

Manual of Wireless Access Point



This is the manual of outdoor CPE, which will approximate guide you how to set and apply the outdoor CPE, it provide a convenient graphical interface for network construction and maintenance person, as well as a user through a simple and accurate operation, and configuration management of the CPE.

1st Connection and Power Supply

1st: Port Connection and power supply

Instruction of different port:



P1 CPE Port Connection

1. Please use a power supply of 12V DC adapter or 24V POE adapter, WAN / LAN port is the PoE Port.



Pay Attention

Pls make sure the CPE's power supply is normal in reset process, or the CPE will be damaged and can't reboot

2. Reset:

There are two ways to reset the CPE:

3. CPE Manage page: Click "Management", then "Save/Reload Settings", then click "Reset Settings" to finish the CPE Reset

2. Press the Reset Button on CPE more than 15 seconds, then release, the device will reboot and restore to factory settings

4. The connection way of CPE, PoE Adapter and PC:



P2 Connection diagram of CPE and PoE adapter



Pay Attention

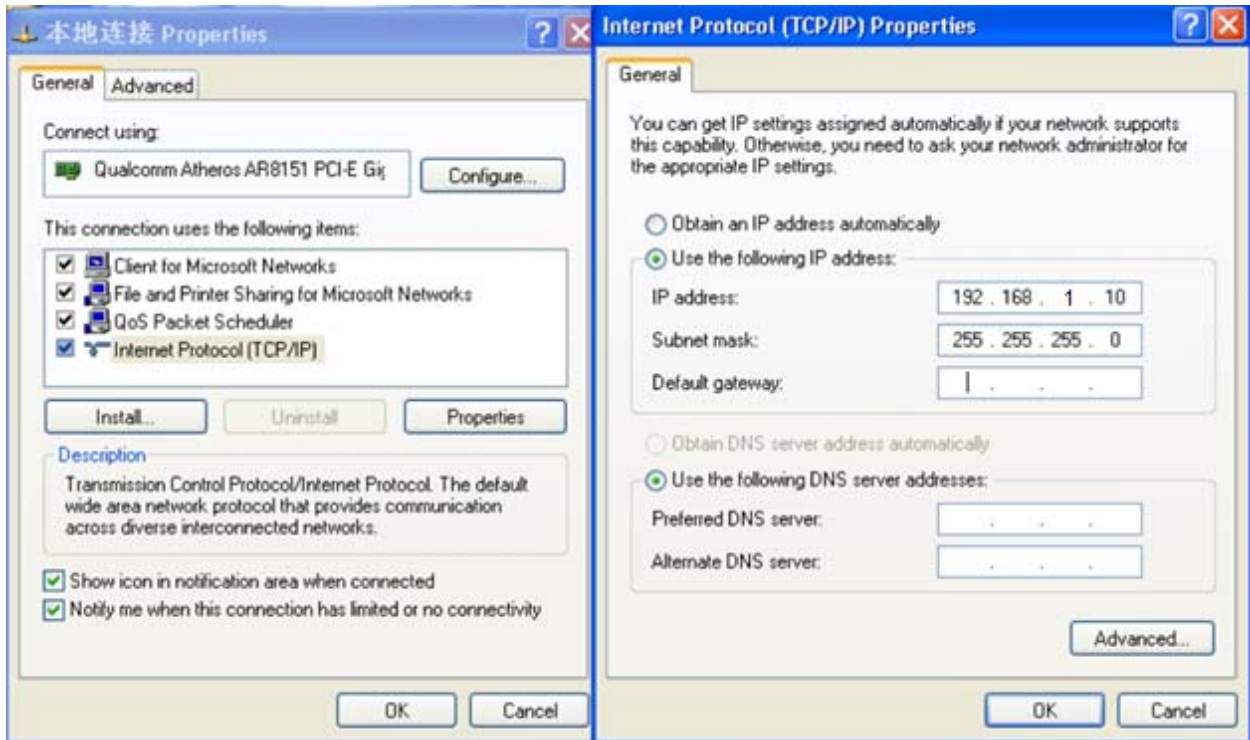
Incorrect Connection or the use power adapter and PoE adapter not from our factory, the CPE will be damaged

2nd Steps: Login

- 1) Connect the CPE with computer as P2 picture
- 2) Configure the PC's local connection IP address as 192.168.188.X (X is number from 2 to 254), subnet mask is 255.255.255.0, follow P3 and P4 to finish.



