



Wireless G 2.4GHz 500mW Outdoor AP
Model: APO1000/APO1010

Quick Installation Guide

V.1.0

Preface

The 802.11 b/g compliant Airlink101® APO1000/APO1010 is an outdoor high power wireless access point that can be used for five different purposes in three different modes. In the AP mode, it can be deployed either as traditional fixed wireless Access Point (AP), or combination of AP and WDS (AP+WDS). In the WDS mode, it's only used to expand or bridge Ethernet networks and deployed as a main base, relay based or remote base station. In the CPE (Customer Premises Equipment) mode, it connects to Wireless Internet Service Provider's (WISP) outdoor network via wireless WAN gateway to access to Internet. In the Client Bridge + Universal Repeater mode, it connects to Wireless Internet Service Provider's (WISP) outdoor network via wireless or wired bridge to access to Internet

The die-cast sealed APO1000/APO1010 is compact in size and compliant with IP68 weatherproof standard. It comes with a mounting kit to mount on pole or wall. It is suitable for both indoor and outdoor usage with its 500mW output power, which is higher than a typical indoor AP (100mW).

This Quick Installation Guide provides instructions and reference material for getting started with APO1000/APO1010. This guide will also show you how to connect APO1000/APO1010 to other network devices.

Package Contents

The standard package contents of APO1000/APO1010 :

- | | |
|-------------------------------------|-----|
| ■ APO1000/APO1010 | x 1 |
| ■ Quick Installation Guide | x 1 |
| ■ CD-ROM (with User Manual and QIG) | x 1 |
| ■ PoE Adapter (PSE) with AC Cable | x 1 |
| ■ Mounting Kit | x 1 |



It is highly recommended to use all the supplies in the package instead of substituting any components by other suppliers to guarantee best performance.

System Overview

> APO1000



1. Reset Button : System reboot button press until LED flashed and release for system reboot or for reset to factory default press, LED flashes keep pressing until LED becomes static
2. Power : Red LED ON indicates power on, and OFF indicates power off
3. Signal Strength : Yellow LED ON indicates Low Signal (CPE Mode)
4. Signal Strength : Green LED ON indicates Normal Signal (CPE Mode) or (WDS Mode only)
5. Signal Strength : Green LED ON indicates High Signal (CPE Mode) or (AP Mode only)
6. WLAN : Green LED BLINKING indicates Wireless ON, and BLINKING quickly indicates Wireless Transmit quickly.
7. Ethernet : Green LED ON indicates connection, OFF indicates no connection
8. PoE Connector : For connecting to PSE
9. N-Type Connector : For connecting to N-Type antenna



In CPE Mode, the LED 3 ON indicates the signal Low (Signal ≤ 10 RSSI); the LED 3 and 4 ON indicate the signal Normal ($10 < \text{Signal} \leq 40$ RSSI); the LED 3, 4 and 5 ON indicate the signal High (Signal > 40). Only LED 4 ON indicates the operating mode is WDS Mode; only LED 5 ON indicates the operating mode is AP Mode.

➤ **APO1010**



1. Reset Button : System reboot button press until LED flashed and release for system reboot or for reset to factory default press, LED flashes keep pressing until LED becomes static
2. Power : Red LED ON indicates power on, and OFF indicates power off
3. Signal Strength : Yellow LED ON indicates Low Signal (CPE Mode)
4. Signal Strength : Green LED ON indicates Normal Signal (CPE Mode) or (WDS Mode only)
5. Signal Strength : Green LED ON indicates High Signal (CPE Mode) or (AP Mode only)
6. WLAN : Green LED BLINKING indicates Wireless ON, and BLINKING quickly indicates Wireless Transmit quickly.
7. Ethernet : Green LED ON indicates connection, OFF indicates no connection
8. PoE Connector : For connecting to PSE



In CPE Mode, the LED 3 ON indicates the signal Low (Signal ≤ 10 RSSI); the LED 3 and 4 ON indicate the signal Normal ($10 < \text{Signal} \leq 40$ RSSI); the LED 3, 4 and 5 ON indicate the signal High (Signal > 40). Only LED 4 ON indicates the operating mode is WDS Mode; only LED 5 ON indicates the operating mode is AP Mode.

Hardware Installation

Please follow the steps mentioned below to install the hardware of APO1000/APO1010 :

➤ APO1000



Front Panel



Rear Panel

- ➔ Connect N-type antenna to the N-type connector on the rear panel.
- ➔ Connect Power Injector to the PoE connector on the front panel.
- ➔ Connect an Ethernet cable to the Power Injector and the other end to a computer.
- ➔ Source power to Power Injector in order to supply power to APO1000

➤ APO1010



Front Panel



Rear Panel

- ➔ Connect Power Injector to the PoE connector on the front panel.
- ➔ Connect an Ethernet cable to the Power Injector and the other end to a computer.
- ➔ Source power to Power Injector in order to supply power to APO1010

Getting Started

APO1000/APO1010 supports web-based configuration. Upon the completion of hardware installation, APO1000/APO1010 can be configured through a PC or Laptop by using its web browser such as Internet Explorer or Mozilla Firefox.

