



Wi-Fi EOC Slave Quick Start Guide

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1. Hardware Setup

Getting to know your EOC slave

The Wi-Fi EOC slave provides you with an easy and secure way to set up a wireless home network with fast access to the Internet over a coaxial cable network. The EOC slave has a built-in EOC slave to work with the EOC master of the Internet service providers. With your EOC slave, you can block unsafe Internet content and applications, and protects the devices (computers, gaming consoles, and so on) that you connect to your home network.

This chapter explains how to set up your hardware. If you have already set up your EOC slave, you can skip this chapter. Chapter 2 explains how to set up.

This chapter contains the following sections:

- Unpack Your EOC slave
- Hardware Features
- Position Your EOC slave
- Cable Your EOC slave

1.1 Unpack Your EOC slave

Open the box and remove the EOC slave, cables, Power adapter and installation guide.



EOC Slave



Router Ethernet cable



cable Power adapter

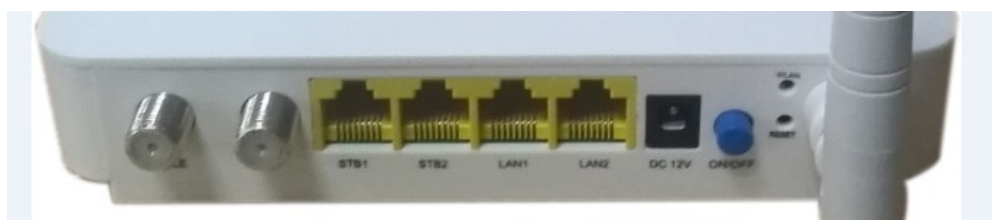
If any parts are incorrect, missing, or damaged, contact your On Networks dealer. Keep the carton and original packing materials in case you need to return the product for repair.

1.2 Hardware Features

Before you cable your EOC slave, take a moment to become familiar with the front, side, and back panels and the label. Pay particular attention to the LEDs on the front panel.

Back Panel

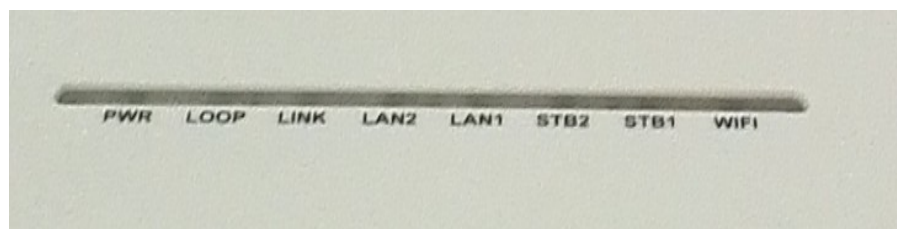
The back panel has the connections and button shown in the following figure.



Interface		Qty.	Description
Cable		1	Connect to uplink CATV network
TV		1	Connect to STB or TV by Cable
Ethernet	LAN	2	Ethernet LANn ports for connecting to PC, can work on Router Mode. WAN connection can get the IP address from upper-layer device.
	STB	2	Ethernet ports for connecting to PC, the user-side IP address is obtained through the upper-layer device.
Power Connector		1	Power connector
Power Button		1	Power On/Off
Reset		1	Reset button
WLAN		1	Wifi button

Front Panel

The router front panel has the status LEDs shown in the following figure.



LED	Description
POWER	Solid green. Power is supplied to the EOC slave.
SYS	Solid green. System has started. Blinking green. The EOC slave is starting up.
LOOP	If the loop happened the LOOP led will on
LINK	<ul style="list-style-type: none"> •Solid green. The CABLE port has detected a link with the EOC Master by coaxial cable network. •Blinking green. Data is being transmitted or received. •Off. The unit is off or there is no link established.
LAN1-2	<ul style="list-style-type: none"> •Solid green. The LAN port has detected an Ethernet link with a device such as a computer. •Blinking green. Data is being transmitted or received. •Off. No link is detected on this port.
STB1-2	<ul style="list-style-type: none"> •Solid green. The STB port has detected an Ethernet link with a device such as a computer. •Blinking green. Data is being transmitted or received.

	•Off. No link is detected on this port.
WIFI	Blinking green. Data is being transmitted or received over the wireless link. OFF. No wireless PC connected.

1.3 Position Your EOC Slave

The slave lets you access your network from virtually anywhere within the operating range of your wireless network. However, the operating distance or range of your wireless connection can vary significantly depending on the physical placement of your slave. For example, the thickness and number of walls the wireless signal passes through can limit the range. For best results, place your router:

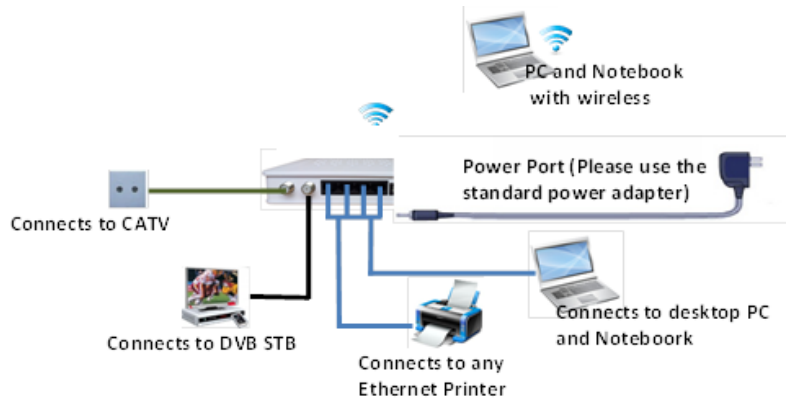
- Near the center of the area where your computers and other devices operate, and preferably within line of sight to your wireless devices.
- So it is accessible to an AC power outlet and near Ethernet cables for wired computers.
- In an elevated location such as a high shelf, keeping the number of walls and ceilings between the router and your other devices to a minimum.
- Away from electrical devices that are potential sources of interference. Equipment that might cause interference includes ceiling fans, home security systems, microwaves, computers, the base of a cordless phone, or a 2.4 GHz cordless phone.
- Away from any large metal surfaces, such as a solid metal door or aluminum studs. Large expanses of other materials such as glass, insulated walls, fish tanks, mirrors, brick, and concrete can also affect your wireless signal.

