802.11bg Outdoor WISP AP/CPE

## **User's Manual**

Version 2.0

1 Introduction

## 1.1 Overview

The AP is a wireless outdoor multi-function device based on IEEE 802.11b/g 2.4GHz radio technologies. When installed in upright position, it is rain and splash proof. It features an integrated 14dBi patch antenna and passive POE to simplify the installation. The built-in antenna can provide up to 10~15km of distance depending on conditions. The firmware of the AP provides up to 5 operations modes to satisfy different application environments

### 1.2 How to Use This Guide

The AP is an advanced wireless CPE with many functions. It is recommended that you read through the entire user's guide whenever possible. The user guide is divided into different chapters. You should read at least go through the first 3 chapters before attempting to install the device.

## **1.3 Firmware Upgrade and Tech Support**

If you encounter a technical issue that can not be resolved by information on this guide, we recommend that you visit our comprehensive website support .The tech support FAQ are frequently updated with latest information.

## 1.4 Features

- 8MB Flash and 32MB SDRAM
- 5 wireless multi-function modes: Access Point (WDS parent), Bridge Infrastructure, Client Infrastructure (WDS child), WISP Router, AP Router.
- 14dBi Integrated Antenna: Vertical Polarization, Horizontal Polarization
- Built from High Temperature resistant ABS material with Anti-UV protection
- Power by passive PoE: 18V Adapter and injector included
- Pole Mount strap included. Optional metal L-mounting available
- Total Bandwidth Control
- Site Survey, RSSI signal Survey
- WMM
- Web, SSH/SSH2, Telnet, and SNMP managements

## **1.5 Wireless Operation Modes**

The AP can perform as a multi-function wireless device. Through the web interface, users can easily select which wireless mode they wish the AP1 to perform.

The AP can be configured to operate in the following wireless operation modes:

### 1.5.1 Access Point Mode(bridge mode-WDS parent+AP)

When operating in the Access Point mode, the AP becomes the center hub of the wireless network. All wireless cards and clients connect and communicate through AP. This type of network is known as "Infrastructure network". Other AP or 802.11b/g CPE can connect to AP mode through "Client Infrastructure Mode" or "(WDS child)Bridge Infrastructure Mode". The Access Point mode will act as "WDS parent+AP" when connecting with the "Bridge Infrastructure mode".



#### 1.5.4 Bridge Infrastructure Mode (WDS client)

This mode is also known as "WDS Station" or "Client mode with MAC address transparency". The Bridge Infrastructure mode can only connect with "Access Point" mode. 2 Bridge Infrastructure can not connect with each other. It works like client mode with MAC address transparency function. In another word, the MAC addresses of the PCs will be passed instead of the AP's wireless MAC address. If you require Bridge connection with WPA-PSK or WPA-PSK2 connection, please use this mode instead. However, this mode might not work with some outdoor APs. If it occurs, please use Client Infrastructure or WDS Bridge instead.



#### 1.5.5 Client Infrastructure Mode

This mode is also known as "Client" mode. In Client Infrastructure mode, the AP acts as if it is a wireless adapter to connect with a remote Access Point. Users can attach a computer or a router to the LAN port of AP to get network access. This mode is often used by WISP on the subscriber's side.



#### **1.5.7 WISP Router Mode**

In WISP Router Mode, AP connects to the remote Access Point as in Client Infrastructure Mode. On the LAN side, it acts like a wired router for IP sharing function. This mode is best used for IP sharing application for WISP subscribers. In this mode, the WAN is the wireless client side; the LAN is the wired side.



#### 1.5.8 AP Router Mode

In AP Router Mode, the AP behaves like a wireless router. The LAN port of the AP will become WAN port. The wireless network of AP becomes the LAN side. Please note when this mode is used, the only way to manage the AP is through the wireless side unless remote management is opened.



# 2 Installing the AP

This section describes the hardware features and the hardware installation procedure for the AP. For software configuration, please go to chapter 3 for more details.

