Wi-Fi EOC terminal user manual

Contents

《Wodaplug wireless EOC slave terminal user manual》Will provide detailed instructions on how to manage the terminal device locally through the web management page.

The preface section contains the following:

•Target readers

•Data acquisition method

•Technical support

•Data feedback

Target readers

This manual is mainly applicable to the following engineers:

• Network planner

•Site technical support and maintenance personnel

•Network administrator responsible for network configuration and maintenance

Data acquisition method

•Get the latest information from our website

•Contact relevant technical personnel of our company to obtain product information

Data feedback

If you find any problems with the product data during using, you can contact our staff for feedback in the following ways:

Telephone +420 775 262 900

http://www.wodaplug.com/kontakty-2/

1 You will learn about the product as follows

①The general form of the product, the business characteristics or its positioning in the actual network application

②Manage the device by building a WEB environment, and be more familiar with its settings page

③Manage and maintain the EOC wireless terminal equipment through the WEB management page, such as Wan configuration, WiFi wireless settings, etc

2 Product introduction

Explanation:

• This manual is applicable to the EOC1121R4WL-R wireless terminal equipment of Wodaplug technology. The relevant configuration in this paper is introduced in the case of EOC1121R4WL-R. The interface involved is schematic, please refer to the actual conditions.

•The Cable ports involved in this manual refer to the Cable ports connected to the terminal and the local end.

2.1 product brief introduction

EOC1121R4WL-R terminal device is used to structure two layers of Ethernet transmission channel in CATV Cable network, transmit and receive Ethernet signal through cable coaxial cable, and do not affect the original CATV signal. EOC1121R4WL-R coaxial cable broadband access terminal adopted the industry recognized HomePlugAV AR7411L solution, through a coaxial port connected to OLT, local provides 4 fast full-duplex Ethernet interface, including LAN1,LAN2,STB1 and STB2 .LAN1 and LAN2 which is a port with routing function, through two ports can log in the wifi terminal web management page to configure the wifi terminal for local management. The local end can send the template, configure VLAN service and VLAN mode to carry out different service through STB1 and STB2 port. The four Ethernet interfaces of the terminal can be used to simultaneously connect computers, digital TV set-top boxes, IP phones and other terminals. EOC1121R4WL-R terminal device also can provide Wireless WIFI 11N router function, terminals can use wireless WIFI to access the internet.

EOC1121R4WL-R satisfies the operator’s requirement and supports 4 SSID in maximum. Based on the ieee802.11n standard, the wireless network can be extended to provide stable transmission up to 150Mbps, and be compatible with ieee802.11b and ieee802.11g. The user side of EOC1121R4WL-R has two different privileges: the general user account and the administrator account. Users need to log in with user name and password to configure or manage EOC1121R4WL-R. The WAN connection of EOC1121R4WL-R supports 4 sub-interface Settings. Set up independent channels such as management, video service, voice service and online service. Each sub-interface has routing and bridge mode. EOC1121R4WL-R as a home network and external network data hub, can according to user's side ports (including wired and wireless), service discover results for data flow classification, QOS adaptation to different data streams, can limit per subnet bridge maximum upstream and downstream bandwidth, prevent the impact of the entire

cable transmission network when other network devices in the user side under abnormal or man-made attacks. Support priority identification, according to the service findings, identify the packets of specific service, such as RTP data streams, including 802.1d and DSCP identifiers. Support 7 priority queues, support different scheduling algorithms, including: SP, DWRR and CAR. EOC1121R4WL-R supports encrypted transmission and provides escort for sensitive data.

2.2 Product features

- Conform to IEEE Home Plug AV，802.11n、IEEE802.11g、IEEE 802.11b、IEEE 802.3、IEEE802.3u
- EOC coaxial cable Cable port access, providing TV, WiFi wireless, wired and o ther interfaces
- Support the CSMA/CA, CSMA/CD, TCP/IP, PPPoE, DHCP, ICMP, NAT protocol
- Provide 2 STB ports, 2 LAN ports 10 / 100M adaptive, support port auto flip
- There are two modes of work: bridging mode and routing mode
- Support the Quality of Service（QoS）- 802.11e
- Support remote and Web management, provide English and Chinese configurati on interface
- Support multiple SSID functions
- Support NAT/NAPT IP sharing, Wan support protocol: PPPoE/Static IP/DHCP
- Provide stable transmission up to 150Mbps
- Support virtual server, DMZ host
- Support the latest wireless security standards such as WEP64/WEP128/, TKIP/CCMP (AES), WEP/WPA-PSK/WPA2-PSK, etc
- Support UPnP function, DDNS function
- Provide Web management page reset, support software update online
- WiFi support 3 dbi high-gain omni-directional antenna
- High security, support mutual isolation between the terminal equipment
- Strong anti-interference ability, the physical layer using advanced forward error correction, channel estimation and adaptive capacity of the OFDM modulation, greatly reducing the symbol rate of each subcarrier, reducing the impact of mul tipath propagation

2.3 Product specification

- Environmental requirements
- Ambient temperature:-0°C～50°C
- Relative humidity:5% to 95%(Non-condensing）
- Power specifications
- Power adapter input:12 V/1A
- Power Consumption:<8W

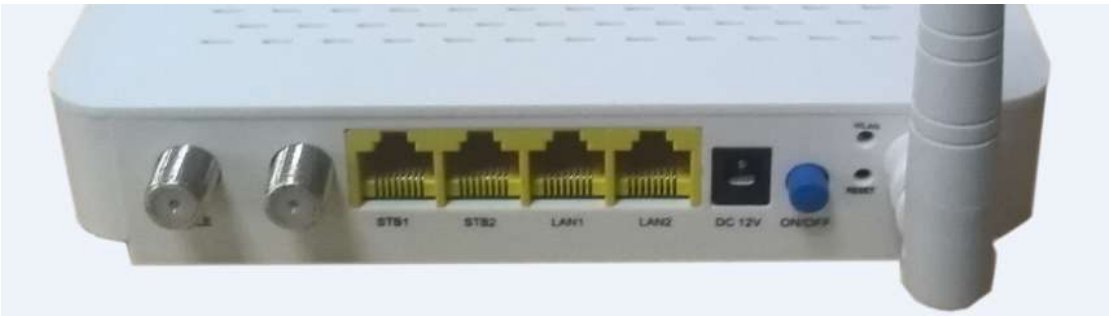
2.4 List of articles

Open the box and carefully check all the objects. Including:

- A host
- A network line (optional)
- A dc power adapter
- A quick installation guide
- A certificate of conformity



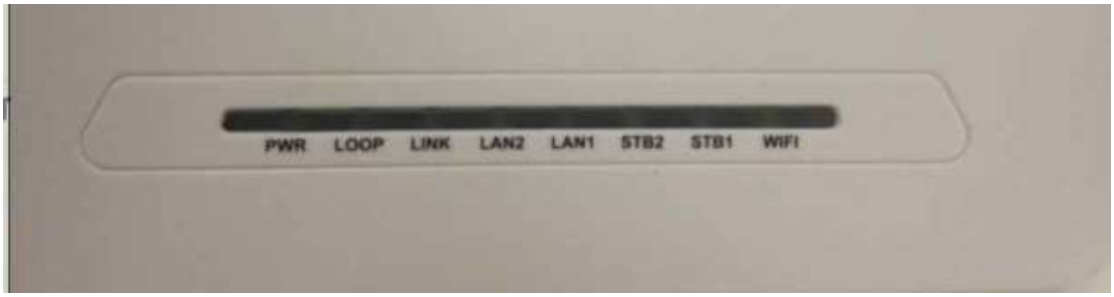
2.5 Device interface definition



Note: the specific interface is subject to purchase.

interface	amount	description
TV	1	Use cable to connect to set-top box or TV
Cable	1	Use cable to connect to the cable TV home interface
Ethernet interface	4	Use network cable to connect to the computer, set-top box or other equipment, 2 STB ports, 2 LAN 10/100M self-adaption ports
power interface	1	Connect the power adapter
Power switch	1	Turn off the power
WLAN	1	WIFI switch
RESET	1	Reset switch

