Easy Hotspot Kit

User's Manual

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P/N: 6835000-0020

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1. Introduction

The Wireless Subscriber Gateway is deployed in a Wireless broadband service network for high-speed access the Internet. The Wireless Subscriber Gateway can immediately recognize new users on the network (and remember returning users) and redirect their browser to a proprietary Web page. That is to say, user needn't change their network configuration to access the Internet, just plug and play.

The product is a freestanding or wall-mounted unit with five Ethernet ports (WAN and LAN), a serial port for external device application. After the initial setup and network configuration is established, a network administrator through a Web management interface easily manages the product.

The two models to provide a variety of access numbers at same time to accommodate different needs of customers:

- 20 access account
- 100 access account

1-1 Package Contents

Please inspect your package. The following items should be included:

- One Wireless Subscriber Gateway
- Two antennas
- One AC Power Adapter for Wireless Subscriber Gateway
- One CD containing user's manual, installation guide
- Two screws for wall-mount
- One UTP Ethernet/Fast Ethernet cable (Cat.5 Twisted-pair)
- One Mini Account Generator Printer
- One AC Power Adapter for mini account generator printer
- One RJ-11 to DB25 male connector cable (1.8m)

If any of the above items are damaged or missing, please contact your dealer immediately.

1-2 Features

Plug and Play - Support All Network Configurations

The Wireless Subscriber Gateway provides instant Internet access by using your own notebook PC without the hassle of configuration setting. This innovative sophisticated design enables instant Internet access wherever traveling may take you. Easy to use plug-and-play access to broadband networks.

Note:

The "PnP" Function only can be used with TCP/IP-based Network.

Seamless Email Handling with Email Server (SMTP) Redirection

The Wireless Subscriber Gateway will redirect subscriber's original message of E-mail according to SMTP rules and sent it out via the specified SMTP server. This function could help subscribers to send E-mail via the local SMTP server when their default SMTP server is out of work or don't allow connecting from Internet.

Remote Configuration

The administrator can access this system by using web browsers such as Netscape Navigator or Microsoft Internet Explorer. This system allows a remote user to view and/or modify system configuration via Internet.

HTTP Proxy Support

Supports common proxies acting as a proxy server. This function could help subscribers without changing proxy settings to eliminate support calls related to client proxy settings.

Home Page Redirection

The Wireless Subscriber Gateway enables solutions providers to redirect subscribers to a portal web site of their choice. This allows the solution provider to generate online advertising revenues and increase business exposure.

Support VPN (Virtual Private Network)

The Wireless Subscriber Gateway can allow subscriber to create VPN networks using the Internet as the medium for transporting data.

<u>V-LAN</u>

The Wireless Subscriber Gateway can avoid sharing data within the wireless or wired LAN group. That is the best solution for HotSpot security. Nobody will allow his computer's data to be shared to anyone else. We can also provide Port-Based V-LAN via our equipped four 10/100Mbps auto-negotiating Ethernet ports.

Secure HTML Login Page (SSL)

We use Secure HTML Login Page through SSL to protect username and password while LAN users login. That enables security authentication within the network.

WEP Data Encryption

WEP (Wireless Equivalent Privacy) ensures the wireless data security and help prevent unauthorized access. We support 64bit, 128bit and 256bit.

Watchdog

The feature enables the Wireless Subscriber Gateway to keep working by resetting system itself once the device crash down.

Built-in Accounting/Authentication System

Provides **No-backend-RADIUS-server** Internet Service Provider to have Integrated Solution for rapid deployment.

1-3 Precautions

- Never remove or open the cover. You may suffer serious injury if you touch these parts.
- Never install the system in the wet locations.
- Use only the original fitting AC power adapter otherwise there is a danger of severe electrical shock.
- Avoid exposing the Wireless Subscriber Gateway to direct sunlight or another heat source.
- Choose a well-ventilated area to position your Wireless Subscriber Gateway.

1-4 Outlook

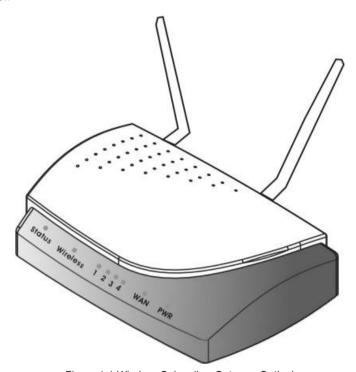


Figure 1-1 Wireless Subscriber Gateway Outlook

1-4-1 Top Panel

The top panel of the Wireless Subscriber Gateway is shown below.

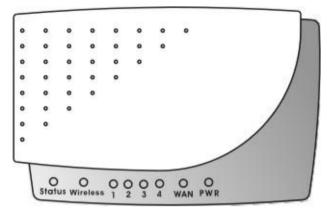


Figure 1-2 Wireless Subscriber Gateway Top Panel

LEDs Indication

LED	State	Description
		The Wireless Subscriber Gateway is not receiving electrical power.
	Green	The Wireless Subscriber Gateway is receiving electrical power.
WAN	Green	The WAN port is used to connect your xDSL or Cable modem.
	Green (Blinking)	Data is in transmitting and receiving on WAN port.
LAN (1-4) Green A port ha		A port has established a valid 10/100Mbps network connection.
	Green (Blinking)	10/100Mbps traffic is traversing the port.
	Off	Port has not established any network connection.
Wireless Green The Wireless Subscriber Gateway has wireless connection.		The Wireless Subscriber Gateway has established a valid wireless connection.
	Green (Blinking)	The Wireless connection is active.
Status Off The V		The Wireless Subscriber Gateway status is defective.
	Green	The Wireless Subscriber Gateway status is complete.
	Green (Blinking)	During firmware upgrades, this status LED will blink.

1-4-2 Rear Panel

The rear panel of the Wireless Subscriber Gateway is shown below.

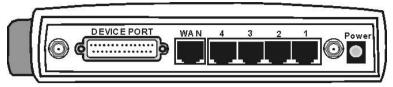


Figure 1-3 Wireless Subscriber Gateway Rear Panel

1. Power Jack:

Used to connect the external power supply with the Wireless Subscriber Gateway device.

2. LAN Port:

The rear panel supports four auto-sensing RJ-45 ports and all ports can be auto-switched to MDI-II connections. The LAN ports used for linking hosts or other networking device. The individual port can be either connected to 100BaseTX networks or 10BaseT networks. When connecting to a 100BaseTX network, the ports operate at 100Mbps in half-duplex mode or 200Mbps in full-duplex mode. When connecting to a 10BaseT network, the ports operate at 10Mbps in half-duplex mode or 20Mbps in full-duplex mode.

3. WAN Port:

One Ethernet port used for linking xDSL or Cable Mode

4. Device Port

Used to connect the Mini Account Generator Printer.

1-4-3 Left Side Panel

The left side panel of the Wireless Subscriber Gateway is shown below.

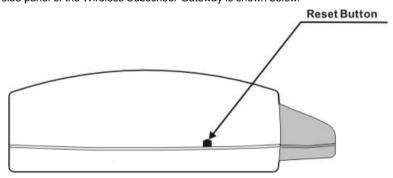


Figure 1-4 Wireless Subscriber Gateway Left Side Panel

1. Reset Button:

The Wireless Subscriber Gateway has a reset button at the left side panel of the device. For some circumstances you might need to reset the Wireless Subscriber Gateway device.

1-5 Technical Specifications

1-5-1 Hardware Specifications

Network Specification

IEE802.3 10BaseT Ethernet

IEE802.3u 100BaseTX Fast Ethernet

IEE802.11b Wireless LAN

ANSI/IEEE 802.3 NWay auto-negotiation

Wi-Fi Compatible

Connectors

Four LAN Ports (10BaseT/100BaseTX Auto cross-over)

One WAN Port (10BaseT/100BaseT)

One Device Port (1 DB9 Female RS232 for external device application)

Wireless Operation Range

Open Space: 100~300m

Indoors: 35~100m

Wireless Data Rate

22 Mbps

11 Mbps

5.5 Mbps

2 Mbps

1 Mbps

Encryption

64/128/256-bit RC4

External Antenna Type

2dBi (Max) Dual detachable diversity antenna with reverse SMA

Power Requirement

External Power Adapter

Input: 100-240 VAC, 50/60 Hz

Output: 5V, 1.4A

LED Indicators

One POWER LED

One WAN Link/Activity LED

Four LAN Link/Activity LEDs

One Wireless Link/Activity LED

One Status LED

Dimension

Size: 200(L) x 130(W) x 44(H) mm

Weight: About 400g (Net)

Environment Conditions

Operating Temperature:-10 to 45 $^{\circ}$ C Storage Temperature: -10 to 65 $^{\circ}$ C

Humidity: 10% to 90% non-condensing

Certifications

FCC part 15 Class B

CE

VCCI Class B

UI

Mounting

Desktop

Wall mounted

1-5-2 Software Specifications

Plug and Play Internet Access

This function can accommodate all network configuration, including DHCP, DNS, HTTP Proxy and dynamic and static IP address assignments. That is, whenever a subscriber login, the Wireless Subscriber Gateway automatically translates their computer's network settings to provide them with seamless access to the broadband network. Subscribers no longer need to alter their computer network configuration settings.