P3 Setting of computer's IP address



P 4 Setting of computer's IP address

3) Input 192.168.188.253 into IE browser, then pop up the login page, the default login user name: Admin, Passwords: admin, pls do following P5



P5 Login

5. After login, then P6 will be showed:



P6: System Status

3rd: Quickly Configure Wireless AP

① Gateway Mode:

Click "Gateway Mode" and choose the right WAN access type, then input the right SSID, Channel, key as like.

② WiFi Repeater and Station operation configuration

- A. Login the Web management page, click " Repeater Mode", then "Scan AP"
 - B. Select the AP's SSID want to bridge
 - C. input the AP's key, and apply changes
 - D. In Repeater Mode, the SSID is disable in default setting, it work as Station; Then if need SSID broadcast in this operation mode, just manual to change under Advanced Settings, So, click sure in this part to finish the repeater operation mode setting.
 - E. After this step, can click the Device status to check the status of this Wireless AP. And it will show Wireless AP's LAN Interface, WLAN status and Sigbal Strength.
 - F. Then if SSID should be broadcast under repeater mode, pls click "Advanced Settings" , then "2.4GHz Repeater" will pop up.
- If want to bridge another AP's SSID, then can setup in this part and Apply changes.

Quick Setup System Status Operation Mode **2.4GHz Repeater** Network Setting Management

2.4GHz Repeater 2.4GHz Virtual AP 2.4GHz Advanced English

Wireless Repeater

Status ☐ Disabled ☒ Enabled

SSID WirelessAP **ScanAP**

MAC ☐ lockmac

Channel 7

Authentication WPA2-PSK

Cipher Suite ☐ TKIP ☒ AES

Key 66666666

Apply Change

P14 2.4GHz Repeater

G. Click "2.4GHz Virtual AP", will show SSID shut off, if need SSID broadcast, pls follow steps of 1,2,3,4,5,6 showed in following picture. This Wireless AP will work under wireless repeater and broadcast SSID after apply changes.

Quick Setup System Status Operation Mode **2.4GHz Repeater** Network Setting Management

Wireless Repeater **2.4GHz Virtual AP** 2.4GHz Advanced 1 English

VAP Settings 2

VAP Interface ☒ Disabled ☐ Enabled

SSID WirelessAP1 5

Broadcast SSID ☐ Disabled ☒ Enabled

WMM ☐ Disabled ☒ Enabled

Authentication Open

Apply Changes 6 **Reset**

Status	Band	SSID	Broadcast SSID	Rate	WMM	Security	Edit
Signal (Off)	B+G+N	WirelessAP1	Enabled	Auto	Enabled	Open	4
Signal (Off)	B+G+N	WirelessAP2	Enabled	Auto	Enabled	Open	3
Signal (Off)	B+G+N	WirelessAP3	Enabled	Auto	Enabled	Open	

P15 2.4GHz Virtual AP

③ AP Mode

Plug and Play to transmit wireless signal for wireless end users form wired networking. In this part, user can mark the AP's location and name for easy problem checking. Then can change SSID, Key, Channel as request.

Quick Setup

Device Status

Gateway Mode

Repeater Mode

AP Mode

WISP

Advanced Settings

CPU Frequency:535MHz
System Memory:512 M
CPU Usage:38%

Terminal

AP

Switch

AP Mode(Basic structure of the network graph)

Location Information

AP Location
AP Name

Wireless Basic Settings

SSID: WirelessAP
Channel: 7 - 2442MHz
Authentication: WPA2-PSK
Cipher Suite: ☐ TKIP ☒ AES ☐ TKIP/AES
Key: 66666666

Apply Changes

P16 AP Mode

④ WISP

In this operation mode, user should confirm the WAN access type at first, then set the SSID, key, Channel as request.

Quick Setup

Device Status

Gateway Mode

Repeater Mode

AP Mode

WISP

Advanced Settings

CPU Frequency:535MHz
System Memory:512 M
CPU Usage:26%
Memory Usage:19%

AP

AP

Internet

WISP(Basic structure of the network graph)

WAN Access Type

WAN Access Type: Dynamic IP
PPPOE(ADSL)

PPPOE(ADSL)

User Name
Password

WISP

SSID: WirelessAP
MAC:
Authentication: WPA2-PSK
Cipher Suite: ☐ TKIP ☒ AES
Key: 66666666

ScanAP
☐ lockmac
Channel: 7

Apply Changes

P17 WIPS Mode

⑤ Advanced Settings:

1. System Status

Click "Advance Settings", will show system status, such as firmware version, build time, System uptime...

