User Manual of Mesh Wireless Router





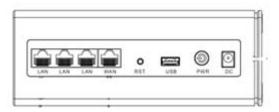
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Chapter 1.: Product Introduction

1.1 Interface



P1 Router Interface

1.2 LED Lights

LED Indicator Instruction

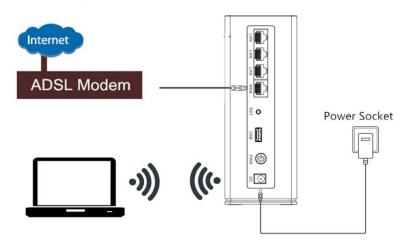
LED	Status	Description
System Indicator	Blue, Green	Power on: Blue; Internet work: Green
WAN	Green	Ethernet Connected
LAN	Green	Lan Connected
Internet	Blue/Green	Internet work, Green; Internet not work: Blue

1.3 Connecting Router with PC

User can connect the PC with wireless router by Wireless SSID and LAN cable:

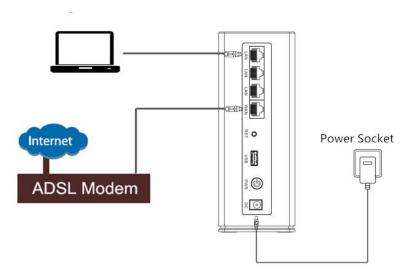
The diagram of wireless connection showed as follow:

Pls note: the default SSID is Wireless2.4G, SSID's password is 66666666



P3 Connect router with PC in WiFi

The diagram of LAN cable connection showed as follow:



P4 Connect router with PC in LAN Port

Chapter 2 Login the WEB

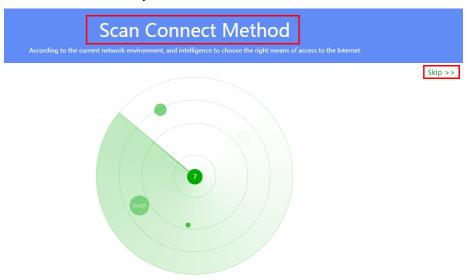
- 2.1 Power on this wireless router, connect PC with wireless router as chapter 1 connection.
- 2.2 Click Internet Explorer and input 192.168.188.253 on the address bar, then press Enter, following experience page will pop up.



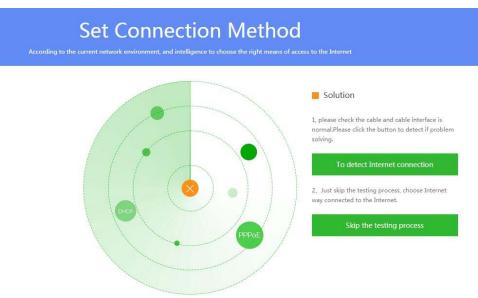
Click Experience to go on, the router will pop up a window ask for select router mode, it support Gateway mode and Subnode Mode(Mesh Mode)



When choose Gateway mode, it will scan the Internet connected method at first!



If scan the internet fail, will ask user to detect internet connection or skip this testing process.



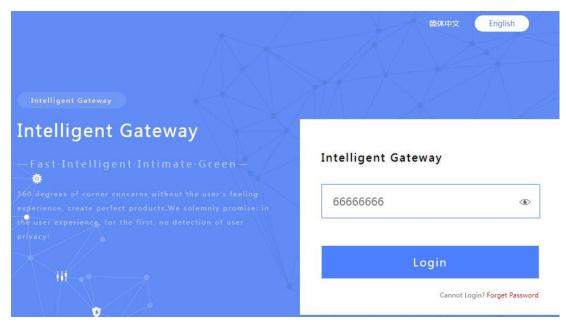
If skip the testing process, following internet connection picture will be showed:



Click Next to continue the WiFi setting:



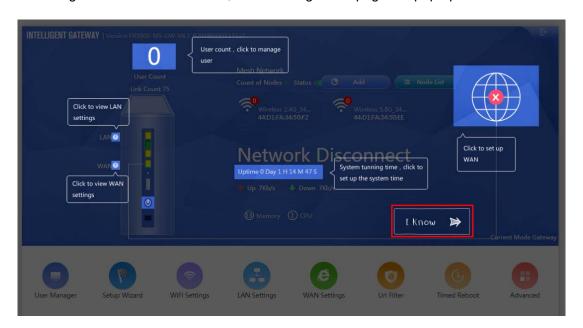
Apply to finish, a login page will pop up, input Device Password: **66666666** in **password**, then click Login to Enter.



