

# LW2100AP

# User's Manual

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## Chapter 1 Overview of the system

### 1.1 Introduction

The LW2100AP delivers the freedom to configure the network without wire and functions as an IEEE 802.3 Ethernet-based Residential Gateway. It provides 10/100 Dual Speed Ethernet port for a DSL Modem, Cable Modem, or other Broadband access device and one 10M Ethernet port for connection to a home or small office network.

LW2100AP can forward all packet between local and Internet such as ICMP, FTP, Real Audio, Quake, H.225 packet. Also support virtual server(DMZ server) that forward incoming packet to specified LAN host system.

LW2100AP supports DHCP server to setup network configuration for each local PC dynamically. LW2100AP use graphical user interface(web-browser) to setup, check system status, change password, and upgrade system image.

The LW2100AP has one local 10Mbps Ethernet port and one 10/100Mbps Dual Speed Ethernet global port. The local port can be connected directly to a single computer or it can be connected to an Ethernet hub or switch to provide Internet Sharing and Firewall protection to a local area network. The global port can be connected to any Cable, DSL, or Broadband modem with an Ethernet port.

Unlike proxy server or NAT software that requires the software server to remain visible on the Internet, no local computers are directly and externally visible when using the LW2100AP. Integrated DHCP services allow up to 63 users to get their IP address automatically on boot up from the LW2100AP.

The LW2100AP can be set to allow separate FTP, Web, and Multiplayer game servers to share the same Internet-visible IP address while still protecting the servers and local users from hackers.

### 1.1.2. Appearance

- **Front view**

There are LEDs with the system to indicate the operation status of the system and port status.



**POWER** : The LED turns on as the power applies to the system.

**LAN1** : The LED is on while the LAN1 connection is active.

The LED is blinking while the system receives packets via this port.

**LAN2** : The LED is on while the LAN2 connection is active.

The LED is blinking while the system receives packets via this port.

**AIR1/AIR2** : The LED turns on while the default/optional wireless connection is active..

The LED is blinking while the system receives packets via this air link.

- **Rear view**

The system is equipped with LAN1 port and LAN2 port for Ethernet interface, RJ-11 console port for management.



LAN1 : Global Port, RJ-45

10/100Mbps Ethernet to an external Cable/DSL Modem or LAN Switch/Hub

LAN2 : Local Port, RJ-45, 10Mbps Ethernet

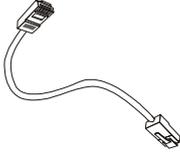
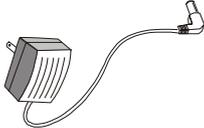
Console : connection to PC COM port.

DC5V : connect the power adapter.

Antenna1 : Dipole Antenna

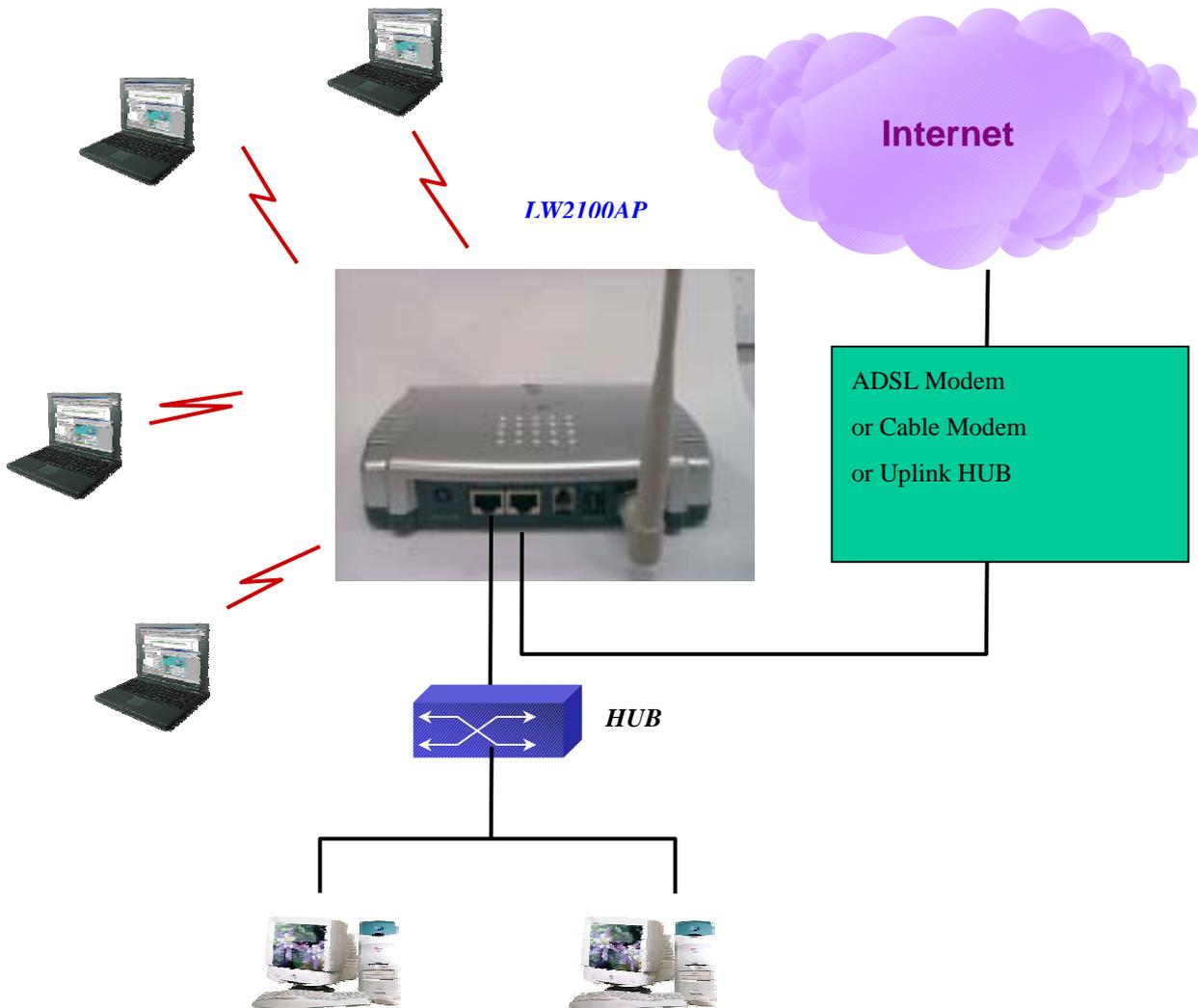
Antenna2(Optional) : Dipole Antenna

### 1.1.3. Components

Item Included in Standard package	Description	Purpose
	Console cable	Connects from console port of LW2100AP to RS232C Port on PC
	Power adapter	Connects from LW2100AP to power source
	LW2100AP	Main Unit
	Antenna	
	Manuals	User's Guide

## 1.2. Hardware Installation

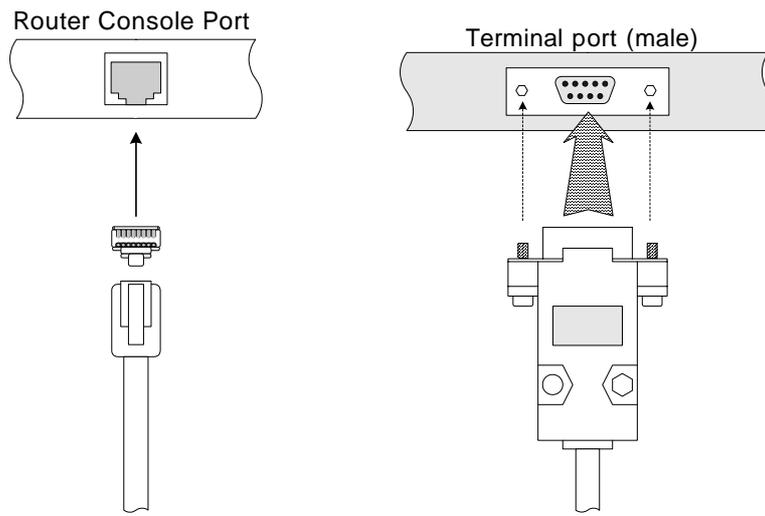
The configuration information of connected AP is displayed.



1. Choose the place with the consideration of power outlet and network connection to install LW2100AP.
2. Use a UTP Ethernet Straight-through cable to connect the DSL/Cable Modem to the LAN1(**Global**) port.
3. Use a UTP Ethernet Straight-through Cable to connect the LAN2(**Local**) port to a free port on your hub or switch **OR** Use a Cross-Over cable to connect directly to a PC.
4. Connect the Power Adapter to the **DC 5V** port on the LW2100AP and into a wall outlet.

5. Console cable connection

Using the Console cable included in the package, connect a Serial port of the administrator computer to the Console port of LW2100AP. One end of the console cable with the RJ45 connector is connected to the console port on the back panel of the system and the other end is connected to the 9-pin serial port of a RS-232 based terminal such as workstation, PC or notebook as shown in the following figure. Then, fix the cable to the AP using the screws hanging on both sides of the connector.



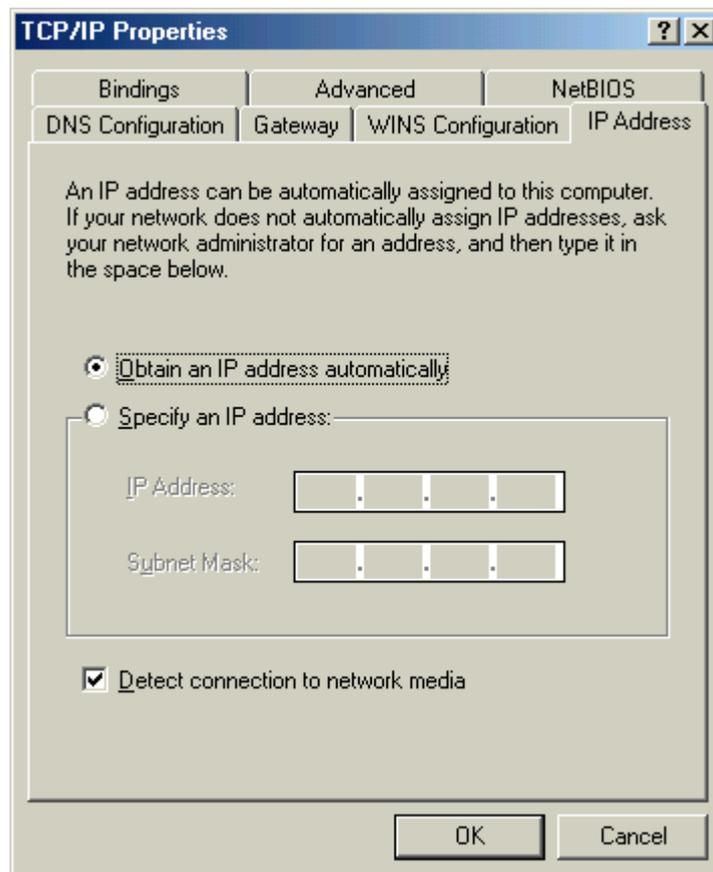
### 1.3. Network Setting for PC

Client machines(PC) require no software, simply set them to accept a dynamically assigned IP address and reboot. Each time they are powered up the LW2100AP will recognize them and set their IP address to instantly connect them to the LAN.

