



**2.4GHz IEEE 802.11g 54/108Mbps
Wireless LAN Access Point**

GW-AP54SGX

Planex Communications Inc.

CONTENTS

Chapter 1	Introduction.....	3
1.1	Features.....	3
1.2	Package Contents.....	3
Chapter 2	Product Overview.....	4
2.1	Front View.....	4
2.2	Rear View.....	4
2.3	System Requirements.....	5
Chapter 3	Hardware Installation.....	5
Chapter 4	System Configuration.....	6
4.1	Browser Configuration.....	6
4.1.1	Disable Proxy Connection.....	6
4.1.2	Internet Explorer (5 or above).....	6
4.1.3	Internet Explorer (For Macintosh).....	6
4.2	Navigating the Web Browser Interface.....	7
4.2.1	Current Status.....	8
4.2.2	Setup Wizard.....	8
4.2.3	Advanced Setup.....	10
4.2.3.1	Configuration.....	10
4.2.3.2	Management.....	18
4.2.3.3	Maintenance.....	19
4.2.4	Statistics.....	20
Chapter 5	Specifications.....	23
Chapter 6	Safety Statement.....	24

Chapter 1 Introduction

The 2.4 GHz IEEE 802.11g 54Mbps Wireless LAN Access Point (GW-AP54SGX) offers fast, reliable wireless connectivity with considerable cost savings over wired LANs (eliminates long-term maintenance overhead for cabling). Just install enough wireless access points to cover your network area, plug wireless cards into your notebooks or install wireless adapters into your desktops, and start networking. Moreover, moving or expanding your network is as easy as moving or installing additional access points – no wires!

1.1 Features

- Provide Ethernet to Wireless LAN bridge fully IEEE 802.3 compatible on the Ethernet side and fully interoperable with IEEE 802.11b/g compliant equipment.
- Compatible with IEEE 802.11b high rate standard to provide wireless 11Mbps data rate
- Compatible with IEEE 802.11g Draft higher speed standard to provide wireless 54Mbps data rate, and the turbo mode of 108Mbps (For USA)
- Operation at 2.4~2.5GHz to meet worldwide regulations
- Allows auto fallback data rate for reliability, optimized throughput and transmission range
- Supports IEEE 802.11 b/g wireless data encryption with 64/128/152-bit WEP for security
- Web-based configuration and management
- Dual diversity antennas for the multi-path environment
- Supports enhanced security – WPA, 802.1x, RADIUS client, and Cipher negotiation, and AES
- Supports DFS/TPC for European operations
- Supports 10/100M Ethernet port
- Type approval compliant with USA, Japan, and Europe regulation

1.2 Package Contents

- GW-AP54SGX
- 5V DC Power Adapter
- Antenna
- RJ-45 UTP Cable
- CD-ROM (User's Manual)
- Quick Installation Guide
- Warranty Card

Inform your dealer if there are any incorrect, missing, or damaged parts. If possible, retain the carton, including the original packing materials. Use them again to repack the product in case there is a need to return it.

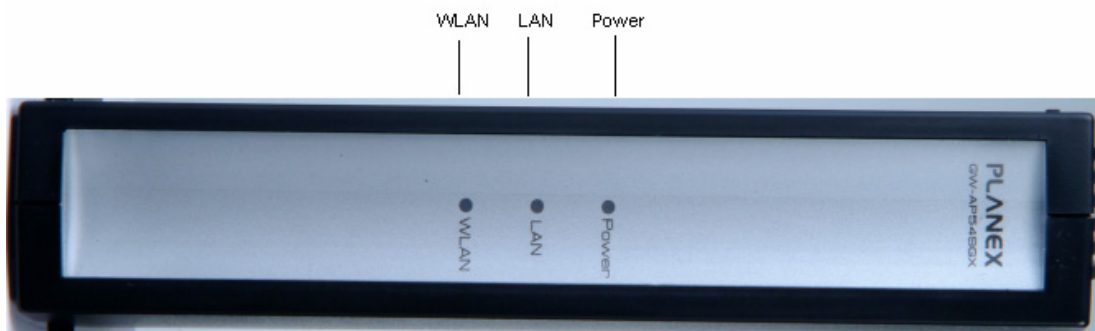
Chapter 2 Product Overview

The Access Point serves as a Media Access Control (MAC) bridge between your wired Local Area Network (LAN) and one or more Wireless Local Area Networks (WLANs).