2.6 Indicator definition

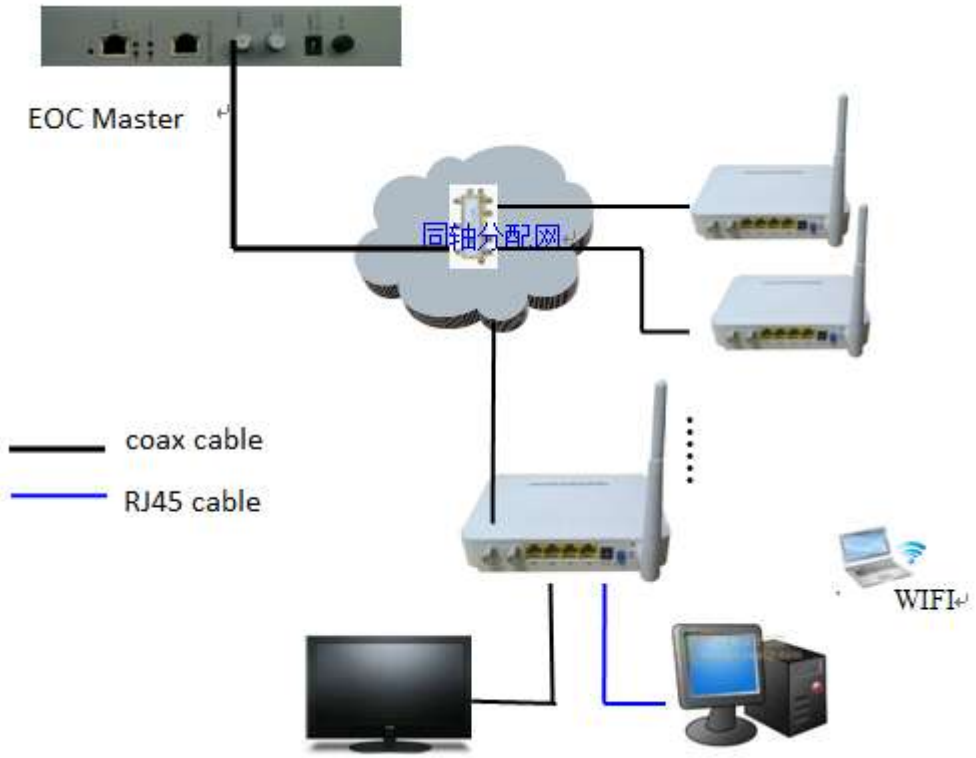


Label	explanation	Description
POWER	Power Indicator light	Solid green, device has been powered, you can start using
LOOP	Loop indicator light	Solid green, indicates that the terminal has a loop
LINK	Data interface light	Solid green, Successfully connect to the network. Blinking green: data is being transmitted.
LAN1-2	LAN network interface light	Solid green, LAN port connects to the network. Blinking green: data is being transmitted.
STB1-2	STB network interface light	Solid green, STB port connect to the network. Blinking green: data is being transmitted.
WIFI	WIFI status indicator light	Solid green, WiFi signal enable. Indicator light off: turn off the WiFi signal.

2.7 Device connection

- Connect coaxial cable: connect coaxial cable to radio frequency joint
- Connect Ethernet cable: use rj-45 Ethernet cable connect any LAN (lan1-lan4) port of the EOC to family equipment, such as computer, IPTV set-top box, etc
- Connect telephone line: use RJ11 telephone line connect TEL interface to telep hone or fax equipment.
- Connect power adapter: plug the AC/DC adapter into AC wall socket and EOC terminal 12V DC power socket
- Press the power button, if all indicator lights are normal after running device w hich means device can offer services.

2.8 Networking application



3 Introduction Guide

3.1 Preparation Work

Before accessing the WEB management page of the WiFi terminal, your computer needs to meet some basic setting requirements.

3.1.1 Managing computer requirements

Hardware: PIII800 + processor, 256 memory, 1GB disk space and 10M / 100M / 1000M Ethernet network card.
Software: operating system should be one of Windows NT, Windows XP, Windows Vista, Windows 7 and Windows 8.

3.1.2 Network connection

(1)Through the WiFi terminal LAN port connection: click <start> button on the lower left

corner of the screen to enter the start menu, and select "Control Panel". Double-click the "network connection" icon, then double-click the pop-up "local connection" icon, pop-up window shown in Figure 1 .

Figure 1 Local connection status

Click the <attribute> button to enter the window shown in figure 2

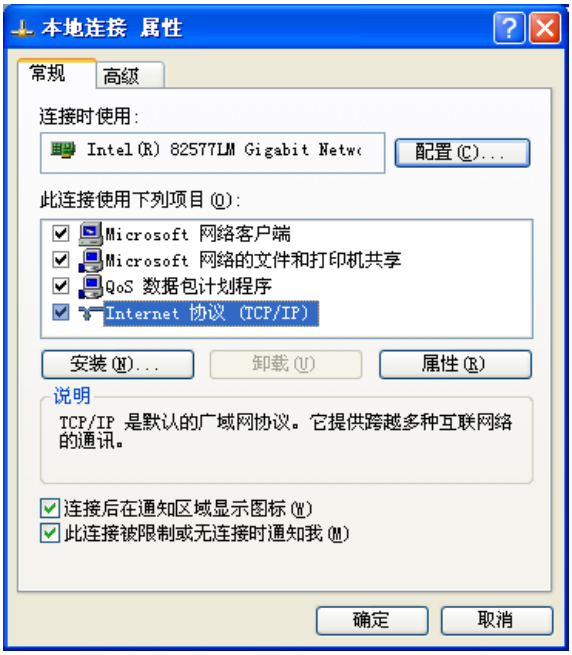


figure 2 Local Area Connection Properties

Select "Internet protocol (TCP/IP)" and click the <attribute> button, please set your computer IP address to 192.168.1. X (2 ~ 254), the subnet mask to 255.255.255.0,and the gateway to 192.168.1.1.

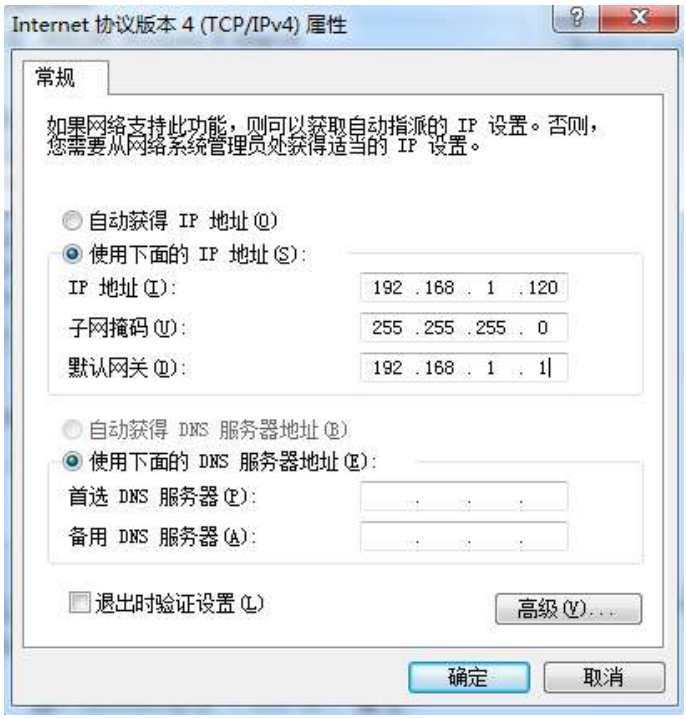
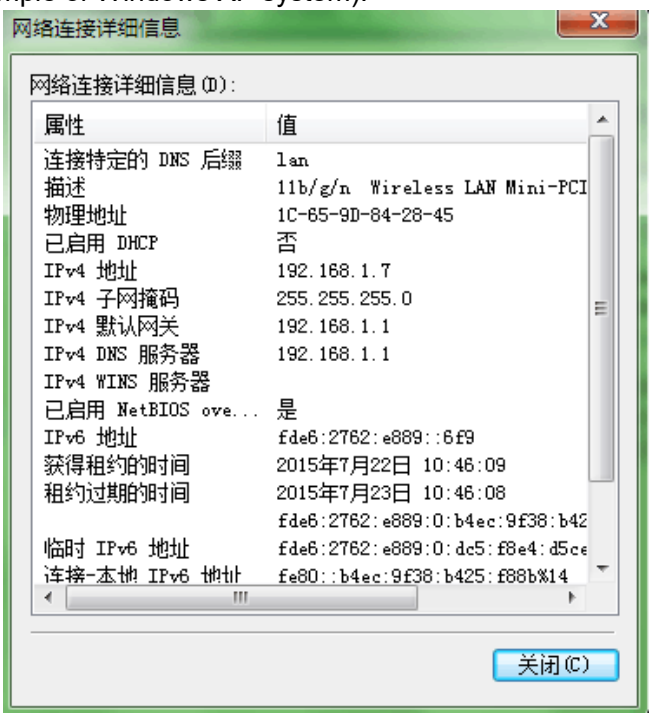


Figure 3　Internet protocol (TCP/IP) properties

(2)Establish network connection through the WiFi terminal SSID: set the IP address of the management computer.
Explanation: the WiFi terminal can automatically assign IP addresses to the management computer, so you don't have to manually set the static IP address.
Your management computer gets the IP address of the wifi terminal, and the results are as follows (as an example of Windows XP system).