Note:

The "PnP" Function only can be used with TCP/IP-based Network.

Seamless Email Handling with Email Server (SMTP) Redirection

The Wireless Subscriber Gateway will redirect subscriber's original message of E-mail according to SMTP rules and sent it out via the specified SMTP server. This function could help subscribers to send E-mail via the local SMTP server when their default SMTP server is out of work or don't allow connecting from Internet.

DHCP Function

The Wireless Subscriber Gateway will follow RFC2131 that is designed to supply dynamic IP addresses.

HTTP Proxy Support

Supports common proxies acting as a proxy server. This function could help subscribers without changing proxy settings to eliminate support calls related to client proxy settings.

Various WAN Connections

The Wireless Subscriber Gateway provides alternative WAN connection such like PPPoE, PPTP Client, DHCP Client or Static IP for service provider to establish their service networking.

Support VPN (Virtual Private Network)

The Wireless Subscriber Gateway can allow subscriber to create VPN networks using the Internet as the medium for transporting data.

V-LAN

The Wireless Subscriber Gateway can avoid sharing data within the wireless or wired LAN group. That is the best solution for HotSpot security.

Built-in Simple Authentication and Accounting System

The Wireless Subscriber Gateway provides simple authentication and accounting system.

Support VPN (Virtual Private Network) Pass through

VPN PPTP / IPSec pass through provides users who want to run his VPN or secure tunneling client software to connect to his company VPN Server via Wireless Subscriber Gateway.

WEP Data Encryption

WEP (Wireless Equivalent Privacy) ensures the wireless data security and help prevent unauthorized access. We support 64bit and 128bit and 256bit.

Remote Browser-based Configuration and management

The administrator can access this system by using web browsers such as Netscape Navigator or Microsoft Internet Explorer. This system allows a remote user to view and/or modify system configuration via Internet.

Watchdog

The feature enables the Wireless Subscriber Gateway to keep working by resetting system itself once the device crash down.

<u>Sysloq</u>

This function allow network administrator to monitor the usage status of subscribers from remote site. Administrator could set up a syslog server to receive the log that consist of Current logged-in subscribers information send by Wireless Subscriber Gateway within interval time.

2. Installation

The followings are instructions for setting up the Wireless Subscriber Gateway. Refer to the illustration and follow the simple steps below to quickly install your Wireless Subscriber Gateway.

2-1 Wall-Mounting

The Wireless Subscriber Gateway can be wall-mounted on a wall by applying the two mounting brackets on screws.

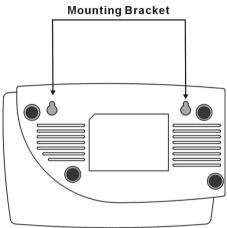


Figure 2-1 Wall-Mounting Bracket - Bottom of Wireless Subscriber Gateway

Please refer to the following instructions for mounting a Wireless Subscriber Gateway on a wall or other surface.

1. Install two screws on a wall according to the relative positions shown below.



Figure 2-2

Hang Wireless Subscriber Gateway on the wall by sliding the two screws in the mounting brackets.

Note: If the screws are not properly anchored, the strain of the cables connected to the Wireless Subscriber Gateway rear panel connectors could pull out the Wireless Subscriber Gateway from the wall.

2-2 Connecting the antennas

The Wireless Subscriber Gateway provides two antenna connectors on the rear of the unit.

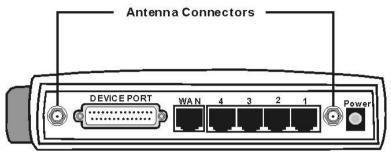


Figure 2-3 Antenna Connectors

2-3 Installation Requirements

Before installing the Wireless Subscriber Gateway, make sure your network meets the following requirements.

System Requirements

The Wireless Subscriber Gateway requires one of the following types of software:

- Windows 95/98/NT/2000/XP
- Any TCP/IP-enabled systems like Mac OS and UNIX (TCP/IP protocol installed)
- Standard phone line for xDSL modem

or

Coaxial cable for Cable modem

- Web Browser Software (Microsoft I.E 4.0 or later version or Netscape Navigator 5.0 or later version)
- One computer with an installed 10Mbps, 100Mbps or 10/100Mbps Ethernet card
- UTP network Cable with a RJ-45 connection (Package contents)

Note: Prepare twisted-pair cables with RJ-45 plugs. Use Cat.5 cable for all connections. Make sure each cable not exceed 328 feet (Approximately 100 meters).

ISP Requirements

Verify whether your ISP use fixed or dynamic IP. If it is a fixed IP, be sure to get the IP from your ISP. For dynamic IP, which is mostly used, the PC will get the IP automatically whenever it hooks up on the modem.

Dynamic IP

Dynamic IP Setting

Fixed IP

- Your fixed IP address for the Wireless Subscriber Gateway
- Your subnet mask for the Wireless Subscriber Gateway
- Your default gateway IP address
- Your DNS IP address

PPPoE

- Your user name from your ISP
- Your password from your ISP

PPTP

- PPTP Server IP Address from your ISP
- PPTP Local IP address from your ISP.
- PPTP Local IP subnet mask from your ISP.
- Your user name from your ISP
- Your password from your ISP

Your PC Requirements

The Static IP settings for the PC

- Your PC's fixed IP address
- Your PC's subnet mask
- Your PC's default gateway IP address
- Your PC's primary DNS IP address

Note:

- 1. The gateway's default IP address setting is "10.59.1.1".
- 2. The gateway's default subnet mask setting is "255.0.0.0".

The Dynamic IP settings for the PC

We recommend that you leave your IP settings as automatically assigned. By default, the Wireless PnP Subscriber Gateway is a DHCP server, and it will give your PC the necessary IP settings.

2-3 Getting Start

- 1. Place the Wireless Subscriber Gateway and Mini account generator printer on a flat work surface.
- Connect the DB-25 connector of printer cable into the device port on the rear of the Wireless Subscriber Gateway.
- 3. Plug the other end of the printer cable into the RJ11 port of the mini account generator printer.

 Check that the mini account generator printer status LED lights.
- 4. Ensure that your modem and computer are both switched on.
- 5. Use the supplied cable to connect the Wireless Subscriber Gateway's WAN port to the modem. Check that the Cable/xDSL Status LED lights.
- Connect your computer to one of the 10/100 LAN ports on the Wireless Subscriber Gateway.Check that the LAN Port Status LED lights.
- 7. Configure the further parameters via a web browser.

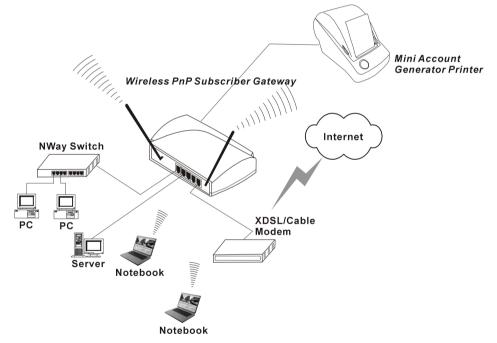


Figure 2-1 Wireless Subscriber Gateway Connection

3. Configuring the Wireless PnP Subscriber Gateway

3-1 Setting Wizard

Step 1: Start your browser, and then enter the factory default IP address 10.59.1.1 in your browser's location box. Press Enter



Figure 3-1 Web Browser Location Field (Factory Default)

Step 2:The Wireless Subscriber Gateway configuration tools menu will appear. In the Username and Password field, type the factory default user name (admin) and password (admin). If you want to setup the device quickly, select Setting Wizard and click Get Started button; otherwise, select Advanced Setup for special configuration settings and click Get Started button



Figure 3-2 Setup Wizard Screen

Note:

- If you would like to change the password please see Step 9.
- Username and Password can consist of up to 20 alphanumeric characters and are case sensitive.
- If for some reason your password is lost or you cannot gain access to the Wireless PnP Subscriber Gateway Configuration Program, please press the reset button to load the device to manufacturer defaults.
- If the Wireless Subscriber Gateway doesn't send packet in 20 minutes, the Wireless Subscriber Gateway wills logout automatically.
- Proxy needs to set disable first when administrator accesses admin UI.

