

# ZSR1134WE

# 802.11g **Wireless** Broadband Router

User's Manual

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## **Chapter 1 Introduction**

### Welcome

Thank you for purchasing Zonet ZSR1134WE – 802.11g wireless broadband router! This high cost-efficiency router is the best choice for Small office / Home office users, all computers and network devices can share a single xDSL / cable modem internet connection at high speed. Easy install procedures allows any computer users to setup a network environment in very short time - within minutes, even inexperienced. When the number of your computers and network-enabled devices grow, you can also expand the number of network slot by simple attach a hub or switch, to extend the scope of your network!

All computers and IEEE 802.11b/g wireless-enabled network devices (including PDA, cellular phone, game console, and more!) can connect to ZSR1134WE without additional cabling. With the support of 802.11g standard, ZSR1134WE provides data transfer of up to 54Mbps, up to 5 times faster than 802.11b; it is backwards compatible with existing 802.11b infrastructure while migrating to the new screaming fast 802.11g.

The ZSR1134WE giving you an instant network today, and the flexibility to handle tomorrow's expansion and speed.

### **Contents of Package**

- One ZSR1134WE
- One Power Adapter
- One User Manual CD
- One Quick Installation Guide
- One Cradle

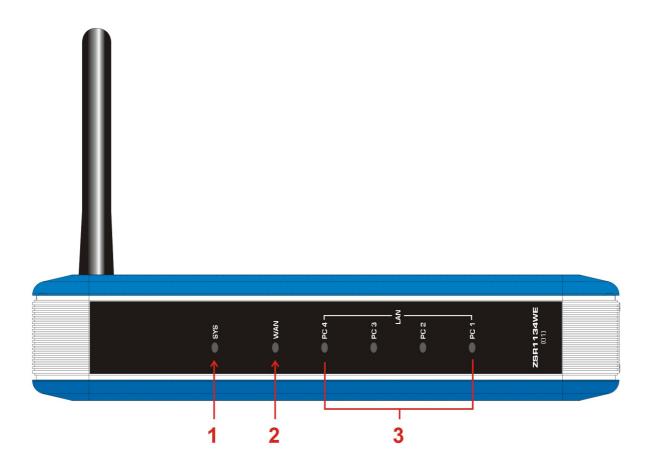
Contact your local authorized reseller or the store purchased from for any items damaged and/or missing.

### **System Requirements**

- Internet connection, provided by xDSL or cable modem with a RJ-45 Ethernet port.
- Computer with wired or wireless network interface card.
- Web browser (Microsoft Internet Explorer 5.5 or above, Firefox 1.0 or above).
- An available AC power socket (100–240V, 50/60Hz)

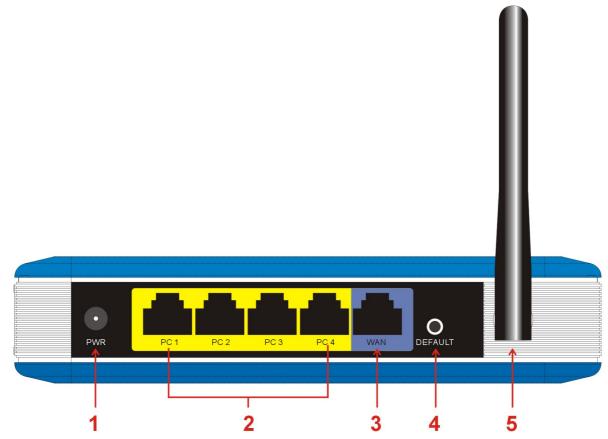
## Getting to Know Your ZSR1134WE

### Front Panel



LED Indicator	Status	Description		
SYS	ON	Indicates ZSR1134WE is receiving power		
515	Flashing	Indicates ZSR1134WE works normally.		
ON WAN Flashing		Indicates WAN port is connected		
		Indicates WAN activity (transferring or receiving data)		
	ON	Indicates LAN port is connected		
LAN(1/2/3/4)	Flashing	Indicates LAN activity (transferring or receiving data)		

#### **Rear Panel**



Item Name	Description
POWER	Power connector, connects to power adapter
1-4 (LAN Ports)	Local Area Network (LAN) ports 1 to 4
WAN	Wide Area Network (WAN / Internet) port.
DEFAULT	Reset ZSR1134WE to factory default settings (clear all settings).
Antenna	The antenna is 2dBi dipole antenna.

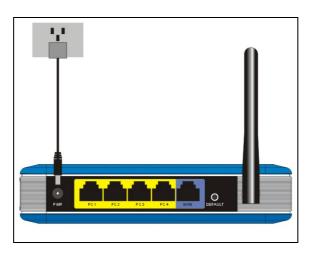
There is a way to reset the ZSR1134WE's factory defaults by using the Default Reset button:

- 1. Turn off ZSR1134WE's power
- 2. Press and hold the default reset button and turn on ZSR1134WE at the same time.
- 3. Hold the button until the system LED lights up (about 10 seconds)
- 4. Release the default reset button and wait for ZSR1134WE to reboot.

