Wireless LAN Device Series

WLAN Outdoor Bridge

ZPlus-G192-OD User Manual

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Preface

This guide is for the networking professional who installs and manages the Ziwell

ZWA-G192 outdoor product, 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.

Chapter 1 - ZWA-G192 Installation

Packing List

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

- Wireless Outdoor Bridge unit * 1
- Mounting Kit * 1
- Waterproof (IP67) RJ-45 Cable (30M) * 1
- Waterproof (IP66) RF Cable (1M) * 1
- Power Over Ethernet Kit * 1
- Ground Wire * 1
- 2.5" /4" U bolts * 2 and Anchor * 4
- 6 dBi omni directional antenna * 1 (separated package)
- RJ-45 Cable (1.5M) * 1







Hardware Installation

Once you check off everything from the package, you can start to install the ODU. You can mount to a pipe, a pole or to the side of a building. The steps are showed in the following :

1. You must mount the ODU into the bracket first.

Note: ALL the 4 screws had been tightened onto the ODU and bracket

 You can use the 2 or 4 inches U bolt to mount on the pipe, depending on the radius of the pipe. (Wall mounting is referred to Wall Mounting Figure) The two U bolts must be mounted tightly. Be aware of not over-tighten the U bolt.



Pipe Mounting Figure



Wall Mounting Figure

3. After checking the ODU is mounted well, you can connect the following two cables: the Waterproof RJ-45 network cable to "P+ DATA OUT" port of ODU and the RF cable to antenna port. Additional waterproof tool, such as waterproof tape, is recommended to use to enhance the waterproof function. It is suggested to have a lightening protector between antenna and antenna port. Connecting the ground wire as the figure of "ODU ground wire connection."



4. Plug the other end of the waterproof RJ-45 cable to the PoE device. The PoE device is guaranteed only in indoor environment.



<u>Caution</u>: DON'T plug the power cord into PoE device before you finish install the antenna and Ground wire to ensure the safety.

If the RJ-45 cable's length is not long enough to connect to your network device for indoor parts installation, you can extend the cable length. However, make sure the maximum length of the RJ-45 cable is shorter than 100M (about 109 yards) for normal operation under IEEE 802.3 standards.

When you plug the regular RJ-45 cable into the PoE device, you should use the regular RJ-45 cable to plug into the "DATA IN" of "Power Over Ethernet Kit" to connect to hub/switch or use the crosslink RJ-45 cable (Not included in the Packing List) to connect with user's PC.

The waterproof RJ-45 cable must be connected to the "P+DATA OUT" port.

<u>Caution:</u> Be careful! Don't plug the two cables inversely. It will damage the devices!

We recommend you refer to the following illustration as a guideline for hardware installation.



Chapter 2 - First Time Configuration Before Start to Configure

There are two interfaces to configure the device, one is web-browser interface, and the other is 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, 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 subnet, otherwise it will cause abnormal situation.

Inside the CD, we provide the device auto-discovery tool, the tool can detect the device even your PC is not in the same subnet as the device in case the IP address of device is changed and forgot by user. The tool only can discover the device in your local area network.

Knowing the Network Application

ZWA-G192-OD 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 met 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	x
WDS	V	V	x
Client	v	х	v
AP+WDS	V	V	х

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 (<u>http://192.168.2.254</u>) 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.

Wireless LAN Series			
Site contents: Wizard Operation Mode Wireless	1. Operatic You can setup differ function.	on Mode	
- ► TCP/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 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.	
	O 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. Cancel < <back next="">></back>	

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

▶ Site contents: ≌ Wizard	2. Time	Zone Setting
Coperation Mode Wireless TCP/IP Firewall Management Reboot	You can main the Internet.	tain the system time by synchronizing with a public time server over
	🗖 Enable N	TP client update
	Time Zone Select :	(GMT-08:00)Pacific Time (US & Canada); Tijuana
	NTP server :	192.5.41.41 - North America 💌

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

Wireless LAN Series			
Site contents: Vizard Operation Mode Vireless TCP/IP Firewall Management Reboot	3. LAN Internet of the device. Here y DHCP Server will be Server in your network of the Address:	configure the paramete ou may change the set up and running, please rk when the device is in 192.168.2.254 255.255.255.0	rs for local area network which connects ting for IP addresss, subnet mask. The make sure there is no another DHCP Bridge/Client Modes.

