Wireless LAN Device Series

Multi-Mode AP

ZWA-G120 User Manual

Version. 1.0.0 (13.05.2005)

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Preface

This guide is for the networking professional who installs and manages the Ziwell ZWA-G120 Multi-Mode AP, hereafter referred to as the "device". To use this guide, you should have experience working with the TCP/IP configuration and be familiar with the concepts and terminology of wireless local area networks.

Ch 1. ZWA-G120 Installation

Packing List

Before you start to install the device, make sure the package contains the following items :

- ZWA-G120 Multi-Mode AP * 1
- Power Adapter * 1
- RJ-45 Cable * 1





Hardware Installation

Once you check off everything from the package, you can start to install the device. You can use the wall mount hole on the bottom of the device to mount the device on the wall, or just put the device on the desktop. The administrator can refer to the figure below while constructing your WLAN environment.



Ch 2. First Time Configuration Before Start to Configure

There are two ways to configure the device, one is through web-browser, and the other is through Secure Shell CLI interface. To access the configuration interfaces, make sure you are using a computer connected to the same network as the device. The default IP address of the device is 192.168.2.254, and the subnet-mask is 255.255.255.0.

The device has three operation modes (Router/Bridge/WISP). In bridge mode, also known as AP Client, you can access the device by both WLAN (Wireless Local Area Network) and wired LAN. And in router/WISP modes, the device can be accessed by both WLAN and WAN. The default IP addresses for the device are 192.168.2.254(for LAN), 172.1.1.1(for WAN), so you need to make sure the IP address of your PC is in the same subnet as the device, such as 192.168.2.X (for LAN), 172.1.1.X (for WAN).

Please note that the DHCP server inside the device is default to up and running. Do not have multiple DHCP servers in your network environment, otherwise it will cause abnormal situation.

We also provide an auto-discovery tool which is for finding out the IP of the device. In case, you've forgot the IP of the device or the IP of the device has been changed, you can use the tool to find out the IP of the device even your PC is not in the same subnet as the device is.

Knowing the Network Application

ZWA-G120 can act as the following roles, and it supports WDS (Wireless Distribution System) function.

- Access Point
- WDS (Wireless Repeater)
- Bridge/Router
- WISP
- AP Client

The device provides 3 different operation modes and the wireless radio of device can act as AP/Client/WDS. The operation mode is about the communication mechanism between the wired Ethernet NIC and wireless NIC, the following is the

types of operation mode.

Router

The wired Ethernet (WAN) port is used to connect with ADSL/Cable modem and the wireless NIC is used for your private WLAN. The NAT is existed between the 2 NIC and all the wireless clients share the same public IP address through the WAN port to ISP. The default IP configuration for WAN port is static IP. You can access the web server of device through the default WAN IP address 172.1.1.1 and modify the setting base on your ISP requirement.

Bridge

The wired Ethernet and wireless NIC are bridged together. Once the mode is selected, all the WAN related functions will be disabled.

WISP (Wireless ISP)

This mode can let you access the AP of your wireless ISP and share the same public IP address form your ISP to the PCs connecting with the wired Ethernet port of the device. To use this mode, first you must set the wireless radio to be client mode and connect to the AP of your ISP then you can configure the WAN IP configuration to meet your ISP requirement.

The wireless radio of the device acts as the following roles.

AP (Access Point)

The wireless radio of device serves as communications "hub" for wireless clients and provides a connection to a wired LAN.

AP Client

This mode provides the capability to connect with the other AP using infrastructure/Ad-hoc networking types. With bridge operation mode, you can directly connect the wired Ethernet port to your PC and the device becomes a wireless adapter. And with WISP operation mode, you can connect the wired Ethernet port to a hub/switch and all the PCs connecting with hub/switch can share the same public IP address from your ISP.

WDS (Wireless Distribution System)

This mode serves as a wireless repeater; the device forwards the packets to another AP with WDS function. When this mode is selected, all the wireless clients can't survey and connect to the device. The device only allows the WDS connection.

WDS+AP

This mode combines WDS plus AP modes, it not only allows WDS connections but

also the wireless clients can survey and connect to the device.

The following table shows the supporting combination of operation and wireless radio modes.

	Bridge	Router	WISP
AP	V	V	х
WDS	V	V	Х
Client	V	Х	V
AP+WDS	V	V	V

Hereafter are some topologies of network application for your reference.