- **Default IP Address** : 192.168.2.254
- **Default IP Netmask** : 255.255.255.0
- **Default User Name and Password** :

The default user name and password for both root manager account and admin manager account are as follows :

Mode	CPE Mode		AP Mode	WDS Mode	Client Bridge + Universal Repeater Mode
Management Account	Root Account	Admin Account	Root Account	Root Account	Root Account
User Name	root	admin	root	root	root
Password	default	admin	default	default	default

Step

■ IP Segment Set-up for Administrator's PC

Set the IP segment of the administrator's computer to be in the same range as APO1000/APO1010 for accessing the system. Do not duplicate the IP Address used here with IP Address of APO1000/APO1010 or any other device within the network

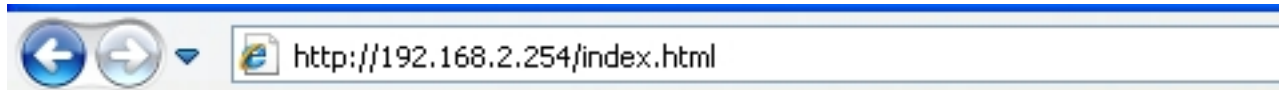
Example of Segment :

The valid range is 1 ~ 254 and 192.168.2.254 shall be avoided because it is already assigned to APO1000/APO1010. 192.168.2.10 is used in the example below.

- IP Address : 192.168.2.10
- IP Netmask : 255.255.255.0

■ Launch Web Browser

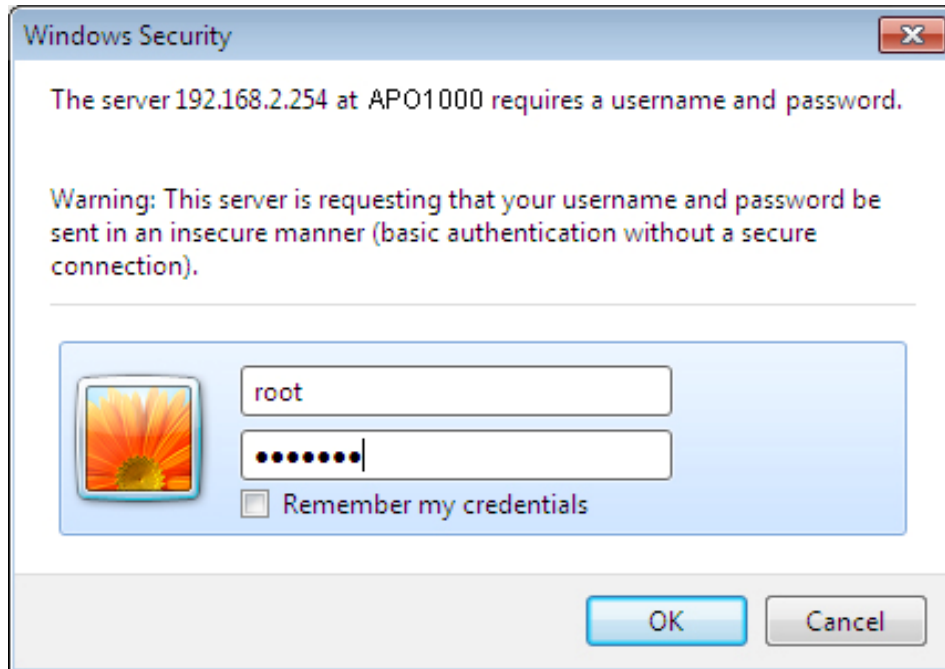
Launch web browser to access the web management interface of system by entering the default IP Address, <http://192.168.2.254>, in the URL field, and then press **Enter**.



■ System Login

The network manager Login Page then appears.

Enter “root” for user name and “default” for password, and then click OK to login to the system.



■ Login Success

System Overview page will appear after successful login.