## 2.1 Before You Start

It is important to read through this section before you install the AP

- The AP comes with everything you need to start installation with exception of the PoE Ethernet Cable. You can use a good quality CAT-5E outdoor graded Ethernet cable (shielded with anti-UV) according to the length you need.
- The AP must be installed in the upright position if the unit is located in outdoor or wet environments.
- You must set the distance parameter to make long distance connection work.
- The integrated antenna has forward coverage angle of 25 degree both in vertical and horizontal direction.
- The AP is a 2.4GHz CPE device only, it can not operate in 5GHz.

## 2.2 Package Content

The AP package contains the following items:

- " One AP main unit
- " One 18V 1A DC power adapter
- " Passive PoE DC Injector
- " Mounting kits
- " User's Guide CD



The PoE Ethernet cable is not included in the package. You may choose an outdoor specification Ethernet cable according to the length you need.

## **2.3 Optional Accessories**

The AP have the following optional accessories

" Tilting Metal Adjustable antenna degree Pole Mount (*Model: L-Mounting Kits*): This kit allows AP to adjust angle to get perfect connection



## 2.5 Hardware Installation

- 1. Plug Power adapter into the POE Adapter passive
- 2. Connect RJ45 ( LAN Port ) to computer or Switch
- 3. Connect RJ45 (PoE Port) to AP



## 2.5.1 Standard Pole Mount

AP support vertical and horizontal potions pole mounting. Please follow the procedure below to install:





## 2.5.2 Optional Antenna Adjustable Mounting

With Optional Antenna Adjustable Mounting could easy to adjust better angle position to connect to the Base-Station. Please follow the procedure below to install:



3

## **Configuring the AP**

### Configuring the IP address of your computer

In order to manage with AP, you have to configure the IP addresses of your computer to be compatible with this device.

#### Note:

1. The default network setting of the device:

IP address:	10.0.0.1
Subnet Mask:	255.0.0.0

- 2. In the following TCP/IP configuration guide, the IP address "10.0.0.2 " is assumed to be your IP address. Please **DO NOT** choose 10.0.0.1 for the IP address (10.0.0.1) has been set as the default IP for this device.
- 3. The following TCP/IP configuration guide uses windows XP as the presumed operation system.

#### Procedures to configure IP addresses for your computer

- 1. If you are in Classic Start menu view, click **Start→Settings→Control Panel→Network Connections**.
- If you are in Start menu view, click **Start→Control Panel→ Network Connections.**
- 2. Double click "Local Area Connection"



3. Choose Internet Protocol (TCP/IP) and click Properties.

Local	Area Connect	tion Prop	erties		?
General	Authentication	Advanced	1		
Connec	using:				
B S	S 900-Based PC	I Fast Ether	net Adapt	er	
This c <u>o</u> r	nection uses the	e following it	ems:	<u>C</u> onfigu	ire
	File and Printer QoS Packet So Internet Protoco	Sharing for I Sharing for I heduler bl (TCP/IP)	Series Alicrosoft 1	Vetworks	
	istall	<u>U</u> ninsta	all	P <u>r</u> operti	es
- Descr Allow netwo	ption s your computer ork.	to access re	esources c	n a Microsoft	
Shoy	y icon in notifical	ion area wh	en conne	cted	
					Cancel

4. Choose "Use the following IP address" to specify IP addresses manually. Fill in the IP addresses in each column. Please click the OK button after your configuration.

○自動取得 IP 位址(0)					
● 使用下列的 IP 位址(S)			-		
IP 位址①:	10 .	0.	0	. 25	]
子網路遮罩(U):	255 .	255 . 0 . 0		. 0	
預設閘道(型):			_		
○ 自動取得 DNS 伺服器位均	£®)				
⊙使用下列的 DNS 伺服器的	立址(E): -		_	-	
慣用 DNS 伺服器(P):				4	

#### Starting the WEB-Based Management Interface

The device uses WEB as the management interface. You can use a browser to access the management interface easily. Please follow up the steps listed below.

- 1. Double click the Internet WEB browser icon on your desktop screen (Netscape Communicator 4.0 and Internet Explorer 3.0 or update version)
- 2. Type 10.0.0.1 into the URL WEB address location and press Enter.

