





PR08 User Guide

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Visit www.flyingvoice.com for product documents and FAQ, or contact Flyingvoice by email at support@flyingvoice.com. We'll get you the help you need.

Declaration of Conformity

Part 15 FCC Rules

This device complies with Part 15 of the FCC Rules. Operation is subject to the following three conditions:

- This device may not cause harmful interference
- This device must accept any interference received, including interference that may cause undesired operation.
- The distance between user and products should be no less than 20cm

Note: This equipment has been tested and found to comply with the limits of 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 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: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate this equipment.

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

CE

Manufacturer: Flyingvoice Network Technology Co., Ltd.

Address: 1801-1802, Building 1, Chongwen Park, Nanshan Zhiyuan, Nanshan District, Shenzhen, China

Hereby, Flyingvoice Network Technology Co., Ltd. declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU

A copy of the declaration of conformity can be obtained with this user manual; this product is not restricted in the EU.

Safety warning and Attentions

If use adapter, adapter must be comply 2014/30/EU Directive.

Adapter Caution: Adapter shall be installed near the equipment and shall be easily accessible.

Do not store or use your product in temperatures higher than 50°C.

RF Exposure Statement

The distance between user and products should be no less than 20cm.

GNU GPL INFORMATION

Flyingvoice phone firmware contains third-party software under the GNU General Public License (GPL). Flyingvoice uses software under the specific terms of the GPL. Please refer to the GPL for the exact terms and conditions of the license.

The original GPL license, source code of components licensed under GPL and used in Flyingvoice products can be downloaded online:

https://www.flyingvoice.com/soft_GPL.aspx

Risk Warning Statement

This risk warning statement contains a summary of external network servers that FVUI will access under its factory settings in order to obtain necessary service support. If you want to prohibit these accesses based on security considerations, you can disable them through the WEB management page.

Number	Server Domain Name	Description	Factory Setting
1	https://prv3.flyingvoice.net:44	Flyingvoice Provision web management configuration server	Enable
2	prv3.flyingvoice.net:3450	Flyingvoice Provision web management stun server	Enable
3	https://prv4.flyingvoice.net	Flyingvoice Provision web management backup server	Enable
4	log3.flyingvoice.net:9005	Flyingvoice Provision web management log server	Disable
5	http://acs3.flyingvoice.net:808	Flyingvoice TR069 web management server	Disable
6	acs3.flyingvoice.net:3478	Flyingvoice TR069 web management server	Disable
7	pool.ntp.org/cn.pool.ntp.org	NTP server	Enable
8	https://rps.flyingvoice.net	Flyingvoice Provision redirect server	Enable

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About This Guide

Thank you for choosing Flyingvoice PR08, which is a highly integrated ATA gateway for POTS replacement solution, provides 8 FXS ports to support 8 external connections and easily connect to elevator emergency call panel, fire/burglar alarm panel, fax machines, ATM machines/POS terminals and so on. And the PR08 integrates 2 gigabit WAN ports that support PoE out and network failover, 1UPSport, and 2 type-C USB ports that support external power banks to achieve 24h power outage running and ensure you an uninterrupted connection with calls and network. You can choose to use the PR08 with Flyingvoice LM150 or third-party router to form a "4G/5G+POTS Replacement" IP communication solution.

Related Documentation

The following types of related documents are available on each page:

- Datasheet
- Quick Installation guide

Chapter 1 Introduction

This section describes the product's hardware, indicator lights, and installation procedures.

Topics:

Hardware Introduction

LED Indicator

Hardware Installation

1.1 Hardware Introduction

This section describes the exterior design and interfaces of the product.

Product	PR08
	FLYÍNGVOICE
Appearance display	FLYÍNGVOICE
	FLYÍNGVOICE RESET
PWR	19V / 3.42A
(Power supply)	
Interface	2*WAN/10/100/1000Mbps, PoE out 2*LAN,10/100/1000Mbps 8*FXS 1*UPS port 2*USB(Type-C) 1*DC Jack

Chapter 1 Introduction

Indicator	2*WAN Ports Indicator 2*LAN Ports Indicator 8*FXS Ports Indicator 1*UPS Indicator 2*BAT Indicator 1*PWR Indicator
Structure	Cast aluminum alloy enclosure. Supports desktop installation and wall mounting.

The descriptions of the corresponding interface are as follows:

Interface	Description
)-/AN	Connect to network adapters, router, modem or gateway to connect to
WAN	external network, normally for internet connection. Support PoE out.
LAN	Connect to the devices in the local-area network.
FXS	Connect to alarm panel, analog phone or fax machine.
BAT1/2	Type-C port, connect to the power bank as the backup power to provide interrupted service during power failure. 65w PD power bank is Recommended for best experience.
UPS	Connect to receiving Power device (such as LM150), support Power out.
DC Jack	Connect the 19V power adapter.
Reset Button	Long press for 5s to reset the device to factory default
Reset Button	Short press for < 5s to reboot the device

1.2 LED Indicator

This section describes the status of the indicators for power, LAN port, FXS port and BAT Indicator in different operating states.

Indicator	Status
WAN/LAN Port Indicator	Solid Green: Connection successful. Blinking Green(5Hz): Data transmission. Off: Disconnected.
FXS Port Indicator	Solid Green: Account Registered. Blinking Green(5Hz): Ringing, Off-hook, On Call. Off: Disconnected or Registration failure.
UPS Indicator	Solid Green: Power out after connection. Off: Disconnected or Insufficient device power (No output).
BAT Indicator	Solid Orange: Power bank charging. Blinking Green(1Hz): 65W Power bank discharging. Blinking Orange(1Hz): Non-65W Power bank discharging. Off: Disconnected or No-charging.
PWR Indicator	Solid Green: Power On. Off: Power Off.

1.3 Hardware Installation

This section describes how the interface is mounted and how it is powered.

Topics:

Installation Preparation

Installation Procedure

TIPS: Before installing the device, check whether the equipment is complete and installation conditions are met. After unpacking the device, check whether the contents are complete against the quick installation guide. If you find that the contents in the packing box do not match the list, please contact us directly.

Device Power Supply

The device supports two power supply modes. When PR08 is connected to normal DC power supply, or when it is connected to standard 65W power bank supply, it will automatically turn on the PoE Out function of WAN port.

WARNING:

Do not attempt to use an unsupported power adapter, and do not unplug the power when configuring or upgrading devices. Using other power adapters may damage the device and will void the manufacturer's warranty.

DC Power Supply

Device DC power input supports up to 19V 3.42A, please make sure the power adapter is correct before connecting.

Procedure:

- 1. Use a single-phase, three-core DC power socket, and ensure that the ground cable is properly grounded.
- 2. Connect the power adapter to the PWR port.
- 3. After plugging in the DC power supply, the PWR indicator will turn green and wait for the device to start up.

Power Bank Supply

PR08 supports power bank power supply. It is recommended to choose a 65W power bank with PD3.0 protocol for charging. At this time, the two WAN ports can be used as PoE Out ports and UPS port can output up to 12V.

Note: Some power bank may not correctly output power for PR08 or cannot automatically output power, please use PD 3.0 power bank with 65w or more for best effect. Please check the specification of your power bank before install the devices.

Procedure:

- 1. Plug the power bank into the device's BAT1 or BAT2 port via the Type-C cable.
- 2. After plugged in, the BAT indicator on the device will turn to green(If the power of Powerbank is not enough, the light will be orange).

TIPS:

- The installation site must meet the conditions for connecting devices to external devices, including power cables, network cables, and PC. Use a single-phase, three-core DC power socket, and ensure that the device is properly grounded.
- 2. The environment of the installation site should ensure sufficient air flow to facilitate the heat dissipation of the equipment, the appropriate working temperature of the equipment is 0°C ~ 50°C and support working from -40°C ~ 85° (not recommended).

Ethernet Port Access

Before using the device, it must be properly connected:

- 1. Connect the device WAN port to the modem with an Ethernet cable
- 2. Connect the PC to the LAN port of the device using an Ethernet cable
- 3. When the connection is complete, the WAN/LAN port indicator on the device will turn green.

Chapter 2 Basic Configuration

This section describes basic configuration of the device through web interface, include the following topics:

Topics

Device Initialization

Web Interface

Basic Network Configuration

Advanced Network Configuration

2.1 Device Initialization

After the device is powered on and started, perform the following steps:

- 1. If the power indicator is normal, ensure that the network cable connected to the adapter can access the Internet properly. The device works in DHCP mode by default.
- 2. To configure or view device information, connect the LAN port of the device to the PC's RJ45 port. After the connection is successful, the PC will obtain an IP address of 192.168.1.x and can access to the PR08, plus the internet normally.

2.2 Web Interface

This section describes how to log in to the device web interface and view system information.

Login

You can view the device status on the web page:

- 1. Enter the IP address of the LAN port in the browser to enter the login page
- 2. Input Username / Password (admin / last 6 digits of SN number)

For user level, enter user/last 6 digits of SN number to login. Different user level can configure different items. You can check the SN number on the label of device.

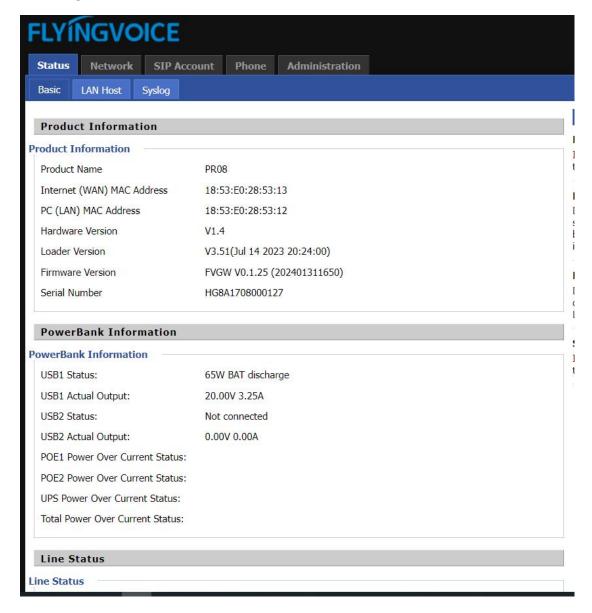


After successfully login, the device status information page is displayed by default, where you can view the system information, Intranet host information, and system logs of the device

System Status

Procedure

1. Navigate to **Status** -> **Basic**



System information includes:

Version, Serial Number, etc.