Step 3: Internet Connection Setting

Please setup your Internet Connection				
Please choose one from the following selections PPPoE (Mostly for ADSL modem users)				
User name:				
Password:				
Confirm Password:				
Service name:		(optional)		
PPP MTU Setting:	1460	(optional)		
PPP mss Setting:	1452	(optional)		
Connect on Demand	Max Idle Time: 10 Min.			
C Keep alive	Redial Period: 30 Sec.			
		Next>		

Figure 3-3 Internet Connection Setting Screen

DHCP Client

The device can work as a DHCP client. This allows the device to obtain the IP address and other TCP/IP settings from your ISP. If your xDSL/Cable comes with this feature, please enable Use DHCP Client.



Figure 3-4 Internet Connection Setting Screen—DHCP Client Setting

Static IP Setting

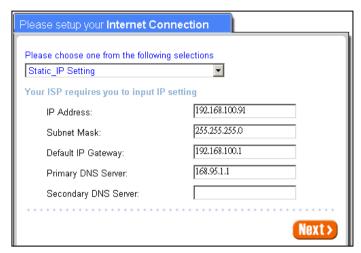


Figure 3-5 Internet Connection Setting Screen—Static IP Setting

Item	Description
IP Address	An IP address for the xDSL/Cable connection (provided by your
	ISP)
Subnet Mask	An IP address (provided by your ISP)
Default IP Gateway	The default IP Gateway address for the xDSL/Cable connection
	(provided by your ISP).
Primary DNS Server	A primary DNS server IP address for the xDSL/Cable connection
	(provided by your ISP).
Secondary DNS Server	A secondary DNS server IP address for the xDSL/Cable connection
	(provided by your ISP). If the primary DNS Server IP were not
	available, meanwhile, Secondary DNS Server IP would start in the
	same time.

PPPoE

Please setup your Internet Conr	nection		
Please choose one from the following selections PPPoE (Mostly for ADSL modem users)			
Your ISP requires you to input user	rname / password		
Username:			
Password:			
PPP MTU Setting:	1492		
TCP MSS Setting:	1452		
Service Name:	(option)		
	Max Idle Time: 10 Min.		
C Keep alive	Redial Period: 30 Sec.		
	Next>		

Figure 3-6 Internet Connection Setting Screen—PPPoE Setting

Item	Default	Description
User Name	Empty	The user name of your ISP account. The user name can
		consist of up to 80 alphanumeric characters and is case sensitive.
Password	Empty	The user password of your ISP account. The password can consist of up to 80 alphanumeric characters and is case sensitive.
Service name	Empty	Your ISP will provide the service name.
PPP MTU Setting	1460	MTU (Maximum Transfer Unit) specifies maximum transmission unit size.
PPP mss Setting	1452	MSS (Maximum Segment Size) specifies maximum segment size.

Item	Default	Description
Connect on Demand	and Max Idle	Time
Connect on Demand	Enable	You can configure your Wireless Subscriber Gateway to
Max Idle Tim	10 Minutes	cut your connection with your ISP after a specified period
		of time (Max Idle Time). If you have been disconnected
		due to inactivity, Connect on Demand enables your
		Wireless Subscriber Gateway to automatically
		re-establish your connection as soon as you attempt to
		access the Internet again. If you wish to activate Connect
		on Demand, click the radio button. If you want your
		Internet connection to remain, click the radio button of
		keep alive. The Max Idle Tim maximum value is 65535
		minutes.
Keep alive and Redial Period		
Keep alive	Disable	This option keeps your PPPoE enabled Internet access
Redial Period	30 Seconds	connected indefinitely, even when it sits idle. The Redial
		Period maximum value is 65535 seconds.

• PPTP Client

Please setup your Internet Conn	ection		
Please choose one from the following selections PPTP (Mostly for Europe ADSL modem users) ▼			
Your ISP requires you to input users PPTP Local IP Address:	name / password / PPTP setting		
PPTP Local Subnet Mask:			
PPTP Server IP Address:			
Username:			
Password:			
PPP MTU Setting:	1460		
TCP MSS Setting:	1360		
Connection ID/Name:	(option)		
Connect on Demand	Max Idle Time: 10 Min.		
C Keep alive	Redial Period: 30 Sec.		
	Next>		

Figure 3-7 Internet Connection Setting Screen—PPTP Client Setting

Item	Default	Description
PPTP Local IP Address	Empty	A PPTP local IP address for the xDSL/Cable
		connection (provided by your ISP).
PPTP Local Subnet Mask	Empty	A PPTP local IP address for the xDSL/Cable
		connection (provided by your ISP).
PPTP Server IP Address	Empty	A PPTP server IP address for the xDSL/Cable
		connection (provided by your ISP).
User name	Empty	The user name of your ISP account. The user name
		can consist of up to 80 alphanumeric characters and
		is case sensitive.
Password	Empty	The user password of your ISP account. The
		password can consist of up to 80 alphanumeric
		characters and is case sensitive.
Connection ID/Name	Empty	Connection ID or connection name.
PPP MTU Setting	1460	MTU (Maximum Transfer Unit) specifies maximum
		transmission unit size.
PPP mss Setting	1420	MSS (Maximum Segment Size) specifies maximum
		segment size.
Connect on Demand and I	Max Idle Time	
Connect on Demand	Enable	You can configure your Wireless Subscriber
Max Idle Tim	10 Minutes	Gateway to cut your connection with your ISP after a
		specified period of time (Max Idle Time). If you have
		been disconnected due to inactivity, Connect on
		Demand enables your Wireless Subscriber Gateway
		to automatically re-establish your connection as
		soon as you attempt to access the Internet again. If
		you wish to activate Connect on Demand, click the
		radio button. If you want your Internet connection to
		remain, click the radio button of keep alive. The Max
		Idle Tim maximum value is 65535 minutes.
Keep alive and Redial Period		
Keep alive	Disable	This option keeps your PPTP enabled Internet
		access connected indefinitely, even when it sits idle.
		The Redial Period maximum value is 65535
		seconds.

Step 4: Wireless Setting

This page allows you to define ESSID, Channel ID and WEP encryption for wireless connection.

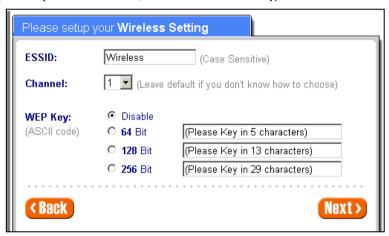


Figure 3-8 Wireless Setting Screen

Item	Default	Description	
ESSID	Wireless	The ESSID is the unique name that is shared among all points	
		in a wireless network. It is case sensitive and must not exceed	
		32 characters.	
Channel	1	The channel ID for wireless connection.	
WEP Key	Disable	Disables or set the use of the WEP algorithm. Enabling the	
		security can protect your data while it is transferred from one	
		station to another. The Wireless Subscriber Gateway support	
		64-bit, 128 bit or 256 bit WEP encryption.	
		Enter 5 characters for ASCII 64-bit WEP Key.	
		Enter 13 characters for ASCII 128-bit WEP Key.	
		Enter 29 characters for ASCII 256-bit WEP Key.	

Step 5: E-mail Server Setting

Wireless Subscriber Gateway allows an extra Email server parameter to forward the subscriber's F-mail



Figure 3-9 E-mail Service Setting Screen

Item	Default	Description
Email Server Redirect	Yes	Disables or enables email server redirect function.
		To prevent some subscriber's original Email server
		may protect by firewall or NAT network. Wireless
		Subscriber Gateway provides an extra Email server
		parameter to forward the subscriber's Email. The
		Wireless Subscriber Gateway not only forwards the
		subscribers' E-mail via other E-mail server but also
		changes the SMTP header. The recipient of your
		E-mail sees the message as if you sent it from your
		local Internet Service Provide, not form the hotel or
		other place.
Email Server IP address or	Empty	Before setting this field, please make sure the E-mail
Domain name		sever relay function is opened. It must not exceed 50
		characters.

Step 6: Authentication Service Setting



Figure 3-10 Authentication Service Setting Screen

Step 7: Printer Setting

There are two different choices, one is exclusive printer, and the other is non-exclusive printer. Exclusive printer is a portable thermal printer that is integrated with Wireless Subscriber Gateway to press one button to generate accounts and receipt immediately without PC operating. Non-exclusive printer can use the PC Web-based browser to print out user account.