A screenshot of the AirLink 101 network manager web interface. The top left corner features the "AIRLINK 101 networkingsolutions" logo. The top right corner displays "APO1000". Below the logo is a navigation menu with tabs for "Wizard", "System", "Wireless", "Utilities", and "Status". Under the "System" tab, there are sub-links for "Overview", "Clients", "WDS Status", "Extra Info", and "Event Log". The main content area is titled "System Overview" and includes a "Refresh" button. The overview is divided into four sections: "System", "Network", "LAN Information", and "Wireless Information".
System
Host Name : APO1215
Operating Mode : AP Mode
Location :
Description : Outdoor WiFi-N, 5G, 200mW
Firmware Version : Cen-CPE-NSH2 V1.0.10 Version
Firmware Date : 2010-03-19 04:34:20
Device Time : 2000-01-01 01:08:53
System Up Time : 01:08:53
Network
Mode : Static Mode
IP Address : 192.168.2.254
IP Netmask : 255.255.255.0
IP Gateway : 192.168.2.1
Primary DNS :
Secondary DNS :
LAN Information
MAC Address : 00:11:A3:1A:F8:DD
Receive Bytes : 146489
Receive Packets : 1207
Transmit Bytes : 966616
Transmit Packets : 1073
Wireless Information
MAC Address : 00:11:A3:1A:F8:DE
Channel : 44
Rate : 300 Mb/s
Receive Bytes : 0
Receive Packets : 0
Transmit Bytes : 29703
Transmit Packets : 172
At the bottom of the page, there is a copyright notice: "@Copyright Airlink101®. All rights reserved."

Quick Setup

APO1000/APO1010 is a multiple mode system which can be configured either as a gateway or an access point as desired. This section provides a step-by-step configuration procedure for basic installation on **AP Mode**, **WDS Mode** and **CPE (Wireless Bridge) Mode** and **Client Bridge + Universal Repeater**.

Operating Mode

Operating Mode

Mode : AP Mode
 WDS Mode
 CPE Mode
 Client Bridge + Universal Repeater Mode

Save&Reboot

➤ Setup In AP Mode



Step 1 : Mode Confirmation

Ensure the Operating Mode is currently at AP mode; the web management UI can be viewed at the **Status** section under the **System Overview** page.

System Overview Refresh

System

System Name : WCB1000H5PX
Operating Mode : AP Mode
Location :
Description : Outdoor CPE, WIFI-G, 500mW
Firmware Version : Cen-CPE-G2H5 V1.1.2 Release Version
Firmware Date : 2009-10-22 15:27:59
System Time : 1970-01-01 00:01:31
System Up Time : 01:31

LAN Information

MAC Address : 00:0D:0B:13:6B:16
Receive Bytes : 13540
Receive Packets : 122
Transmit Bytes : 196351
Transmit Packets : 167

Wireless VAP0 Information

MAC Address : 00:0D:0B:13:6B:18
Receive Bytes : 0
Receive Packets : 0
Transmit Bytes : 614
Transmit Packets : 6

Network

Mode : Static Mode
IP Address : 192.168.2.254
IP Netmask : 255.255.255.0
IP Gateway : 192.168.2.1
Primary DNS :
Secondary DNS :

Step 2 : Change Password

Click **System -> Management** and then **Management Setup** page appears.

There can change root and admin manager account. Enter a new password, and verify it again in the **New Password** and **Check New Password** field respectively. Click **Save** button, and proceed with the following steps.

Management Setup

System Information
System Name : WCB1000H5PX
Description : Outdoor CPE, WiFi-G, 500mW
Location :

Root Password
New Root Password :
Check Root Password :

Admin Password
New Admin Password :
Check New Password :

Admin Login Methods
Enable HTTP : Port : 80
Enable HTTPS : Port : 443 UploadKey
Enable Telnet : Port : 23
Enable SSH : Port : 22 GenerateKey
Host Key Footprint : ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQgwl

Save

Step 3 : LAN IP Settings

Click **System -> LAN**, and then **Network Setup** page appears.

Enable “Static IP” and “DNS”, and enter the related informations in the field marked with red asterisks. Click **Save** button to save the settings.

LAN Setup

Ethernet Connection Type
Mode : Static IP Dynamic IP

Static IP
IP Address : 192.168.2.254
IP Netmask : 255.255.255.0
IP Gateway : 192.168.2.1

DNS
DNS : No Default DNS Server Specify DNS Server IP
Primary DNS :
Secondary DNS :

802.1d Spanning Tree Protocol
STP : Enable Disable

Save

Step 4 : Time Zone settings

Click **System -> Time Server**, and then **Time Server Setup** page appears.

Enable “Setup Time Use NTP”, and then enter the related information. Click **Save** button to save the settings.

Time Server Setup

System Time
Local Time : 2009/01/01 Thu 00:06:30

NTP Client
Enable :

Default NTP Server : time.stdtime.gov.tw (optional)

Time Zone : (GMT) Dublin, Edinburgh, Lisbon, London

Daylight Saving Time : Disable

Save

Step 5 : ESSID Settings

Click **Wireless -> Virtual AP Setup**, and then **VAP Setup** page appears.

