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

Shenzhen Yunlink Technology Co., Ltd

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.



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



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.

LAN or High-Sp	eed Internet
本地) Conr Oual	连接 Disable
	Status
	Repair
	Bridge Connections
	Create Shortcut
	Delete
	Rename
	Properties

P3 Setting of computer's IP address

本地注接 Properties 【】				
ieneral Advanced	General			
Connect using: Qualcomm Atheros AR8151 PCI-E Gig Configure This connection uses the following items:	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.			
Eient for Microsoft Networks	Use the following IP address:			
Prile and Printer Sharing for Microsoft Networks QoS Packet Scheduler Tinternet Protocol (TCP/IP)	IP address: 192 . 168 . 1 . 10 Subnet mask: 255 . 255 . 0			
Install Uninstal Properties Description	O Dotain DNS server address automatically			
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	Ouse the following DNS server addresses: Preferred DNS server: Alternate DNS server:			
 Show icon in notification area when connected Notify me when this connection has limited or no connectivity 	Advanced			
OK Cancel	OK Cancel			

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,

			_
(Real Property lies)	admin		

P5 Login

5. After login, then P6 will be showed:

Passwords: admin, pls do following P5

Quick Setup Device Status Gateway Mode	Terminal O	Switch
((•)) Repeater Mode	Operation Mode:AP Mode	
The AP Mode	IP Address 192.168.188.253 IAC Address 78:D3:8D:BF:CE:C4	
(() WISP	Location Information	
Advanced Settings	AP Location AP Name	
	WLAN Status	
CPU Frequency:535MHz System Memory:512 M CPU Usage:25% Memory Usage:21%	WLAN Status Enabled SSID WirelessAP Encryption WPA2PSK-AES Channel Number 149	

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.

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Quick Setup System Status Operation Mode 2.44	Hz Repeater Network Setting Management
2.4GHz Repeater 2.4GHz Virtual AP 2.4GHz Advanced	English
Wireless Repeater	
Status	
SSID	WirelessAP ScanAP
MAC	
Channel	7
Authentication	WPA2-PSK V
Cipher Suite	O TKIP
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.

tup 🤮	System Status Operatio	on Mode 2.4GHz Repeat	er Network Setting	Management				
Repeater	2.4GHz Virtual AP 2.	.4GHz Advanced						English 🗸
/AP Setti	ngs 2							
		VAP Interface © Disable SSID WirelessA Broadcast SSID O Disabl WMM O Disabl Authentication Open	ed O Enabled P1 ed O Enabled ed Enabled	5			ſ	6 Apply Changes Reset
Status	Band		SSID	Broadcast SSI	D Rate	WMM	Security	Edit 4
ıll i (Off)	B+G+N	V	/irelessAP1	Enabled	Auto	Enabled	Open	O 3
IIII(Off)	B+G+N	V	/irelessAP2	Enabled	Auto	Enabled	Open	0
ıll i (Off)	B+G+N	V	/irelessAP3	Enabled	Auto	Enabled	Open	0

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	Terminal	Switch
((•)) Repeater Mode	AP Mode(Basic structure of the network graph)	
	Location Information	
AP Mode	AP Location	
	AP Name	
((C) WISP	Wireless Basic Settings	
~	SSID WirelessAP	
Advanced Settings	Channel 7 - 2442MHz V Intelligent Analysis	
	Authentication WPA2-PSK V	
CPU Frequency:535MHz	Cipher Suite TKIP O AES TKIP/AES	
System Memory:512 M	Key 66666666	
CPU Usage:38%		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						Y			
	Device Status		(9			←	\odot		
٢	Gateway Mode	AP			e	AP				Internet
((•))	Repeater Mode			WIS	P(Basic st	tructure of th	ne network graph)			
		WAN Access Type								
<u>(</u>	AP Mode		WAN Access Type	Dynamic IP						
		PPPOE(ADSL)								
	WISP		User Name							
-	A damage of Detting		Password							
Q	Advanced Settings	WISP								
			SSID	WirelessAP	Sca	INAP				
CPU F	requency:535MHz		MAC			ockmac				
System	n Memory:512 M		Authentication	WPA2-PSK V				Channel	7	
CPU U	Jsage:26%		Cipher Suite							
			Key	66666666						
Memor	ry Usage:19%									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	Operat	tion Mode	2.4GHz Wireless	Network Setting	Management
System Status	2.4GHz Wireless	Status	LAN Status	;		
Status						
		Firm	nw <mark>are Ver</mark> s	ion XD9341-SF	PI-2T2R-V1.1-V5.	3-B20150509023952
			Build T	ime 201505090	23952	
		S	ystem upt	ime 0Day 0H 4M	/I 43S	