Just attach the access point anywhere along your Ethernet LAN to provide wireless stations within its area of coverage with transparent access to the local wired and wireless LAN.

The Access Point supports a 54 Mbps half-duplex connection to Ethernet networks for each active channel. It is fully compliant with 2.4 GHz DSSS CSMA/CA wireless networking as defined in the IEEE 802.11b standard.

2.1 Front View



LED Indicator	Color	Status	
		Solid	Flashing
Power	Green	Turns solid green when power is applied to this device.	The GW-AP54SGX is initializing or upgrading firmware.
LAN	Green	Valid Ethernet cable link.	Receiving/Sending data
WLAN	Green	N/A	Receiving/Sending data

2.2 Rear View



Port / Button	Functions
DC 5V	Connects the power adapter plug.
Reset	Press for over 5 seconds to restore to factory settings. Performing the Factory Reset will erase all previously entered device settings.
LAN	Connects to Ethernet

2.3 System Requirements

- AC power outlet.
- Available RJ-45 (UTP) port on an Ethernet hub or switch
- 802.11b compliant wireless Ethernet adapters with TCP/IP protocols installed
- TCP/IP network protocol installed on each PC that needs to access the Internet.
- A Java-enabled Web browser, such as Microsoft Internet Explorer 5.5 or above, or Netscape Communicator 4.0 or above installed on one PC at your site for configuring the Wireless Access Point.

Chapter 3 Hardware Installation

1. Choose a location for your Access Point. Usually, the best location is at the center of your wireless coverage area, if possible within line-of-sight of all wireless devices.
2. Place the Wireless Access Point in a position that gives it maximum coverage. Normally, the higher you place the antenna, the better performance.
3. Position the antennas in the desired positions.
4. The GW-AP54SGX can be wired to an Ethernet network through an Ethernet device such as a hub or a switch using category 3, 4, or 5 UTP Ethernet cable and an RJ-45 connector. Use either straight through or crossover cabling depending on the port type provided by the Ethernet device.
5. Connect the power adapter cable to the 9V DC power socket on the rear panel.

Warning: Use only the power adapter supplied with the GW-AP54SGX.

Chapter 4 System Configuration

The Access Point can be configured by any Java-supported browser, which is Internet Explorer 5.5 or above. Using the Web management interface, you can configure the Access Point and view statistics to monitor network activity.

Before you attempt to log into the Access Point's Web-based Administration, please verify the following.

1. Your browser is configured properly (see below).
2. Disable any firewall or security software that may be running.
3. Confirm that you have a good link LED where your computer is plugged into the Wireless Access Point. If you don't have a link light – then try another cable until you get a good link.

4.1 Browser Configuration

4.1.1 Disable Proxy Connection

You will also need to verify that the HTTP Proxy feature of your web browser is disabled. This is so that your web browser will be able to view the Access Point configuration pages. The following steps are for Internet Explorer and for Netscape. Determine which browser you use and follow the appropriate steps.

4.1.2 Internet Explorer (5 or above)

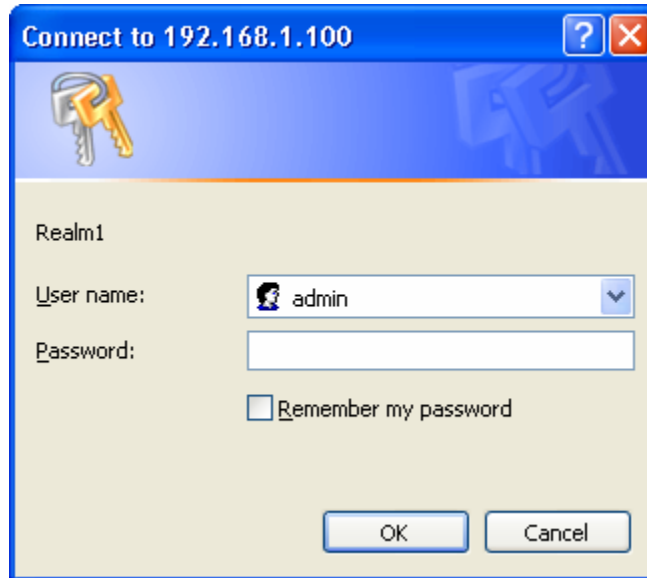
1. Open Internet Explorer. Click **Tools**, and then select **Internet Options**.
2. In the **Internet Options** window, click the **Connections** tab.
3. Click the **LAN Settings** button.
4. Clear all the check boxes and click **OK** to save these LAN settings changes.
5. Click **OK** again to close the **Internet Options** window.