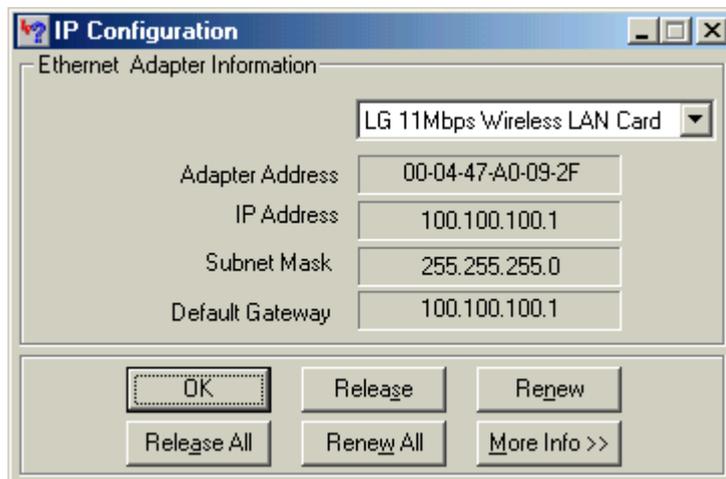
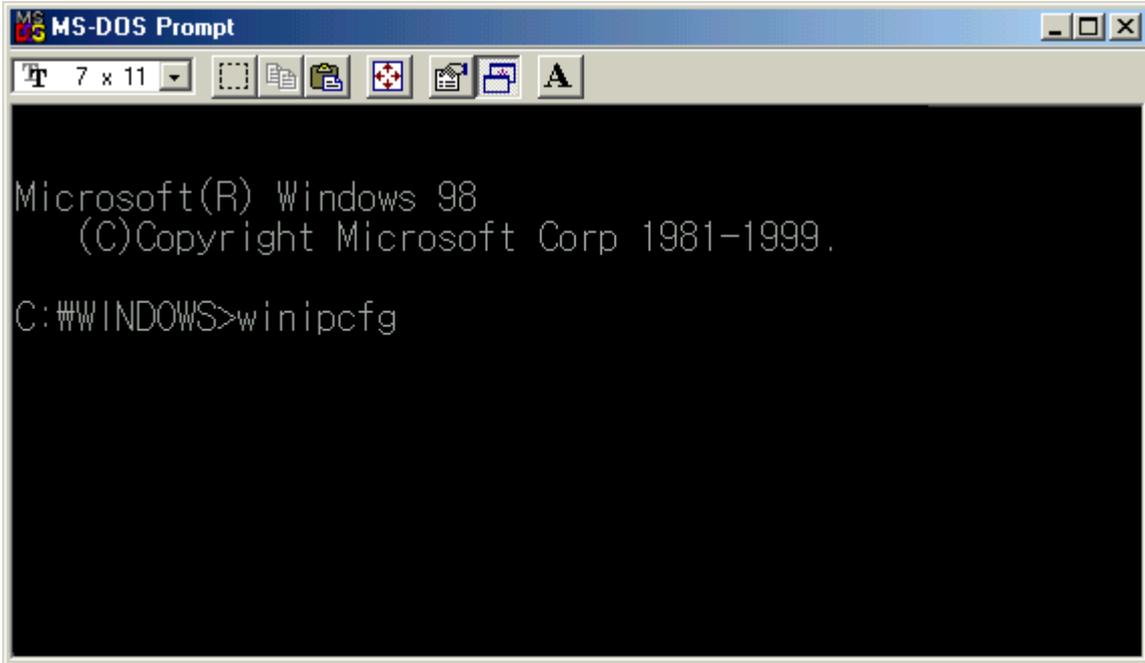
If you want to use an assigned (static) IP address, you can select "Specify an IP address" in "TCP/IP Properties" window.

◆ **How to Set DHCP Client (in Win98)**

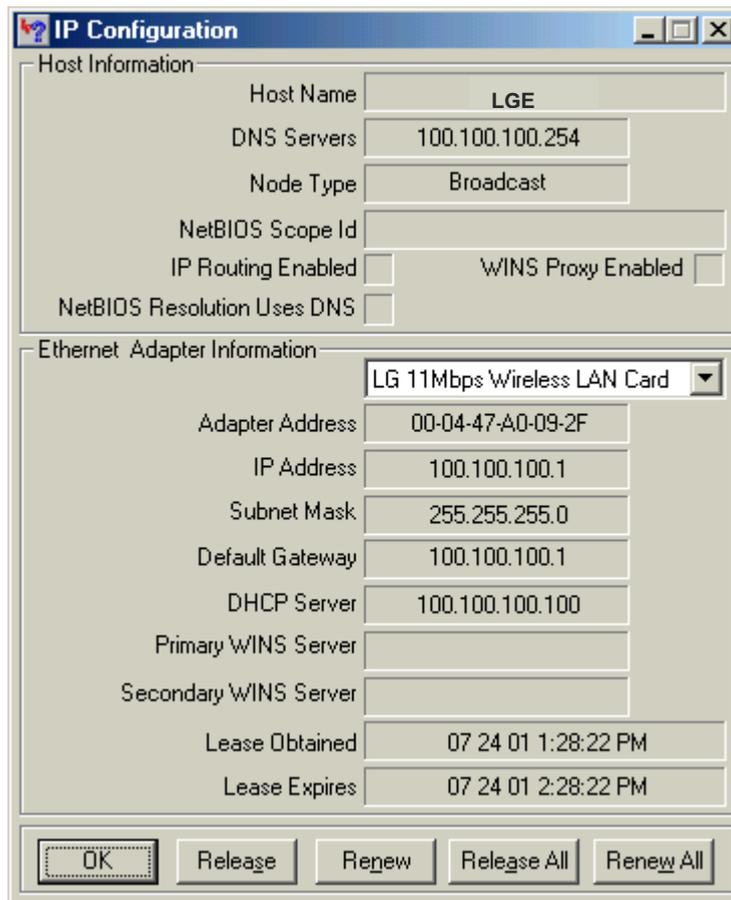
- a. Select Control Panel(Network('TCP/IP' (TCP/IP is only for LGE card). Then the "TCP/IP Properties" window will be brought to the screen. Click the "IP Address" tab in the "TCP/IP Properties" window. Select "Obtain an IP address automatically". Then reboot the system.



Go into the DOS window to check whether the IP address is normally assigned after the system reboots. Then execute the command of winipcfg.



Click the "More Info" button in the "IP Configuration" window as above to view information on IP Configuration of LGE Wireless LAN Card. Below is the window displayed when you click the "More Info" button.



Above is the window to show information on IP Address and Subnet Mask assigned by AP, Default Gateway, DHCP Server, IP Address use time, etc. To be assigned a new IP Address, click the "Release All" button followed by "Renew All". The existing IP address can be re-assigned. In case the existing IP address is already assigned to another user, you may be re-assigned a different user's IP address

## Chapter 2 WEB Server Manual

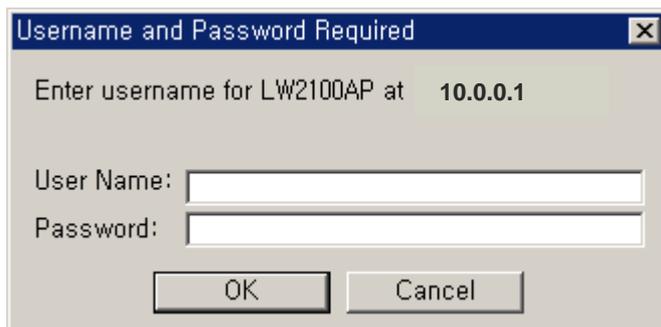
### 2.1 Execution of WEB Server and AP connection to WEB Server

This chapter explains how to connect the LW2100AP to the Internet using Web-based management tool.

The first step is to execute the Internet browser directly and to enter the IP address of an AP to connect. At this time, it is possible only if the IP address of an AP to connect is already known.

The default IP address of an AP in factory shipment is 10.0.0.1

The AP connection to WEB Server is available for a PC that can execute the Internet browser and connect with the Internet. If the AP connection to WEB Server operates normally, a window indicating to input the password of connected AP is open.

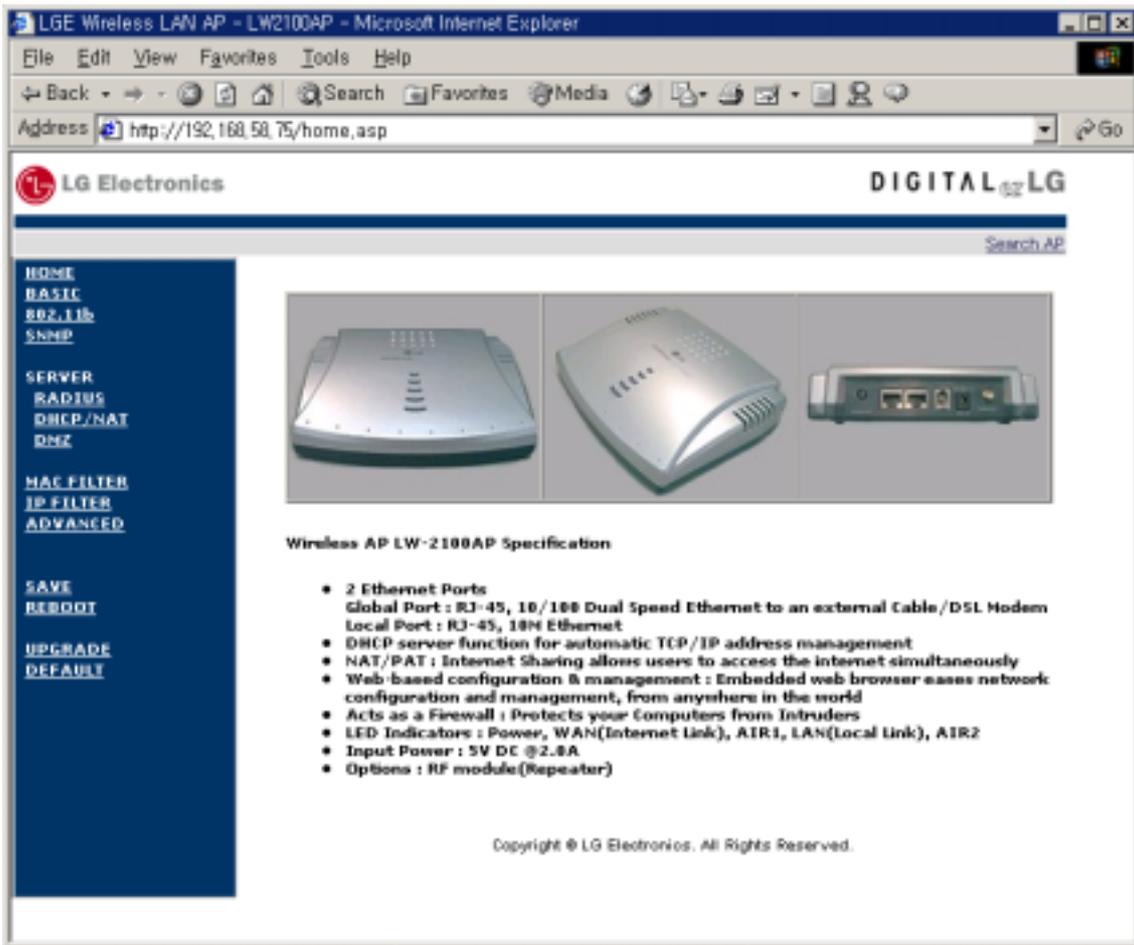


The default value of the username and the password is "root", "lw2100ap" respectively.

If the password is correctly entered, the initial Home screen displays as follows.

At this time, the access to WEB Server is available.

\* The Web-based management system is fully compatible with Microsoft Internet Explorer versions 4.0 or later and Netscape Communicator versions 4.0 or later. Earlier versions of these browsers cannot use all features of the management system.



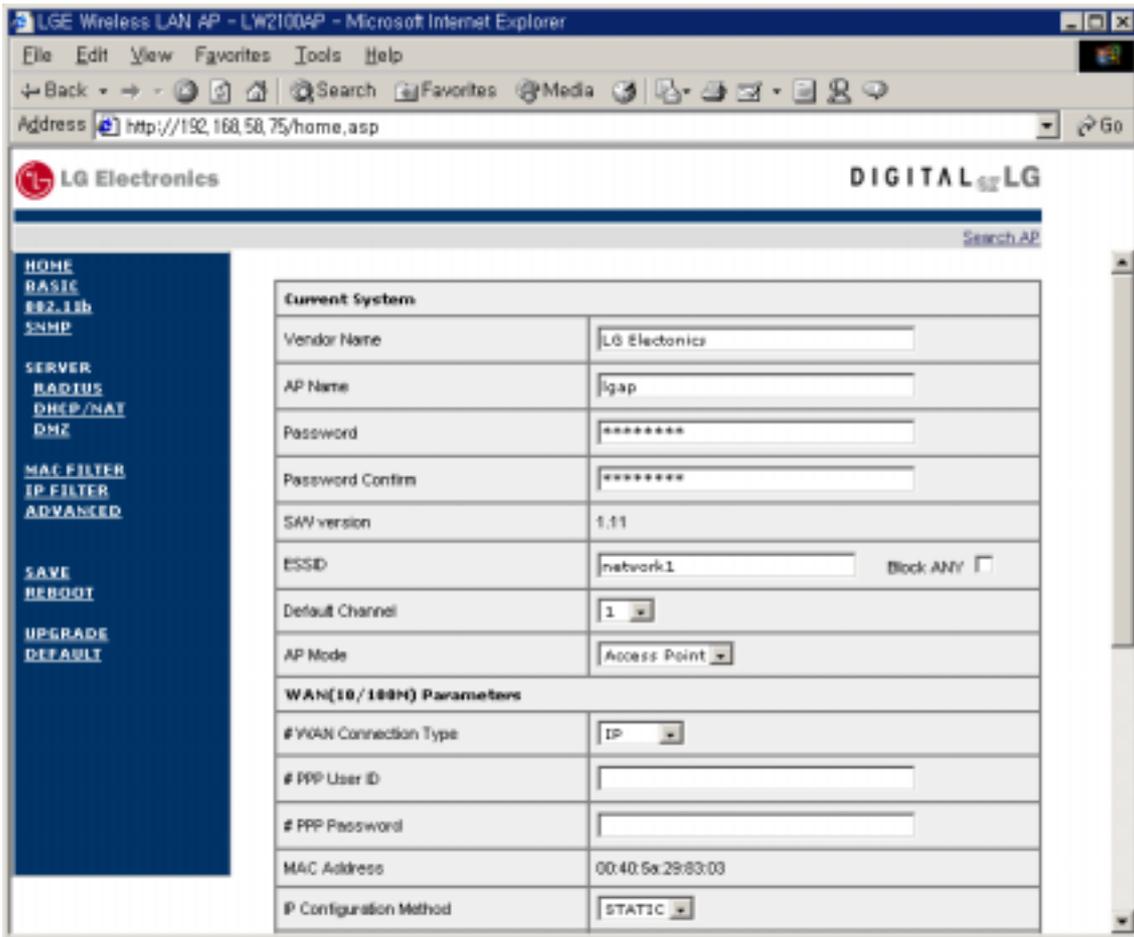
Navigation buttons appear at the left of the page.