P18 System Status

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

Quick Setup	System Status Opera	ation Mode 2.4	4GHz Wireless	Network Setting	Management		
System Status	2.4GHz Wireless Status	LAN Status					
WLAN Status							
	2.4	4GHz WLAN Status	AP(Enabled)				
		Channel-Band	2.4GHz (B/G/N) channel7			
		SSID	WirelessAP (I	Broadcast)			
		BSSID	78:D3:8D:C1:D	B:27			
		Encryption	WPA2-PSK				
		MAC Address	7A:D3:8D:C1:E)B:27			
	Ad	cess Control Mode	Allow All				
Client Table							
МА	C Address	Band	נד	(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 N	lode 2.4GHz Wi	reless Network Setting	Management	
System Status	2.4GHz Wireless	Status LA	N Status			
LAN Status						
			IP Address 192.	168.188.253		
		:	Subnet Mask 255.	255.255.0		
		C	OHCP Server Disa	bled		
		N	MAC Address 78:D	3:8D:C1:DB:26		



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				
Operation Mode	e				English				
Operation Mode)								
O Gateway M	Node		In this mode LAN ports s PPPOE, DF	e, the device is s share the same If HCP client or stat	upposed to connect to internet via ADSL/Cable Modem. The NAT is enabled and P to ISP through WAN port. The connection type can be setup in WAN page by u tic IP.				
O Repeater I	Mode		In this mode are not sup	e, all ports are br ported.	idged together and NAT function is disabled. All the WAN related function and fir				
O WISP Mod	le		In this mode, all ethernet ports are bridged together and the wireless client will connect to ISP access point. is enabled and PCs in ethernet ports share the same IP to ISP through wireless LAN. You must set the wirel- client mode first and connect to the ISP AP in Site-Survey page. The connection type can be setup in WAN p using PPPOE. DHCP client or static IP.						
• AP Mode	is interface and cable interface bridging together. Without NAT, firewall and all ne								
					Apply Changes				

P21 Operation Mode

3. 2.4GHz Wireless:

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

Quick Setup	System Status	Operation Mode 2.40	Hz Wireless Net	work Setting	Management	
2.4GHz Basic	2.4GHz Virtual AP	2.4GHz Access Contro	2.4GHz Advance	d		Englis
Wireless Basic S	Settings					
		Status	O Disabled Enat	led		
		SSID	WirelessAP]	
		AP Name				
		AP Location				
		Band	2.4 GHz (B+G+N) N	•		
		Broadcast SSID	O Disabled Enab	led		
		WMM	O Disabled Enat	led		
Channel						
		Channel Width	20MHz	×		
		Channel Number	7 - 2442MHz 🗸 II	telligent Analys	is	
Security					_	
		Authentication	WPA2-PSK V			
		Cipher Suite	O TKIP	O TKIP/AES		
		Кеу	66666666			
						Apply Chang