🗿 Access Point Administrative Console - Microsoft Internet Explorer	
檔案(F) 續輯(F) 稜鏡(F) 莪的最菱(A) 工具(T) 誤明(H)	
③ 上-頁 · ② · ☑ ② ⑦ /> 搜尋 ☆ 我的最爱 ④ ② · ॆ □ ② · □ ◎ ② · □ ◎ ○	
網址(2) (書) http://10.0.0.1/	🔽 🔁 移至 連結 🎽
😰 - Search web 🔎 - 🔶 - 🍕 - 📢 ☆ Favorites - 🖗 PC Health 😂 Spaces - 🖃 - 🍇 - 🗟 - 🚱 -	

- 3. The Username and Password Required window appears.
  - Enter **admin** in the User Name location (default value).
  - Enter admin in the Password location (default value).
  - Click "OK" button

連線到 10.0.0.1	? 🛛
R	
Access Point	
使用者名稱(U):	🖸 admin 💌
密碼(P):	*****
	□記憶我的密碼(®) 確定 取消

# 4 Web Management

In this chapter, we will explain about the wireless settings and router mode settings in web management interface.

#### With the web management interface, there are 4 basic sections to configure the AP



Start with WISP Wizard: Helps you quickly set up AP to connect with Base-Station or AP Start with Home Bridge Wizard: Helps you quickly set up AP in bridge mode Start with Home Router Wizard: Helps you quickly set up AP in router mode Start with Advanced setup: Provides more detailed configuration options

## Here will explain all web page functions

				Access Point V1.1 Uptime: 2:05
System	Settings Password Setting Backu	ip & Restore Syslog S	ettings Firmware Upgrade	home
WAN	System Settings	Frankline States		
LAN	.:: System Settings			
Wireless1	Operation Mode	Bridge 🛩		Operation Mode: Bridge: bridge all interfaces together and dischied DHCP server(docmaso) & frewall
Wireless2				Router: NAT and DHCP server enable. Router: NAT and DHCP server enable. Note: If change operation mode, the LAN settings will recover to factory default and
WDS-Repeater				recommend reboot device.
Q05 SNMP				
DMZ	.d Time Settings			
DynDNS	Timezone	Taiwan	~	NTP Server: A NTP server is used to obtain the correct time from a time source and adjust the
Status	NTP Server	220.130.158.52		Please input the ip address or hostname of the NTP server.
Reboot				
	: Web Interface Settings			
	Language	English	~	
				Save Changes
-				
Wel	come to Access Point	t Setup Page		
า syste	m page			
Greate				
Syste	m			
	Settings	- Ope	eration Mode:	
		Br	idge: bridge all interface	es together and disabled DHCP server (dnsmasg) & firmwa
			outer: NAT and DHCP se	erver enable
			ator for and prior s	
		Tir	me Settings: NTP server	to obtain the correct time from the time source and adjust
		the the	local time in each conne	ecting computer
		Weł	b Interface setting: allov	v to change the Language
	D 10	·	To shange the passive	and to access the AD web management
	Password S	etting —	10 change the passw	ord to access the AP web management
	Backup & H	Restore	To Download the	e config. Or Upload the config. Setting file
			Duranta Caralana	
	Syslog Sett	ings	Kemote Syslog:	
			IP address and port	of the remote logging host.
			Leave this address	blank for no remote logging. The port is set to 514 by defa
	Firmware I	Ingrade	To upgrade the	latest firmware

J'y Journ	WAN Settings	home
WAN	WAN Settings	
LAN		
Wireless1	This device is in Bridge mode, the WAN settings only availible for Router mode	
Wireless2		
/DS-Repeater		
QoS		
SINMP		
DVDDNS		
Status		
Reboot		

