

# Quick Start Guide (CPE and WBS)

# CHAPTERS

- 1. Check the System Requirements
- 2. Log In to the Device
- 3. Set Up the Wireless Network



#### This guide applies to:

CPE610(UN) 1.0, CPE520(UN) 3.0, CPE510(UN) 3.0, CPE210(UN) 3.0, CPE210(EU) 3.0, CPE220(UN) 3.0, CPE510(UN) 1.0, CPE510(UN) 2.0, CPE210(UN) 2.0, CPE520(UN) 1.0, CPE520(UN) 2.0, WBS210(UN) 2.0, WBS210(UN) 2.0, WBS510(UN) 1.0, WBS510(UN) 2.0.

This guide introduces how to build a wireless network using the CPE/WBS products:

- 1. Check the System Requirements
- 2. Log In to the Device
- 3. Set Up the Wireless Network

The following parts detailedly introduces these steps.

# **1** Check the System Requirements

• Operating System:

Microsoft Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10, Linux, or Mac OS X.

Web Browser

Google Chrome, Safari, Firefox, and Apple Safari. IE browsers are not recommended.

# **2** Log In to the Device

Before configuring the device, you need to access the PharOS configuration interface. Follow the steps below:

- 1) Connect your PC to the device.
- 2) Set the IP address of your PC as static IP address on 192.168.0.X subnet (X ranges from 2 to 253, e.g.192.168.0.10)



General	
You can get IP settings assigned auto supports this capability. Otherwise, yo administrator for the appropriate IP s	matically if your network ou need to ask your network ettings.
Obtain an IP address automatica	ally
• Use the following IP address:	
IP address:	192 .168 . 0 . 10
Subnet mask:	255 .255 .255 . 0
Default gateway:	· · ·
Obtain DNS server address auto	matically
Use the following DNS server ad	dresses
Preferred DNS server:	· · ·
Alternate DNS server:	· · ·
Validate settings upon exit	Advanced
	OK Cancel

 Launch a web browser on and enter the management IP address of the device (192.168.0.254 by default) in the address bar to load the login page of the PharOS configuration interface.

Figure 2-2 Entering the Management IP Address

-		
1 1		
-	http://192.168.0.254	
10	G maph/ 1921100101204	
~		

4) Use **admin** for both of User Name and Password. Select the appropriate language from the Language drop-down list. Read and agree the terms of use, then click Login.

F' 0.0	
Figure 2-3	Loging in

	User Name:	admin
to-link	Password:	
	Language:	English
TERMS OF USE This TP-LINK wireless device must be insta cable and earth grounding must be used ir rules and regulations in terms of legal freq requirements. The End User accents resor	alled by a certified profess n compliance with this pro uency channels, output po posibility for maintaining th	ional. Properly installed shielded Ethernet duct's warranty. Installers must abide by local wer, and Dynamic Frequency Selection (DFS) e product in accordance with these rules and

5) Create a new username and password for network security. Click *Finish* to log in to the PharOS.

Change Password	
Ptp-link	New User Name: New Password: Confirm Password:
TERMS OF USE	ice user name and password from its default settings.

Figure 2-4 Creating a New Account

# **3** Set Up the Wireless Network

You can use the Quick Setup wizard to quickly configure your device step by step. Choose the suitable operation mode according to your network environment and follow the stepby-step instructions.

### 3.1 Access Point

Follow the steps below to configure the device as Access Point mode:

1) Go to the **QUICK SETUP** page, select Access Point and click Next.

Figure 3-1	Selecting an Operation Mode
------------	-----------------------------

Ptp-link	PHAROS		Operation M	ode: Access Point	About Sup	pport Log Out
QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM	
Operation Mode						
Please select the p	proper operation mode acc	ording to your needs:				
Access Point	In this m which su	ode, the AP will act as a c upports up to 4 different S	central hub for different w SIDs and passwords.	reless LAN clients. Multi-SSI	D is also available in this mode	÷,
◯ Client	In client your wire	mode, the device can cor eless network.	nnect to a wired device a	id work as a wireless adapter	r to receive wireless signals fro	m
⊖ Repeater	In this m especial	ode, the device can copy Ily for a large space to elir	and reinforce the existin ninate signal-blind corne	g wireless signal to extend the rs.	e coverage of the signal,	
⊖ Bridge	Bridge n can set (	node borrows existing wir up a wireless client to con	eless internet and broad nect with a root AP and a	asts it using a different SSID wireless AP for local wireles	and password. In this mode, y s coverage.	ou
◯ AP Router	In this m the Ethe	ode, the device enables r rnet WAN port to connect	multiple users to share th to the ISP. The wireless p	e internet. The wireless ports ort can be regarded as a LAN	share the same IP address as N port while in AP Router mode	e.
○ AP Client Route	er (WISP Client) In this m IP as tha in AP CI	ode, multiple users can si at assigned by the WISP to ient Router mode. The Ett	hare an internet connect o the Wireless port. While hernet port acts as a LAN	on provided by a WISP. The L connected to a WISP, the wir port.	AN port devices share the san eless port works as a WAN poi	ne rt
			N	ext		

2) In the **LAN Settings** section, specify the LAN IP address and the Subnet Mask for the device. Then, click Next.