3.1.3 Cancel proxy server

If the current management computer uses the proxy server to access the Internet, the agent service must be prohibited, and the operation is as follows:

(1) select “Tools / Internet Options” in the browser window, select the "Connection" tab in the pop-up window, and click <Local Area Network (LAN) Settings> button to enter the page shown in Figure 5.

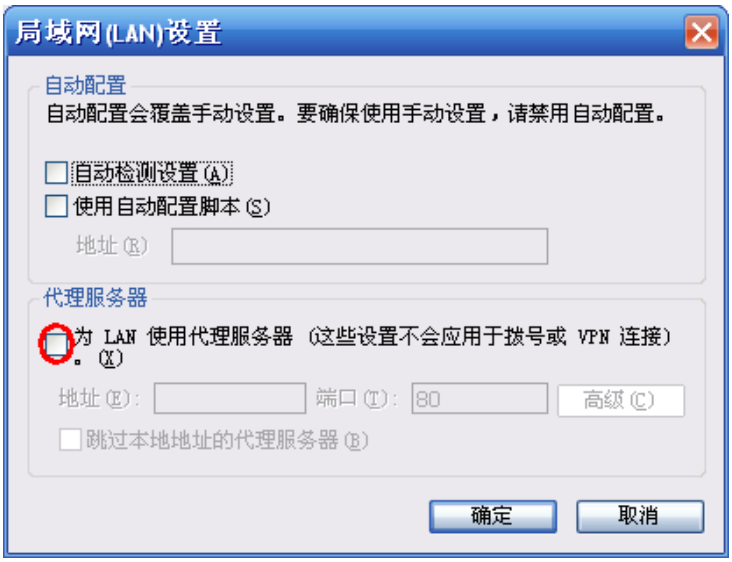
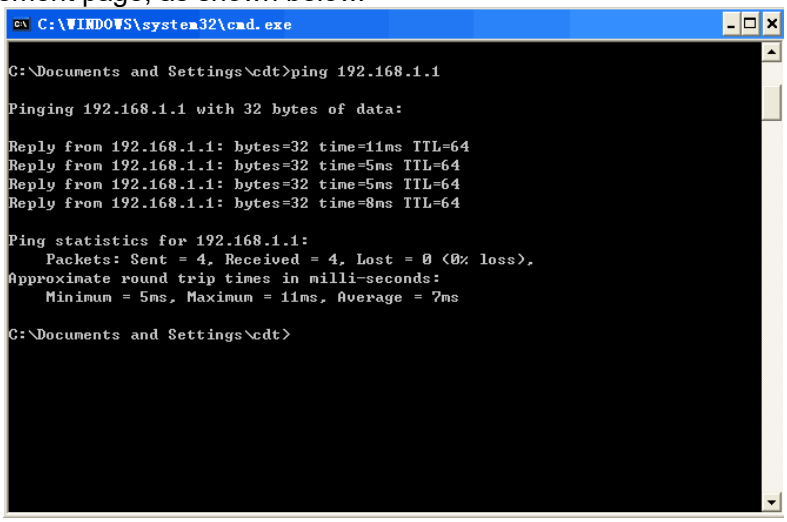


Figure 5 Cancel the proxy server

(2) Confirm that the "Use proxy server for LAN" option is not selected. If it is selected, please cancel and click <OK> button.
(3) Confirm that the management computer is connected to the wifi terminal
Use the Ping command that comes with the windows to verify that the network between the management computer and the WiFi terminal is connected. Click <start> button on the lower left corner of the computer screen, select “operation”, click <enter> button, enter “CMD” in the dialog box, click <OK > button, enter the command Ping 192.168.1.1, hit the “Enter” key, get the following tips that means the computer can normal login WiFi terminal WEB management page, as shown below.



3.2 Login the Web Management Interface

Open the WEB browser (recommend IE), enter http://192.168.1.1 in the address bar, and then press enter to display the login interface, as shown in figure. Please input user name and password (general subscribers default user name and password are both admin for login, user name and password are “admin” and “admin”), click <Enter> button to enter the WEB management interface.

Login the Web Management Interface

Note:
You can modify the password after entering WEB management interface. Please refer to system maintenance “Management” for related operation.

4 Familiar with WEB management page

WEB management interface can rapidly complete required function configurations. This chapter will lead you to understand and become familiar with WEB management interface.

4.1 WEB Management Interface Introduction

WEB management interface introduction
1) The main menu area
2) The sub-menu area
3) Display the content

4.2 Main Menu Introduction

Main Menu	Sub-Menu
Status	Device Information. Network Side Information. User side Information. Remote Management Status
Network	Broadband Setup. LAN Setup. WLAN Setup. Move Device. Remote Management. User Member Limit .Time Setup
Security	Denial of Service. URL Filtering. IP Filtering. MAC Filtering
Service	Port Forwarding. DDNS. UPNP Setup. Advanced NAT. Telnet Server. IGMP. Pocily Route. Pocily DNS
System	System Log. Save/Upgrade Setup. Admin Account Management. Diagnosis. Manual Inform. Language

5 Status

Status includes Device information, Network Status, User side Information. Remote Management Status.

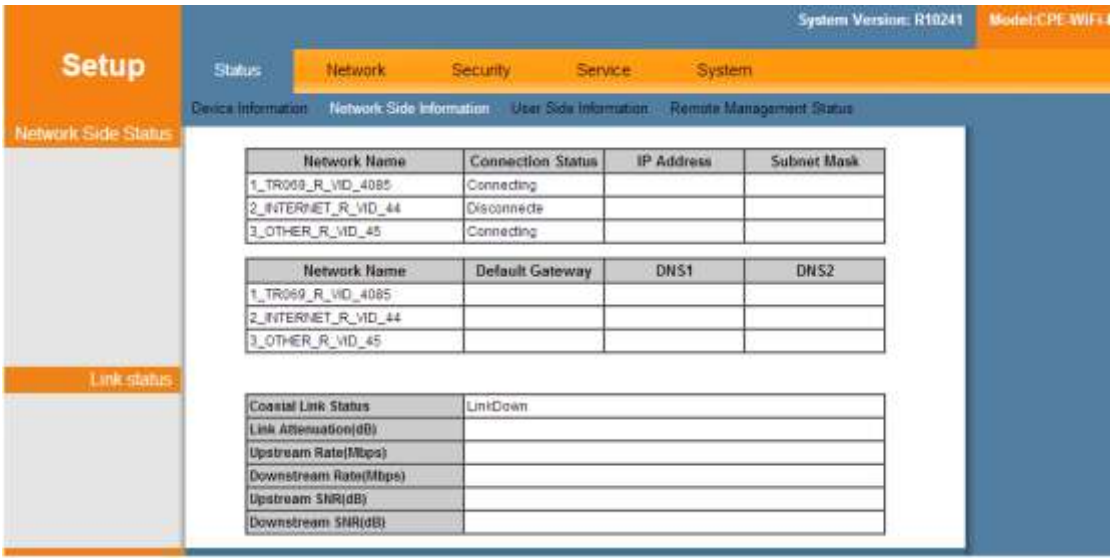
5.1 Device information

Click <Device Information> to display as follows.

This interface displays the device model, uptime, local time, hardware version, firmware version, and Serial number.

5.2 Network side information

Click <Network Side information> to display as follows.