1.4 Cable Your EOC Slave

The installation guide that came in the box has a cabling diagram. This section walks you through how to cable your EOC slave with detailed illustrations.

To cable your EOC slave:

1. Please connect the LAN port of the slave to the network adapter of your computer with one cable.
2. Please connect your coaxial line provided by your ISP to the Cable port of your slave.
3. Please use the delivery-attached power adapter to the slave, and plug the power adapter into an outlet. Wait for the Power LED on the front panel to light. If no LEDs are lit, press the Power On/Off button on the rear panel of the slave.



2 Getting Start

2.1 Prepare for login the EOC slave web management

Before you login the EOC slave, you should confirm the connect between the CPE and your PC is normal.

Step 1 Configuring the IP address of your PC to 192.168.1.X (2~254) , subnet mask is 255.255.255.0 , gateway is 192.168.1.1.

Step 2 Ping IP address of the EOC slave (Default address is 192.168.1.1). If the PC can get right reply from Ping command, it is mean the connecting between the PC and CPE is normal.

【Figure 1】

```
C:\WINDOWS\system32\cmd.exe

C:\Documents and Settings\cdt>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=11ms TTL=64
Reply from 192.168.1.1: bytes=32 time=5ms TTL=64
Reply from 192.168.1.1: bytes=32 time=5ms TTL=64
Reply from 192.168.1.1: bytes=32 time=8ms TTL=64

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 5ms, Maximum = 11ms, Average = 7ms

C:\Documents and Settings\cdt>
```

2.2 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, **administrator user name and password are "adminisp" and "adminisp"**), and select your preferred language. Click Enter button and enter the WEB management interface.



The image shows a web browser window displaying a login page. The page has a light blue and white background with a blue border. At the top, the text "user Login" is displayed in a large, bold, blue font. Below this, there are three input fields: "Username" with a user icon and the text "adminisp", "Password" with a key icon and a masked password "*****", and "language" with a dropdown menu showing "English". To the right of these fields is a large blue button with the word "Enter" in white text. The overall layout is clean and professional.

Login to the WEB management interface

Note:

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

3 Know WEB Management Interface

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

3.1 WEB Management Interface Introduction



WEB management interface introduction

- 1) The sub-menu area
- 2) The main menu area
- 3) Display the content

3.2 Main Menu Introduction

Main Menu	Sub-Menu
Running	Device information. Network Status. Wireless Status. Configuration Wizard.
Network	Network Status. Static Routing. WAN Setting. LAN Setting. QoS.
Wireless	Wireless Status. Basic Setting. MAC Filter.
Security	Basic Setting. URL Filter. MAC Filter. IP Filter..
Application	ALG Setting. Dynamic DNS. UPnP. DMZ Setting. Port Forward. IGMP Setting.
System	System Log. Kernel Log. Log server. Device Reboot. System Upgrade. Restore Factory. Management. TR069 Management.
Diagnosis	Ping Test. Tracert Test

4 Running

Running screen includes Device information, Network Status, Wireless Status and Configuration Wizard.

4.1 Device information

Click Device information to display the following screen:



Product Information shows Product Model, Product Function, Hardware Version, Software Version and Compile Time.

4.2 Network Status

Click Network Status to display the following screen:



The page will show WAN connection status and LAN status.

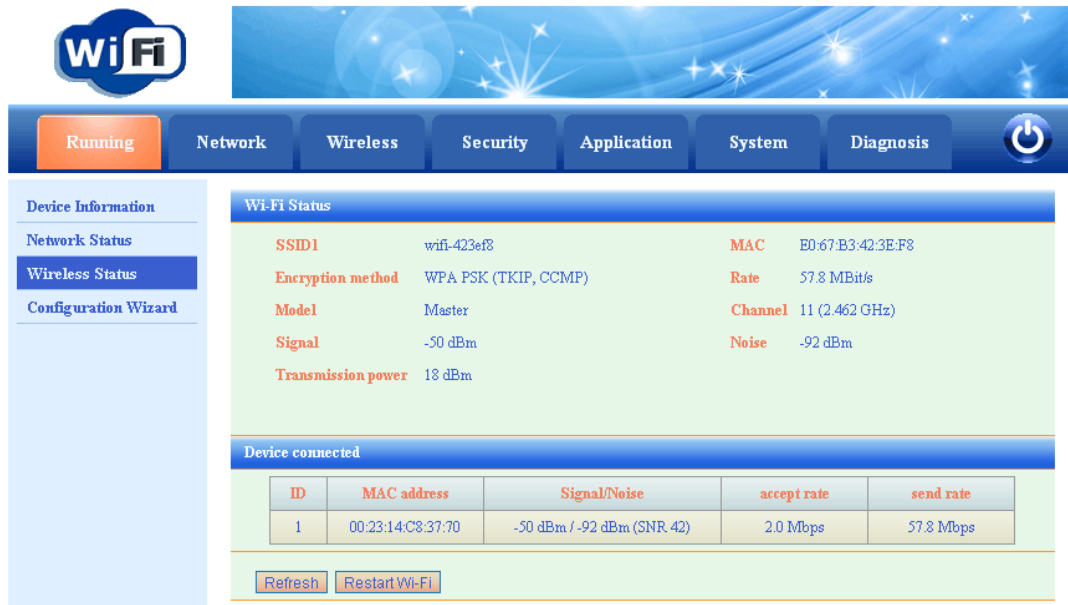
WAN Status shows current system WAN Connection Name, Connect Type, Connect Status, Default Gateway, IP Address that has been obtained, subnet Mask, preferred dns1,

LAN Status will show client ID, IP address, MAC Address and Hostname.