Virtual AP List

VAP List

VAP	ESSID	Status	Security Type	MAC Filter	MAC Filter Setup	Edit
VAP0	AP00	On	Disabled	Disable	Setup	Edit
VAP1	AP01	Off	Disabled	Disable	Setup	Edit
VAP2	AP02	Off	Disabled	Disable	Setup	Edit
VAP3	AP03	Off	Disabled	Disable	Setup	Edit
VAP4	AP04	Off	Disabled	Disable	Setup	Edit
VAP5	AP05	Off	Disabled	Disable	Setup	Edit
VAP6	AP06	Off	Disabled	Disable	Setup	Edit
VAP7	AP07	Off	Disabled	Disable	Setup	Edit

Click "Edit" and then **VAP0 Setup** page appears.

Set up the broadcasting ESSID for easily identifying the system when device is trying to associate the service. Click **Save** button to save settings

VAP 0 Setup

Security

ESSID : AP00

Hidden SSID : Enable Disable

Client Isolation : Enable Disable

WMM : Enable Disable

IAPP Support : Enable Disable

Maximum Clients : 32

VLAN ID : Enable Disable

Security Type : Disabled

Save

Step 6 : Security Settings

In **VAP0 Setup** page, select WEP in "Security Type" pull down menu. The WEP setting field will shown up immediately.

WEP

Key Length : 64 bits ▼

WEP auth method : Open system Shared

Key Index : 1 ▼

WEP Key 1 :

WEP Key 2 :

WEP Key 3 :

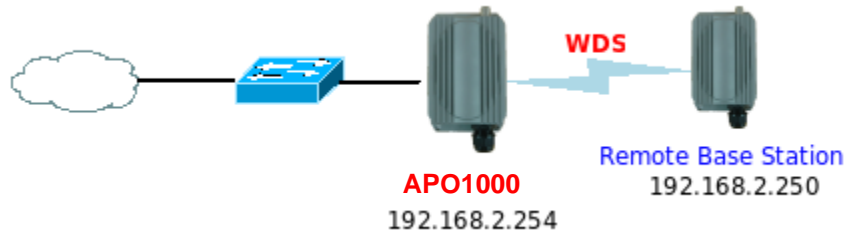
WEP Key 4 :

Enter the WEP key information required in the WEP settings field, and the same information will also be used to set up devices which will then be using APO1000/APO1010's services.

Click **Reboot** to activate all settings configured so far.

Congratulation! The AP mode is now successfully configured.

➤ Setup In WDS Mode



Step 1 : Mode Confirmation

Ensure the Operating Mode is currently at WDS mode; the web management UI can be viewed at the **Status** section under the **System Overview** page.

System Overview

Refresh

System System Name : WCB1000H5PX Operating Mode : WDS Mode Location : Description : Outdoor CPE, WiFi-G, 500mW Firmware Version : Cen-CPE-G2H5 V1.1.2 Release Version Firmware Date : 2009-10-22 15:27:59 System Time : 1970-01-01 00:00:44 System Up Time : 44	LAN Information MAC Address : 00:0D:0B:13:6B:16 Receive Bytes : 13024 Receive Packets : 114 Transmit Bytes : 197590 Transmit Packets : 172
Network Mode : Static Mode IP Address : 192.168.2.254 IP Netmask : 255.255.255.0 IP Gateway : 192.168.2.1 Primary DNS : Secondary DNS :	

Step 2 : Change Password

Click **System -> Management** and then **Management Setup Configuration** page appears.

There can change root and admin manager account. Enter a new password, and verify it again in the **New Password** and **Check New Password** field respectively. Click **Save** button, and proceed with the following steps.

Management Setup

System Information System Name : <input type="text" value="WCB1000H5PX"/> Description : <input type="text" value="Outdoor CPE, WiFi-G, 500mW"/> Location : <input type="text"/>	Root Password New Root Password : <input type="password"/> Check Root Password : <input type="password"/>
	Admin Password New Admin Password : <input type="password"/> Check New Password : <input type="password"/>
	Admin Login Methods Enable HTTP : <input checked="" type="checkbox"/> Port : <input type="text" value="80"/> Enable Telnet : <input checked="" type="checkbox"/> Port : <input type="text" value="23"/>

Step 3 : LAN IP Settings

Click **System -> LAN**, and then **Network Setup** page appears.

Enable “Static IP” and “DNS”, and enter the related information in the field marked with red asterisks. Click **Save** button to save the settings.

LAN Setup

Ethernet Connection Type
Mode : Static IP Dynamic IP

Static IP
IP Address :
IP Netmask :
IP Gateway :

DNS
DNS : No Default DNS Server Specify DNS Server IP
Primary DNS :
Secondary DNS :

802.1d Spanning Tree Protocol
STP : Enable Disable

Step 4 : Time Zone settings

Click **System -> Time Server**, and then **Time Server Setup** page appears.