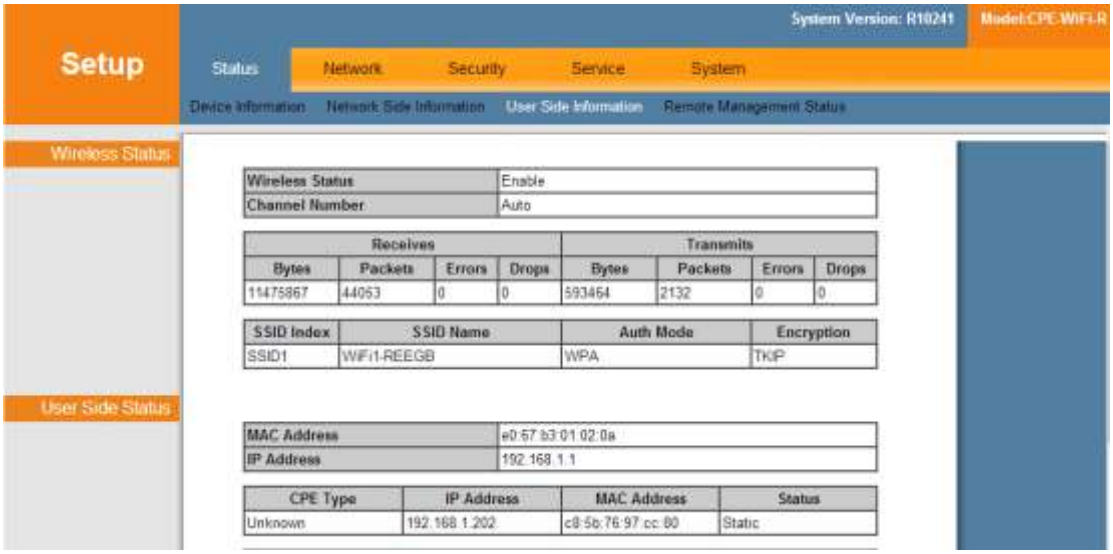


The page will show WAN connection status.

WAN Status shows current System Interface Name, Connect Type, Connect Status, Default Gateway, IP Address that has been obtained, subnet Mask, DNS1 and DNS2.

5.3 User Side Information

Click <User Side information> to display as follows.



Wireless Status shows current Wi-Fi SSID, MAC, Signal, Transmission and so on.
User Side Status Information shows MAC Address, IP Address, Current device information that connects LAN port, number of bytes.

5.4 Remote Management Status

Click <Remote Management Status> to display as follows.

Remote Management Status shows the status of the interaction established by TR069 and the status of the service configuration.

6 Network

The network includes Broadband Setup, LAN Setup, Wireless Setup, Move Device, Remote Management, User Number Limit and Time Setup.

6.1 Broadband Setup

You can set the WAN connection here. WAN connections can work in a routing or bridging mode, and can connect a LAN port or WiFi with a wide area network.

6.1.1 WAN connection naming rules

WAN connection (network name) naming rules are as follows.

catalogue	Definition	description
Network name	Sequence number	To identify WAN connections, the rules are: based on the sequence of WAN connections, the number of sequences increases, the number of non-reusable has been used
Service mode	TR069	Used to connect TR069
	INTERNET	Used to connect to the Internet and not support TR069
	TR069_INTERNET	Used to connect the Internet and TR069
Routing and bridging	B	Bridging mode
	R	Routing mode
VLAN	VID_Z	VID_Z VLAN ID (untag) for the current WAN connection, When the WAN connection is established, no VLAN is added, VID_Z will not appear in the network name.

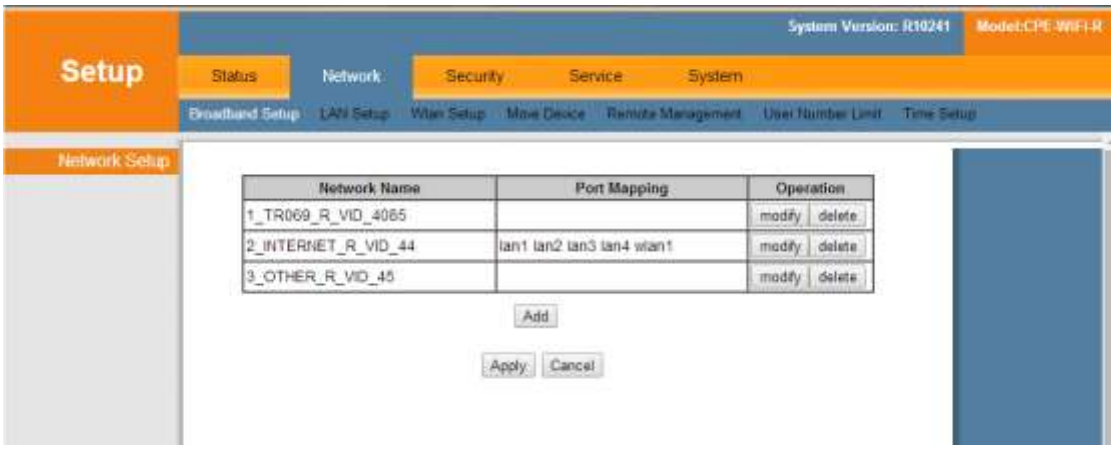
Such as:

1_INTERNET_R_VID_2 (service mode is: INTERNET, working mode is: routing, VLAN, ID: 2)

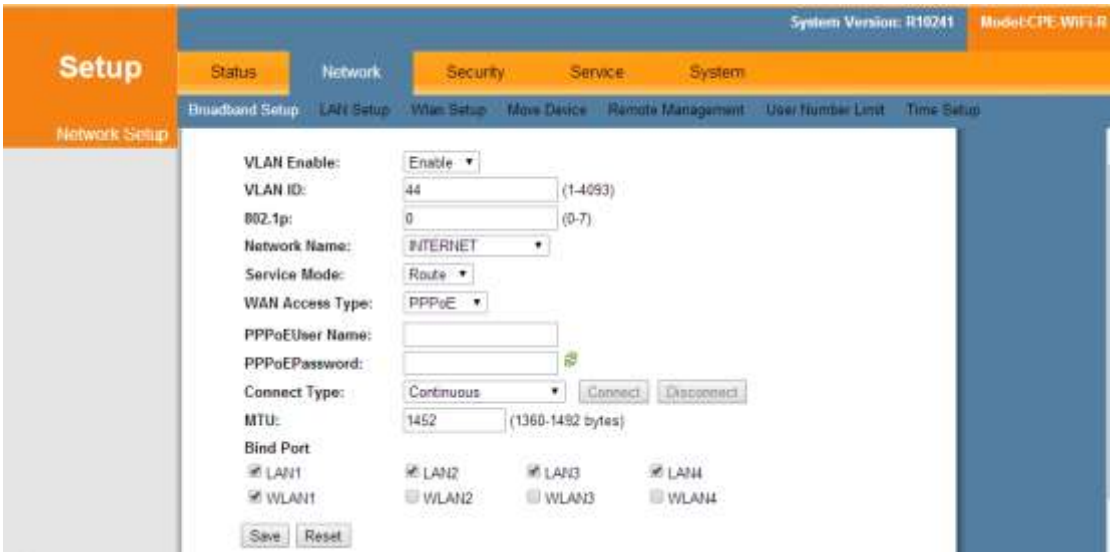
2_INTERNET_B_VID_ (service mode is: INTERNET, working mode is: bridging, VLAN, ID : 0)

6.1.2 Default WAN connection and routing mode

Default WAN connection: you can modify the mode, VLAN, and bound ports according to network requirements as shown below.



Click <modify> as shown below.

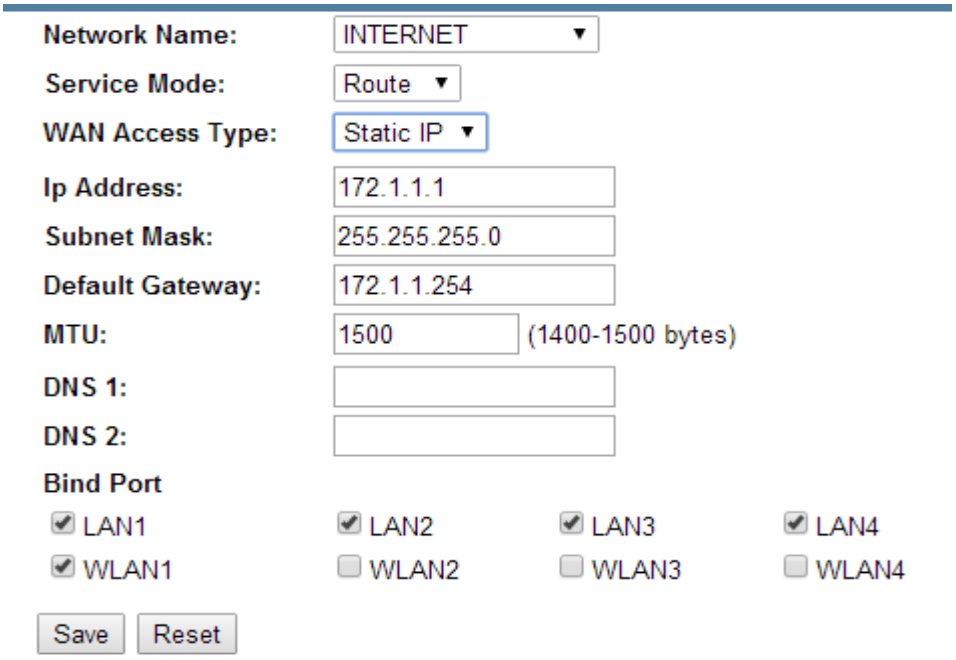


Project	Description
VLAN Enable	Enable or Disable VLAN
VLAN	If you enable VLAN , enter a number into VLAN ID
802.1p	Select a priority（0-7）
Network Name	Select the type of service
Service Mode	Routing or Bridging Mode
Connect Type	You can choose DHCP、 Static、PPPoE modes
MTU	Maximum transport unit (MTU bytes)
Bind Port	Binding to the WAN service port: Select the port that is bound to the connection