You use the navigation buttons to display other management pages

## 2.2. Menu description of WEB Server

### 2.2.1. Basic configuration Menu

The Basic configuration Menu displays the Vendor Name, AP name, Password, ESSID, Default Channel, MAC Address, IP Address, Subnet Mask, and Gateway information of connected AP.



The screenshot shows a web browser window titled "LGE Wireless LAN AP - LW2100AP - Microsoft Internet Explorer". The address bar shows "http://192.168.58.75/home.asp". The page header includes the LG logo and "DIGITAL LG". A left sidebar contains navigation links: HOME, BASIC, BB2.Lib, SNMP, SERVER, RADIUS, DHCP/NAT, DMZ, MAC FILTER, IP FILTER, ADVANCED, SAVE, REBOOT, UPGRADE, and DEFAULT. The main content area is titled "Current System" and contains the following configuration fields:

Vendor Name	LG Electronics
AP Name	lgap
Password	*****
Password Confirm	*****
SW version	1.11
ESSID	network1 <input type="checkbox"/> Block ANY
Default Channel	1
AP Mode	Access Point
<b>WAN(10/100M) Parameters</b>	
#WAN Connection Type	IP
#PPP User ID	
#PPP Password	
MAC Address	00:40:5a:29:83:03
IP Configuration Method	STATIC

#### Current System

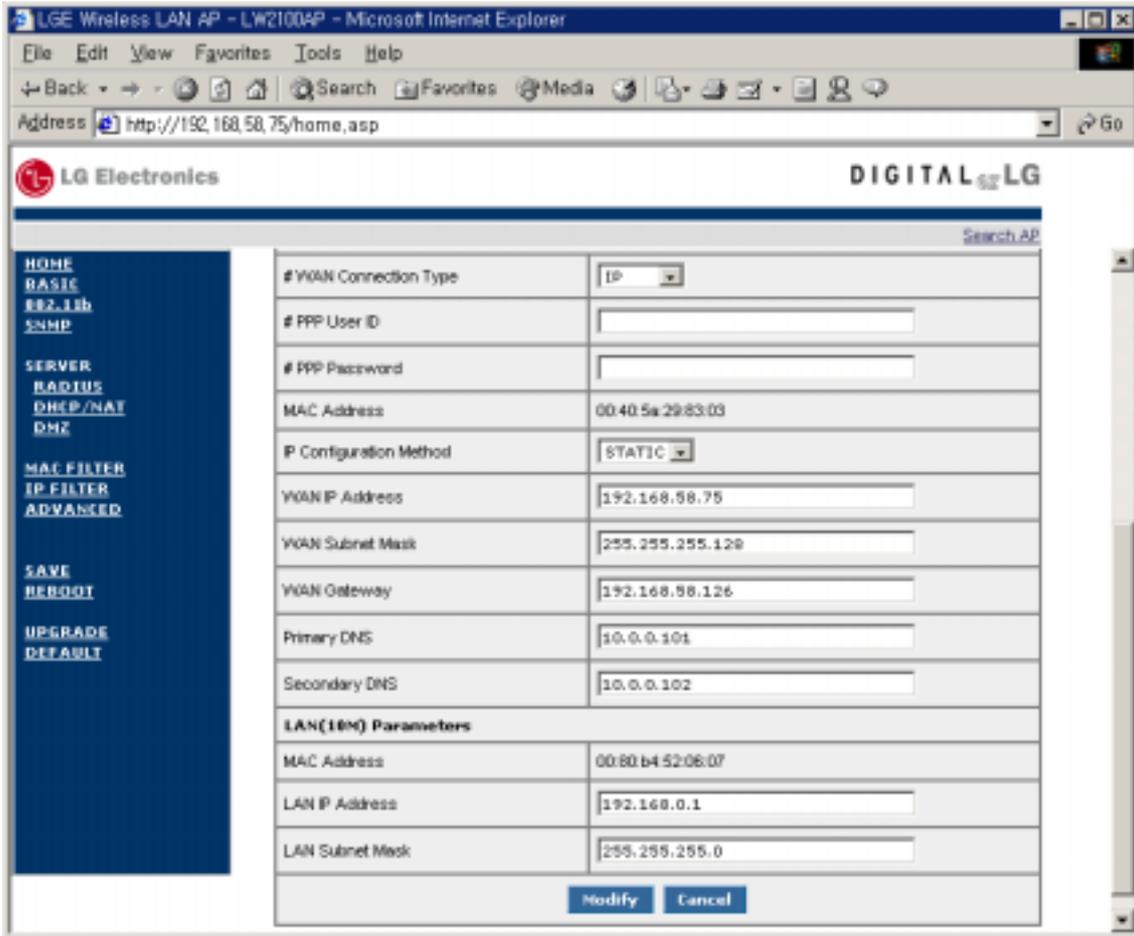
- **Vendor Name** : The AP system supplier.
- **AP name** : The AP name is not an essential setting, but it helps identify the Access Point in your network.
- **Password** : Used to change the password of connected AP. Enter a password to change in "Password" and Retype in "Password Confirm". The password for Password and Retype shall be identical. If the password is wrong or not correct, an error message

is displayed and the changed value is not applied.

- **ESSID:** An ID to distinguish the cells of radio LAN network. The clients equipped with the radio LAN shall be setup with the same ID to make communication with the AP. To provide the roaming between APs in adjacent area, the SSID of AP in adjacent area shall be identical. The string used for SSID shall consist of up to 32 alphabets and figures except blank and special characters (by distinguishing capital and small letters). . It is setup as "LGE" in factory shipment.
- **Default Channel:** The default channel can be 1 ~ 14 channels. It depends on the country and in Korea we use 1 ~ 13 channel. If two or more APs are used in adjacent area, they need to use different channels to avoid the interference. In adjacent area, it is recommended to set the channels with at least five channels of interval. It is setup as channel 1 in factory shipment.
- **AP Mode:** Used to determine the AP mode as Access Point or Repeater. In "Access Point" mode, AP acts as normal AP. In "Repeater" mode, AP acts as wireless repeater for connecting separated area.

#### WAN(10/100M) Parameters

- **WAN(LAN1) Connection Type :** IP(for Office LAN user), PPPoE(for ADSL user)
- **MAC Address:** This MAC(Media Access Control) address is a unique serial number permanently assigned to the Access Point's WAN Ethernet controller. You cannot change this MAC Address.
- **WAN(LAN1) IP Address:** Describes the IP address of AP. For the communication with AP Manager and for the connection with WEB Server and Telnet, it is setup as 10.0.0.1 in factory shipment.
- **WAN(LAN1) Subnet Mask:** Describes the subnet mask of AP. It determines that the IP Address belongs to which subnet. It is setup as 255.255.255.0 in factory shipment. Upon changing, user shall inquire of the related person about the matters.
- **WAN(LAN1) Default Gateway:** Describes the default gateway of AP. It is setup as 10.0.0.254 in factory shipment. Upon changing, user shall inquire of the related person about the matters.



The screenshot shows the configuration page for the LW2100AP. The browser title is 'LGE Wireless LAN AP - LW2100AP - Microsoft Internet Explorer'. The address bar shows 'http://192.168.58.75/home.asp'. The page has a navigation menu on the left with options like HOME, BASIC, BB2.1lib, SNMP, SERVER, RADIUS, DHCP/NAT, DMZ, MAC FILTER, IP FILTER, ADVANCED, SAVE, REBOOT, UPGRADE, and DEFAULT. The main content area is titled 'DIGITAL LG' and contains a 'Search AP' button. The configuration fields are as follows:

#WAN Connection Type	IP
# PPP User ID	
# PPP Password	
MAC Address	00:40:5a:29:83:03
P Configuration Method	STATIC
WAN IP Address	192.168.58.75
WAN Subnet Mask	255.255.255.128
WAN Gateway	192.168.58.126
Primary DNS	10.0.0.101
Secondary DNS	10.0.0.102
<b>LAN(10M) Parameters</b>	
MAC Address	00:80:b4:52:06:07
LAN IP Address	192.168.0.1
LAN Subnet Mask	255.255.255.0

At the bottom of the form are 'Modify' and 'Cancel' buttons.

- **Primary DNS** : Enter the IP address of the primary domain name server on your network. It is setup as 10.0.0.101 in factory shipment. Upon changing, user shall inquire of the related person about the matters.
- **Secondary DNS** : Enter the IP address of the secondary domain name server on your network. It is setup as 10.0.0.102 in factory shipment. Upon changing, user shall inquire of the related person about the matters.

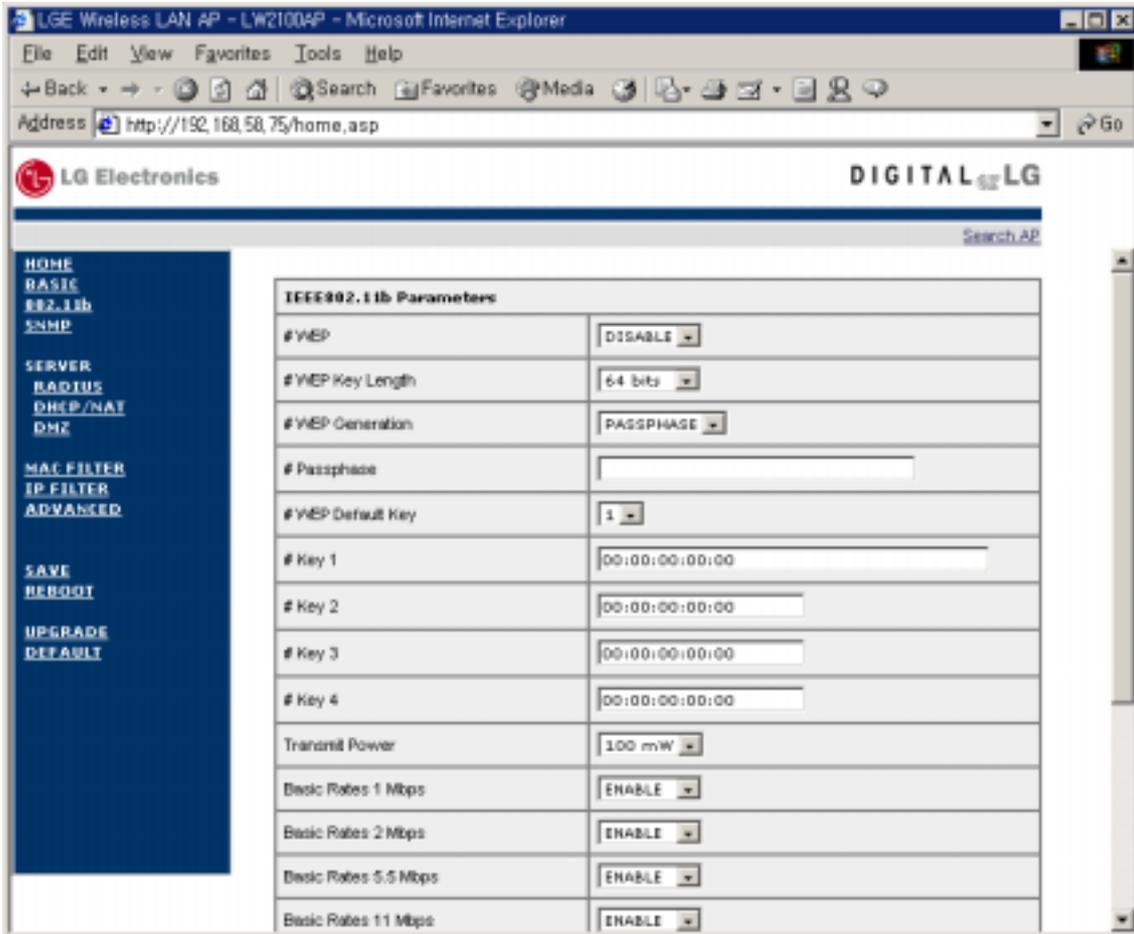
#### LAN(10M) parameters

**MAC Address** : This MAC(Media Access Control) address is a unique serial number

- permanently assigned to the Access Point's LAN Ethernet controller. You cannot change this MAC Address.
- **LAN(LAN2) IP Address:** Describes the IP address of AP. For the communication with AP Manager and for the connection with WEB Server and Telnet, it is set up as 192.168.0.1 in factory shipment.
- **LAN(LAN2) Subnet Mask:** Describes the subnet mask of AP. It determines that the IP Address belongs to which subnet. It is set up as 255.255.255.0 in factory shipment. Upon changing, user shall inquire of the related person about the matters.
- **Modify :** Used to change the item value of Basic Menu. Change the value of each item in input column and click related button, and then the configuration value will be changed. However, if the "SAVE" is not performed, the changed value will be returned to the previous value when AP is rebooted. Refer to the "SAVE" menu.
- **Cancel :** Used to cancel the changed item value of Basic Menu.