Examples of Configuration



This example demonstrates how to set up a network with different device configurations. There are 2 DHCP servers (DEV1/DEV4) in the network to control the IP configuration of 2 domains (192.168.2.x/192.168.3.x). Once the setting is done, all the PCs can visit Internet through DEV1.

We assume all the devices keep the factory default setting. To make sure that user can continuing press the rest button for more than 5 seconds to restore the factory default setting.

The following descriptions show the steps to configure DEV1 to DEV5.

Configure DEV1:

- 1. Connect the ADSL modem to Ethernet port of device using Ethernet cable.
- 2. Access the web server (http://192.168.2.254) of device from the wireless station.
- 3. Use Wizard page to setup device.



4. Press "Next>>" button then set the "Operation Mode" to "Router" mode.



5. Press "Next>>" button then disable "Time Zone" function.

Site contents.	2. Time Zone Setting
 Yuizard Operation Mode Wireless TCP/IP Firewall Management Reboot 	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
'ress "Next>>'	Cancel (Back Next) ' button then set the IP address of LAN interface. Wireless LAN Series
Site contents: Wizard Operation Mode Wireless TCP/IP Firewall	3. LAN Interface Setup This page is used to configure the parameters for local area network which connects to the device. Here you may change the setting for IP addresss, subnet mask. The DHCP Server will be up and running, please make sure there is no another DHCP Server in your network when the device is in Bridde/Client Modes.
 Wireless TCP/IP Firewall 	• • • • • • • • • • • • • • • • • • •

6.

 Press "Next>>" button then select the "PPPoE" for "WAN Access Type" and fill in the "User Name" and "Password" fields.

Site contents:	4. WAN Inte	rface Setup
Wizard Operation Mode Wireless TCP/IP Eirowoll	This page is used to co the WAN port of your A static IP, DHCP, PPPc	onfigure the parameters for Internet network which connects to Access Point. Here you may change the access method to Æ or PPTP by click the item value of WAN Access type.
Management E Reboot	WAN Access Type:	PPPoE
	User Name:	87043609@hinet.net
	Password:	•••••

8. Press "Next>>" button then select the "AP+WDS" for "mode" and change the SSID to "ZPlus-G120-DEV1".

	Wireless LA	AN Series
Site contents: Wizard Operation Mode Wireless Wreless Firewall	5. Wireless Basi This page is used to configure connect to your Access Point. the Client Mode.	c Settings he parameters for wireless LAN clients which may If you want to use Wireless ISP mode, please choose
Management B Reboot	Band: 2.4 GH; Mode: AP+WE Network Type: Infrastru SSID: ZPlus-G Channel Number: 11 Enable Mac Clone (Sing	(B+G) S cture 120-DEV1] Jle Ethernet Client) Cancel >

9. Press "Next>>" button then select "None" for "Encryption" then press "Finished" button.

Site contents:	6. Wireless Security Setup
Wizard Operation Mode Wireless TCP/IP Firewall Management Reboot	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.
10001	

10. Wait for refreshing web page.



11. Use "WDS Settings" page to configure WDS.

	Wireless LAN Series
Site contents: Wizard Operation Mode Wireless Basic Settings Advanced Settings Advanced Settings Koress Control WDS settings Security TCP/IP Firewall Management Reboot	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. Enable WDS Add WDS AP: MAC Address Apply Changes Reset Show Statistics Current WDS AP List: MAC Address Comment Delete Selected Delete All

12. Enable WDS function and add the BSSID of DEV2 to "Current WDS AP List".

	Wireless LAN Series
Site contents: Wizard Operation Mode Wireless Basic Settings Carlot Advanced Settings Carlot WDS settings Site Survey CP/IP Firewall Management Reboot	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. Image: The same channel and set MAC address Image: The same channel address I
	Delete Selected Delete All Reset

13. Since we access the device by wireless connection, it may temporarily disconnect when applying the WDS setting. After re-connecting to the device, use the "Status" page to check the settings.

ontents:	Free Memory	1060 kB
	Firmware Version	v1.2.1
	Webpage Version	v1.2.1
n Mode	Wireless Configuratio	n
Settings	Mode	AP+WDS - Router
ed Settings	Band	2.4 GHz (B+G)
Y	SSID	ZPlus-G120
Control	Channel Number	11
ettings	Encryption	Disabled(AP), Disabled(WDS)
rvey	BSSID	00:00:00:04:27:28
	Associated Clients	2
	Power(OFDM/G)	100mW
п	Power(CCK/B)	250mW
~	TCP/IP Configuration	
	Attain IP Protocol	Fixed IP
	IP Address	192.168.2.254
	Subnet Mask	255.255.255.0
irmware	Default Gateway	192.168.2.254
ad Setting	DHCP Server	Enabled
	MAC Address	00:00:00:04:27:28
	WAN Configuration	
	Attain IP Protocol	PPPoE Connected
	IP Address	218.168.150.18
	Subnet Mask	255.255.255.255
	Default Gateway	218.168.128.254
>	MAC Address	04:05:06:07:08:09