4.1.3 Internet Explorer (For Macintosh)

1. Open Internet Explorer. Click **Edit/Preferences**.
2. In the Internet Explorer Preferences window, under **Network**, select **Proxies**.
3. Uncheck all checkboxes and click **OK**.

To access the Access Point's management interface, enter the Access Point IP address in your Web browser <http://192.168.1.100>. The **Login Screen** will appear. Type the **admin** (default user name) in the **User name** field. (default no password) in the **Password** field. Click **OK**.

The home page displays the Login options.



4.2 Navigating the Web Browser Interface

The Access Point's management interface features a user-friendly setup interface. This configuration menu is divided into four categories: **Status, Wireless, TCP/IP and Other.**

Note: To ensure proper screen refresh after a command entry, ensure that Internet Explorer 5.5 is configured as follows: Under the menu **Tools → Internet Options → General → Temporary Internet Files → Settings**, the setting for **Check for newer versions of stored pages** should be **Every visit to the page.**

Use the Web management interface to define system parameters, manage and control the Access Point and its ports, or monitor network conditions. The following table outlines the selections available from this program.

Menu	Description
Current Status	Displays the system information and basic wireless information.
Setup Wizard	Quickly configure settings for wireless environments.
Advanced Setup	Contains options to wireless setting, change password and firmware update.
Statistics	Shows the current status information of wireless access point.

4.2.1 Current Status

The Access Point **Current Status** page shows the current status and some basic settings of the device.



4.2.2 Setup Wizard

(1) Setup Wireless Networks

Use the **Setup Wizard** to quickly configure settings for wireless environments. Click **Next** to begin setup.



(2) Set Wireless LAN 802.11g Connection

Enter the **SSID** name and **Channel** number to be used for the Wireless LAN 802.11g Connection. Click **Next** to continue.

PLANEX GW-AP54SGX
Wireless Access Point

CURRENT STATUS SETUP WIZARD ADVANCED SETUP STATISTICS

Setup Wizard

Set Wireless LAN 802.11g Connection

Enter the SSID name and Channel number to be used for the Wireless LAN 802.11g Connection. Click Next to continue.

SSID:

Channel:

[Back](#) [Next](#)

(3) WEP Encryption for 802.11g

If you wish to use encryption, enable it here and enter the encryption Key values. Click **Next** to continue.

PLANEX GW-AP54SGX
Wireless Access Point

CURRENT STATUS SETUP WIZARD ADVANCED SETUP STATISTICS

Setup Wizard

WEP Encryption for 802.11g

If you wish to use encryption, enable it here and enter the encryption Key values. Click Next to continue.

Encryption: Disabled Enabled

Key Size: 64 128 152

Key1:

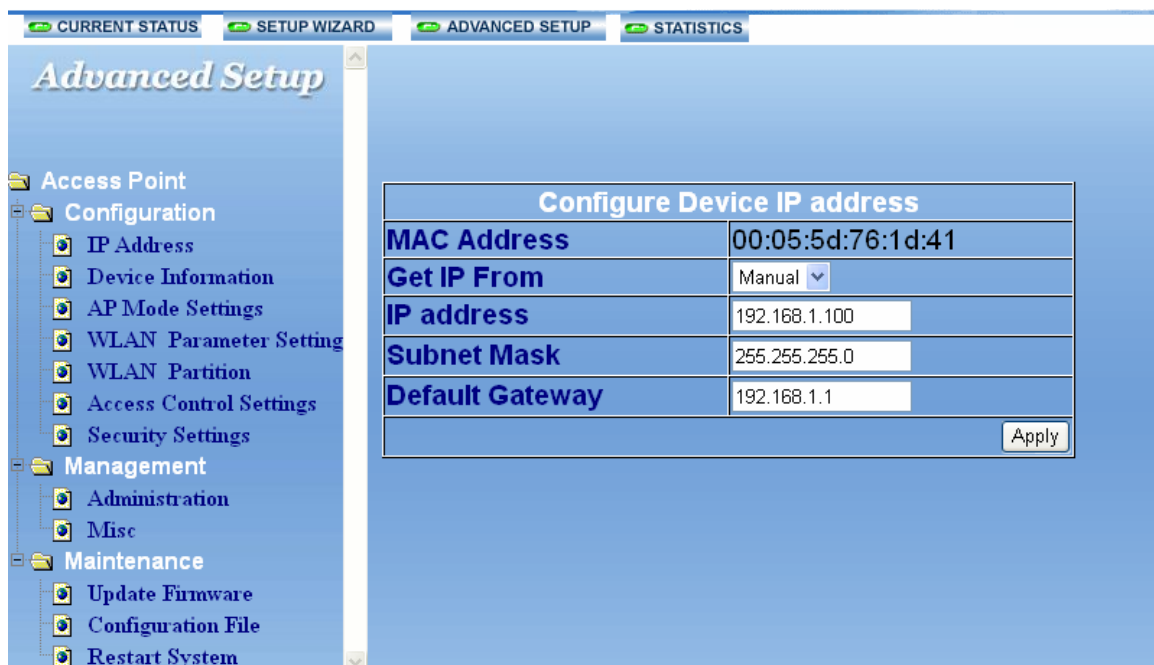
[Back](#) [Next](#)

(4) Wireless Setup Complete

The **Setup Wizard** has completed. Click **Back** to modify previous settings. Click **Reboot** to save the current settings and reboot the Wireless AP.



4.2.3 Advanced Setup



4.2.3.1 Configuration

(1) IP address

Configuration Device IP Address

The default settings of the GW-AP54SGX are displayed in the example below. The default **IP address** is 192.168.1.100

MAC Address (Media Access Control Address)

A unique, hardware-defined address used to identify a device on a network (Ethernet and wireless). It is assigned at the factory and cannot be changed. Usually you will find this address on a sticker on the device or on the packaging.

Get IP From

If you are assigning a Manual IP address for the Access Point (recommended), type in an **IP address** and **Subnet Mask** compatible with your network IP scheme.

IP address

The static IP address you want to assign to the AP. The default value is **192.168.1.100**.

Subnet Mask

The subnet mask you want to assign for the AP. The default value is **255.255.255.0**.

Default Gateway

The **Default Gateway** IP address is a router or other gateway device used to access IP networks that are outside the chosen subnet.

If you select DHCP, you will obtain a dynamic IP Address from a DHCP server on your network (This is not advisable since it will be difficult to determine the dynamic IP address assigned to the GW-AP54SGX). Using DHCP automatically configures all IP settings upon restart, therefore the IP Address, Subnet Mask and Default Gateway will be read-only displays when the device is configured as a DHCP client.

Click **Apply** if you have made any changes.

Configure Device IP address	
MAC Address	00:05:5d:76:1d:41
Get IP From	Manual <input type="button" value="v"/>
IP address	<input type="text" value="Manual"/> <input type="text" value="00"/> <input type="text" value="DHCP"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
Default Gateway	<input type="text" value="192.168.1.1"/>
<input type="button" value="Apply"/>	

(2) Device Information

This page displays the current information including the **Device Type**, **MAC Address**, **Software Version**, **System Name**, and **System Contact** information for both 802.11g and 802.11b.

Device Information	
Device Type	GW-AP54SGX
MAC Address	00:0d:88:c8:15:d5
Software Version	v1.00tw
System Name	WLAN Access Point
System Contact	WLAN Technical Support.
<input type="button" value="Apply"/>	

(3) AP Mode Settings

This device can work not only as an **Access Point** but also as a Point-to-Point Bridge (**PtP Bridge**), a Point-to-Multipoint Bridge (**PtMP Bridge**) or **AP Repeater**. Simply input the **Root AP MAC Address** of the other remote Conception 108Mbps Access point(s).

Bridge

Wireless Bridge can connect another Wireless Bridge and also connect wireless clients at the same time. Wireless Bridge is used to transparently connect two or more networks. With Point-to-Multipoint (**PtMP**) Bridge, you can connect up to 8 networks.