Enable “Setup Time Use NTP”, and then enter the related information. Click Save button to save the settings.

Time Server Setup

System Time
Local Time : 2009/01/01 Thu 00:08:30

NTP Client
Enable :
Default NTP Server : (optional)
Time Zone :
Daylight Saving Time :

Step 5 : Enable WDS Peer's MAC Address

Click **Wireless -> WDS Setup**, and then **WDS Setup** page appears.

Enable “WDS Peer's MAC Address”, and then enter the related information. Click Save button to save the settings.

WDS Setup

WDS Setup

WMM: Enable Disable

Security Type: Disabled

WDS MAC List

#	Enable	WDS Peer's MAC Address	VLAN ID	Description
01	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
02	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
03	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
04	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
05	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
06	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
07	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
08	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Save

 Setting WDS link, you need verify **“Peer's MAC Address”**, **“Channel”** and **“Security Type”** first. The **“Channel”** and **“Security Type”** must be the same

Step 6 : Wireless General Settings

Click **Wireless -> General Setup**, and then **General Setup** page appears.

Select the “Channel” and “Transmit Rate Control” information required in the General Setup field. The information must the same the other WDS device.

Wireless Setup

General Setup

MAC Address : 00:0d:0b:13:6b:18

Band Mode: 802.11b+802.11g


Transmit Rate Control: Auto

Country: US

Channel: 6

Tx Power: Level 9

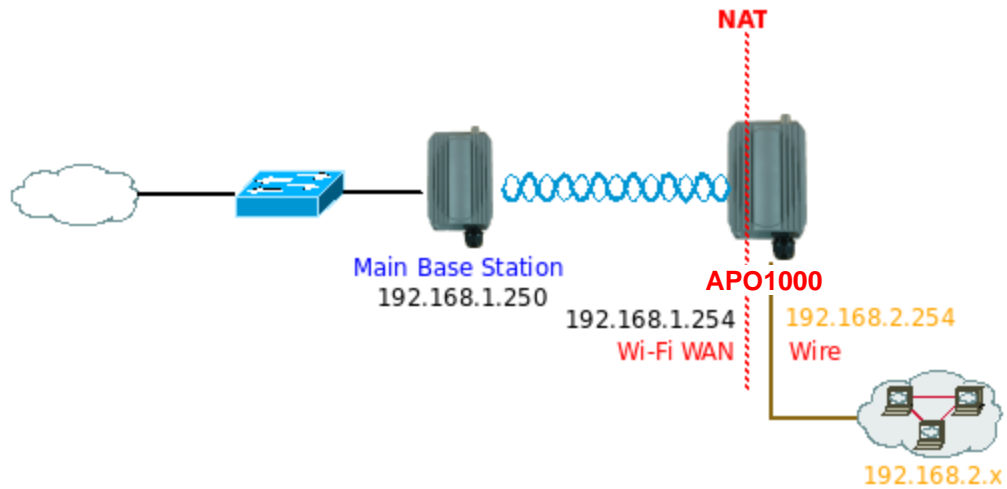
Save

 Try to select fix **“Transmit Rate Control”** will be get better throughput. **“Tx Power”** also effect throughput. More advanced setting see User Manual

Click **Reboot** to activate all settings configured above.

Congratulation! The WDS mode is now successfully configured.

➤ Setup In CPE (Customer Premises Equipment) Mode



Step 1 : Mode Confirmation

Ensure the Operating Mode is currently at CPE mode; the web management UI can be viewed at the **Status** section under the **System Overview** page.

System Overview Refresh

System System Name : WCB1000HSPX Operating Mode : CPE Mode Location : Description : Outdoor CPE, WIFI-G, 500mW Firmware Version : Cen-CPE-G2H5 V1.1.2 Release Version Firmware Date : 2009-10-22 15:27:59 System Time : 1970-01-01 00:00:44 System Up Time : 44	CPE Wireless Information ESSID : default Security Type : disabled Status : Unlinked
WAN Information Mode : Static Mode MAC Address : 00:0D:0B:13:6B:18 IP Address : 192.168.1.254 IP Netmask : 255.255.255.0 IP Gateway : 192.168.1.1 Primary DNS : Secondary DNS : Receive Bytes : 0 Receive Packets : 0 Transmit Bytes : 0 Transmit Packets : 0	LAN Information MAC Address : 00:0D:0B:13:6B:16 IP Address : 192.168.2.254 IP Netmask : 255.255.255.0 Receive Bytes : 12027 Receive Packets : 134 Transmit Bytes : 226880 Transmit Packets : 196

Step 2 : Change Password

Click **System -> Management** and then **Management Setup** page appears.

There can change root and admin manager account. Enter a new password, and verify it again in the **New Password** and **Check New Password** field respectively. Click **Save** button, and proceed with the following steps.