<

Configure DEV2:

1. Access the web server (http://192.168.2.254) of device from the Ethernet port. Caution

If you configure multiple devices in the same PC, since the devices have the same default IP address but different MAC addresses, it may cause you not able to access the web server of device. If the situation happens, please try to clean the ARP table of your PC by DOS command "arp –d" then you can access the web server of device using the default IP address.

2. Use Wizard page to setup device.

Zinwell WLAN AP Webserv	rer in the second s
File Edit View Favorites T	ools Help
G Back 👻 🕥 🕤 💌 🚺	🕽 🐔 🔎 Search 🤺 Favorites 🚱 🔗 - چ 🔯 - 🧾 鑬 鉴 🔯
Address 🕘 http://192.168.2.254/	home.asp
	Wireless LAN Series
Site contents:	Setup Wizard The setup wizard will guide you to configure access point for first time. Please follow the setup wizard step by step. Welcome to Setup Wizard. The Wizard will guide you the through following steps. Begin by clicking on Next. Setup Operation Mode Choose your Time Zone Setup LAN Interface Setup WAN Interface Setup Setup.
	Nevta

3. Press "Next>>" button then set the "Operation Mode" to "Bridge" mode.

Site contents:	Operation	Mode
Vvizard Operation Mode Wireless	You can setup differ function.	rent modes to LAN and WLAN interface for NAT and bridging
Tice/IP Firewall Management Reboot	○ Router:	In this mode, the device is supposed to connect to internet via ADSL/Cable Modem. The NAT is enabled and PCs connected to WLAN 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.172.1.1.1 is the default static IP address for WAN port
	Bridge:	In this mode, the ethernet port and wireless interface are bridged together and NAT function is disabled. All the WAN related function and firewall are not supported.
	⊖ Wireless ISP:	In this mode, the wireless client will connect to ISP access poin The NAT is enabled and PCs connecting with ethernet port shar 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 b using PPOE, DHCP client, PPTP client or static IP.

4. Press "Next>>" button then disable "Time Zone" function.

Site contents:	2. Time	Zone Setting
Wizard ● Operation Mode ■ Wireless ■ TCP/IP ■ ■ ■ Management ■ Reboot	You can main the Internet. DE Enable N	tain the system time by synchronizing with a public time server over
	Time Zone Select :	(GMT-08:00)Pacific Time (US & Canada); Tijuana
	NTP server :	192.5.41.41 - North America 😪

5. Press "Next>>" button then set the IP address of LAN interface.



6. Press "Next>>" button then select the "AP+WDS" for "mode" and change the SSID to "ZPlus-G120-DEV2".

Wireless LAN Series			
Site contents: Wizard Operation Mode TCP/IP	5. Wireless This page is used to a connect to your Acce the Client Mode.	Basic Settings configure the parameters for wireless LAN clients which may ss Point. If you want to use Wireless ISP mode, please choose	
Generation Firewall Management Reboot	Band: Mode: Network Type: SSID: Channel Number: Enable Mac Cl	2.4 GHz (B+G) AP+WDS Infrastructure ZPlus-G120-DEV2 11 one (Single Ethernet Client) Cancel < <back next="">></back>	

7. Press "Next>>" button then select "None" for "Encryption" then press "Finished" button.

Site contents:	6 Wireless Security Setup
 Wizard Operation Mode Wireless TCP/IP Firewall Management Behoot 	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.

8. Wait for refreshing web page.



9. Access the web server by new IP address "192.168.2.202" then use "LAN Interface" page to disable DHCP Server.

Wireless LAN Series		
Site contents:	LAN Interface Setup This page is used to configure the parameters for local area network which connects to the device. Here you may change the setting for IP addresss, subnet mask, DHCP, etc	
Wireless → TCP/P LAN Interface WAN Interface WAN Interface Management Reboot	IP Address: Subnet Mask: Default Gateway: DHCP: DHCP Client Range: 802.1d Spanning Tree: Clone MAC Address: Apply Changes	192.168.2.202 255.255.0 0.0.0.0 Disabled ♥ 192.168.2.1 - 192.168.2.201 Show Client Disabled ♥ 00000000000 Reset

10. Wait for refreshing web page.

Wireless LAN Series		
Site contents: Wizard Operation Mode Wireless TCP/IP LAN Interface WAN Interface Firewall Management Reboot	Change setting successfully! Please wait a while for refreshing webpage. If IP address was modified, you have to re-connect the WebServer with the new address.	

