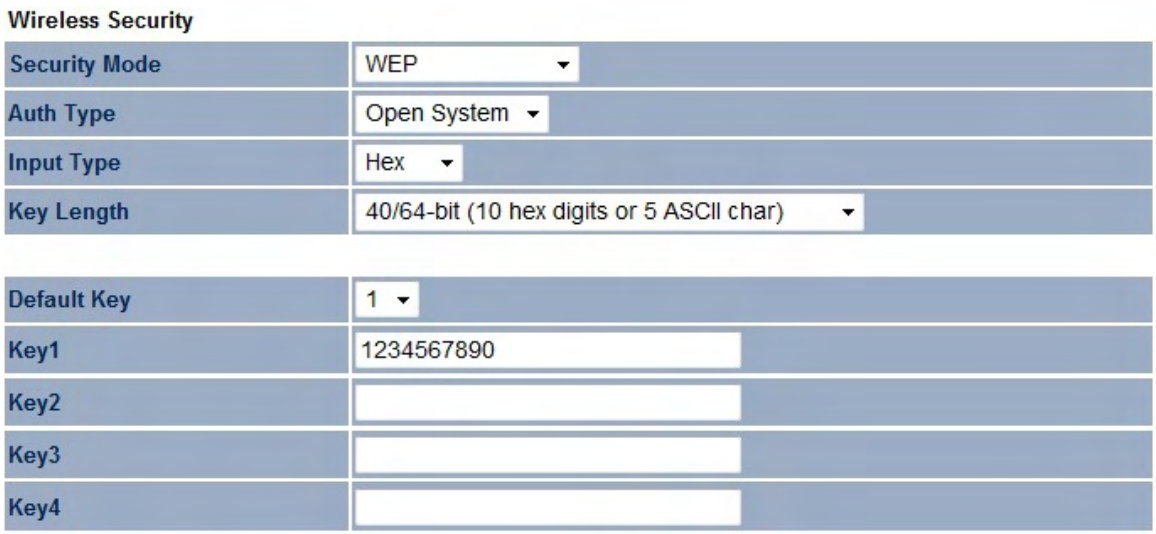
SSID Profile	
SSID	Specify the SSID for current profile.
VLAN ID	Specify the VLAN tag for the current profile.
Suppressed SSID	Allow you to hide the SSID from clients. If checked, the SSID will not appear in the site survey.
Station Separation	Allow or prevent communication between client devices.
Wireless Security	See the Wireless Security section.
Save / Cancel	Click [**Save**] to accept the changes or [**Cancel**] to cancel and return previous settings.

6.2 Wireless Security

The Wireless Security section allows you to configure the SWE1210's security modes: WEP, WPA-PSK, WPA2-PSK, WPA-PSK Mixed, WPA, WPA2, and WPA Mixed. We strongly recommend you use WPA2-PSK.

Note: Only in Access Point and WDS AP mode.

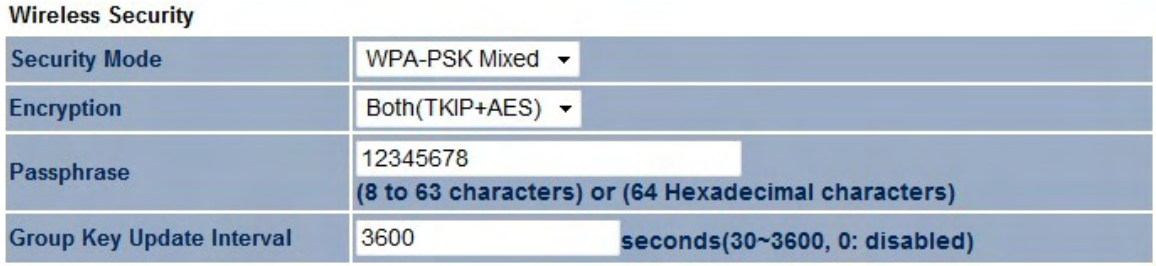
WEP Encryption:



WEP Encryption	
Authentication Type	Please ensure that your wireless clients use the same authentication type.
Key type	**ASCII**: Using characters from the ASCII standard (recommended) **HEX**: Uses hexadecimal characters.
Key Length	The amount of bits the WEP key will use. • **64 Bit** - data is encrypted, using the default key, before being transmitted. You must enter at least the default key. For 64 Bit Encryption, the key size is 10 chars in HEX (0~9 and A~F).

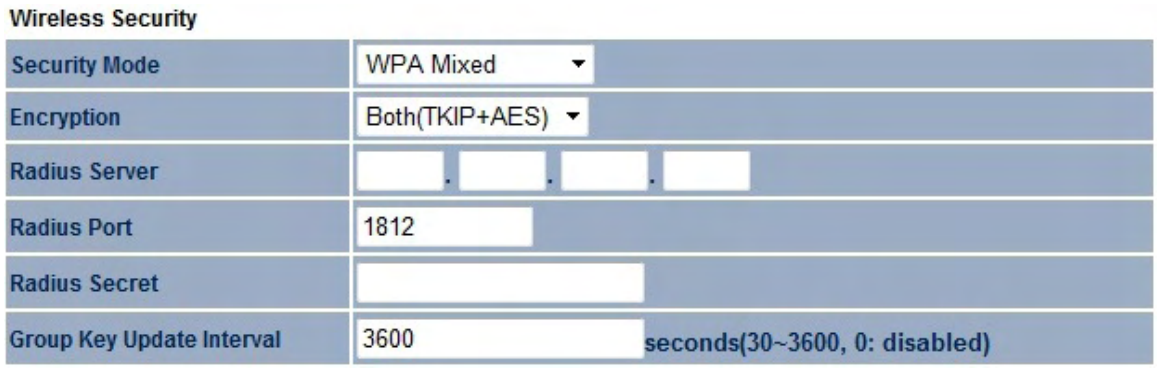
	• **128 Bit** - data is encrypted, using the default key, before being transmitted. You must enter at least the default key. For 128 Bit Encryption, the key size is 26 chars in HEX (0~9 and A~F).
Default Key	Select the key you wish to be the default. Transmitted data is ALWAYS encrypted using the Default Key; the other Keys are for decryption only. You must enter a **Key Value** for the **Default Key**.
Encryption Key #	Enter the key value or values you wish to use. Only the Key selected as Default is required. The others are optional.