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

	Wireless LAN Seri	ries	
Site contents: Wizard Operation Mode Wireless TCP/IP Firewall Management Reboot User N Passw	VAN Interface Setur age is used to configure the parameter AN port of your Access Point. Here your IP, DHCP, PPPoE or PPTP by click to Access Type: PPPoE Iame: 87043609@hinet. Yord: ••••••••	ters for Internet network which connects to you may change the access method to the item value of WAN Access type.	• •

8. Press "Next>>" button then select the "AP+WDS" for "mode" and change the SSID to "ZPlus-G192-DEV1".

	Wirele	ess LAN Series
Site contents: Wizard Operation Mode Wireless TCP/IP Firewall Management Reboot	5. Wireless This page is used to connect to your Acce the Client Mode. Band: Mode: Network Type: SSID: Channel Number: Enable Mac C	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) AP+WDS Infrastructure ZPlus-G192-DEV1 11 Unce (Single Ethernet Client) Cancel < <back next="">></back>

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



10. Wait for refreshing web page.

Wireless LAN Series			
Site contents: Wizard Operation Mode Wireless TCP/IP 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 Wireless Basic Settings Security Advanced Settings Security WDS settings WDS settings 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. Image: Enable WDS Add WDS AP: MAC Address Add WDS AP: Reset Show Statistics Current WDS AP List: MAC Address Delete Selected Delete All

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

	Wireless LAN Series
Site contents: Vizard Operation Mode Vireless Advanced Settings Carlot Security Carlot Carlot Carlot Carlot C	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: 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: To do this, you must set these APs in the same channel and set MAC address Add WDS AP: MAC Address Comment Apply Changes Reset Set Security Show Statistics Set Security Select O0:00:00:04:26:92 BSID of DEV2 Image: Topology and the set 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
sincorneo.	Firmware Version	v1.2.1
	Webpage Version	v1.2.1
on Mode	Wireless Configuratio	n
Cottingo	Mode	AP+WDS - Router
ed Settings	Band	2.4 GHz (B+G)
v	SSID	ZPlus-G192
s Control	Channel Number	11
ttings	Encryption	Disabled(AP), Disabled(WDS)
vey	BSSID	00:00:00:04:27:28
	Associated Clients	2
67 - C	Power(OFDM/G)	100mW
	Power(CCK/B)	250mW
e	TCP/IP Configuration	
	Attain IP Protocol	Fixed IP
	IP Address	192.168.2.254
	Subnet Mask	255.255.255.0
Firmware	Default Gateway	192.168.2.254
eload Setting	DHCP Server	Enabled
4	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

Configure DEV2:

1. Access the web server (<u>http://192.168.2.254</u>) 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 can't 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.



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

	Wirel	ess LAN Series
Site contents:	Operation	Mode
 □ Operation Mode □ Vireless □ TCP/IP □ Firewall □ Management □ Reboot 	You can setup differ function.	rent modes to LAN and WLAN interface for NAT and bridging
	O 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.
	O Wireless ISP:	In this mode, the wireless client will connect to ISP access point. The NAT is enabled and PCs connecting with ethemet port 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.
	Apply Change	Reset

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



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

	Wirele	ess LAN Seri	es
Site contents: Wizard Operation Mode Wireless TCP/IP Firewall Management E Reboot	3. LAN Intervention of the server is used to the device. Here y DHCP Server will be Server in your netwo	configure the parameter ou may change the sett up and running, please rk when the device is in 192.168.2.202 255.255.255.0	s for local area network which connects ing for IP addresss, subnet mask. The make sure there is no another DHCP Bridge/Client Modes.

6. Press "Next>>" button then select the "AP+WDS" for "mode" and change the SSID to "ZPlus-G192-DEV2".

	Wirele	ss LAN Series
Site contents: ♥ Wizard Peration Mode Wireless TCP/IP Firewall Management Reboot	This page is used to connect to your Acce the Client Mode. Band: Mode: Network Type: SSID: Channel Number:	Basic Settings configure the parameters for wireless LAN clients which may ass Point. If you want to use Wireless ISP mode, please choose 2.4 GHz (B+G) AP+WDS Infrastructure ZPlus-G192-DEV2 11
	Enable Mac Cl	lone (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.