11. Use "WDS Settings" page to configure WDS.

	Wireless LAN Series
Site contents: Wizard Operation Mode Badenced Settings Secons control WDSS contro	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 the mable the WDS. Enable WDS Add WDS AP: MAC Address Apply Changes Reset Show Statistice Current WDS AP List: Delete Selected Delete All

12. Enable WDS function and add the BSSID of DEV1 to "Current WDS AP List".

	Wireless LAN Series
Site contents: Wizard Operation Mode Wireless Stadvanced Settings Security Secur	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 stat MAC address of other APs which you want to communicate with in the table and then enable the WDS. Image: Transformed communication of the table and the enable the WDS. Image: Transformed communication of the table and the enable the WDS. Image: Transformed communication of the table and the enable the WDS. Image: Transformed communication of the table and the enable the WDS. Image: Transformed communication of the table and the enable the WDS. Image: Transformed communication of the table and the enable the WDS. Image: Transformed communication of the table and the enable the WDS. Image: Transformed communication of the table and the enable the WDS. Image: Transformed communication of the table and the enable the WDS. Image: Transformed communication of the table and the enable the WDS. Image: Transformed communication of table o

13. Use the "Status" page to check the settings.

	Wireless LAN Series	
	This page shows the cur	rrent status and some basic settings of the
Site contents:	device.	
🕒 Wizard		
Coperation Mode		
🔁 Wireless	System	
	Uptime	Oday:1h:46m:9s
🛅 Firewall	Free Memory	2136 kB
Management	Firmware Version	v1.2.1
💾 Status	Webpage Version	v1.2.1
	Wireless Configuratio	n
	Mode	AP+WDS - Bridge
	Band	2.4 GHz (B+G)
Log	SSID	ZPlus-G120-DEV2
Save/Reload Setting	Channel Number	11
Password	Encryption	Disabled(AP), Disabled(WDS)
🗳 Reboot	BSSID	00:00:00:04:26:92
	Associated Clients	2
	Power(OFDM/G)	100mW
	Power(CCK/B)	250mW
	TCP/IP Configuration	
	Attain IP Protocol	Fixed IP
	IP Address	192.168.2.202
	Subnet Mask	255.255.255.0
	Default Gateway	0.0.0.0
	DHCP Server	Disabled
me	MAC Address	00:00:00:04:26:92

Configure DEV3:

1. Access the web server (http://192.168.2.254) of device from the Ethernet port. Caution

If you configure multiple devices in the same PC, since the devices have the same default IP address but different MAC addresses, it may cause you not able to access the web server of device. If the situation happens, please try to clean the ARP table of your PC by DOS command "arp –d" then you can access the web server of device using the default IP address.

2. Use "LAN Interface" page to set the IP address of LAN interface and disable DHCP server.

	Wireless	LAN Series
Site contents: Site contents: Vizard Operation Mode Wireless TCP/IP	LAN Interface Setup This page is used to configure the parameters for local area network which connects to the device. Here you may change the setting for IP addresss, subnet mask, DHCP, etc	
Wireless Image: Construction of the sector of th	IP Address: Subnet Mask: Default Gateway: DHCP: DHCP Client Range: 802.1d Spanning Tree: Clone MAC Address: Apply Changes	192.168.2.203 255.255.255.0 0.0.0 Disabled 192.168.2.102 - 192.168.2.254 Show Client Disabled 000000000000 Reset

3. Wait for refreshing web page.

Wireless LAN Series			
Site contents: Wizard Geration Mode Wireless TCP/IP LAN Interface WAN Interface Firewall Management Reboot	Change setting successfully! Please wait a while for refreshing webpage. If IP address was modified, you have to re-connect the WebServer with the new address.		