	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
LAN Settings					
		IP Address:	192.168.0.254		
		Subnet Mask:	255.255.255.0		
		E	Back	Next	

Figure 3-2 Specifying the LAN Settings

3) In the **Wireless AP Settings** section, specify the basic wireless parameters to create a wireless network. Click Next.



QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
Wireless AP Settings					
		SSID:	TP-LINK_Outdoor_BD205C	]	
		Mode:	802.11a/n		
		Channel Width:	20/40MHz ~		
		Channel/Frequency:	Auto	i	
		Security:	None		
		PSK Password:		Show	
			We do not recommend using encryption mode.	WEP encryption. You can go	to WIRELESS page to configure the
		Distance Setting:	0	(0-27.9)km	
		MAXtream:	Enable 💡		
		_			
		В	lack Ne	xt	

Figure 3-3 Specifying the Wireless AP Settings

4) In the **Finish** section, review the configurations and click *Finish* to complete the quick setup.

Figure 3-4 Checking the Settings

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM	
Finish						
		Operation Mode:	Access Point			
		IP Address:	192.168.0.254			
		Subnet Mask:	255.255.255.0			
		SSID:	TP-LINK_Outdoor_BD205C			
		Mode:	802.11a/n			
		Channel Width:	20/40MHz			
		Channel/Frequency:	Auto			
		Security:	None			
		Distance Setting:	0 km			
		MAXtream:	Disable			
			Back Fin	ish		

5) Connect the device according to your network topology and use it normally.

### 3.2 Client

Follow the steps below to configure the device as Client mode:

1) Go to the **QUICK SETUP** page, select *Client* and click *Next*.

Figure 3-5 Selecting an Operation Mode

	PHAROS		Operation M	ode: Access Point	About	Support Log Ou
	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM	
Operation Mode						
Please select the p	roper operation mode acco	rding to your needs:				
<ul> <li>Access Point</li> </ul>	In this m which su	ode, the AP will act as a c pports up to 4 different SS	entral hub for different wi SIDs and passwords.	reless LAN clients. Multi-SSID	) is also available in this mo	ode,
<ul> <li>Client</li> </ul>	In client your wire	mode, the device can con eless network.	nect to a wired device an	d work as a wireless adapter t	to receive wireless signals	from
◯ Repeater	In this m for a larg	ode, the device can copy a ge space to eliminate signa	and reinforce the existing al-blind corners.	wireless signal to extend the	coverage of the signal, est	ecially
O Bridge	Bridge n can set i	node borrows existing wire up a wireless client to conr	less internet and broadca nect with a root AP and a	ists it using a different SSID a wireless AP for local wireless	nd password. In this mode coverage.	, you
○ AP Router	In this m Ethernet	ode, the device enables m WAN port to connect to th	ultiple users to share the ne ISP. The wireless port	internet. The wireless ports s can be regarded as a LAN po	hare the same IP address rt while in AP Router mode	as the
○ AP Client Route	r (WISP Client) In this m IP as tha in AP Cl	ode, multiple users can sh at assigned by the WISP to ient Router mode. The Eth	are an internet connection the Wireless port. While ernet port acts as a LAN	n provided by a WISP. The LA connected to a WISP, the wir port.	AN port devices share the s eless port works as a WAN	;ame I port
				Next		

2) In the LAN Settings section, specify the LAN IP Address and the Subnet Mask for the device. Then, click Next.

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM	
-						
LAN Settings						
		IP Address:	192.168.0.254			
		Subnet Mask:	255.255.255.0			
			Back	Next		

Figure 3-6 Specifying the LAN Settings

3) In the **Wireless Client Settings** section, click Survey to search for the upstream wireless network.