However, all the bridged Conception 108Mbps Access Point in the same domain should apply for the same settings.

- WPA disable
- Share the same WEP keys
- The same channel

Repeater

Wireless Repeater is used to extend the range of wireless LAN by repeating the wireless signal of the root AP. However, the throughput will be dropped due to the connection with another repeater to extend the wireless coverage. When AP Repeater is enabled, the remote repeater will apply the same settings from the root AP.

(4) WLAN Parameter Management

In the **WLAN Parameter Management** screen, you can change the **SSID** and **Channel** for the IEEE wireless environment you are configuring.

SSID

(Service Set Identifier) **default** is the default setting. The **SSID** is a unique name that identifies a network. All devices on a network must share the same **SSID** name in order to communicate on the network. If you choose to change the **SSID** from the default setting, input your new **SSID** name in this field. The **SSID** can be up to 32 characters in length.

SSID Broadcast

Broadcasting the SSID on the wireless network for easy connection with client PCs.(Default: Enable).

Frequency

2.4~2.4835GHz (Industrial Scientific Medical Band)

Channel

Available channels depend on the regulations in you area or country. Use the **Setup Wizard** to select the country or region for your Access Point. The **Setup Wizard** is described in the Quick Installation Guide (**customer has to go to QIG for the Setup Wizard**) and you can launch it from the Home tab by clicking Wizard. All devices on the network must be set to the same channel to communicate on the network.

Data Rate

Select the transmission rate for the network.

Beacon Interval (20 – 1000)

Beacons are packets sent by an Access Point to synchronize a wireless network. Specify a **Beacon interval** value. Default (100) is recommended.

DTIM (1 - 255)

Enter a value between 1 and 255 for the Delivery Traffic Indication Message (DTIM.) **DTIM** is a countdown informing clients of the next window for listening to broadcast and multicast messages.

Fragment Length (256 – 2346)

This value should remain at its default setting of 2346. If you experience a high packet error rate, you may slightly increase your Fragmentation Threshold within the value range of 256 to 2346. Setting the Fragmentation Threshold too low may result in poor performance.

RTS Length (256 – 2346)

This value should remain at its default setting of 2346. If you encounter inconsistent data flow, only minor modifications to the value range between 256 and 2346 are recommended.

Transmit Power

Transmitting power can be limited for circumstances where cell overlap is not desired or interference is a concern. The options are full (default), half (-3dB), quarter (-6dB), eighth (-9dB) or min (minimum).

Super G Mode

If your Wireless LAN Card supports Super G Mode transmit rate. You can use this function to increased wireless throughput.

802.11g Only

Enable this function only support IEEE 802.11g mode wireless transmission.

Radio On/Off

Choose the Wireless Radio On to receive the radio frequency signal. Or choosing the Wireless Radio Off will stop receiving the radio frequency signal.

Click **Apply** if you have made any changes or additions.

WLAN Parameter Management	
SSID	GW-AP54SGX
SSID Broadcast	Enabled <input checked="" type="checkbox"/>
Frequency	2.437 GHz
Channel	6 <input checked="" type="checkbox"/>
Data Rate	Auto <input checked="" type="checkbox"/>
Beacon Interval (20 - 1000)	100
DTIM (1 - 255)	1
Fragment Length (256 - 2346)	2346
RTS Length (256 - 2346)	2346
Transmit Power	full <input checked="" type="checkbox"/>
Super G Mode	Disabled <input checked="" type="checkbox"/>
802.11g Only	Disabled <input checked="" type="checkbox"/>
Radio On/Off	On <input checked="" type="checkbox"/>
<input type="button" value="Apply"/>	

(5) WLAN Partition

Use the **WLAN Partition** menu to control barriers between networks and wireless devices.

The partitions that can be created are described as follows:

Internal Station Connection

When this is enabled there is no barrier to communication among wireless stations using the Access Point. If this is disabled, wireless stations of the selected band (802.11g Or 802.11b) are not allowed to exchange data through the Access Point

Ethernet to WLAN Access

When this is enabled there is no barrier to data flow from the Ethernet to wireless devices using the Access Point. If this is disabled, all data from the Ethernet to associated wireless devices is blocked. Wireless devices can still send data to the Ethernet.