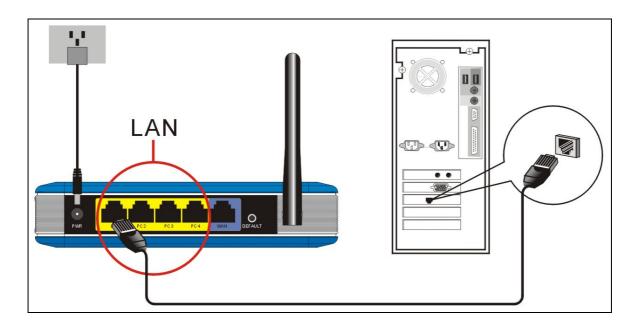
## **Chapter 2 Hardware Installation**

Please follow the following instruction to build the network connection between your ZSR1134WE and your computers, network devices:

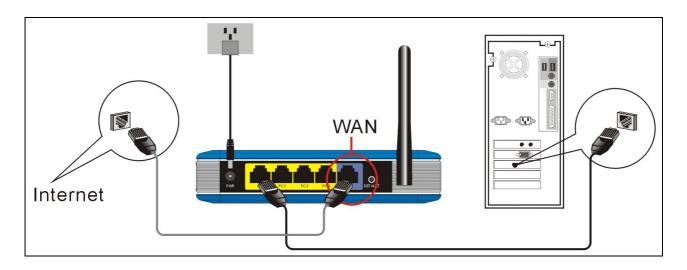
1. Connect the power adapter to the wall socket, and then connect it to the **Power** socket of ZSR1134WE.



2. Connect all your computers, network devices (network-enabled consumer devices other than computers, like game console, or switch / hub) to the **LAN** port of ZSR1134WE.



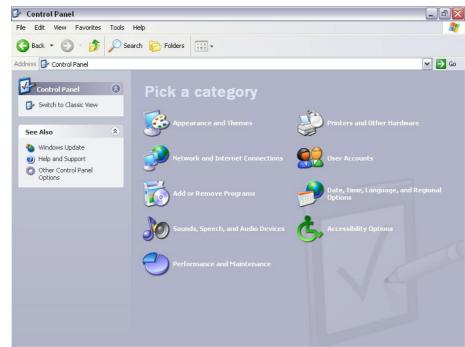
3. Connect your xDSL / cable modem to the **WAN** port of ZSR1134WE by Ethernet cable.



4. Please check all LEDs on the front panel. SYS LED should be steadily on, WAN and LAN LEDs should be on if the computer / network device connected to the respective port of ZSR1134WE is powered on and correctly connected. If any LED you expected is not on, please recheck the cabling, or jump to "Troubleshooting" for possible reasons and solution.

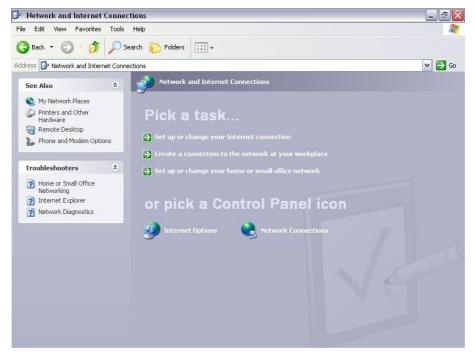
## Chapter 3 Connect Your ZSR1134WE

### How to Set the Network Configurations for My Computer

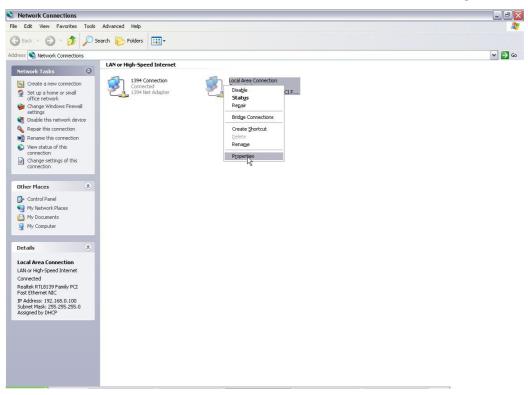


1. Click *Start* → *Control Panel* 

2. Click Network and Internet Connections -> Network Connections



3. Right click Local Area Network Connection and select Properties.



4. Select Internet Protocol (TCP/IP) and click Properties.

Connect using:				
🕎 Realtek	RTL8139	Family PCI Fast	Etł 🔽	Configure
This connection	n uses the	following items		
QoS F     GIS     AEGIS     Thtem	6 Protocol	(IEEE 802.1x) v	/3.5.3.0	
<		III		
Install		Uninstall	E	Properties
Transmission wide area ne	etwork pro	rotocol/Interne tocol that provid nnected networ	des communi	
Show icon i				onnectivity

5. Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**. Click **OK** to save the configurations.

eneral	Alternate 0	Configuration	1				
this cap		ings assigne rwise, you n :ettings.					
📀 Oł	otain an IP a	address auto	matically				
-O Us	e the follow	ing IP addre	ISS:				
IP ac	ldress:					10	
Subr	iet mask:			(3)	11. 1	-	
Defa	ult gateway				- 52	6)) (	
💿 Oł	otain DNS s	erver addres	s automal	ically			
-OUs	e the follow	ing DNS ser	rver addre	sses: —			
Prefe	med DNS s	erver:		-	111		
Alter	nate DNS isi	erver:		*	+1	-	
						Adva	anced
				_			Cano

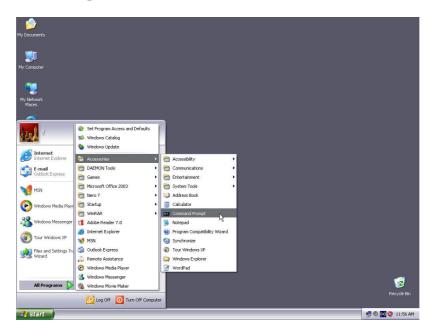
### **Additional Settings for Wireless Client**

If you choose to access ZSR1134WE via a wireless client, please also verify the following:

- 1. Make sure your PC is equipped with 802.11g or 802.11b wireless adapter and has appropriate WLAN card driver/utility and TCP/IP installed.
- 2. Set the wireless adapter to use appropriate TCP/IP settings as described in previous section.
- 3. Launch the wireless adapter's provided utility and verify that your wireless client is configured with these settings:
  - **Operation Mode:** Infrastructure
  - **SSID:** default
  - Authentication: Disabled
  - Encryption: Off
  - Radio Band: 802.11B/G

How to Check the Network Connection

1. Select *Start* → *Programs* → *Accessories* → *Command Prompt*.



2. Input *ping 192.168.1.1* and press *Enter*. If the screen displays as below, it means your PC is connected to your router successfully.