P 5 Login

Chapter 3 WEB GUI Configure

When login this broad band router, the following home page will pop up as follow:



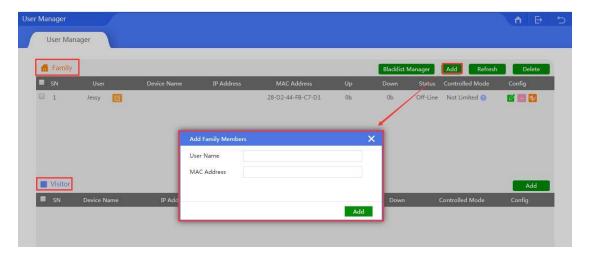
P6 Home page

Click I know to continue:

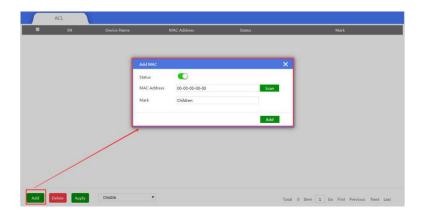


Let's show how to configure User Manager, Setup Wizard, WiFi Setting, LAN Setting, WAN Setting, Url Filter, Timed Reboot, Advanced functions, to make users with more understanding in this product.

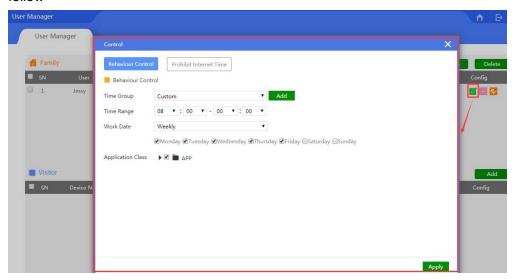
3. 1. User Manager



In user manager, can manage the network behavior of family members and visitors. **Add:** Add the MAC which will be managed, configuration showed in above picture. **Blacklist Manager:** Mean add the MAC address into black name, prohibit it Ethernet behavior, configuration showed as following picture;

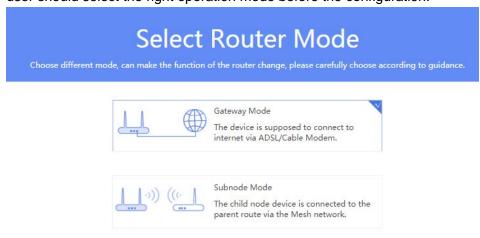


Config: To controller the Ethernet behavior or Ethernet time, configuration showed as follow



3. 2. Setup Wizard

There are three operation mode in this router: Gateway, WiFi Repeater and AP Mode, user should select the right operation mode before the configuration.



3.2.1 Gateway Mode

The device is supposed to connect to internet via ADSL/Cable Modem; For this part, pls check more information from Chapter 2.

3.2.2 Subnode Mode

In subnode mode, user can extend the exist wireless signal to more Wi-Fi range by wireless connection, if one of subnode breakdown, other subnodes will work fine still.

Before go to this mode, make sure have 2PCS mesh wireless router on hand.

A. Set 1PC mesh wireless router as Gateway mode;

Pls note: different LED color mean different status, pls refer to following table.





LED	Power On	Internet Work	Internet not	Mesh	Mesh
Light			work	Connecting	Connected
Gateway	Blue Color,	Green Color,		Green color	Blue Color,
Mode	Flash	Flash		and blue	Flash
Subnode	Blue Color,	Green Color,	Blue Color,	color twinkle	
Mode	Flash	Flash	Flash		

B. Set 1PC mesh wireless router in Subnode Mode.

Click Subnode mode, device will reboot at first, confirm the reboot and waiting for the restart.