### 2.2.2. 802.11b Menu

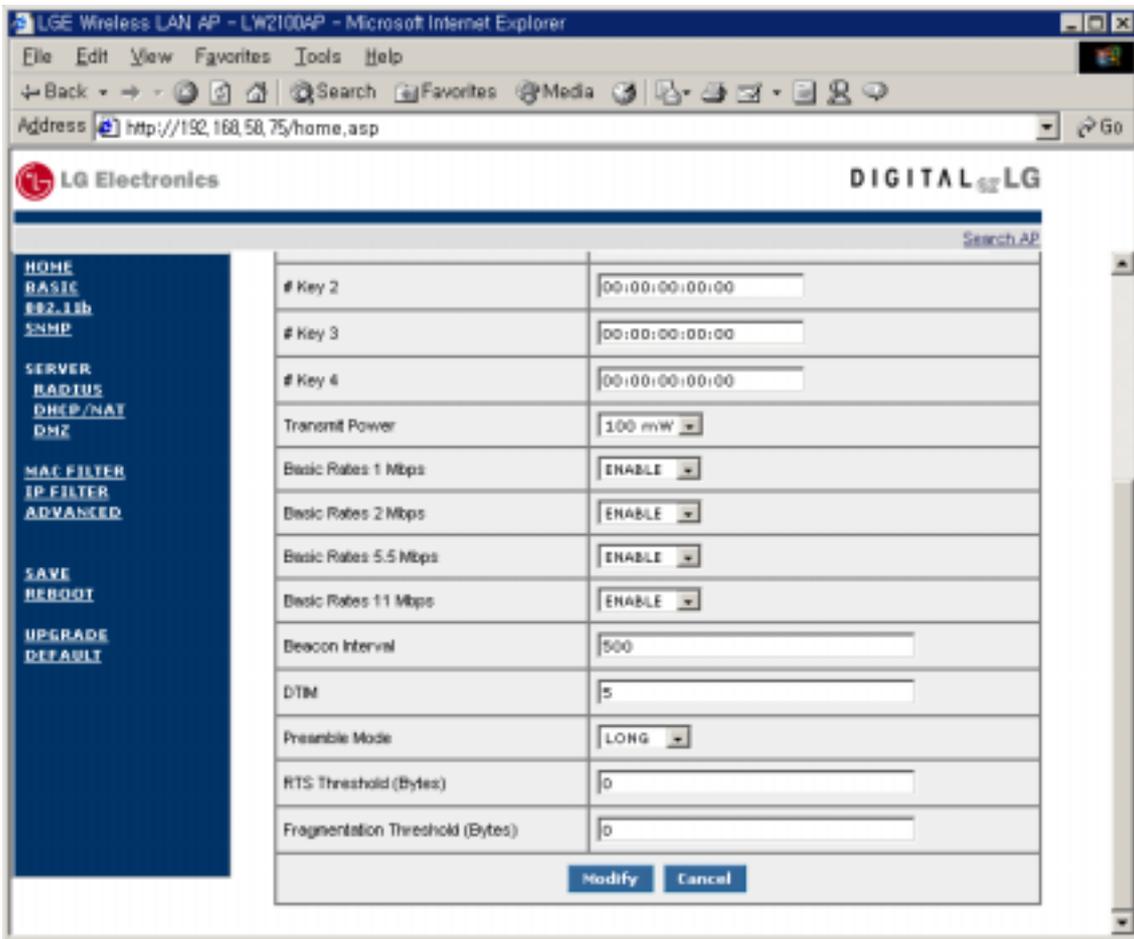
The 802.11b Menu displays the WEP related information including WEP use, WEP Generation, Passphrase, WEP Default Key, Key 1, Key 2, Key 3, Key 4 and others.



- **WEP:** Stands for Wired Equivalent Privacy. It is a function to provide the data security for the radio communication users and can be set to 64 bits or 128 bits. The web related information setting for the clients to communicate with related AP should be the same as that of AP.
- **WEP Generation:** A method to generate the web key. There are the Manual and Passphrase. In case of Manual, it is to enter directly the web key for generation. In case of Passphrase, when a word is entered in accordance with the pre-defined method with the radio LAN, the web key corresponding to the related word will be automatically

generated.

- **Passphrase:** In case the WEB Generation is setup as Passphrase, this is a place to enter the word for the web key generation.
- **WEP Default Key:** In case the WEB is set to 64 bits, this is the assigned default key. It can be assigned as 1 ~ 4. In case of 128 bits, it is not necessary to enter.
- **Key 1, Key2, Key3, Key4:** A place to enter actual key value. Only the HEX values (0~9, A~F) can be entered. It is possible only if the WEP Generation is Manual.
- **Basic Rates :** The highest rates specified will be the rate that the AP will use when transmitting broadcast/multicast and management frames.. The rates are expressed in megabits per second.

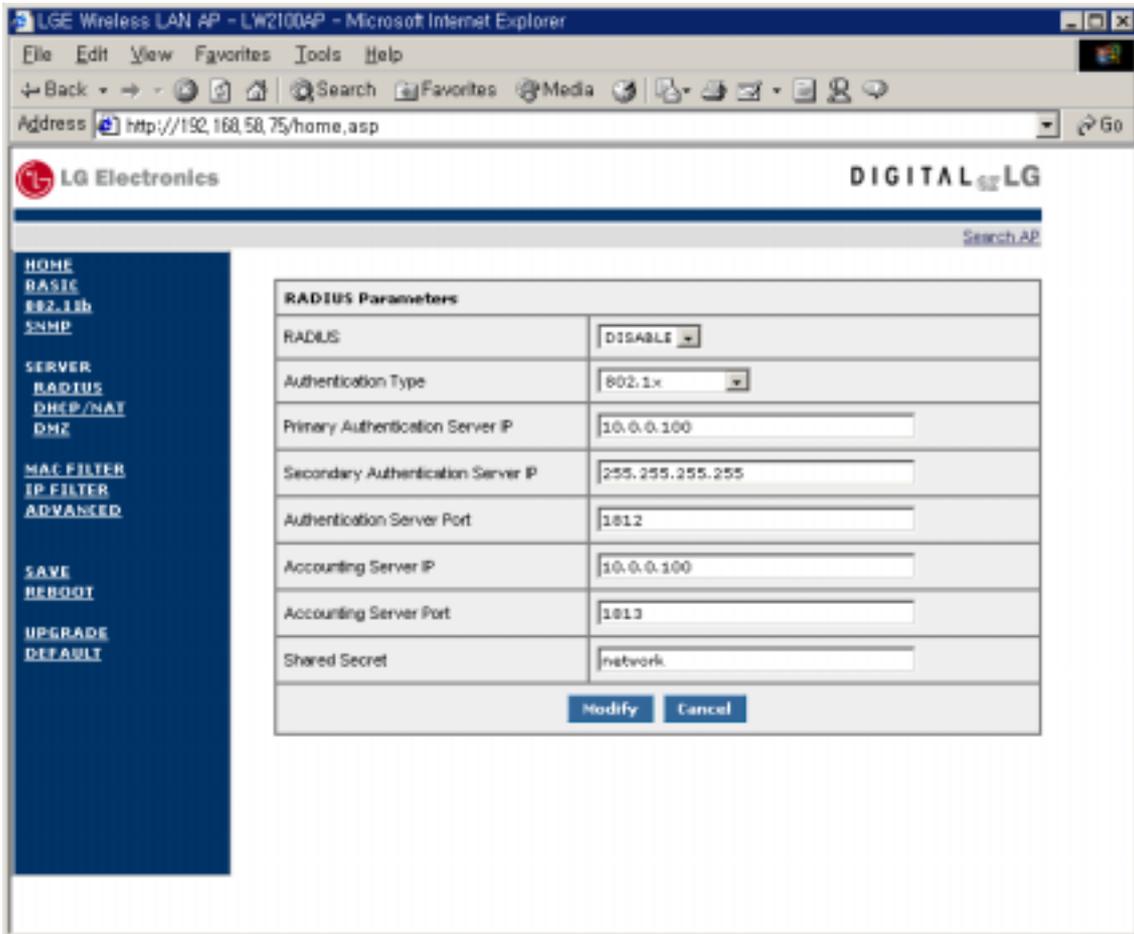


- **Beacon Interval :** The amount of time between beacons in kilomicroseconds. One Kusec equals 1,024 micro seconds.

- **DTIM** : This setting, always a multiple of the beacon period, determines how often the beacon contains a delivery traffic indication message(DTIM). The DTIM tells power-save client devices that a packet is waiting for them.
- **Preamble Mode** : The preamble is a section of data at the head of a packet that contains information the Access Point and client devices need when sending and receiving packets. A short preamble improves throughput performance.
- **RTS Threshold(Bytes)** : This setting determines the packet size at which the Access Point issues a request to send(RTS) before sending the packet. Enter a setting ranging from 0 to 2339 bytes.
- **Fragmentation Threshold(Bytes)** : This setting determines the size at which packets are fragmented. Enter a setting range from 256 to 2338 bytes. Use a low setting in area where communication is poor or where there is a great deal of radio interference.
- **Modify**: Used to change the item value of 802.11b Menu. Change the value of each item in input column and click related button, and then the configuration value will be changed. However, if the "SAVE" is not performed, the changed value will be returned to the previous value when AP is rebooted. Refer to the "SAVE" menu.
- **Cancel**: Used to cancel the changed item value of 802.11b Menu.

### 2.2.3. RADIUS Server Menu

The RADIUS Menu displays information for communication with RADIUS(Remote Authentication Dial In User Service) server.