If not, please make sure the hardware installation and network adapter are OK.

C:\TINDOTS\system32\cmd.exe	
C:\Documents and Settings\Freddy>ping 192.168.1.1	
Pinging 192.168.1.1 with 32 bytes of data:	
Reply from 192.168.1.1: bytes=32 time=1ms TTL=64	
Reply from 192.168.1.1: bytes=32 time<1ms TTL=64	
Reply from 192.168.1.1: bytes=32 time<1ms TTL=64	
Reply from 192.168.1.1: bytes=32 time<1ms TTL=64	
Ping statistics for 192.168.1.1: Packets: Sent = 4, Received = 4, Lost = 0 (0% lo Approximate round trip times in milli-seconds: Minimum = Oms, Maximum = 1ms, Average = Oms	)ss),
C:\Documents and Settings\Freddy>_	-
	• //

## **Chapter 4 Basic Configurations**

This section is to show you how to configure your new ZSR1134WE through the Web-based Configuration Utility.

### How to Access the Web-based Configuration Utility

1. After your computer obtained an IP address from ZSR1134WE, please start your web browser, and input the default IP address of ZSR1134WE <u>http://192.168.1.1</u> in address bar.

🚰 about:blank - Microsoft Internet Explorer							
Eile	<u>E</u> dit	⊻iew	F <u>a</u> vorites	<u>T</u> ools	Help		1
A <u>d</u> dre	ss 🕘	http://:	192.168.1.1			-	] ∂Go
							-
🙋 Do	ine					Internet	1.

2. Please input user name and password and then click **OK**. Both default user name and password is **guest**.

Enter Nets	vork Passwoi	rd	×
<b>?</b> >	This secure W	/eb Site (at 192.168.1.1) requires you to log on.	
IJ	Please type th	e User Name and Password that you use for Device.	
	<u>U</u> ser Name	guest	
	Password	XXXXX	
	□ <u>S</u> ave this	password in your password list	
		OK Cancel	

### **Quick Setup Wizard**

1. When *Convenient Setup* show up, Click *Next* to continue.

## **Convenient Setup**

The Convenient Setup will guide you to configure access point for first time. Please follow the Convenient Setup step by step.

#### Welcome to Convenient Setup.

The Wizard will guide you the through following steps. Begin by clicking on Next.

- 1. Setup Operation Mode
- 2. Choose your Time Zone
- 3. Setup LAN Interface
- 4. Setup WAN Interface
- 5. Wireless LAN Setting
- 6. Wireless Security Setting

Next>>

#### a. Operation Mode

## **1. Operation Mode**

You can setup different modes to LAN and WLAN interface for NAT and bridging function.

⊙ Gateway:	In this mode, the device is supposed to connect to internet via ADSL/Cable Modem. The NAT is enabled and PCs in four LAN ports share the same IP to ISP through WAN port. The connection type can be setup in WAN page by using PPPOE, DHCP client, PPTP client or static IP.
O Bridge:	In this mode, all ethernet ports and wireless interface are bridged together and NAT function is disabled. All the WAN related function and firewall are not supported.
O Wireless ISP:	In this mode, all ethernet ports are bridged together and the wireless client will connect to ISP access point. The NAT is enabled and PCs in ethernet ports share the same IP to ISP through wireless LAN. You must set the wireless to client mode first and connect to the ISP AP in Site-Survey page. The connection type can be setup in WAN page by using PPPOE, DHCP client, PPTP client or static IP.

#### • Gateway

ZSR1134WE is supposed to connect to Internet via ADSL/Cable Modem. The NAT is enabled and PCs in four LAN ports share the same IP to ISP through WAN port. The connection type can be setup in **WAN** page by using PPPoE, DHCP client, PPTP client or static IP.

#### • Bridge

All Ethernet ports and wireless interface are bridged together and NAT function is disabled. All the WAN related function and firewall are not supported.

#### • Wireless ISP

All Ethernet ports are bridged together and the wireless client will connect to ISP access point. The NAT is enabled and PCs in Ethernet ports share the same IP to ISP through wireless LAN. You must set the wireless to client mode first and connect to the ISP AP in *Site Survey* page. The connection type can be setup in *WAN* page by using PPPoE, DHCP client, PPTP client or static IP.

#### b. Time Zone

## 2. Time Zone Setting

You can maintain the system time by synchronizing with a public time server over the Internet.

#### 🗹 Enable NTP client update

Time Zone Select :	(GMT-08:00)Pacific Time (US & Canada); Tijuana	*
NTP server :	192.5.41.41 - North America 🔽	

#### • Time Zone

Select your time zone from the drop-down menu.

#### • NTP Server

Manually assign time server address if the default time server does not work.

Cancel

<<Back

#### c. LAN Setup

LAN Setup page allows you to specify a private IP address for ZSR1134WE's LAN ports as well as a subnet mask for your LAN segment.

to configure the paramete the LAN port of your Acc for IP addresss, subnet r	ess Point. Here you may
192.168.1.1	
255.255.255.0	
	the LAN port of your Acc of for IP addresss, subnet r 192.168.1.1

#### • IP Address

ZSR1134WE's LAN IP address (not your PC's IP address). Once you modify the IP address, you need to remember it for the Web-based Utility login next time. Default value is 192.168.1.1

#### • Subnet Mask

ZSR1134WE's subnet mask for measurement of the network size. Default value is 255.255.255.0.

#### d. WAN Setup

## 4. Internet Setup

This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by click the item value of WAN Access type.