#### WAN Page: work on in Router Mode Bridge Mode doesn't support WAN setting

			Access Paint VI.1 (Uptime: 2:05
System	LAN Settings		home
WAN	LAN Settings		
» LAN	"i LAN Configuration		
Wireless1 Wireless2	Connection Type	O DHCP Client ③ Static IP O PPPoE	
WDS-Repeater	IP Settings		
QoS	LAN IP Address	10 . 0 . 1	LAN IP Settings: IP Settings are optional for DHCP. They are used as defaults in case the DHCP server
SNMP	Subnetmask	255 255 255 0	is unavailable. Notice:The LAN IP should be in different subnet of WAN
DM2	Default Gateway		
Status			
Reboot	10.0.0.1 Add		Note: Please confirm your DNS server before adding/removing DNS servers
	.: DHCP Service For LAN		
	DHCP Service	Disabled O Enabled	DHCP Start: The start IP address of DHCP server's IP range.The default value is 100(valid range1:254).
	Max Client Q'ty	50	Max Client Q'ty: The maximum number of DHCP IP. The IP range is from (DHCP start) to (DHCP start + Max Client O'tv - 1). The default value is 50(valid range:1-253).
	DHCP Lease Time(Minutes)	1440	DHCP Lease Time: DHCP Lease Time means DHCP server grants permission to a DHCP client to use a particular TP address. The default value is 1440 minutes(valid range:1-86400 minutes).

LAN Settings:

- 1. LAN configuration: allow to choose DHCP Client, Static IP or PPPoE
- 2. IP Settings: are optional for DHCP. They are used as defaults in case the DHCP server is unavailable.
- 3. DHCP Service For LAN:
  - DHCP Start: the start IP address of DHCP server's IP range. The default value is 100 (valid range: 1~254)
  - Max Client Q'ty: the maximum number of DHCP IP. The IP range is from (DHCP start) to (DHCP start + Max Client Q'ty -1). The default value is 50 (valid range: 1~253)
  - DHCP Lease Time: DHCP lease time means DHCP server grants permission to a DHCP client to use a particular IP address. The default value is 1440 minutes (valid range: 1~86400 minutes)

System	Wireless1 Settings MAC Filter Settin	ngs	h
WAN LAN Wireless1 WDS-Repeater QoS SNMP DMZ DynDNS Status Reboot	Wireless1 Settings at Wireless Configuration Wireless Interface Wlan Mode Broadcast SSID SSID Name Channel Transmit Power Radio Mode Data Rate Isolation WMM Distance CTS/RTS length	<ul> <li>Disabled  <ul> <li>Enabled</li> <li>AP+WDS Parent</li> <li>WDS Child</li> </ul> </li> <li>WAP1 <ul> <li>11 (2.462 GHz) ×</li> <li>18 w dBm</li> <li>b only  <ul> <li>g only  <ul> <li>b only  <ul> <li>g only  <ul> <li>b only  <ul> <li>g only  <ul> <li>b log mixed</li> </ul> </li> </ul> </li> <li>Auto  <ul> <li>Disabled  <ul> <li>Enabled</li> <li>Enabled</li> <li>Enabled  <ul> <li>Enabled</li> <li>Enabled</li> <li>Enabled  <ul> <li>Enabled</li> <li>Enabled</li> <lu> <li>(1-2346)</li> </lu></ul> </li> </ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul>	Wian Mode:         AP+WDS Parent: AP master mode.         Client: Wireless client mode for Router.         WDS Child: WDS child mode for Router.         WDS Child: WDS child wery clients.         Broadcast said to swarp clients.         Transmit Power:         Change the amount of power used by a radio transceiver to send the signal out.         Noterthis is a global setting for all VAPs.         Radio Mode:         b only: only allow 11b clients connection.         b/gr mixed: allow 11b mod 11g clients connection.         Note:This is a global setting for all VAPs.         Rotation Mode:         WAPs. Isolate the traffic between Wireless1 and Wireless2.         Clients: Isolate the traffic between wireless client         Please input the distance(meter) between this device and connection target. This setting is for long distance connection200 meters).
	.a Encryption Settings	Disabled	Security Moder. WPA2 allows WPA and WPA2 stations. WPA/WPA2 with RADIUS only support for AP mode.