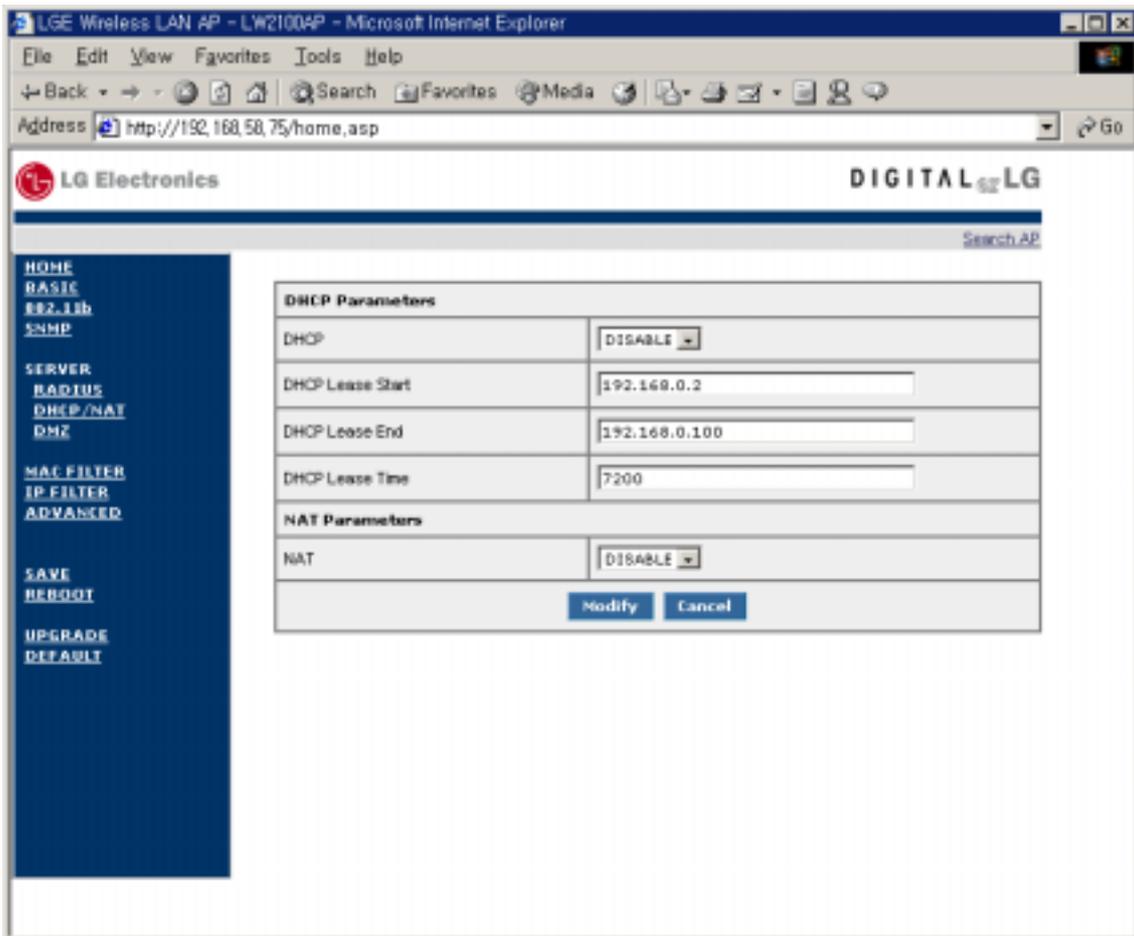
- **RADIUS(Server Use)** : Describes whether or not to use the RADIUS Server. “**Enable**” shows ‘in use’ of the RADIUS Server and “**Disable**” shows ‘not use’ of the RADIUS server.
- **Authentication Type** : Selects the authentication type as MAC, 802.1x, MAC + 802.1x
- **Primary Authentication Server IP** : Shows the IP address of primary RADIUS Server.
- **Secondary Authentication Server IP** : Shows the IP address of secondary RADIUS Server.

- **Authentication Server Port** : Shows the UDP port number.
- **Accounting Server IP** : Shows the IP address of Accounting Server. Usually same with RADIUS Server IP address.
- **Accounting Server Port** : Shows the UDP port number .
- **Shared Secret** : Promised authentication value between AP and RADIUS Server. Available maximum 12 digits in text.
- **Modify**: Used to change the item value of RADIUS Menu. Change the value of each item in input column and click related button, and then the configuration value will be changed. However, if the "SAVE" is not performed, the changed value will be returned to the previous value when AP is rebooted. Refer to the "SAVE" menu.
- **Cancel**: Used to cancel the changed item value of RADIUS Menu.

## 2.2.4. DHCP/NAT Server Menu

The Server Menu displays DHCP Server information such as Start address, End IP Address, Lease Duration etc.

The Server Menu displays also whether or not to use NAT Server function.



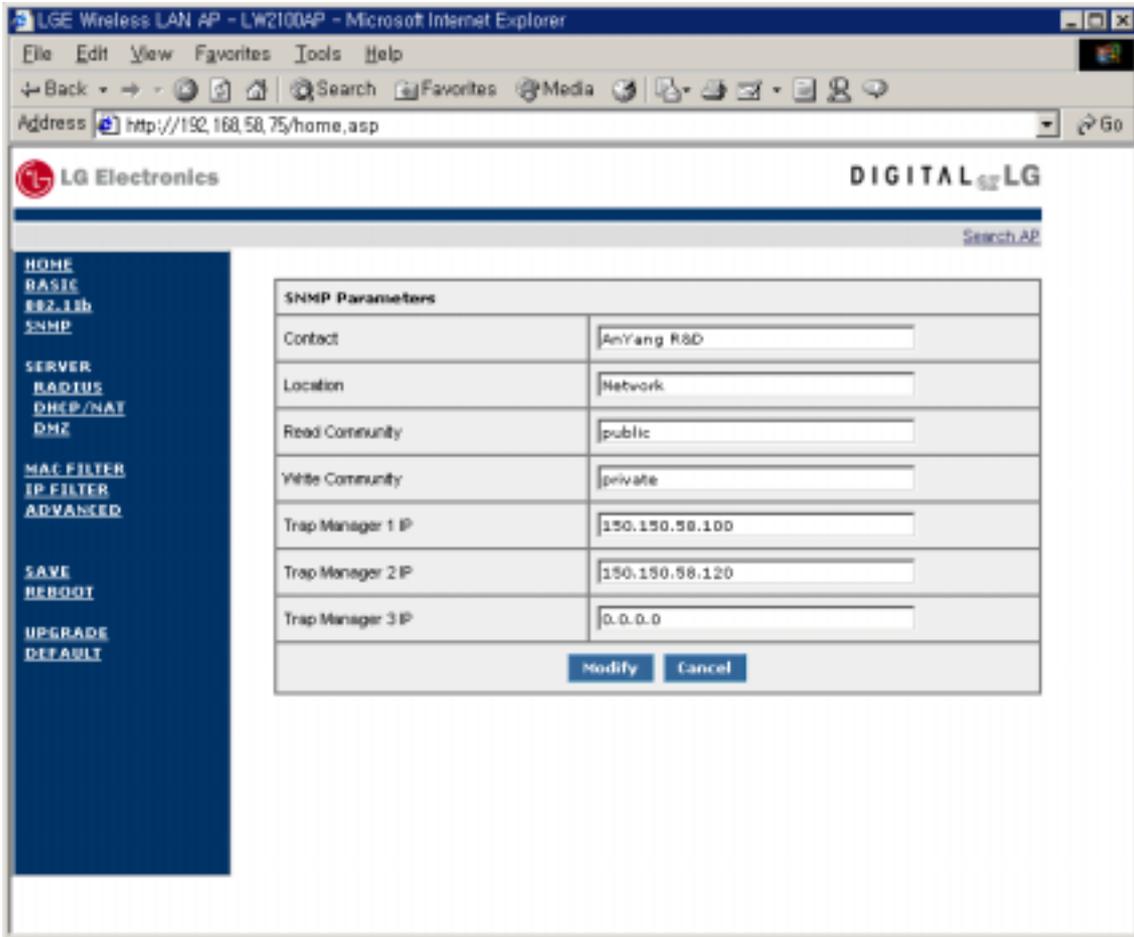
DHCP Parameters	
DHCP	DISABLE
DHCP Lease Start	192.168.0.2
DHCP Lease End	192.168.0.100
DHCP Lease Time	7200
NAT Parameters	
NAT	DISABLE

- **DHCP Server Use:** Describes whether or not the DHCP server of connected AP is used. "Enable" means 'in use' of the DHCP Server and "Disable" means 'not use' of the DHCP Server.
- **DHCP Lease Start:** Shows the start IP address out of the IP address range to be allocated to the clients when the DHCP Server is in use.
- **DHCP Lease End:** Shows the end IP address out of the IP address range to be

allocated to the clients when the DHCP Server is in use.

- **DHCP Lease Time:** Shows the using period of the IP address to be allocated to the clients when DHCP Server is in use. The maximum value is 99 days 23 hours 59 minutes.
- **NAT Server Use :** Shows whether or not the NAT function is used. "**Enabled**" shows 'in use' of the NAT function and "**Disabled**" shows 'not use' of the function.
- **Modify:** Used to change the item value of DHCP/NAT Menu. Change the value of each item in input column and click related button, and then the configuration value will be changed. However, if the "SAVE" is not performed, the changed value will be returned previous value when the AP is rebooted. Refer the "SAVE" menu.
- **Cancel:** Used to cancel the changed item value of DHCP/NAT Menu.

### 2.2.5. SNMP Server Menu



- **Contact** : The textual identification of the contact person for this AP, together with information on how to contact this person.
- **Location** : The physical location of this AP (e.g., `telephone closet, 3rd floor').
- **Read Community** : In case of getting request or getting-next request commands are used for MIB through SNMP, it is used to support minimum security function for the security of system. Only when the read community name supported in the system and that of NMS requesting SNMP command are same, the result of the requested MIB is returned.
- **Write Community** : When the command of set request is used through SNMP, it is used

to support minimum security function for the security of system. Only when the write community name supported in the system and that of NMS requesting SNMP set request command are same, the changed value of the requested MIB can be applied to the system

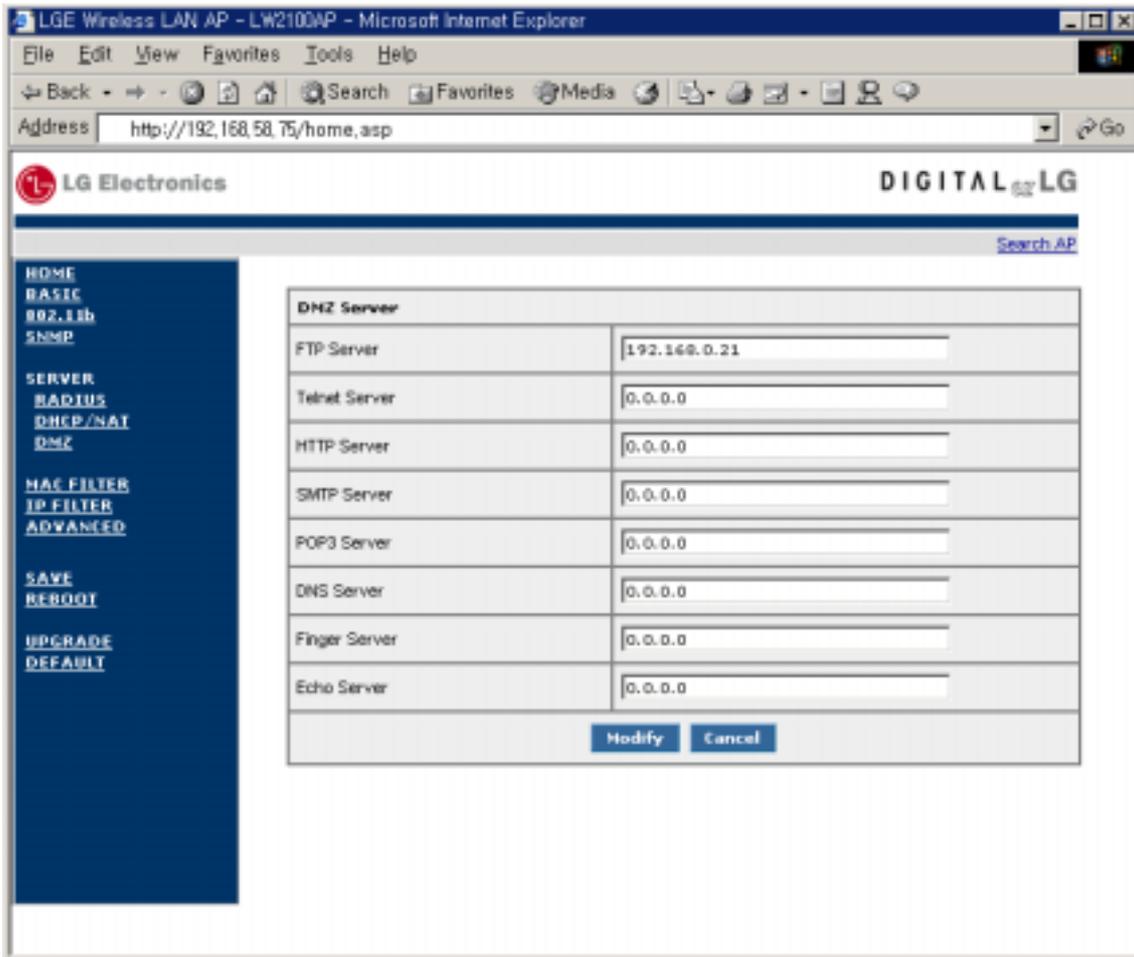
- **Trap Manager IP** : This is an IP address of NMS that receives SNMP TRAP message triggered when there is failure in the system. Up to 3 addresses are available.
- **Modify** : Used to change the item value of SNMP Menu. Change the value of each item in input column and click related button, and then the configuration value will be changed. However, if the "SAVE" is not performed, the changed value will be returned to previous value again when the AP is rebooted. Refer to the "SAVE" menu.
- **Cancel** : Used to cancel the changed item value of SNMP Menu.