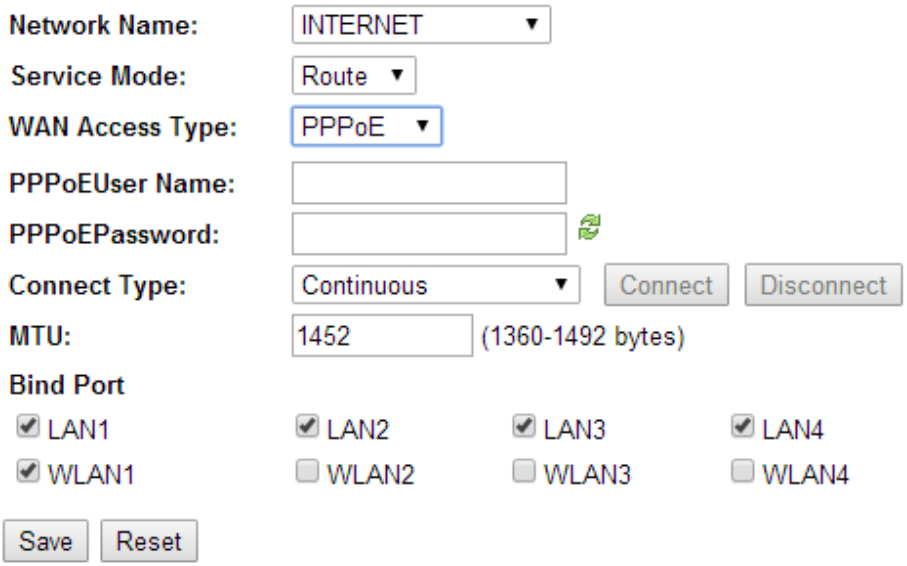
Routing mode:
When the connection type is routing mode, there are three ways to obtain WAN side IP address, that is DHCP, static mode and PPPoE.
1) the IP address of DHCP is dynamic mode.
2) in static mode, set the static address. You need to enter the IP address, subnet mask, the IP address of the alternate DNS server, and the default gateway.
3) in PPPoE mode, you need to enter your username and password.

Note: the port is bound to the routing mode in default, also you can choose “Bridge” to set to the bridging mode. If all ports are bound to the bridge state, LAN1 port is the management port, you can use this port to enter the management page, management IP is 192.168.1.1.And if a port is bound to the routing mode which can be used to enter the management page.

You need to choose connection type settings in the WAN connection configuration, STATIC, IP, DHCP, and PPPoE are optional.
Here is the page to select STATIC IP, which needs to configure the IP address, mask, gateway, and DNS.

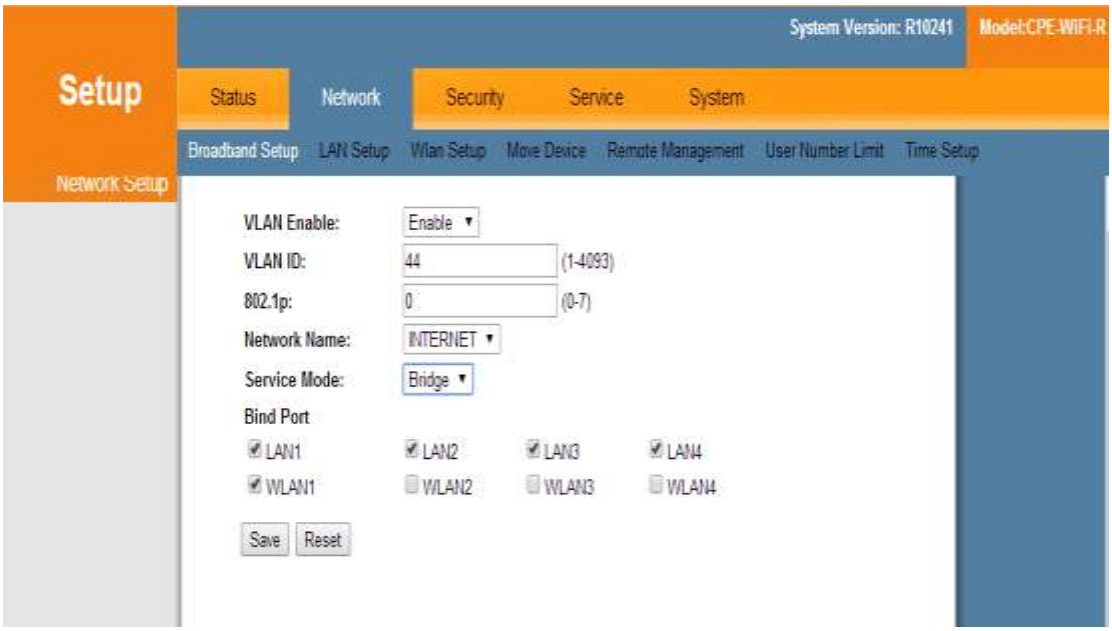


Here is the page to select PPPoE, which you need to configure your username and password.



If you select DHCP, the route automatically gets the IP address.

Bridge mode: the second layer data frame of the bridge over the WAN port and the binding port is transparent broadcast. In this application scenario, PC or other terminals connected to the gateway through PPPOE way to obtain WAN Internet IP address.

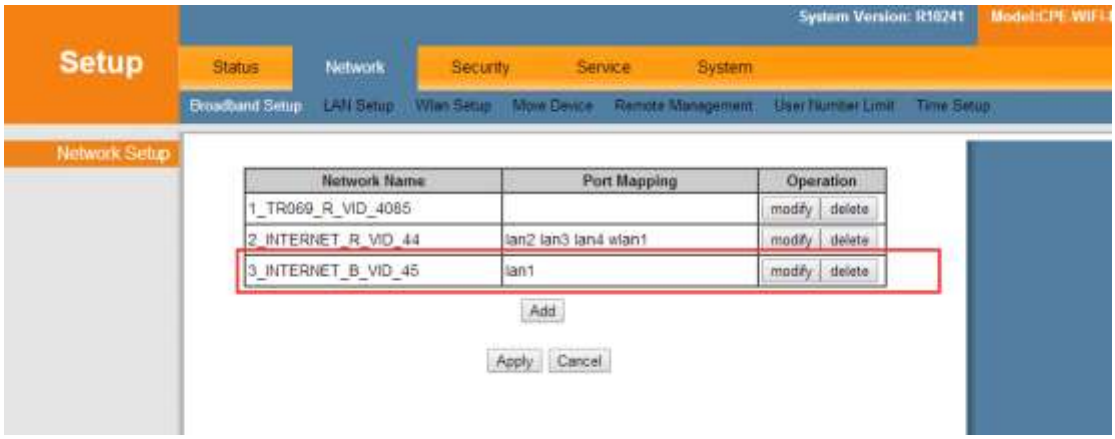


Click <Save> button to save the configuration.

6.1.3 Add WAN connection bridge mode

As shown in the following, add a WAN connection, set to bridge mode, port binding to Port1.

Click <Save> button to save the configuration. You can get 3_INTERNET_B_VID_.



You can set WAN connections for different service users.