WPA-PSK (WPA Pre-Shared Key) Encryption:



WPA Pre-Shared Key Encryption	
WPA type	Select the WPA encryption you would like. Please ensure that your wireless clients use the same settings. • **TKIP:** Uses a Pre-Shared Key with a dynamically generated key for each 128-bit packet. • **AES:** Government standard of WPA2 encryption. • **Both (TKIP+AES):** Allows the use of both WPA and WPA2 clients on the network.
Pre-shared Key Type	Pre-Shared Key format (ASCII or Hexadecimal).
Pre-shared Key	Wireless clients must use the same key to associate the device to the SWE1210. If using passphrase format, the Key must be from 8 to 63 characters in length.

WPA Encryption:



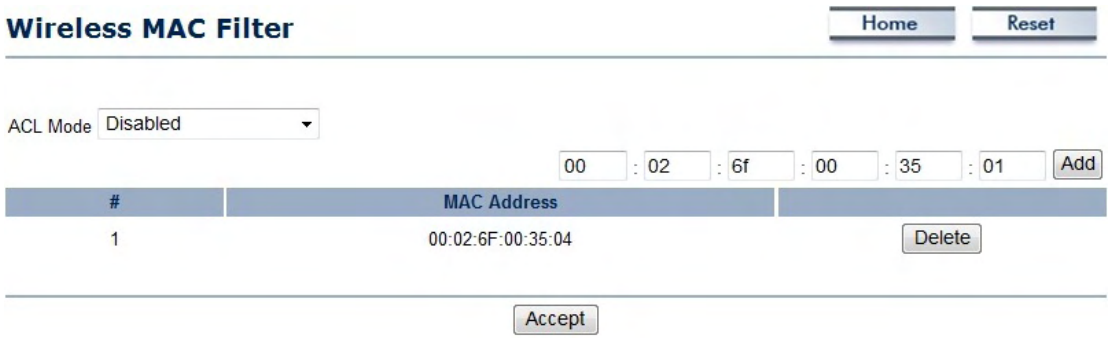
WPA RADIUS Encryption	
WPA type	Select the WPA encryption you would like. Please ensure that your wireless clients use the same settings. • **TKIP:** Uses a Pre-Shared Key with a dynamically generated key for each 128-bit packet. • **AES:** Government standard of WPA2 encryption. • **Both (TKIP+AES):** Allows the use of both WPA and WPA2 clients on the network.
RADIUS Server	Enter the IP address of the RADIUS Server.
RADIUS Server Port	Enter the port number used for connections to the RADIUS server.
RADIUS Secret	Enter the password required to connect to the RADIUS server.
Group Key Update Interval	Specify how often, in seconds, the group key changes.

Note: 802.11n does not allow WEP/WPA-PSK TKIP/WPA2-PSK TKIP security mode. The connection mode will change from 802.11n to 802.11g.

6.3 Wireless MAC Filter

Wireless MAC Filters are used to allow or deny network access to wireless clients according to their MAC addresses. You can manually add a MAC address to grand the permission to access SWE1210. The default setting is Disable Wireless MAC Filter.

Note: Only in Access Point and WDS AP mode.