WAN Access Type:	DHCP Client 💌			
	Static IP			
	DHCP Client			
	PPPoE			
	PPTP			
	30 <del>3</del> 4			
		Capitel	< < Back	Nexton

- Static IP Your ISP has given you an IP address already
- **DHCP Client** Your ISP will automatically give you an IP address. And then click **Next**.
- **PPPoE** Your ISP requires PPPoE connection
- **PPTP**

Your ISP requires you to use a Point-to-Point Tunneling Protocol (PPTP) connection.

### e. Wireless Basic Settings

## 5. Wireless Basic Settings

This page is used to configure the parameters for wireless LAN clients which may connect to your Access Point.

Band:	2.4 GHz (	(B+G)
Mode:	AP	~
Network Type:	AP Client	
SSID:	WDS	
Channel Number:	AP+WDS	

Enable Mac Clone (Single Ethernet Client)



• Mode

Support AP, Client, WDS, AP+WDS mode.

• Network Type

Support infrastructure and hoc.

• SSID

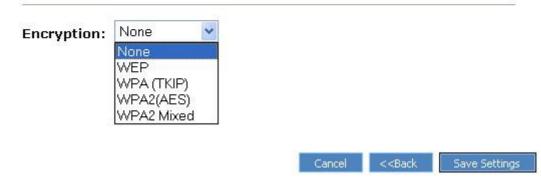
It's the name of your wireless network.

### Channel Number

The channel used by the wireless LAN. All devices in the same wireless LAN should use the same channel.

## 6. Wireless Security Setup

This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.



#### • Encryption Mode

ZSR1134WE provides security authentication methods including: None, WEP, WPA(TKIP), WPA2(AES) and WPA2 Mixed. *None* means do not encrypt wireless data.

#### • WEP

WEP (Wired Equivalent Privacy) is an encryption method used to protect your wireless data communications. WEP uses a combination of 64-bit or 128-bit keys to provide access control to your network and encryption security for every data transmission.

#### • WPA (TKIP)

TKIP means "Temporal Key Integrity Protocol", which incorporates Message Integrity Code (MIC) to provide protection against hackers. Choose "Pre-Shared Key Format"

#### • WPA2(AES)

This use CCMP protocol to change encryption key frequently. AES can provide high level encryption to enhance the wireless LAN security.

#### • WPA2 Mixed

This will use TKIP or AES based on the other communication peer automatically.

### **LAN Setup**

## LAN Setup

This page is used to configure the parameters for local area network which connects to the LAN port of your Access Point. Here you may change the setting for IP addresss, subnet mask, DHCP, etc..

IP Address:	192.168.1.1		
Subnet Mask:	255.255.255.0		
Default Gateway:	0.0.0.0		
DHCP:	Server 💌		
DHCP Client Range:	192.168.1.100 -	192.168.1.200	Show Client
Domain Name:			
302.1d Spanning Free:	Disabled 🚩		
Clone MAC Address:	000000000000	1	

#### • IP Address

ZSR1134WE's LAN IP address (not your PC's IP address). Once you modify the IP address, you need to remember it for the Web-based Utility login next time. Default value is 192.168.1.1

#### Subnet Mask

ZSR1134WE's subnet mask for measurement of the network size. Default value is 255.255.255.0.

#### • Default Gateway

The IP address of Default gateway you obtained after connect to the Internet, if you haven't connected to Internet yet, this field is blank.

#### DHCP Server

You can enable or disable the DHCP server. By enabling the DHCP server ZSR1134WE will automatically give your LAN clients an IP address. If the DHCP is selected client, ZSR1134WE will get an IP address from the other DHCP Server

#### • DHCP Client Range

You can select a particular IP address range for your DHCP server to issue IP addresses to your LAN Clients.

#### • Domain name

Put in a name to mark your DHCP Server.

#### • 802.1d Spanning tree

You can enable or disable the Spanning tree for ZSR1134WE.

#### • Clone MAC address

Replace the LAN MAC address with the MAC address of that PC.

### **Internet Setup**

## **Internet Setup**

This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by click the item value of WAN Access type.

WAN Access Type:	DHCP Cli	ent 💌
Host Name:		
MTU Size:	1412	(1400-1492 bytes)
Attain DNS Autor Set DNS Manually		
DNS 1:		
DNS 2:		
DNS 3:		
Clone MAC Address:	00000000	0000
Enable uPNP		
Enable Ping Acc	ess on W	AN
🔲 Enable Web Ser	ver Acce	ss on WAN
📃 Enable IPsec pa	ss throug	gh on VPN connection
Enable PPTP pa	ss throug	h on VPN connection

Enable L2TP pass through on VPN connection

Save Settings

#### • WAN Access Type

• Static IP address

IP address provided by your ISP.

- **DHCP Client** Your ISP will automatically give you an IP address.
- **PPPoE** Your ISP requires PPPoE connection
- PPTP

Your ISP requires you to use a Point-to-Point Tunneling Protocol (PPTP) connection.

### • MTU

Maximum Transmission Unit. It is the size of largest datagram that can be sent over a network. The default value is 1412. Do NOT modify it unless necessary.

#### • DNS

You can specify a DNS server that you wish to use

### • Clone MAC Address

Replace the WAN MAC address with the MAC address of that PC

## **Chapter 5 Wireless Settings**

### **Basic Settings**

## **Wireless Basic Settings**

This page is used to configure the parameters for wireless LAN clients which may connect to your Access Point. Here you may change wireless encryption settings as well as wireless network parameters.