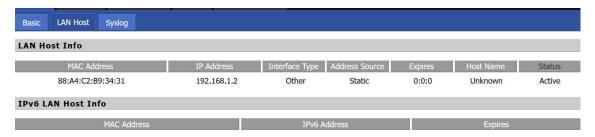
Product Information (Product Name, MAC Address, Hardware Version, Firmware

LAN Host includes:

• IPv4 LAN Host Information (MAC Address, IP Address, Interface Type, Address

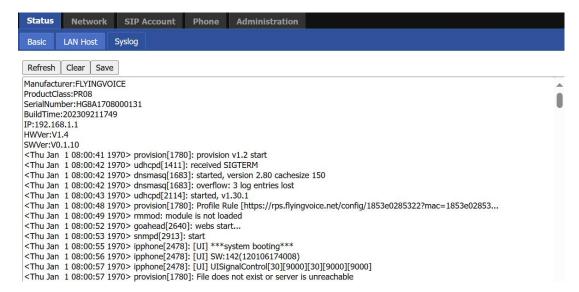
Source, Expires, Host Name, Status)

• IPv6 LAN Host Information (MAC Address, IPv6 Address, Expires)



System log includes:

- The system records the configuration information in real time;
- Support refresh logs, clear all logs, save and export logs;



2.3 Basic Network Configuration

PR08 supports different network access modes for WAN port and IP address Settings for LAN port.

WAN Settings

In this section, you can set different WAN configurations, including DHCP, static IP, and PPPoE.

Topics

WAN Network Settings

DHCP Mode Setting

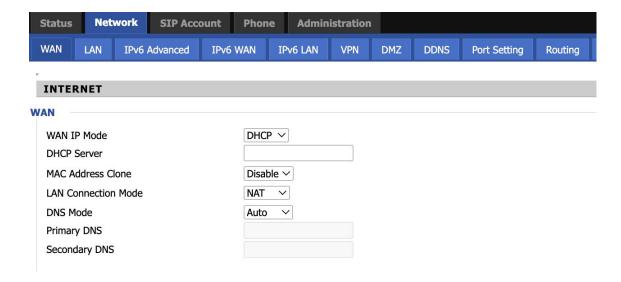
Static IP Mode Setting

PPPoE Mode Setting

DHCP Mode Setting

Procedure

- 1. Navigate to **Network** -> **WAN**
- 2. Select **DHCP** in WAN IP Mode



TIPS:

- The built-in DHCP server assigns a dedicated IP address to each local client.
- The factory default DHCP mode allows the device to automatically obtain an IP address from the DHCP server without manually assigning an IP address to the client.

•

Parameter	Description
WAN IP Mode	Default DHCP.
DHCP Server	Enter the specified DHCP server address or domain.

	MAC Address Clone	Enable V	
	MAC Address	88:a4:c2:b9:34:31 Get Current PC MAC Address	
	Select "enable" to enable this function.		
MAC Address Clone	After this function is e	nabled, you need to enter the MAC	
	address of the bound PC. You can also click the button "Get		
	current PC MAC Address" to obtain the MAC address of the		
	current PC.		
LAN Connection			
LAN CONNECTION	Bridge or NAT mode is optional.		
	The default is NAT mode.		
Mode	The delidate is that mode.		
	option: automatic or mar	nual:	
	If automatic is selected, devices on the LAN port automatically		
DNS Mode	obtain the primary DNS and secondary DNS.		
	If Manual is selected, yo	u need to manually enter the primary	
	DNS and secondary DNS.		

Static IP Mode Setting

You can use this configuration when you receive a fixed public IP address or a public subnet from your Internet provider. In most cases, a cable service provider will provide a fixed public IP, while a DSL service provider will provide a public subnet. If you have a public subnet, you can assign an IP address to the WAN interface.

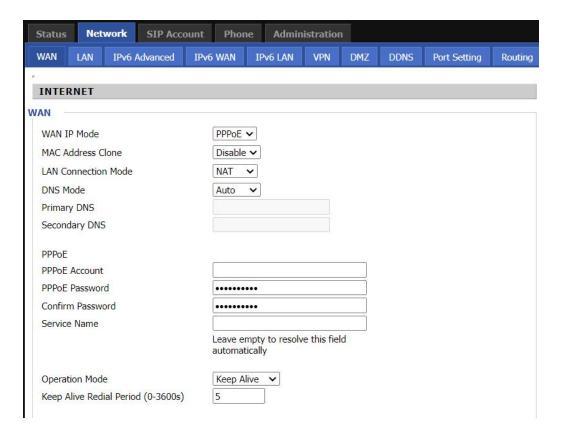


Parameter	Description		
WAN IP Mode	Select Static IP.		
	MAC Address Clone MAC Address	Enable > 88:a4:c2:b9:34:31 Get Current PC MAC Address	
	Select "enable" to ena	ble this function.	
MAC Address Clone	After this function is enabled, you need to enter the MAC		
	address of the bound PC. You can also click the button "Get		
	current PC MAC Address" to obtain the MAC address of the		
	current PC.		
LAN Connection Mode	Bridge or NAT mode is o	optional. The default is NAT mode.	
IP Address	Enter the fixed IP address received from the ISP.		
Subnet Mask Enter the subnet mask of the IP address.		of the IP address.	
Default Gateway	Enter the local gateway address.		
DNS Mode	The default is manua	l. You need to manually enter the	
אויין כאום פווע כאום	primary DNS and secon	dary DNS.	

PPPoE Mode Setting

PPPoE is a point-to-point protocol on the Ethernet. It relies on two standards: PPP and Ethernet, through which it connects users to the Internet with a common broadband medium, such as a single DSL line, wireless device, or cable modem.

PPPoE is mostly used for DSL modem users, ISP provide information about user names, passwords, and authentication modes, and all local users can share a PPPoE public connection to access the Internet.



The descriptions are as follows:

Parameter	Description
WAN IP Mode	Select PPPoE.

_ <u></u>	
	MAC Address Clone MAC Address 88:a4:c2:b9:34:31 Get Current PC MAC Address
	Select whether to enable this function.
MAC Address Clone	After this function is enabled, you need to enter the MAC
	address of the bound PC. You can also click to obtain the
	MAC address of the current PC.
LAN Connection Mode	Bridge or NAT mode is optional. The default is NAT mode.
DNS Mode	option: automatic and manual: If automatic is selected, devices on the LAN port automatically obtain the primary DNS and secondary DNS. If Manual is selected, you need to manually enter the primary DNS and secondary DNS.
PPPoE Account Enter the PPPoE account obtained from the ISP.	
PPPoE Password	Enter the PPPoE password obtained from the ISP.
Confirm Password	Enter the PPPoE password again.
Service Name	Enter the PPPoE authentication service name.
Service Name	If it is empty, the service name is automatically detected.
	Operation Mode Keep Alive V Keep Alive Redial Period (0-3600s) 5
	Option: Keep Alive, On Demand, Manual, the default is Keep Alive:
Operation Mode	If you choose Keep Alive, the redial is automatically reconnected within a redial period, you need to set an redial period. The default value is 5s.
	If you choose On Demand, the device will dial the connection automatically when there is access data, and if there is no data, the network connection will be automatically disconnected within the set time. You need to set the idle

time on demand. The default value is 5min.

If you choose Manual, dial by manually clicking on the connection, the device does not dial automatically.

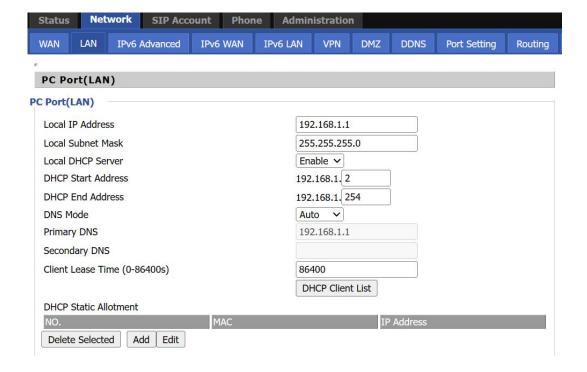
LAN Setting

You can assign IP addresses to devices on the LAN interface.

DHCP Enable

Procedure

- 1. Navigate to Network -> LAN
- 2. Select Local DHCP Server as Enable



Parameter	Description
Local IP Address	Enter the local IP address of the device on the LAN. The IP addresses of all devices on the LAN must be in the same network segment as this IP address. The default gateway address is 192.168.1.1.
Local Subnet Mask	Enter the subnet mask to determine the network size (default: 255.255.255.0).
Local DHCP Server	Whether to enable the DHCP server.
DHCP Start Address	After the DHCP server is enabled, this is needed to be filled. Enter a valid IP address as the start IP address sent by the DHCP server to the DHCP client. If the IP address of the LAN port is 192.168.1.1, the start IP address must be greater than or equal to 192.168.1.2 but smaller than the end IP address.
DHCP End Address	After the DHCP server is enabled, this is needed to be filled. Enter a valid IP address as the end IP address sent by the DHCP server to the DHCP client.
DNS Mode	Option: automatic and manual: If automatic is selected, devices on the LAN port automatically obtain the primary DNS and secondary DNS. If Manual is selected, you need to manually enter the primary DNS and secondary DNS.
Client Lease Time	The validity period of the IP address assigned by the DHCP server to the device. During this time, the server will not assign the IP address to other devices.
DHCP Static Allotment	Operation Mode On Demand Idle Time (0-60m) You can add multiple DHCP static assignment rules, enter MAC address and IP address and reserve an IP address for a specified mac address. For each assignment rule, you can also edit/delete it.

2.4 Advanced Network Configuration

This section describe the advanced network configuration, including IPv6 WAN/LAN,

VPN, DMZ, DDNS, Port Setting, Routing and so on.

Topic

IPv6 Advance Setting

IPv6 WAN Setting

IPv6 Enable

You can select to Enable or disable IPv6.