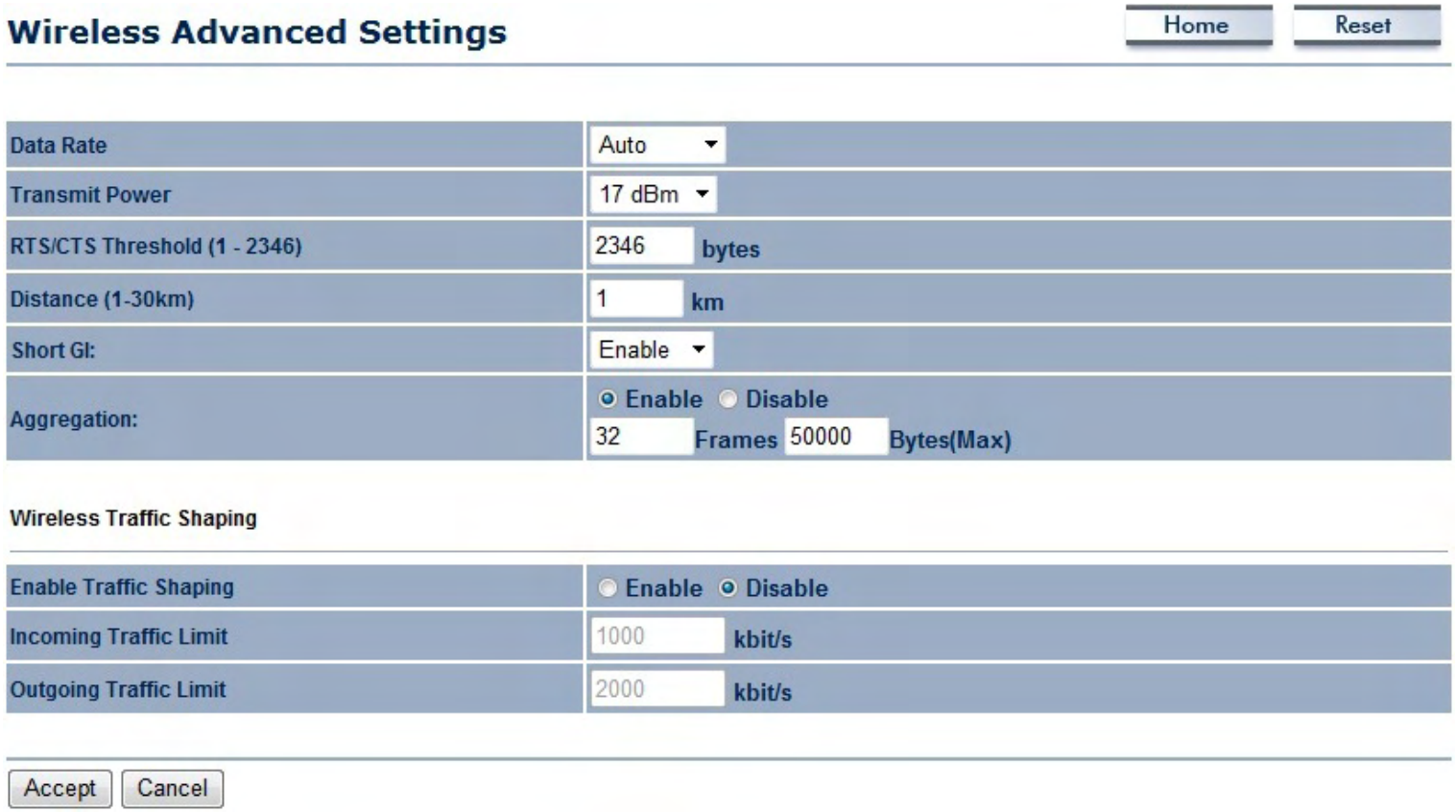


Wireless Filter (Access Point / WDS AP mode)	
ACL Mode	Determines whether network access is granted or denied to clients whose MAC addresses appear in the MAC Address table on this page. Choices are **Disable**, **Deny MAC in the list**, or **Allow MAC in the list**.
MAC Address	Enter the MAC address of the wireless client.
Add	Click **Add** to add the MAC address to the **MAC Address** table.
Delete	Delete the selected entries.
Apply	Click "Apply" to apply the changes.

6.4 Wireless Advanced

This page displays the advanced wireless options of the SWE1210.

It is recommended that the SWE1210's default settings are used unless the user has experience with advanced networking.



Wireless Advanced	
Data Rate	Select a data rate from the drop-down list. The data rate affects throughput. If you select a low data rate value, the throughput is reduced but the transmission distance increased.
Transmit Power	Set desired output power of the wireless signal.
RTS/CTS Threshold	Specify the threshold package size for RTC/CTS. A smaller number causes RTS/CTS packets to be sent more often and consumes more bandwidth.
Distance	Specify the distance between Access Points and clients. Longer distances may reduce high-speed connections.
Short GI	Sets the time that the receiver waits for RF reflections to settle out before sampling data. Using a short (400ns) guard interval can increase throughput, but it can also increase error rate in some installations due to increased sensitivity to radio-frequency reflections. Select the option that works best for your installation.
Aggregation	Merges data packets into one packet. This option reduces the number of packets, but increases packet sizes.
Wireless Traffic Shaping	Check this option to enable wireless traffic shaping. Traffic shaping regulates the flow of packets leaving an interface to deliver improved Quality of Service.
Incoming Traffic Limit	Specify the wireless transmission speed used for downloading.
Outgoing Traffic Limit	Specify the wireless transmission speed used for uploading.
Accept / Cancel	Click [**Accept**] to confirm the changes or [**Cancel**] to cancel and return previous settings.

6.5 WPS (Wi-Fi Protected Setup)

WPS feature follows the Wi-Fi Alliance WPS standard and it eases the setup of security-enabled Wi-Fi networks in home and/or small office environments.

It reduces the user steps required to configure a network and supports two methods that are familiar to most consumers to configure a network and enable security.

Note: Only in Access Point and WDS AP mode.

WPS

WPS	Enable Disable
WPS current status	Configured Release Configuration
Self Pin Code	31580700
SSID	Siselectron000006
Authentication Mode	None
Passphrase Key	
WPS Via Push Button	Start to Process
WPS Via Pin	Start to Process

Wi-Fi Protected Setup (WPS)	
WPS	Check to Enable or Disable the WPS feature.
WPS Current Status	Shows whether the WPS function is **Configured** or **Un-Configured**. Configured means that WPS has been used to authorize connection between the device and wireless clients.
Self Pin Code	The PIN code of this device.
SSID	The SSID (wireless network name) used when connecting using WPS.
Authentication Mode	Shows the encryption method used by the WPS process. This is set as the mode selected in the **Security** option in the **Wireless** menu.
Passphrase Key	This is the passphrase key that is randomly generated during the WPS process. It is required if wireless clients that do not support WPS attempts to connect to the wireless network.
WPS Via Push Button	Activate WPS using a push button.
WPS Via PIN	Activate WPS using the PIN code from the WPS device.