#### Wireless 1 Settings:

- 1. Wireless configuration:
  - Wlan Mode: AP+WDS Parent: AP master mode.
  - Client: Wireless client mode for router
  - WDS child: WDS child mode for bridge
- 2. Broadcast SSID: broadcast SSID to every clients
- 3. Transmit power: change the amount of power used by a radio transceiver to send the signal out.
- 4. Radio Mode:
  - b only: only allow 11b clients connection
  - g only: only allow 11g clients connection
  - b/g mixed: allow 11b and 11g clients connection
- 5. Isolation:
  - VAPs: isolate the traffic between wireless1 and wireless2
  - Clients: isolate the traffic between each wireless client
- 6. Distance: please input the distance( meter ) between this device and connection target. This setting is for long distance connection (>300 meters)
- 7. Security Mode: WPA2 allows WPA and WPA2 stations.

WPA/WPA2 with RADIUS only support for AP mode

System	Wireless2 Settings MAC Filter Settin	gs		home
WAN LAN Wireless1 WDS-Repeater QoS SNMP DMZ DynDNS Status Reboot	Wireless2 Settings Wireless Configuration Wireless Interface Wlan Mode Broadcast SSID SSID Name Channel Transmit Power Isolation WMM	<ul> <li>Disabled C Enabled</li> <li>AP+WD5 Parent</li> <li>Yes M</li> <li>WAP2</li> <li>11 (2.462 GHz) M</li> <li>18 M dBm</li> <li>Disabled O VAPs O Clients</li> <li>Disabled O Enabled</li> </ul>	Wlan Mode:         AP+WDS Parent: AP master mode.         Broadcast SSID:         Broadcast said to avery clients.         Transmit Power:         Change the amount of power used by a radio transceiver to send the signal out.         Note:This is a global setting for all VAPs.         Isolation:         VAPs: Isolate the traffic between Wireless1 and Wireless2.         Clients: Isolate the traffic between each wireless client	
	.i Encryption Settings	(1-2346)	Security Hode: WPA2 allows WPA and WPA2 stations. WPA/WPA2 with RADIUS only support for AP mode. Save Cha	anges

#### Wireless 2 Settings:

- 1. Wlan Mode: AP+WDS Parent: AP master mode.
- 2. Broadcast SSID: broadcast SSID to every clients
- 3. Transmit power: change the amount of power used by a radio transceiver to send the signal out.
- 4. Isolation:
  - VAPs: isolate the traffic between wireless1 and wireless2
  - Clients: isolate the traffic between each wireless client
- 5. Security Mode: WPA2 allows WPA and WPA2 stations.

WPA/WPA2 with RADIUS only support for AP mode

			Access Point V1.2 Uptimer 2:06
System	Repeater Settings		home
WAN	Repeater Settings		
LAN	.:: Repeater Configuration		
Wireless1	WDS Repeater	Disabled     O Enabled	WDS Repeater:
Wireless2	SSID Name	WAP1	If enable WDS Repeater will set System Operation mode in Repeater mode and set Wireless1 in WDS child mode.
w <b>WDS-Repeater</b> QoS	Inherit AP Settings	Disabled     O Enabled	If disable WDS Repeater will reset System to factory default. SSID Name: Please input the SSID of parent AP.
SNMP			Inherit AP Settings: If enable Inherit AP will clone the SSID and security settings from parent AP to Wireless2, and enable Wireless2.
DVDDNS			
Status	+ Encryption Settings		
Reboot	Security Mode	Disabled	Repeater Security: Please set the security mode consistent with parent AP.
Wai	como to Accors Dair	e Colum Dava	Save Changes

#### **Repeater Settings:**

- 1. WDS Repeater: if enable WDS repeater will set system operation mode in repeater mode and set wireless 1 in WDS child mode. If disable WDS repeater will reset system to factory default
- 2. SSID Name: please input the SSID of parent AP
- 3. Inherit AP settings: if enable inherit AP will clone the SSID and security setting from parent AP to Wireless2, and enable Wireless2
- 4. Repeater Security: please set the security mode consistent with parent AP