Procedure

1. Navigate to **Network** -> **IPv6 Advanced**



IPv6 WAN Setting

Topic

DHCPv6 mode

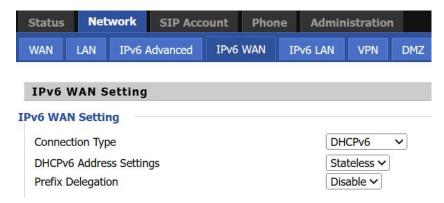
Static IPv6 mode

PPPoE mode

DHCPv6 mode

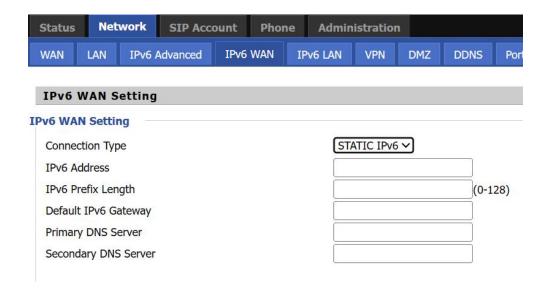
Procedure

- 1. Navigate to **Network** -> **IPv6 WAN**
- 2. Set DHCPv6 mode, Save settings



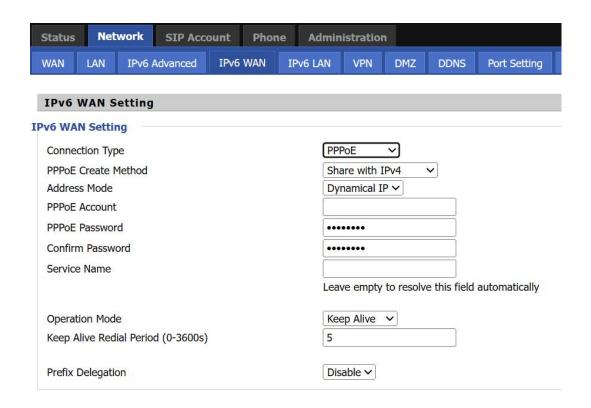
Parameter	Description
Connection Type	Option: DHCPv6, static IPv6, or PPPoE. The default mode
	is DHCPv6.
DHCPv6 Address Settings	Option: Stateless, Stateful.
Prefix Delegation	Option: whether to enable prefix distribution.

Static IPv6 mode

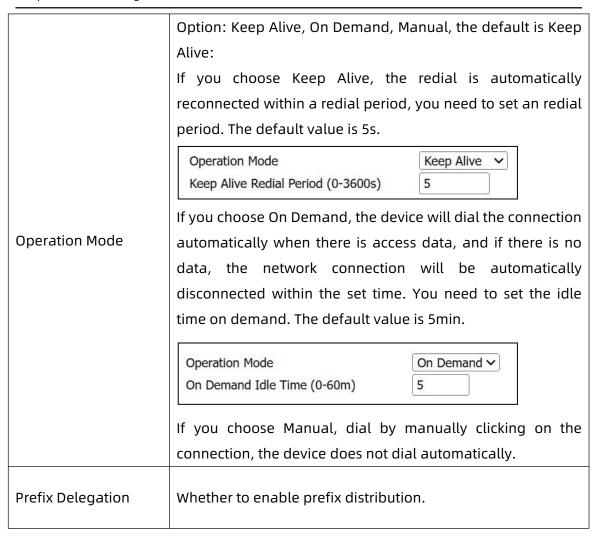


Parameter	Description
Connection Type	Select static IPv6.
IPv6 Address	Enter the fixed IP address received from the ISP.
IPv6 Prefix Length	Enter the IPv6 address prefix length, ranging from 0 to 128.
Default IPv6 Gateway	Enter the IPv6 address of the local gateway.
Primary DNS Server	Enter the primary DNS server address.
Secondary DNS Server	Enter the secondary DNS server address.

PPPoE mode



Parameter	Description
Connection Type	Select PPPoE mode.
PPPoE Create Method	The default is shared with IPv4. You can optionally create a new PPPoE.
Address Mode	Option: dynamic address, static address.
	The default is dynamic address ,
	If static address is selected, manually enter an IPv6 address.
PPPoE Account	Enter the PPPoE account obtained from the ISP.
PPPoE Password	Enter the PPPoE password obtained from the ISP.
Confirm Password	Enter the PPPoE password again.
Service Name	Enter the PPPoE authentication service name. If it is empty, the service name is automatically detected.



IPv6 LAN Setting

Topic

DHCPv6 mode

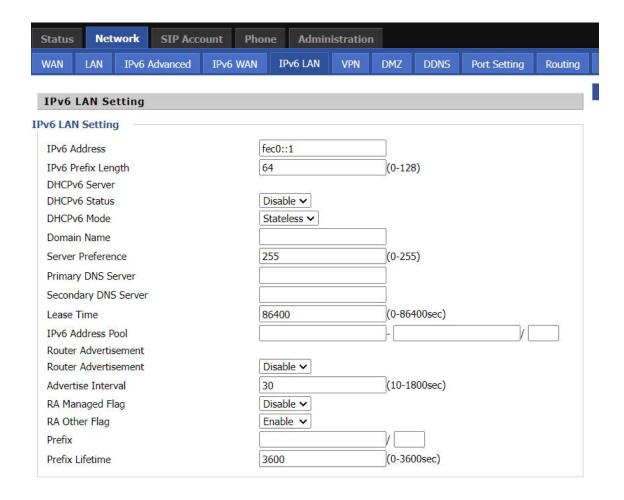
Static IPv6 mode

PPPoE mode

DHCPv6 mode

Procedure

- 1. Navigate to **Network** -> **IPv6 LAN**
- 2. Select DHCPv6 Status as **Enable**
- 3. Select DHCPv6 Mode as stateful or Stateless



Parameter	Description
IPv6 Address	Enter the fixed IP address received from the ISP.
IPv6 Prefix Length	Default is 64, 0~128

DHCPv6 Server	Whether to enable prefix distribution.
DHCPv6 Status	DHCPv6 Status provides the option to choose between 'disable' and 'enable,' allowing users to control the activation status of DHCPv6 functionality.
DHCPv6 Mode	DHCPv6 Mode offers a choice between stateless and stateful modes, allowing users to opt for dynamic IPv6 address assignment with or without additional configuration parameters.
Domain Name	Domain name of the provider network.
Server Preference	DHCPv6 server preference level.
Primary DNS Server	Enter the primary DNS server address.
Secondary DNS Server	Enter the secondary DNS server address
Lease Time	Enter the expiration date of the IP address assigned by DHCP.
IPv6 Address Pool	Enter the starting range of IPv6 addresses
Router Advertisement	Defalut is Disable, Enable
Advertise Interval	Enter the time interval for sending advertisements, default 30
RA Managed Flag	Disable, Enable
RA Other Flag	Disable, Enable
Prefix	Enter the IPv6 address prefix.
Prefix Lifetime	Enter the expiration date of the prefix (Prefix) in the IPv6 address

VPN Setting

VPN is a technology that creates a private network over a public network. The connection between any two nodes of the VPN network doesn't have the end-to-end physical link required by the traditional private network, but is built on the network platform provided by the public network service provider, and user data is transmitted in the logical link. With VPN technology, users can establish a private connection and transfer data between any two devices on a public network, and the PRO8 supports PPTP, L2TP, and OpenVPN.

Topics

Set PPTP mode

Set L2TP mode

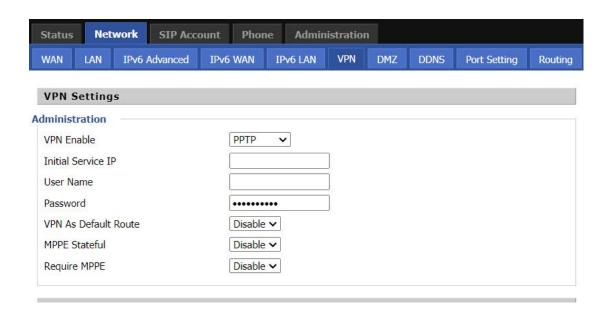
Set OpenVPN mode



Set PPTP mode

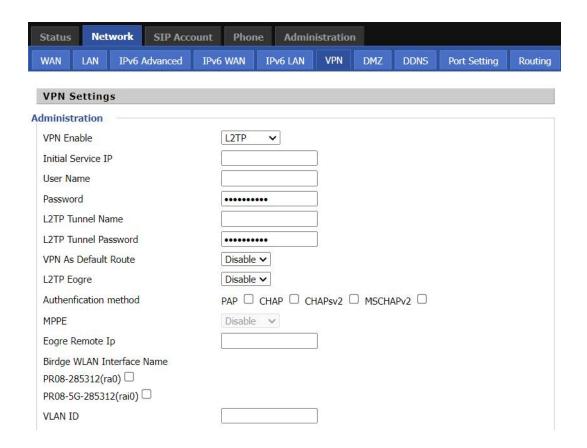
Procedure

- 1. Navigate to Network->VPN
- 2. Select VPN Enable -> PPTP mode



Parameter	Description
VPN Enable	Select PPTP.
Initial Service IP	Enter the IP address of the VPN server.
User Name	Enter the user name.
Password	Enter the password.
VPN As Default Route	Whether to enable the VPN as the default route.
MPPE Stateful	Whether to enable the MPPE (Microsoft point-to-point encryption) protocol.
Require MPPE	Option: MPPE uses 40-bit encryption and 128-bit encryption.

Set L2TP mode



Parameter	Description
VPN Enable	Select L2TP (Layer 2 Tunnel Protocol).
Initial Service IP	Enter the IP address of the VPN server.
User Name	Enter the user name.
Password	Enter the password.
L2TP Tunnel	Enter the name of the LOTE tunnel
Name	Enter the name of the L2TP tunnel.
L2TP Tunnel	Enter the password of the LOTE tuppel
Password	Enter the password of the L2TP tunnel.

Chapter 2 Basic Configuration

VPN As Default	Whether to enable the VPN as the default route.
Route	

Set OpenVPN mode



Parameter	Description
VPN Enable	Select OpenVPN.
OpenVPN TLS Auth	Whether to enable OpenVPN TLS authentication.
OpenVPN TLS Crypt	Whether to enable OpenVPN TLS encryption.
VPN As Default Route	Whether to enable the VPN as the default route.

DMZ Setting

DMZ (Demilitarized zone) is to solve the problem that the external network users can not access the internal network server after the installation of the firewall. And set up a buffer between the non-secure system and the secure system, also the buffer between internal network and external network of small network area. In this small network area, you can place some server facilities that must be public, such as

enterprise Web servers, FTP servers.On the other hand, the internal network is more effectively protected through the DMZ. Because this network deployment, compared with the general firewall solution, the attacker from the external network has one more barrier, after the DMZ host is set in the LAN, the host will be completely exposed to the WAN, which can realize two-way unlimited communication. Adding clients to the DMZ can create insecurity in the local network, so don't use this option easily.

Procedure

1. Navigate to **Network** -> **DMZ Setting**



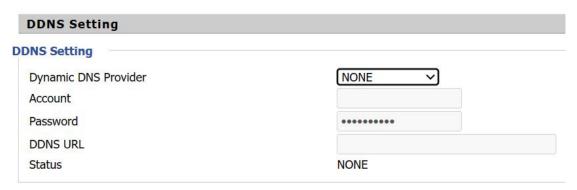
Parameter	Description
DMZ Enable	Whether to enable the DMZ.
DMZ Host IP Address	Enter the IP address of the specified DMZ host, or obtain
	the IP address of the current PC with one click.