6.6 WDS Link Settings

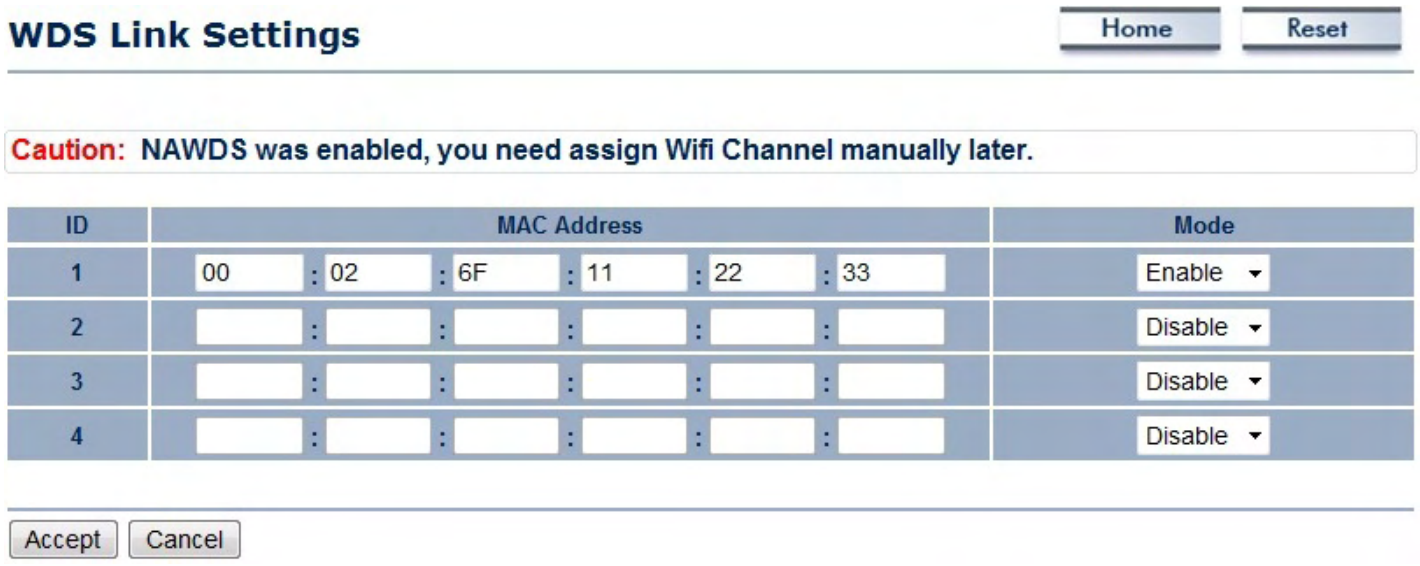
Using WDS (Wireless Distribution System) to connect Access Point wirelessly extends a wired infrastructure to locations where cabling is not possible or inefficient to implement.

Note: Compatibility between different brands and models of Access Point is not guaranteed. It is recommended that the WDS network be created using the same Access Point models for maximum compatibility.

Also, all Access Points in the WDS network needs to use the same Channel and Security settings.

To create a WDS network, please enter the MAC addresses of the Access Point that you want included in the WDS. There can be a maximum of four access points.

Note: Only in WDS AP and WDS Bridge mode.



WDS Link Settings	
MAC Address	Enter the Access Point's MAC address to which you want to extend the wireless area.
Mode	Select **Disable** or **Enable** from the drop-down list.
Accept / Cancel	Click [**Accept**] to confirm the changes or [**Cancel**] to cancel and return to previous settings.

7 Management

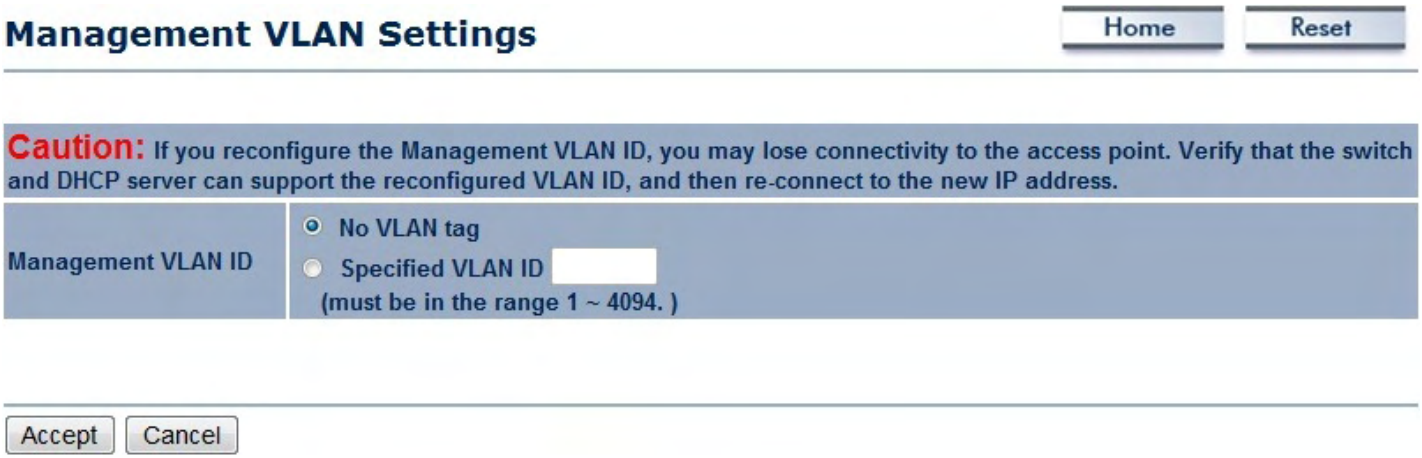
7.1 Administration

This page allows you to change the SWE1210 default password. By default, the user name is **admin** and the password is: **admin**. Password can contain 0 to 12 alphanumeric characters and is case sensitive.

Change Password	
Name	Enter a new username for logging in to SWE1210 web user interface.
Password	Enter a new password for logging in to SWE1210 web user interface.
Confirm Password	Re-enter the new password for confirmation.
Save/Apply / Cancel	Click **Save/Apply** to apply the changes or **Cancel** to return previous settings.

7.2 Management VLAN

This page allows you to assign a VLAN tag to the packets. A VLAN is a group of computers on a network whose software has been configured so that they behave as if they were on a separate Local Area Network (LAN), regardless of their physical location.