System	QoS Settings			h
WAN	QoS Settings			
LAN	.:: QoS Options			
Wireless1	WAN QoS Service	Oisabled (	) Enabled	Maximum Upload/Download: Setup the WAWLAN maximum sustained upload and download speeds, in kilobits
Wireless2	Upload Speed	1024	kBits	
VDS-Repeater	Download Speed	12288	kBits	
SNMP	LAN OOS Sopriso	O Picelul (	N Frankland	
DMZ	Unload Speed	UISADIED (	2 Enabled	
DynDNS	Download Speed	1024	KBIES	
Status	bownioad Speed	1024	KBICS	
Reboot				

#### QoS Settings:

Maximum Upload/Download: setup the WAN/LAN maximum sustained upload and download speeds in kilobits.

			Access Point,V1,1
			Uptimer 2:05
System	SNMP Settings		home
WAN	SNMP Settings		
LAN	: SNMP Setting Options		
Wireless1 WDS-Repeater QoS >> SNMP DynDNS Status Reboot	SNMP Service SNMP Public Community Name SNMP Public Source SNMP Private Community Name SNMP Private Source	Disabled      Disabled     public     default     private     localhost	SNMP Community name identifies a group of devices and management systems that share authentication, access control of this group. Although public and private are commonly used. It is strongly suggested to use that do guess ameres. The only worse thing than 'public' and 'private' is to leave the community name blank! The community name is an is considered a group assessment. SNMP Source Search as considered a group assessment. Some strong the source search are all aformation from this 'public' community devices or control this 'private' community device.
			Save Changes
Wel	come to Access Point	Setup Page	

#### SNMP Settings:

- 1. SNMP Community Name: the SNMP community name identifies a group of devices and management systems that share authentication, access control of this group. Although "pulic" and "private" are commonly used, it is strongly suggested to use hard to guess names. The only worse thing than " public" and "private", is to leave the community name blank. The community name can be considered a group password.
- 2. SNMP Source: SNMP source defines the IP address, hostname or network mask for management systems that can read information from this "public" community device or control this "private" community device.

		Access Goint V1.1 Uptimer 2:05
System	DMZ Settings	home
WAN	DMZ Settings	
LAN	: DMZ Configuration	
Wireless1	DMZ Service	DMZ Service:
Wireless2	DMZ IP Address	DM2(Demilitarized Zone) is a network area (a subnetwork) that sits between an organization's internal network and an external network, usually the Internet.The
WDS-Repeater	10.0.0.	DMZ is typically used for connecting servers that need to be accessible from the outside world, such as e-mail, web and DNS servers.
QoS		
SNMP		
DMZ		
DynDNS		
Status Reboot		
		Save Changes
Wel	come to Access Point Setup Page	

#### DMZ Settings:

DMZ service: DMZ(Demilitarized Zone) is a network area (a subnetwork) that sits between an organization's internal network and an external network, usually the internet. The DMZ is typically used for connecting servers that need to be accessible from the outside world, such as e-mail, web and DNS servers.

System	Dynamic DNS		ho
WAN	DynDNS Settings		
LAN	.ii DynDNS		
Wireless1	Dynamic DNS	Disabled      O Enabled	DynDNS:
Wireless2	Service Provider	dyndns-dynamic 💌	The Dynum's service comes in handy for establishing connections from computers on the Internet to your network at home. This is especially useful if you want to run service raftware or SSH on usure Mixi Revize and only base a duragenic TP.
/DS-Repeater			
QoS	.: Account		
SNMP	a recount		
DIMONS	Domain Name		
Statue	User Name		
Reboot	Password		
			Save Changes

#### **DynDNS Setting:**

- 1. DynDNS: the DynDNS service comes in handy for establishing connections from computers on the internet to your network at home. This is especially useful if you want to run server software or SSH on AP and only have a dynamic IP.
- 2. Account: put your DynDNS domain name, user name and password on it to access DynDNS