Figure 3-7 Searching for Upstream Wireless Networks

Areless Client Settings SSID of Remote AP: MAC of Remote AP: MAC of Remote AP: Mode: 802.11a/n WDS: Auto Channel Width: 20/40MHz Security: None PSK Password: PSK Password: Show We do not recommend using WEP encryption. You can go to WIRELESS page to configure the encryption mode.	Wireless Client Settings         SSID of Remote AP:         McC of Remote AP:         WDS:         Auto         VDS:         Auto         Security:         None         PSK Password:         PSK Password:         Distance Setting:         0         (0-27.9)km	1	SYSTEM	MANAGEMENT	ELESS	۱	NETWORK	STATUS	
SSID of Remote AP: Survey MAC of Remote AP: Lock to AP Mode: 802.11a/n WDS: Auto WDS: Auto Channel Width: 20/40MHz Security: None PSK Password: Show We do not recommend using WEP encryption. You can go to WIRELESS page to configure the encryption mode.	SSID of Remote AP: MAC of Remote AP: Mode: 802.11a/n WDS: Auto Channel Width: 20/40MHz Security: None PSK Password: PSK Password: Distance Setting: 0 (0-27.9)km							ngs	Vireless Client Setting
MAC of Remote AP: Mode: 802.11a/n WDS: Auto Channel Width: 20/40MHz Security: None PSK Password: Show We do not recommend using WEP encryption. You can go to WIRELESS page to configure the encryption mode.	MAC of Remote AP: Mode: 022.11a/n WDS: Auto Channel Widt: 20/40MHz Security: None PSK Password: Show We do not recommend using WEP encryption. You can go to WIRELESS page to encryption mode. Distance Setting: 0 (0-27.9)km			Survey			SSID of Remote AP:		
Mode: 802.11a/n WDS: Auto Channel Width: 20/40MHz Security: None PSK Password: Show We do not recommend using WEP encryption. You can go to WIRELESS page to configure the encryption mode.	Mode: 802.11a/n   WDS: Auto   WDS: Auto   Channel Width: 20/40MHz   Security: None   PSK Password: Image: Show   We do not recommend using WEP encryption. You can go to WIRELESS page to encryption mode.   Distance Setting: 0   (0-27.9)km			Lock to AP			MAC of Remote AP:		
WDS: Auto	WDS: Auto   Channel Widtt: 20/40MHz   Security: None   PSK Password: Image: Show   We do not recommend using WEP encryption. You can go to WIRELESS page to encryption mode.   Distance Setting: 0   (0-27.9)km				~	802.11a	Mode:		
Channel Width: 20/40MHz Security: None PSK Password: Show We do not recommend using WEP encryption. You can go to WIRELESS page to configure the encryption mode.	Channel Width: 20/40MHz Security: None PSK Password: Show We do not recommend using WEP encryption. You can go to WIRELESS page to encryption mode. Distance Setting: 0 (0-27.9)km				~	Auto	WDS:		
Security: None PSK Password: Show We do not recommend using WEP encryption. You can go to WIRELESS page to configure the encryption mode.	Security:       None         PSK Password:       Show         We do not recommend using WEP encryption. You can go to WIRELESS page to encryption mode.         Distance Setting:       0         (0-27.9)km				~	20/40MH	Channel Width:		
PSK Password: Show We do not recommend using WEP encryption. You can go to WIRELESS page to configure the encryption mode.	PSK Password: Back Next				~	None	Security:		
We do not recommend using WEP encryption. You can go to WIRELESS page to configure the encryption mode.	We do not recommend using WEP encryption. You can go to WIRELESS page to encryption mode.       Distance Setting:     0       0     0-27.9)km			Show			PSK Password:		
encryption mode.	encryption mode. Distance Setting: 0 (0-27.9)km	age to configure the	to WIRELESS page	WEP encryption. You can go	mmend using	We do no			
	Distance Setting: 0 (0-27.9)km			1	le.	encryptio			
Distance Setting: 0 (0-27.9)km	Back Next			(0-27.9)km		0	Distance Setting:		
	Back Next								
	Back Next								
	Back Next								
	Back Next								
	Back Next								
	Back Next								
	Back Next								
	Back Next								
				xt _	Nex	Back	В		

4) Select the desired wireless network and click Connect.

Note:

There may be two or more networks with the same SSID in the AP list. Click *Lock to AP* to select the SSID and AP simultaneously, which can make the device connect to the specific AP next time.

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Figure 3-8 Selecting an Upstream Wireless Network

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ICK SETUP	51A105	NETWORK	WIRELESS	MANAGEMEN	I SY	STEM
eless Client Settings	;					
BSSID	SSID	MAXtream	Device Name SNR (dB)	Signal / Noise (dBm)	Channel	Security
18-A6-F7-41-26-4	6 daisy 3	No	42	-53/-95	5180 (36)	WPA2-PSK
50-C7-BF-27-7F-6	E SR20_5G	No	50	-45/-95	5220 (44)	WPA2-PSK
50-C7-BF-17-A6-	E3 EAP-Show	No	14	-81/-95	5180 (36)	WPA2-PSK
D4-61-FE-5A-2A-	00 das	No	11	-85/-96	5180 (36)	WPA-PSK/WPA2 -PSK
50-C7-BF-48-54-	DB deco	No	35	-61/-96	5200 (40)	WPA2-PSK
50-C7-BF-48-57-	IF deco	No	30	-66/-96	5200 (40)	WPA2-PSK
50-C7-BF-48-57-7	4 deco	No	47	-49/-96	5200 (40)	WPA2-PSK
56-C7-BF-48-54-	DB	No	37	-59/-96	5200 (40)	WPA2-PSK
56-C7-BF-48-57-	IF	No	31	-65/-96	5200 (40)	WPA2-PSK
56-C7-BF-48-57-	4	No	47	-49/-96	5200 (40)	WPA2-PSK
_						WPA-PSK/WPA2

5) In the **Wireless Client Settings** section, specify the wireless parameters to connect to the specified wireless network. Click Next.



Make sure that *Security* and *PSK Password* are the same as the upstream wireless network's. Other parameters set in this page and those of the upstream wireless network should be compatible with each other. For details, refer to *Configure the Wireless Parameters*.

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
Wireless Client Settin	gs				
		SSID of Remote AP:	7200_5G	Survey	
		MAC of Remote AP:	50-C7-BF-01-88-1F	Lock to AP	
		Mode:	802.11a/n	~	
		WDS:	Auto	~	
		Channel Width:	20/40MHz	×	
		Security:	WPA-PSK / WPA2-PSK	$\checkmark$	
		PSK Password:	•••••	Show	
			We do not recommend us	ng WEP encryption. You can go	to WIRELESS page to configure the
			encryption mode.		
		Distance Setting:	0	(0-27.9)km	
		В	ack	Next	

Figure 3-9 Specifying the Wireless Client Settings

6) In the **Finish** section, review the configurations and click *Finish* to complete the quick setup.