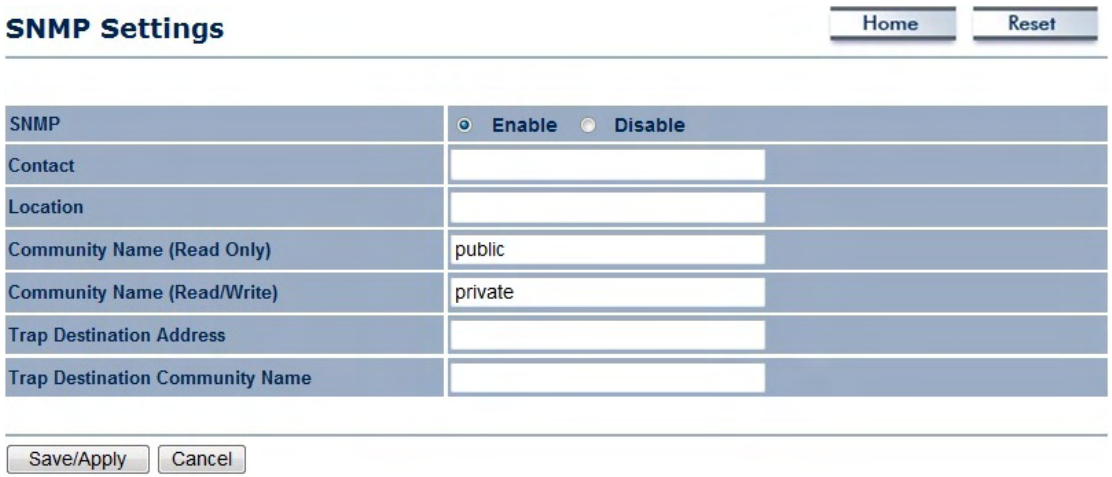
Management VLAN	
Management VLAN ID	Enter the VLAN ID if your network includes VLANs and if tagged packets need to pass through the Access Point. Otherwise, click **No VLAN tag**.
Accept / Cancel	Click **Accept** to confirm the changes or **Cancel** to cancel and return to previous settings.

Note:

1. If you reconfigure the Management VLAN ID, you may lose your connection to the SWE1210. Verify that the DHCP server supports reconfigured VLAN ID, and then reconnect to the SWE1210 using the new IP address.
2. Clicking **Accept** does not apply the changes. To apply them, use Status > Save/Reload (see section 4.1).

7.3 SNMP

The **SNMP** section of the **Management** menu allows you to assign the contact details, location, community name, and trap settings for the Simple Network Management Protocol (SNMP). The SNMP is a networking management protocol used to monitor network-attached devices. SNMP allows messages (called protocol data units) to be sent to various parts of a network. Upon receiving these messages, SNMP-compatible devices (Agents) return data stored in their Management Information Bases.

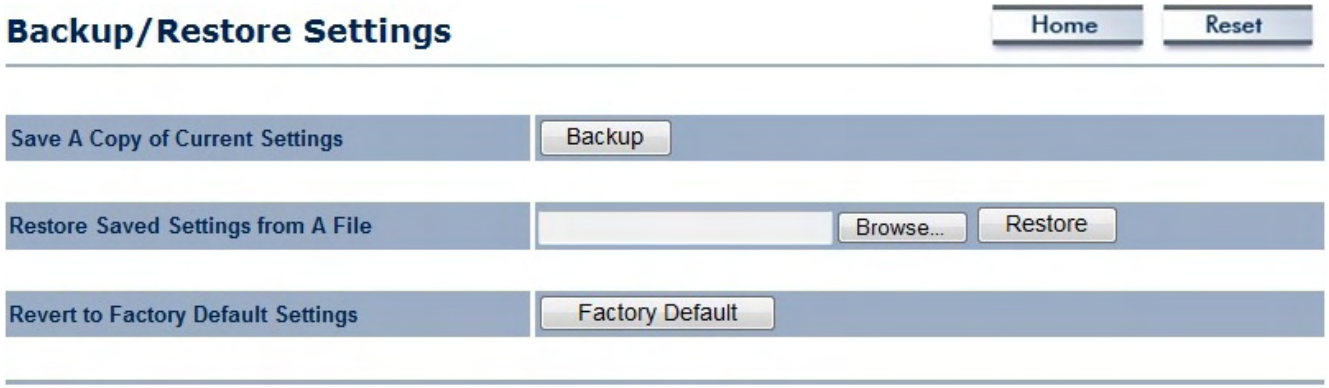


SNMP	
SNMP Enable/Disable	Enable or disable SNMP feature.
Contact	Specify the contact details of the device
Location	Specify the location of the device.
Community Name (Read Only)	Specify the password for access the SNMP community for read only access.

Community Name (Read/Write)	Specify the password for access to the SNMP community with read/write access.
Trap	
Trap Destination Address	Specify the IP address of the computer that will receive the SNMP traps.
Trap Destination Community Name	Specify the password for the SNMP trap community.