4. Access the web server by new IP address "192.168.2.203" then use "Basic Settings" page to change SSID and CHANNEL.

	Wireless LAN Series	
Site contents: Wizard Operation Mode Wireless Wireless Basic Settings Advanced Settings	Wireless Basic Settings This page is used to configure the parameters for wireless LAN clients which r connect to your Access Point. Here you may change wireless encryption setti well as wireless network parameters.	nay ings as
E Security B Access Control B WDS settings E Site Survey Firewall Management Reboot	□ Disable Wireless LAN Interface Band: 2.4 GHz (B+G) ▼ Mode: AP ▼ Mode: Infrastructure ▼ SSID: ZPlus-G192-DEV3 Channel Number: 5 ▼ Associated Clients: Show Active Clients Enable Mac Clone (Single Ethernet Client) Apply Changes Reset	

5. Use the "Status" page to check the settings.

· · · · · · · ·	Wireles	s LAN Series	
Site contents:	This page shows the current status and some basic settings of the device.		
Wireless	System		
	Untime	0day:1b:26m:28s	
🛁 Firewall	Free Memory	1912 kB	
- 🔁 Management	Firmware Version	v1.2.1	
Status	Webpage Version	v1.2.1	
	Wireless Configuratio	n	
G Time Zone	Mode	AP - Bridge	
E Log	Band	2.4 GHz (B+G)	
🛛 📴 Upgrade Firmware	SSID	ZPlus-G192-DEV3	
📑 Save/Reload Setting	Channel Number	5	
Password	Encryption	Disabled	
E Reboot	BSSID	00:00:aa:bb:dd:91	
	Associated Clients	0	
	Power(OFDM/G)	100mW	
	Power(CCK/B)	250mW	
	TCP/IP Configuration		
	Attain IP Protocol	Fixed IP	
	IP Address	192.168.2.203	
	Subnet Mask	255.255.255.0	
	Default Gateway	0.0.0.0	
	DHCP Server	Disabled	
	MAC Address	00:00:aa:bb:dd:91	

Configure DEV4:

1. Access the web server (http://192.168.2.254) of device from the Ethernet port.

Caution

If you configure multiple devices in the same PC, since the devices have the same default IP address but different MAC addresses, it may cause you unable to access the web server of device. If the situation happens, please try to clean the ARP table of your PC by DOS command "arp –d" then you can access the web server of device using the default IP address.

2. Use Wizard page to setup device.

Zinwell WLAN AP Webser	ver
File Edit View Favorites 1	rools Help
🕒 Back - 🐑 - 💌 🕻	🛐 🏠 🔎 Search 🤸 Favorites 🚱 😥 - 嫨 🔯 - 🛄 🇱 🕍 🚺
Address 🕘 http://192.168.2.254/	'home.asp
	Wireless LAN Series
Site contents:	Setup Wizard
 Wizard Operation Mode Wireless TCP/IP TCP/IP Management E Reboot 	The setup wizard will guide you to configure access point for first time. Please follow the setup wizard step by step. Welcome to Setup Wizard. 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 UAN Interface 5. Wireless LAN Setting 5. Wireless Security Setting

3. Press "Next>>" button then set the "Operation Mode" to "Wireless ISP" mode.

Site contents: Vizard Operation Mode Operation Mode TCP/IP TCP/IP Firewall Management Reboot	 Operation You can setup different function. 	on Mode
	○ Router:	In this mode, the device is supposed to connect to internet via ADSL/Cable Modern. The NAT is enabled and PCs connected with WLAN 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. 172.1.1.1 is the default static IP address for WAN port
	🔘 Bridge:	In this mode, the ethernet port and wireless interface are bridged together and NAT function is disabled. All the WAN related function and firewall are not supported.
	⊙ Wireless ISP:	In this mode, the wireless client will connect to ISP access point. The NAT is enabled and PCs connecting with the ethernet port share the same IP to ISP through wireless LAN. You must set the wireless to client mode and connect to the ISP AP. The connection type can be setup in WAN page by using PPPOE, DHCP client, PPTP client or static IP.

4. Press "Next>>" button then disable "Time Zone" function.

Site contents:	2. Time Zone Setting	
Generation Mode Operation Mode Vireless TCP/IP Firewall Management Reboot	You can maintain the system time by synchronizing with a pub the Internet.	olic time server over
	Enable NTP client update	
	Time Zone Select : (GMT-08:00)Pacific Time (US & Canada); Tijue	ana
	NTP server : 192.5.41.41 - North America	
	NTP server : 192.5.41.41 - North America	

5. Press "Next>>" button then set the IP address of LAN interface.



6. Press "Next>>" button then select the "DHCP Client" for "WAN Access



7. Press "Next>>" button then select the "Client" for "mode" and change the SSID to "ZPlus-G120-DEV4".



8. Press "Next>>" button then select "None" for "Encryption" then press "Finished" button.

	Wireless LAN Series
Site contents: Wizard Operation Mode TCP/IP Firewall Rangement Reboot	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: None Cancel <back finished<="" td=""></back>

9. Wait for refreshing web page.



10. Change the IP address of your PC to 192.168.3.x then access the web server by the new IP address "192.168.3.1" and use "Status" page check the setting.