Quick Setup	System Status	Operation Mode	2.4GHz Wireless	Network Setting	Management
System Status	2.4GHz Wireless Status	LAN Status			
Status					
Firmware Version		XD9341-SPI-2T2R-V1.1-V5.3-B20150509023952			
Build Time		20150509023952			
System uptime		0Day 0H 4M 43S			

P18 System Status

Click 2.4GHz Wireless Status, will show Wireless AP's WLAN Status, Channel Band, SSID...

Quick Setup	System Status	Operation Mode	2.4GHz Wireless	Network Setting	Management
System Status	2.4GHz Wireless Status	LAN Status			
WLAN Status					
2.4GHz WLAN Status		AP(Enabled)			
Channel-Band		2.4GHz (B/G/N) channel7			
SSID		WirelessAP (Broadcast)			
BSSID		78:D3:8D:C1:DB:27			
Encryption		WPA2-PSK			
MAC Address		7A:D3:8D:C1:DB:27			
Access Control Mode		Allow All			
Client Table					
MAC Address	Band	TX Rate	TX Packets	RX Packets	Link Time

P19 2.4GHz Wireless Status

If want to check LAN status, pls check following picture

Quick Setup	System Status	Operation Mode	2.4GHz Wireless	Network Setting	Management
System Status	2.4GHz Wireless Status	LAN Status			
LAN Status					
		IP Address	192.168.188.253		
		Subnet Mask	255.255.255.0		
		DHCP Server	Disabled		
		MAC Address	78:D3:8D:C1:DB:26		

P20 LAN Status

2. Operation Mode:

Set operation mode manually, choose the right operation mode, then apply changes. The function of this part will be same as Quick Setup step.

Quick Setup	System Status	Operation Mode	2.4GHz Wireless	Network Setting	Management
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Operation Mode English

Operation Mode

☐ Gateway Mode
 In this mode, the device is supposed to connect to internet via ADSL/Cable Modem. The NAT is enabled and LAN ports share the same IP to ISP through WAN port. The connection type can be setup in WAN page by using PPPOE, DHCP client or static IP.

☐ Repeater Mode
 In this mode, all ports are bridged together and NAT function is disabled. All the WAN related function and features are not supported.

☐ WISP Mode
 In this mode, all ethernet ports are bridged together and the wireless client will connect to ISP access point. The NAT is enabled and PCs in ethernet ports share the same IP to ISP through wireless LAN. You must set the wireless 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 or static IP.

☒ AP Mode
 In this mode, the AP wireless interface and cable interface bridging together. Without NAT, firewall and all network related functions.

Apply Changes

P21 Operation Mode

3. 2.4GHz Wireless:

In this part, you can scan AP's SSID, disable or enable AP's SSID, modify Channel, Security..

Quick Setup	System Status	Operation Mode	2.4GHz Wireless	Network Setting	Management
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2.4GHz Basic 2.4GHz Virtual AP 2.4GHz Access Control 2.4GHz Advanced English

Wireless Basic Settings

Status ☐ Disabled ☒ Enabled

SSID

AP Name

AP Location

Band ▼

Broadcast SSID ☐ Disabled ☒ Enabled

WMM ☐ Disabled ☒ Enabled

Channel

Channel Width ▼

Channel Number ▼

Security

Authentication ▼

Cipher Suite ☐ TKIP ☒ AES ☐ TKIP/AES

Key

Apply Changes

P22 2.4GHz Wireless

Quick SetupSystem StatusOperation Mode2.4GHz WirelessNetwork SettingManagement

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Wireless VAP Settings

VAP Interface

☐ Disabled☐ Enabled

SSID

Broadcast SSID

☐ Disabled☐ Enabled

WMM

☐ Disabled☐ Enabled

Authentication

Open

Key Length

☐ Wep 64 Bit☐ Wep 128 Bit

Cipher Suite

☐ TKIP☐ AES☐ TKIP/AES

Key Format

ASCII(5 characters)

Key

Apply Changes

Status	Band	SSID	Broadcast SSID	Rate	WMM	Security
(Off)	B+G+N	WirelessAP1	Enabled	Auto	Enabled	Open
(Off)	B+G+N	WirelessAP2	Enabled	Auto	Enabled	Open
(Off)	B+G+N	WirelessAP3	Enabled	Auto	Enabled	Open