Note: Refresh button is for refresh the information of explore

4.3 Wireless Status

Click Wireless Status to display the following screen:



The screenshot shows the 'Wireless Status' page. The left sidebar has a menu with 'Device Information', 'Network Status', 'Wireless Status' (selected), and 'Configuration Wizard'. The main content area is titled 'Wi-Fi Status' and displays the following information:

SSID1	wifi-423ef8	MAC	E0:67:B3:42:3E:F8
Encryption method	WPA PSK (TKIP, CCMP)	Rate	57.8 MBit/s
Model	Master	Channel	11 (2.462 GHz)
Signal	-50 dBm	Noise	-92 dBm
Transmission power	18 dBm		

Below this is a 'Device connected' section with a table:

ID	MAC address	Signal/Noise	accept rate	send rate
1	00:23:14:C8:37:70	-50 dBm / -92 dBm (SNR 42)	2.0 Mbps	57.8 Mbps

At the bottom of the main content area, there are two buttons: 'Refresh' and 'Restart Wi-Fi'.

Wireless Status shows current Wi-Fi SSID, MAC, Signal, Transmission and so on.

4.4 Configuration Wizard

Click Configuration Wizard to display the following screen:



The screenshot shows the 'Configuration Wizard' page. The left sidebar has a menu with 'Device Information', 'Network Status', 'Wireless Status', and 'Configuration Wizard' (selected). The main content area is titled 'Please Select Wan Access Mode' and displays three radio button options:

- DHCP Mode
- Static Mode
- PPPoE Mode

At the bottom of the main content area, there is a 'Next' button.

The Configuration Wizard screen provide rapid configuration, you can choose in DHCP Mode, Static Mode and PPPoE Mode based on your network.

5 Network

Network screen includes Network status, Static Routing, WAN Setting, LAN Setting, Qos. Network status is same as in the Running-->Network Status

5.1 WAN Setting

You can setup WAN connection here. No

The WAN connection can work under the router or bridging mode. You can bind the LAN port or WIFI to the WAN connection.

5.1.1 WAN Connection Named Rule

The WAN Connection (Network Name) named rule as below:

Numerical order_ Keywords_ Bridge or Router mode_PVC/VLAN information

Content	Definition	Description
Numerical order	Sequence number	To identify the WAN Connection, following the next rule: based the sequence of the WAN Connection created, number in sequence increasing, no reuse the number have been used
Keywords	TR069	The connection is used for TR069
	INTERNET	The connection is used for INTERNET, not support the TR069
	TR069_INTERNET	The connection is used for INTERNET and the TR069
Bridge or Router	B	Bridge Mode
	R	Router Mode
VLAN	VID_Z	Z of VID_Z is the VLAN_ID value (for untag WAN Connection, value of Z is Null and do not appear in the connection's name)

For Example:

1_INTERNET_R_VID_2 (The WAN Connection is used for INTERNET, working mode is Router, VLAN ID is 2)

2_INTERNET_B_VID_ (The WAN Connection is used for INTERNET, working mode is

Bridge, VLAN ID is Null)

5.1.2 Default WAN Connection and Router Mode

There is a default WAN connection, 1_INTERNET_R_VID_ as below.
It works on Router Mode, DHCP, VLAN Disable.

The screenshot shows the 'WAN Set' configuration page. The 'Network Name' is 'Add New WAN'. The 'Mode' is '1_INTERNET_R_VID_'. 'Enable NAT' is checked. 'Connect Type' is 'DHCP'. 'MTU' is '1500'. 'Service Mode' is 'INTERNET'. 'VLAN Enable' is 'Disable'. 'VLAN ID' is empty with '(1,4093)' next to it. 'Bind Port' options for Port1, Port2, SSID1, SSID2, SSID3, and SSID4 are all unchecked.

LABEL	DESCRIPTION
Network Name	Name of the WAN connection, you can add a new WAN connection or edit a exist WAN connection
Mode	Bridge or Route mode.
NAT	Enable or disable NAT function
Connect Type	You can use DHCP, Static and PPPoE mode.
MTU	maximum transmission unit (MTU in bytes)
VLAN ID	If you enable VLAN then enter the VLAN ID here.
Service	TR069, INTERNET ,R069_INTERNET
VLAN Enable	Enable or disable the VLAN
VLAN ID	VLAN ID value
Port Binding	Binding the port with the WAN service (Default WAN Connection in Router Mode have bound with all ports in default. If you setup new Bridge Mode WAN Connection, you can bind the port and de-bind the port from the Router MODE WAN Connection.)

Router Mode: When connection type is router mode, you can obtain WAN side IP in three ways. The mode of obtaining an IP address can be set to DHCP, static, or PPPoE.

- 1) In DHCP mode, the IP address is dynamically obtained.
- 2) In static mode, the IP address is set statically. You need to enter the IP address, subnet mask, IP addresses of the active and standby DNS servers, and default

gateway.

3) In PPPoE mode, you need to enter the user name and password.