📃 Disable Wirele	ess LAN Interface
Band:	2.4 GHz (B+G) 💌
Mode:	AP 💌
Network Type:	Infrastructure 💙
SSID:	default
Channel Number:	8 💌
Associated Clients:	Show Active Clients
Enable Mac C	lone (Single Ethernet Client)
Enable Universimultaneouly)	rsal Repeater Mode (Acting as AP and client
SSID of Extended	Interface:
Save Settings	

Band

Support 802.11b/g mixed, 802.11b and 802.11g modes.

Mode

Support AP, Client, WDS, AP+WDS mode.

• Network Type

Support infrastructure and hoc.

• SSID

It's the name of your wireless network.

• Channel Number

Select the channel used for wireless communication from drop-down list. Available channel numbers are 1 to 13 for European countries, 1 to 11 for USA.

• Associated Clients

Click **Show Active Clients** button, then an **Active Wireless Client Table** will pop up. You can see the status of all active wireless stations that are connecting to ZSR1134WE. • Enable Mac Clone

Click the **Enable MAC Clone** checkbox will copy the MAC address of your PC to the WLAN MAC.

 Enable Universal Repeater Mode
 To Enable Universal Repeater Mode, Acting as AP and client simultaneously

### **Advanced Settings**

## Wireless Advanced Settings

These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.

Authentication Type:	Open Sys	tem 🔘	Shared k	(ey 💽 A	uto
Fragment Threshold:	2346	(256-234	46)		
RTS Threshold:	2347	(0-2347)	)		
Beacon Interval:	100	(20-102	24 ms)		
Data Rate:	Auto 💌				
Preamble Type:	Ostange € State Stat	mble 🤇	) Short P	reamble	
Broadcast SSID:	💿 Enabled	🔘 Disab	led		
IAPP:	💿 Enabled	🔿 Disab	led		
802.11g Protection:	💿 Enabled	🔘 Disab	led		
WMM:	🔘 Enabled	💿 Disab	led		
RF Output Power:	⊙ 100% (	50%	<mark>○25%</mark>	010%	05%
Turbo Mode:	💿 Auto 🛛 🔘	Always	Ooff		
	Note: "Alway "Auto" will or	0.0000000000000000000000000000000000000		<ul> <li>A second sec second second sec</li></ul>	

Save Settings

#### • Authentication Type

- **Open System:** Wireless stations can associate with ZSR113WE without WEP encryption.
- **Shared Key:** Also need to setup WEP key in **Security** page and wireless stations should use WEP encryption in the authentication phase to associate with ZSR1134WE.
- **Auto**: Wireless client can associate with ZSR1134WE by using any one of above two authentication types.

#### • Fragment Threshold

Specify the maximum size of packet during the fragmentation of data to be transmitted. Default value is 2346.

#### • RTS Threshold

When the packet size is smaller the RTS threshold, ZSR1134WE will not use the RTS/CTS mechanism to send this packet. Default value is 2347.

#### Beacon Interval

The interval of time ZSR1134WE broadcast a beacon. Beacon is used to synchronize the wireless network. Default value is 100.

#### • Data Rate

For different requirement, you can select one of the suitable Basic Data Rates. Default value is Auto.

#### • Preamble Type

- Long Preamble can provide better wireless LAN compatibility
- Short Preamble can provide better wireless LAN performance

#### Broadcast SSID

- **Enabled:** Every wireless station located within the coverage of ZSR1134WE can discover it easily.
- **Disabled:** Provide better security.

#### • IAPP

Enabled IAPP allows wireless station roaming between IAPP enabled routers within the same wireless LAN.

#### • 802.11g Protection

It also called CTS Protection. It is recommended to enable the protection mechanism. This mechanism can decrease the rate of data collision between 802.11b and 802.11g wireless stations. When the protection mode is enabled, the throughput of ZSR1134WE will be a little lower due to many of frame traffic should be transmitted.

### **Security Setup**

#### a. None

### **Wireless Security Setup**

This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

Encryption: None	Set WEP Key
Use 802.1x Authentication	• WEP 64bits OWEP 128bits
WPA Authentication Mode	CEnterprise (RADIUS)  • Personal (Pre-Shared Key)
WPA Cipher Suite:	TKIP AES
WPA2 Cipher Suite:	TKIP AES
Pre-Shared Key Format:	Passphrase 👻
Pre-Shared Key:	
Enable Pre- Authentication	
Authentication RADIUS Server:	Port 1812 IP address

Note: When encryption WEP is selected, you must set WEP key value.

Save Settings

#### b. WEP (Set WEP Key)

WEP (Wired Equivalent Privacy) is an encryption method used to protect your wireless data communications. WEP uses a combination of 64-bit or 128-bit keys to provide access control to your network and encryption security for every data transmission.

Wireless	WEP	Key	Setup
----------	-----	-----	-------

This page allows you setup the WEP key value. You could choose use 64bit or 128-bit as the encryption key, and select ASCII or Hex as the format of input value.

Key Length:	64-bit 💌
Key Format:	Hex (10 characters) 💌
Default Tx Key:	Key 1 💌
Encryption Key 1:	solololololololok
Encryption Key 2:	sololololololok
Encryption Key 3:	soloololololol
Encryption Key 4:	xalalalalalalalalala

#### • Key Length

Select the WEP Key Length from 64-bit or 128-bit. Larger WEP key length will provide higher level of security, but the throughput will be lower.

#### • Key Format

- **ASCII:** Use any alphanumerical characters (0-9, a-z, and A-Z)
- Hex: Use characters 0-9, a-f, and A-F.

#### • Default Key

Select one of the four keys to encrypt your data. Only the key you select it in the **Default key** will take effect.

#### • Encryption Key 1, 2, 3, 4

Input WEP key characters here, the number of characters must be the same as the number displayed at *Key Format*. Rules:

- **64-bit WEP:** Input 10-digit Hex values or 5-digit ASCII character
- **128-bit WEP:** Input 26-digit Hex values or 13-digit ASCII characters.