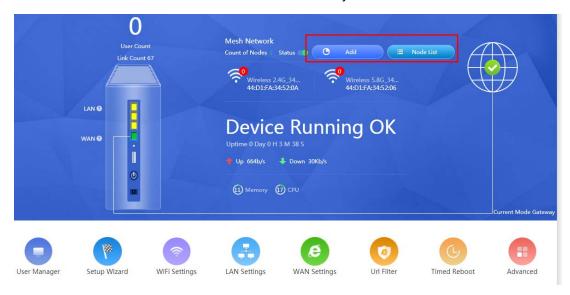
C. After reboot, input 66666666 to login this wireless router again, which will show the working status of subnode mode as follow:



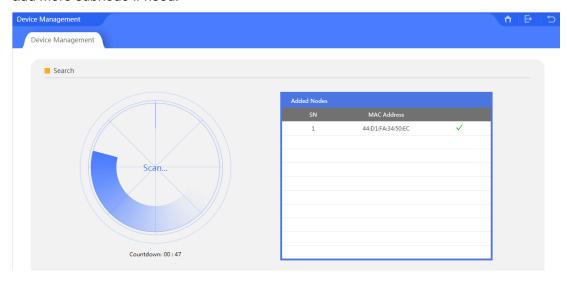
In the above picture, we can setup the operation mode, upgrade device firmware, reboot this device and reset this device, modify the login password.

D. Pls press the reset button 1 second of mesh wireless router with gateway mode, it will search and connect with the mesh wireless router with subnode mode. When connecting, the LED light will twinkle in green and blue color. When connected, LED light flash in blue color

When this two mesh wireless router connected, when login 192.168.188.253 IP address, it will access into the mesh wireless router in Gateway mode.



If need to add more subnode, can configure it from above home page. It will scan and add more subnode if need.



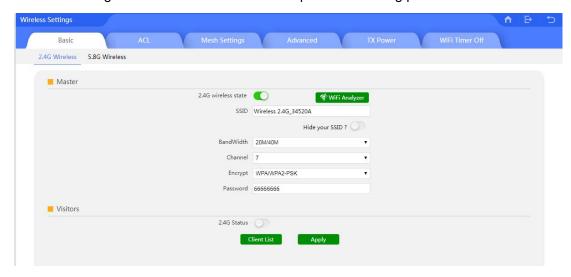
3.3 WiFi Settings

This including basic wireless setting, advanced wireless setting, TX Power and Wifi timer off.

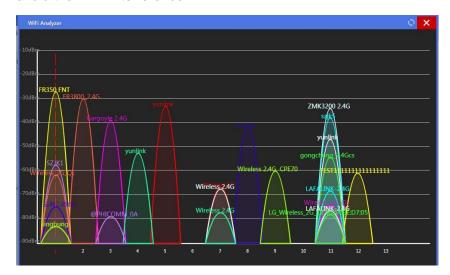
3.3.1 Basic

In basic wireless settings, including master and visitors network.

User can configure the data based on their request in following picture:

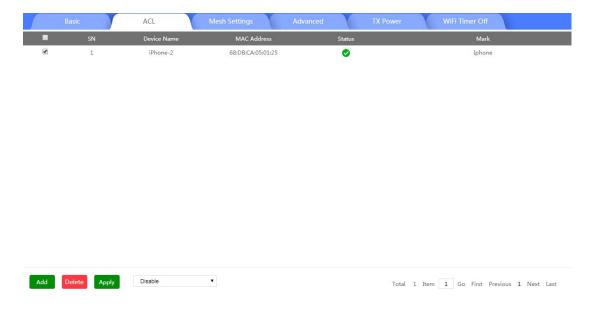


There is WiFi analyzer tool in this router, which can help user to choose the best channel, avoid the WiFi Interference.