DDNS Setting

DDNS, namely dynamic DNS server is used to map the user dynamic IP address to a fixed DNS. Every time the user connects to the network, the client program will send the dynamic IP address of the host to the server program located on the host of the service provider, and the server program is responsible for providing DNS services and implementing dynamic domain name resolution.

Procedure

1. Navigate to **Network->DDNS**.



Parameter	Description
Dynamic DNS	Default NONE, option: Dyndns.org, www.no-ip.com two DNS
Provider	service providers.
Account	Enter the account provided by ISP.
Password	Enter the password provided by ISP.
DDNS URL	Enter the dynamic DNS domain name or IP address.
Status	Check whether DDNS is successfully upgraded.

Port Setting

On this page, you can set the rate and working mode of each network port. All ports are automatically detected by default, and the maximum speed is 1000Mbps. Manually, you can select the port rate of 10Mbps or 100Mbps, and the working mode of half-duplex or full-duplex is suitable for different network environments of the device.

Procedure

1. Navigate to **Network** -> **Port Setting**



Parameter	Description
	Default for automatic detection. Optional for 100Mbps full
WAN Port Speed Nego	duplex, 100Mbps half duplex, 10Mbps full duplex, 10Mbps
	half duplex, select the rate negotiation method supported
	by the WAN port.
	Default automatic detection. Optional for 100Mbps full
LAN1~3 Port Speed	duplex, 100Mbps half duplex, 10Mbps full duplex, 10Mbps
Nego	half duplex, select the rate negotiation method supported
	by the LAN1~3 ports.

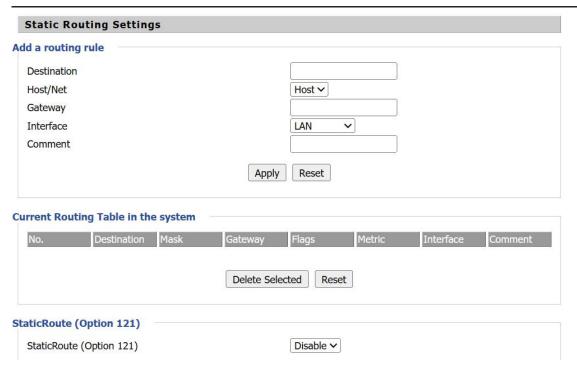
Routing Setting

On this page, you can manually add and configure one or more static routing rules in this interface, and route to the destination terminal through the set network interface.

Procedure

- 1. Navigate to **Network->Routing Setting**
- 2. Fill in the information in the blank" Add a routing rule", and click Apply
- 3. A new route will be displayed under the blank "Current Routing Table in the system"

Chapter 2 Basic Configuration

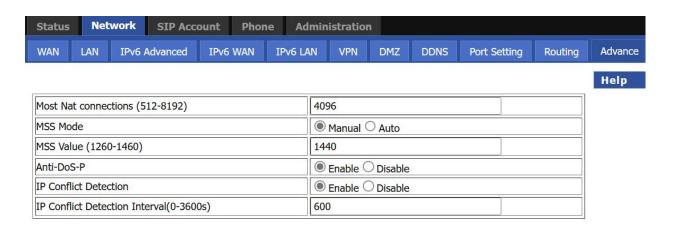


Parameter	Description
Destination	Enter the destination IP address of the routing terminal.
Host/Net	Option: Host or Net, target host or network selection. If Net is selected, enter the subnet mask.
Gateway	Enter the gateway IP address.
Interface	The default is LAN, Option: INTERNET, VOICE, TR069, VPN.
Comment	Enter the description of the route.
Current Routing Table	After entering the preceding routing rules and submit them,
in the system	you can view them here.
Static Route	Whether to enable static routes.

Advance Setting

Procedure

1. Navigate to **Network** -> **Advance**



Parameter	Description
Most Nat connections	The default maximum number of Nat connections is 4096.
MSS Mode	Option: Manual, Automatic.
MSS Value	Enter the TCP value to limit the maximum number of bytes sent at the application layer. The default value is 1440.
Anti-DoS-P	This parameter is optional.
IP Conflict Detection	Whether to enable the parameter, the connected terminal will display a message when an IP conflict occurs.
IP Conflict Detection Interval	Enter the interval for detecting IP address conflict. The default value is 600s.

Chapter 3 VoIP Configuration

This section describes VoIP configuration of the device through web interface, include the following topics:

Topics:

Account Settings

FXS Setting

SIP Setting

VoIP QoS

Call Setting

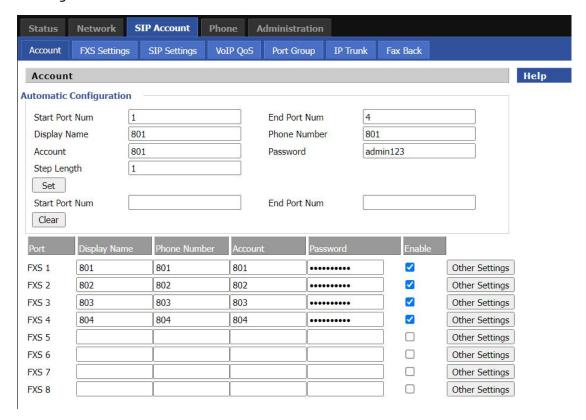
3.1 Account Settings

PR08 integrates 8 FXS ports, supports 8 external analog phones, and configures 8 accounts.

On this page, you can set registration information for each FXS port.

Procedure

1. Navigate to VoIP-> Account.



Parameter	Description
Start Port Num	This parameter is used to quickly configure multiple accounts in sequence. Enter the number of the first FXS port, such as 1.
End Port Num	This parameter is used to quickly configure multiple accounts in sequence. Enter the number of the end FXS port, such as 8.

Display Name	Enter the extension name of the FXS port. When configure multiple port, this is for the "Start Port Num".
Phone Number	Enter the extension number registered with the SIP server. When configure multiple port, this is for the "Start Port Num".
Account	Enter the SIP account registered with the SIP server for each FXS port.When configure multiple port, this is for the "Start Port Num".
Password	Enter the password registered with the SIP server for each FXS port. When configure multiple port, this is for the "Start Port Num".
Step Length	Enter the step interval of the account, which is used to quickly configure multiple port accounts. For example, if the step interval enter the 1, the registered account of the start port is increased by 1, if the start account is set to 301, the registered account will be increased to 302, 303, and so on. The phone number, display name, password will also increase by the rules above.
Set button	Click to make the above setting takes effect, please remember to click "save" button when you finish editing.
Start Port Num	Used to clear registered port accounts, enter the number of the first port to be cleared, such as 1.
End Port Num	Used to clear registered port accounts, enter the number of the end port to be cleared, such as 8.
Clear button	Click to clear the port registration account, from the start port number to the end port number.
FXS1~8 Display Name	If you want to configure a single FXS port, enter the phone display name for the port.
FXS1~8 Phone Number	If you want to configure a single FXS port, enter the phone number for the port.
FXS1~8 Account	If you want to configure a single FXS port, enter the SIP account registered with the SIP server for the port.

FXS1~8 Password	If you want to configure a single FXS port, enter the password registered with the SIP server for the port.
FXS1~8 Enable Select box	Whether to enable account registration on the port.
Other Settings button	After you click, you will be automatically transferred to FXS Settings, which are used to set other configuration of the port.

After the above basic account information is configured, click Save and apply, you can dial each other. For the configuration of registration server, please check the next chapter.

3.2 FXS Setting

On this page, you can set registration server information, call audio code, fax mode, call service, and speed dial for different ports in batches.

Topics

Configure SIP Accounts

Configure Call Audio

Configure the Fax Service

Supplementary Service

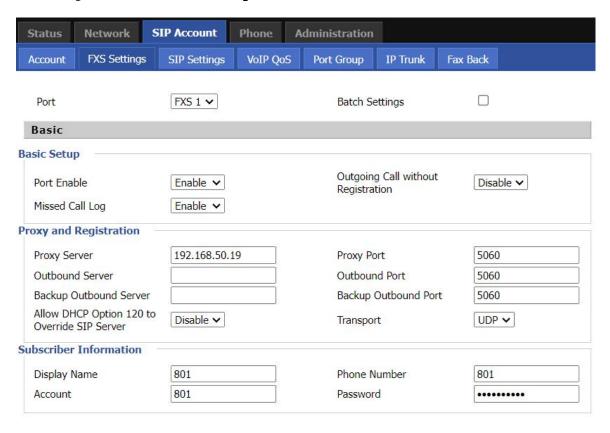
Advanced Setup

Configure SIP Accounts

Before configuring, make sure the analog device has access to the FXS port.

Procedure

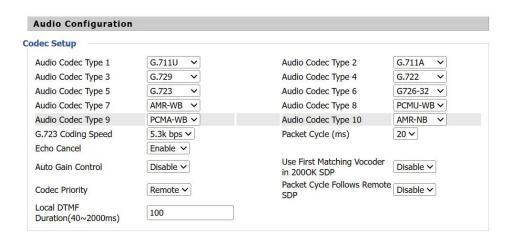
Navigate to VoIP-> FXS Settings



Parameter	Description
Port	Select to configure the corresponding FXS port.
Port Enable	Whether to enable the SIP account of this port.
Outgoing Call without	Whether to enable the IP direct dial function without
Registration	registration.

Missed Call Log	Whether to enable the real-time recording of missed calls.
Proxy Server	Enter the domain name or IP address of the registered SIP server.
Proxy Port	Enter the port number of the VoIP service supported by the SIP server. The default is 5060.
Outbound Server	Enter the domain name or IP address of the outbound server.
Outbound Port	Enter the service port number of the outbound server.
Backup Outbound Server	Enter the domain name or IP address of the backup outbound server.
Backup Outbound Port	Enter the service port number of the backup outbound server.
Display Name	Enter the phone display name of the FXS port.
Phone Number	Enter the phone number registered with the SIP server for the FXS port.
Account	Enter the SIP account name registered with the SIP server for the FXS port.
Password	Enter the password registered with the SIP server for the FXS port.

Configure Call Audio



Parameter	Description
Audio Codec	Option: G.711A, G.711U, G.722, G.729, G.723, G.726-32, iLBC,
Type1~10	ARM-WB, PCMU-WB, PCMA-WB, ARM-NB 11.Select a priority based on the serial number of the coding mode.
G.723 Coding Speed	Option: 5.3kbps, 6.3kbps.
Packet Cycle	Set the RTP packaging period. Option: 10, 30, 40, 50, or 60ms. The default is 20ms.
Echo Cancel	Whether to enable echo cancellation.
Auto Gain Control	Whether to enable automatic gain control, automatic gain control is a control method that makes the gain of the amplifier circuit automatically adjust with the signal strength.
Codec Priority	Option: remote or local priority.
Use First Matching Vocoder in 2000K SDP	When this is se to enable, the device will use the first matching vocoder in the received 2000K SDP as the codec.
Packet Cycle Follows Remote SDP	Whether the packaging period is dominated by the remote end.
Local DTMF Duration	Enter the duration of each DTMF signal, default for 100ms.