Management Setup

System Information

System Name :

Description :

Location :

Root Password

New Root Password :

Check Root Password :

Admin Password

New Admin Password :

Check New Password :

Admin Login Methods

Enable HTTP : Port :

Enable Teinet : Port :

Step 3 : LAN IP Settings

Click **System -> LAN**, and then **LAN Setup** page appears. Enter the "IP Address" and "IP Netmask" of the LAN Setup.

LAN Setup

LAN IP

IP Address :

IP Netmask :

DHCP Server

DHCP : Enable Disable

802.1d Spanning Tree

STP : Enable Disable

Step 4 : Time Zone settings

Click System -> Time Server, and then Time Server Setup page appears. Enable "NTP Client", and then enter the related information. Click Save button to save the settings.

Time Server Setup

System Time

Local Time : 2000/01/01 Sat 00:05:44

NTP Client

Enable :

Default NTP Server : (optional)

Time Zone :

Daylight saving time :

Step 5 : WAN IP Settings

Click **System -> WAN**, and then **WAN Setup** page appears.

Enable "Static IP", and then enter the related information (**Default WAN IP is 192.168.1.254**)

Click **Save** button to save the settings.

WAN Setup

Internet Connection Type
 Static IP Dynamic IP PPPoE

Static IP
 IP Address :
 IP Netmask :
 IP Gateway :

DNS
 DNS : No Default DNS Server Specify DNS Server IP
 Primary DNS :
 Secondary DNS :

MAC Clone
 Keep Default MAC Address
 Clone MAC Address: 00:1a:92:9f:a4:9b
 Manual MAC Address: : : : : :

Bandwidth Control
 Bandwidth : Enable Disable
 Upload : Kbits
 Download : Kbits

Step 6 : Site Survey

Click **Wireless -> Site Survey**, and then **Station Site Survey** page appears. The system will automatically scan and display the scan results of all AP existing near by the system.

Below depicts an example for scanning result.

CPE Site Survey

Scan Result

ESSID	MAC Address	Channel	Signal Level	Security Type	Setup
RTL8186-default	00:E0:4C:81:86:86	1	-62 dBm	None	<input type="button" value="Select"/>
dlink	00:1E:58:32:E1:27	1	-82 dBm	None	<input type="button" value="Select"/>
AP00	00:11:A3:07:02:03	6	-49 dBm	WEP	<input type="button" value="Select"/>
MENTHOLATUM	00:11:22:5A:5B:5E	11	-30 dBm	WPA-PSK2 (TKIP)	<input type="button" value="Select"/>
MENTHOLATUM2	06:11:22:5A:5B:5E	11	-30 dBm	WPA-PSK2 (AES)	<input type="button" value="Select"/>
ZINWELL	00:05:9E:86:5A:01	11	-93 dBm	None	<input type="button" value="Select"/>
ZyXEL	00:19:CB:1C:12:E8	3	-92 dBm	None	<input type="button" value="Select"/>
PEK-2-1-test	00:D0:41:AE:3B:83	6	-85 dBm	WPA-PSK(TKIP)	<input type="button" value="Select"/>

Step 7 : Select AP to be Associated

Search for the AP to be associated with from the Scan Result list provided in **Step 6**; use **AP00** as an example here where the AP is encrypted via WEP security type.

Step 8 : Wireless General Setup

Click **Select** button of the **AP00**, and related information will display in **Wireless General Setup** page.

Enter the information required in the **Wireless General Setup** page. Information to be entered shall be exactly the same as configured in the **AP00 AP**.

Click **Save** to save the settings.

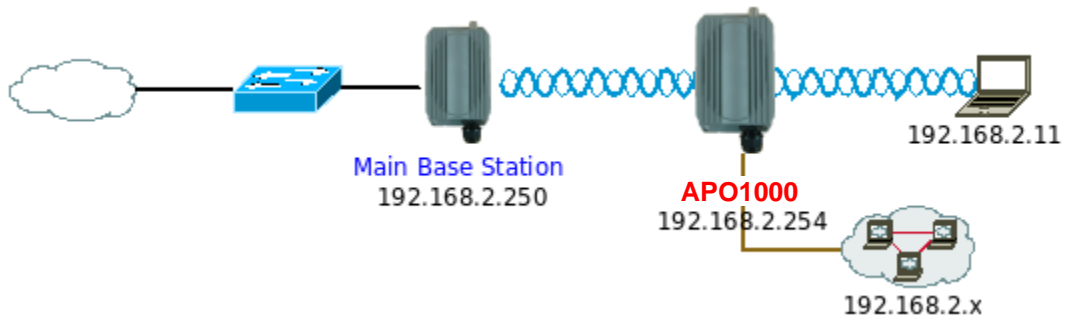
Wireless Setup

General Setup	WEP
ESSID: AP00	Key Length: 64 bits
Band Mode: 802.11b+802.11g	WEP auth method: <input type="checkbox"/> Open system <input type="checkbox"/> Shared
Transmit Rate Control: Auto	Key Index: 1
Country: US	WEP Key 1:
Channel: 6	WEP Key 2:
Tx Power: Level 9	WEP Key 3:
Security Type: WEP	WEP Key 4:

Click **Reboot** button to activate all settings configured above.