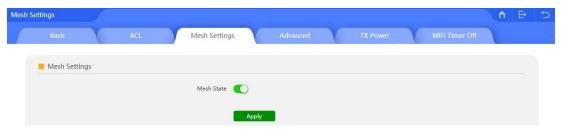
3.3.2 ACL

This is MAC filter, to control the user access, can add/delete the user's MAC address based on request:



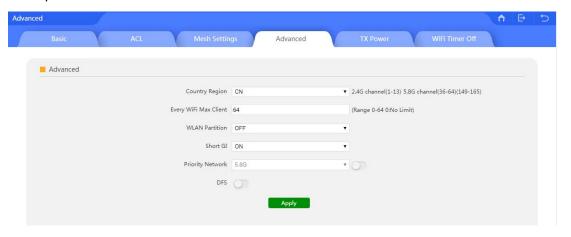
3.3.3 Mesh Settings

Enable and Disable the Mesh function



3.3.4 Advanced

In this part, user can set the right country code, client count, coverage threshold based on request:



3.3.5 TX Power

In this part, user can adjust the router's TX power to control the wireless signal WiFi range.



3.3.6 WiFi Timer Off

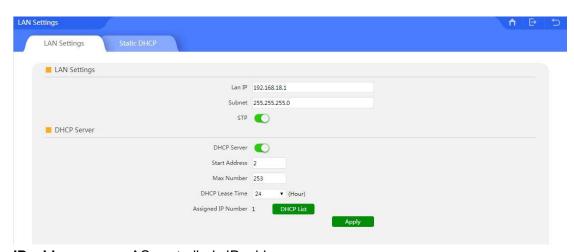
In this part, user can enable/disable wireless signal in central time to save the energy.



3.4 LAN Settings

This including LAN setting and Static DHCP

3.4.1 LAN Setting:



IP address: mean AC controller's IP address

Subnet Mask: to set the subnet of LAN

STP: Spanning Tree: Enable to show the assigned IP list in DHCP list; Disable mean will not show it.

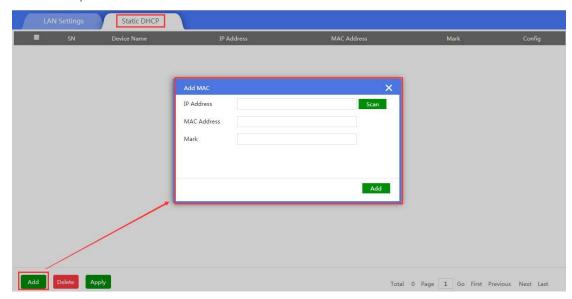
DHCP Server: Enable mean can assign IP address automatic.

Start Address: The started DHCP IP address **Max Number:** QTY of max DHCP address

DHCP Lease Time: the IP address lease time by DHCP server **Assigned IP Number:** QTY of IP address that DHCP assigned.

3.4.2 Static DHCP

Static DHCP: Banding certain users with certain IP address by scan MAC address and IP address:

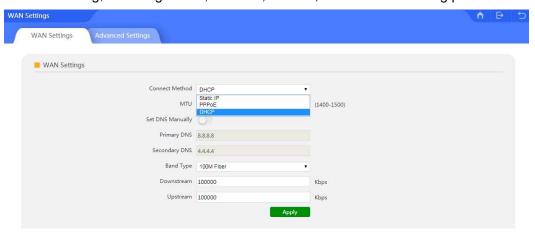


3.5. WAN

For the MR series product, the default operation mode is gateway.

3.5.1 WAN Setting:

In WAN Setting, including DHCP, Static IP, PPPoE, showed as following picture:



Static IP: Assign IP address and DNS information to get the Ethernet

PPPoE: Dial up the PPPoE number to get the Ethernet

DHCP: Get Ethernet from router's DHCP.