Figure 3-10 Checking the Settings

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM					
Finish										
		Operati	on Mode: Client							
		LAN IP	Address: 192.168.0.2	254						
		LAN Subr	net Mask: 255.255.25	5.0						
		SSID of Re	mote AP: TP-LINK_D	C91_5G						
			Mode: 802.11a/n							
	WDS: Auto									
	Channel Width: 20/40MHz									
		Distance	Security: WPA-PSK/	WPA2-PSK						
		Distance	e Setting. U Kin							
		B	ack	Finish						

7) Connect the device according to your network topology and use it normally.

### 3.3 Repeater (Range Extender)

Follow the steps below to configure the device as Repeater (Range Extender) mode:

1) Go to the **QUICK SETUP** page, select Repeater and click Next.

Figure 3-11 Selecting an Operation Mode

	PHAROS		Operation M	ode: Client	Abou Tools	t Support Lo	og Out
QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM		
Operation Mode							
Please select the p	roper operation mode acc	ording to your needs:					
<ul> <li>Access Point</li> </ul>	In this r which s	mode, the AP will act as a c supports up to 4 different SS	entral hub for different wi SIDs and passwords.	reless LAN clients. Multi-SSIE	) is also available in this	mode,	
◯ Client	In clien your wi	t mode, the device can con reless network.	nect to a wired device an	d work as a wireless adapter t	to receive wireless signa	Is from	
Repeater	In this r for a la	mode, the device can copy a rge space to eliminate signa	and reinforce the existing al-blind corners.	wireless signal to extend the	coverage of the signal, e	especially	
O Bridge	Bridge can set	mode borrows existing wire t up a wireless client to conr	eless internet and broadca nect with a root AP and a	ists it using a different SSID a wireless AP for local wireless	and password. In this mo coverage.	de, you	
○ AP Router	In this r Etherne	mode, the device enables m et WAN port to connect to th	nultiple users to share the ne ISP. The wireless port	internet. The wireless ports s can be regarded as a LAN po	share the same IP addre rt while in AP Router mo	ss as the ide.	
O AP Client Route	er (WISP Client) In this r IP as th in AP C	mode, multiple users can sh nat assigned by the WISP to Client Router mode. The Eth	nare an internet connection o the Wireless port. While nernet port acts as a LAN	n provided by a WISP. The L4 connected to a WISP, the wir port.	AN port devices share th eless port works as a W	e same AN port	
				Next			

2) In the LAN Settings section, specify the LAN IP address and the Subnet Mask for the device. Then, click Next.

Figure 3-12 S	pecifying the LAN Settings
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QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
LAN Settings					
		IP Address:	192.168.0.254		
		Subnet Mask:	255.255.255.0		
		E	Back	Next	

3) In the **Wireless Client Settings** section, click *Survey* to search for the upstream wireless network.

Figure 3-13 Searching for Upstream Wireless Networks

	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
Wireless Client Setting	gs				
		SSID of Remote AP:		Survey	
		MAC of Remote AP:		Lock to AP	
		Mode:	802.11a/n	2	
		WDS:	Auto	<ul> <li>Image: A set of the set of the</li></ul>	
		Channel Width:	20/40MHz		
		Security:	None		
		PSK Password:		Show	
			We do not recommend usin encryption mode.	g WEP encryption. You can go	to WIRELESS page to configure the
		Distance Setting:	0	(0-27.9)km	
		Ва	ack N	ext	

4) Select the desired wireless network and click Connect.

Note:

There may be two or more networks with the same SSID in the AP list. Click *Lock to AP* to select the SSID and AP simultaneously, which can make the device connect to the specific AP next time.

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Figure 3-14 Selecting an Upstream Wireless Network

eless Client Settings	\$						
BSSID	SSID	MAXtream	Device Name St	NR (dB) Signal / No	ise (dBm) Channel	Security	
18-A6-F7-41-26-4	6 daisy 3	No	42	-53/-95	5180 (36)	WPA2-PSK	•
50-C7-BF-27-7F-6	E SR20_5G	No	50	-45/-95	5220 (44)	WPA2-PSK	
50-C7-BF-17-A6-	E3 EAP-Show	No	14	-81/-95	5180 (36)	WPA2-PSK	
D4-61-FE-5A-2A-	00 das	No	11	-85/-96	5180 (36)	WPA-PSK/WPA2 -PSK	
50-C7-BF-48-54-E	DB deco	No	35	-61/-96	5200 (40)	WPA2-PSK	
50-C7-BF-48-57-1	IF deco	No	30	-66/-96	5200 (40)	WPA2-PSK	
50-C7-BF-48-57-7	4 deco	No	47	-49/-96	5200 (40)	WPA2-PSK	
56-C7-BF-48-54-	DB	No	37	-59/-96	5200 (40)	WPA2-PSK	
56-C7-BF-48-57-1	IF	No	31	-65/-96	5200 (40)	WPA2-PSK	
56-C7-BF-48-57-7	4	No	47	-49/-96	5200 (40)	WPA2-PSK	
						WPA-PSK/WPA2	•

5) In the **Wireless Client Settings** section, specify the wireless parameters to connect to the specified wireless network. Click Next.



Make sure that **Security** and **PSK Password** are the same as the upstream wireless network's. Other parameters set in this page and those of the upstream wireless network should be compatible with each other. For details, refer to **Configure the Wireless Parameters**.