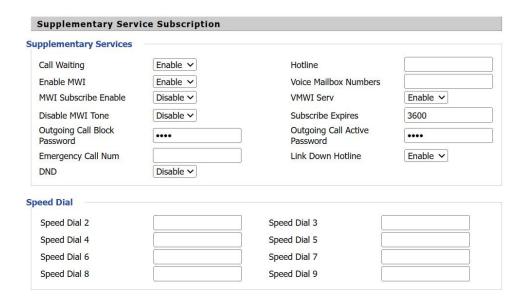
Configure the Fax Service

FAX Configuration



Parameter	Description
FAX Mode	Option: T.30, T.38, Bypass 3 fax modes.
Bypass Attribute Value	Default fax/modem, option: X-fax/X-modem or disable. If the X-fax/X-modem is selected, the fax receiver initiates packets to negotiate fax parameters. The X-fax is a slow fax, and the X-modem is a high-speed fax.
Enable T.38 CNG Detect	Whether to enable CNG detection.
Enable T.38 CED Detect	Whether to enable CED detection.
Enable T.38 V21 Detect	Whether to enable T.38 V21 detection.
Enable gpmd attribute	Whether to enable gpmd attribute.
T.38 Redundancy	Whether to allow T.38 redundancy.
Max Fax Rate	The default fax rate is 14400bps. Option: 9600bps or 4800bp.

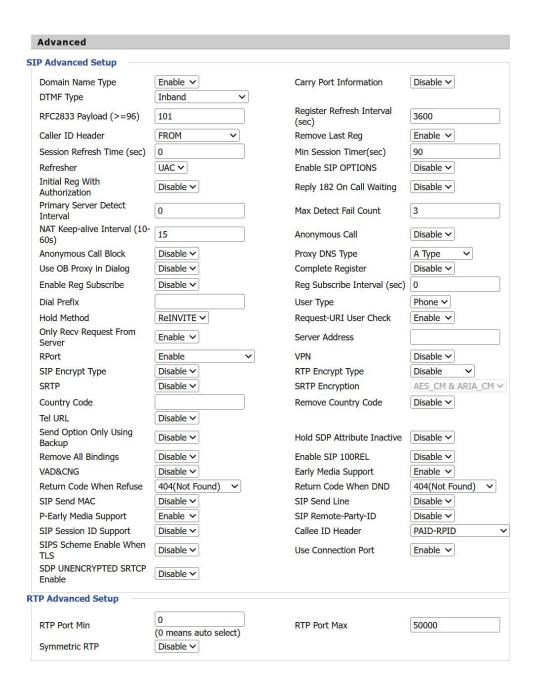
Supplementary Service



Parameter	Description
	Whether to enable call waiting. After enable the function, a
	special pause tone is heard when another call comes in
Call Waiting	during the call.
	You can press *77 to hold a call to connect to a new call.
	You can switch between two calls by pressing *77.
	Enter a hotline number. After the number is set successfully,
Hotline	the hotline number is automatically dialed after the phone
	picks up.
Enable MWI	Whether to enable MWI (message waiting instruction). If
	you need to use voice mailbox, please enable it.
	When a voice message or text message is received, MWI has
	3 ways to prompt: the LCD interface appears the prompt
	message, the voice message icon, and the power indicator
	slowly flashes red.
	After you listen to or delete all voice messages, the voice
	icon disappears and the power indicator turns off.
	The actual prompt way depends on specific phone in use.

Voice Mailbox	Enter the feature code of the voice mailbox provided by the	
Numbers	SIP service provider. For example, the feature code of the voice mailbox on the Elatix platform is *97.	
MWI Subscribe Enable	Whether to enable MWI subscription function. After enable the function, the phone will resend the MWI subscription request before the MWI subscription period expires.	
VMWI Server	Whether to enable VMWI server function.	
Disable MWI Tone	Whether to disable the MWI's message prompt tone.	
Subscribe Expires	Enter the MWI subscription period. The default is 3600s.	
DND	Whether to enable the DND function. After this function is enabled, all the incoming calls can be rejected.	
Speed Dial 2~9	It can quickly set 8 speed dial numbers, enter the target number, and you can call with one key. For example, fill in the number 12345678 in the blank "Speed Dial2", when you dial 2, 12345678 will be dialed.	

Advanced Setup



Parameter	Description
Domain Name Type	Whether to enable domain name identification in SIP URI.
Carry Port Information	Whether to carry port information of the SIP URI.

DTMF Type	Select the DTMF processing mode. Option: In-band, RFC2833, or SIP Info.
RFC2833 Payload	Enter the payload of RFC2833. The default is 101.
Register Refresh Interval	Refresh interval between two registration messages. The default is 3600s.
Caller ID Header	The default is FROM, option: PAID, PAID-FROM, RPID-PAID-FROM, PAID-RPID-FROM, RPID-FROM. Displays the caller number and caller name after the header field in the packet in the incalling prompt.
Remove Last Reg	Whether to remove the last registration message.
Session Refresh Time	Enter the interval between two sessions. The default is 0s, which means real-time refresh.
Min Session Timer	Enter the minimum session interval. The default is 90s, which means sending a packet every 90 seconds indicates that the call is still on.
Refresher	Option: UAC or UAS for initiating and receiving transaction requests.
Enable SIP OPTIONS	Whether to enable SIP Option detection function.
Initial Reg With Authorization	Whether to carry authentication information during registration.
Reply 182 On Call Waiting	Whether to send 182 SIP massage during call waiting.
Primary Server Detect Interval	Enter the Primary Server Detect Interval, the default is 0s.
Max Detect Fail Count	Enter the maximum number of detection failures. The default number is 3.
NAT Keep-alive Interval	Enter the NAT Keep-alive Interval, The value ranges from 10 to 60s.

Anonymous Call	Whether to enable the anonymous call function.
Proxy DNS Type	Set the type of the DNS server. The default type is A. The options are DNS SRV, automatic, and DNS NRPTR.
Enable Reg Subscribe	Whether to enable the registration subscription. If it is enabled, subscription messages will be sent after registration.
Reg Subscribe Interval	Enter the registration subscription time, the default is 0s.
Dial Prefix	Enter the prefix number before dialing. Generally used for external calls.
Hold Method	Option: call hold REINVITE or INFO.
RPort	Whether to enable the RPort mechanism. The Rport field is added to the Via header field of the packet to route the response through the Rport mechanism.
VPN	Whether to enable the VPN function.
SIP Encrypt Type	Whether to encrypt SIP packets. Option: N2C1, N2C2, RC4.
RTP Encrypt Type	Whether to encrypt RTP packets. Option: N2C1, N2C2, CALLID-XOR.
SRTP	Whether to enable the SRTP function.
SRTP Encryption	After SRTP is enabled, the available encryption modes for SRTP are AES_CM&ARIA_CM, ARIA_CM&AES_CM, AES_CM ONLY, ARIA_CM ONLY.
Country Code	Enter the country code to support the channel of the local country.
Remove Country Code	Whether to remove the country code.

Send Option Only Using Backup	Whether to send Option packets only when the backup server is used.
Hold SDP Attribute Inactive	Whether to keep the SDP property inactive.
Enable SIP 100REL	Whether to enable intermediate state response confirmation, which means temporary response confirmation.
VAD&CNG	Whether to enable VAD voice activity detection and CNG comfort noise generation.
Early Media Support	Whether to support early media, if it is enabled, the calling party can still generate media streams with the network when the called party does not answer the call.
Return Code When Refuse	Option: return code 404, 480, 486, 603.
Return Code When DND	Option: DND return code 404, 480, 486, 603.
SIP Remote-Party-ID	Whether to enable the header field of calling party information in SIP calls.
Callee ID Header	Default PAID-RPID, option: DIALED, RFC4916, RPID-PAID-CONTACT, PAID-RPID-CONTACT.
RTP Port Min	Enter the minimum port number for RTP packets. The default is 0s, which means automatically selected.
RTP Port Max	Enter the maximum port for RTP packets.
Symmetric RTP	Whether to enable the symmetric RTP mechanism.

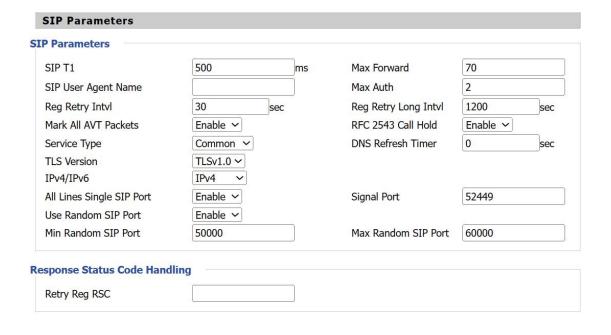
3.3 SIP Setting

On this page, you can set SIP parameters that will be registered with the SIP platform or PBX. Ensure that the parameter settings match those of the device.

Procedure

1. Navigate to VoIP->SIP Setting.

SIP Parameters Setting



Parameter	Description
SIP T1	T1 is the time of each hop on the network. The default is 500ms.
Max Forward	Enter the maximum number of hops allowed. The default is 70.

SIP User Agent Name	Enter the header domain name requested by the SIP UAS.
Max Auth	Enter the maximum number of authentication failures. The default is 2.
Reg Retry Intvl	Enter the interval for sending registration requests again after registration fails. The default is 30s.
Reg Retry Long Intvl	Enter the long interval for sending registration requests again after registration fails. The default is 1200s.
Mark All AVT Packets	Whether to mark all AVT packets.
RFC 2543 Call Hold	Whether to enable REC2543 call hold.
Service Type	Optional service types are common, Broadsoft or AICaTel.
DNS Refresh Timer	Enter the DNS refresh interval. The default is 0s, which means refresh in real time.
TLS Version	Option: v1.0 or v1.2.
IPv4/IPv6	Option: IPv4, IPv6 or IPv4&IPv6.
All Lines Single SIP Port	Whether to allow all lines to use the same SIP port.
Signal Port	Enter the SIP port number, the default is 52449.
Use Random SIP Port	Whether to enable random SIP ports.
Min Random SIP Port	After random SIP port is enabled, enter the minimum random SIP port number (50000 by default).