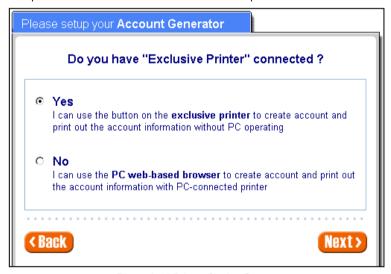


Figure 3-11 Printer Setting Screen

Step 8: Account Generator

Exclusive Printer

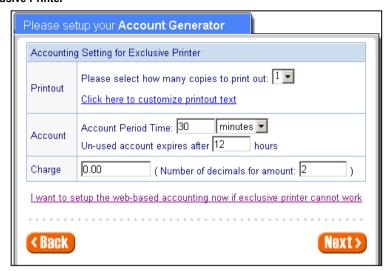


Figure 3-12 Accounting Setting Screen

Item	Default	Description
Printout	1	The system allows you to print all your bills. This value is
		number of copies.
Account		
Account Period Time	30 Min.	A valid period of your service.
Un-used account	12 hours	Un-used account expires after 12 hours.
Charge	0.00	Enter the amount of Internet service. The amount maximum
		value is 999999.
Number of decimals	2	The field maximum value is 3.
for amount		

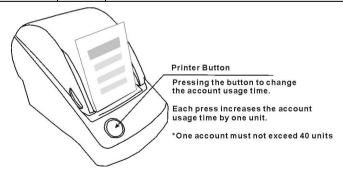


Figure 3-13 The Printer Button of Mini Account Generator Printer

Customize Printout Text

This function allows you to produce custom bill based on your requirements.

	Customize Printout Text	
Title:	Welcome!	(Max.=23)
Username:	Username:]
Password:	Password:]
Usage Time:	Usage Time:]
☑ Price:	Total: Currency: \$	
ESSID:	ESSID:	
WEP:	WEP:]
☑ Time:	yyyy/mm/dd HH:mm:ss (HH:24h hh:12h tt:AM	/PM)
☑ Ending:	Thank you very much!	(Max.=23)
Expire Time:	yyyy/mm/dd HH:mm:ss (HH:24h hh:12h tt:AM	/PM)
		Preview
		Apply

Figure 3-14 Customize Printout Text Setting Screen

Note: The title and ending must not exceed 23 characters.



Figure 3-15 Example-Printout Label

Web-based Accounting

Web-based	Account Generator Pa	Preview / Operate	
No.	Button name	Account Usage time	Charge
	(Max. 12 characters)		(Decimals: 2)
Button 1	30 minutes	30 minutes 🗹	0.00
Button 2	1 hour	1 hours 💌	0.00
Button 3	2 hours	2 hours 💌	0.00
Button 4	3 hours	3 hours	0.00

Figure 3-16 Web-based Accounting Setting Screen

Item	Default	Description
No.	Button1~Button 4	Button 1 to Button 4.
Button name	30Min/ 1hour/	The button name can be specified text. The maximum
	2hours/3hours	character of the button name is 12.
Account Usage	30Min/ 1hour/	Define each button's usage time.
Time	2hours/3hours	
Charge	0.00	Enter the amount of Internet service.

Note: The button 1 setting will apply on "exclusive printer" button setting

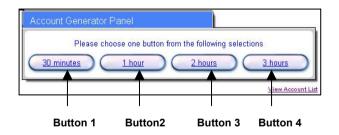


Figure 3-17 Account Generator Panel

Account Setting



Figure 3-18 Account Setting Screen

Item	Default	Description
Expire time	12 hours	The expiration time valid range is 1 to 168 hours.

Account List

The account list shows the current account's information.

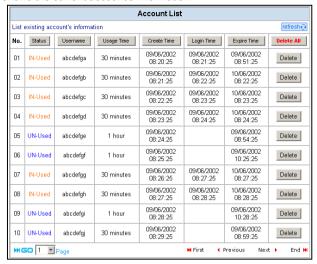


Figure 3-19 Account List

Note:

- 1. Delete: To delete an existing user account.
- 2. The maximum user account entry is 512.

Step 9: System Setting

In the Username and Password field, type the factory default user name (admin) and password (admin). Click Apply and Restart button.



Figure 3-20 System Setting Screen

Item	Default	Description
Username	admin	The user name of administrator. The user name can consist
		of up to 80 alphanumeric characters and is case sensitive.
Password	admin	The user password of administrator. The password can
		consist of up to 80 alphanumeric characters and is case
		sensitive.
Confirm		The password of administrator for confirmation.
System date/time		Define the system date and time.
Allow remote	Anywhere	This function allows remote user to management the device.
management from		

Note:

After change the settings, please click Apply and Restart button to update the new settings and restart the device.

3-2 Advanced Setup

3-2-1 Express Setup

The Express Setup screen enables you to configure basic settings related to accessing the Internet.

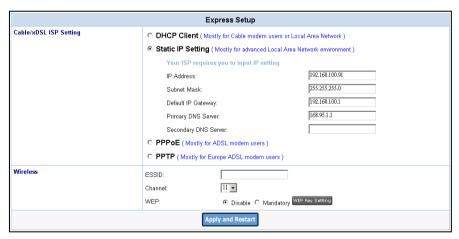


Figure 3-21 Express Setup Screen

Note:

After change the settings, please click Apply and Restart button to update the new settings and restart the device.

Cable/xDSL ISP Setting

Express Setup				
Cable/xDSL ISP Setting	O DHCP Client (Mostly for Cable modern users or Local Area Network)			
	Static IP Setting (Mostly for advanced Local Area Network environment)			
	Your ISP requires you to input IP setting			
	IP Address: 192.168.100.91			
	Subnet Mask: 255.255.255.0			
	Default IP Gateway: 192.168.100.1			
	Primary DNS Server: 168.95.1.1			
	Secondary DNS Server:			
	C PPPoE (Mostly for ADSL modern users)			
	C PPTP (Mostly for Europe ADSL modem users)			

Figure 3-22 Cable/xDSL ISP Setting

DHCP Client

The device can work as a DHCP client. This allows the device to obtain the IP address and other TCP/IP settings from your ISP. If your xDSL/Cable comes with this feature, please enable Use DHCP Client.

DHCP Client (Mostly for Cable modem users or Local Area Network)

Figure 3-23 DHCP Client Setting Screen

Static IP Setting

Static IP Setting (Most!	Static IP Setting (Mostly for advanced Local Area Network environment)		
Your ISP requires you t	Your ISP requires you to input IP setting		
IP Address:			
Subnet Mask:			
Default IP Gateway:			
Primary DNS Server:			
Secondary DNS Server:			

Figure 3-24 Static IP Setting Screen

Item	Description		
IP Address	An IP address for the xDSL/Cable connection (provided by your ISP)		
Subnet Mask	An IP address (provided by your ISP)		
Default IP Gateway	The default IP Gateway address for the xDSL/Cable connection		
	(provided by your ISP).		
Primary DNS	A primary DNS server IP address for the xDSL/Cable connection		
Server	(provided by your ISP).		

Item	Description
Secondary DNS	A secondary DNS server IP address for the xDSL/Cable connection
Server	(provided by your ISP). If the primary DNS Server IP were not available,
	meanwhile, Secondary DNS Server IP would start in the same time.

● PPPoE

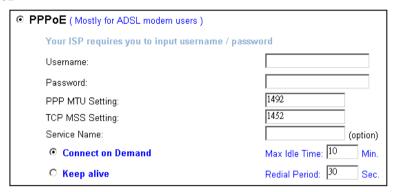


Figure 3-25 PPPoE Setting Screen

Item	Default	Description
User Name	Empty	The user name of your ISP account. The user name can consist of up to 80 alphanumeric characters and is case sensitive.
Password	Empty	The user password of your ISP account. The password can consist of up to 80 alphanumeric characters and is case sensitive.
Service Name (Option)	Empty	Your ISP will provide the service name.
PPP MTU Setting	1492	MTU (Maximum Transfer Unit) specifies maximum transmission unit size.
PPP mss Setting	1452	MSS (Maximum Segment Size) specifies maximum segment size.

Item	Default	Description	
Connect on Demand	and Max Idle	Time	
Connect on Demand	Enable	You can configure your Wireless PnP Subscriber	
Max Idle Tim	10 Minutes	Gateway to cut your connection with your ISP after a specified period of time (Max Idle Time). If you have been disconnected due to inactivity, Connect on Demand enables your Wireless Subscriber Gateway to automatically re-establish your connection as soon as you attempt to access the Internet again. If you wish to activate Connect on Demand, click the radio button. If you want your Internet connection to remain, click the radio button of keep alive. The Max Idle Tim maximum value is 65535 minutes.	
Keep alive and Redia	Keep alive and Redial Period		
Keep alive	Disable	This option keeps your PPPoE enabled Internet access	
Redial Period	30 Seconds	connected indefinitely, even when it sits idle. The Redial Period maximum value is 65535 seconds.	

• PPTP

PPTP (Mostly for Europe ADSL modem users)			
Your ISP requires you to input username / p	Your ISP requires you to input username / password / PPTP setting		
PPTP Local IP Address:			
PPTP Local Subnet Mask:			
PPTP Server IP Address:			
Username:			
Password:			
PPP MTU Setting:	1460		
TCP MSS Setting:	1360		
Connection ID/Name:	(option)		
⊙ Connect on Demand	Max Idle Time: 10 Min.		
C Keep alive	Redial Period: 30 Sec.		