	Wireles	s LAN Series		
	• •			
	opume	00ay. 11.4011.415		
Site contents:	Free Memory	1292 kB		
Wizard	Firmware Version	v1.2.1		
Coperation Mode	Webpage Version	v1.2.1		
- Wireless	Wireless Configuration			
	Mode	Infrastructure Client - Router		
- 📴 LAN Interface	Band	2.4 GHz (B+G)		
🖳 🔛 WAN Interface	SSID	ZPlus-G192-DEV1		
Firewall	Channel Number	11		
Management	Encryption	Disabled		
Status	BSSID	00:00:00:04:27:28		
	State	Connected		
G Time Zone	RSSI	0		
Log	TCP/IP Configuration			
🛛 📴 Upgrade Firmware	Attain IP Protocol	Fixed IP		
🚽 🖳 📴 Save/Reload Setting	IP Address	192.168.3.1		
Password	Subnet Mask	255.255.255.0		
🕒 🕒 Reboot	Default Gateway	192.168.3.1		
	DHCP Server	Enabled		
	MAC Address	00:00:aa:bb:dd:92		
	WAN Configuration			
	Attain IP Protocol	DHCP		
	IP Address	192.168.2.5		
	Subnet Mask	255.255.255.0		
	Default Gateway	192.168.2.254		
	MAC Address	00:00:aa:bb:dd:91		

11. If the "State" of "Wireless Configuration" is not "Connected" or you want to refresh the "RSSI ", please use "Site Survey" page to re-connect a AP.

Site contents: Wizard Operation Mode Wireless	Wireless Si This page provides too found, you could choos	te Survey	network. I ally when	f any A client r	ccess Po node is er	int or IE nabled.	ISS is
Advanced Settings	SSID	BSSID	Channel	Туре	Encrypt	Signal	Sele
Access Control	ZPlus-G192-DEV1	00:00:00:04:27:28	11 (B+G)	AP	no	100	۲
VVDS settings	Mercy_CA_SSID	00:0d:14:00:80:18	9 (B+G)	AP	no	100	C
TCP/IP	Zinwell	00:05:9e:80:01:f8	1 (B)	AP	no	81	C
LAN Interface	ZPlus-G192-DEV2	00:00:00:04:26:92	11 (B+G)	AP	no	81	C
Firewall	default	00:0f:3d:3d:89:62	6 (B+G)	AP	no	75	C
Management	linksys	00:06:25:d7:c3:97	6 (B+G)	AP	no	67	C
Status Statistics	ZPlus-G192	00:aa:ee:ff:99:01	11 (B+G)	AP	no	63	C
DDNS	ZPlus-G192-mike-cli	00:00:00:04:27:01	2 (B+G)	AP	no	52	C
Time Zone	G192-wds2	00:00:00:04:26:93	11 (B+G)	AP	no	50	C
Upgrade Firmware	DFC-test	00:05:9e:80:46:3b	1 (B)	AP	no	35	0
Save/Reload Setting	G192-wds1	00:00:00:04:26:88	11 (B+G)	AP	no	21	C

Configure DEV5:

1. Access the web server (http://192.168.2.254) of device from the Ethernet port. Caution

If you configure multiple devices in the same PC, since the devices have the same default IP address but different MAC addresses, it may cause you unable to access the web server of device. If the situation happens, please try to clean the ARP table of your PC by DOS command "arp –d" then you can access the web server of device using the default IP address.

2. Use Wizard page to setup device.

Zinwell WLAN AP Webserv	ver l
File Edit View Favorites T	iools Help
🕒 Back - 🕥 - 💌 🕻	🔰 🏠 🔎 Search 🤺 Favorites 🤣 🍛 - 🌺 🔯 - 🛄 🎇 🕍 📓
Address 🚳 http://192.168.2.254/	home.asp
	Wireless LAN Series
Site contents:	Setup Wizard The setup wizard will guide you to configure access point for first time. Please follow
⊡ Wireless ⊡ TCP/IP ⊡ Firewall ⊡ Management	the setup wizard step by step. — Welcome to Setup Wizard.
–≌ Reboot	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>>