Note: All the ports are bound with the default Router Mode WAN Connection. If you setup another Bridge Mode WAN connection, the port which you choose to bind with the bridge WAN connection will de-bind with the WAN connection. All the WAN connection in Router Mode shared the Bind Port (exception the port bind with Bridge Mode WAN Connection).

You need to select a Connect Type Setting in the WAN Connection configuration. You can choose the STATIC IP, DHCP and PPPoE for different network application. Below is the page as you choose the STATIC IP. You should configure the IP address, Mask, Gateway and DNS.

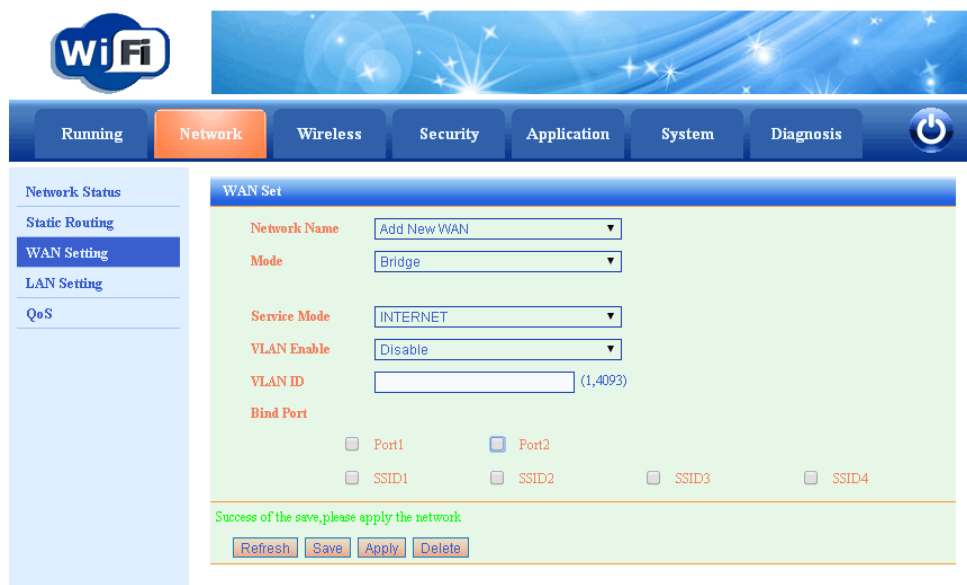
IP address	<input type="text" value="0.0.0.0"/>
Mask	<input type="text" value="0.0.0.0"/>
Gateway	<input type="text" value="0.0.0.0"/>
DNS	<input type="text" value="0.0.0.0"/>

Below is the page as you choose the PPPoE IP. You should configure the PPPoE user name and password here.

Connect Type	<input type="text" value="PPPoE"/>
Username	<input type="text"/>
Password	<input type="text"/>

If you choose DHCP, the router will obtain an IP address automatically from the up-layer device.

Bridge Mode: If you use bridge mode, L2 frame produced by WAN port and port binding to WAN is transparent transmission. Under this application condition, PC or other terminal after connecting will get IP address from up-layer device.



Click the Save button to save the configuration. And then click the Apply button to let the configuration come into operation.

5.1.3 Add An Bridge Mode WAN Connection

As the following figure configured, WAN 1 is the default WAN in Router Mode, and we set up WAN2 to Bridge Mode. Port1 is bound to the WAN2

The screenshot shows the 'WAN Set' configuration page. The 'Network' tab is active. The configuration includes:

- Network Name: Add New WAN
- Mode: Bridge
- Service Mode: INTERNET
- VLAN Enable: Disable
- VLAN ID: (1,4093)
- Bind Port: Port1, Port2, SSID1, SSID2, SSID3, SSID4

Buttons: Refresh, Save, Apply, Delete

Click SAVE-->Apply button , then we get the '2_INTERNET_B_VID_' Connection.

The screenshot shows the 'WAN Set' configuration page after the configuration has been applied. The 'Network Name' is now '2_INTERNET_B_VID_'. The other settings are the same as in the previous screenshot:

- Mode: Bridge
- Service Mode: INTERNET
- VLAN Enable: Disable
- VLAN ID: (1,4093)
- Bind Port: Port1, Port2, SSID1, SSID2, SSID3, SSID4

You can set up several WAN Connection to carry out different service to subscriber.

5.2 LAN Setting

The LAN Setup screen allows configuration of LAN IP services such as Dynamic Host Configuration Protocol (DHCP).

The device is shipped preconfigured in a router mode and to use private IP addresses on the LAN side and to act as a DHCP server. The router's default LAN IP configuration is:

- LAN IP address. 192.168.1.1
- Subnet mask. 255.255.255.0

These addresses are part of the designated private address range for use in private networks and are suitable for most applications. If your network requires a different IP addressing scheme, you can change these settings in the LAN Setup screen.

The image shows two screenshots of a web-based configuration interface. The top screenshot is titled "LAN Setting" and features a blue header bar. Below the header, there are three rows of configuration options: "Protocol" with a dropdown menu set to "Static IP", "IP address" with a text input field containing "192.168.1.1", and "Subnet mask" with a text input field containing "255.255.255.0". Below these fields are three buttons: "Refresh", "Save", and "Apply". The bottom screenshot is titled "DHCP Server" and also has a blue header bar. It contains several configuration options: "DHCP enable" with a dropdown menu set to "enable", "Lease time" with a text input field containing "2" and a dropdown menu set to "min", "IP address start" with a text input field containing "192.168.1.100", "IP address end" with a text input field containing "192.168.1.250", "DNS1" with an empty text input field, and "DNS2" with an empty text input field. At the bottom of this section are three buttons: "Refresh", "Save", and "Apply DHCP".