Congratulation! The CPE mode is now successfully configured.

➤ Setup In Client Bridge + Universal Repeater Mode



Step 1 : Mode Confirmation

Ensure the Operating Mode is currently at Client Bridge + Universal Repeater mode; the web management UI can be viewed at the **Status** section under the **System Overview** page.

System Overview Refresh

System Host Name : WCB1000H5PX Operating Mode : Client Bridge + Universal Repeater Mode Location : Description : Outdoor CPE, WIFI-G, 500mW Firmware Version : Cen-CPE-G2H5 V2.0.4 Release Version Firmware Date : 2009-10-26 03:54:35 Device Time : 2009-01-01 00:03:39 System Up Time : 03:59	LAN Information MAC Address : 00:11:A3:07:02:01 Receive Bytes : 18541 Receive Packets : 140 Transmit Bytes : 18992 Transmit Packets : 118
Network Mode : Static Mode IP Address : 192.168.2.254 IP Netmask : 255.255.255.0 IP Gateway : 192.168.2.1 Primary DNS : Secondary DNS :	Wireless Station Information ESSID : default Security Type : disabled Status : Unlinked
	Wireless AP Information MAC Address : 06:11:A3:07:02:03 Receive Bytes : 0 Receive Packets : 0 Transmit Bytes : 0 Transmit Packets : 0

Step 2 : Change Password

Click **System -> Management** and then **Management Setup** page appears.

There can change root and admin manager account. Enter a new password, and verify it again in the **New Password** and **Check New Password** field respectively. Click **Save** button, and proceed with the following steps.

Management Setup

System Information System Name : <input type="text" value="WCB1000H5PX"/> Description : <input type="text" value="Outdoor CPE, WiFi-G, 500mW"/> Location : <input type="text"/>	Admin Login Methods Enable HTTP : <input checked="" type="checkbox"/> Port : <input type="text" value="80"/> Enable HTTPS : <input type="checkbox"/> Port : <input type="text" value="443"/> <input type="button" value="UploadKey"/> Enable Telnet : <input checked="" type="checkbox"/> Port : <input type="text" value="23"/> Enable SSH : <input type="checkbox"/> Port : <input type="text" value="22"/> <input type="button" value="GenerateKey"/> Host Key Footprint : <input type="text" value="ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQgwl"/>
Root Password New Root Password : <input type="text"/> Check Root Password : <input type="text"/>	
Admin Password New Admin Password : <input type="text"/> Check New Password : <input type="text"/>	
<input type="button" value="Save"/>	

Step 3 : LAN Settings

Click **System -> LAN**, and then **LAN Setup** page appears. Enter the "IP Address" and "IP Netmask" of the LAN Setup.

Ethernet Connection Type Mode : <input checked="" type="radio"/> Static IP <input type="radio"/> Dynamic IP	DHCP Server DHCP : <input type="radio"/> Enable <input checked="" type="radio"/> Disable
Static IP IP Address : <input type="text" value="192.168.2.254"/> IP Netmask : <input type="text" value="255.255.255.0"/> IP Gateway : <input type="text" value="192.168.2.1"/>	
DNS DNS : <input checked="" type="radio"/> No Default DNS Server <input type="radio"/> Specify DNS Server IP Primary : <input type="text"/> Secondary : <input type="text"/>	
802.1d Spanning Tree STP : <input type="radio"/> Enable <input checked="" type="radio"/> Disable	
<input type="button" value="Save"/>	

Step 4 : Time Zone settings

Click **System -> Time Server**, and then **Time Server Setup** page appears. Enable "NTP Client", and then enter the related information. Click **Save** button to save the settings.

System Time Local Time : 2000/01/01 Sat 00:05:44
NTP Client Enable : <input type="checkbox"/> Default NTP Server : <input type="text" value="time.stdtime.gov.tw"/> (optional) Time Zone : <input type="text" value="(GMT) Dublin, Edinburgh, Lisbon, London"/> Daylight saving time : <input type="text" value="Disable"/>
<input type="button" value="Save"/>

Step 5 : Site Survey

Click **Wireless -> Site Survey**, and then **Station Site Survey** page appears. The system will automatically scan and display the scan results of all AP existing near by the system.