	STATUS	NETWORK	WIRELESS	MANAGEME	NT SYSTEM	
Wireless Client Setting	js					
		SSID of Remote AP:	7200_5G	Survey		
		MAC of Remote AP:	50-C7-BF-01-88-1F	Lock to AP		
		Mode:	802.11a/n	$\sim$		
		WDS:	Auto	~		
		Channel Width:	20/40MHz	~		
		Security:	WPA-PSK / WPA2-PSK	×		
		PSK Password:	•••••	Show		
			We do not recommend us encryption mode.	ing WEP encryption. Ye	u can go to WIRELESS page to co	Infigure the
		Distance Setting:	0	(0-27.9)km		
		В	ack	Next		

Figure 3-15 Specifying the Wireless Client Settings

6) In the **Finish** section, review the configurations and click *Finish* to complete the quick setup.

Figure 3-16 Checking the Settings

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM	
Finish						
		Operation Mode:	Repeater			
		IP Address:	192.168.0.254			
		Subnet Mask:	255.255.255.0			
		SSID of Remote AP:	7200_5G			
		Mode:	802.11a/n			
		WDS:	Disable			
		Channel Width:	20/40MHz			
		Security:	WPA-PSK / WPA2-PSK			
		Distance Setting:	0 km			
		E	Back	Finish		

7) Connect the device according to your network topology and use it normally.

### 3.4 Bridge

Follow the steps below to configure the device as Bridge mode:

1) Go to the **QUICK SETUP** page, select *Bridge* and click *Next*.

Figure 3-17 Selecting an Operation Mode

	PHAROS		Operation M		About Su	ipport Log Out			
			Operation w						
QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM				
Operation Mode									
Please select the pr	roper operation mode acc	ording to your needs:							
○ Access Point	In this which s	mode, the AP will act as a c supports up to 4 different SS	entral hub for different w SIDs and passwords.	reless LAN clients. Multi-SSID	is also available in this mode,	1			
◯ Client	In clien your wi	t mode, the device can con reless network.	nect to a wired device an	d work as a wireless adapter to	o receive wireless signals fron	1			
◯ Repeater	In this for a la	mode, the device can copy rge space to eliminate signa	and reinforce the existing al-blind corners.	wireless signal to extend the	coverage of the signal, especi	ally			
Bridge	Bridge can se	Bridge mode borrows existing wireless internet and broadcasts it using a different SSID and password. In this mode, you can set up a wireless client to connect with a root AP and a wireless AP for local wireless coverage.							
◯ AP Router	In this Ethern	mode, the device enables n et WAN port to connect to th	nultiple users to share the ne ISP. The wireless port	internet. The wireless ports sl can be regarded as a LAN por	hare the same IP address as t t while in AP Router mode.	he			
O AP Client Router	r (WISP Client) In this IP as th in AP C	mode, multiple users can sh nat assigned by the WISP to Client Router mode. The Eth	nare an internet connection o the Wireless port. While hernet port acts as a LAN	n provided by a WISP. The LA connected to a WISP, the wire port.	N port devices share the sam eless port works as a WAN po	e rt			
				Next					

2) In the **LAN Settings** section, specify the LAN IP address and the Subnet Mask for the device. Then, click *Next*.

Table 3-1 S	pecifying the LAN Settings
-------------	----------------------------

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
LAN Settings					
		IP Address:	192.168.0.254		
		Subnet Mask:	255.255.255.0		
		E	Back	Next	

3) In the **Wireless Client Settings** section, click *Survey* to search for the upstream wireless network.

UICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
Vireless Client Settin	gs				
		SSID of Remote AP:		Survey	
		MAC of Remote AP:		Lock to AP	
		Mode:	802. <b>1</b> 1a/n	1	
		WDS:	Auto ~	1	
		Channel Width:	20/40MHz ~		
		Security:	None		
		PSK Password:		Show	
			We do not recommend using	WEP encryption. You can go	to WIRELESS page to configure the
			encryption mode.	_	
		Distance Setting:	0	(0-27.9)km	
		Distance Setting:	o	(0-27.9)km	
		В	ack Ne	×t	

Figure 3-18 Searching for Upstream Wireless Networks

4) Select the desired wireless network and click Connect.

Note:

There may be two or more networks with the same SSID in the AP list. Click *Lock to AP* to select the SSID and AP simultaneously, which can make the device connect to the specific AP next time.

Figure 3-19 Selecting an Upstream Wireless Network

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CK SETUP	SIATUS	NETWORK	WIRELESS	MANAGEMEN	I SY	STEM
reless Client Setting	s					
BSSID	SSID	MAXtream	Device Name SNR (dB	) Signal / Noise (dBm)	Channel	Security
18-A6-F7-41-26-	46 daisy 3	No	42	-53/-95	5180 (36)	WPA2-PSK
50-C7-BF-27-7F-	6E SR20_5G	No	50	-45/-95	5220 (44)	WPA2-PSK
50-C7-BF-17-A6	E3 EAP-Show	No	14	-81/-95	5180 (36)	WPA2-PSK
D4-61-FE-5A-2A	-00 das	No	11	-85/-96	5180 (36)	WPA-PSK/WPA2 -PSK
50-C7-BF-48-54	DB deco	No	35	-61/-96	5200 (40)	WPA2-PSK
50-C7-BF-48-57	1F deco	No	30	-66/-96	5200 (40)	WPA2-PSK
50-C7-BF-48-57	74 deco	No	47	-49/-96	5200 (40)	WPA2-PSK
56-C7-BF-48-54	DB	No	37	-59/-96	5200 (40)	WPA2-PSK
56-C7-BF-48-57-	1F	No	31	-65/-96	5200 (40)	WPA2-PSK
56-C7-BF-48-57	74	No	47	-49/-96	5200 (40)	WPA2-PSK
						WPA-PSK/WPA2

5) In the **Wireless Client Settings** section, specify the wireless parameters to connect to the specified wireless network. Click Next.