#### c. 802.1x

This security mode is used when a RADIUS server is connected to ZSR1134WE. IEEE 802.1x is an authentication protocol. Every user must use a valid account to login to ZSR1134WE before accessing the wireless LAN. The authentication is processed by a RADIUS server. This mode also uses WEP to encrypt the data during communication.

## **Wireless Security Setup**

This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

Encryption:	WEP	Set WEP Key
<b></b> Use 802.1 Authenticati		⊙ WEP 64bits ○WEP 128bits
WPA Authen	tication Mode	CEnterprise (RADIUS)  • Personal (Pre-Shared Key)
WPA Cipher	Suite:	TKIP AES
WPA2 Cipher	· Suite:	TKIP AES
Pre-Shared H	Key Format:	Passphrase 💉
Pre-Shared H	(ey:	
Enable Pr Authenticati		
Authenticati Server:	on RADIUS	Port 1812 IP address

Note: When encryption WEP is selected, you must set WEP key value.

Save Settings

#### • Authentication RADIUS Server

• Port

Input the port number of the Radius server here. Default value is **1812.** 

• IP address

Input the IP address of Radius server here.

#### • Password

Input the Password of Radius server here

#### d. WPA

Wi-Fi Protected Access (WPA) is an advanced security standard. It uses TKIP and AES to change the encryption key frequently.

## **Wireless Security Setup**

This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

Encryption:	WPA 🔽	Set WEP Key
Use 802.1 Authenticati		• WEP 64bits OWEP 128bits
WPA Authen	tication Mode:	● Enterprise (RADIUS) ○ Personal (Pre-Shared Key)
WPA Cipher	Suite:	TKIP AES
WPA2 Cipher	r Suite:	TKIP AES
Pre-Shared H	Key Format:	Passphrase 😽
Pre-Shared I	<ey:< th=""><th></th></ey:<>	
Enable Pr Authenticati		
Authenticati Server:	on RADIUS	Port 1812 IP address

Note: When encryption WEP is selected, you must set WEP key value.

Save Settings

#### • WPA Cipher Suite

- Select one encryption type, *TKIP* or *AES*.
- Pre-Shared Key Format
  - **Passphrase:** alphanumeric format
  - Hexadecimal Digits: in the A-F, a-f and 0-9 range

### **Access Control**

This function will help you to prevent unauthorized users from connecting to ZSR1134WE; only those wireless devices who have the MAC address you assigned here can gain access to your ZSR1134WE. You can use this function with other security measures described in previous section, to create a safer wireless environment.

## **Wireless Access Control**

If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Access Point.

	ave Settings		urrent Access Control List:	
Settings		AC Address:		
	Deny Listed	V(, VUULOCC, )	Save Settings	

- Wireless Access Control Mode:
  - **Disable:** Access ZSR1134WE from any external IP Address
  - Allow listed: Fill in the *MAC Address* and *Comment* of the wireless station to be added and then click *Save Settings*.
  - **Deny listed:** Fill in the *MAC Address* and *Comment* of the wireless station to be added and then click *Save Settings*.

#### • Current Access Control List

The added MAC addresses are listed here. Click **Delete Selected** to delete the filter management for this MAC address.

### **WPS Setting**

Wi-Fi Protected Setup (WPS) is the simplest way to build connection between wireless network clients and ZSR1134WE. You don't have to select encryption mode and input a long encryption passphrase every time when you need to setup a wireless client, you only have to press a button on wireless client and WPS will do the rest for you.

## **Wi-Fi Protected Setup**

This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client automically syncronize its setting and connect to the Access Point in a minute without any hassle.

WPS Status: Self-PIN Number:	12345	nfigured 670	O UnConfigured Regenerate PIN	
Push Button Confi	guration: Start P	РВС		
Save Settings Current Key Info:				
	Encryption	Key		

#### • Disable WPS

Select the checkbox to disable WPS function, default setting is **Enable**.

- WPS Status
  - **Configured:** means WPS feature is enabled and goes into effect.
  - **UnConfigured:** means WPS is not used.
- Self-PIN Number: The PIN code used by default.

#### • Push-Button Configuration

If you want to use PBC, you have to push a specific button on the wireless client to start WPS mode, and switch ZSR1134WE to WPS mode too. You can click **PBC** button in the web configuration interface to enable WPS

### **WDS Setting**

In this mode, you can expand the scope of network by combining up to four other access points together, and every access point can still accept wireless clients.

## **WDS Settings**

Wireless Distribution System uses wireless media to communicate with other APs, like the Ethernet does. To do this, you must set these APs in the same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS.

dd WDS AP: MAC Addres	ss Comment
Save Settings Set Set	curity Show Statistics
Save Settings Set Set	curity Show Statistics
Save Settings Set Se	curity Show Statistics
Save Settings Set Se	curity Show Statistics
Save Settings Set Se Current WDS AP List:	curity Show Statistics

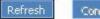
**Note:** First, you should set ZSR1134WE in **AP** mode at **Wireless Basic Settings** page, and then select the **Enable WDS** checkbox in this page. Two wireless routers must use the same band, channel number, and security setting.

### **Site Survey**

## Wireless Site Survey

This page provides tool to scan the wireless network. If any Access Point or IBSS is found, you could choose to connect it manually when client mode is enabled.