	After random SIP port is enabled, enter the
Max Random SIP Port	maximum random SIP port number (60000 by
	default).

NAT Traversal Setting

NAT traversal refers to network address translation, which converts a private (reserved) address into a valid public IP address.



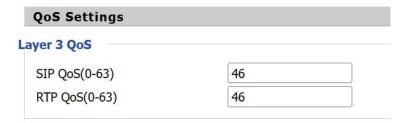
Parameter	Description
NAT Traversal	Whether to disable the NAT traversal mode or enable the STUN mode.
STUN Server Address	STUN is the application of NAT session traversal. Enter the IP address assigned by the NAT device to the STUN client.
NAT Refresh Interval	Enter the interval for refreshing NAT. The default is 60s.
STUN Server Port	Enter the STUN service port number. The default is 3478.

3.4 VoIP QoS

QoS services can improve the quality of voice applications.

Procedure

1. Navigate to VoIP -> VoIP QoS.



Parameter	Description
	Enter the DSCP value of SIP/RTP packets.
SIP QoS / RTP	The value ranges from 0 to 63.
QoS	For voice traffic transmission, the general DSCP value is set to 46 by
	default.

3.5 Call Setting

On this page, you can configure the call volume, ring tone, call transfer, function keys,

CPC control, digital map, and call log.

Topics

Volume Settings

Regional ringtone Settings

Call Forward

Feature Code

CPC Control

FXS Port Polarity Configuration

Miscellaneous

Dial Rule

Call Log

Procedure

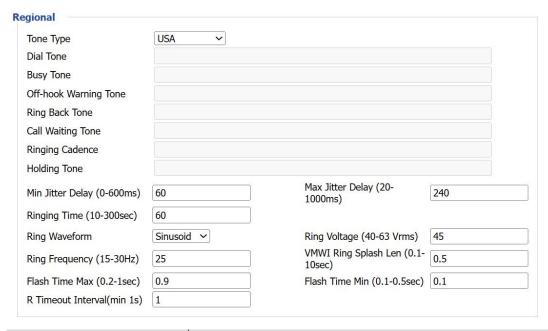
1. Navigate to **Phone** -> **Preferences**

Volume Settings



Parameter	Description
Handset Input	The value of the handset MIC input volume ranges from 0 to 7.
Gain	The default is 5.
Handset Volume	The value of the handset speaker output volume ranges from 0
	to 7. The default is 5.
DTMF Volume	Indicates the audio power level of the DTMF signal. It ranges
	from 0 to -45dbm. The default is -19dbm.

Regional ringtone Settings

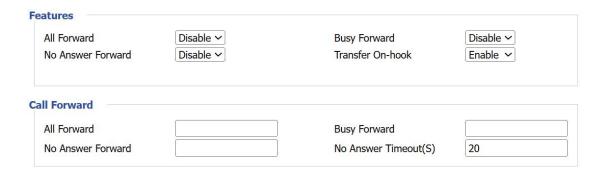


Parameter	Description
Tone Type	Option: ringtone type in different countries.
Dial Tone	Enter the key tone script for dialing, including rhythm and frequency: • Syllable - total length (segment: On = time, off = time (frequency)) • Frequency - dBm @ frequency For example, 350@-19,440@-19; (2. 1 /. 1/1 + 2); 10(*/0/1+2).
Busy Tone	Enter the tone script of the busy tone.
Off-hook Warning Tone	Enter the tone script of the off-hook warning tone.
Ring Back Tone	Enter the tone script of the ring back tone.
Call Waiting Tone	Enter the tone script of the call waiting tone.
Ringing Cadence	Enter the tone script of the ringing cadence.

Enter the tone script of the holding tone.
Enter the minimum jitter delay. The jitter delay of the device
uses the adaptive mechanism. The default is 60ms.
Enter the minimum jitter delay. The default is 240ms.
Enter the ring duration. The default is 60s.
Option: Sinusoid or Trapezoid.
Enter the ringing voltage, default 45Vrms.
Enter the ringing frequency, default 25Hz.
Enter the VMWI ringing duration, default 0.5s.
Enter the maximum interval between two flapping springs.
The default is 0.9s.
Enter the minimum interval between two flapping springs.
The default is 0.1s.
The R key is the key on the analog phone, used to hang
up/hold the call, or with the digital key can transfer the call,
form a tripartite meeting, etc.Enter the timeout period of the
key. The default is 1s.

Call Forward Settings

On this page, you can set different call forward types, including unconditional forward, busy forward, no answer forward, and hang up forward.



Parameter	Description
	Whether to enable unconditional call transfer. After it is
	enabled, you need to enter the destination extension
All Forward	number.
All Forward	When the peer end calls the original extension, the call is
	automatically transferred to the specified destination
	extension.
	Whether to enable transfer on busy. After this is enabled,
	you need to enter the destination extension number.
Busy Forward	When the peer end calls the original extension, but the
	original extension is in a call, then the call is automatically
	transferred to the destination extension.
	Whether to enable the call transfer without answer
	function. After it is enabled, you need to enter the
No Answer Forward	destination extension number and timeout period of no
	answer.
	When the peer end calls the original extension, but the
	original extension does not answer, the call is
	automatically transferred to the destination extension
	after the timeout period lasts.

Transfer On-hook	Whether to enable transfer on hang up. After it is enabled, when the peer end calls the original extension but the original extension ends the call, the call is automatically transferred to the destination extension.
All Forward	Enter the destination extension after All Forward is enabled.
Busy Forward	Enter the destination extension after Busy Forward is enabled.
No Answer Forward	Enter the destination extension after No Answer Forward is enabled.
No Answer Timeout	Enter the ring duration when no answers. The default is 20s.

Feature Code

On this page, you can set the feature codes of different function keys to quickly implement different functions with digital keys.

Hold Key Code	*77	Conference Key Code	*88
Transfer Key Code	*98	IVR Key Code	****
Flash Digit Control	Disable ~		
Enable R Key	Disable >	R Key Cancel Code	R1 ~
R Key Hold Code	R2 ~	R Key Transfer Code	R4 ~
R Key Conference Code	R3 ~	R Key Reject 2nd Call Code	R0 ∨
Flash As R Key	Disable 🗸	Speed Dial Code	*74
Cfwd All Act Code	*72	Cfwd All Deact Code	*73
Cfwd Busy Act Code	*90	Cfwd Busy Deact Code	*91
Cfwd No Ans Act Code	*52	Cfwd No Ans Deact Code	*53
DND Act Code	*78	DND Deact Code	*79

Parameter	Description
Hald Kay Cada	Enter the feature code, you can dial the feature code to
Hold Key Code	hold a call quickly. The default is *77.
Conference Key Code	Enter the feature code of a three-party conference. The
Conference key code	default is *88.
Transfer Key Code	Enter the feature code of the call transfer. The default is
Transfer key code	*98.
IVP Koy Codo	Enter the feature code of the voice menu. The default is
IVR Key Code	****
Enable R Key	Whether to enable R key.
R Key Cancel Code	After the R key is enabled, the R key can be combined with
	numeric keys to cancel the key function. The value ranges
	from R+0 to R+9.
R Key Hold Code	After the R key is enabled, the R key can be combined with
	numeric keys to hold a call. The value ranges from R+0 to
	R+9.
	After the R key is enabled, the R key can be combined with
R Key Transfer Code	numeric keys to transfer calls. The value ranges from R+0
	to R+9.

	After the R key is enabled, the R key can be combined with
R Key Conference Code	numeric keys to complete the conference function. The
	value ranges from R+0 to R+9.
	After the R key is enabled, the R key can be combined with
R Key Reject 2nd Call Code	numeric keys to reject the second call. The value ranges
	from R+0 to R+9.
Flash As R Key	Whether to use the R key as the Flash break key.
Speed Dial Code	Enter the feature code of the speed dial number. The
	default value is *74.

CPC Control

On this page, you can set the CPC function. That is, after the peer device hangs up the call, the analog phone under the PR08 automatically hangs up. The hang up process changes from busy tone to silent tone, and finally to off tone.



Parameter	Description
CPC Enable	Whether to enable the CPC function.
CPC Duration	Enter the silence duration before the local device hangs
	up. The default is 0s.
CPC Delay	Enter the busy tone duration before the local device
	hangs up. The default is 0s.

FXS Port Polarity Configuration

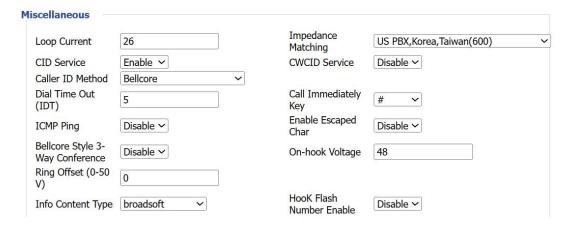
On this page, you can set the polarity reversal of an FXS port. It is used with an FXO gateway to detect the polarity reversal signal to determine whether an analog phone connected to establish a call or hangs up. For call charging, you can also record the start time and end time of a call.

FXS Port Polarity Configuration Idle Polarity Forward Caller Conn Polarity Forward Called Conn Polarity Forward Forward

Parameter	Description
Idle Polarity	Choose the polarity which you want to set before a call is
	connected from the drop-down menu. The possible values
	are Forward or Reverse. The default value is Forward.
Caller Conn Polarity	Choose the polarity which you want to set after an outbound
	call is connected from the drop-down menu. The possible
	values are Forward or Reverse. The default value is Forward.
	When reverse is selected a reverse signal is generated when
	the local end initiates a call. When the FXO gateway detects
	the signal, it initiates a call to the peer end,which means the
	call starts.
Called Conn Polarity	Choose the polarity which you want to set after an inbound
	call is connected from the drop-down menu. The possible
	values are Forward or Reverse. The default value is Forward.
	When reverse is selected, a reverse signal is generated when
	the local end picks up the phone and answers the call,
	indicating that the call is started.
	After the call ends, a reverse pole signal is generated,
	indicating that the call is over.

Miscellaneous

On this page, you can set other call functions, such as incoming call display and dial timeout.