#### Note:

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Make sure that the **Security** and **PSK Password** are the same as the upstream wireless network's. Other parameters set in this page and those of the upstream wireless network should be compatible with each other. For details, refer to **Configure the Wireless Parameters**.

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
Wireless Client Setting	js				
		SSID of Remote AP:	7200_5G	Survey	
		MAC of Remote AP:	50-C7-BF-01-88-1F	Lock to AP	
		Mode:	802.11a/n	×	
		WDS:	Auto	$\sim$	
		Channel Width:	20/40MHz	$\sim$	
		Security:	WPA-PSK / WPA2-PSK	×	
		PSK Password:		Show	
		,	We do not recommend us	sing WEP encryption. You can	go to WIRELESS page to configure the
			encryption mode.		
		Distance Setting:	0	(0-27.9)km	
		Ba	ack	Next	

Figure 3-20 Specifying the Wireless Client Settings

6) In the **Wireless AP Settings** section, specify the parameters to create a new wireless network for the downstream clients. Click Next.

Figure 3-21 Specifying the Wireless AP Settings

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
Wireless AP Settings					
		Wireless Radio: 🗹	Enable	7	
		SSID: TP Security: WF	-LINK_Outdoor_BD205C		
		PSK Password: ••••	••••	Show	
		We	do not recommend using cryption mode.	WEP encryption. You can go	to WIRELESS page to configure the
		- Dack	No	vt	
		Васк	Ne		

7) In the **Finish** section, review the configurations and click *Finish* to complete the quick setup.

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM	
Finish						
		Operation Mode: Brid	dge			
		IP Address: 192	2.168.0.254			
		Subnet Mask: 255	5.255.255.0			
		SSID of Remote AP: 720	00_5G			
		Mode: 802	2.11a/n			
		WDS: Dis	able			
		Channel Width: 20/	40MHz			
		Security: WP	A-PSK / WPA2-PSK			
		Distance Setting: U ki	m			
		Wireless Radio: Ena	able			
		SSID: TP-	LINK_Outdoor_BD205C	;		
		Security: WP	A-PSK / WPA2-PSK			
		Back	: Fir	nish		

Figure 3-22 Checking the Settings

8) Connect the device according to your network topology and use it normally.

## 3.5 AP Router

Follow the steps below to configure the device as AP Router mode:

1) Go to the **QUICK SETUP** page, select AP Router and click Next.

	HAROS				About Support Log	g O
			Operation M	ode: AP Client Router		
	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM	
Operation Mode						
Please select the proper	operation mode acco	ording to your needs:				
○ Access Point	In this m which su	node, the AP will act as a couports up to 4 different SS	entral hub for different wi SIDs and passwords.	reless LAN clients. Multi-SSID	) is also available in this mode,	
◯ Client	In client your wir	mode, the device can conr eless network.	nect to a wired device an	d work as a wireless adapter t	o receive wireless signals from	
◯ Repeater	In this m for a larg	node, the device can copy a ge space to eliminate signa	and reinforce the existing al-blind corners.	wireless signal to extend the	coverage of the signal, especially	
O Bridge	Bridge n can set	node borrows existing wire up a wireless client to conr	less internet and broadca nect with a root AP and a	asts it using a different SSID a wireless AP for local wireless	nd password. In this mode, you coverage.	
AP Router	In this m Etherne	node, the device enables m t WAN port to connect to th	nultiple users to share the ne ISP. The wireless port	internet. The wireless ports s can be regarded as a LAN po	hare the same IP address as the rt while in AP Router mode.	
O AP Client Router (WI	SP Client) In this m IP as the in AP Cl	node, multiple users can sh at assigned by the WISP to lient Router mode. The Eth	are an internet connection the Wireless port. While ernet port acts as a LAN	on provided by a WISP. The LA connected to a WISP, the win port.	AN port devices share the same eless port works as a WAN port	
				Next		

#### Figure 3-23 Selecting an Operation Mode

2) In the **WAN Connection Type** section, specify the connection type according to your need and click Next.

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
WAN Connection Type	e				
Sel	ect the connection type	e of WAN port according to	your needs.:		
	O PPPoE - For	this connection, you need	to get the account name	and password from your ISP.	
	Oynamic IP	When connecting to the W	/AN, your router gets an	IP address assigned by the DH	ICP server of your ISP.
	🔿 Static IP - Wi	th this type of connection, t	he device uses a perma	nent, static IP address assigne	d by your ISP.
		Book		ovt	
		Васк		ext	

The device supports three types of the WAN connection, including PPPoE, Dynamic IP and Static IP. You can contact with your ISP to confirm your WAN connection type.

» PPPoE

Select *PPPoE* and click *Next*, then the following page will appear. In the **WAN Settings** section, specify the parameters that are provided by your ISP and click *Next*.