7.4 Backup/Restore

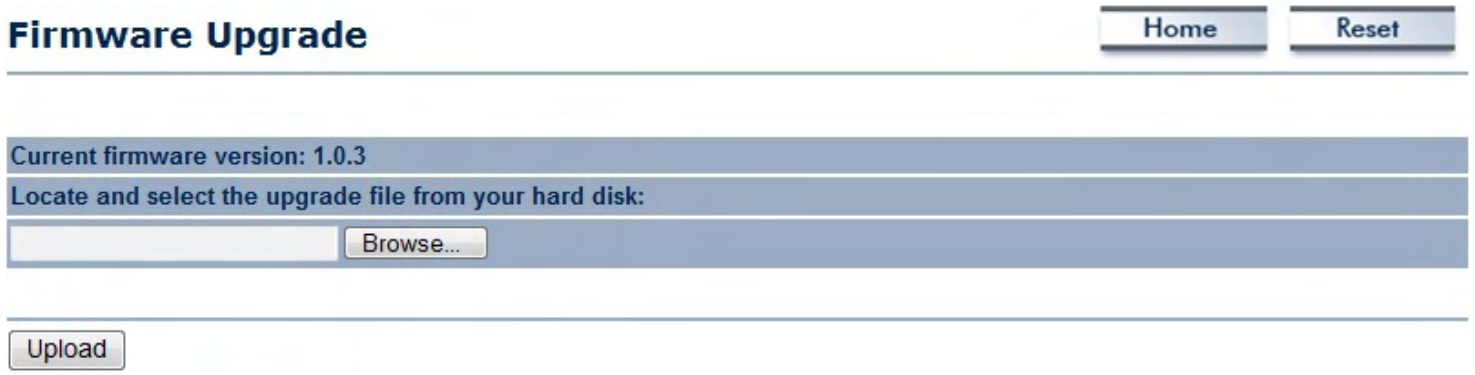
This page allows you to save the current SWE1210 configurations. Once you saved the configurations, you can also re-load the saved configurations into the device through the [**Restore Saved Settings from A File**]. You may also use the [**Revert to Factory Default Settings**] to set all configurations to its original default settings.



Backup/Restore	
Save A Copy of Current Settings	Click [**Backup**] to save current configured settings.
Restore Saved Settings from A File	To restore to previously saved settings, click [**Browse**], select the file, and click [**Restore**].
Revert to Factory Default Settings	Click [**Factory Default**] button to restore the SWE1210 to its factory default settings.

7.5 Firmware Upgrade

This page allows you to upgrade the device's firmware.



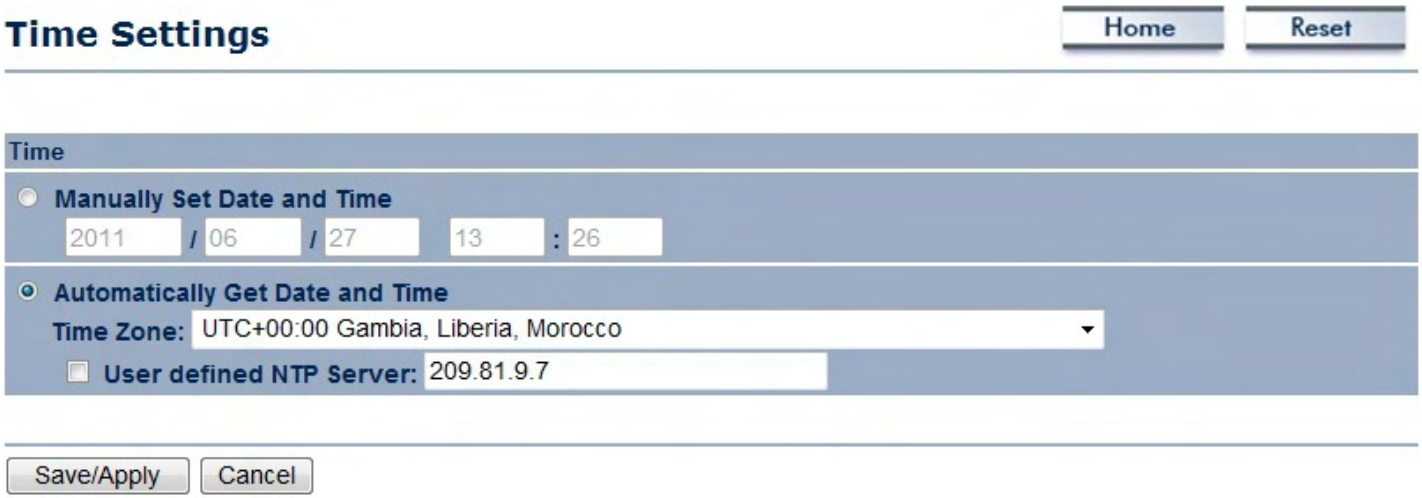
To perform the Firmware Upgrade:

1. Download the firmware version that you want to install into the SWE1210 and place it in a known location.
2. Click the [**Browse**] button and navigate to the location of the firmware upgrade file.
3. Select the upgrade file. Its name will appear in the ***Upgrade File*** field.
4. Click the [**Upload**] button to commence the firmware upgrade.

Note: The device is unavailable during the upgrade process, and must restart when the upgrade is completed. Any connections to or through the device will be lost.