2.4GHz Virtual AP

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Wireless Access Control

Wireless Access Control Mode

Allow All

Allow Listed

Deny Listed

2.4GHz Access Control

Quick SetupSystem StatusOperation Mode2.4GHz WirelessNetwork SettingManagement

2.4GHz Basic2.4GHz Virtual AP2.4GHz Access Control2.4GHz AdvancedEnglish

Wireless Advanced Settings

Country Region

United States

Channel(1-11)

Fragment Threshold

2346

(256-2346)

RTS Threshold

2346

(0-2347)

Ack Timeout Control

64

(0-255)us

Beacon Interval

100

(100-1000)ms

Max Users

40

(0-40)

Preamble Type

☒ Long Preamble☐ Short Preamble

Aggregation

☐ Disabled☒ Enabled

Short GI

☐ Disabled☒ Enabled

WLAN Partition

☐ Disabled☒ Enabled

RF Output Power

Apply Changes

Reset

P23 2.4GHz Advanced

Note: The frequency selection feature is disabled by firmware for devices marketed to the US. only channels 1-11 will be used in North America. Country code selection is disabled.

4. Network Setting

LAN Interface Setup mainly showed as follow:

Quick Setup	System Status	Operation Mode	2.4GHz Wireless	Network Setting	Management
LAN Interface					
LAN Interface Setup					
Access Type					<div>Fixed IP</div> <div>DHCP</div>

P24 Network Setting

5. Management

In this part, user can set Time zone, show Log info, upgrade firmware, change login user name and password;

Quick Setup	System Status	Operation Mode	2.4GHz Wireless	Network Setting	Management
Time Zone Setting	Log	Upgrade Firmware	Save/Reload Settings	Password	
Time Zone Setting					
Current Time 2015-01-01 15:53:43 Sync with host					
Time Zone Select (GMT+13)United States					
<input type="checkbox"/> Enable NTP client update					
NTP Server <input checked="" type="radio"/> 192.5.41.41 - North America					
<input type="radio"/> 0.0.0.0 (Manual IP Setting)					
<input type="checkbox"/> After device running 1 days, Automatic optimization system					

P25 Management

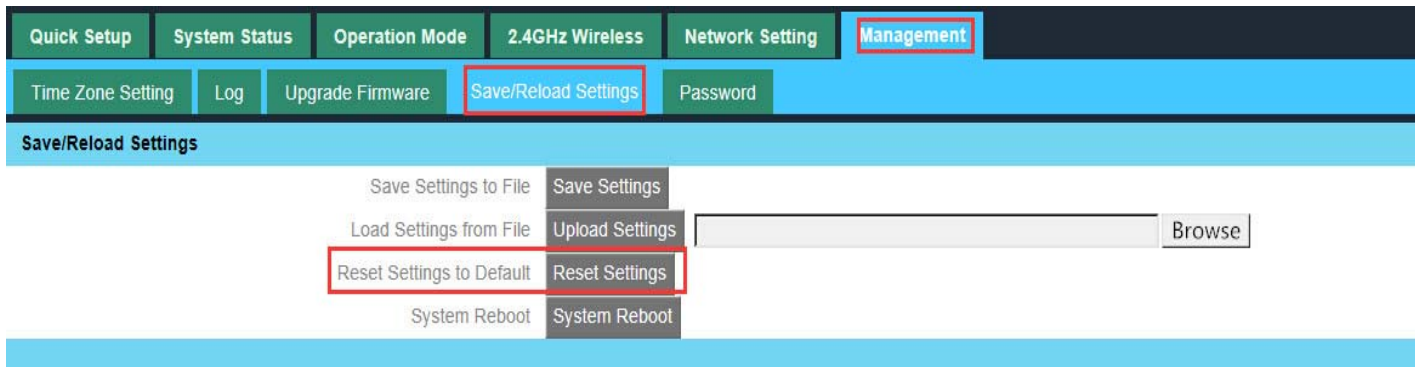
6. Upgrade Firmware

Pls click Upgrade Firmware, then browse and choose the firmware should upgrade, then click upgrade to upgrade the firmware.

Quick Setup	System Status	Operation Mode	2.4GHz Wireless	Network Setting	Management
Time Zone Setting	Log	Upgrade Firmware	Save/Reload Settings	Password	
Upgrade Firmware					
Firmware Version XD9341-SPI-2T2R-V1.1-V5.3-B20150509023952					
Build Time 20150509023952					
Select File					<div>Browse</div> <div>Upgrade</div>
 Note: do not power off the device during the upload because it may crash the system!					