Figure 3-25 Specifying the WAN Settings

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
WAN Settings					
		User Name:		]	
		Password:		Show	
		Confirm Password:		Show	
		Back	N	lext	

#### » Dynamic IP

Select Dynamic IP and click Next. In this type, the device will obtain a WAN connection automatically without any WAN configurations.

#### » Static IP

Select Static IP and click Next, then the following page will appear. In the **WAN Settings** section, specify the parameters that are provided by your ISP and click Next.

UICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
VAN Settings					
		IP Address:	0.0.0.0		
		Subnet Mask:	0.0.0.0		
		Default Gateway:	0.0.0.0		
		Primary DNS:	0.0.0.0		
		Secondary DNS:	0.0.0.0	(Optional)	
		Ba	ack N	lext	

Figure 3-26 Specifying the WAN Settings

3) In the **Wireless AP Settings** section, specify the basic wireless parameters to create a wireless network. Click Next.



QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
Wireless AP Settings					
		SSID:	TP-LINK_Outdoor_BD205C		
		Mode:	802.11a/n ~		
		Channel Width:	20/40MHz ~		
		Channel/Frequency:	Auto ~		
		Security:	None ~		
		PSK Password:		Show	
			We do not recommend using	WEP encryption. You can go t	to WIRELESS page to configure the
			encryption mode.		
		Distance Setting:	0	(0-27.9)km	
		MAXtream:	Enable 🕜		
		E	ack Ne	kt	

Figure 3-27 Specifying the Wireless AP Settings

4) In the **Finish** section, review the configurations and click *Finish* to complete the quick setup.

Flaure 3-28	Checking the Settings
	, , , , -

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM	
Finish						
		Operation Mode: AP	Router			
		WAN Connection Type: Sta	tic IP			
		IP Address: 192	2.168.2.10			
		Subnet Mask: 255	5.255.255.0			
		Default Gateway: 192	2.168.2.1			
		Primary DNS: 192	2.168.0.3			
		Secondary DNS: 192	2.168.1.3			
		SSID: TP-	LINK_Outdoor_BD2050	;		
		Mode: 802	2.11a/n			
		Channel Width: 20/	40MHz			
		Security: No	ne			
		Distance Setting: 0 k	m			
		MAXtream: Dis	able			
		Back	Fi	nish		

5) Connect the device according to your network topology and use it normally.

### 3.6 AP Client Router (WISP Client)

Follow the steps below to configure the device as AP Client Router (WISP Client) mode:

1) Go to the QUICK SETUP page, select AP Client Router (WISP Client) and click Next.

Figure 3-29 Selecting an Operation Mode

					Abou	t Support Lo	og Out
			Operation M	ode: AP Client Router	Tools		
QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM		
Operation Mode							
Please select the prop	per operation mode acco	rding to your needs:					
○ Access Point	In this m which su	ode, the AP will act as a comports up to 4 different SS	entral hub for different wi SIDs and passwords.	reless LAN clients. Multi-SSID	) is also available in this	mode,	
◯ Client	In client your wire	mode, the device can con eless network.	nect to a wired device an	d work as a wireless adapter t	o receive wireless signa	ls from	
◯ Repeater	In this m for a larg	ode, the device can copy a ge space to eliminate signa	and reinforce the existing al-blind corners.	wireless signal to extend the	coverage of the signal, e	especially	
⊖ Bridge	Bridge n can set i	node borrows existing wire up a wireless client to conr	less internet and broadca nect with a root AP and a	ists it using a different SSID a wireless AP for local wireless	nd password. In this mo coverage.	de, you	
O AP Router	In this m Ethernet	ode, the device enables m WAN port to connect to th	nultiple users to share the ne ISP. The wireless port	internet. The wireless ports s can be regarded as a LAN por	hare the same IP addre rt while in AP Router mo	ss as the ide.	
AP Client Router (	WISP Client) In this m IP as tha in AP CI	ode, multiple users can sh at assigned by the WISP to ient Router mode. The Eth	nare an internet connection o the Wireless port. While nernet port acts as a LAN	n provided by a WISP. The LA connected to a WISP, the wire port.	AN port devices share th eless port works as a W	e same AN port	
				Next			

2) In the **WAN Connection Type** section, choose the connection type according to your need and click Next.

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
WAN Connection Type	9				
Sel	ect the connection type	e of WAN port according to	your needs.:		
	O PPPoE - For	this connection, you need	to get the account name	and password from your ISP.	
	Oynamic IP	When connecting to the W	/AN, your router gets an	IP address assigned by the DF	ICP server of your ISP.
	◯ Static IP - W	th this type of connection, t	he device uses a perma	nent, static IP address assigne	d by your ISP.
		Back	N	ext	

Figure 3-30 Specifying the WAN Connecting Type

The device supports types, *PPPoE*, *Dynamic IP* and *Static IP* for the WAN connection. You can contact with your ISP to confirm your WAN connection type.

» PPPoE

Select *PPPoE* and click *Next*, then the following page will appear. In the **WAN Settings** section, specify the parameters that are provided by your ISP and click *Next*.

UICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
VAN Settings					
		User Name:		]	
		Password:		Show	
		Confirm Password:		Show	
		Back	i N	ext	

Figure 3-31 Specifying the WAN Settings

» Dynamic IP

Select *Dynamic IP* and click Next. In this type, the device will obtain a WAN connection automatically without any WAN configurations.

» Static IP

Select *Static IP* and click *Next*, then the following page will appear. In the **WAN Settings** section, specify the parameters that are provided by your ISP and click *Next*.