7.6 Time Setting

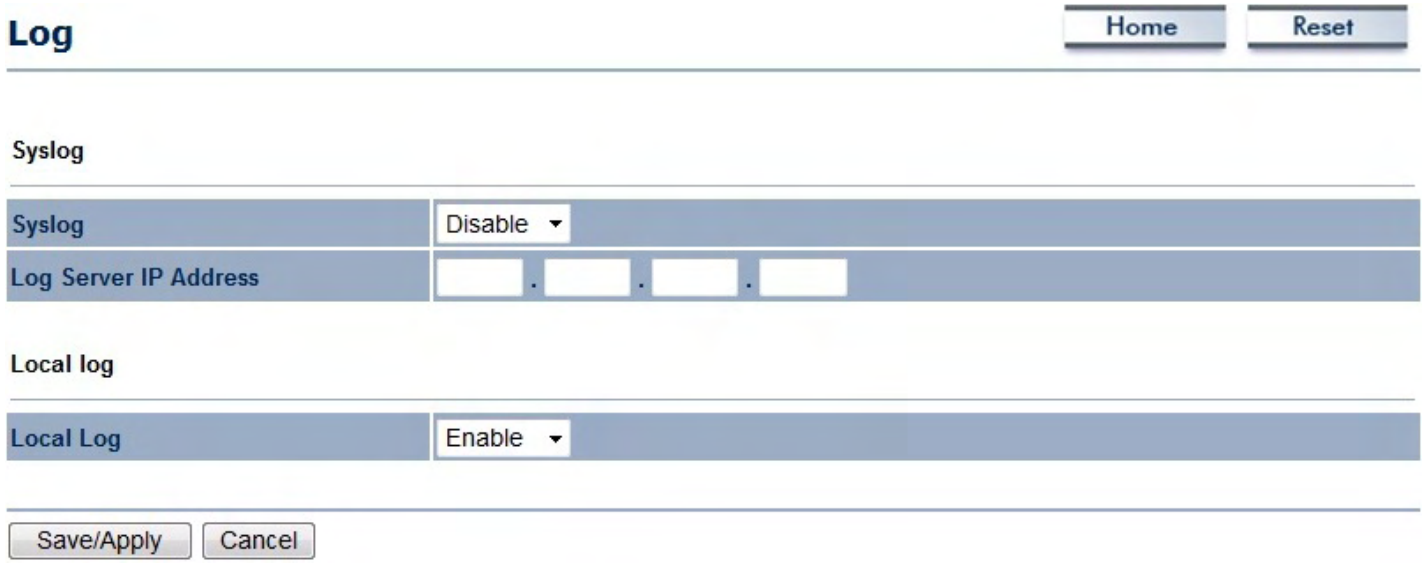
This page allows you to set the system time.



Time	
Manually Set Date and Time	Manually specify the date and time.
Automatically Get Date and Time	Select a time zone from the drop-down list and check whether you want to enter the NTP server IP address or use the default NTP server.

7.7 Log

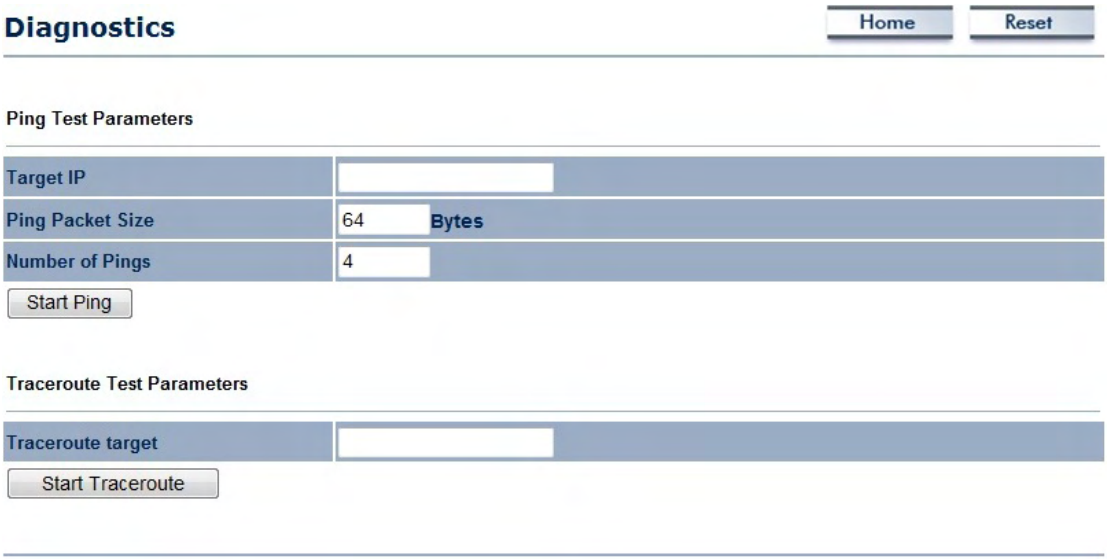
This page allows you to setup Syslog and local log functions.



Log	
Syslog	Enable or disable the syslog function.
Log Server IP Address	Enter IP address of the log server.
Local Log	Enable or disable the local log service.
Save/Apply / Cancel	Click **Save/Apply** to apply the changes or **Cancel** to return to previous settings.

7.8 Diagnosis

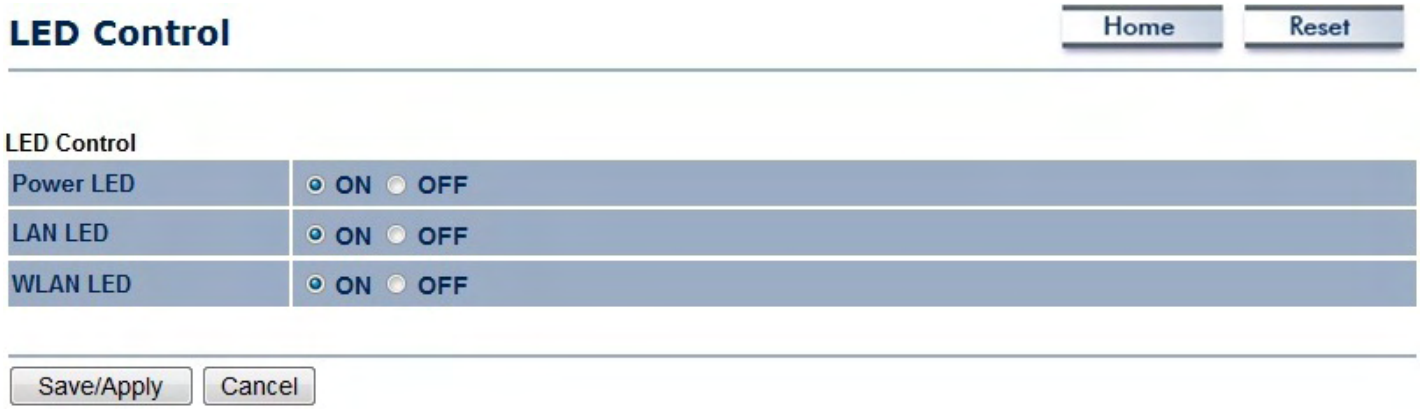
This page allows you to ascertain connection quality and trace the routing table to the target.