Note: If you change the LAN IP address of the router while connected through the browser, you are disconnected. You will have to open a new connection to the new IP address and log in again.

By default, the device acts as a DHCP server. It assigns IP, DNS server, and default gateway addresses to all computers connected to the LAN. The assigned default IP address of the device 192.168.1.1 is also the gateway address. The device assigns IP addresses to the attached computers from a pool of addresses specified in the LAN Setup screen

★*Tips: DHCP is the abbreviation of Dynamic Host Configuration Protocol which can assign IP address, Subnet Mask, Default Gateway of LAN Client on TCP/IP automatically.*

1. DHCP Server: The DHCP function will go into effect if you select “Enable” as the figure beside.

2. IP Pool Starting Address: The starting IP address which DHCP Server automatically starts.

3. IP Pool Ending Address: The ending IP address which DHCP Server automatically ends.

The IP address that DHCP Server assigns to the requested client should be within the IP Pool. e.g., when you configure IP address pool from 10 to 30, the IP Address which can be obtained by the clients would be between 10 and 30

4. Lease Time: You can set the time period during which the DHCP allows the assigned IP addresses to be used by the clients.

By setting a suitable lease time, you would enable the DHCP to take better advantage of the IP addresses which are not used again.

For example, you can set the lease time as one hour, and then the DHCP server would take back the IP addresses per an hour.

5. DNS: The DNS server is used to look up site addresses based on their names. If you know that your ISP requires specific servers, select this option. Enter the IP address of your ISP’s DNS server. If a secondary DNS server address is available, enter it in DNS2 also.

6 Wireless

The Wireless Settings screen lets you view or configure the wireless network setup.

There are Wireless Status, Basic Setting and MAC Filter su-menu.

6.1 Base Setting

In Basic Setting, you can enable or disable WIFI, and set wireless channel and work model etc.

Basic Set Area

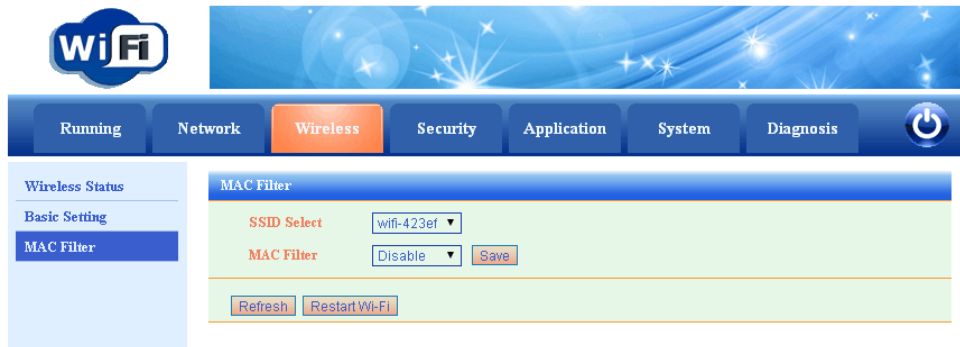
LABEL	DESCRIPTION
WIFI	Enable or disable WLAN
Channel Selection	Set the operating channel manually by selecting a channel from the Channel Selection list or use Auto Channel Select to have it automatically configured.
Model	The default 11NGHT40PLUS in Mode setting, and you can also manually change it into other modes.
Transmitting power	From 20% to 100%, 20% in step. 100% is maxim power.
Set SSID number	You can set up to 4 SSID. Default value is 1..

SSID1 Area

LABEL	DESCRIPTION
SSID	The SSID (Service Set IDentity) identifies the service set with which a wireless service is associated.
Hide SSID	Select this check box to hide the SSID in the outgoing beacon frame so a station cannot obtain the SSID through scanning using a site survey tool.
WMM Enable	Select this check box to enable the WMM protocol support
Encryption method	Select the authentication from None, WEP, WPA-PSK, WPA2 –PSK and Mixed WPA2/WPA –PSK. If you choose one encryption method, you need configure the authentication method and KEY.

6.2 MAC Filter

In this screen, you can choose the SSID Select and enable/disable MAC Filter.



The screenshot shows the WiFi configuration page with the 'Wireless' tab selected. The 'MAC Filter' section is active, displaying the following settings:

- SSID Select: wifi-423ef
- MAC Filter: Disable

Buttons for 'Refresh' and 'Restart Wi-Fi' are visible at the bottom of the section.

If you enable the MAC Filter, you can choose two rules, MAC White list and MAC Black list.



The screenshot shows the WiFi configuration page with the 'Wireless' tab selected. The 'MAC Filter' section is active, displaying the following settings:

- SSID Select: wifi-423ef
- MAC Filter: MAC Whit

The 'MAC address table' section contains a table with the following structure:

ID	MAC	Operation
+	<input type="text"/>	<input type="button" value="Add"/>

Buttons for 'Refresh' and 'Restart Wi-Fi' are visible at the bottom of the section.

In the MAC address table, you can add the corresponding MAC address.