WLAN Partition	
Internal Station Connection	<input checked="" type="checkbox"/> Enabled
Ethernet to WLAN Access	<input checked="" type="checkbox"/> Enabled
<input type="button" value="Apply"/>	

(6) Access Control Settings

MAC Address Control List

Use MAC Filters to allow or deny wireless connection to the GW-AP54SGX. WLAN Partition is used to set up barriers between wireless devices or between wired and wireless interfaces.

MAC Address Filtering or Access Control is disabled by default. When this feature is enabled, you can select wireless devices that are allowed access or specify wireless devices that are denied access to the wireless interface through the Access Point. To turn MAC address filtering off, select Disabled for the Access Control drop-down menu.

To use MAC Address Filtering:

1. In the **Control** drop-down menu, choose the action you want to take for the listed MAC addresses. If you choose to **Accept** the devices, only the devices listed are allowed to associate with the Access Point through the wireless interface. If you choose **Reject**, the listed devices are NOT allowed to associate with the access point.
2. Type in the list of MAC addresses you want to specify in the **Input MAC Address**.
3. Click **Save** to add new access control list.
4. Click **Apply** to save your choices.

MAC Address Control List			
Control	Disabled ▾		
Input MAC Address	<input type="text"/>		
			Save
Current Access Control List			
MAC Address	Delete	MAC Address	Delete
00:90:cc:12:34:56	✕	00:90:cc:11:22:33	✕

(7) Security Settings

WEP Encryption is a standardized system for encrypting data and controlling association for wireless LANs.

To configure **Security Settings**:

1. Choose the **Authentication** system used for WEP. All wireless devices that use the Access Point must use the same type of authentication.
2. Next to **Encryption**, choose the Enabled option to enable encryption.
3. Choose the **Key Type** from the drop-down menu.
4. Choose the **Key Size** from the drop-down menu.
5. Select the **Valid Key** chosen from the list of keys you must define below. All wireless devices that use the Access Point must use the same valid key. The valid keys that are available may depend on the Authentication chosen above.
6. Type in the keys (**First Key**, **Second Key** etc.) in the spaces provided. The number and type of characters used for the keys depends on the key type and key size.

Authentication

You must choose the type of authentication used for WEP. The differences between the choices are explained below.

- **Open System**

Using an open system with WEP enabled means the access point and wireless stations encrypt only the data in each packet. WEP is not used for the purpose of authentication, that is, encryption does not prevent any station from associating with the access point.

- **Shared Key**

With this setting only stations using a shared key encryption identified by the access point are allowed to associate with it. Shared key WEP prohibits non-WEP WLAN stations from associating with the access point. Shared key WEP uses encryption for both data and authentication.

- **WPA**

If you use WPA you do not need to supply a WEP key. This is an access control system used for Ethernet and wireless networks and a key is generated automatically from a server or switch. In order to use WPA you must have the system running on your network. That is, you need a Radius server or computer or switch capable of implementing PAE. After applying the settings and restarting the Access Point, you must choose to use a Radius server or a local server or switch for Authentication. Use the Encryption menu to select where authentication information comes from and what size key to use.

Encryption

You can choose the Enabled option to Disabled or Enabled encryption

Key Type and Size

Keys are defined by the type (HEX or ASCII) of characters entered and size in bits. HEX or Hexadecimal characters are numbers and the letters A – F, upper and lower case are recognized as the same for HEX characters. ASCII characters include all printable characters (including spaces) available on a standard keyboard. ASCII upper and lower cases are recognized as different characters.

The size of the key relates to the level of encryption complexity. Keep in mind however that throughput can be affected by WEP and the higher the level of complexity, the more it will influence throughput. This should not be a problem for most users however, even at the highest levels.

Key Table for HexValue

Use the Key Table to define the WEP keys according to the restriction you have selected (key size and type). The Key Table will allow only keys of the correct size and type to be entered. If you should enter a key of an incorrect character type or size an error message informs you when you attempt to apply the changes. The Valid Key determines which Key (Key 1 to Key 4) encrypts and decrypts the transmitting and received by the access point. Make sure you configure your wireless adapters exactly the same way. That is, make sure that Key 1 on the access point is the exactly the same as Key 1 on the adapters, and so on for the other keys in the table.