Figure 3-26 PPTP Setting Screen

Item	Default	Description
PPTP Local IP Address	Empty	A PPTP local IP address for the xDSL/Cable
		connection (provided by your ISP).
PPTP Local Subnet Mask	Empty	A PPTP local IP address for the xDSL/Cable
		connection (provided by your ISP).
PPTP Server IP Address	Empty	A PPTP server IP address for the xDSL/Cable
		connection (provided by your ISP).
User name	Empty	The user name of your ISP account. The user name
		can consist of up to 80 alphanumeric characters and
		is case sensitive.
Password	Empty	The user password of your ISP account. The
		password can consist of up to 80 alphanumeric
		characters and is case sensitive.
Connection ID/Name	Empty	Connection ID or connection name.
PPP MTU Setting	1460	MTU (Maximum Transfer Unit) specifies maximum
		transmission unit size.
TCP mss Setting	1360	MSS (Maximum Segment Size) specifies maximum
		segment size.
Connect on Demand and I	Max Idle Time	
Connect on Demand	Enable	You can configure your Wireless Subscriber
Max Idle Tim	10 Minutes	Gateway to cut your connection with your ISP after a
		specified period of time (Max Idle Time). If you have
		been disconnected due to inactivity, Connect on
		Demand enables your Wireless PnP Subscriber
		Gateway to automatically re-establish your
		connection as soon as you attempt to access the
		Internet again. If you wish to activate Connect on
		Demand, click the radio button. If you want your
		Internet connection to remain, click the radio button
		of keep alive. The Max Idle Tim maximum value is
		65535 minutes.
Keep alive and Redial Per	iod	
Keep alive	Disable	This option keeps your PPTP enabled Internet
		access connected indefinitely, even when it sits idle.
		The Redial Period maximum value is 65535
		seconds.

Wireless Setting

This page allows you to define ESSID, Channel ID and WEP encryption for wireless connection.



Figure 3-27 Wireless Setting Screen

Item	Default	Description
ESSID	Wireless	The ESSID is the unique name that is shared among all points in
		a wireless network. It is case sensitive and must not exceed 32
		characters.
Channel	1	The channel ID for wireless connection.
WEP	Disable	Disables or enables the use of the WEP algorithm. Enabling the
		security can protect your data while it is transferred from one
		station to another.

WEP Key Setting

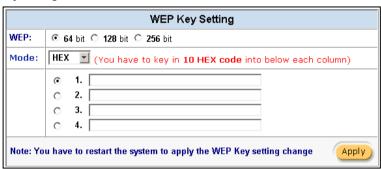


Figure 3-28 WEP Key Setting

Item	Default	Description
WEP	Empty	The Wireless Subscriber Gateway supports 64-bit, 128 bit
		or 256 bit WEP encryption.
Mode	HEX	Options: HEX (Hexadecimal) and ASCII (American
		Standard Code for Information Interchange).

Item	Default	Description
WEP Key	1	This selects which of the Keys the Wireless PnP
		Subscriber Gateway uses when it transmits. You can
		change the selected encryption key every now and then
		to increase the security of your network.
		Enter 5 characters for ASCII 64-bit WEP Key.
		Enter 10 characters for Hex 64-bit WEP Key.
		Enter 13 characters for ASCII 128-bit WEP Key.
		Enter 26 characters for Hex 128-bit WEP Key.
		Enter 29 characters for ASCII 256-bit WEP Key.
		Enter 58 characters for Hex 256-bit WEP Key.



Figure 3-29 WEP Key Setting Save Screen

Note:

After change the settings, please click Apply and Restart button to update the new settings and restart the device.

3-2-2 Advanced Setup

This section details the directions of configuring the Wireless Subscriber Gateway's advanced features, including:

- 1. System Configuration
- 2. WAN/LAN
- Server
- 4. Authentication
- 5. Accounting
- 6. Login Page
- 7. Advertisement
- 8. Wall Garden
- 9. Syslog
- 10. Wireless

Note:

After change the settings of device, please click apply button to save the new settings.

<u>System</u>

Define the Wireless Subscriber Gateway System configuration.

System				
System/Host Name				
Date/Time	Date: 2002 V / 2 V / 24 V (Year/Month/Day) Time: 16 V : 10 V : 54 V (Hour : Minute : Second) Get from my Computer			
Administrator Authorized Access IP Address	© Any C Specify ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			
Multicast Pass Through	○ Enable			
Allow remote user to ping the device	⊙ Enable ○ Disable			
SSL Certificate	⊙ Default ○ Customer Certificate			
	Apply			

Figure 3-30 System Setting Screen

Item	Default	Description
System/Host Name	Empty	Some ISPs use Host Name to authenticate the user. The
		host name can consist of up to 40 alphanumeric
		characters.
Date/Time		
Date	YYYY/MM/DD	The system date of the Wireless Subscriber Gateway.
		The valid setting of year is from 2002 to 2035.
Time	HH:MM:SS	The system time of the Wireless Subscriber Gateway.
Administrator Authorized	Any	Options: Any and Specify.
Access IP Address		
Multicast Pass Through	Disable	This function allows for multiple transmissions to specific
		recipients at same time.
Allow remote user to	Enable	This function allows remote user to ping the Wireless
ping the device		Subscriber Gateway through Internet. Ping is normally
		used to test the physical connection between two devices,
		to ensure that everything is working correctly.

Item	Default	Description
SSL Certificate	Default	Option: default or customize certificate, These are two
		ways to create a certificate, one is purchase a certificate
		from a certificate authority (Ex. Verisign or Thawte), and
		another is creating a self-certificate (For example: Uses
		OpenSSL tool).

WAN/LAN

Device IP (LAN IP) Setting

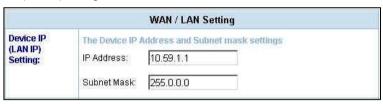


Figure 3-31 Device IP (LAN IP) Setting

Item	Default	Description
IP Address	10.59.1.1	The internal LAN IP address of your Wireless Subscriber Server
		Gateway.
Subnet Mask	255.0.0.0	The subnet mask of your Wireless Subscriber Gateway.

WAN MAC Address

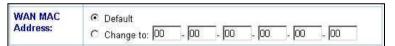


Figure 3-32 WAN MAC Address Setting

Item	Description
IP Address	The default MAC address is set to the WAN physical interface on device. If
	required by your ISP, fill in the MAC address of the network interface card in the
	change to field.

WAN Port Mode

Please see the section Cable/xDSL ISP Setting in this chapter.

Server

Server Configuration				
Web Server	Web Server Port. 80 (80, 8010 - 8060) ☐ SSL Security			
DHCP Server	C DHCP Disable C DHCP Relay DHCP Server IP Address: C DHCP Server (Default) DHCP Pool Start IP Address: DHCP Pool Size: Lease Duration Minutes: [10.59.1.2] [10.5			
Email Server Redirect	IP Address or Domain Name:			
	Apply			

Figure 3-33 Server Configuration Screen

Item	Default	Description
Web Server	80	The web server port allowed range is 80 or 8010 to
		8060 if administrator wants to remote access under
		NAT Network. For access the Wireless Subscriber
		Gateway system under NAT, please tab the
		"http://WAN Port IP Address: Port Number". The
		function of remote access Internet.
DHCP Server	Enable	There are three types of DHCP Services.
		DHCP Disable—Disable the DHCP server function.
		DHCP Relay—Enable DHCP Relay function.
		DHCP Server—Enable DHCP Server function.
DHCP Relay	Empty	To route DHCP through an external server, the
		administrator needs to enable the DHCP relay and
		assign a valid DHCP server IP address.
DHCP Server IP Address	10.59.1.1	The IP address of DHCP relay server.
DHCP Pool Start IP Address	10.59.1.2	The DHCP Pool Start IP address. To set up the
		DHCP pool that is the same network with WAN port
		you just tab the WAN port IP address. If you want to
		set up a NAT DHCP pool please type the same
		network IP Address with NAT network as the DHCP
		server IP address.
DHCP Pool Size	253	The DHCP pool size range is 1 to 1024.
Lease Duration Minutes	1440	The DHCP lease time. The DHCP lease time range
		is 1 to 71582788 minutes.

Item	Default	Description
Email Server Redirect	Empty	To prevent some subscriber's original Email server
		may protect by firewall or NAT network. Wireless
		Subscriber Gateway provides an extra Email server
		parameter to forward the subscriber's Email. The
		Wireless Subscriber Gateway not only forwards the
		subscribers' E-mail via other E-mail server but also
		changes the SMTP header. The recipient of your
		E-mail sees the message as if you sent it from your
		local Internet Service Provide, not form the hotel or
		other place. Note: Before setting this sever, please
		make sure the E-mail sever relay function is opened.
		It must not exceed 50 characters.