3. Press "Next>>" button then set the "Operation Mode" to "Wireless ISP" mode.

	Wirel	ess LAN Series			
Site contents: Wizard Deration Mode Wireless TCP/IP Firewall Reboot Reboot	 Operation Mode You can setup different modes to LAN and WLAN interface for NAT and bridging function. 				
	O Router:	In this mode, the device is supposed to connect to internet via ADSL/Cable Modem. The NAT is enabled and PCs connected with WLAN 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. 172.1.1.1 is the default static IP address for WAN port			
	Bridge:	In this mode, the ethernet port and wireless interface are bridged together and NAT function is disabled. All the WAN related function and firewall are not supported.			
	○ Wireless ISP:	In this mode, the wireless client will connect to ISP access point. The NAT is enabled and PCs connecting with the ethernet port share the same IP to ISP through wireless LAN. You must set the wireless to client mode and connect to the ISP AP. The connection type can be setup in WAN page by using PPPOE, DHCP client, PPTP client or static IP.			

4. Press "Next>>" button then disable "Time Zone" function.

Site contents: Vizard Operation Mode Vireless TCP/IP Firewall Management Reboot	2. Time	Zone Setting
	You can mair the Internet.	ntain the system time by synchronizing with a public time server over
	Time Zone Select :	(GMT-08:00)Pacific Time (US & Canada); Tijuana
	NTP server :	192.5.41.41 - North America

5. Press "Next>>" button then set the IP address of LAN interface.



6. Press "Next>>" button then select the "Client" for "mode" and change the SSID to "ZPlus-G120-DEV5".

		ess LAN Series
Site contents: Wizard Deparation Mode Wireless TCP/IP Firewall Management Reboot	5. Wireless This page is used to connect to your Acc the Client Mode. Band: Mode: Network Type: SSID: Channel Number:	S Basic Settings configure the parameters for wireless LAN clients which may ess Point. If you want to use Wireless ISP mode, please choose 2.4 GHz (B+G) Client Infrastructure ZPlus-G192-DEV2 11 Cone (Single Ethernet Client) Cancel < <back next="">></back>

7. Press "Next>>" button then select "None" for "Encryption" then press "Finished" button.



8. Wait for refreshing web page.



9. Access the web server by the new IP address "192.168.2.205" and use "LAN Interface" page to disable DHCP Server.

a second	Wireless	LAN Series
Site contents: Wizard Operation Mode Wireless LAN Interface WAN Interface WAN Interface Management Reboot	LAN Interface This page is used to config the device. Here you may etc. IP Address: Subnet Mask: Default Gateway: DHCP: DHCP Client Range: 802.1d Spanning Tree: Clone MAC Address:	Setup pure the parameters for local area network which connects to change the setting for IP addresss, subnet mask, DHCP, 192.158.2.205 255.255.255.0 0.0.0 Disabled 192.168.2.1 - 192.168.2.204 Show Client Disabled 000000000000 Reset
Wait for refreshing	webpage.	
	Wireless L	AN Series



11. Use "State" page to check setting.

10.

	Wireles	s LAN Series			
Site contents:	This page shows the cu device.	rrent status and some basic settings of the			
	System				
Firewall	Uptime	Odav:2h:56m:6s			
- Management	Free Memory	1520 kB			
🕒 🕒 Status	Firmware Version	v1.2.1			
🚽 📴 Statistics	Webpage Version	v1.2.1			
DDNS - M Time Zone - M Log - M Dggrade Firmware - M Save/Reload Setting	Wireless Configuration				
	Mode	Infrastructure Client - Bridge			
	Band	2.4 GHz (B+G)			
	SSID	ZPlus-G192-DEV2			
Bassword	Channel Number	11			
Behoot	Encryption	Disabled			
	BSSID	00:00:00:04:26:92			
	State	Connected			
	RSSI	0			
	TCP/IP Configuration				
	Attain IP Protocol	Fixed IP			
	IP Address	192.168.2.205			
	Subnet Mask	255.255.255.0			
	Default Gateway	0.0.0.0			
	DHCP Server	Disabled			
	MAC Address	00:00:aa:bb:dd:91			

12. If the "State" of "Wireless Configuration" is not "Connected" or you want to refresh the "RSSI ", please use "Site Survey" page to re-connect a AP.