The screenshot shows the WiFi configuration page with the 'Wireless' tab selected. The 'MAC Filter' section is active, displaying the following settings:

- SSID Select: wifi-423ef
- MAC Filter: MAC Blac

The 'MAC address table' section contains a table with the following structure:

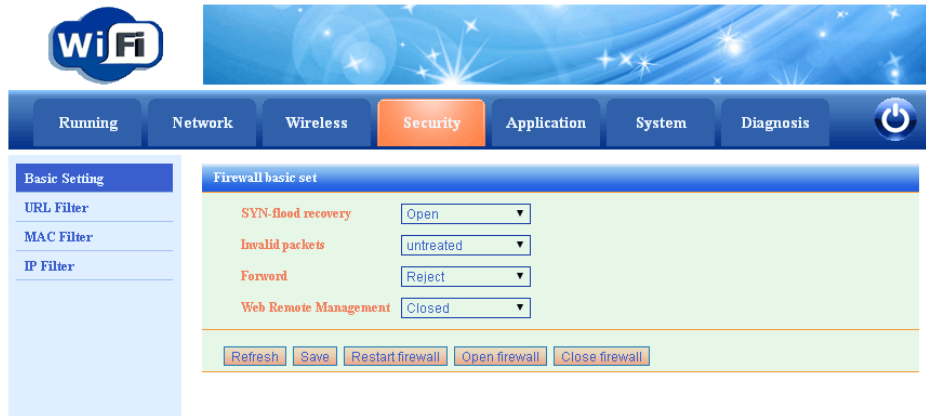
ID	MAC	Operation
+	e0:67:b3:11:22:33	<input type="button" value="Add"/>

Buttons for 'Refresh' and 'Restart Wi-Fi' are visible at the bottom of the section.

7 Security

7.1 Basic setting

In Basic Setting screen, you can set relevant parameters, such as SYN-flood recovery, Invalid packets, Forward, Web Remote Management. Click save button to add them. As displayed below.



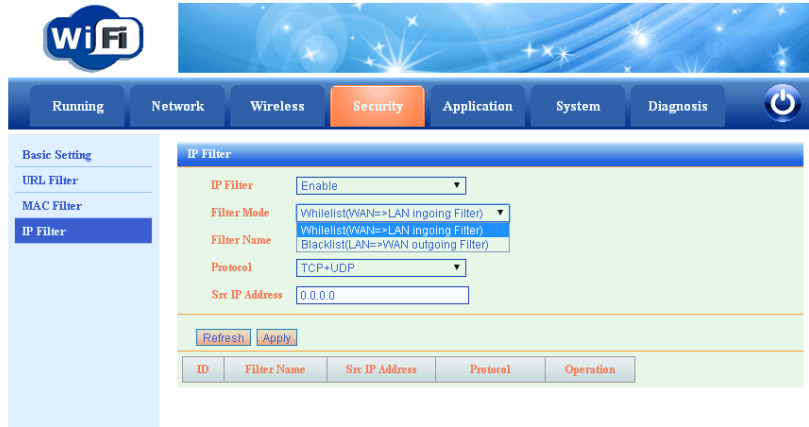
7.2 URL Filter

In URL Filter screen, Provide URL Filter table, Click add button to add corresponding rules.



7.3 IP Filter

In IP Filter screen, Provide enable/disable IP Filter, you can choose whitelist or blacklist, Click Apply button to add corresponding rules.



8 System

System Maintenance includes User Manager, System Update, Reboot, Reset Default, System Log;

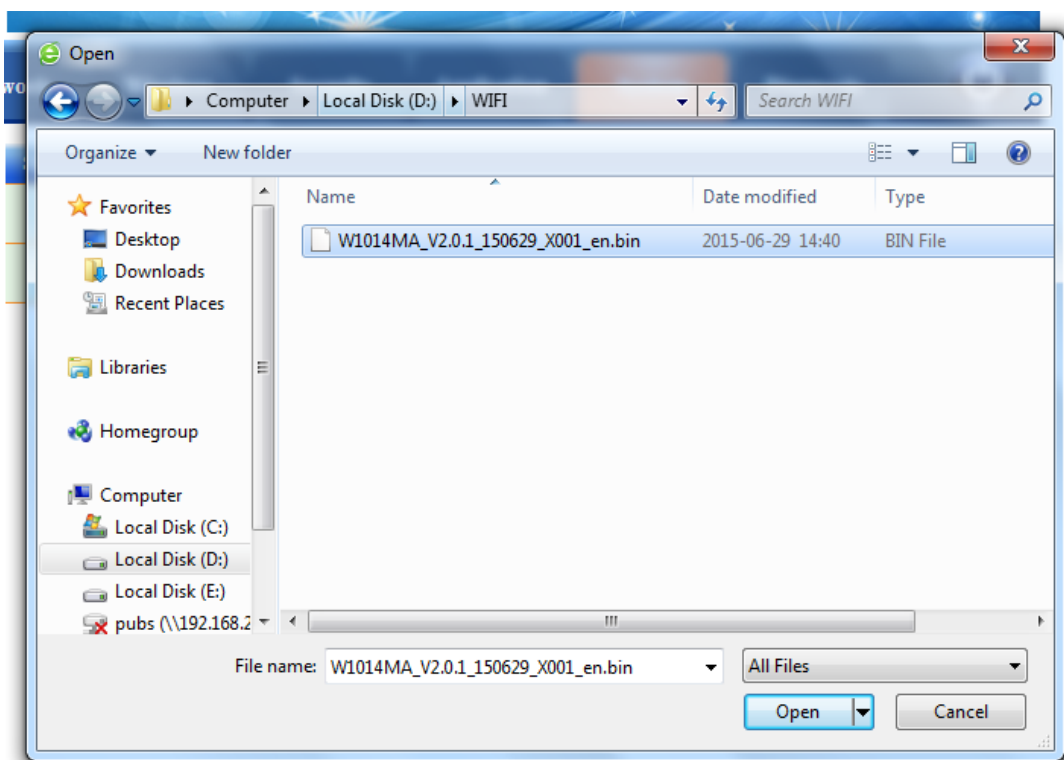
8.1 Management

User Manager Setting has two default user name. The first user name is administrator, user level is Administrator. The second user name is admin, user level is Guest. Click corresponding Modify button, these two user names and passwords can be made relevant changes. Click the following add button, you can add relevant users, and set added user level, user name, corresponding passwords. As displayed below.