<u>Authentication</u>

Authentication Configuration		
Authentication Type	○ No Authentication Proprietary	
SSL Login Page Security	⊙ Disable ○ Enable	
	Apply	

Figure 3-34 Authentication Setting Screen

Item	Default	Description
Authentication Type	Proprietary	Option: No Authentication or Proprietary Authentication.
	Authentication	The Wireless Subscriber Gateway provides proprietary
		authentication, which is allowed service provider to build
		up an internet access business without any other
		authentication software like Radius Server.
SSL Login Page	Enable	Enables or disables SSL security of login page.

Accounting

• Web-based Account Generator Panel Setting

Web-based Account Generator Panel Setting Preview / Opera			
No.	Button name	Button name Account Usage time	
	(Max. 12 characters)		(Decimals: 2)
Button 1	30 minutes	30 minutes 🗹	0.00
Button 2	1 hour	1 hours 🔽	0.00
Button 3	2 hours	2 hours	0.00
Button 4	3 hours	3 hours	0.00

Figure 3-35 Web-based Account Generator Panel Setting

Item	Default	Description
No.	Button1~Button 4	Button 1 to Button 4.
Button name	30Min/ 1hour/	The button name can be specified text. The maximum
	2hours/3hours	character of the button name is 12.
Account Usage	30Min/ 1hour/	Define each button's usage time.
Time	2hours/3hours	
Charge	0.00	Enter the amount of Internet service.

Account Setting



Figure 3-36 Account Setting Screen

Item	Default	Description
Expire time	12 hours	The expiration time valid range is 1 to 168 hours.

Printout Setting

Please see the section "Customize Printout Text" in this chapter.

Login Page

For some Hotels or ISPs, they may hope to have a customize subscriber's login page to the users. This function helps they to realize the ideal. The page elements are including welcome image, background color, article etc. Certainly the administrator can decide to use only standard form. The Wireless Subscriber Gateway provides three different login page formats, including standard, advanced and frame format.

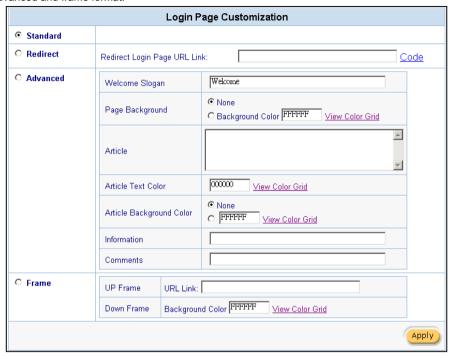


Figure 3-37 Login Page Customization Screen

Standard

This is Wireless Subscriber Gateway default login page, can't be changed.



Figure 3-38 Standard Login Page Setting Screen



Figure 3-39 Standard Login Page

Login Page Redirect



Figure 3-40 Login Page Redirect



Figure 3-41 Redirect Login Page Code

Advanced

This function allow user to design login page of Wireless PnP Subscriber Gateway.



Figure 3-42 Login Page Customization-Advanced Setting Screen

Item	Default	Description		
Welcome Slogan	Welcome	The maximum allowed characters length is 80.		
Page Background	None	The page background can be none or specified color. For the background color format please views the color grid. The allowed format is Hexadecimal (RGB values of Red, Green, and Blue, where each component has a hexadecimal value of from 00 to FF. 000000 is black and FFFFFF is white.)		
Article		The article is allowed the administrator to input a paragraph in the subscriber login page for advisement or announcement. The maximum character of the article is 1024.		
Article Text Color	000000	The article text color can be specified color. For the specified text color format please views the color grid. The allowed format is Hexadecimal.		
Article Background Color	None	The article background can be specified color. For the background color format please views the color grid. The allowed format is Hexadecimal (RGB values of Red, Green, and Blue, where each component has a hexadecimal value of from 00 to FF. 000000 is black and FFFFFF is white.)		
Information	Empty	Allow the administrator to input the text information such like address, telephone number and fax information. The maximum character of the information is 80.		

Item	Default	Description
Comments	Empty	Allow the administrator to input the text comments such like
		"Pleas Contact to our Customer Service Center, EXT 142".
		The maximum character of the comment is 80.

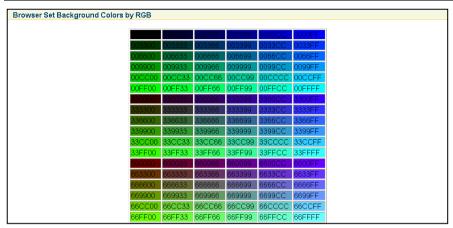


Figure 3-43 Color Gird Selection Table

Frame



Figure 3-44 Login Page Customization - Frame Setting Screen

Item	Default	Description	
URL Link (Up Frame)		The input format can be http://www.yahoo.com. The	
		maximum character of the URL Link is 200.	
Background Color (Down	FFFFFF The down frame background can be specified color.		
Frame)	For the background color format please views the color		
	grid. The allowed format is Hexadecimal (RGB values		
	of Red, Green, and Blue, where each component has a		
		hexadecimal value of from 00 to FF. 000000 is black	
		and FFFFFF is white.)	

Advertisement

The system allow service provider to input 10 URL links for advertisement link purpose.

	Advertisement URL Link
	lows ISP to specify the advertisement URL link. The advertisement Web page will show right when the subscribers start Network access.
Frequency	One Time Only Multi-sending Interval
URL Link 1	
URL Link 2	
URL Link 3	
URL Link 4	
URL Link 5	
URL Link 6	
URL Link 7	
URL Link 8	
URL Link 9	
URL Link 10	
	Apply

Figure 3-45 Advertisement Setup

Item	Default	Description
Frequency	One time Only	The Frequency can be chosen One Time Only or
		Multi-sending. One Time Only means to send the
		advertisement link once after the subscriber Login. The
		Multi-sending means to send the advertisement link
		every interval minutes.
Interval	1	The value range is 1 to 60 (minutes).
URL Link 1~10	Empty	This function allows the administrator to input ten
		different websites in the table for advertisement. And
		these 10 websites will display to the subscribers at
		random when the subscribers login in the Wireless PnP
		Subscriber Gateway system. The input format can be
		"http://www.yahoo.com". The maximum character of
		the URL Link # is 200.

Wall Garden

We prepare three URL links that allows subscriber to access the specific Web pages even they didn't have a username or password. It's free trying and can use for advertisement.

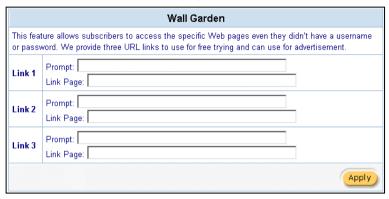


Figure 3-46 Wall Garden



Figure 3-47 Login Page

Item	Description
Prompt	The URL Link Prompt is allowed user to set the prompt string in user
	customize login page. The maximum allowed characters length is 80.
Link 1~3	The input format can be "http://www.yahoo.com". The maximum character of
	the Link# is 200.

Syslog

This function allow network administrator to monitor the usage status of subscribers. Administrator could set up a syslog server to receive the log that consist of current logged-in subscribers information send by Wireless Subscriber Gateway within interval time.

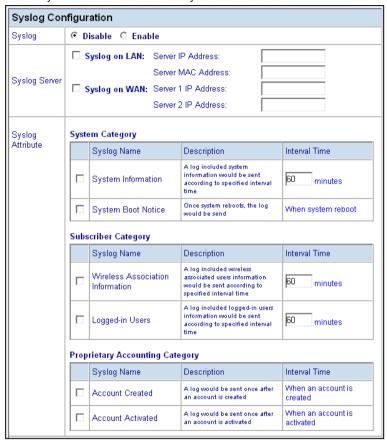


Figure 3-48 Syslog Configuration

Item	Default	Description
Syslog	Enable	Enables or disables the syslog server function.
Syslog on LAN		
Server IP Address	Empty	Enter in the IP address of the syslog server. The device will
		send all of its logs to the specified syslog server.
Server MAC Address	Empty	Enter in MAC address of the syslog server. The device will
		send all of its logs to the specified syslog server.

Item	Default	Description	
Syslog on WAN			
Server 1 IP Address	Empty	Enter in IP address of the syslog server one.	
Server 2 IP Address	Empty	Enter in IP address of the syslog server two.	
Syslog Attribute			
Syslog Information	60 minutes	The log included system information would be sent according	
		to specified interval time.	
System Boot Notice		If device have been rebooted, the log would be sent.	
Wireless Association	60 Minutes	A log included wireless associated users information would	
Information		be sent according to specified interval time.	
Logged-in Users	60 Minutes	A log included logged-in users information would be sent	
		according to specified interval time.	
Subscriber Trace		A log included subscriber login/logout time would be sent	
		once after subscriber logout.	
Account Create		A log would be sent if account were created.	
Account Activated		A log would be sent if account were activated.	