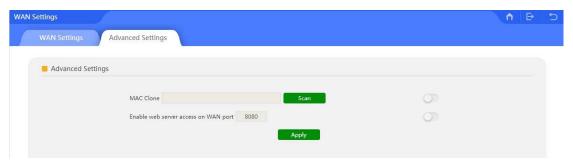
Downstream: Download bandwidth of Ethernet;

Upstream: Upload bandwidth of Ethernet.



3.5.2 Advanced Setting:

In Advanced Setting, mainly to show MAC Clone and Remote Management



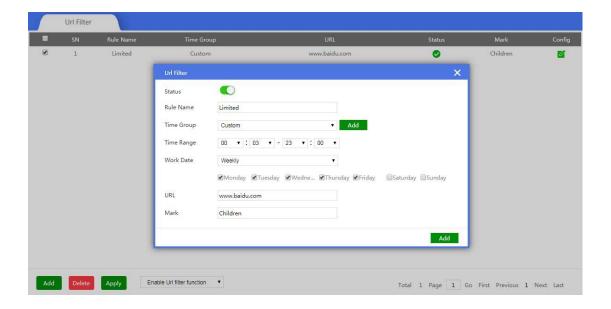
MAC Clone: When enable it, can scan the connected device's MAC address, choose the MAC address needed to be cloned, then apply; Or can input the indicated MAC to clone.

Port Remote Management

Enable the remote management port, manager can access into the WEB interface even in another Ethernet.

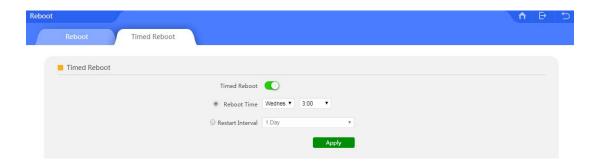
3.6. URL Filter

When enable URL filter, this will prohibit the users to visit some URL in certain time; When click URL filter, pls setup the URL rule, add the time group, configure the limited time range and input URL to finish.



3.7 Timed Reboot

Let's setup auto reboot at certain time



3.8 Advanced Settings

In this part, it including device setting, Common setting, Network setting and Security Setting.

3.8.1 Device:

In device, it including router configure, Reboot, Modify Password, Upgrade, Time, Log and USB storage

3.8.1.1 Configure

In this part, including the broadband router backup, restore, reset default.



Backup

Save the WLAN controller configuration file to your computer, can restore to the same configuration if restore this file.

Restore

Using the saved configuration file to recovery configuration

Restore default

Restore the factory default settings, please press this button

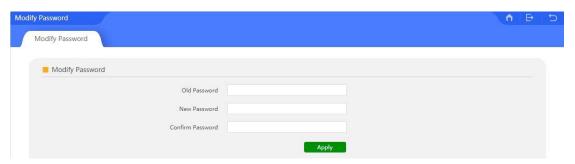
3.8.1.2 Reboot

In this part, mainly to reboot the broadband router now or reboot this broadband router in certain time



3.8.1.3 Modify Password

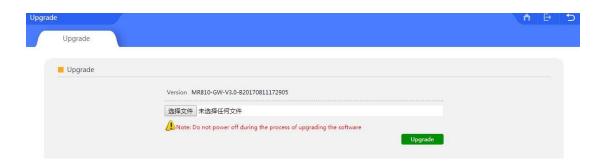
Modify the login password of this broadband router



3.8.1.4 Firmware Upgrade

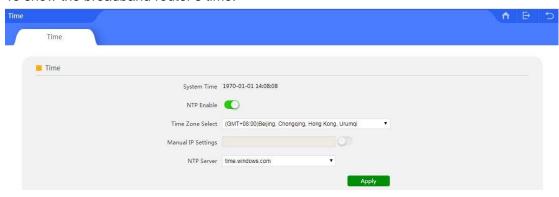
This feature allows the device firmware upgrade.

Noted:Upgrading software may cause system outage, In the process of upgrading the firmware, do not power off, otherwise it may damage the broadband router!



3.8.1.5 Device Time

To show the broadband router's time.