Security Settings	
Authentication	<input checked="" type="radio"/> Open System <input type="radio"/> Shared Key <input type="radio"/> WPA
Encryption	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled
Key Type	HEX
Key Size	64 Bits
Key Table for HexValue	
Valid Key	First
First Key	<input type="text"/>
Second Key	<input type="text"/>
Third Key	<input type="text"/>
Fourth Key	<input type="text"/>
<input type="button" value="Apply"/>	

4.2.3.2 Management

(1) Administration

Administration Management

Change your password in this window. It can be up to 12 characters in length. Please keep a copy of your password in a safe place. This is the same password used for access by the Multiple AP Manager. Since there is no default password, the Old Password field is blank the first time you access this menu.

Click **Apply**, if you have made any changes.

Administration Management	
User Name	admin
Old Password	<input type="text"/>
New Password	<input type="text"/>
Confirm New Password	<input type="text"/>
<input type="button" value="Save"/>	

(2) Misc

Telnet Settings

The Miscellaneous menu is used to set up Telnet for the Access Point. By default Telnet is enabled. You may disable it by “un-checking” the Status **Enabled** option box. Telnet timeout options are Never, 1, 3, 5, 10 or 15 minutes.

Click **Apply**, if you have made any changes.

Telnet Settings	
Telnet Service	<input checked="" type="checkbox"/> Enabled
Timeout	3 Mins <input type="button" value="v"/>
<input type="button" value="Apply"/>	

4.2.3.3 Maintenance

(1) Update Firmware

Update Firmware from Web Server

Upgrade the firmware for the Access Point. Click on the link to find upgrades to the firmware on the Planex Communication Inc. website at <http://www.planex.net>. After you have downloaded the upgrade firmware to your local drive, click **Browse**. Select the firmware and click **Apply** to complete the upgrade.

IMPORTANT! The Access Point must be manually reset after every firmware upgrade. After the GW-AP54SGX has been upgraded and reboots, hold down the reset button on the rear panel for a few seconds. The device will reset and reboot. Upon rebooting after this manual reset, the Access Point is ready to use.

Update Firmware from Web Server	
Firmware Version	v1.00eu
Update File	<input type="text"/> <input type="button" value="Browse..."/>
<input type="button" value="OK"/>	

(2) Configuration File

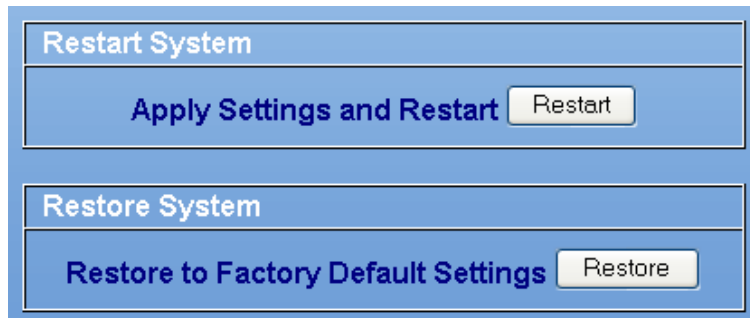
Update Configuration File

The current system settings can be saved as a file onto the local hard drive by clicking **OK** from **Download Configuration File**. The saved file can be loaded back on the GW-AP54SGX by clicking **Browse**. When you have selected the settings file, click **OK** from **Update Configuration File**.

Update Configuration File	
Update File	<input type="text"/> <input type="button" value="Browse..."/>
<input type="button" value="OK"/>	
Download Configuration File	
Load settings to Local Hard Drive	
<input type="button" value="OK"/>	

(3) Restart System

Click **Restore** from **Restore to Factory Default Settings** to return to factory default settings or click **Restart** from **Apply Settings and Restart** to apply new settings and restart your system (GW-AP54SGX).



4.2.4 Statistics

Network traffic statistics for both received and transmitted communications through the Ethernet port and wireless connections associated with the Access Point are displayed here.

CURRENT STATUS SETUP WIZARD ADVANCED SETUP **STATISTICS**

Statistics

- Type
 - Throughput
 - Transmitted
 - Received
 - WEP Frame Error

ThroughPut of WLAN 802.11g	
Transmit Success Rate	88 %
Transmit Retry Rate	0 %
Receive Success Rate	0 %
Receive Duplicate Rate	0 %
RTS Success Count	0
RTS Failure Count	206
RTS Success Rate	0 %

Reload

(1) Throughput

ThroughPut of WLAN 802.11g

Click **Reload**, shows the current status information.