Parameter	Description
Loop Current	Enter the circuit current value after off-hook. The default
	is 26A.
les es el se es Matabia e	It used to adjust load power and suppress signal
Impedance Matching	reflection, default US PBX,Korea,Taiwan(600).
	Whether to enable caller ID. After it is enabled, the phone
CID Service	number of an incoming call is displayed when the phone
	rings.
	Whether to enable the CWCID (Call Waiting Calling
CWCID Service	Number Identification) service. After it is enabled, call
	waiting phone numbers are displayed.
Caller ID Method	Option: Caller ID method: Bellcore, DTMF, ETSI, RAS, etc.
Dial Time Out	Enter the delay period from dialing to auto dial, the
Dial Time Out	default is 5s.
Call Immediately Key	Whether to enable special characters as call keys. The
Call Illillediately Key	value can be * or #.
	Whether to enable the ICMP Ping service.
ICMP Ping	When enabled, the phone pings the SIP server at
	intervals. Otherwise, an empty hello packet will be sent to

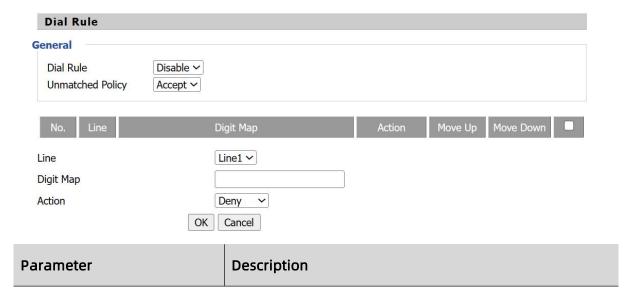
	the SIP server.
Enable Escaped Char	Whether to allow the use of special characters to escape.
Bellcore Style 3-way Conference	Whether to enable Bellcore Style conference. When this is enable, user can create 3-way conference with "flash" button.
On-Hook Voltage	Enter the off-hook voltage. The default value is 48V.
Ring Offset(0-50V)	Enter the Offset voltage.The default value is 0V.
Info Content Type	Choose the type of Info content from Broadsoft, hook-flash, telephone-event, dtmfinfo+xml, dtmf-relay.
Hook Flash Number Enable	Whether to enable Hook Flash Number

Dial Rule

On this page, you can set the digit map function and define call rules for FXS accounts.

Procedure

1. Navigate to **Phone** -> **Dial Rule**



Dial Rule	Optioanl whether to enable the dial rule function, All
Diachate	subsequent Settings are based on enabling this.
	Whether to accept unmatched policies:
	If reject, only the number in the digitmap rule can be
Unmatched Policy	successfully called.
	If accept, you can successfully call any number, not
	limited to the number of the data rule.
	Since PR08 supports 8 accounts, you can choose account
Line	1 to account 8.
	Enter the digital map rule:
	Support valid characters: 0 1 2 3 4 5 6 7 8 9 * #;
	Support enter the extension numbers with valid
	characters, such as 1500;
	Support replacement rules, such as <5:2>, then the
	entered 5 is replaced with 2;
	Support matching sequence extension, such as [2-5],
	then support 2, 3, 4, 5;
Digit Map	Support matching x extension, such as x, support 1, 2, 3
	and any other legal characters;
	Support matching x. extension, such as 01., support 01,
	011, 0111;
	Support interval dial tone, such as 1,2, there will be a
	dial tone after dialing 1, and the dial tone will end after
	entering 2;
	Support setting delay, such as 1500T10, after dialing
	1500, it will be delayed for 10s to automatically call out.
	Option: deny or dial out.
	After the digit map rule is enabled, if set as dial out,
Action	which means can be called out normally; if set as deny,
	the number of the digit map rule will fail to call out.

Call Log

On this page, you can view the local number, remote number, call start time, and call duration in call records, including the redial call list (outgoing call list), answer call list, and missed call list.

Procedure

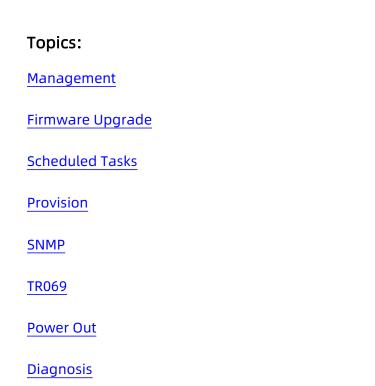
1. Navigate to **Phone** -> **Call Log**

Redial List					
Index	Local Number	Remote Number	Start Time	Duration	- ŝ
1	7008	123	09/22 16:05	00:00:01	
2	7008	123	09/22 16:05	00:00:01	
3	801	802	09/22 16:07	00:00:01	
4	801	802	09/22 16:35	00:00:12	
5	803	801	09/22 16:38	00:00:11	
6	801	802	09/22 16:38	00:00:07	
7	804	804	09/22 16:41	00:03:19	
8	804	804	09/22 16:41	00:03:01	
9	802	83	09/22 16:42	00:00:17	
10	802	803	09/22 16:42	00:00:12	
11	802	03	09/22 16:43	00:00:14	□ ▼
Answ	vered Calls				
Index	Local Number	Remote Number	Start Time	Duration	
1	801	803	09/22 16:38	00:00:09	
2	801	803	09/22 16:54	00:00:21	
3	804	803	09/22 16:58	00:00:11	
4	801	803	09/22 17:15	00:00:05	
Missed Calls					
Index	Local Number	Remote Number	Start Time	Duration	
1	802	804	09/22 16:46	00:00:00	

Chapter 4 Management Configuration

This section mainly introduces software upgrade, NTP time zone, administrator settings,

Power Out setting, Remote control and other related configurations.



4.1 Management

On this page, users can upload configuration files to configure the device, configure the web login account and password, configure the display language, configure the VPN, configure the telnet, configure the time and date, configure the system local and remote logs, configure the factory status, and so on.

Topics

Configure File Upload & Download

Administrator Settings

NTP Settings

Syslog Setting

Factory Default Setting

Configure File Upload & Download

Procedure

1. Navigate to Administration -> Management.

le
& Download
Choose File No file chosen
Upload Download

Parameter	Description
Local File	Click the Select File button to go to local file browsing and select the configuration file in cfg format.
Upload	After selecting the configuration file, click the Upload button to import the configuration file to the web background.
Download	Click the Download button to automatically download the configuration file in cfg format.

Administrator Settings

PR08 supports 3 user levels, which are basic, normal, admin. The display and configuration contents of different user levels after logging in to the web are different.

And the default login password for admin is last 6 digits of SN number.

After obtaining the device, User should change the password in time to avoid the unavailability of the device caused by abnormal modification of advanced Settings.

On this page, you can set a new user name and password. The password must be confirmed twice and contains a maximum of 25 characters.



The administrator can also change the display language here, the default is English, and 20 languages can be selected.

Language		
Language	English ✓	

The administrator can also enable the VPN function here.

VPN Access	
Management Using VPN	Disable >

The administrator can also set up remote web login here.

D. I. W.L.I.	(F. LL)	
Remote Web Login	Enable ~	
Https Web Access	Enable 🗸	
Web Port	80	
Web SSL Port	443	
Web Idle Timeout (0 - 60min)	50	
Allowed Remote IP (IP1;IP2;)	0.0.0.0	

Parameter	Description
Remote Web Login	Whether to enable or disable the Remote Web Login.
Https Web Access	Whether to enable Https access to the Web, Https access is to use SSL protocol for access, you need to set up the website as an SSL secure site.
Web Port	Fill in the port number for logging in the Web via Internet port and PC port, for Http server, the general default is 80.
Web SSL Port	Support https access, can be connected to the device via SSL, fill in the SSL port number, generally default 443.
Web Idle Timeout	Fill in the Web idle timeout time, i.e., no operation on the Web idle, will automatically exit the login, the length of the default 5 minutes.
Allowed Remote IP	Fill in the IP address of the remote device, so that it supports remote access to the Web, more than one separated by a semicolon.

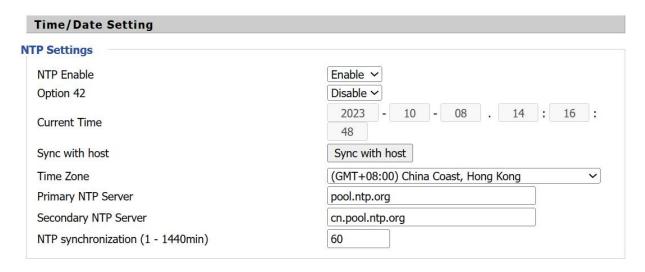
Administrators can also set Telnet here.

elnet Access	
Remote Telnet	Enable 🗸
Telnet Port	23
Allowed Remote IP (IP1;IP2;)	0.0.0.0
HostName	PR08

Parameter	Description
Remote Telnet	Whether to enable remote Telnet function to support line other devices Telnet connection to the device.
Telnet Port	Fill in the port number for Telnet to the device, default 23.
Allowed Remote IP	Fill in the IP address of the remote device to enable it to connect to the device remotely, and separate more than one device with a semicolon.
HostName	Fill in the name of the device to be displayed after successful connection, the default is the device model PR08.

NTP Settings

The administrator can set the time and date here.



Parameter	Description
NTP Enable	Whether to enable the NTP (Network Time Protocol) switch, used to synchronize the time.
Option 42	Whether to enable DHCP Option 42, which is used to specify the server that provides NTP/SNTP service.
Current Time	Displays the current date and time: year, month, day, hour, and second.
Sync with host	Click it to synchronize the time of the device with the PC host automatically.
Time Zone	Optional time zone, default is (GMT+08:00) China Coast, Hong Kong.
Primary NTP Server	Fill in the IP address or domain name of the preferred NTP server.
Secondary NTP Server	Fill in the IP address or domain name of the alternative NTP server.
NTP synchronization	Fill in the NTP synchronization period, the period length can be 1~1440 minutes, default 60 minutes.

Syslog Setting



Parameter	Description
Enable Syslog	Whether to enable system logging function.
Syslog Level	System logging level, option: INFO, DEBUG.
	DEBUG is the lowest level and can be used for development and debugging;
	INFO information log, used to feedback the current state of the system to the end user, can not be
	changed arbitrarily.
Enable Remote Syslog	Whether to enable the remote system log function.
Remote Syslog Server	Fill in the IP address or domain name of the server for remote system logging.

Factory Default

You can restore the factory by clicking the button on the Web or Reset button on the device.

Procedure

- 1. Navigate to Administration > Management -> Factory Default Setting
- 2. Click the Button
- 3. Reboot the device if there is a prompt
- 4. You can also long press the Reset button on the device for 5s to reset the device, or short press for less than 5s to reboot the device

Note: please make sure you save the settings before reboot.

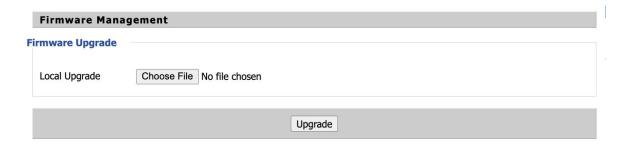


Parameter	Description
Factory Default Lock	Whether to lock the restore factory state, when it is on, the device will not be the factory default state after reset.
Reset to Factory Default	When clicked, the device will be restored to the factory default state.