P26 Firmware Upgrade

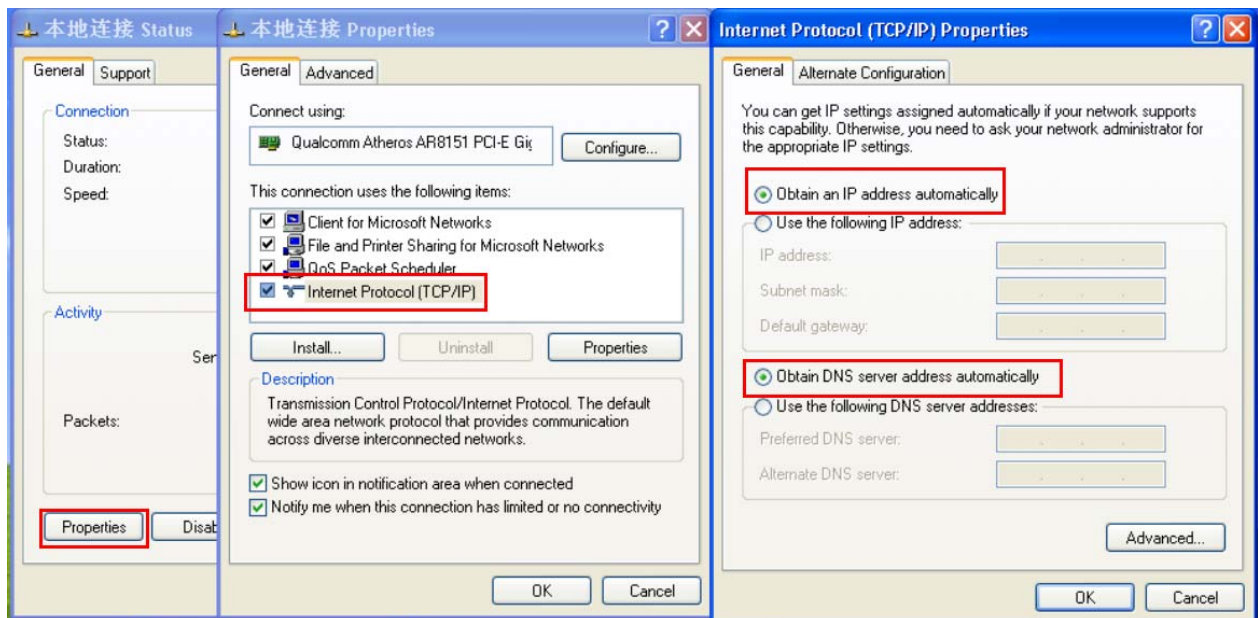
After finish firmware upgrade, pls click Save/Reload Settings, then reset settings to default.



After that, the firmware upgrade is finished.

7. Share Internet and Obtain IP address automatically

Set computer's TCP/IP as [Obtain an IP address automatically](#), [Obtain DNS server address automatically](#) as following picture showed. the computer will obtain the IP address from router or base station to get Internet.



Trouble Shooting:

F 1 The Failure phenomenon and solution

Failure phenomenon	Solution
SYS Indicator off	Pls make sure the PoE module connection is right. POE Port connect with AP, LAN port connect with computer
Can't land to Wireless AP through Web page	Pls check the IP address of computer and Wireless AP to see whether they are in same networking segment, The method is click "start"- "Run" input "cmd", ping 192.168.188.253 to test the Wireless AP connectivity. Reset Wireless AP and load it again; Pls make sure the IP address 192.168.188.253 is not occupied by other device in Wireless AP's networking; Check computer and cable problem, recommend to use 10/100M UTP unshielded cable; Clean up Arp binding from "Start"-"Run" input "cmd" arp -d Clean the IE Brower's temporary files and Cache file.
Wireless AP can't connect with AP (the status display unconnected)	Try to scan the available wireless networking again; Make sure the Wireless AP's wireless standard (11b/g/n, 2.4G) is correct; The Security and passwords are matched between Wireless AP and AP; The signal strength of AP is too weak to connect, should be more than -75dBm;
The connection of Wireless AP and AP is success, but the computer can't share internet	Pls Check the computer's IP address and DNS setting. If it is dynamain, set the network card as automatically obtain. If it is static IP, pls contact with ISP for correct IP address and DNS address.
How to Reset Wireless AP	Press the "Reset" button more than 15 seconds after power on. The Wireless AP will restore factory default after the Wireless AP restart.

Note:

*. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.