System	System Events log DHCP Clients	PPPoE WLAN Stations About	
WAN	System		
LAN	.:: System		
Wireless1	Device Name	Access Point	
Wireless2	Firmware Version	V1.1 r1383	
/DS-Repeater	WAN		
QoS			WAN Status:
SNMP			WAN stands for Wide Area Network and is usually the upstream connection to the internet.
DMZ			
DynDNS	LAN		
Status	IP Address	10.0.0.1	LAN Status:
Reboot	Subnetmask	255.255.255.0	LAN stands for Local Area Network.
	.: WLAN		
	Wireless1	Enabled	WLAN Status:
	SSID Name Frequency	WAP1 2.462 GHz	WLAN stands for Wireless Local Area Network.
	MAC Address	00:C0:CA:2F:35:9C	
	Encryption	Off	
	Wireless2	Disabled	

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#### Status:

- 1. System: show the AP current setting
- 2. Events log: show the AP events log
- 3. DHCP Clients: show the client list who access to AP
- 4. PPPoE: show the PPPoE status
- 5. WLAN Stations: show the Wireless Station current status
- 6. About: show the firmware version

			Access Point V1.1 Uptime: 2:97
System WAN LAN Wireless1 WDS-Repeater QoS SINMP DMZ DynDNS Status <b>X</b> Reboot		Reboot device now Reset to factory default now	uptime: 2.07
Weid	come to Access Point Setup Page		3

#### Reboot:

- 1. Reboot device now: afte all setting, don't forgot to reboot the device
- 2. Reset to factory default now: reset AP to factory default

## **5** WISP Client Mode Setup

Support DHCP Client, PPPoE Client, Static IP and SNMP (Simple Network Management Protocol)

IP: 192.168.1.1



AP set as WISP PPPoE Client Mode and NAT Enabled



Step 1: Select "Start With WISP Setup"

#### WAN Settings

		hor
N Settings		
Wireless Configuration		
SSID Name of Parent AP	WAP1 Scan AP	Radio Mode: 802.11b: only allow 11b clients connection.
Radio Mode	O b only O g only 💿 b/g mixed	802.11b/g: allow 11b and 11g clients connection. Note:This is a global setting for all VAPs.
Security Mode	Disabled	Security Mode:
Connection Type	OHCP Client O Static IP O PPPOE	WPA/WPA2 with RADIUS only support for AP mode.
		DHCP Client: Obtain IP addresses and other parameters such as the default gateway, subnet mask, and IP addresses of DNS servers from a DHCP server.
		Static IP: A Static IP address is where a computer uses the same address every time a user logs on to a network, for example the Internet.
		PPPoE: It is used mainly with ADSL services where individual users connect to the ADSL transceiver (modern) over ethernet.
		Fack Nex

**Step 2:** Push "Scan AP" button to search the AP or Manually to type the WISP AP's name into "SSID Name of Parent AP"

If choosing the "Scan AP" will pop-up the AP Scan Window, choose the one you would want to access from the list then double click the mouse.



		he
AN Settings		
": Wireless Configuration		
SSID Name of Parent AP	Wireless_11n_AP Scan AP	Radio Mode: 802.11b: only allow 11b clients connection.
Radio Mode	<mark>⊖ b enly                                   </mark>	802.11b/g: allow 11b and 11g clients connection. Note:This is a global setting for all VAPs.
Security Mode	Disabled 💌	Security Mode: WPA2 allows WPA and WPA2 stations.
Connection Type	WEP c 1P O PPPoE	WPA/WPA2 with RADIUS only support for AP mode.
	WPA/WPA2(PSK)	DHCP Client: Obtain IP addresses and other parameters such as the default gateway, subnet mask, and IP addresses of DNS servers from a DHCP server.
		Static IP: A Static IP address is where a computer uses the same address every time a user logs on to a network, for example the Internet.
		PPPoE: It is used mainly with ADSL services where individual users connect to the ADSL transceiver (modem) over ethernet.
IP Settings		
WAN IP Address		
Subnetmask		

Step 3: To setup the Security, choose from the security mode column, if no security, choose "Disabled"

**Step 4:** Choose the **Connection Type** which connect to WISP Base Station Tower. \*\* In this demo case, we will choose "PPPoE" to connect to WISP Base Station Tower \*\*