### 2.2.6. DMZ Server Menu

The DMZ Server Menu displays static IP address of servers on your LAN using NAT firewall. Normally NAT firewall filters let unrecognized packets out to protect your LAN.

This function allows you to make a server on your LAN access to internet users.

If users do not want setup DMZ server, then just leave "0" on IP address field. Following windows show local PC. "192.168.1.21" is FTP server

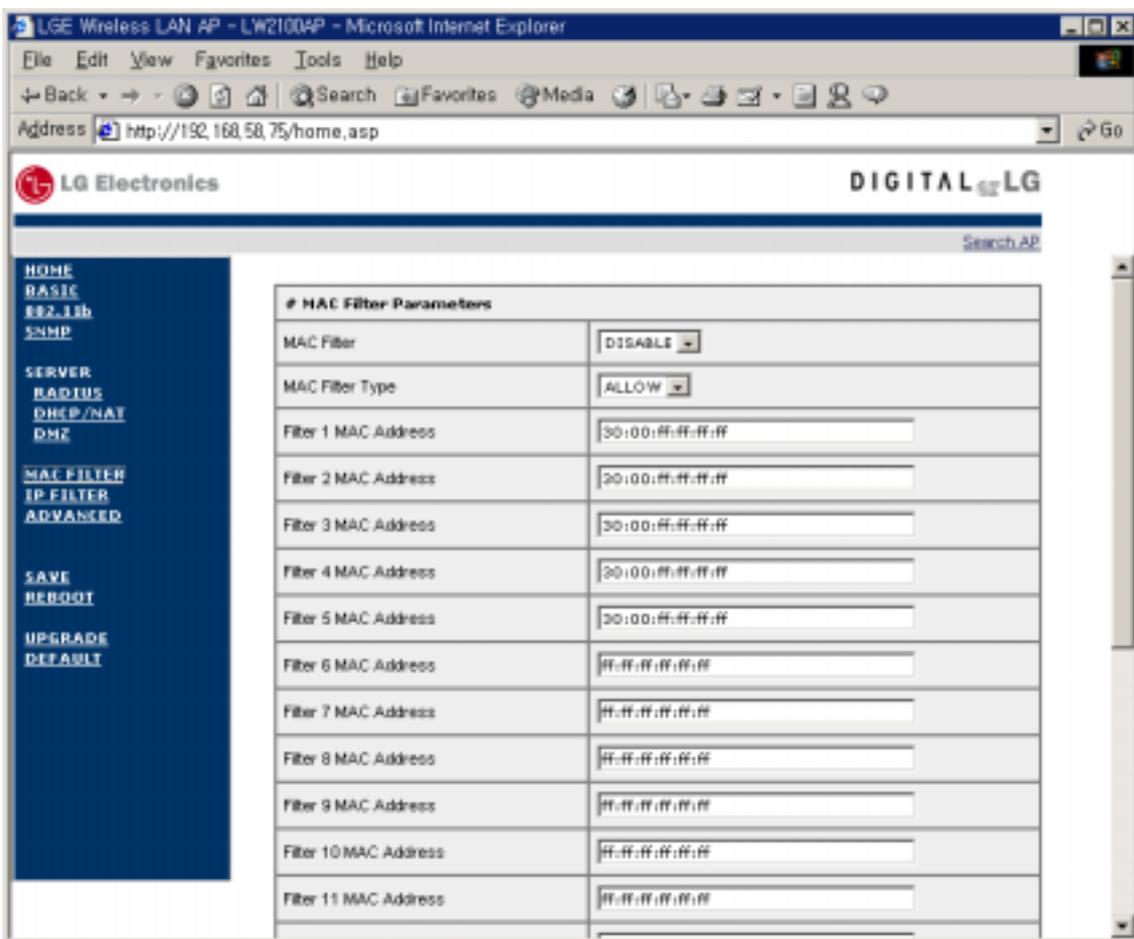


- **FTP server** : The IP address of FTP server on your LAN.
- **Modify** : Used to change the item value of DMZ Menu. Change the value of each item in input column and click related button, and then the configuration value will be changed. However, if the "SAVE" is not performed, the changed value will be returned to previous value when the AP is rebooted. Refer to the "SAVE" menu.
- **Cancel** : Used to cancel the changed item value of DMZ Menu.

### 2.2.7. MAC Filter Menu

The MAC Filter Menu displays whether or not to use the MAC Filter function (MAC address range, MAC address) of connected AP and the MAC Filter related information including the setting value of each function for use. With this function, it is possible to connect only the PC equipped with a radio LAN card of registered MAC address to related AP.

In case of a MAC Address registered on both "Allowed MAC Address" and "Denied MAC Address" then "Denied MAC Address" has priority. In this case the client cannot be associated with the AP.

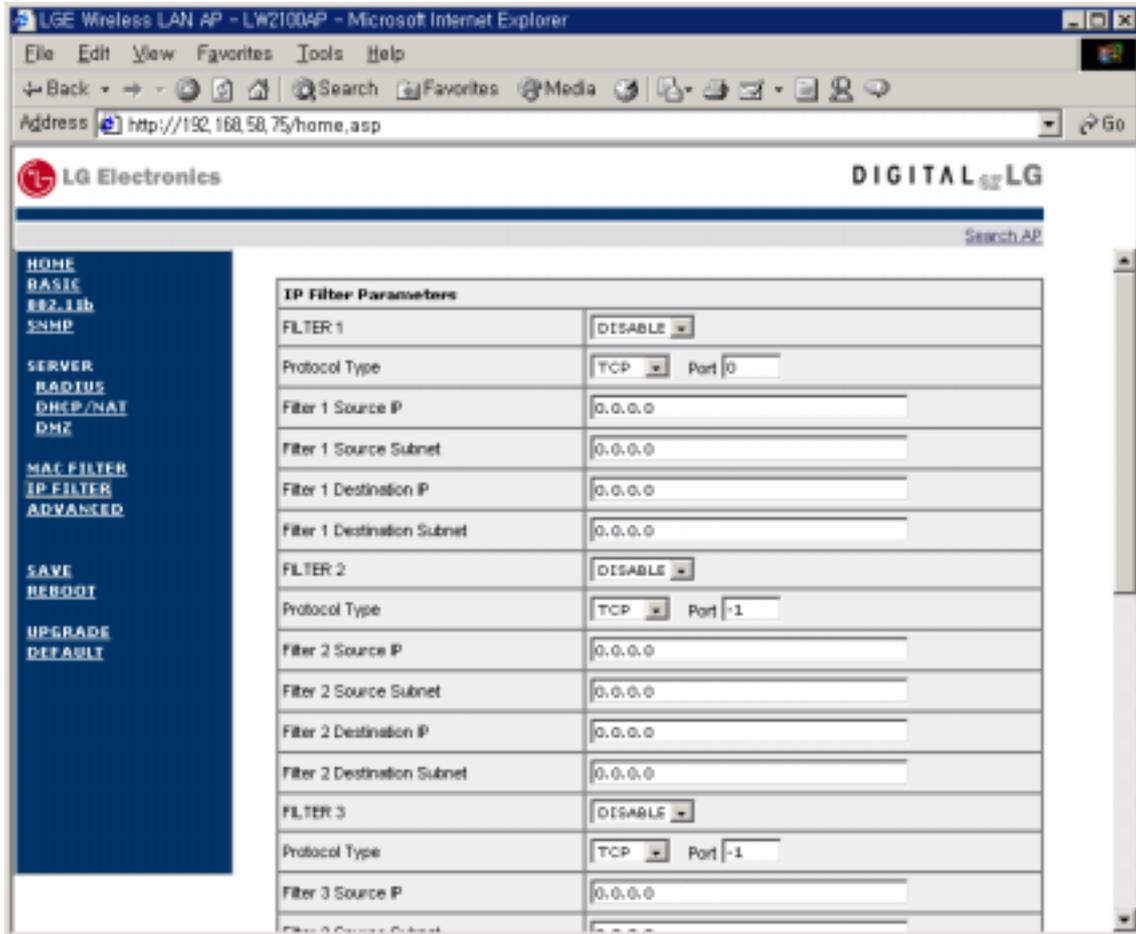


- **MAC Filter** : : It is a MAC Filter function to setup the MAC address entering into each MAC address. Select "Enabled" to setup related function, and select "Disabled" to release the related function.

- **MAC Filter Type** : It is a MAC Filter function to setup the MAC address entering into the MAC address range. Select "Allow" to setup related function, and select "Deny" to release the related function.
- **Filter 1 ~ 20 MAC Address** : It is a MAC Filter function for entering MAC address each MAC address and to enable/disable only the PC equipped with a radio LAN card that has related MAC address to be connected to related AP.
- **Modify**: Used to change the item value of MAC Filter Menu. Change the value of each item in input column and click related button, and then the configuration value will be changed. However, if the "SAVE" is not performed, the changed value will be returned previous value when the AP is rebooted. Refer to the "SAVE" menu.
- **Cancel**: Used to cancel the changed item value of MAC Filter Menu.

## 2.2.8. IP Filter Menu

The IP Filter Menu displays whether or not to use the IP Filter function



IP Filter Parameters	
<b>FILTER 1</b>	DISABLE
Protocol Type	TCP Port 0
Filter 1 Source IP	0.0.0.0
Filter 1 Source Subnet	0.0.0.0
Filter 1 Destination IP	0.0.0.0
Filter 1 Destination Subnet	0.0.0.0
<b>FILTER 2</b>	DISABLE
Protocol Type	TCP Port -1
Filter 2 Source IP	0.0.0.0
Filter 2 Source Subnet	0.0.0.0
Filter 2 Destination IP	0.0.0.0
Filter 2 Destination Subnet	0.0.0.0
<b>FILTER 3</b>	DISABLE
Protocol Type	TCP Port -1
Filter 3 Source IP	0.0.0.0
Filter 3 Source Subnet	0.0.0.0
Filter 3 Destination IP	0.0.0.0
Filter 3 Destination Subnet	0.0.0.0

- **FILTER** : Use, protocol, port number .
- **Filter Source IP** : Describe the source IP Address.
- **Filter Source Subnet** : Describe the source Subnet mask.
- **Filter Destination IP** : Describe the destination IP Address.
- **Filter Destination Subnet** : Describe the destination Subnet mask.
- **Apply** : Used to change the item value of IP Filter Menu. Change the value of each item in input column and click related button, and then the configuration value will be changed. However, if the "SAVE" is not performed, the changed value will be returned