4.2 Firmware Upgrade

On this page, you can upgrade the device firmware version.

Path: Administration->Firmware Upgrade.



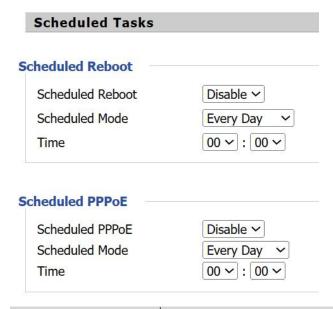
Parameter	Description
Local Upgrade	After clicking, you can browse the local folder and select the standard firmware version file provided by FLYINGVOICE.
Upgrade	After clicking, the device starts to upgrade the firmware and the upgrade process cannot be interrupted.

4.3 Scheduled Tasks

On this page, you can set scheduled tasks, including scheduled device reboot and scheduled PPPoE.

Procedure

1. Navigate to **Administration** -> **Scheduled Tasks**.



Parameter	Description
Scheduled	Whether to enable timed reboot of the device.
Reboot	
Scheduled Mode	After enabling timed reboot, you can select the period of reboot: daily, weekly, once only, running days. If you select Daily, you need to select a specific time, i.e., restart the device at a certain time and minute every day; If you select Weekly, you need to check the weekday, and you need to select a specific time, i.e., restart the device at a certain time and minute on the weekday;

	If you select Once only, you need to select a specific time, that is, only reboot the device once at a certain time and minute on the set day; If you choose to run days, you need to fill in the value of days running from the day, and you need to choose a specific time, that is, since the day of the setting of a few days from the day of a certain hour and a certain minute will reboot the device.
Time	Select a specific reboot time (such and such a minute).
Scheduled PPPoE	Enable or disable the PPPoE reboot timer function.
Scheduled Mode	After enabling Timed Reboot PPPoE, you can select the period of reboot: daily, weekly, and only once. If you select Daily, you need to select a specific time, i.e., restart PPPoE at a certain time and minute every day; If you select Weekly, you need to check the weekday, and you need to select a specific time, i.e., restart PPPoE at a certain time and minute on the weekday; If you select Once only, you need to select a specific time, that is, restart PPPoE only once at a certain time and minute on the set day;
Time	Select a specific time to restart (a certain hour and a certain minute).

4.4 Provision

On this page, you can configure Provision related parameters, which supports 3 methods, TFTP (support option 66), HTTP and HTTPS.

Provision	
Configuration Profile	
Provision Enable	Enable 🗸
Resync on Reset	Enable V
Resync Random Delay (sec)	40
Resync Periodic (sec)	3600
Resync Error Retry Delay (sec)	3600
Forced Resync Delay (sec)	14400
Resync after Upgrade	Enable V
Resync from SIP	Enable 🗸
Option 66	Enable V
Option 67	Enable ~
Config File Name	\$(MA)
User Agent	
HTTP Authentication	Basic V
User Name	
Password	
Profile Rule	https://rps.flyingvoice.net/config/\$(MA)?mac=\$(MA)≻
Configuration Profile2	
User Agent	
HTTP Authentication	Basic V
User Name	
Password	
Profile Rule	https://prv4.flyingvoice.net/config/\$(MA)?mac=\$(MA)&
Firmware Upgrade	
Enable Upgrade	Enable 🗸
Upgrade Error Retry Delay (sec)	3600
Upgrade Rule	

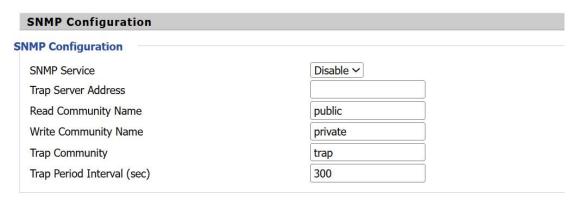
Parameter	Description
Provision Enable	Whether to enable the Provision.

Resync on Reset	Whether configuration synchronization is triggered at each reboot except for parameter updates and firmware upgrades.
Resync Random Delay	Sets the maximum delay time for requesting file synchronization, default for 40 seconds.
	With the interval from 0 to 40 seconds, a value is generated randomly and the device waits for the interval of this value before requesting the Provision server.
	When filled in with 0, it indicates that the feature is disabled as a way to prevent a large number of devices from sending too many server requests at the same time.
Resync Periodic	Fill in the cycle time for the device to automatically resynchronize with the server, default 3600 seconds.
Resync Error Retry Delay	Fill in the interval time for re-synchronization again after synchronization error, default 3600 seconds.
Forced Resync Delay	Fill in the forced synchronization time, i.e., if the device is in a busy state such as a call at the specified re-synchronization time, server synchronization is not possible, then define the interval time to guarantee that the device is forced to re-synchronize after being idle, default 14400 seconds.
Resync after Upgrade	Whether to trigger resynchronization after each firmware upgrade.
Resync From SIP	Whether to enable resynchronization from SIP.
Option 66	Whether to allow enabling DHCP option 66.
Option 67	Whether to allow enabling DHCP option 67.
Config File Name	Fill in the configuration file name.

User Agent	Fill in the user agent name.
HTTP Authentication	HTTP authentication methods, option: Basic, Digest. Basic authentication sends the user and password encrypted by base64 to the server for authentication; Digest authentication is to combine the specific value in the 401 message responded by the server with the user name and password to get a value by irreversible digest algorithm, and then send the user name and this digest value to the server for authentication.
User Name	Fill in the username required for HTTP authentication.
Password	Fill in the password for HTTP authentication.
Profile Rule	Fill in the path URL of the configuration file to complete the synchronization command, which is a TCP/IP operation and an associated URL. The TCP/IP operation can be TFTP, HTTP, or HTTPS.
Enable Upgrade	Whether to upgrade the firmware when resynchronizing.
Upgrade Error Retry Delay	Fill in the retry interval after upgrade failure, when the upgrade fails the system starts timing from the set value and automatically re-upgrades after decreasing to 0, default 3600 seconds.
Upgrade Rule	Fill in the path where the upgrade firmware file is located under the server.

4.5 SNMP

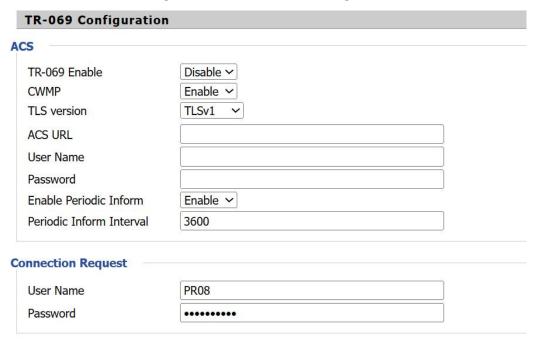
SNMP Simple Network Management Protocol, users can configure the PC and PR08 in the same network segment, through the function with the MIB file to realize the automatic configuration of the device information node.



Parameter	Description
SNMP Service	Whether to enable SNMP function.
Trap Service Address	Fill in the Trap's server address, usually the IP address of the PC.
Read Community Name	Fill in the read-only passphrase, the password and string value used to request information from the device via SNMP.
Write Community Name	Fill in the Read/Write passphrase, the password and string value used to write configuration values to the device via SNMP.
Trap Community	Fill in the passphrase, the password and string value used to retrieve Trap from the device.
Trap Period Interval (sec)	Fill in the time interval for Trap to be sent from the device, default 300 seconds.

4.6 TR069

TR069 is used for auto-negotiation interaction between the device and ACS, which can realize automatic configuration and remote management of the device.



Parameter	Description
TR-960 Enable	Optional to enable or disable the TR069 function.
CWMP	Whether to enable the CWMP protocol function, which is mainly used for remote management of network devices with a large number of configurations in the gateway center.
TLS version	Optional version V1, V1_2 of TLS.
ACS URL	Fill in the URL of the server for TR069, the default is the ACS server address of Flying Voice.
User Name	Fill in the username for the TR069 server connection.
Password	Fill in the password used for the TR069 server connection.
Enable Periodic Inform	Optionally enable periodic notification to inform the user periodically about connection settings.

Periodic Inform Interval	Fill in the time interval for the TR069 server to send periodic notification messages, default 3600 seconds.
User Name	User name of the TR069 server connection to the PR08.
password	Password for the TR069 server to connect to the PR08.

4.7 Power Out

This interface allows users to set the PR08 to support PoE and UPS discharges in different states.

Power Out Configuration Power Out Configuration		
POE1	AutoSwitch ✓	
POE2	AutoSwitch ~	

Parameter	Description
UPS Out	You can select 3 states: AutoSwitch, Always On, Always Off,
	default for AutoSwitch.
	AutoSwitch:
	When PR08 is connected to DC normal power supply, or when it is
	connected to standard 65W mobile power supply, it
	automatically turns on the UPS discharge;
	When PR08 is connected to non-65W mobile power supply, it will
	automatically turn off the UPS discharge.
	Always On: UPS discharge is always on in any state.
	Always Off: UPS discharge is always turned off in any state.

You can select 3 states: Autoswitch, always on, always off, default auto switch.

AutoSwitch:

When PR08 is connected to DC normal power supply, or when it is connected to standard 65W mobile power supply, it will automatically turn on the network port PoE Out;

WAN1/WAN2 PoE Out

When PR08 is connected to non-65W mobile power supply, it will automatically turn off the UPS discharge.

Always On: Network port PoE Out is always turned on in any state.

Always Off: Network port PoE Out is always turned off in any state.

4.8 Diagnosis

Users can perform packet tracing, ping test and traceroute test in this interface to diagnose the connection status of the device.

Topics

Packet Trace

Ping Test

Traceroute test

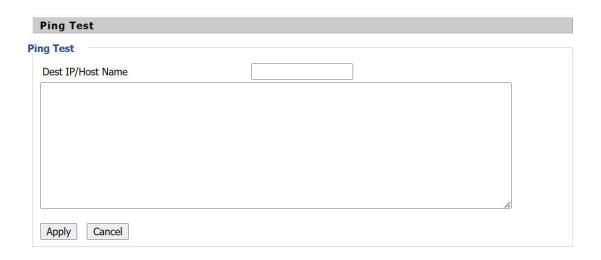
Packet Trace

Users can use the packet tracing function to intercept the sent packets. Click Start button to start data tracing, click Stop to stop capturing packets. Click Save button to save the captured packets.



Ping Test

Fill in the destination IP address or host name and click Submit, the device will execute the ping test.



Traceroute test

Fill in the destination IP address or host name, select IPv4 or IPv6, and then click Submit,

the device will execute route traceroute test.