WAN Settings		101
Wireless Configuration		
SSID Name of Parent AP	Wireless_11n_AP Scan AP Ra	adio Mode: 802.11b; only alloy 11b clients connection.
Radio Mode Socurity Mode	O b only ⊙ g only ⊙ b/g mixed	802.11b/g: allow 11b and 11g dients connection. Note:This is a global setting for all VAPs.
Connection Type	DISableu     Sector Static IP O PPPoE	PACUNTY MODE: WPA2 allows WPA and WPA2 stations. WPA/WPA2 with RADIUS only support for AP mode.
	<u>↑</u> ↑	HCP Client: Obtain IP addresses and other parameters such as the default gateway, subnet mark, and ID addresses of DNS conversions a DHCD conversion
	st	mask, and in addresses of one servers norm a prior server. tatic IP: A Static IP address is where a computer uses the same address every time a user
	PI	logs on to a network, for example the Internet.
		It is used mainly with ADSL services where individual users connect to the ADSL transceiver (modem) over ethernet.
		Back
	↓	
ID Cottings		
: IP Settings		
WAN IP Address		
WAN IP Address		
WAN IP Address Subnetmask		
WAN IP Address Subnetmask Default Gateway	.:: PPPoE Settings	
WAN IP Address Subnetmask Default Gateway	.:: PPPoE Settings	
WAN IP Address Subnetmask Default Gateway	.:: PPPoE Settings Reconnect Policy	Keep Alive
WAN IP Address Subnetmask Default Gateway		Keep Alive
WAN IP Address Subnetmask Default Gateway	.:: PPPoE Settings Reconnect Policy Username	Keep Alive

10 0, 0, 0, 1 255 , 255 , 255 , 0	LAN IP Settings: IP Settings are optional for DHCP. They are used as defaults in case the DHCP server's unavailable. Notice:The LAN IP should be in different subnet of WAN
O Disabled 💿 Enabled	DHCP Start: The start IP address of DHCP server's IP range.The default value is 100.
50	Max Client Q'ty: The maximum number of DHCP IP. The IP range is from (DHCP start) to (DHCP start + Max Client Q'ty - 1). The default value is 50.
1440	DHCP Lease Time: DHCP Lease Time means DHCP server grants permission to a DHCP dient to use a particular IP address.The default value is 1440 minutes.
	Back Next
	10 , 0 , 0 , 1 266 , 266 , 266 , 0 ○ Disabled ⊙ Enabled 10.0.0, 100 50 1440

Step 5: Into LAN Settings page to choose Enable or Disable "DHCP NAT Routing".

Step 6: Finish the Wizard and Reboot the AP.

Setting finish		
	The wizard settings finished. Please click finish button to reboot device and apply all the changes.	
	Back Finish	

	home
Rebooting now router should be up in about 90 seconds.	
The webpage should automatically reload after 86 seconds.	
Diagon den't referab this page. If your browners and extended and	
please type IP address of this device in URL(http://10.00.1) and reconnect again.	
	Rebooting now router should be up in about 90 seconds. The webpage should automatically reload after 86 seconds. Please don't refresh this page. If your browser can not auto load page, please type IP address of this device in URL(http://10.0.0.1) and reconnect again.

- /			
WAN	System		
LAN	.:: System		
Wireless1	Device Name	Access Point	
Wireless2	Firmware Version	V1.1 r1346	
VDS-Repeater	.: WAN		
SNMP	ID Address	100 160 1 157	
DMZ	Subnetmask	255.255.255.0	WAN status: WAN stands for Wide Area Network and is usually the upstream
DynDNS	Gateway DNS Server 1	192.168.1.1 168.95.1.1	connection to the internet.
Status			
Reboot	.a LAN		
	IP Address Subnetmask	10.0.0.1 255.255.255.0	LAN Status: LAN stands for Local Area Network.
	WLAN		
	Wireless1 SSID Name Frequency Connect Status Encryption	Enabled Wireless_11n_AP 2.437 GHz Associated(00:C0:CA:2F:79:94) Off	WLAN Status: WLAN stands for Wireless Local Area Network.
	Wireless2	Disabled	