	Wireless LAN Series
Site contents: Wizard Operation Mode Wireless TCP/IP 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.

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 This page is used to config the device. Here you may etc	e Setup gure the parameters for local area network which connects to change the setting for IP addresss, subnet mask, DHCP,
CAN Interface	IP Address: Subnet Mask: Default Gateway: DHCP: DHCP Client Range: 802.1d Spanning Tree: Clone MAC Address:	192.168.2.202 255.255.255.0 0.0.0 Disabled ✓ 192.168.2.1 Disabled ✓ 00000000000

10. Wait for refreshing web page.



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

	Wireless LAN Series
Site contents: Wizard Operation Mode Wireless Contents Contents Security Contents WVDS settings Site Survey TCP/IP Firewall Management Reboot	WDS Settings Wireless Distribution System uses wireless media to communicate with other APs, the Ethernet does. To do this, you must set these APs in the same channel and ster MAC address of other APs which you want to communicate with in the table and the enable the WDS. Enable WDS Add WDS AP: MAC Address Add WDS AP: Reset Show Statistics Current WDS AP List: MAC Address Delete Selected

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

	Wireless LAN Series
Site contents: Wizard Operation Mode Wireless Basic Settings Advanced Settings Security Security WDS settings WDS settings Site Survey Firewall Management Reboot	WDS Settings Wireless Distribution System uses wireless media to communicate with other APs, like the Ethermet 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: Comment and the enable with the table and the enable with the with the with the table and the enable with the with the with the table and the enable with the with the with the table and the enable with the with the with the with the table and the enable with the with the with the table and the enable with the with the table and the enable with the with the with the table and the enable with the with the with the table and the enable with the with the with the table and the enable with the with the with the table and the enable with the with the table and the enable with the with the table and the enable with the table and the enable with the with the table and the enable with the table and table a
	MAC Address Comment Select
	00:00:00:04:27:28 BSSID of DEV1
	Delete Selected Delete All Reset

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

Wireless LAN Series



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

System	
Uptime	Oday:1h:46m:9s
Free Memory	2136 kB
Firmware Version	v1.2.1
Webpage Version	v1.2.1
Wireless Configuratio	n
Mode	AP+WDS - Bridge
Band	2.4 GHz (B+G)
SSID	ZPlus-G192-DEV2
Channel Number	11
Encryption	Disabled(AP), Disabled(WDS)
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
MAC Address	00:00:00:04:26:92

Configure DEV3:

1. Access the web server (<u>http://192.168.2.254</u>) 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 can't 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:	LAN Interface	Setup
	This page is used to config the device. Here you may etc	gure the parameters for local area network which connects to change the setting for IP addresss, subnet mask, DHCP,
LAN Interface		100 100 0 000
	IP Address:	192.168.2.203
🔚 🧰 Management	Subnet Mask:	255.255.255.0
🕒 皆 Reboot	Default Gateway:	0.0.0.0
	DHCP:	Disabled 💙
	DHCP Client Range:	192.168.2.102 - 192.168.2.254 Show Client
	802.1d Spanning Tree:	Disabled 💌
	Clone MAC Address:	0000000000
	Apply Changes	Reset

3. Wait for refreshing web page.



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

	Wireles	ss LAN Series
Site contents: Wizard Operation Mode Basic Settings Advanced Settings Security Access Control WDS settings Site Survey TCP/IP Firewall Management Beboot	Wireless Ba This page is used to connect to your Access well as wireless network Disable Wireless Band: Mode: Network Type: SSID: Channel Number: Associated Clients: Enable Mac Cha	Asic Settings anfigure the parameters for wireless LAN clients which may s Point. Here you may change wireless encryption settings as the parameters. S LAN Interface 2.4 GHz (B+G) AP Infrastructure ZPlus-G192-DEV3 5 Show Active Clients one (Single Ethernet Client) Beset

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

	Wireles	s LAN Series
Site contents:	This page shows the cu device.	rrent status and some basic settings of the
Wireless	System	
	Untime	0day:1b:26m:28s
🕂 🦳 Firewall	Eree Memory	1912 kB
Management	Firmware Version	v1.2.1
Status	Webpage Version	v1.2.1
	Wireless Configuratio	n
Time Zone	Mode	AP - Bridge
	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 (<u>http://192.168.2.254</u>) 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 can't 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.