Sync with the host

Synchronization time with connected PC and router

NTP Eable

Enable or Disable NTP

NTP Server

Select the server time synchronization

Manual IP Setting

Setting user-defined IP address

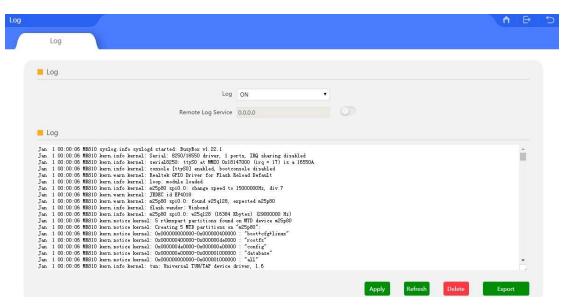
Time Zone Select

Setting the router's time zone

Manual IP Settings

Setup the manual IP address

3.8.1.6. Device Log



Device Log

Enable or Disable to show system log

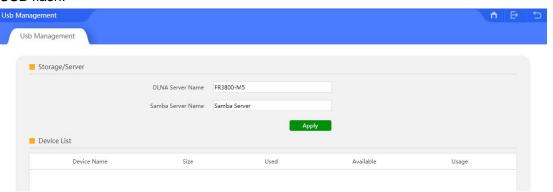
Remote Log Service

To decide whether send System log into some pointed remote server synchronously;

3.8.1.7. USB Storage

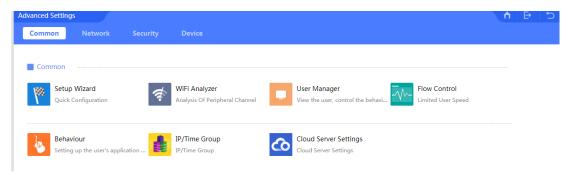
There is a USB port on the product, support the USB storage function, like DLNA or Samba.

Connect USB flash with router, Input the server name in following picture, then find out the server name from DLNA or Samba APP, mobile phone can share the documents from USB flash.



3.8.2 Common:

In common part, it including Setup Wizard, WiFi Analyzer, User Manager, Flow Control, Behaviour, IP/Time Group, Cloud Server Settings.



3.8.2.1 Setup Wizard

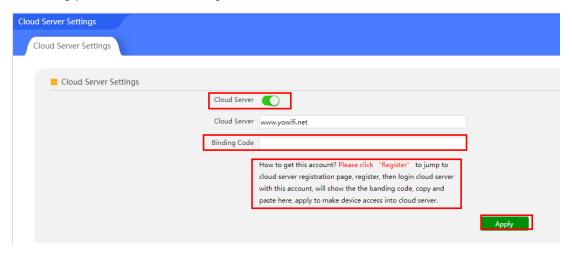
Pls refer to Chapter 3.2.

3.8.2.2 Cloud Server Settings

This wireless router can access into cloud server in gateway mode.

After access into cloud server, it can get WeChat alert in working status, can do remote management...

Following picture show how to login the cloud server:



3.8.2.3 WiFi Analyzer

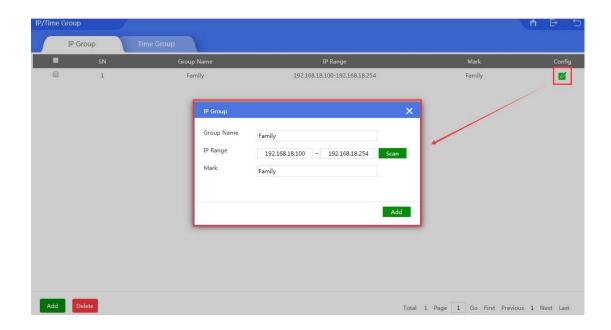
Pls refer to Chapter 3.3.1

3.8.2.4 User Manager

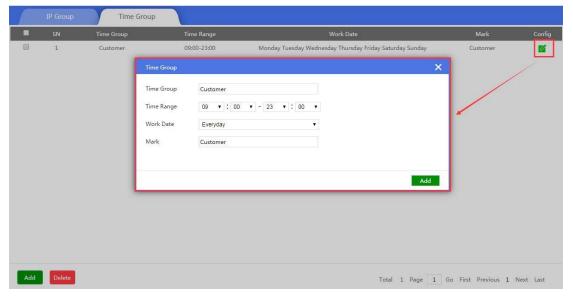
Pls refer to Chapter 3.1

3.8.2.5 IP/Time Group

IP Group: Can add the IP group if need based on following picture



Time Group: Can add time group based on requirement in following picture:



Application Class: Including

Instant messaging (QQ, Trade Manager, WeChat);

Network Download (Thunder, BT, Edonkey);

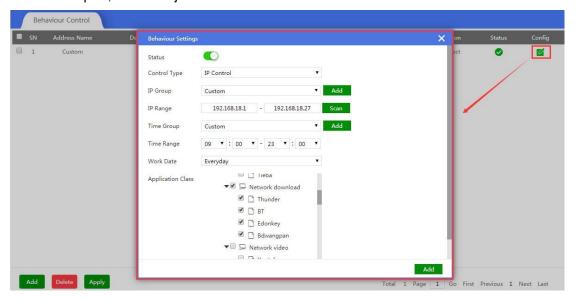
Network Video (Youtube, PPTV, Tencent Video, Ppstream, Youku, Sohu Video, Letv, RSTP, Douyu, Storm web version, funsh, YY)

Office (FTP, DNS, Http, NTP, NFS, DHCP, RTSP, IRC, Telnet, Stun, System Log, IPSEC, IGMP, SSH, TFTP, PPTP, Radius, OpenVPN)

Finance and other (ICMP, Flush, DZH, Eastmoney)

3.8.2.6 Behaviour

In behavior part, it allow/reject end users some behavior based on rules.

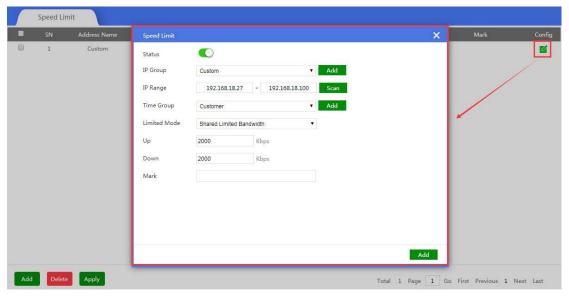


3.8.2.7 Flow Control

Flow Control mean Ethernet speed limit, to limit end users Ethernet speed;

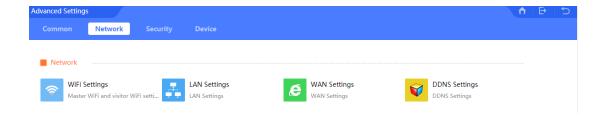
Should add IP group first, then choose the limited mode.

Pls note: Shared Mode: mean all end users in this IP group share the downstream and upstream Ethernet speed; Exclusive Mode mean each end users in this IP group get the downstream and upstream.



3.8.3 Network

In this part, including WiFi Settings, LAN Settings, WAN Settings and DDNS Settings.



3.8.3.1 WiFi Settings:

Pls refer to Chapter 3.3

3.8.3.2 LAN Settings:

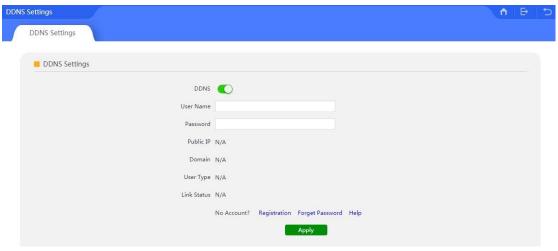
Pls refer to Chapter 3.4

3.8.3.3 WAN Settings:

Pls refer to Chapter 3.5

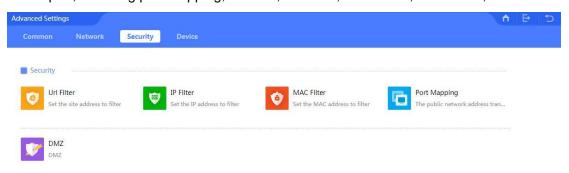
3.8.3.4 DDNS Settings:

DDNS or Dynamic DNS, is a method of automatically updating a name server in the Domain Name System(DNS), often in real time, with the active DDNS configuration of its configured hostname, address or other information.