Contents: ard ration Mode dess Basic Settings	Wireless S This page provides to found, you could cho	ite Survey ol to scan the wireless ose to connect it manu	network. ally when	lf any A client r	Access Po node is er	int or IE nabled.	ISS is
Advanced Settings Security	SSID	BSSID	Channel	Туре	Encrypt	Signal	Select
Access Control	Mercy_CA_SSID	00:0d:14:00:80:18	9 (B+G)	AP	no	100	0
settings	ZPlus-G192-DEV1	00:00:00:04:27:28	11 (B+G)	AP	no	100	0
TCP/IP Firewall	ZPlus-G192-DEV2	00:00:00:04:26:92	11 (B+G)	AP	no	84	۲
	default	00:0f:3d:3d:89:62	6 (B+G)	AP	no	81	0
	Zinwell	00:05:9e:80:01:f8	1 (B)	AP	no	80	0
	ZPlus-G192	00:aa:ee:ff:99:01	11 (B+G)	AP	no	63	0
	linksys	00:06:25:d7:c3:97	6 (B+G)	AP	no	61	0
	ZPlus-G192-mm	00:00:00:04:27:01	2 (B+G)	AP	no	52	0
	G192-wds2	00:00:00:04:26:93	11 (B+G)	AP	no	41	0
	DFC-test	00:05:9e:80:46:3b	1 (B)	AP	no	29	0
	G192-wds1	00:00:00:04:26:88	11 (B+G)	AP	no	23	0
	3E-PRINTER	00:0c:6e:c1:9b:11	7 (B+G)	AP	ves	18	0

Basic Settings

	Wirele	ss LAN Series
Site contents: Vizard Operation Mode Vireless Advanced Settings Security Content Vireless Security Security Security MDS settings Site Survey TCP/IP Firewall Management Reboot	Wireless Ba This page is used to co connect to your Access well as wireless network Disable Wireless Band: Mode: Network Type: SSID: Channel Number: Associated Clients: Enable Mac Clients	Asic Settings onfigure the parameters for wireless LAN clients which may s Point. Here you may change wireless encryption settings as the parameters. I LAN Interface 2.4 GHz (B+G) AP Infrastructure ZPlus-G192 11 Show Active Clients one (Single Ethernet Client)
	Apply Changes	Reset

Disable Wireless LAN Interface

Disable the wireless interface of device

Band:

The device supports 2.4GHz(B), 2.4GHz(G) and 2.4GHz(B+G) mixed modes.

Mode:

The radio of device supports different modes as following:

1. AP

The radio of device acts as an Access Point to serves all wireless clients to join a wireless local network.

2. Client

Support Infrastructure and Ad-hoc network types to act as a wireless adapter.

3. WDS

Wireless Distribution System, this mode serves as a wireless repeater, only devices with WDS function supported can connect to it, all the wireless clients can't survey and connect the device when the mode is selected.

4. AP+WDS

Support both AP and WDS functions, the wireless clients and devices with WDS function supported can survey and connect to it.

Infrastructure:

This type requires the presence of 802.11b/g Access Point. All communication is done via the Access Point.



Ad Hoc:

This type provides a peer-to-peer communication between wireless stations. All the communication is done from Client to Client without any Access Point involved. Ad Hoc networking must use the same SSID and channel for establishing the wireless connection.



In client mode, the device can't support the Router mode function including Firewall and WAN settings.

SSID:

The SSID is a unique identifier that wireless networking devices use to establish and maintain wireless connectivity. Multiple access point/bridges on a network or sub-network can use the same SSID. SSIDs are case sensitive and can contain up to 32 alphanumeric characters. Do not include spaces in your SSID.

Channel Number

The following table is the available frequencies (in MHz) for the 2.4-GHz radio:

Channel No.	Frequency	Country Domain
1	2412	Americas, EMEA, Japan, and China
2	2417	Americas, EMEA, Japan, and China
3	2422	Americas, EMEA, Japan, Israel, and China
4	2427	Americas, EMEA, Japan, Israel, and China

5	2432	Americas, EMEA, Japan, Israel, and China
6	2437	Americas, EMEA, Japan, Israel, and China
7	2442	Americas, EMEA, Japan, Israel, and China
8	2447	Americas, EMEA, Japan, Israel, and China
9	2452	Americas, EMEA, Japan, Israel, and China
10	2457	Americas, EMEA, Japan, and China
11	2462	Americas, EMEA, Japan, and China
12	2467	EMEA and Japan only
13	2472	EMEA and Japan only
14	2484	Japan only

When set to "Auto", the device will find the least-congested channel for use.

Associated Client

Show the information of active wireless client stations that connected to the device.

REMARK: Channels are used (CH1~CH11) by firmware controlled in U.S.A..