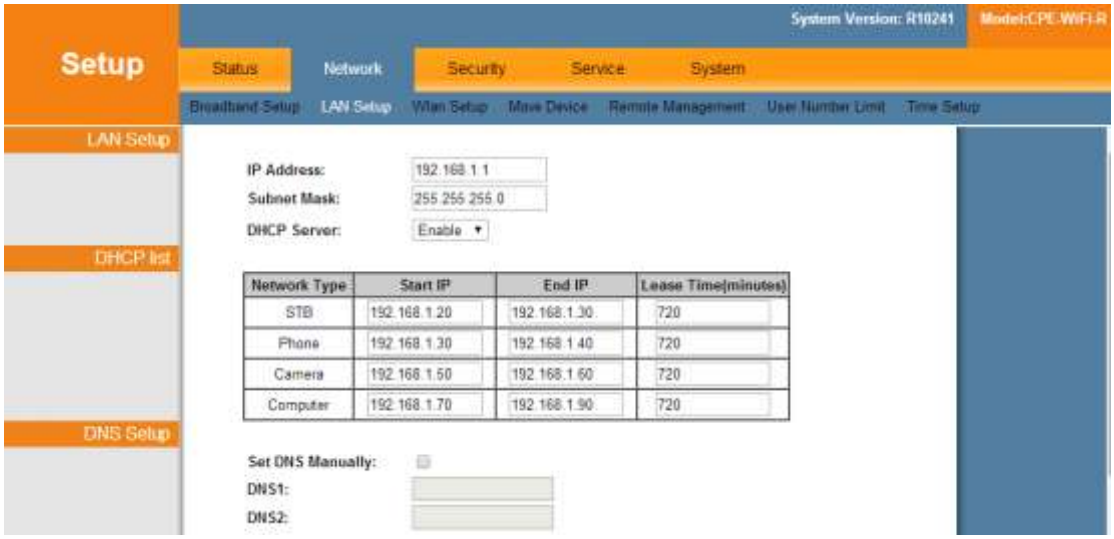
6.2 LAN settings

LAN settings are primarily intended for LAN IP services, such as Dynamic Host Configuration Protocol (DHCP) configurations. The device is preconfigured with routing mode, using the LAN IP address and DHCP server. The default LAN configuration for routing is:

•LAN IP Address: 192.168.1.1

• Subnet mask: 255.255.255.0

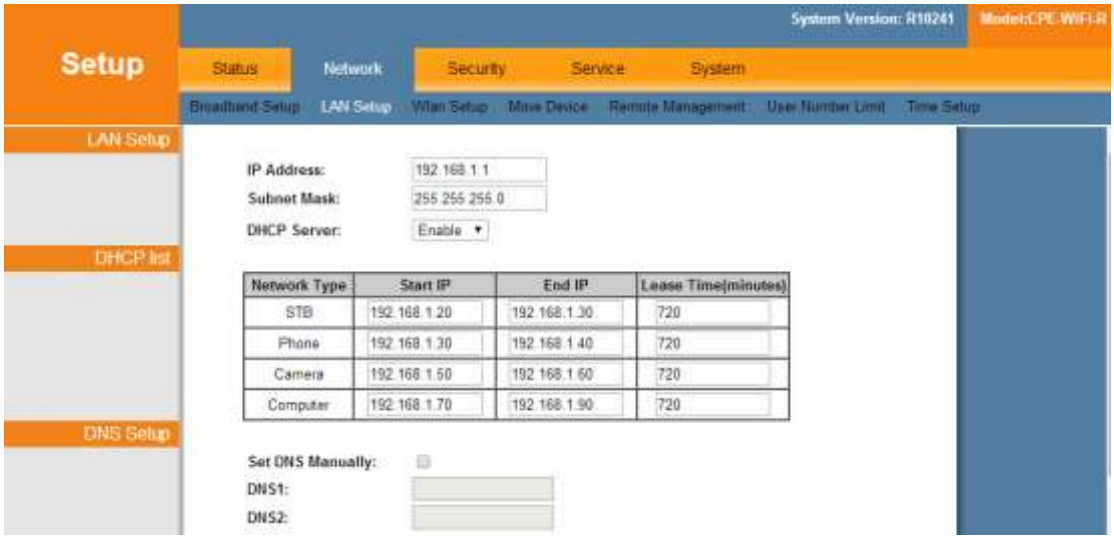
LAN side IP address is mainly used for local area network management, you can enter the following interface to modify the LAN side IP address . Click “save” then apply to the network.



Note: after changing the LAN IP address, the current browser interface will be disconnected. You need to reopen your browser and use the changed IP address to log in.

By default, the device is equivalent to a DHCP server, assigning IP, DNS, and network connections to computers connected to the device. The default IP address of the device is 192.168.1.1, which is the gateway address. The device allocates the IP address pool as shown below.

* tips: DHCP is the abbreviation of Dynamic Host Configuration Protocol, you can specify the IP address, subnet mask, default gateway. LAN client can automatically obtain IP address.

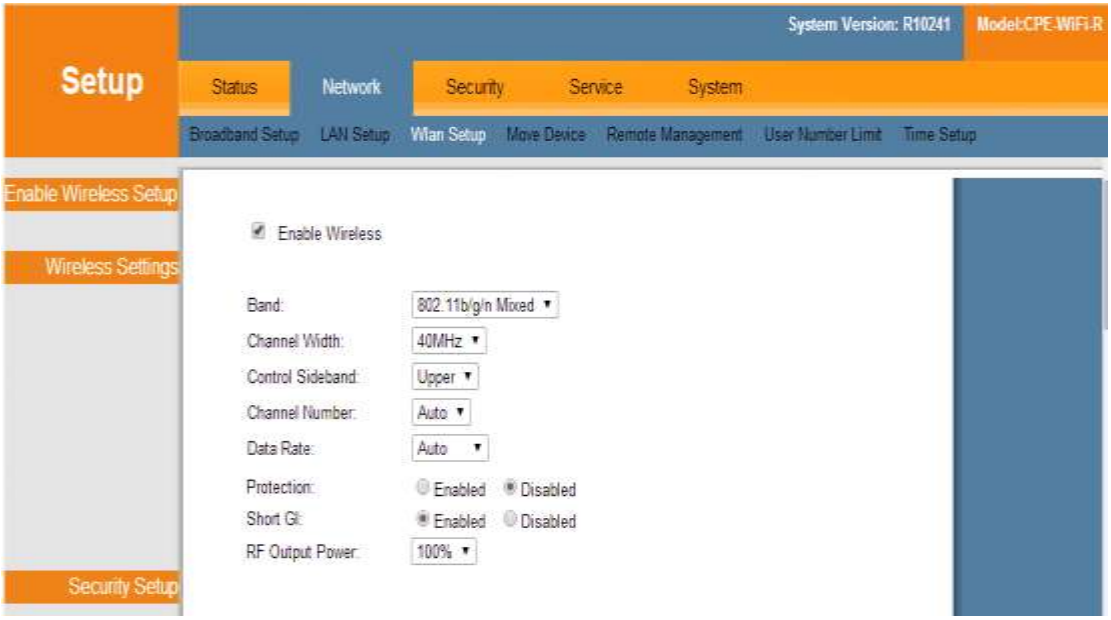


1. DHCP Enable: You can select the "Enable / Disable" DHCP function.
The IP address of the DHCP server is assigned to the requesting client, and the host should be within that segment.
2.the rental time: you can set the clients that DHCP allows to assign IP addresses during the time period. Enabling DHCP server to better allocate IP addresses by setting a proper time to ensure non repetition.

For example, setting the rental time to 1 hour, the DHCP server will recycle the IP address every 1 hour.
3.DNS: DNS service is used to resolve the address. If IPS requires a specific server, fill in the address of a specific ISP in DNS.

6.3 Wireless settings

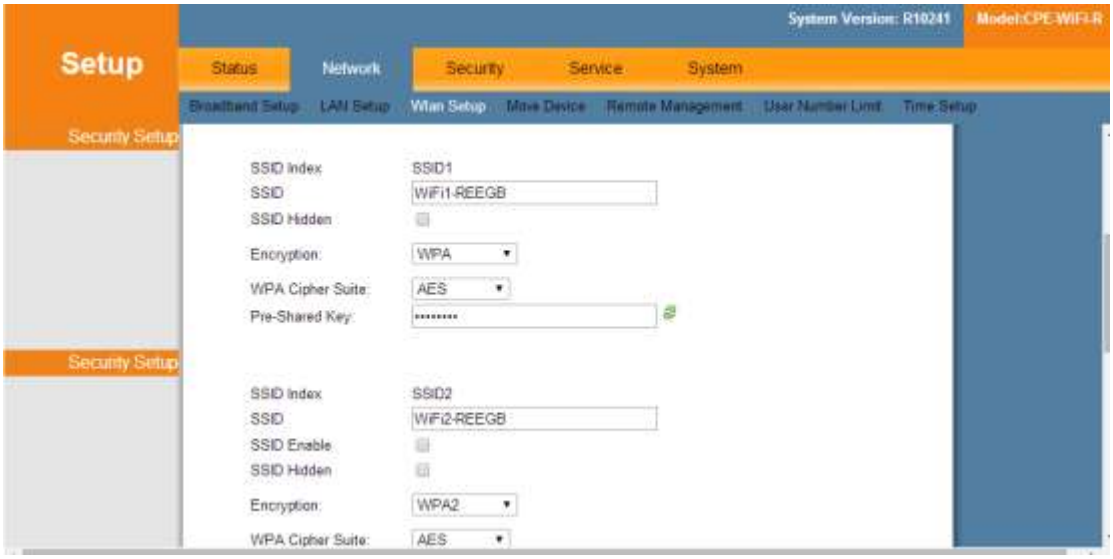
Wireless settings include the basic configuration and the SSID configuration
Basic configuration is as follows.