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

	Wirel	ess LAN Series
Site contents:	1. Operatic You can setup differ function.	on Mode
 ■ TCP/IP ■ Firewall ■ Management ■ Reboot 	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. Cancel < <back next="">></back>

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



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

	0. EAN 1110	mace Setup	
Operation Mode Vireless TCP/IP Firewall Management Bahaot	This page is used to to the device. Here y DHCP Server will be Server in your netwo	configure the parameters for lo ou may change the setting for up and running, please make s k when the device is in Bridge.	cal area network which connect IP addresss, subnet mask. The sure there is no another DHCP /Client Modes.
I Kebbor	IP Address:	255 255 255 0	

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

	Wireless LAN Series
Site contents: VVizard Operation Mode Vireless TCP/IP Firewall Management Reboot	4. WAN Interface 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 ▼ Cancel < <back< td=""> Next>></back<>

7. Press "Next>>" button then select the "Client" for "mode" and change the SSID to "ZPlus-G192-DEV1".

Wireless LAN Series				
Site contents:	5. Wireless This page is used to connect to your Acce the Client Mode. Band: Mode: Network Type: SSID: Channel Number: Enable Mac C	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-DEV1 11 ~ Hone (Single Ethernet Client) Cancel < <back next="">></back>		

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



9. Wait for refreshing web page.

Wireless LAN Series			
Site contents: Wizard Operation Mode Wireless TCP/IP 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.		

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
Site contents:	opume Free Memory Firmware Version Webpage Version Wireless Configuratio Mode Band SSID Channel Number Encryption BSSID State RSSI TCP/IP Configuration Attain IP Protocol IP Address Subnet Mask Default Gateway DHCP Server MAC Address WAN Configuration Attain IP Protocol IP Address Subnet Mask	State State State State 1292 kB v1.2.1 v1.2.1 v1.2.1 v1.2.1 v1.2.1 Infrastructure Client - Router 2.4 GHz (B+G) ZPlus-G192-DEV1 11 Disabled 00:00:00:04:27:28 Connected 0 Fixed IP 192.168.3.1 255.255.255.0 192.168.3.1 Enabled 00:00:00:a:bb:dd:92 DHCP 192.168.2.5 255.255.255.0 255.255.255.0
	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.

Wireless LAN Series



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	Select
ZPlus-G192-DEV1	00:00:00:04:27:28	11 (B+G)	AP	no	100	۲
Mercy_CA_SSID	00:0d:14:00:80:18	9 (B+G)	AP	no	100	0
Zinwell	00:05:9e:80:01:f8	1 (B)	AP	no	81	0
ZPlus-G192-DEV2	00:00:00:04:26:92	11 (B+G)	AP	no	81	0
default	00:0f:3d:3d:89:62	6 (B+G)	AP	no	75	0
linksys	00:06:25:d7:c3:97	6 (B+G)	AP	no	67	0
ZPlus-G192	00:aa:ee:ff:99:01	11 (B+G)	AP	no	63	0
ZPlus-G192-mike-cli	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	50	0
DFC-test	00:05:9e:80:46:3b	1 (B)	AP	no	35	0
G192-wds1	00:00:00:04:26:88	11 (B+G)	AP	no	21	0

Refresh Connect

Configure DEV5:

1. Access the web server (<u>http://192.168.2.254</u>) 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 can't 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.