Below depicts an example for scanning result.

Site Survey

Scan Result

ESSID	MAC Address	Channel	Signal Level	Security Type	Setup
AP00	00:0D:0B:13:6B:18	6	-85 dBm	WEP	Select
MENTHOLATUM	00:11:22:5A:5B:5E	11	-45 dBm	WPA-PSK2 (TKIP)	Select
MENTHOLATUM2	06:11:22:5A:5B:5E	11	-45 dBm	WPA-PSK2 (AES)	Select
dlink	00:1E:58:32:E1:27	1	-90 dBm	None	Select
PEK-2-1-test	00:D0:41:AE:3B:83	6	-90 dBm	WPA-PSK(TKIP)	Select

Step 6 : Select AP to be Associated

Search for the AP to be associated with from the Scan Result list provided in **Step 3**; use **AP00** as an example here where the AP is encrypted via WEP security type.

Step 7 : Wireless General Setup

Click **Select** button of the **AP00**, and related information will display in **Wireless General Setup** page.

Enter the information required in the **Wireless General Setup** page. Information to be entered shall be exactly the same as configured in the **AP00**.

Click **Save** to save the settings.

Wireless Setup

General Setup

ESSID : AP00

Band Mode : 802.11b+802.11g

Transmit Rate Control : Auto

Country : US

Channel : 6

Tx Power : Level 9

Security Type : WEP

WEP

Key Length : 64 bits

WEP auth method : Open system Shared

Key Index : 1

WEP Key 1 :

WEP Key 2 :

WEP Key 3 :

WEP Key 4 :

Save

Step 8 : Repeater AP's SSID & Security Settings

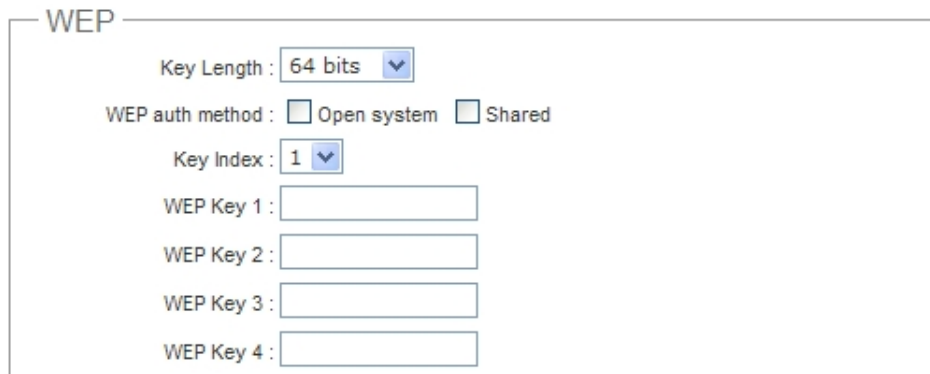
Click **Wireless -> AP Setup**, and then **AP Setup** page appears.

Setup the broadcast SSID for easy identification of the system when device is trying to associate the service. The default SSID is **"Repeater_AP"**.



The screenshot shows the 'AP Setup' page with a 'Security' section. The 'ESSID' field is set to 'Repeater_AP'. The 'Enable AP' radio button is selected (checked). The 'Hidden SSID' radio button is selected (checked) under the 'Disable' option. The 'Client Isolation' radio button is selected (checked) under the 'Disable' option. The 'Maximum Clients' field is set to '32'. The 'Security Type' dropdown menu is set to 'Disabled'. A 'Save' button is located at the bottom right of the form.

Select WEP in "Security Type" drop-down list. The WEP setting field will show up immediately. Enter the WEP key information required in the WEP settings field, the same information will also be used to set up devices using **APO1000/APO1010**s services.



The screenshot shows the 'WEP' settings section. The 'Key Length' dropdown menu is set to '64 bits'. The 'WEP auth method' has two radio buttons: 'Open system' and 'Shared', both of which are unselected. The 'Key Index' dropdown menu is set to '1'. There are four text input fields labeled 'WEP Key 1', 'WEP Key 2', 'WEP Key 3', and 'WEP Key 4', all of which are currently empty.

Click **Reboot** to activate all settings configured above.

Congratulation! The Client Bridge + Universal Repeater mode is now successfully configured.

Technical Support

E-mail: support@airlink101.com

Toll Free: 1-888-746-3238

Web Site: www.airlink101.com

*Theoretical maximum wireless signal rate derived from IEEE standard 802.11 specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, mix of wireless products used, radio frequency interference (e.g., cordless telephones and microwaves) as well as network overhead lower actual data throughput rate. Specifications are subject to change without notice. Photo of product may not reflect actual content. All products and trademarks are the property of their respective owners. Copyright ©2010 Airlink101®