Wireless

Wireless			
General Setting:	ESSID: Wireless		
	Channel: 1 💌		
	WEP:		
Do not change any setting below unless you make sure you understand all the meaning of setting. You can press "DEFAULT" to restore the wireless factory default setting once you made setting changed to cause wireless not work			
Beacon Interval:	200 (msec, range:1~1000, default:200)		
RTS Threshold:	2432 (range:256~2342, default:2342)		
Fragmentation Threshold:	2346 (range:256~2346, default:2346, even number only)		
DTIM Interval:	3 (range:1~65535, default:3)		
Transmission Rates:	○ 1-2(Mbps) ○ 1-2-5.5-11(Mbps) ⊙ 1-2-5.5-22(Mbps)		
Preamble Type:	○ Short Preamble		
Authentication Type:	○ Open System ○ Shared Key ⊙ Both		
Antenna Selection:	⊙ Left Antenna C Right Antenna C Diversity Antenna		
SSID Broadcast:	● Enable C Disable		
Default			

Figure 3-49 Wireless Setting Screen

Item	Default	Description	
Beacon Interval	200	This value valid range is 1 to 1000 indicates the frequency interval	
		of the beacon.	
RTS Threshold	2432	This value valid range is 256 - 2342. This setting determines the	
		packet size at which the Wireless PnP Subscriber Gateway issues	
		a request to send (RTS) before sending the packet. A low RTS	
		Threshold setting can be useful in areas where many client	
		devices are associating with the Wireless PnP Subscriber	
		Gateway, or in areas where the clients are far apart and can detect	
		only the Wireless PnP Subscriber Gateway and not each other.	
Fragmentation	2346	This setting determines the size at which packets are fragmented.	
Threshold		Enter a setting ranging from 256 to 2346 bytes. Use a low setting	
		in areas where communication is poor or where there is a great	
		deal of radio interference.	
DTIM Interval	3	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. The DTIM Interval value valid range is	
		1 to 65535.	
Transmission	1-2-5.5-22	The basic transfer rates should be set depending on the speed of	
Rates	(Mbps)	your wireless network. The default setting is 1-2-5.5-22 (Mbps).	
Preamble Type	Long	The preamble type is a section of data at the head of a packet that	
	Preamble	contains information the Wireless PnP Subscriber Gateway and	
		client devices need when sending and receiving packets. The	
		setting menu allows you to select a long or short preamble type.	
Antenna	Left	Select left antenna, right antenna or diversity antenna.	
Selection	Antenna	Left Antenna—	
		If your device has removable antennas and you install a high-gain	
		antenna on the device's left connector, you should use this setting	
		for both receive and transmit. When you look at the device's back	
		panel, the left antenna is on the left.	
		Right Antenna—	
		If your device has removable antennas and you install a high-gain	
		antenna on the device's right connector, you should use this	
		setting for both receive and transmit. When you look at the	
		device's back panel, the right antenna is on the right.	

Item	Default	Description
Antenna	Left	Diversity antenna—
Selection	Antenna	This default setting tells the device to use the antenna that
		receives the best signal. If your device has two fixed
		(non-removable) antennas, you should use this setting for both
		receive and transmit.
Authentication	Both	Select open system, shared Key or both.
Туре		Open System — Allows any device to authenticate and then
		attempt to communicate with the wireless subscriber gateway.
		Using open authentication, any wireless device can authenticate
		with the wireless subscriber gateway, but the device can only
		communicate if its WEP keys match the wireless subscriber
		gateway. Devices not using WEP do not attempt to authenticate
		with a wireless broadband router that is using WEP. Open
		authentication does not rely on a RADIUS server on your network.
		Shared Key-During shared key authentication, the wireless
		subscriber gateway sends an unencrypted challenge text string to
		any device attempting to communicate with the wireless
		subscriber gateway. The device-requesting authentication
		encrypts the challenge text and sends it back to the wireless
		subscriber gateway. If the challenge text is encrypted correctly, the
		wireless subscriber gateway allows the requesting device to
		authenticate. Both the unencrypted challenge and the encrypted
		challenge can be monitored, however, which leaves the wireless
		subscriber gateway open to attack from an intruder who calculates
		the WEP key by comparing the unencrypted and encrypted text
		strings. Because of this weakness, shared key authentication can
		be less secure than open authentication. Like open authentication,
		shared key authentication does not rely on a RADIUS server on
		your network.
		Both—With this setting stations can communicate with or without
		data encryption.

Item	Default	Description		
SSID Broadcast	Enable	Enable— It allows devices that do not specify an SSID to		
		associate with the wireless broadband router.		
		Disable— Devices that do not specify an SSID (devices that are		
		"broadcasting" in search of an access point to associate with) are		
		not allowed to associate with the access point. With no selected,		
		the SSID used by the client device must match exactly the		
		wireless broadband router's SSID.		

Default

This operation will load the default manufacturer configuration to the system. All this page (Wireless) configuration setup will be replaced by default settings.

3-2-3 System Status

System Information

The System Information Menu displays current system basic information including the host name, LAN, WAN, DHCP Configuration, DNS, E-mail Server Information and the system hardware/firmware version number.

System			
Display the WAN connection status, firmware and hardware version.			
	Host Name:		
	Bootrom Version:		
	Firmware Version:		
System Status	Wireless Version:		
	Concurrent Users Limitation:	100	
	WAN MAC Address:	00:90:0E:00:3C:22	
	LAN MAC Address:	00:90:0E:00:3C:21	
	WAN Port Mode:	Static IP Setting	
WAN IP Settings	IP Address:	192.168.100.91	
WANTE Settings	Subnet Mask:	255.255.255.0	
	Default IP Gateway:	192.168.100.1	
DNS	Primary DNS Server:	168.95.1.1	
DIA2	Secondary DNS Server:		
	DHCP Status	Server	
DHCP	Start IP Address:	10.59.1.2	
рисе Висе	End IP Address:	10.59.1.254	
	Lease Time:	1440	
E-Mail	Server IP Address:		
	Country	00	

Figure 3-50 System Information Screen

Account List

The account list shows the current account's information.



Figure 3-51 Account List

Delete: Delete button allow service provider to delete the subscriber accounts.

Account Log

The account log shows the account's log information.

Account Log						
List acco	List account's log. Clear Log refresh →					
NO.	Usemame	Create Time	Login Time	Usage Time	Charge	Status
1	28mpbr52	2002/1/22 18:08:58		2 minutes	0.00	Expired
2	mg2bz522	2002/1/22 18:09:21		2 hours	0.00	Expired
3	3mt2j922	2002/1/22 18:09:21		2 minutes	0.00	Expired
4	d9d2b922	2002/1/22 18:09:26		2 minutes	0.00	Expired
5	ppvi8r32	2002/1/22 18:09:32		2 hours	0.00	Expired
6	uw329m32	2002/1/22 18:09:32		2 minutes	0.00	Expired
7	fb45my32	2002/1/22 18:09:38		2 minutes	0.00	Expired
8	632ptg32	2002/1/22 18:10:01		2 hours	0.00	Expired
9	wbu78r22	2002/1/22 18:10:12		2 hours	0.00	Expired
10	58j79722	2002/1/22 18:10:21		2 hours	0.00	Expired

Figure 3-52 Account Log List

Current User

Display the current logged-in subscribers status. It allow service provider to disconnect any subscribers.

	Current User List				
List cur	List current on-line user's information refresh⊕				
No.	Туре	Usemame	IP Address	MAC Address	Disconnect
1	Wireless	User1	192.168.100.1	OE-90-80-90-EE-12	Apply
2	Wireless	User2	192.168.100.2	OE-90-80-90-EE-13	Apply
3	Wireless	User3	192.168.100.3	OE-90-80-90-EE-14	Apply
4	Wireless	User4	192.168.100.4	OE-90-80-90-EE-15	Apply
5	Ethernet	User5	192.168.100.5	OE-90-80-90-EE-16	Apply
6	Ethernet	User6	192.168.100.6	OE-90-80-90-EE-17	Apply
7	Wireless	User7	192.168.100.7	OE-90-80-90-EE-18	Apply
8	Wireless	User8	192.168.100.8	OE-90-80-90-EE-19	Apply
9	Ethernet	User9	192.168.100.9	OE-90-80-90-EE-20	Apply
10	Ethernet	User10	192.168.100.10	OE-90-80-90-EE-21	Apply

Figure 3-53 Current User Screen

Apply: To disconnect a subscriber.

DHCP Clients

The DHCP client table shows the current DHCP users on the LAN.

DHCP Clients			
DHCP Client's Information, including assigned IP address, MAC address.			
No.	MAC Address	IP Address	
1	00:02:2D:4B:86:DE	10.59.1.2	
2	00:C0:CA:19:7D:58	10.59.1.3	

Figure 3-54 Current User Screen

Session List

The remote site administrator could monitor the real time usage status of Wireless Subscriber Gateway via this page.