SSID	BSSID	Channel	Туре	Encrypt	Signal
Default	00:13:f7:8e:25:3b	11 (B+G)	AP	WEP	100
Air	00:07:40:fe:5e:b6	7 (B+G)	AP	WEP	53
Air	00:07:40:fe:5e:b6	5 (B+G)	AP	WEP	52
Super-G	00:e0:b8:77:c9:82	10 (B+G)	AP	WEP	52
Default	00:23:f8:08:11:26	6 (B+G)	AP	WPA2- PSK	15



Connect

## **Chapter 6 Advanced Settings**

### **Applications & Gaming**

#### a. Virtual Service

When you want different servers/clients in your LAN to handle different service/Internet application type (e.g. Email, FTP, Web server etc.) from the Internet, you can use the Virtual Server function. Computers use numbers called port numbers to recognize a particular service/Internet application type. The Virtual Server allows you to re-direct a particular service port number (from the Internet/WAN Port) to a particular LAN private IP address and its service port number.

## **Virtual Service**

Entries in this table allow you to automatically redirect common network services to a specific machine behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the private local network behind your Gateway's NAT firewall.

IP Address:	Prot		Port Range:	2
Comment:		Both TCP		
Save Settings				
Current Virtual S	ervice Table:			

#### • IP Address

Delete Selected Delete All

Enter the IP address of the PC where you want to set the applications.

#### • Protocol

Select the protocol (TCP/UDP/Both) for the application.

#### • Port Range

Enter the start/end port number which ranges the External ports used to set the server or Internet applications.

#### • Comment

The description of this setting

#### b. DMZ

The DMZ(Demilitarized Zone) function is to allow one computer in LAN to be exposed to the Internet for a special-purpose service as Internet gaming or videoconferencing.

### DMZ

A Demilitarized Zone is used to provide Internet services without sacrificing unauthorized access to its local private network. Typically, the DMZ host contains devices accessible to Internet traffic, such as Web (HTTP) servers, FTP servers, SMTP (e-mail) servers and DNS servers.

DMZ Host IP Address:	
A A A A A A A A A A A A A A A A A A A	

#### • Enable DMZ

Select the checkbox to enable the DMZ host.

#### • DMZ Host IP Address The IP address of the computer you want to expose.

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### **Security Management**

To benefit your further management to the computers in the LAN, you can control some ports access to Internet by data packet filter function.

#### a. Port Filtering

## **Port Filtering**

Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.

ort Range:	Protoc	Both ♥ Both TCP UDP	Comme	nt:
Save Settings		(4)		
Save Settings urrent Filter Table:				

#### • Enable Port Filtering

Select the checkbox to enable port filtering

#### • Port Range

Enter the port range over the protocol for access policy.

#### • Protocol

Select one protocol (Both/TCP/UDP) from drop-down menu.

#### • Comment

The description of this setting

#### **b. IP Filtering**

## **IP Filtering**

Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.

Loal IP Address:	Protoc	ol: Both Y Con Both TCP UDP	nment:
Save Settings		. <u> </u>	
Current Filter Table:			

#### • Enable IP Filtering

Select the checkbox to enable IP filtering

Local IP Address
 Enter the IP address you want to run the access policy.

#### c. MAC Filtering

## **MAC Filtering**

Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.

Enable MAC Filterin MAC Address:	Comment:
Save Settings	
urrent Filter Table:	

- Enable MAC Filtering Select the checkbox to enable MAC filtering
- MAC Address Enter the MAC address you want to run the access policy.

#### d. URL Filtering

If you want to prevent computers in local network from accessing certain website (like pornography, violence, or anything you want to block), you can use this function to stop computers in local network from accessing the site you defined here.

	d to deny LAN users from acces ch contain keywords listed belov	
am		V , «
🗹 Enable URL	_ Filtering	
URL Address: \	www.url.com	
Save Settings		
Current Filter T	able:	

#### • Enable URL Filtering

Select the checkbox to enable URL filtering

#### • URL Address

Enter the full URL address or the keyword of the web site you want to block.

## **Chapter 7 System tools**

### **System Information**

#### a. Status

The Status page allows you to monitor current status of ZSR1134WE.

### Status

This page shows the current status and some basic settings of the device.

System	
Uptime	Oday:3h:21m:40s
Firmware Version	v1.4d Dec 23 2008
Wireless Configuration	on.
Mode	AP
Band	2.4 GHz (B+G)
SSID	default
Channel Number	8
Encryption	Disabled
BSSID	00:e0:4c:81:86:d1
Associated Clients	0
TCP/IP Configuration	1
Attain IP Protocol	Fixed IP
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
DHCP Server	Enabled
MAC Address	00:e0:4c:81:86:d1
WAN Configuration	
Attain IP Protocol	Getting IP from DHCP server
IP Address	0.0.0
Subnet Mask	0.0.0
Default Gateway	0.0.0
MAC Address	00:e0:4c:81:86:d3

#### **b.** Statistics

## Statistics

This page shows the packet counters for transmission and reception regarding to wireless and Ethernet networks.

Wireless LAN	Sent Packets	5587
	Received Packets	194854
	Sent Packets	962
Ethernet LAN	Received Packets	865
F46	Sent Packets	543
Ethernet WAN	Received Packets	0

Refresh

System Log

#### c. System Log

<ul> <li>Enable Log</li> <li>system all</li> <li>Enable Remote L</li> </ul>	🗌 wireless 🗌 DoS Dg Log Server IP Address:	
Save Settings		

- **Refresh:** Click to update the log.
- **Clear:** Click to clear the current shown log.

### DDNS

DDNS (Dynamic Domain Name System) is to assign a fixed host and domain name to a dynamic Internet IP address, which is used to monitor hosting website, FTP server and so on behind ZSR1134WE. If you want to activate this function, please select Enable and a DDNS service provider to sign up.