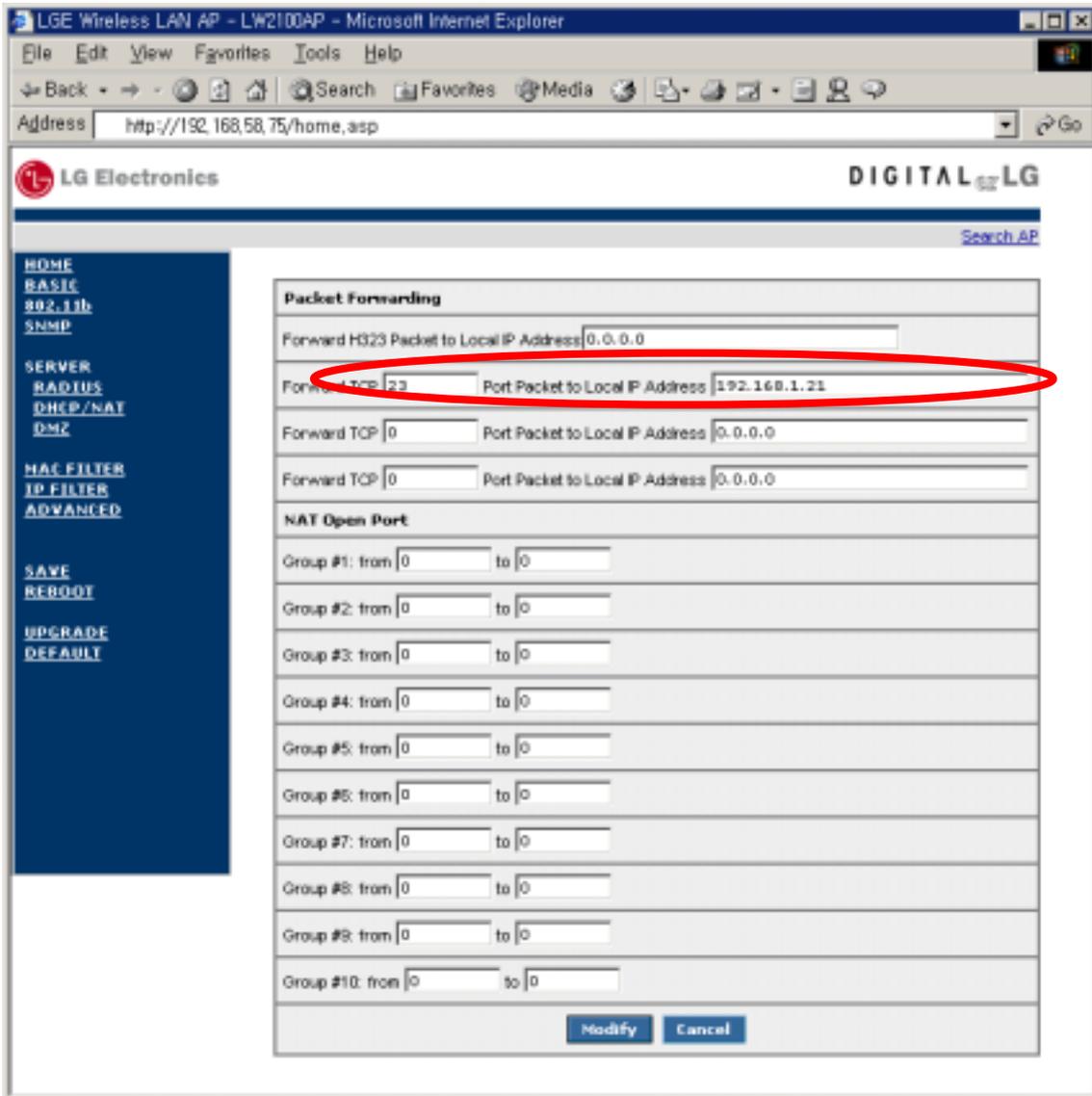
previous value when the AP is rebooted. Refer the "SAVE" menu.

- **Cancel** : Used to cancel the changed item value of IP Filter Menu.

## 2.2.9 Advanced Menu

User can forward incoming packet to specified local PC, such as H.323 packet. To setup packet forwarding, user must know TCP/UDP protocol, port number, and local PC IP address.

Following windows show forward incoming TCP/23 packet to local PC "192.168.1.21".



The screenshot shows the configuration page for the LG Wireless LAN AP. The browser address bar shows 'http://192.168.58.75/home.asp'. The page title is 'LGE Wireless LAN AP - LW2100AP - Microsoft Internet Explorer'. The main content area is titled 'Packet Forwarding' and contains the following fields:

- Forward H323 Packet to Local IP Address: 0.0.0.0
- Forward TCP 23 Port Packet to Local IP Address: 192.168.1.21 (This row is circled in red)
- Forward TCP 0 Port Packet to Local IP Address: 0.0.0.0
- Forward TCP 0 Port Packet to Local IP Address: 0.0.0.0

Below the Packet Forwarding section is the 'NAT Open Port' section, which contains ten groups of ports, each with a 'from' and 'to' field set to 0. At the bottom of the form are 'Modify' and 'Cancel' buttons.

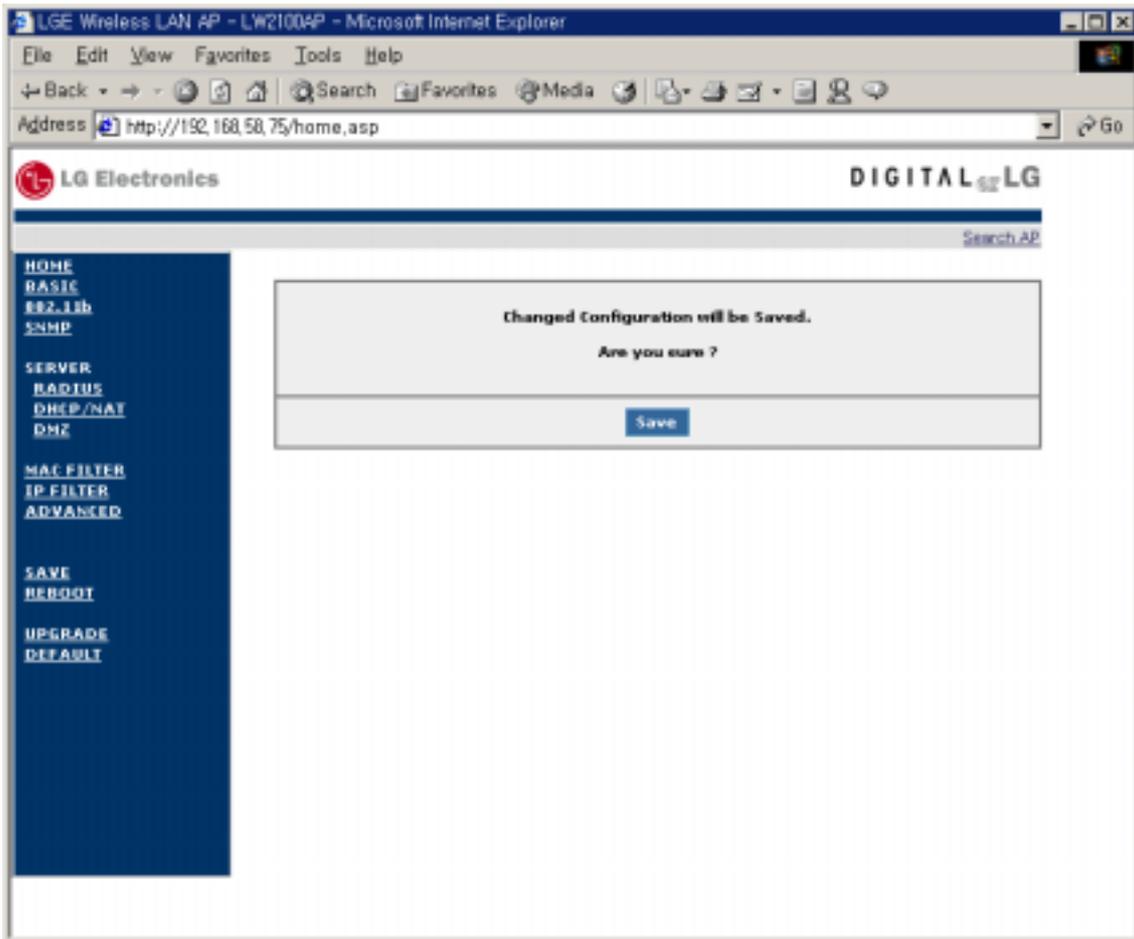
- **port** : port number
- **Local IP Address** : The IP address of a local PC.
- **Modify** : Used to change the item value of Advanced Menu. Change the value of each item in input column and click related button, and then the configuration value will be changed. However, if the "SAVE" is not performed, the changed value will be returned

previous value when the AP is rebooted. Refer the "SAVE" menu.

- **Cancel** : Used to cancel the changed item value of Advanced Menu.

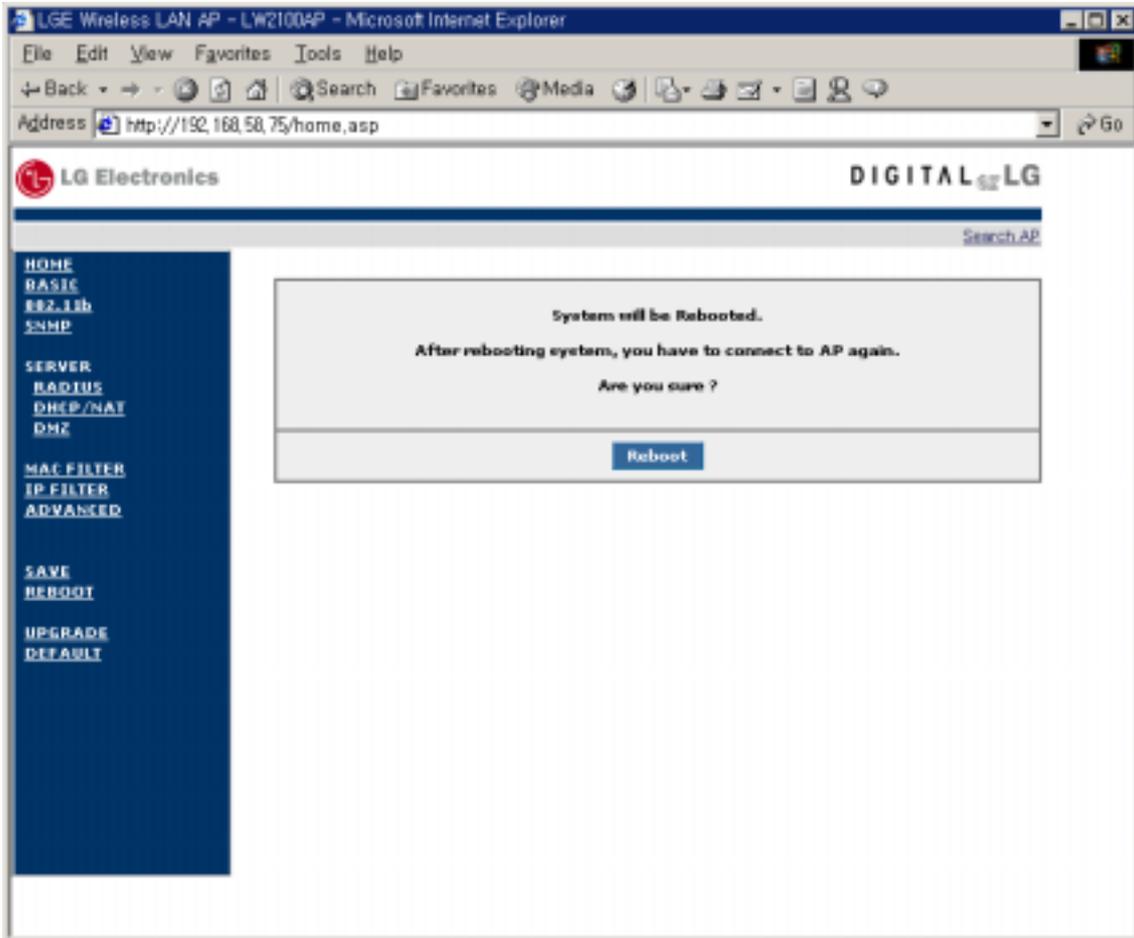
## 2.2.10. Save Menu

Used to save the changed configurations. However, if the "SAVE" is not performed, the changed configuration value will be returned previous value when the AP is rebooted.