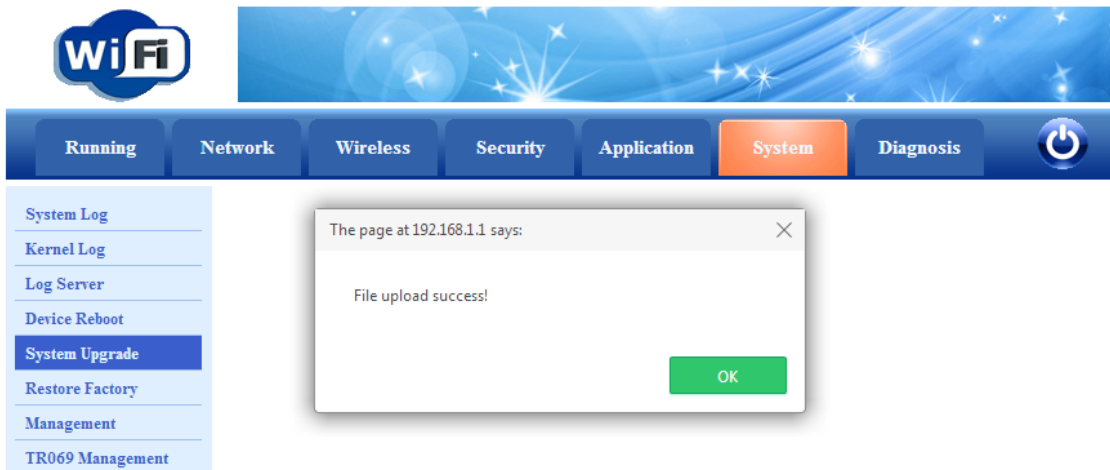
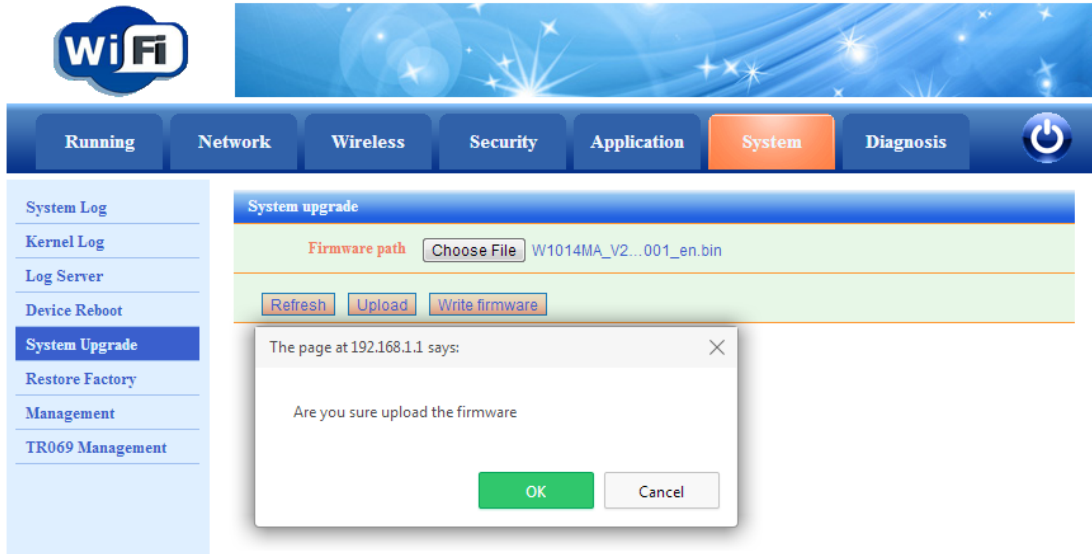


8.2 System Upgrade

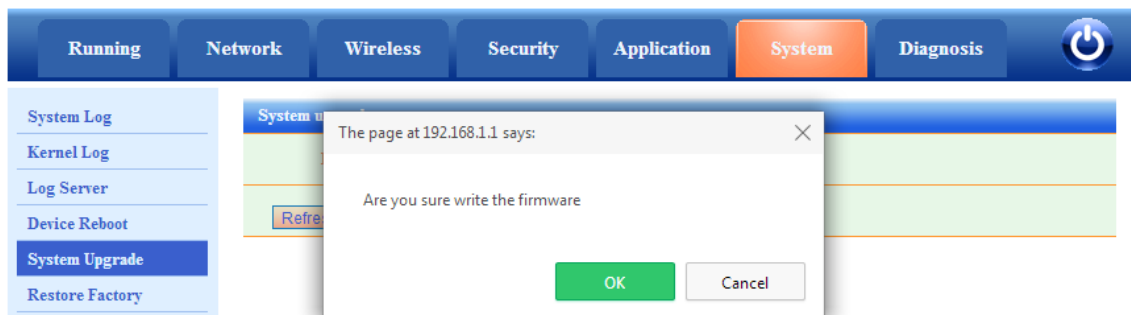
Device Software Upgrading can update device software version. Click 'Choose File' button, and choose corresponding upgrading file.