Label	Description
Enable Wireless	Enable or disable Wireless
Band	Select a bandwidth in the list
Channel	Select a channel bandwidth in the list
40M Signal side band selection	You can choose a higher or lower sideband
Channel	Select a suitable channel in the list, the default is automatic
Data Rate	Select a suitable rate in the list, the default is automatic
Protection	Enable or disable Protection
Short GI	Enable or disable Short GI
RF Output Power	Transmit power range of 15% ~ 100%, and the default is 10%. 100% is the maximum power

SSID configuration is as follows.

You can configure 4 SSID, open the corresponding SSID, and modify it.

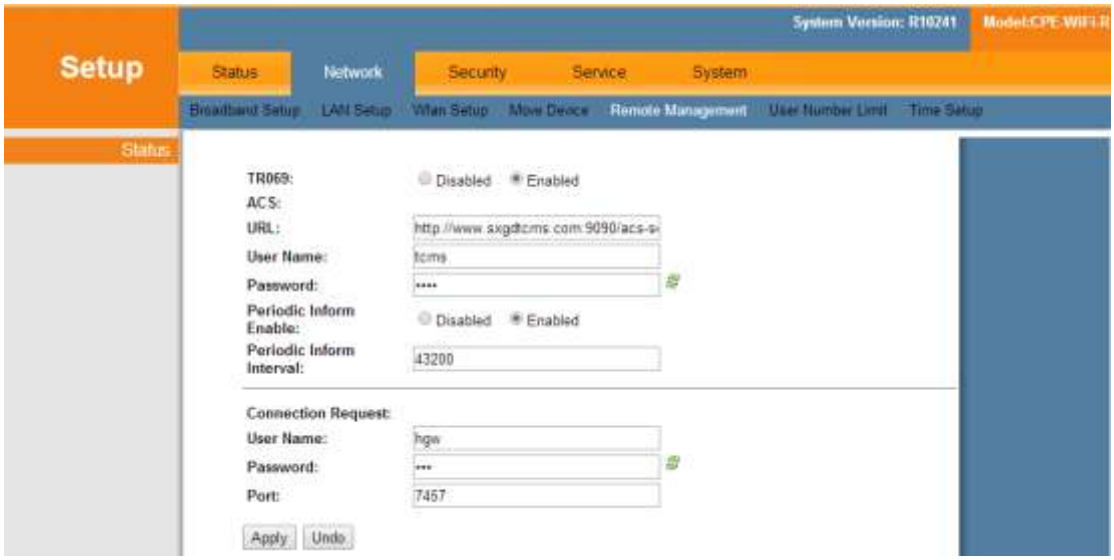


Label	Description
SSID	SSID is used to identify the identification of wireless services
SSID Hidden	After selecting SSID Hidden, the corresponding WiFi cannot be searched through the WiFi query
encryption	You can choose encryption methods, such as NONE, WEP, WPA-PSK, WPA2 - PSK, and Mixed WPA2/WPA - PSK, and if you choose one, you need to configure authentication methods and keys.

6.4 Move Device

Click <Move Device> button to move the device.

6.5 Remote Management



Label	Description
TR069	Enable or Disable TR069
URL	ACS Sever address
Username	ACS Sever username
Password	AC Sever password
Periodic Inform Enable	Enable or disable periodic inform
Periodic Inform Interval	Set the periodic inform interval
Username	Local username
Password	Local password
Port	Set the port number of the connection

6.6 User Number Limit

Enable or Disable the user number limit and configure the maximum number of users allowed.

6.7 Time Setup

Set the time of the device, you can manually set the time or synchronize the network time.

7 Security

Security includes DoS prevention, URL filtering, IP filtering, and MAC filtering.

7.1 Preventing DoS attacks

Under the Basic Settings menu, enable or disable DoS protection and set various protections.

7.2 URL Filtering、IP Filtering、MAC Filtering

In these options, you can filter URL, IP, and MAC.

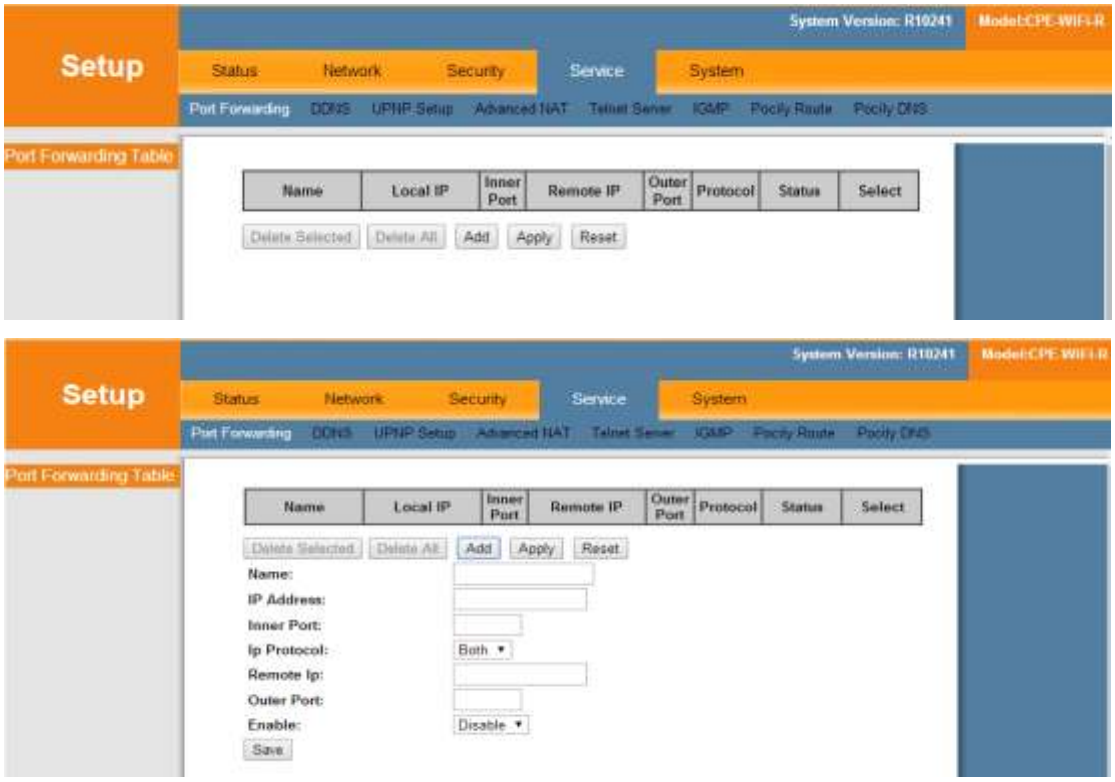
The filter is closed by default, and if you need to enable it, tick in front of the corresponding pattern and click <Apply>.

8 Service

Services include port forwarding, dynamic domain name service, UPNP setup, advanced NAT, Telnet server, IGMP, policy route, and policy DNS.

8.1 Port Forwarding

In the basic configuration interface, you can click on the add port to forward the link, and then configure the corresponding option.



Label	Description
Name	The name of the link
IP Address	The IP to map
Inner Port	The port to map
IP protocol	Select the corresponding transport protocol TCP, UDP
Remote IP	The IP to be mapped to
Outer port	The port to be mapped to
Enable	Enable or Disable the link

8.2 DDNS

In the DDNS interface, you can tick in the front and click <Apply> to enable it.

Label	Description
Service Provider	Choose service provider
Domain Name	Fill in the domain name you want to use
Username	Username
Password	Password

8.3 UPNP Setup

In the UPNP Setup interface, you can tick in the front and click <Apply> to enable it.

8.4 Advanced NAT

In the advanced NAT page, you can enable some special links, to enable the corresponding link just tick in the front, and then click <Apply>.