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

	Wirel	ess LAN Series	
Site contents: Wizard Operation Mode Wireless TCP/IP Firewall Anagement Reboot	1. 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. Cancel < <back next="">></back>	

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

	wi	reless LAN Series
Site contents: Wizard Operation Mode TCP/IP Firewall Management Reboot	2. Time You can maint the Internet. C Enable N Time Zone Select : NTP server :	Zone Setting tain the system time by synchronizing with a public time server over TP client update (GMT-08:00)Pacific Time (US & Canada): Tijuana 192.5.41.41 - North America Cancel < <back next="">></back>

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

	Wirele	ss LAN Series	
Site contents: Wizard Operation Mode TCP/IP Firewall Management Reboot	3. LAN Inte This page is used to to the device. Here y DHCP Server will be Server in your netwo IP Address: Subnet Mask:	erface Setup configure the parameters for ou may change the setting f up and running, please make k when the device is in Bridg 192.168.2.205 255.255.255.0	r local area network which connects or IP addresss, subnet mask. The e sure there is no another DHCP ge/Client Modes.

6. Press "Next>>" button then select the "Client" for "mode" and change the SSID to "ZPlus-G192-DEV2".

	Wirele	ess LAN Series
Site contents:	5. Wireless	s Basic Settings
Operation Mode Wireless TCP/IP Firewall	This page is used to connect to your Acc the Client Mode.	configure the parameters for wireless LAN clients which may ess Point. If you want to use Wireless ISP mode, please choose
Management	Band:	2.4 GHz (B+G) 🐱
	Mode:	Client 👻
	Network Type:	Infrastructure 💌
	SSID:	ZPlus-G192-DEV2
	Channel Number:	11.
	🔲 Enable Mac C	Cancel (Single Ethernet Client)

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

	Wireless LAN Series
Site contents: Wizard Operation Mode Vireless TCP/IP TCP/IP Management 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<="" th=""></back>

8. Wait for refreshing web page.

Wireless LAN Series			
Site contents: Site contents: Site contents: Viraless TCP/IP Firewall Management E 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.		

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

	Wireless	LAN Series
Site contents: Wizard Operation Mode TCP/IP	LAN Interface This page is used to config the device. Here you may etc	e Setup gure the parameters for local area network which connects to change the setting for IP addresss, subnet mask, DHCP,
 B LAN Interface B WAN Interface Firewall Management B Reboot 	IP Address: Subnet Mask: Default Gateway:	192.168.2.205 255.255.255.0 0.0.0.0
	DHCP: DHCP Client Range: 802.1d Spanning Tree: Clone MAC Address:	Disabled Ig2.168.2.204 Show Client Disabled Ig2.168.2.204 Show Client 000000000000000000000000000000000000
	Apply Changes	Reset

10. Wait for refreshing webpage.



11. Use "State" page to check setting.

	Wireles	s LAN Series			
Site contents: Wizard Operation Mode	This page shows the cur device.	rent status and some basic settings of the			
	System				
	Untime	Dday:2b:56m:6s			
Management	Eree Memory	1520 kB			
C Status	Firmware Version	v1.2.1			
Statistics	Webpage Version	v1 2 1			
	Wireless Configuratio	n			
Time Zone	Mode	Infrastructure Client - Bridge			
	Band	2.4 GHz (B+G)			
	SSID	ZPlus-G192-DEV2			
	Channel Number	11			
	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			
	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.

Site contents: Wizard Operation Mode Wireless Basic Settings	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.							
Advanced Settings Security VDS settings Site Survey TCP/IP Firewall Management Reboot	SSID	BSSID	Channel	Туре	Encrypt	Signal	Select	
	Mercy_CA_SSID	00:0d:14:00:80:18	9 (B+G)	AP	no	100	0	
	ZPlus-G192-DEV1	00:00:00:04:27:28	11 (B+G)	AP	no	100	0	
	ZPlus-G192-DEV2	00:00:00:04:26:92	11 (B+G)	AP	no	84	•	
	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	
	3F-PRINTER	00:0c:6e:c1:9b:11	7 (B+G)	AP	ves	18	0	

Basic Settings

Wireless LAN Series				
Site contents: Wizard Coperation Mode Wireless Carl Basic Settings Carl Advanced Settings Carl Security Carl Secur	Wireless Ba This page is used to co connect to your Acces well as wireless netwoor Disable Wireless Band: Mode: Network Type: SSID: Channel Number: Associated Clients: Disable Mac Cle Apply Changes	AP SLAN Interface 2.4 GHz (B+G) Infrastructure ZPlus-G192 11 Show Active Clients Meset		

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.

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