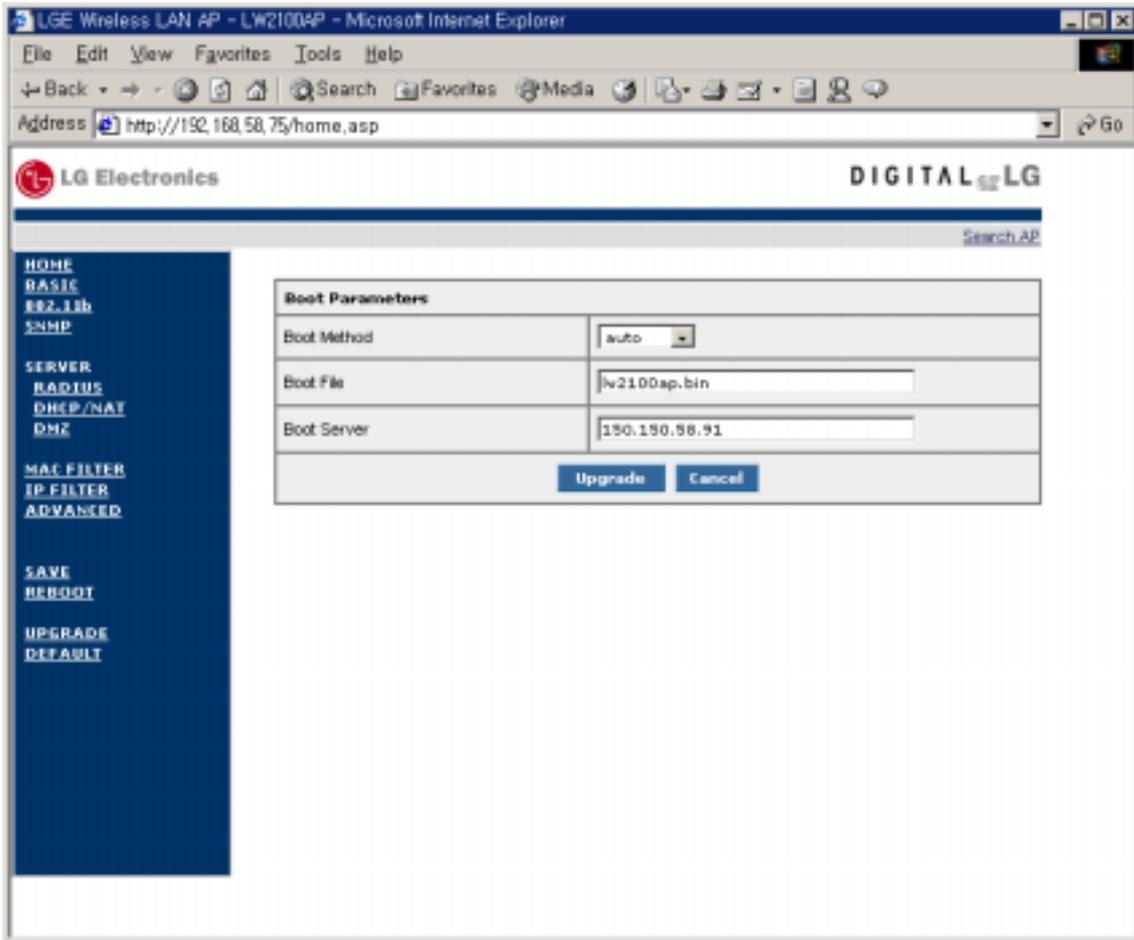


## 2.2.11. Reboot Menu

Used to reset connected AP. Click **Reboot** button. System will be rebooted, and not saved configuration will be deleted. AP has to be reconnected for web managing.



## 2.2.12. Upgrade Menu



There is two Boot Method. One is auto and another is manual(method). The difference is the duration of booting time. Auto method is processed without waiting to enter bios prompt unconditionally Linux booting is processed. Manual method is processed with waiting to enter current bios prompt.

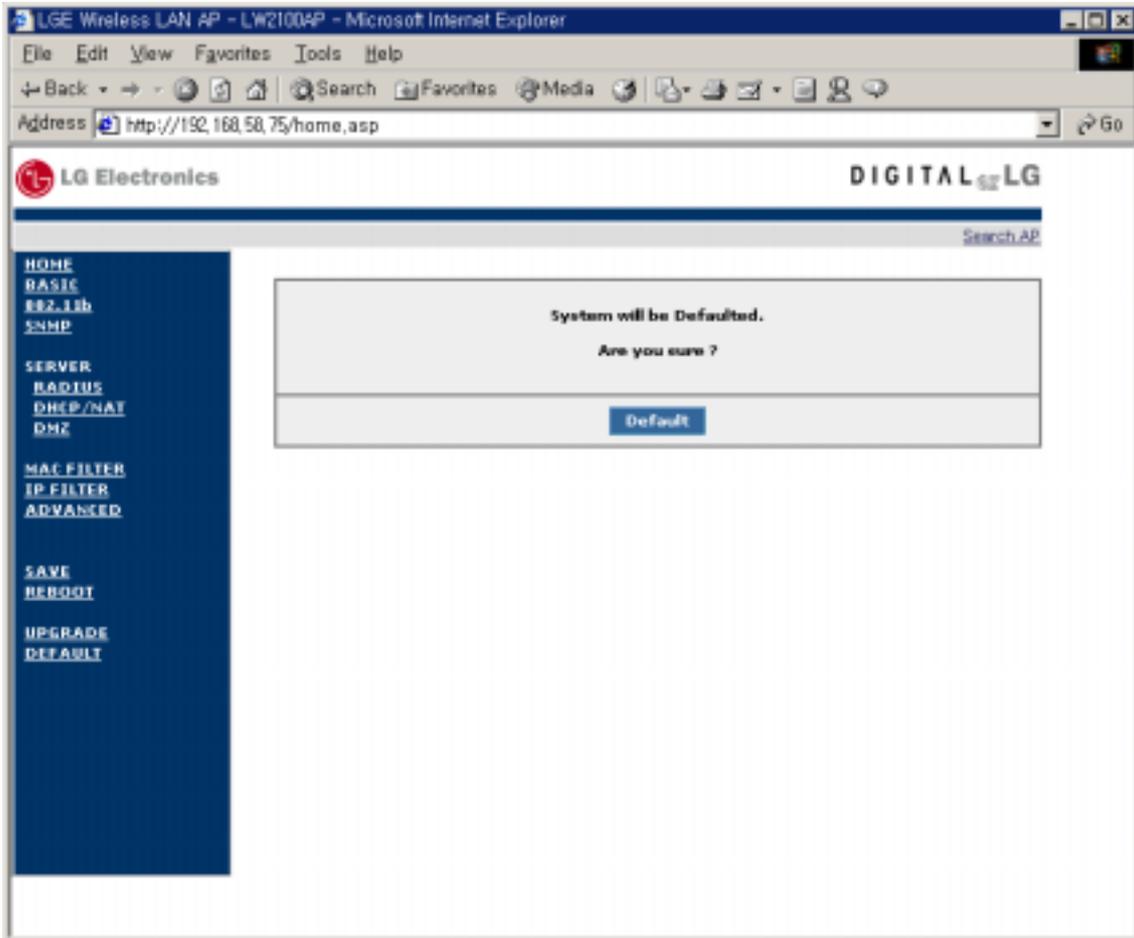
Boot File is upgraded firmware image and Boot Server is TFTP Server. TFTP Server Demon must be installed in Server.(150.150.58.91)

By clicking "the Upgrade Menu", Firmware upgrade is done.

AP's system firmware can upgrade by user's local disk in this page together. After firmware upgrade in this page, AP will be rebooted to apply new firmware. Before AP's firmware upgrade, check console menu to confirm current AP' firmware version.

### 2.2.13. Default Value Menu

Used to make the status of connected AP into factory shipment status. Click the **Default** button. After defaulting the AP, change the WAN IP Address for reconnecting to AP.



## Chapter 3 Console Window Manual

If AP does not include IP address set or is not accessible over the network, you must use console serial cable to connect PC serial port and AP console port and then set the necessary items like IP address.

### 3.1. Connecting Console Window

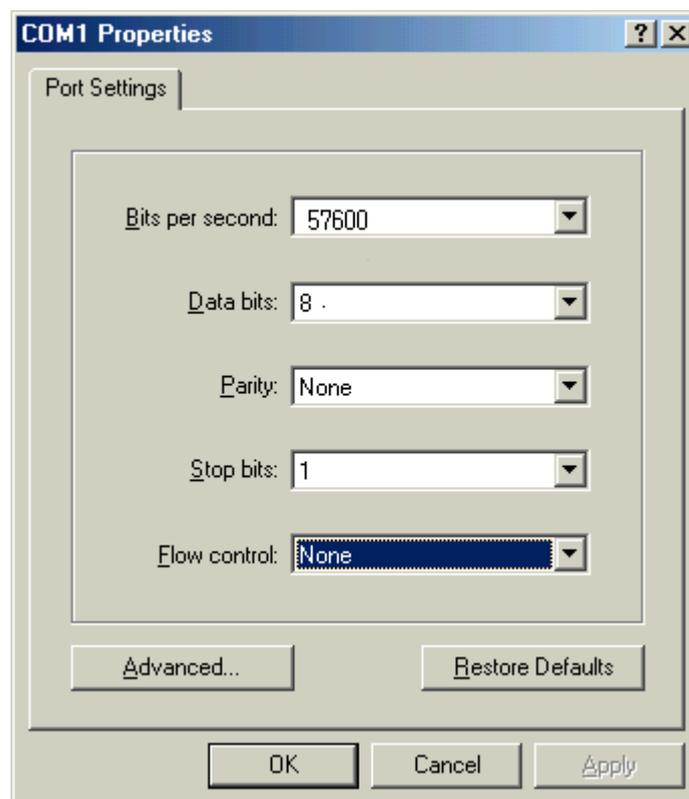
Execute the HyperTerminal program to access AP by serial port. Although this manual describes only examples of how to use HyperTerminal program, you are allowed to access AP by different types of terminal programs. The initial window is executed as below.



Use a random name to access AP and click the "OK". Then, the "Connect To" window appears:



Select the number to be used to access AP from the serial ports list in the above window. Then click the "OK" button. A window appears to set various parameters to be used for serial communications.



To interface with AP, set bit rate per second to “57600”, data bit to “8”, parity to “NO”, stop bit to “1”, flow control to “NO” and click the “OK” button. Then the initial HyperTerminal window shows. Press the “Enter” key in the initial window. If you successfully access AP, a window indicating to input the password of connected AP is opened.

```
LG Access Point
login: root
Password:
+-----+
|                LG LW2100AP                |
+-----+
|  MENU  |
|        |
|  1. EZsetup      |
|  2. Basic[SYSTEM]|
|  3. Basic[WAN/LAN]|
|  4. IEEE 802.11b|
|  5. SNMP         |
|  6. Server[DHCP,NAT,RADIUS]|
|  7. Server[DMZ]  |
|  8. MAC Filter   |
|  9. IP Filter    |
|  0. Advanced     |
|                |
|  COMMAND        |
|  L(Load)/S(Save)/R(Reboot)/D(Default)/C(Command shell)|
|                |
+-----+
|          Select Configuration Menu Number / Select Command          |
+-----+
Select >
```

If the password is correctly entered, a prompt provided by AP firmware appears as shown in the window below. The default value of the password is “lw2100ap”.

### 3.2. Setting Configuration Elements

```
Select > 1
```

When prompted, enter "1" and then press "Enter" key. The current status of the AP set will be displayed in the window. SSID of AP is set to "LGE" and IP address to "10.0.0.1" by default.

```
Select > 1
+-----+
|                LG LW2100AP                |
+-----+
|  MENU  |
|  |    |
|  | 1. EZsetup |
|  | 2. Basic[SYSTEM] |
|  | 3. Basic[WAN/LAN] |
|  | 4. IEEE 802.11b |
|  | 5. SNMP |
|  | 6. Server[DHCP,NAT,RADIUS] |
|  | 7. Server[DMZ] |
|  | 8. MAC Filter |
|  | 9. IP Filter |
|  | 0. Advanced |
|  |    |
|  | COMMAND |
|  | L(Load)/S(Save)/R(Reboot)/D(Default)/C(Command shell) |
|  |    |
+-----+
|                Select Configuration Menu Number / Select Command                |
+-----+
Select >c

***** NOTICE *****
If you want to setup AP configuration, Type "setup" at command shell
*****

[lgap]#
```

You may change information on AP configuration in the current Console Window, using the command number specific to configuration change.

```
Select >> 1
+-----+
|                LG LW2100AP                |
|-----< 1. EZSetup >-----+
* AP Name           : lgap
* ESSID             : network
* Channel           : 4

# WAN Connection    : IP
* WAN MAC Address   : 00:40:5a:93:82:19
* WAN IP Configuration : Static
* WAN IP            : 150.150.58.92
* WAN SUBNET        : 255.255.255.128
* WAN Gateway       : 150.150.58.126
+-----+
|   Press E(Edit) Key for editing / Press Return Key for Upper Menu   |
+-----+
Select >c

***** NOTICE *****
If you want to setup AP configuration, Type "setup" at command shell
*****

[lgap]#
```

Enter "setup" and then press "Enter" key

```
[LGAP]# setup
+-----+
|                LG LW2100AP                |
+-----+
|  MENU  |
|        |
|  1. EZsetup          |
|  2. Basic[SYSTEM]   |
|  3. Basic[WAN/LAN]  |
|  4. IEEE 802.11b    |
|  5. SNMP            |
|  6. Server[DHCP,NAT,RADIUS] |
|  7. Server[DMZ]     |
|  8. MAC Filter      |
|  9. IP Filter       |
|  0. Advanced        |
|        |
|  COMMAND            |
|  L(Load)/S(Save)/R(Reboot)/D(Default)/C(Command shell) |
|        |
+-----+
|                Select Configuration Menu Number / Select Command                |
+-----+
Select >>  1
```



**Caution**

Be careful to define the value(s) and item(s) that you want to change as long as any change in AP configuration may seriously affect terminal system connected to AP.