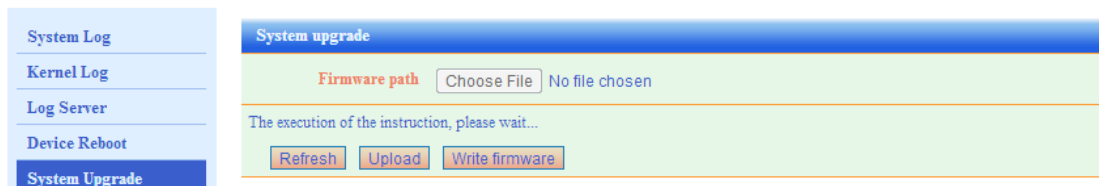
Click upload button, and then system will pop-up a windows to confirm uploading file.



After that ,you can click **Write firmware** to upgrade.

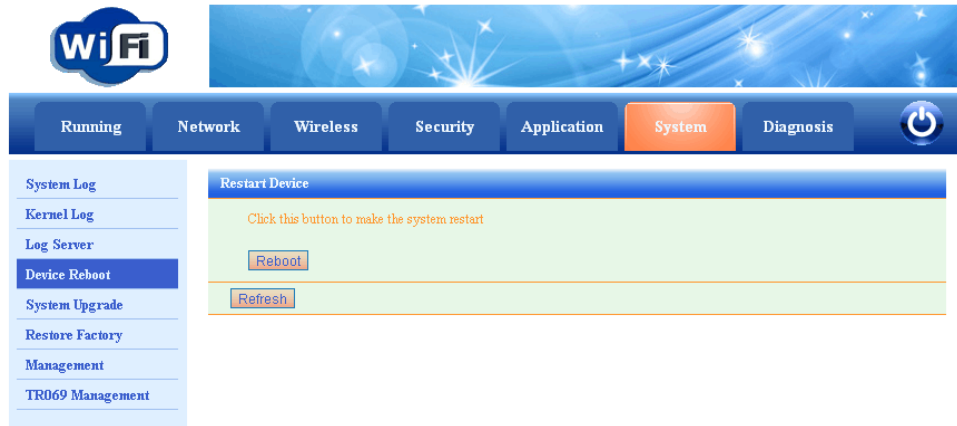


In upgrade.



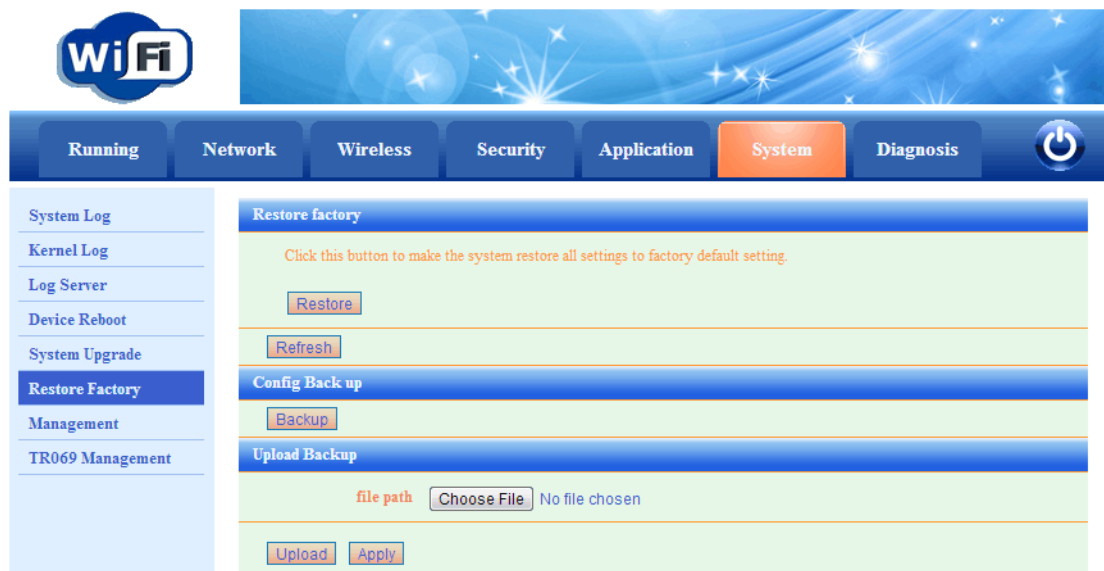
8.3 Device Reboot

Click Reboot button to reboot the current home gateway devices, as displayed below.



8.4 Restore Factory

Reset Default Setting, click submit button to restore the factory setting of the home gateway into default status. All parameters configurations made in system which includes WAN port parameter settings, wifi settings and other parameters will be cleared. As displayed below.



8.5 System Log

Log basic setting can be chosen to enable or disable log. Log pri includes Emergency, Alert, Critical, Error, Warning, Notice, Information, Debugging, a total of eight categories. It can be chosen into different log pri according to different operation situation. Click submit

button to finish relevant setting. Log events record relevant log events information that happened, it can clean relevant log information and export log information. As displayed below.

9. Specification

Item	Description
Power Consumer	<8W
Power Supply	12V/1A
Dimension	160×120×32 mm
Working Temperature	0℃～50℃
Storage Temperature	-40℃～85℃
Working humidity	10%～90% non-condensing
Storage humidity	10%～90% non-condensing

Appendix : hazardous and noxious substance

Parts	Hazardous Substance					
	Pb	Hg	Cd	Cr6+	PBB	PBDE
PCB	×	○	○	○	○	○
Plastic Parts	○	○	○	○	○	○
Metal Parts	○	○	○	○	○	○
Packing Material	○	○	○	○	○	○
Accessory	○	○	○	○	○	○

○: Means meet the requirement of SJ/T11363-2006
 ×: The toxic and harmful substances in the parts at least in a homogeneous material content is beyond the SJ/T11363-2006 standard of set limit to prescribed requirements