ThroughPut of WLAN 802.11g	
Transmit Success Rate	99 %
Transmit Retry Rate	8 %
Receive Success Rate	100 %
Receive Duplicate Rate	0 %
RTS Success Count	5289
RTS Failure Count	0
RTS Success Rate	100 %
<input type="button" value="Reload"/>	

(2) Transmitted

Transmitted Frames Count

Click **Reload**, shows the current status information.

Transmitted Frames Count	
Transmitted Fragment Count	184
Multicast Transmitted Frame Count	0
Transmitted Error Count	2
Transmitted Total Retry Count	16
Transmitted Multiple Retry Count	16
<input type="button" value="Reload"/>	

(3) Received

Received Frame Count

Click **Reload**, shows the current status information.

Received Frame Count	
Received Fragment Count	0
Multicast Received Frame Count	0
Received Frame FCS Error Count	0
Received Frame Duplicate Count	0
Ack Rcv Failure Count	0
<input type="button" value="Reload"/>	

(4) WEP Frame Error

Wep Frame Error Count

Click **Reload**, shows the current status information.

Wep Frame Error Count	
Wep Excluded Frame Count	7
Wep ICV Error Count	0
<input type="button" value="Reload"/>	

Chapter 5 Specifications

Standards	IEEE 802.11b Wireless LAN IEEE 802.11g Wireless LAN IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet
Ports	One 10/100Mbps Ethernet LAN ports
Data Rates	802.11b: 11, 5.5, 2, and 1Mbps 802.11g: 108, 54, 48, 36, 24, 18, 12, 9 and 6Mbps
Security Encryption	64/ 128/152 bit WEP encryption WPA
Media Access Control	CSMA/CA with ACK
Operating Frequency	802.11b: 2400 ~ 2497MHz ISM band 802.11g: 2400 ~ 2483.5MHz ISM band
Modulation Technology	802.11b: DQPSK, DBPSK and CCK 802.11g: BPSK, QPSK, 16QAM, 64QAM, OFDM
Transmitter Output Power	802.11b: Typical 18dBm at 11, 5.5, 2 and 1Mbps 802.11g Draft: Typical RF Output Power at each Data Rate +14 ~ 15dBm at 54Mbps and 108Mbps +14 ~ 16dBm at 48Mbps +16 ~ 18dBm at 36, 24, 18, 12, 9, and 6Mbps
External Antenna Type	2.0dBi antenna with reverse SMA connector
LED indicators	Power Green for power on. LAN Green (flashing for activity). WLAN Green (flashing for activity).
Device Management	Configuration via WEB Configuration via Telnet
Power Input	DC 5V, 2A
Physical Dimension	157(W) x 103(H) x 34(D) mm <no-antenna>
Weight	185g
Operating Temperature	-5°C to 55°C
Operating Humidity	20~85% non-condensing

Chapter 6 Safety Statement

CE Statements

This device has been tested and found to comply with the requirements set up in the council directive on the approximation of the law of member states relating to EMC Directive 89/336/EEC, Low Voltage Directive 73/23/EEC and R&TTE Directive 99/5/EC.

FCC Statements

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.

Installation and use of this Wireless LAN device must be in strict accordance with the instructions included in the user documentation provided with the product. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment. The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device, or the substitution of the connecting cables and equipment other than manufacturer specified. It is the responsibility of the user to correct any interference caused by such unauthorized modification, substitution or attachment. Manufacturer and its authorized resellers or distributors will assume no liability for any damage or violation of government regulations arising from failing to comply with these

guidelines.

FCC RF Radiation Exposure Statement: This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

Your device contains a low power transmitter. When device is transmitted it sends out Radio Frequency (RF) signal.

In order to maintain compliance with the FCC RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body. Use only with supplied antenna. Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.

"PLANEX COMMUNICATIONS INC. declare that GW-US54MINI (54Mbps Wireless USB LAN Adapter) is limited in CH1~CH11 by specified firmware controlled in USA."

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