Diagnosis	
Target IP	Enter the IP address you would like to search.
Ping Packet Size	Enter the packet size of each ping.
Number of Pings	Enter the number of times you want to ping.
Start Ping	Click [**Start Ping**] to begin pinging.
Traceroute Target	Enter an IP address or domain name you want to trace.
Start Traceroute	Click [**Start Traceroute**] to begin the trace route operation.

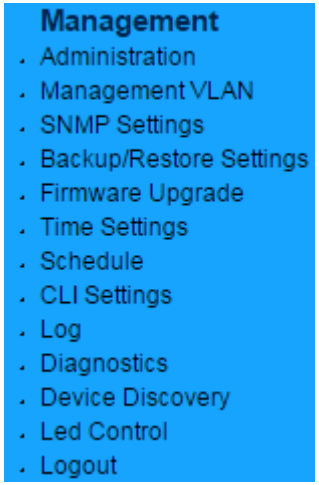
7.9 LED Control

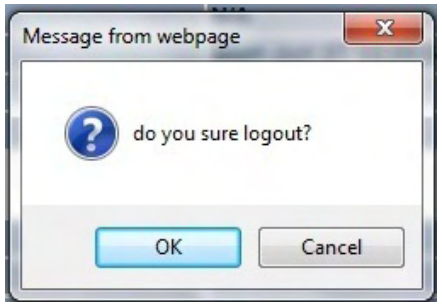
This page allows you to control LED on/off for Power, LAN interface and WLAN interface.



7.10 Logout

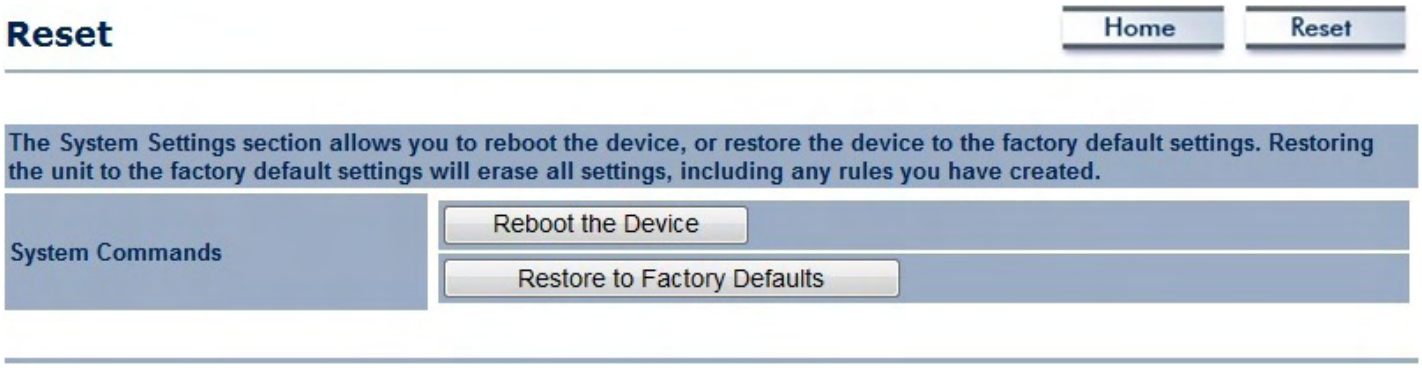
Click [**Logout**] in **Management** menu to logout.





7.11 Reset

In some circumstances it may be required to reboot the device. Click on [**Reboot the Device**] to reboot.



8 Building a Wireless Network

With its ability to operate in various operating modes, your SWE1210 is the ideal device for building your WLAN. This appendix describes how to build a WLAN around your SWE1210 using the device's operation modes.

8.1 Access Point Mode

In Access Point Mode, SWE1210 behaves likes a central connection for stations or clients that support IEEE 802.11b/g/n networks. Stations and client must be configured to use the same SSID and security password to associate with the SWE1210. The SWE1210 supports four SSIDs at the same time for secure guest access.

8.2 Access Point Mode with WDS Function (WDS AP mode)

The SWE1210 also supports WDS AP mode. This operation mode allows wireless connections to the SWE1210 by using WDS technology. In this mode, configure the MAC addresses in both Access Points to extend the wireless coverage area by enabling WDS Link settings. WDS supports up to four AP MAC addresses.

8.3 WDS Bridge Mode

In WDS Bridge Mode, the SWE1210 can wirelessly connect to different LANs by configuring the MAC address and security settings of each SWE1210 device. Use this mode when two wired LANs located in a short distance apart and want to communicate with each other. The best solution is to use the SWE1210 to wirelessly connect two wired LANs, as shown in the following figure.

WDS Bridge Mode can establish up to four WDS links, creating a star-like network.

Note: WDS Bridge Mode is different than Access Point mode. Access Points linked by WDS mode are using the same frequency channel. By having more access point connected together, it may lower throughput. Please be aware to avoid loop in your wireless connection, otherwise enable Spanning Tree function.

FCC Interference 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 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.

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

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

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

CE 0560

E s	ereby S se e tr Te y td de arates t at t e SWE 2 20 s a e w t t e esse t a re re e tsa d t er re e a ts r s s D re t e 1 E
Es a S a s	r ed de a rese te S se e tr Te y td de ara e e SWE 2220 e s re s t s ese a es y a es era tras d s s es a ab es e b es de a d re t a 1 E