Dynamic	DNS	Setting
		nat provides you with a valid, unchanging, RL) to go with that (possibly everchanging) IP-
Enable DDNS	i	
Service Provider :	DynDNS	✓
Domain Name :	yolololok	
User Name/Email:	xolololololololol	
Password/Key:	•••••	
Note:		
For TZO, you can control panel	have a 30	) days free trial <u>here o</u> r manage your TZO account
For DynDNS, you	can create	e your DynDNS account <u>here</u>
Save Settings		

- Enable DDNS Select the checkbox to enable the DDNS function of ZSR1134WE
- Service Provider
   Select one from the drop-down menu
- **Domain Name** Enter the domain name
- User Name/Email Enter the same account as the registration account.
- Password/Key Enter the password you set.

### System Management

#### a. Time Zone Setting

## **Time Zone Setting**

You can maintain the system time by synchronizing with a public time server over the Internet.

Time Zone Select :	(GMT-08:00)Pacific Time (US & Canada); Tijuana 💌				
🔲 Enable N1	P cli	ent update			
NTP server :	۲	192.5.41.41 - North America			
	0	(Manual IP Setting)			

#### • Time Zone

Select your time zone from the drop-down menu.

#### • NTP Server

Manually assign time server address if the default time server does not work.

#### **b. Upgrade Firmware**



Browse

Click to browse the path to the upgraded firmware files.

• Upload

Click to start upgrade.

**IMPORTANT:** Do not power off the system during the firmware upgrade to avoid damaging. ZSR1134WE will reboot automatically after the upgrade.

### c. Save/Reload Setting

## Save/Reload Settings

This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.

Save Settings to File:	Save	
Load Settings from File:		Browse Upload
Reset Settings to Default:	Reset	

• Save

Click to back up ZSR1134WE's configurations.

• Browse

Click to browse the path where you want to save files.

• Upload

Click to restore ZSR1134WE's configurations.

• Reset

Click to restore to default settings.

Factory Default Settings: User Name: **guest** Password: **guest** IP Address: **192.168.1.1** Subnet Mask: **255.255.255.0** 

**NOTE:** After restoring to default settings, please reboot ZSR1134WE so the settings will take effect.

#### d. Password Setup

## **Password Setup**

This page is used to set the account to access the web server of Access Point. Empty user name and password will disable the protection.

User Name:	
New Password:	
Confirmed	
Password:	

• User Name Enter a new user name.

Save Settings

- **New Password** Enter a new password.
- **Confirmed Password** Re-enter to confirm the new password.

**NOTE:** It is highly recommended to change the password to secure your network and ZSR1134WE.

### Logout

## Logout

This page is used to logout.

#### Do you want to logout?

Save Settings

• Click *Save Settings* to logout

## **Appendix 1: Troubleshooting**

# Q1. I cannot access the Web-based Configuration Utility from the Ethernet computer used to configure ZSR1134WE.

- Check whether the LAN LED is on. If the LED is not on, verify the cable for the LAN connection is firmly connected.
- Check whether the computer resides on the same subnet with ZSR1134WE's LAN IP address.
- If the computer acts as a DHCP client, check whether the computer has been assigned an IP address from the DHCP server. If not, you will need to renew the IP address.
- Use the ping command to ping ZSR1134WE's LAN IP address to verify the connection.
- Make sure your browser is not configured to use a proxy server.
- Check that the IP address you entered is correct. If ZSR1134WE's LAN IP address has been changed, you should enter the reassigned IP address instead.

### Q2. I forget Password (Reset ZSR1134WE without Login)

- Plug out the power of ZSR1134WE.
- Use a pencil to press and hold the default button on the back panel of ZSR1134WE. Then plug in the power of ZSR1134WE.
- Press and hold the default button for few seconds until the CPU LED indicator stays green.
- Reboot ZSR1134WE.
- After above steps, the factory's default settings will be restored in ZSR1134WE. The default user name/password is **guest**.

### **Q3. I have some problems related to Connection with Cable Modem**

Please follow the steps to check the problems:

- Check whether the DSL modem works well or the signal is stable. Normally there will be some indicator lights on the modem, users can check whether the signal is ok or the modem works well from those lights. If not, please contact the ISP.
- Check the front panel of ZSR1134WE, there's also some indicator lights there. When the physical connection is correct, the Power light and the CPU light should be steady; the WAN light should be flashing. If you use your computer, the corresponding LAN port light should be flashing too. If not, please check whether the cables work or not.
- Repeat the steps in **WAN Setup** Connect with Internet through DSL Modem.

# Q4. I can browse ZSR1134WE's Web-based Configuration Utility but cannot access the Internet.

- Check if the WAN LED is ON. If not, verify that the physical connection between ZSR1134WE and the DSL/Cable modem is firmly connected. Also ensure the DSL/Cable modem is working properly.
- If WAN LED is ON, open the System Overview page of the Web configuration utility and check the status group to see if ZSR1134WE's WAN port has successfully obtained an IP address.
- Make sure you are using the correction method (Dynamic IP Address, PPPoE, or Static IP) as required by the ISP. Also ensure you have entered the correct settings provided by the ISP.
- For cable users, if your ISP requires a registered Ethernet card MAC address, make sure you have cloned the wireless client's MAC address to the WAN port of ZSR1134WE. (Refer to **MAC Address** field in **WAN Setup**.)

# **Q5.** My wireless client cannot communicate with another Ethernet computer.

- Ensure the wireless client functions properly. You may open the Device Manager in Windows to see if the adapter is properly installed.
- Make sure the wireless client uses the same SSID and security settings (if enabled) as ZSR1134WE.
- Ensure that the wireless client's TCP/IP settings are correct as required by your network administrator.
- If you are using 802.11b wireless adapter, but selecting the 802.11G Mode in Wireless Basic Setting page; it is not configured to use 802.11g Performance.
- Use the ping command to verify that the wireless client is able to communicate with ZSR1134WE's LAN port and with the remote computer. If the wireless client can successfully ping ZSR1134WE' s LAN port but fails to ping the remote computer, then verify the TCP/IP settings of the remote computer.