8.5 Telnet Sever

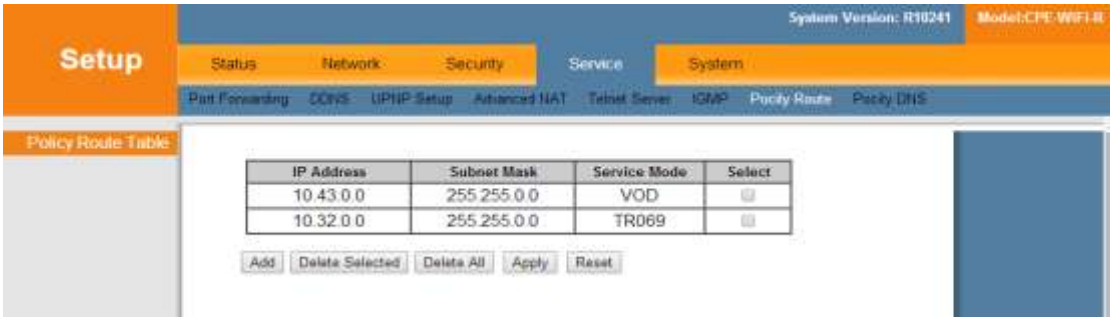
On the Telnet server page, you can tick on the back and click <Apply> to enable the Telnet server.

8.6 IGMP

On the IGMP page, you can enable the IGMP agent or IGMP Snooping, open only need to tick in the front and click <Apply>.

8.7 Pocily Route

On the Policy route page, you can click <Add>, <Delete> to Modify Policy route.



8.7 Pocily DNS

On the Policy DNS page, you can click <Add>, <Delete> to Modify Policy DNS.

9 System

System includes System Log, Save/Upgrade Setup, Admin Account Management, Diagnosis, Manual Inform and language.

9.1 System Log

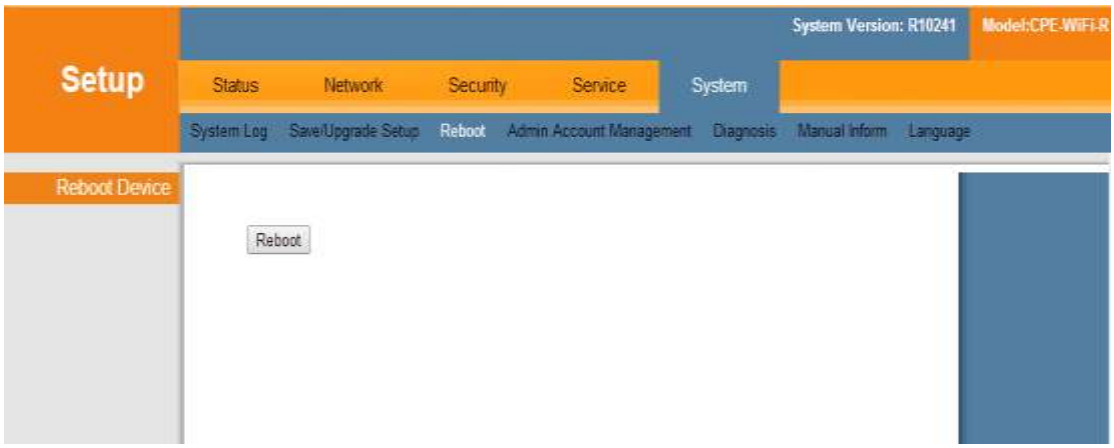
In the system log page, you can choose whether to open the system log, open all or part of it, and open only need to tick in the front.

9.2 Save/Upgrade

Save / Upgrade page consists of three parts, the first part is the backup and recovery of the configuration, in which you can back up and restore the device configuration and restore the device factory settings. The second part can automatically detect whether new software can be upgraded. The third part can update the software manually.

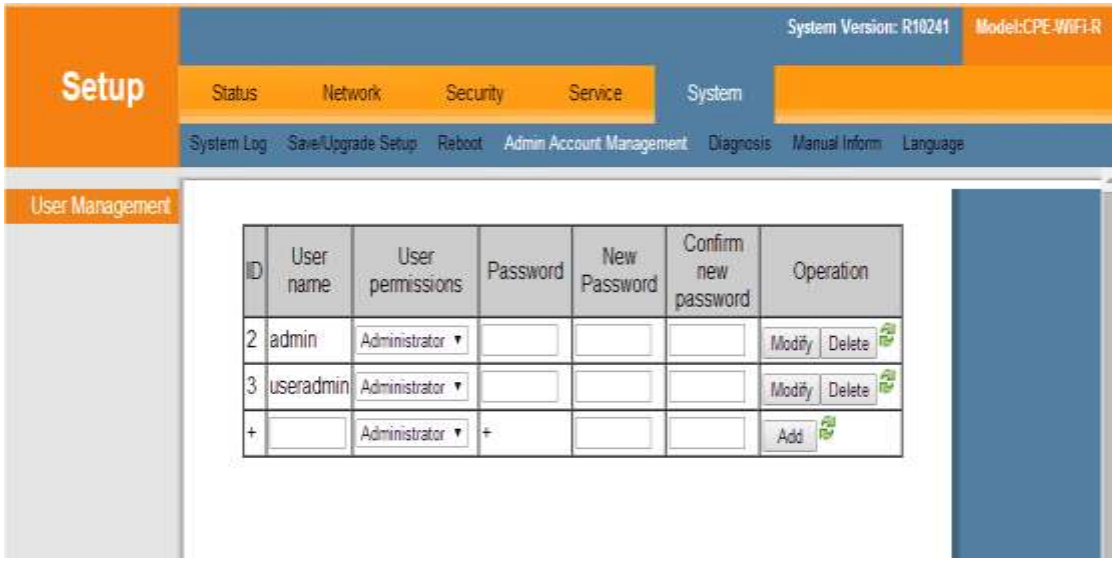
9.3 Reboot

Click <reboot> button to restart the current terminal device, as shown below.



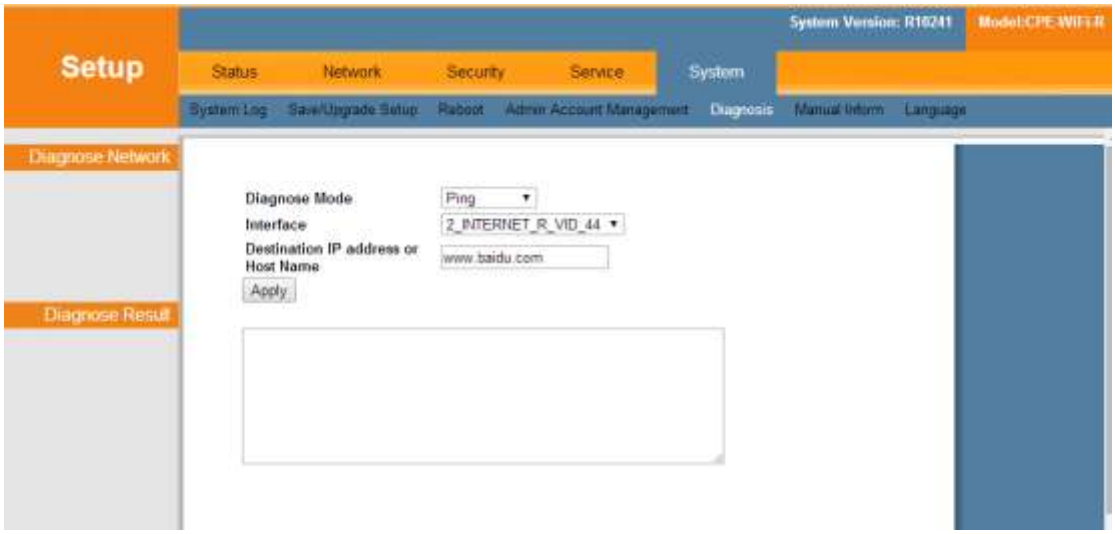
9.4 Admin Account Management

Account management defaults to 2 users: the administrator and the user, click on the corresponding <modify> button, make the relevant changes on the user name, password and permissions. To add a related user, click <Add> button and set the user's level, user name, and password. It is as shown below.



9.5 Diagnosis

On the diagnostic page, you can use Ping or Traceroute as a method to select the corresponding WAN interface and fill in the destination IP address or hostname to diagnose.



9.6 Manual Inform

Manually Inform the page, click <manual inform> button, you can manually inform device configure information.

9.6 Language

Click the language option on the language page to manually switch the device language, Chinese or English ,it is as shown below.