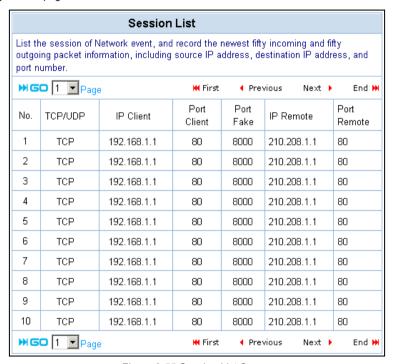


Figure 3-55 Session List Screen

3-2-4 System Tools

Firmware Upgrade

The Firmware Upgrade menu loads updated firmware to be permanent in flash ROM. The download file should be a binary file from factory; otherwise the agent will not accept it. The success of the download operation depends on the accessibility of the TFTP server and the quality of the network connection. After downloading the new firmware, the agent will automatically restart it.



Figure 3-56 Firmware Upgrade Screen

Note:

Before downloading the new firmware, users must save the configuration file for restore configuration parameters of the device.

Import/Export Setting

Use the Import/Export Setting menu to save or restore configuration parameters of the Wireless PnP Subscriber Gateway.



Figure 3-57 Import/Export Setting Screen

SSL Certificate

The function allows you to download the registered CA certificate into the Wireless Subscriber Gateway.

SSL Certificate Download			
This feature allows you to download the registered CA certificate into this device			
TFTP Server IP Address:			
Password			
Certificate File:			
Private Key File:			
	Apply		

Figure 3-58 SSL Certificate

Note: The password field must the same as the CA's registered password.

System Account

Administrator Account			
Administrator can fully control this system and modify all settings.			
Username:	admin		
Password:	****		
Confirm:			
Web-based Acco	ounting Manager		
Web-based accounting manager can operate the	proprietary web-based accounting system.		
Username:	account		
Password:	*****		
Confirm:			
Supervisor Account			
Supervisor can only view system status and change his password.			
Username:	supervisor		
Password:	******		
Confirm:			
Super Subscriber Account			
Super subscriber is a built-in subscriber account for system test or premium usage.			
Username:	super		
Password:	****		
Confirm:			
	Apply		

Figure 3-59 System Account

Item	Default	Description
Administrator Account	This account can fully control this system and modify all setting.	
Username	admin	Administrator username. The user name can consist
		of up to 20 alphanumeric characters and is case
		sensitive.
Password	admin	Administrator password. The password can consist
		of up to 20 alphanumeric characters and is case
		sensitive.
Confirm	Empty	The password of administrator for confirmation.

Item	Default	Description
Web-based Accounting	Web-based	accounting manager can operate the proprietary
Manager	web-based accounting system.	
Username	account	The user name can consist of up to 20 alphanumeric
		characters and is case sensitive.
Password	account	The password can consist of up to 20 alphanumeric
		characters and is case sensitive.
Confirm	Empty	The password of user account for confirmation.
Supervisor Account	This accoun	nt can only view system status and change his
	password.	
Username	supervisor	Super Subscriber user name. The user name can
		consist of up to 20 alphanumeric characters and is
		case sensitive.
Password	supervisor	Super Subscriber password. The password can
		consist of up to 20 alphanumeric characters and is
		case sensitive.
Confirm	Empty	The password of super subscriber for confirmation.
Super Subscriber Account	Super subso	criber is a built-in subscriber account for system test.
Username	super	Super Subscriber user name. The user name can
		consist of up to 20 alphanumeric characters and is
		case sensitive.
Password	super	Super Subscriber password. The password can
		consist of up to 20 alphanumeric characters and is
		case sensitive.
Confirm	Empty	The password of super subscriber for confirmation.

Log Export

This feature can export the stored account log from this device to your PC.

Account Log Export			
This feature can export the stored account log from this device to your PC.			
TFTP Server IP Address:			
Text File Name:	acc_log.txt		
	Apply		

Figure 3-60 Log Export Screen

Factory Setting

This operation will load the default manufacturer configuration to the system. All previous configuration setup will be replaced by default settings. There are two different choices after you decided to change to the factory setting. One is to change all the parameters into factory setting but only reserve the account data. The other is to clear all the parameters into factory setting including the account data.



Figure 3-61 Factory Setting Screen

Restart

If your Wireless Subscriber Gateway is not operating correctly, you can choose this option to display the restart Wireless Subscriber Gateway screen. Clicking the apply button restart the Wireless Subscriber Gateway, with all of your settings remaining intact.



Figure 3-62 Restart Screen

Restart

If your Wireless Subscriber Gateway is not operating correctly, you can choose this option to display the restart Wireless Subscriber Gateway screen. Clicking the apply button restart the Wireless Subscriber Gateway, with all of your settings remaining intact.



Figure 3-62 Restart Screen

Logout

If you would like to leave the configuration page, please click apply to exit.

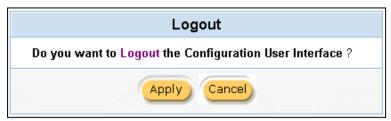


Figure 3-63 Logout Screen

Appendix A RJ-45 Connector Description

RJ-45 Ethernet Port

The Wireless Subscriber Gateway RJ-45 Ethernet port can connect to any networking device that use a standard LAN interface, such as a Hub/Switch Hub or Router. Use unshielded twisted-pair (UTP) or shield twisted-pair (STP) cable to connect the networking device to the RJ-45 Ethernet port.

Depending on the type of connection, 10Mbps or 100Mbps, use the following Ethernet cable, as prescribed.

10Mbps: Use EIA/TIA-568-100-Category 3,4 or 5 cable.

100Mbps: Use EIA/TIA-568-100-Category 5 cable.

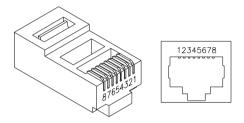


Figure A-1 RJ-45 Connector and Cable Pins

Note:

To prevent loss of signal, make sure that the length of any twisted-pair connection does not exceed 100 meters.

Appendix B Regulations/EMI Compliance

FCC Regulatory Statement

Part 15-Class B compliant device

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including that which may cause undesired operation.

This equipment has been test and found to comply with the limits for a computing device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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:

- 1. Reorient or relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. The equipment and the receiver should be connected the outlets on separate circuits.
- 4. Consult the dealer or an experienced radio/television technician for help.

Changes or modification not expressly approved be the party responsible for compliance could void the user's authority to operate the equipment.

LIMITED WARRANTY

Wireless PnP Subscriber Gateway

What the warranty covers:

We warrant its products to be free from defects in material and workmanship during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, we will at its sole option repair or replace the product with a like product with a like product. Replacement product or parts may include remanufactured or refurbished parts or components.

How long the warranty is effective:

The Wireless PnP Subscriber Gateway is warranted for one year for all parts and one year for all labor from the date of the first consumer purchase.

Who the warranty protects:

This warranty is valid only for the first consumer purchaser.

What the warranty does not cover:

- 1. Any product, on which the serial number has been defaced, modified or removed.
- 2. Damage, deterioration or malfunction resulting from:
 - a. Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
 - b. Repair or attempted repair by anyone not authorized by us.
 - c. Any damage of the product due to shipment.
 - d. Removal or installation of the product.
 - e. Causes external to the product, such as electric power fluctuations or failure.
 - f. Use of supplies or parts not meeting our specifications.
 - g. Normal wears and tear.
 - h. Any other cause that does not relate to a product defect.
- 3. Removal, installation, and set-up service charges.

How to get service:

- 1. For information about receiving service under warranty, contact our Customer Support.
- 2. To obtain warranted service, you will be required to provide (a) the original dated sales slip, (b) your name, (c) your address (d) a description of the problem and (e) the serial number of the product.
- 3. Take or ship the product prepaid in the original container to your dealer, and our service center.
- 4. For additional information, contact your dealer or our Customer Service Center.

Limitation of implied warranties:

THERE ARE NOWARRANTIED, EXPRESSED OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION CONTAINED HEREIN INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Exclusion of damages:

Our LIABILITY IS LIMITED TO THE COST OF REPAIR OR REPLACEMENT OF THE PRODUCT. We SHALL NOT BE LIABLE FOR:

- 1. DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THE PRODUCT, DAMAGES BASED UPON INCONVENCE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, LOSS OF PROFITS, LOSS OF BUSINESS OPPORTUNITY, LOSS OF GOODWILL, INTERFERENCE WITH BUSINESS RELATIONSHIPS, OR OTHER COMMERCIAL LOSS, EVEN IF ADVISED OF THE POSSIBLITY OF SUCH DAMAGES.
- 2. ANY OTHER DAMAGES. WHETHER INCIDENTAL. CONSEQUENTIAL OR OTHERWISE.
- 3. ANY CLAIM AGAINST THE CUSOMER BY ANY OTHER PARTY.