P22 2.4GHz Wireless

Quick Setup	System Status	Operation Mo	ode 2.4GH	z Wireless N	etwork Setting	Management				
2.4GHz Basic	2.4GHz Virtual AP	2.4GHz Ad	ccess Control	2.4GHz Advan	ced					Englisi
Wireless VAP Set	tings									
		VAF	P Interface	Disabled O En	abled					
			SSID							
		Broa	adcast SSID	Disabled OE	nabled					
			WMM (Disabled OE	nabled					
		Au	thentication C	pen	~					
			Key Length	Wep 64 Bit) Wep 128 Bit					
		C	Cipher Suite	TKIP OAES	O TKIP/AES					
			Key Format A	SCII(5 characters) 🗸					
			Key							
									P	Apply Change
Statu	s	Band		SSID		Broadcast SSID	Rate	WMM	Security	
IIII (Off		B+G+N		WirelessA	P1	Enabled	Auto	Enabled	Open	
_{III} II(Off		B+G+N		WirelessA	P2	Enabled	Auto	Enabled	Open	
_{III} II(Off)	B+G+N		WirelessA	P3	Enabled	Auto	Enabled	Open	
				2.4	4GHZ Virtu	al AP				
Quick Setup	System S	tatus O	peration Mo	ode 2.4G	Iz Wireless	Network Setting	Management			
2.4GHz Basi	ic 2.4GHz V	/irtual AP	2.4GHz A	cess Control	2.4GHz A	Advanced				
Wireless Acc	Wireless Access Control									

Wireless Access Control Mode	Allow All	
	Deny Listed	

2.4GHz Access Control

Quick Setup	System Status	Operation Mode 2.40	Hz Wireless	Network Setting	Management	
2.4GHz Basic	2.4GHz Virtual AP	2.4GHz Access Contro	I 2.4GHz Ad			English 🔻
Wireless Advanc	ed 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 Pream	nble	Short Preamble	
		Aggregation	Disabled		Enabled	
		Short GI	O Disabled		Enabled	
		WLAN Partition	Disabled		Enabled	
		RF Output Power				
					A	iply Changes Rese

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 S	etup				Fixed IP
				Access	Type DHCP
				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 S	itatus	Operation Mod	e 2.4GHz Wireless		Network Sett	ing	Management
Time Zone Setti	ng Log	Up	grade Firmware	Save/Reload Settings		Password		
Time Zone Setti	ng							
			Cu	rrent Time	e 2015-01-01 15:	53:43 Sync with	host	
			Time Z	one Select	t (GMT+13)Ur	nited States		
					Enable	NTP client	ipdat	ate
			N	TP Server	er 🖲 192.5.41.4	1 - North Americ	а	v
					O 0.0.0	(Mar	ual I	IP Setting)
					After device run	ning 1 🗸 day	s, Auto	tomatic 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 Upgra	ade Firmwan: Save/Reload Settings	Password						
Upgrade Firmware								
	Firmware Version XD9341-SPI-2	T2R-V1.1-V5.3-B20150509023952						
	Build Time 20150509023952							
Select File Browse Upgrade								
1 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.

Quick Setup Sy	/stem Statu	us Operation Mode	2.4GHz Wireless	Network Setting	Management
Time Zone Setting	Log	Upgrade Firmware	ave/Reload Settings	Password	
Save/Reload Setting	s				
		Save Settings	to File Save Settings	-	
		Load Settings fro	m File Upload Setting	js 🛛	Browse
		Reset Settings to E	efault Reset Settings	5	
		System F	Reboot System Reboo	ot	

After that, the firmware upgrade is finished.

7. Share Internet and Obtain IP address automatically

Set computer's TPC/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.

上本地连接 Status .	🕹 本地连接 Properties 🛛 🔹 🤶 🔀	Internet Protocol (TCP/IP) Properties
General Support	General Advanced	General Alternate Configuration
Connection Status:	Connect using: Pualcomm Atheros AR8151 PCI-E Gig Configure	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Duration:		
Speed:	This connection uses the following items:	Obtain an IP address automatically
	Client for Microsoft Networks	O Use the following IP address:
	File and Printer Sharing for Microsoft Networks	IP address:
	Internet Protocol (TCP/IP)	Subnet mask:
Activity		Default gateway
Sar	Install Uninstall Properties	
36	Description	Obtain DNS server address automatically
	Transmission Control Protocol/Internet Protocol. The default	O Use the following DNS server addresses:
Packets:	across diverse interconnected networks.	Preferred DNS server.
		Alternate DNS server
	Show icon in notification area when connected	
Properties Disat	 Really the when and connection has limited of no connectivity 	Advanced
	OK Cancel	OK Cancel

Trouble Shooting:

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 avaliable 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 dynamin, 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.

F 1 The Failure phenomenon and solution

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.