	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
VAN Settings					
		IP Address: 0.0	).0.0	]	
		Subnet Mask: 0.0	0.0.0		
		Default Gateway: 0.0	0.0.0		
		Primary DNS: 0.0	0.0.0		
		Secondary DNS: 0.0	0.0.0	(Optional)	
		Back	N	ext	

Figure 3-32 Specifying the WAN Settings

3) In the **Wireless Client Settings** section, click *Survey* to search for the upstream wireless network.

Figure 3-33 Searching for Upstream Wireless Networks

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
Wireless Client Setti	ngs				
		SSID of Remote AP:		Survey	
		MAC of Remote AP:		Lock to AP	
		Mode:	802.11a/n	1	
		WDS:	Auto	1	
		Channel Width:	20/40MHz	1	
		Security:	None		
		PSK Password:		Show	
			We do not recommend using	) WEP encryption. You can go	to WIRELESS page to configure the
			encryption mode.	_	
		Distance Setting:	0	(0-27.9)km	
		_			
		В	ack	ext	

4) Select the desired wireless network and click Connect.

Note:

There may be two or more networks with the same SSID in the AP list. Click *Lock to AP* to select the SSID and AP simultaneously, which can make the device connect to the specific AP next time.

Figure 3-34 Selecting an Upstream Wireless Network

\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ .

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les	ss Client Settings								
	BSSID	SSID	MAXtream	Device Name S	NR (dB)	Signal / Noise (dBm)	Channel	Security	
	18-A6-F7-41-26-46	daisy 3	No	42		-53/-95	5180 (36)	WPA2-PSK	
	50-C7-BF-27-7F-6E	SR20_5G	No	50	) .	-45/-95	5220 (44)	WPA2-PSK	
	50-C7-BF-17-A6-E3	EAP-Show	No	14		-81/-95	5180 (36)	WPA2-PSK	
	D4-61-FE-5A-2A-00	das	No	11		-85/-96	5180 (36)	WPA-PSK/WPA2 -PSK	I
	50-C7-BF-48-54-DB	deco	No	35	i .	-61/-96	5200 (40)	WPA2-PSK	
	50-C7-BF-48-57-1F	deco	No	30	)	-66/-96	5200 (40)	WPA2-PSK	
	50-C7-BF-48-57-74	deco	No	47		-49/-96	5200 (40)	WPA2-PSK	
	56-C7-BF-48-54-DB		No	37		-59/-96	5200 (40)	WPA2-PSK	
	56-C7-BF-48-57-1F		No	31		-65/-96	5200 (40)	WPA2-PSK	
	56-C7-BF-48-57-74		No	47		-49/-96	5200 (40)	WPA2-PSK	
_								WPA-PSK/WPA2	•

5) In the **Wireless Client Settings** section, specify the wireless parameters to connect to the specified wireless network. Click Next.



Make sure that **Security** and **PSK Password** are the same as the upstream wireless network's. Other parameters set in this page and those of the upstream wireless network should be compatible with each other. For details, refer to **Configure the Wireless Parameters**.

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
Wireless Client Setting	js				
		SSID of Remote AP:	7200_5G	Survey	
		MAC of Remote AP:	50-C7-BF-01-88-1F	Lock to AP	
		Mode:	802.11a/n	×	
		WDS:	Auto	$\sim$	
		Channel Width:	20/40MHz	$\sim$	
		Security:	WPA-PSK / WPA2-PSK	×	
		PSK Password:		Show	
		,	We do not recommend us	sing WEP encryption. You can	go to WIRELESS page to configure the
			encryption mode.		
		Distance Setting:	0	(0-27.9)km	
		Ba	ack	Next	

Figure 3-35 Specifying the Wireless Client Settings

6) In the **Wireless AP Settings** section, specify the parameters to create a new wireless network for the downstream clients. Click Next.

Figure 3-36 Specifying the Wireless AP Settings

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
Wireless AP Settings	\$				
		Wireless Radio:	Enable		
		SSID:	TP-LINK_Outdoor_BD205C	]	
		Security:	WPA-PSK / WPA2-PSK V		
		PSK Password:	•••••	Show	
			We do not recommend using encryption mode.	WEP encryption. You can go t	o WIRELESS page to configure the
		В	lack Ne	xt	

7) In the **Finish** section, review the configurations and click *Finish* to complete the quick setup.

QUICK SETUP	STATUS	NETWORK	WIRELESS	MANAGEMENT	SYSTEM
Finish					
		Operation Mode:	AP Client Router (WISP Cl	ent)	
		WAN Connection Type:	Static IP		
		IP Address:	192.168.2.10		
		Subnet Mask:	255.255.255.0		
		Default Gateway:	192.168.2.1		
		Primary DNS:	192.168.0.1		
		Secondary DNS:	192.168.1.2		
		SSID of Remote AP:	7200_5G		
		Mode:	802.11a/n		
		WDS:	Disable		
		Channel Width:	20/40MHz		
		Security:	WPA-PSK / WPA2-PSK		
		Distance Setting:	0 km		
		Wireless Radio:	Enable		
		SSID:	TP-LINK_Outdoor_BD205	2	
		Security:	WPA-PSK / WPA2-PSK		
		E	Back F	nish	

Figure 3-37 Checking the Settings

8) Connect the device according to your network topology and use it normally.