3.8.4 Security

In this part, including port mapping, IP Filter, Url Filter, MAC Filter, MAC Filter, DMZ

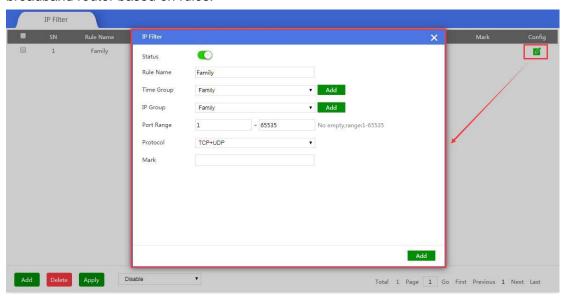


3.8.4.1 URL Filter

For this part, pls refer to chapter 3, 3.6 URL Filter part.

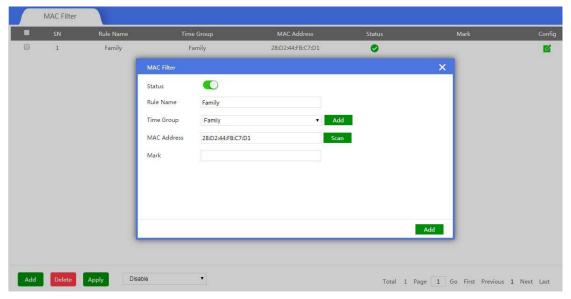
3.8.4.2 IP Filter

When enable this function, router will allow or limited this IP address to access into this broadband router based on rules.



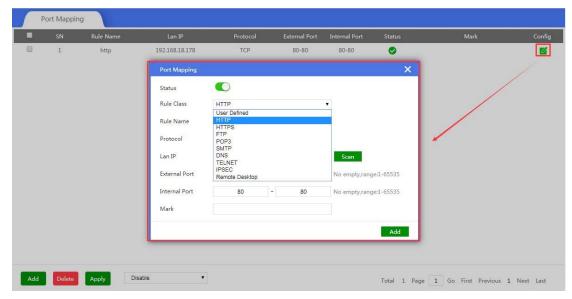
3.8.4.3 MAC Filter

When enable MAC filter, router will allow or prohibit this MAC address to access into this router based on rules.



3.8.4.4 Port Mapping

Port forwarding: called port forwarding also, it an application of network address translation(NAT) that redirects a communication request from one address and port number combination to another while the packets are traversing a network gateway, such as a router or firewall



Status: Enable/Disable

Rule Class: Including user defined, http, https, FTP, POP3, SMTP, DNS, telnet, IPSEC,

Remote Desktop

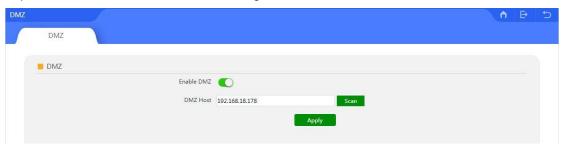
Rule name: Show the name of choosed rule class;

Protocol: Including TCP, UDP, TCP+UDP LAN IP: port mapping LAN IP address External Port: Set external port rule Internet Port: Set internal port rule

Mark: the Ethernet Line which will be applied in this rules

3.8.4.5 DMZ

DMZ or Demilitarized Zone is a physical or logical subnetwork that contains an exposes an organization's external-facing service to a usually larger and untrusted network, usually the Internet. The purpose of a DMZ is to add an additional layer of security to an organization's local area network, an external network node can access only what is exposed in the DMZ, while the rest of organization's network is firewall.



Warning:

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

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

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.

NOTE: This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter

RF Exposure Statement

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance of 200m the radiator your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter