



# VOIP ADAPTER USER GUIDE FTA5120

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Flyingvoice Network Technology Co., Ltd.

I/V

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#### **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: Room 207~209, 2/F, Bldg B52#, Zhongchuang Industrial park, Liuxian Avenue, Taoyuan Street, Nanshan District, Shenzhen.

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.

The wireless operation frequency.

WIFI: 2412MHz-2472MHz, Max EIRP Power 19.36dBm.

#### Safety Warning and Attentions

If use adapter, adapter is required to 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 ATA 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/download/gpl.html

## **Risk Warning Statement**

This risk warning statement contains a summary of external network servers that FTA5120 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.ne t:442	Flyingvoice Provision web management configuration server	Disable
2	http://acs3.flyingvoice.net: 8080	Flyingvoice TR069 web management server	Disable
3	clock.fmt.he.net	NTP server	Enable
4	cn.pool.ntp.org	NTP Secondary server	Enable

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## **About This Guide**

Thank you for choosing Flyingvoice FTA5120, which will allow you to make ATA call using your broadband connection.

This guide provides everything you need to quickly use your new ATA. Firstly, verify with your system administrator that the IP network is ready for ATA configuration. Also be sure to read the Quick Start Guide which can be found in your ATA package before you set up and use the IP ATA. As you read this guide, keep in mind that some features are configurable by your system administrator or determined by your ATA environment. As a result, some features may not be enabled or may operate differently on your ATA. Additionally, the examples and graphics in this guide may not directly reflect what is displayed or is available on your ATA screen.

#### **Related Documents**

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

- Datasheet
- Quick start guide

## **Getting Started with Your ATA**

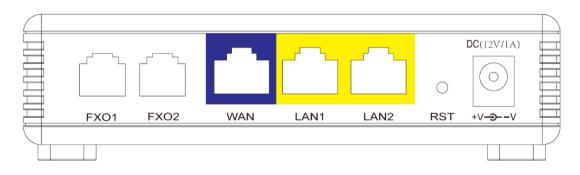
This chapter provides the overview of ATA hardware, and how to navigate your ATA for the best performance.

## **Hardware Overview**

#### Topics

FTA5120 Hardware LED Indicator Hardware Installation

#### FTA5120 Hardware



NO.	ltem	Description
1	DC (12V1A)	Power adapter interface
2	LAN1-LAN2	Local Area Network interface, connect RJ45 cable
3	WAN	Wide Area Network interface, connect RJ45 cable
4	FXO1-FXO2	FXO port, connect RJ11 cable

#### **LED Indicator**

The LED indicator indicates the call, message and ATA's system status.

LED	LED Status	Description
	ON(GREEN)	Powered on
Power	OFF	Powered off
	ON(GREEN)	Connected (Data), running as active WAN
WAN	On Blinking (GREEN)	Connected (Registered)

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Getting Started with Your ATA

	OFF	Disconnected/Power off
	ON(GREEN)	Connected (Data)
LAN	On Blinking (GREEN)	Connected (Registered)
	OFF	Disconnected/Power off
	ON(GREEN)	Connected (Registered)
FXO	On Blinking (GREEN)	Connected (Data)
	OFF	Disconnected/Register fail
	ON(GREEN)	Connected (Registered)
FXO	On Blinking (GREEN)	Connected (Data)
	OFF	Disconnected/Register fail

#### **Hardware Installation**

Before configuring your ATA, please see the procedure below for instructions on connecting the device in your network.

- 1. Connect analog phone to FXO Port with a RJ11 cable.
- 2. Connect the WAN port to your ISP's ATA/switch with a RJ45 cable.
- **3.** Connect one end of the power cord to the power port of the device. Connect the other end to the wall outlet.
- 4. Check the device LED to confirm network connectivity.



#### Warning

Please do not attempt to unsupported power adapters and do not remove power during configuring or updating the device. Using other power adapters may damage the device and will void the manufacturer warranty.

#### Warning

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

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 cause harmful interference to radio communications. However, there is no energy and, if not installed and used in accordance with the instructions, may 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.

#### **Documents**

Name	Content	Location	Language
Quick Guide	Basic functions and	Package	CN/EN
	customization	Flyingvoice Official website	CN/EN
User Guide	Web setting and advanced functions	Flyingvoice Official website	CN/EN

## **Basic Features**

You can use the ATA to make a place and answer calls, ignore incoming calls, transfer a call to someone else, conduct a conference call and perform other basic call features.

Topics

ATA initialization ATA Status Basic Network Setting Configuring SIP trunk

## **ATA** initialization

After the ATA is powered on, the following steps will be performed:

1. Please make sure that the network cable connected to the adapter can access the Internet normally, and the adapter is in DHCP mode by default.

2. Please connect the LAN port of the device to the computer. After the connection is successful, the computer will obtain the IP of 192.168.1.x and can access the Internet normally.

Note: If the ATA cannot obtain the network configuration through the DHCP server, please perform the basic network settings on page 11.

## **ATA Status**

You can check the ATA status through the adapter web interface. The status information of the adapter includes:

- 1. Network status (currently active uplink status, etc.)
- 2. IPv4 address length is 32 bits
- 3. Device information (product name, hardware version, firmware version, product serial number, MAC address)
- 4. Account information (registered information for SIP account)

## **Basic Network Setting**

#### **Static IP**

This configuration may be utilized when a user receives a fixed public IP address or a public subnet, namely multiple public IP addresses from the Internet providers. In most cases, a Cable service. provider will offer a fixed public IP, while a DSL service provider will offer a public subnet. If you have a public subnet, you can assign an IP address to the WAN interface.

Static	
IP Address	192.168.10.173
Subnet Mask	255.255.255.0
Default Gateway	192.168.10.1
DNS Mode	Manual 🔻
Primary DNS	192.168.10.1
Secondary DNS	192.168.18.1

Field Name	Description	
IP Address	The IP address of Internet port	
Subnet Mask	The subnet mask of Internet port	
Default Gateway	The default gateway of Internet port	
DNS Mode	Select DNS mode, options are Auto and Manual:	
	<ol> <li>When DNS mode is Auto, the device under LAN port will automatically obtain the preferred DNS and alternate DNS</li> </ol>	
	2. When DNS mode is Manual, the user manually configures the preferred DNS and alternate DNS information	

Primary DNS Address	The primary DNS of Internet port
Secondary DNS Address	The secondary DNS of Internet port

#### DHCP

The ATA has a built-in DHCP server that assigns private IP address to each local client. The DHCP feature allows to the ATA to obtain an IP address automatically from a DHCP server. In this case, it is not necessary to assign an IP address to the client manually.

INTERNET		
WAN		
Connect Name	1_MANAGEMENT_VOICE_INTERNET_R_VID   Delete Connect	
Service	MANAGEMENT_VOICE_INTERNET ▼	
IP Protocol Version	IPv4 ▼	
WAN IP Mode	DHCP V	
DHCP Server		
MAC Address Clone	Disable 🔻	
NAT Enable	Enable 🔻	
VLAN Mode	Disable 🔻	
VLAN ID	1 (1-4094)	
DNS Mode	Auto 🔻	
Primary DNS		
Secondary DNS		
DHCP		
DHCP Renew	Renew	
DHCP Vendor (Option 60)	FLYINGVOICE-FWR7302	
Field Name	Description	
DNS Mode	Select DNS mode, options are Auto and Manual:	
	When DNS mode is Auto, the device under LAN port will automatically obtain the preferred DNS and alternate DNS.	
	When DNS mode is Manual, the user should manually configure the preferred DNS and alternate DNS.	
Primary DNS Address	Primary DNS of Internet port.	
Secondary DNS Address	Secondary DNS of Internet port.	
DHCP Renew	Refresh the DHCP IP address.	
DHCP Vendor (Option60)	Specify the DHCP Vendor field. Display the vendor and product name.	

#### **PPPoE**

PPPoE stands for Point-to-Point Protocol over Ethernet. It relies on two widely accepted standards: PPP and Ethernet. It connects users through an Ethernet to the Internet with a common broadband medium, such as a single DSL line, wireless device or cable modem. All the users over the Ethernet can share a common connection.

PPPoE is used for most of DSL modem users. All local users can share one PPPoE connection for accessing the Internet. Your service provider will provide you information about user name, password, and authentication mode.

INTERNET		
WAN		
Connect Name	1_MANAGEMENT_VOICE_INTERNET_R_VID V	Delete Connect
Service	MANAGEMENT_VOICE_INTERNET ▼	
IP Protocol Version	IPv4 V	
WAN IP Mode	PPPoE V	
MAC Address Clone	Disable 🔻	
NAT Enable	Enable 🔻	
VLAN Mode	Disable 🔻	
VLAN ID	1 (1-4094)	
DNS Mode	Auto 🔻	
Primary DNS		
Secondary DNS		
PPPoE		
PPPoE Account		
PPPoE Password	••••••	
Confirm Password	•••••	
Service Name		
	Leave empty to autodetect	
Operation Mode	Keep Alive	
Keep Alive Redial Period(0-3600s)	5	

Field Name	Descriptio
PPPoE Account	Enter a valid user name provided by the ISP.
PPPoE Password	Enter a valid password provided by the ISP. The password can contain special characters and allowed special characters are \$, +, *, #, @ and ! For example, the password can be entered as #net123@IT!\$+*

Confirm Password	Enter your PPPoE password again.	Enter your PPPoE password again.						
Service Name	Enter a service name for PPPoE authentication. If it is left empty, the service name is auto detected.							
Operation Mode	Select the mode of operation, options ar When the mode is Keep Alive, the user s range from 0 to 3600s, the default settin	ets the 'keep alive redial period' values						
	When the mode is On Demand, the user the range of 0-60 minutes, the default se							
	Operation Mode On Demand Idle Time(0-60m)	On Demand 💌						

When the mode is Manual, there are no additional settings to configure.

Keep Alive Redial	Set the interval to send Keep Alive messaging.
PPPoE Account	Assign a valid user name provided by the ISP.

## **Configuring SIP trunk**

FTA5120 support forward call between SIP trunk and FXO.

#### **SIP trunk register**

Status Network P	CO Security A	oplication	Administration	
SIP FXO Call Route	Dial Plan(SIP->FXO)	Change	Number(FXO->SIP)	
SIP Trunk	SIP 1 🗸		Replicating Set between accounts	
Basic				
Basic Setup				
Register	Enable 🗸			
Proxy and Registration				
Proxy Server			Proxy Port	5060
Outbound Server			Outbound Port	
Subscriber Information				
Display Name			Phone Number	
Account			Password	
Procedure				

1. Navigate to the FXO/SIP Account web page.

- Input the SIP Server address and SIP Server port number (from server provider) into parameters: Proxy Server and Proxy Port.
- 3. Input account details received from your administrator into Display Name, Phone Number and Account details.
- 4. Type the password received from your administrator into the Password parameter.
- 5. Press Save button in the bottom of the web page to save changes.
- 6. Press Reboot button in the bottom of the web page to make setting effective.
- 7. Navigate to Status page check register status.

#### **PSTN setting**

Basic	
PSTN Trunk Outing	
Tone Region	United States/North America 🗸
Ring Back Type	Belgium (1s-3s)
Impedance match FXO	600Ohms 🗸
FXO Use Callerid	Yes 🗸
FXO CH Cid Type	FSK V
FXO Minimum ring voltage	
FXO TX Vol	GAIN_3DB V
FXO RX Vol	GAIN_6DB V
DTMF CID LEVEL	
Silence_Threshold	
FXO Backup	Disable 🗸
Field Name	Description
Tone Region	Used to match gateway's tone region setting for DTMF CID detect
Ring Back Type	Used to match gateway's ring back type for DTMF CID detect
Impedance match FXO	FXO impedance setting
FXO Use Callerid	FXO CID enable/disable
FXO CH Cid Type	FXO CID type setting: FSK or DTMF
FXO Minimum ring	FXO ring voltage setting
FXO TX Vol	FXO volume gain setting
FXO RX Vol	FXO volume gain setting
DTMF CID LEVEL	DTMF energy setting, when DTMF CID LEVEL > Silence_Threshold, device will detect DTMF CID number
Silence_Threshold	Device default energy setting

#### Call Route

Status	Ne	twork	FX0	Security	App	lication	Administration
SIP F	SIP FXO Call Route		Dial Plan(SIP->	FXO)	Change	Number(FXO->SIP)	

#### Call Route Basic Configuration

**Basic Setting** 

No. Name	Origin	Destination	Dial Prefix	Strip	Priority	Changed number
3 0						
4 0						
Edit Delete						

#### Procedure

1. Navigate to the FXO/Call Route web page.

2. Add call route: call is from SIP trunk1, need forward to FXO1, please refer to call route 1 like picture.

- 3. Please note: when setting call route from sip trunk to FXO, change number is not mandatory, but the call from FXO to sip trunk, you must input change number, this means the call from FXO only could forward to change number.
- 4. Press Save button in the bottom of the web page to save changes.
- 5. Press Reboot button in the bottom of the web page to make setting effective.
- 6. Navigate to Status page check register status.

## **Advanced Web Configuration**

This chapter guides users to execute advanced (full) configuration through admin mode operation. **Topics:** 

Login

<u>Status</u>
<u>Network</u>
<u>FXO</u>
<u>Security</u>
<b>Application</b>
Administration

## Login

	<i>VoIP</i> control panel									
	Username admin									
	Password Login									
Proce	dure Connect the LAN port of the ATA to your PC an Ethernet cable									
2.	Open a web browser on your PC and type http://192.168.1.1.									
3.	Enter Username admin and Password admin									
4.	Click Login									

### **Status**

This webpage shows the status information about the Product, Network, and System including Product Information, SIP Account Status, FXS Port Status, Network Status. and System Status.

#### System status

Advanced Web Configuration

Network Status	
Ethernet WAN Port Status	
WAN Port Status	Link Down
Connection Type	
IP Address	
Subnet Mask	
Default Gateway	
Primary DNS Secondary DNS	
Link-local IPv6 Address	fe80::221:f2ff:fe00:8101/64
IPv6 PD Prefix	
IPv6 Domain Name	
IPv6 Primary DNS	
IPv6 Secondary DNS	
WAN Down Speed	0B/s
WAN Upload Speed	0B/s
VPN Status	
VPN Type	Disable
Initial Service IP	
Virtual IP Address	
LAN Port Status	
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
LAN1	100Mbps Full
LAN2	Link Down
Curta m Chatra	
System Status	
System Status	
Current Time	2021-07-29 13:11:31
Elapsed Time	3 Mins

#### LAN Host

Basic LAN Host Syslog						
LAN Host Info						
MAC Address	IP Address	Interface Type	Address Source	Expires	Host Name	Status
00:21:F2:25:72:A1	192.168.1.43	LAN1	DHCP	14:14:22	FIP16	Active

#### System Log

Status	Network	FXO	FXS	Security	Application	Administration		
Basic	LAN Host	Syslog						
Refresh	Clear Save	•						
Manufact	urer:FLYINGVC	ICE						
ProductCl	ass:FTA5111							
SerialNum	ber:FLY89431	5691235						
BuildTime	:20210730095	8						
IP:192.16								
HWVer:V4								
SWVer:V3								
						3::20c:29ff:fe03:f91b#53		
					meserver 192.168			
					neserver 192.168			
					FFER of 192.168.1 CK to 192.168.11.			
	g 25 05:59:41 g 25 05:59:44					./		
						equests at address 192.168.	11.1	
weu Au				CTC1: webs. Li		equests at audiess 192,100.	11.1	

#### Description

If you enable the system log in Status/syslog webpage, you can view the system log in this webpage.

## Network

You can configure the WAN port, LAN port, DDNS, Multi WAN, DMZ, Port Forward and other parameters in this section of the web management interface.

Topics WAN

<u>VAN</u> <u>LAN</u> <u>VPN</u> <u>DMZ</u> <u>DDNS</u> <u>QoS</u> <u>Port Setting</u> <u>Routing</u> Advanced

#### WAN

This page allows you to set WAN configuration with different modes. Use the Connection Type drop down list to choose one WAN mode and then the corresponding page will be displayed. **Static IP** 

This configuration may be utilized when a user receives a fixed public IP address or a public subnet, namely multiple public IP addresses from the Internet providers. In most cases, a Cable service. provider will offer a fixed public IP, while a DSL service provider will offer a public subnet. If you have a public subnet, you can assign an IP address to the WAN interface.

Static	
IP Address	192.168.10.173
Subnet Mask	255.255.255.0
Default Gateway	192.168.10.1
DNS Mode	Manual 🔻
Primary DNS	192.168.10.1
Secondary DNS	192.168.18.1

Field Name	Description		
IP Address	The IP address of Internet port		
Subnet Mask	The subnet mask of Internet port		
Default Gateway	The default gateway of Internet port		
DNS Mode	Select DNS mode, options are Auto and Manual:		
	3. When DNS mode is Auto, the device under LAN port will automatically obtain the preferred DNS and alternate DNS		
	4. When DNS mode is Manual, the user manually configures the preferred DNS and alternate DNS information		

Primary DNS Address	The primary DNS of Internet port
Secondary DNS Address	The secondary DNS of Internet port

#### DHCP

The ATA has a built-in DHCP server that assigns private IP address to each local client. The DHCP feature allows to the ATA to obtain an IP address automatically from a DHCP server. In this case, it is not necessary to assign an IP address to the client manually.

INTERNET		
WAN		
Connect Name	1_MANAGEMENT_VOICE_INTERNET_R_VID V	Delete Connect
Service	MANAGEMENT_VOICE_INTERNET ▼	
IP Protocol Version	IPv4 ▼	
WAN IP Mode	DHCP V	
DHCP Server		
MAC Address Clone	Disable 🔻	
NAT Enable	Enable 🔻	
VLAN Mode	Disable 🔻	
VLAN ID	1 (1-4094)	
DNS Mode	Auto 🔻	
Primary DNS		
Secondary DNS		
DHCP		
DHCP Renew	Renew	
DHCP Vendor (Option 60)	FLYINGVOICE-FWR7302	
Field Name	Description	

Field Name	Description
DNS Mode	Select DNS mode, options are Auto and Manual:
	When DNS mode is Auto, the device under LAN port will automatically obtain the preferred DNS and alternate DNS.
	When DNS mode is Manual, the user should manually configure the preferred DNS and alternate DNS.
Primary DNS Address	Primary DNS of Internet port.
Secondary DNS Address	Secondary DNS of Internet port.
DHCP Renew	Refresh the DHCP IP address.
DHCP Vendor (Option60)	Specify the DHCP Vendor field. Display the vendor and product name.

#### PPPoE

PPPoE stands for Point-to-Point Protocol over Ethernet. It relies on two widely accepted standards: PPP and Ethernet. It connects users through an Ethernet to the Internet with a common broadband medium, such as a single DSL line, wireless device or cable modem. All the users over the Ethernet can share a common connection.

PPPoE is used for most of DSL modem users. All local users can share one PPPoE connection for accessing the Internet. Your service provider will provide you information about user name, password, and authentication mode.

INTERNET		
WAN		
Connect Name	1_MANAGEMENT_VOICE_INTERNET_R_VID	ete Connect
Service	MANAGEMENT_VOICE_INTERNET ▼	
IP Protocol Version	IPv4 V	
WAN IP Mode	PPPoE V	
MAC Address Clone	Disable 🔻	
NAT Enable	Enable T	
VLAN Mode	Disable 🔻	
VLAN ID	1 (1-4094)	
DNS Mode	Auto V	
Primary DNS		
Secondary DNS		
PPPoE		
PPPoE Account		
PPPoE Password	•••••	
Confirm Password	•••••	
Service Name		
	Leave empty to autodetect	
Operation Mode	Keep Alive 🔻	
Keep Alive Redial Period(0-3600s)	5	
Field Name	Descriptio	
PPPoE Account Enter a vali	d user name provided by the ISP.	

PPPoE Password	Enter a valid password provided by the ISP. The password can contain special
	characters and allowed special characters are $, +, *, #, @$ and !. For example, the
	password can be entered as #net123@IT!\$+*

Confirm Password	Enter your PPPoE password again.	
Service Name	Enter a service name for PPPoE authentication. If it is left empty, the service name is auto detected.	
Operation Mode	Select the mode of operation, options are Keep Alive, On Demand and Manual: When the mode is Keep Alive, the user sets the 'keep alive redial period' values range from 0 to 3600s, the default setting is 5 minutes;	
	When the mode is On Demand, the user sets the 'on demand idle time' va the range of 0-60 minutes, the default setting is 5 minutes;	
	Operation Mode On Demand Idle Time(0-60m)	On Demand 💌

When the mode is Manual, there are no additional settings to configure.

Keep Alive Redial	Set the interval to send Keep Alive messaging.
PPPoE Account	Assign a valid user name provided by the ISP.

#### Bridge Mode

Bridge Mode under Multi WAN is different with traditional bridge setting. Bridge mode employs no IP addressing and the device operates as a bridge between the WAN port and the LAN port. Route Connection has to be built to give IP address to local service on device.

INTERNET			
AN			
Connect Name		1_MANAGEMENT_VOICE_INTERNET_R_VID V	Delete Connect
Service		MANAGEMENT_VOICE_INTERNET ▼	
IP Protocol Version		IPv4 ▼	
WAN IP Mode		Bridge 🔻	
Bridge Type		IP Bridge 🔹	
DHCP Service Type		Pass Through 🔻	
VLAN Mode		Disable 🔻	
VLAN ID		1 (1-4094)	
Port Bind			
Port_1	Port_2	Port_3	
Wireless(SSID)	Wireless(SSID1)	Wireless(SSID2)	<ul> <li>Wireless(SSID3)</li> </ul>
		between the binding port , and finally bound port ection to the port binding operation !	WAN connections bind operation

Field Name	d Name Descriptio	
Bridge Type		
IP Bridge	Allow all Ethernet packets to pass. PC can connect to upper network directly.	
PPPoE Bridge	Only Allow PPPoE packets pass. PC needs PPPoE dial-up software.	
Hardware IP Bridge	Packets pass through hardware switch with wired speed. Does not support wireless port binding.	
DHCP Service Type		
Pass Through	DHCP packets can be forwarded between WAN and LAN, DHCP server in gateway will not allocate IP to clients of LAN port.	
DHCP Snooping	When gateway forwards DHCP packets form LAN to WAN it will add option82 to DHCP packet, and it will remove option82 when forwarding.	

	DHCP packet from the WAN interface to the LAN interface. Local DHCP service will not allocate IP to clients of LAN port.	
Local Service	Gateway will not forward DHCP packets between LAN and WAN, it also blocks DHCP packets from the WAN port. Clients connected to the LAN port can get IP from DHCP server run in gateway.	
/LAN Mode		
Disable	The WAN interface is untagged. LAN is untagged.	
Enable	The WAN interface is tagged. LAN is untagged.	
Trunk	Only valid in bridge mode. All ports, including WAN and LAN, belong to this VLAN Id and all ports are tagged with this VLAN id. Tagged packets can pass through WAN and LAN.	
VLAN ID	Set the VLAN ID.	
	Note Multiple WAN connections may be created with the same VLAN ID.	
802.1p	Set the priority of VLAN, Options are 0~7.	

### LAN

#### LAN Port

NAT translates the packets from public IP address to local IP address to forward packets to the proper destination.

Status	Netwo	rk FXO	Security	Application	Administration					
WAN	LAN IPv6 Advanced IPv6 V		IPv6 WAN	IPv6 LAN	6 LAN VPN DN		VLAN	DDNS	QoS	Port
PC Po	rt(LAN)									
PC Port(L	AN) —									
Local I	P Address			192.	168.1.1					
Local S	ubnet Mask	c		255.	255.255	.0				
Local D	HCP Server	r		Enat	ole 🗸					
DHCP 9	Start Addres	SS		192.1	68.1.2					
DHCP E	End Address	5		192.1	.68.1.25	54				
DNS M	ode			Auto	<b>~</b>					
Primary	y DNS			192.	168.1.1					
Second	lary DNS			8.8.8	3.8					
Client L	.ease Time	(0-86400s)		3600	)					
				DHC	CP Client	List				
DHCP S	Static Allotn	nent								
NO.			MAC			IP /	Address			
Delete	Selected	Add Edit								
DNS Pr	'OXV			Enab	ole 🗸					
Field N	amo		escription							
					بر بر بر از ا					
IP Addre	ess			ress of the ATA						

	of the computers which are in the ATA's LAN must be in the same network segment with this address, and the default gateway of the computers must be this IP address. (The default is 192.168.11.1).
Local Subnet Mask	Enter the subnet mask to determine the size of the network (default is 255.255.255.0/24).
Local DHCP Server	Enable/Disable Local DHCP Server.

DHCP Start Address	Enter a valid IP address as a starting IP address of the DHCP server, and if the ATA's LAN IP address is 192.168.11.1, starting IP address can be 192.168.11.2 or greater, but should be less than the ending IP address.
DHCP End Address	Enter a valid IP address as an end IP address of the DHCP server.
DNS Mode	Select DNS mode, options are Auto and Manual:
	When DNS mode is Auto, the device under LAN port will automatically obtains the preferred DNS and alternate DNS.
	When DNS mode is Manual, the user should manually configure the preferred DNS and alternate DNS.
Primary DNS	Enter the preferred DNS address.
Secondary DNS	Enter the secondary DNS address.
Client Lease Time	This option defines how long the address will be assigned to the computer within the network. In that period, the server does not assign the IP address to the other computer.
DNS Proxy	Enable or disable; If enabled, the device will forward the DNS request of LAN- side network to the WAN-side network.

#### **DHCP** Server

The ATA has a built-in DHCP server that assigns private IP address to each local client. DHCP stands for Dynamic Host Configuration Protocol. The ATA, by factory default acts a DHCP server for your network so it automatically dispatches related IP settings to any local user configured as a DHCP client. It is highly recommended that you leave the ATA enabled as a DHCP server if you do not have a DHCP server for your network.

Port(LAN)	
Local IP Address	192.168.11.1
Local Subnet Mask	255.255.255.0
Local DHCP Server	Enable 🔻
DHCP Start Address	192.168.11.2
DHCP End Address	192.168.11.254
DNS Mode	Auto 🔻

Field Name	Description
Local DHCP Server	Enable/Disable DHCP server.
DHCP Start Address	Enter a value of the IP address pool for the DHCP server to start with when issuing IP addresses.
DHCP End Address	Enter a value of the IP address pool for the DHCP server to end with when issuing IP addresses.
DNS Mode	If DNS information is to be received from a network server, set this parameter to Auto. If DNS information is to be configured manually, set this parameter to Manual.

#### DHCP server, DNS and Client Lease Time

Primary DNS	192.168.11.1
Secondary DNS	8.8.8.8
Client Lease Time(0-86400s)	86400
	DHCP Client List

#### **Field Name**

Description

Primary DNS

Specify the Primary DNS address provided by your ISP. If your ISP does not provide it, the ATA will automatically apply default DNS Server IP address: 202.96.134.33 to this field.

Secondary DNS Secondary IP of 202.96.128.86 to this field. If both the Primary IP and Secondary IP Address fields are left empty, the ATA will assign its own IP address to local users as a DNS proxy server and maintain a DNS cache.

|--|--|

#### VPN

The ATA supports VPN connections with PPTP-based VPN servers.

#### VPN

Status Network FXO	Security	Application	Admi	nistratio	n			
WAN LAN IPv6 Advanced	I IPv6 WAN	IPv6 LAN	VPN	DMZ	VLAN	DDNS	QoS	Port
VPN Settings								
Administration								
VPN Enable	Disable							
	Disable PPTP							
	Say L2TP OpenVF	N Save C	ancel R	Reboot				

Field Name	Description
VPN Enable	Enable/Disable VPN. If the VPN is enabled, user can select PPTP and L2TP mode VPN.
Initial Service IP	Enter VPN server IP address.
User Name	Enter authentication username.
Password	Enter authentication password.

#### DMZ

Status	Net	work	FX0	Security	Administration						
WAN	LAN	IPv6 Advanced		IPv6 WAN	IPv6 LAN	VPN DMZ		VLAN	DDNS	QoS	Port S
Demil	itarize	ed Zone	e (DMZ)								
DMZ Sett	ing –										
DMZ Er	able				Disa	ible 🗸					
Save & Apply Save Cancel Reboot											
				- Carlo artp	<u>,,,   ouro   o</u>						

Advanced Web Configuration

Field Name	Description
DMZ Enable	Enable/Disable DMZ.
DMZ Host IP Address	Enter the private IP address of the DMZ host.

#### **DDNS**

Status N	etwork	FX0	Security	Applicat	ion A	dministra	ation				
WAN LAN	IPv6	Advanced	IPv6 WAN	IPv6 L	AN V	PN DM	z	VLAN	DDNS	QoS	Port Settin
DDNS Sett	ing										H
DDNS Setting											
Dynamic DN	S Provider				NONE	~	]				
Account											
Password					•••••	••					
DDNS URL											
Status					NONE						
			Save & Ap	ply Save	e Cance	Reboot	t				
Field Nam	ne	Descrip	otion								

Field Name	Description
Dynamic DNS	Enable DDNS and select the DDNS service provider
Account	Fill in the DDNS service account
Password	Fill in the DDNS service account password
DDNS URL	Fill in the DDNS domain name or IP address
Status	Check if DDNS is successfully upgraded

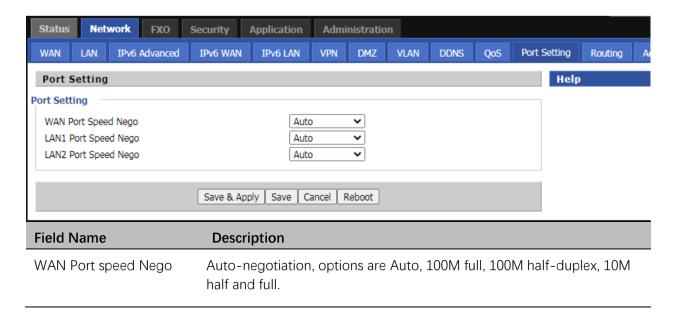
#### QoS

Advanced Web Configuration

Status	Net	work	FX0	Security	Application	Admi	inistratio	n			
WAN	LAN	IPv6	Advanced	IPv6 WAN	IPv6 LAN	VPN	DMZ	VLAN	DDNS	QoS	Port Sett
QOS Ba	andwid	th Set	ting								
Enable (	QoS						Dis	able 🗸			
						Sav	/e Ca	ncel			
QOS R	ules Se	tting									
					Condition						
Na			Dst.IP Address Pr	Src.Po otocol Range		nysical Port	DSCP 8	302.1p VI			temark Rer 302.1p VLA
						Delete	Selected	Add			
							Reboot	]			

Field Name	Description
QoS Enable	Enable/Disable QoS function
Upstream	Set the upstream bandwidth
Downstream	Set the downstream bandwidth
Delete Selected	In NO., Check the items you want to delete, click the Delete option
Add	Click Add to add a new parameter

#### **Port Setting**



LAN1~LAN2 Port Speed	Auto-negotiation, options are Auto, 100M full, 100M half, 10M half and
Nego	10M full.

### Routing

Status	Ne	twork	FX0	Security	Application	Admi	inistratio	'n				
WAN	LAN	IPv6	Advanced	IPv6 WAN	IPv6 LAN	VPN	DMZ	VLAN	DDNS	QoS	Port Setting	Routing
Stati	c Routi	ing Set	ttings								Hel	р
Add a ro Destin Host/I Gatew Interfa	ation Net ray ace	ıle —					· ·				Add or rules h	remove Int ere.
Comm					Apply Res	set						
No.	Routing	Destina	in the sys	sk Gal	elete Selected	Reset	Metric	Inte	erface	Commer	it	
StaticRo Static	o <mark>ute (Op</mark> Route (O		-	s		ble 🗸 Reboot						

Field Name	Description
Destination	Destination address
Host/Net	Both Host and Net selection
Gateway	Gateway IP address
Interface	LAN/WAN/Custom three options, and add the corresponding address
Comment	Comment

### Advanced

Status Ne	etwork	FXO	Security	Applicat	ion /	Admin	istratio	n						
WAN LAN	IPv6	Advanced	IPv6 WAN	IPv6 L	AN V	PN	DMZ	VLAN	DDNS	QoS	Port S	Setting	Routing	Advance
r												Help		
Most Nat conn	ections (5	12-8192)			4096									
MSS Mode					🔘 Mani	ual O	Auto							
MSS Value (12	60-1460)				1440									
Anti-DoS-P					● Enable ○ Disable									
IP Conflict Det	ection				🔘 Enab	ole O I	Disable							
IP Conflict Detection Interval(0-3600s)					0									
				,										
			Ap	oply Can	cel Reb	boot								

Field Name	Description
Most Nat connections	The largest value
MSS Mode	Choose MSS Mode from Manual and Auto
MSS Value	Set the value of TCP
Anti-Dos-P	You can choose to enable or prohibit
IP conflict detection	Select enable if enabled, phone IP conflict will have tips or prohibit
IP conflict Detecting Interval	Detect IP address conflicts of the time interval

### FXO

#### Topics <u>SIP</u> <u>FXO</u> <u>Call Route</u> <u>Dial Plan (SIP->FXO)</u> <u>Change Number (FXO->SIP)</u> <u>Dial Plan Syntactic</u>

#### SIP

Basic

Advanced Web Configuration

Status Network P	CO Security Application	Administration	
SIP FXO Call Route		e Number(FXO->SIP)	
SIP Trunk	SIP 1 🗸	Replicating Set between accounts	
Basic			
Basic Setup			
Register	Enable 🗸		
Proxy and Registration			
Proxy Server		Proxy Port	5060
Outbound Server		Outbound Port	
Subscriber Information			
Display Name		Phone Number	
Account		Password	
Audio Configuration			
Codec Setup			
Audio Codec Type 1	G.711U ₩	Audio Codec Type 2	G.711A 🗸
Audio Codec Type 3 Audio Codec Type 5	GSM	Audio Codec Type 4	G.726 🗸
Echo Cancel	Enable V		
Field name	Description		
Field name SIP trunk	Description Choose SIP trunk		
		gister another SIP server	
	Choose SIP trunk	-	
SIP trunk	Choose SIP trunk Enable: as VoIP terminal, reg	o peer mode	
SIP trunk Register	Choose SIP trunk Enable: as VoIP terminal, reg Disable: SIP trunk use peer t	o peer mode in of SIP Server	
SIP trunk Register Proxy Server	Choose SIP trunk Enable: as VoIP terminal, reg Disable: SIP trunk use peer t The IP address or the domain	o peer mode in of SIP Server in of Outbound Server	Server
SIP trunk Register Proxy Server Outbound Server	Choose SIP trunk Enable: as VoIP terminal, reg Disable: SIP trunk use peer t The IP address or the domain The IP address or the domain	o peer mode in of SIP Server in of Outbound Server in of Backup Outbound S	Server
SIP trunk Register Proxy Server Outbound Server Backup Outbound Server	Choose SIP trunk Enable: as VoIP terminal, reg Disable: SIP trunk use peer t The IP address or the domain The IP address or the domain The IP address or the domain	o peer mode in of SIP Server in of Outbound Server in of Backup Outbound S	Server
SIP trunk Register Proxy Server Outbound Server Backup Outbound Server Proxy port	Choose SIP trunk Enable: as VoIP terminal, reg Disable: SIP trunk use peer t The IP address or the domain The IP address or the domain The IP address or the domain SIP Service port, default is 50	o peer mode in of SIP Server in of Outbound Server in of Backup Outbound S 060 ort, default is 5060	
SIP trunkRegisterProxy ServerOutbound ServerBackup Outbound ServerProxy portOutbound Port	Choose SIP trunk Enable: as VoIP terminal, reg Disable: SIP trunk use peer t The IP address or the domai The IP address or the domai The IP address or the domai SIP Service port, default is 5 Outbound Proxy's Service p	o peer mode in of SIP Server in of Outbound Server in of Backup Outbound S 060 ort, default is 5060 ervice port, default is 500	
SIP trunkRegisterProxy ServerOutbound ServerBackup Outbound ServerProxy portOutbound PortBackup Outbound Port	Choose SIP trunk Enable: as VoIP terminal, reg Disable: SIP trunk use peer t The IP address or the domain The IP address or the domain The IP address or the domain SIP Service port, default is 50 Outbound Proxy's Service por Backup Outbound Proxy's S	o peer mode in of SIP Server in of Outbound Server in of Backup Outbound S 060 ort, default is 5060 ervice port, default is 500 d on LCD	
SIP trunkRegisterProxy ServerOutbound ServerBackup Outbound ServerProxy portOutbound PortBackup Outbound PortDisplay Name	Choose SIP trunk Enable: as VoIP terminal, reg Disable: SIP trunk use peer t The IP address or the domain The IP address or the domain The IP address or the domain SIP Service port, default is 50 Outbound Proxy's Service per Backup Outbound Proxy's S The number will be displayed	o peer mode in of SIP Server in of Outbound Server in of Backup Outbound S 060 ort, default is 5060 ervice port, default is 500 d on LCD pvided by SIP Proxy	

Advanced Web Configuration
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Audio Codec Type1	Choose the audio codec type from G.711U, G.711A, GSM, G.729, G.726
Audio Codec Type2	Choose the audio codec type from G.711U, G.711A, GSM, G.729, G.726
Audio Codec Type3	Choose the audio codec type from G.711U, G.711A, GSM, G.729, G.726
Audio Codec Type4	Choose the audio codec type from G.711U, G.711A, GSM, G.729, G.726
Audio Codec Type5	Choose the audio codec type from G.711U, G.711A, GSM, G.729, G.726
Echo Cancel	Enable/Disable echo cancel. By default, it is enabled

#### **SIP Parameters**

SIP Parameters			
UDP Signal Port 5080			
TCP Signal Port			
TLS Signal Port			
Use Random SIP Port	Disable 🗸		
Min Random SIP Port	50000         Max Random SIP Port         60000		
Trunk Transport			
Sip Trunk SRTP	Disable 🗸		
Register Refresh Interval (60~3600 sec)	120		
DTMF Mode	2833 🗸		
RFC2833 Payload (>=96)	1		
RTP Port Min	000		
RTP Port Max	20000		
FROMUSER FIELD	FROM SIPTRUNK-AND-PSTN V		
DIAL TIME	30		
RPID From Sip Trunk	Sip Trunk Number 🗸		
NAT NO Trunk Tls Dont Verify Server	Yes  Yes  Yes  Yes  Yes  Yes  Yes  Yes		
Field Name	Description		
UDP Signal Port The local port of SIP protocol, default is 5080			
Use Random SIP port The local random port of SIP protocol			
Min Random SIP port Min Random SIP port, default is 50000			
Max Random SIP port Max Random SIP port, default is 60000			
Trunk Transport SIP protocol: UDP,TCP,TLS			
SIP Trunk SRTPEnable = RTP encrypt / disable = RTP unencrypt			
Register Refresh Interval The interval between two normal Register messages. default setting is 120 (60~3600 sec)			
DTMF Mode Choose the DTMF type from Inband, RFC2833 and INFO			
RFC2833Payload	User can use the default setting		
(>=96)			
RTP Port min Min Random RTP port, default is 10000			
RTP Port max Min Random RTP port, default is 20000			
FROMUSER FIELD FROM SIPTRUNK-AND-PSTN: SIP header data from field=SIP trunk nu and PSTN number			
	FROM SIPTRUNK: SIP header data from field=SIP trunk number		
	FROM PSTN: SIP header data from field=PSTN number		
DIAL TIME	Call route from FXO to SIP trunk timeout setting		
RPID From Sip Trun	k SIP header data Remote-Party-ID setting		

NAT NO Trunk	IP directly call with NAT
Tls Dont Verify Server	TLS peer to peer call

#### Layer 3 QoS

ayer 3 QoS		
SIP QoS(0-63)	46	
RTP QoS(0-63)	46	
AT Traversal Cottin	a	
Field Name	Description	
IP QoS(0-63)	VoIP SIP data QoS setting	
RTP QoS(0-63)	VoIP RTP data QoS setting	

#### NAT Traversal Setting

Extern Host Extern IP		
Extern IP		
Extern Refresh		
Localnet		
NAT MODE	YES 🗸	

Description
Upper ATA's domain name which use to do NAT
Upper ATA's IP which use to do NAT
NAT setting refresh time
Device's IP net
Enable/disable NAT traversal

#### STUN SETTING

STUN SETTING		
STUN STUNADDR STUN REFRESH	Yes 🗸	
Field Name	Description	
STUN	Enable/disable STUN	

STUNADDR	STUN server IP
STUN REFRESH	Refresh time to refresh stun information

#### **Configure SAS**

Stand-alone survivability (SAS) is a resource that allows it to assume the functions of an IP PBX in a limited manner, should the latter become unavailable. This way, it is possible to maintain the basic

telephony functions until the IP PBX is made available again. It is a useful resource for environments with a cloud-based IP PBX, for example, where communications need to be kept active in case the connection with the IP PBX becomes unavailable. It is necessary to configure the extensions in a way that the ATA will be defined as a proxy SIP. The survivability module verifies the availability of the IP PBX at a configurable interval of seconds through the SIP OPTIONS command. If there is no response to the SIP OPTIONS command within the defined time interval, its mode of operation is changed from proxy to survival mode.

Configure SAS			
SAS	Enable 🗸		
Partysip Port	5070		
Customer Reg Port	5060		
Qualify	no 🗸		
Qualify Freq(s)	60		
Record Route	Off 🗸		
Outbound Proxy		Outbound Port	

Field Name	Description
SAS	Enable/disable SAS
Partysip Port	Cloud PBX's SIP listen port
Customer Reg Port	Client register port
Qualify	Enable/disable to monitor PBX
Qualify Freq(s)	Device monitoring PBX interval
Record Route	NAT setting refresh time
Outbound Proxy	Device's IP net
Outbound Port	Enable/disable NAT traversal

## FXO

#### **PSTN Trunk Outing**

Basic	
PSTN Trunk Outing	
Tone Region	United States/North America 🗸
Ring Back Type	Belgium (1s-3s) 🗸
Impedance match FXO	600Ohms 🗸
FXO Use Callerid	Yes 🗸
FXO CH Cid Type	FSK V
FXO Minimum ring voltage	21V 🗸
FXO TX Vol	GAIN_3DB 🗸
FXO RX Vol	GAIN_6DB 🗸
DTMF CID LEVEL	
Silence_Threshold	
FXO Backup	Disable 🗸

Field Name	Description
Tone Region	Used to match gateway's tone region setting for DTMF CID detect
Ring Back Type	Used to match gateway's ring back type for DTMF CID detect
Impedance match FXO	FXO impedance setting
FXO Use Callerid	FXO CID enable/disable
FXO CH Cid Type	FXO CID type setting: FSK or DTMF
FXO Minimum ring	FXO ring voltage setting
FXO TX Vol	FXO volume gain setting
FXO RX Vol	FXO volume gain setting
DTMF CID LEVEL	DTMF energy setting, when DTMF CID LEVEL > Silence_Threshold, device will detect DTMF CID number
Silence_Threshold	Device default energy setting
FXO Backup	FXO backup setting, enable, FXO1 and FXO2 are backup for each other

#### Supplementary Services

Supplementary Services Auto Answer Sip-trunk Call DTMF Sequence Generate FXO HOO Hook Flash Time FXO Collect Call Control FXO Block Collect Interval Time FXO	Disable   Disable   **123  200ms   Disable   200ms	
Field Name	Description	
Auto Answer Sip-trunk Call	Enable: support two-stage dialing users could call sip trunk number, then dial outgoing number again Disable: doesn't support two-stage dialing	
DTMF Sequence Generate FXO HOOK FLASH	DTMF number which used to do HOOK FLASH	
Hook Flash Time FXO	Within this time, if users press DTMF number, then device will hold the call	
Collect Call Control FXO	Block collect call, Collect call is a call that the user receiving this call from PSTN line will pay for	
Block Collect Interval Time FXO	Block collect call interval setting	

## **Call Route**

Call Route Basic Configuration		
Basic Setting		
No. Name   1 Image: Constraint of the second s	Origin Destination Dial Prefix Strip Priority Changed number   Image: Image	
Priority Changed number		
Apply Cancel		
Field Name	Description	
Name	Call route name	
Origin	Call route source interface, where the call from	
Destination	Call route destination interface, where the call will to	
Dial Prefix	Call dial prefix setting	
Strip	Dial prefix number setting, strip=2, there should be 2 dial prefix number	
Priority	Call route priority setting	
Changed number	The destination number setting	
	When the call from FXO to SIP trunk, changed number is mandatory	
	When the call from sip trunk to FXO, changed number is not mandatory	

## Dial Plan (SIP->FXO)

SIP FXO Call Route	Dial Plan(SIP->FXO)	Change Number(FXO->SIP)	
Dial Rule			
General			
	ect V		
No. Line	Digit Map	Action	Move Up Move Down
	Edit	Add Delete	
	Save	Cancel Reboot	

#### **Field Name**

Description

Controls how calls will be dialed using this line. It can add a Prefix to Matched Numbers and remove Digits by setting Dial Cuts

Dial Plan	Enable/Disable dial plan
Line	Set the line
Digit Map	Enter the sequence used to match input number
Action	Choose the dial plan mode from Deny and Dial Out
Move Up	Move the dial plan up the list
Move Down	Move the dial plan down the list

## Change Number (FXO->SIP)

SIP FXO Cal	ll Route Dial Plan(SIP->FXO) C	hange Number(FXO->SIP)	)
Changed number	er		
General			
Changed number	Disable 🗸		
No. Line	Digit Map	М	ove Up 🛛 Move Down 🗖
	Edit Ad	d Delete	
	Save Can	cel Reboot	
Field Name	Description		

Handles the source number of the KAP dial-in call to the server by changing in the "from" field in the KAP INVITE

Dial Plan	Enable/Disable dial plan
Line	Set the line
Digit Map	Enter the sequence used to match input number
Move Up	Move the dial plan up the list
Move Down	Move the dial plan down the list

## **Dial Plan Syntactic**

No.	String	Description		
1	0123456789*#	Allowed characters		
2	Х	Lowercase letter "x" stands for one legal character		
		To match one character from sequence. For example:		
		[0-9]: match one digit from 0 to 9		
3	[sequence]	[23-5*]: match one character from 2 or 3 or 4 or 5 or *		
		Match to x, xx, xxx, xxxx and so on.		
4	Х.	For example:		
		"01" can be match to "0","01","011""011111" and so on		
		Replace dialed with substituted		
5		For example:		
	<dialed: substituted=""></dialed:>	<8:1650>123456: input is "85551212", output is"16505551212"		

		Make outside dial tone after dialing "x", stop until dialing character "y"
		For example:
		"9,1xxxxxxxxx": the device reports dial tone after inputting "9", stops tone until inputting "1"
6	Х,У	"9,8,010x": make outside dial tone after inputting "9", stop tone until inputting "0"
		Set the delayed time. For example:
7	Т	"<9:111>T2": The device will dial out the matched number "111" after 2 seconds

## Security

Topics Filtering Setting Content Filtering

## **Filtering Setting**

sic Settings	
Filtering	Disable 🔻
Default Policy	Drop 🔻
The packet that don't match with any rules would be Drop	
Save Cancel	
Port Filter Settings	
Interface	LAN 🔻
Mac address	
Dest IP Address	
Source IP Address	
Protocol	NONE T
Dest. Port Range	
Src Port Range	
Action	Accept 🔻
Comment	
( The maximum rule count is 32 )	

Field Name	Description
Filtering	Enable/Disable filter function
Default Policy	Choose to drop or accept filtered MAC addresses
Mac address	Add the Mac address filtering
Dest IP address	Destination IP address
Source IP address	Source IP address

Protocol	Select a protocol name, support for TCP, UDP and TCP/UDP
Dest. Port Range	Destination port ranges
Src Port Range	Source port range
Action	You can choose to receive or give up; this should be consistent with the default policy
Comment	Add callout
Delete	Delete selected item

## **Content Filtering**

Filtering Setting Content Filtering	
Basic Settings	
Basic Settings	
Filtering	Disable
Default Policy	Accept V
Save Cancel	
Filter List Upload & Download	
Local File 选择文件 未选择任何文件 Upload Download	
Web URL Filter Settings	
Current Web URL Filters	
No.	URL
	Delete Cancel
Add a URL Filter	
URL	
( The maximum rule count is 16 )	
	Add Cancel
Web Host Filter Settings	
Current Website Host Filters	
No.	Keyword
	Delete Cancel
Add a Host (keyword) Filter	
Keyword	
( The maximum rule count is 16 )	
	Add Cancel

Field Name	Description
Filtering	Enable/Disable content Filtering
Default Policy	The default policy is to accept or to prohibit filtering rules
Current Webs URL	List the URL filtering rules that already existed (blacklist)
Delete/Cancel	You can choose to delete or cancel the existing filter rules
Add a URL Filter	Add URL filtering rules
Add/Cancel	Click adds to add one rule or click cancel
Current Website Host Filters	List the keywords that already exist (blacklist)
Delete/Cancel	You can choose to delete or cancel the existing filter rules the existing
Add a Host Filter	Add keywords
Add/Cancel	Click the Add or cancel

# Application

Topics Advance NAT UPnP

## Advance NAT

Status	Network	FX0	FXS	Security	Application	Administration
Advanced	I NAT UPni	P				
ALG						
ALG Settin	Ig					
FTP		Enable	~			
SIP		Disable	~			
H323		Disable	~			
PPTP		Disable	~			
L2TP		Disable	~			
IPSec		Disable	~			

#### Description

Enable/Disable these function(FTP/SIP/H323/PPTP/L2TP/IPSec).

## UPnP

UPnP (Universal Plug and Play) supports zero-configuration networking, and can automatically discover a variety of networked devices. When UPnP is enabled, the connected device is allowed to access the network, obtain an IP address, and convey performance information. If the network has a DHCP and DNS server, the connected device can automatically obtain DHCP and DNS services.

UPnP devices can be automatically added to the network without affecting previously-connected devices.

UPnP	
UPIIP	
UPnP Setting	
Enable UPnP	Enable  Disable Enable
	Save & Apply Save Cancel Reboot
ield Name	Description
JPnP enable	Enable/Disable UPnP function

## **Administration**

The user can manage the device in these webpages; you can configure the Time/Date, password, web access, system log and associated configuration TR069.

#### Topics

Management Firmware Upgrade Schedule Tasks Provision SNMP TR-069 Diagnosis Operating Mode

## Management

#### Save config file

Save Config File	
onfig File Upload &&	Download
Local File	选择文件未选择任何文件
Upload Download	
	'

Field Name	Description	
Config file upload and download	Upload: click on browse, select file in the local, press the upload button to begin uploading files	
	Download: click to download, and then select contains the path to download the configuration file	

## Administrator settings

Administrator Settings	
Password Reset	
User Type	Admin User 🔻
New User Name	admin
New Password	(The maximum length is 25)
Confirm Password	
Language	
Language	English 🔻
VPN Access	
Management Using VPN	Disable 🔻
Neb Access	
Remote Web Login	Enable 🔻
Local Web Port	80
Web Port	80
Web Idle Timeout (0 - 60min)	5
Allowed Remote IP (IP1;IP2;)	0.0.0.0
Felnet Access	
Remote Telnet	Disable 🔻
Telnet Port	23
Allowed Remote IP (IP1;IP2;)	0.0.0.0
HostName	FWR7302

Field Name	Description
User type	Choose the user type from admin user and normal user and basic user
New User Name	You can modify the user name, set up a new user name
New Password	Input the new password
Confirm Password	Input the new password again
Language	Select the language for the web, the device support Chinese, English, and Spanish and so on
Remote Web Login	Enable/Disable remote Web login
Web Port	Set the port value which is used to login from Internet port and PC port, default is 80

Web Idle timeout	Set the Web Idle timeout time. The webpage can be logged out after Web Idle Timeout without any operation
Allowed Remote IP(IP1,IP2,)	Set the IP from which a user can login the device remotely
Telnet Port	Set the port value which is used to telnet to the device

## NTP settings

Settings	
NTP Enable	Enable 🔻
Option 42	Disable 🔻
Current Time	2016 - 01 - 19 . 05 : 55 : 06
Sync with host	Sync with host
NTP Settings	(GMT-06:00) Central Time
Primary NTP Server	pool.ntp.org
Secondary NTP Server	
NTP synchronization(1 - 1440min)	60

# Daylight Saving Time Disable 🔻

Field Name	Description
NTP Enable	Enable/Disable NTP
Option 42	Enable/Disable DHCP option 42. This option specifies a list of the NTP servers available to the client by IP address
Current Time	Display current time
NTP Settings	Setting the Time Zone
Primary NTP Server	Primary NTP server's IP address or domain name

Secondary NTP Server	Options for NTP server's IP address or domain name
NTP synchronization	NTP synchronization cycle, cycle time can be 1 to 1440 minutes in any one, the default setting is 60 minutes

#### System Log Setting

) Setting	
Syslog Enable	Enable 🔻
Syslog Level	INFO V
.ogin Syslog Enable	Enable 🔻
Call Syslog Enable	Enable 🔻
Net Syslog Enable	Enable 🔻
Device Management Syslog Enable	Enable 🔻
Device Alarm Syslog Enable	Enable 🔻
Kernel Syslog Enable	Enable 🔻
Remote Syslog Enable	Disable 🔻
Remote Syslog Server	

Field Name	Description
Syslog Enable	Enable/Disable syslog function
Syslog Level	Select the system log, there is INFO and Debug two grades, the Debug INFO can provide more information
Remote Syslog	Enable/Disable remote syslog function
Remote Syslog	Add a remote server IP address
Syslog Enable	Enable/Disable syslog function

#### **Factory Defaults Setting**

Factory Defaults Setting	
Factory Defaults Setting	
Factory Defaults Lock	Disable <b>•</b>

#### Description

When enabled, the device may not be reset to factory defaults until this parameter is reset to Disable.

#### **Factory Defaults**

#### Factory Defaults

Reset to Factory Defaults

Factory Default

#### Description

Click Factory Default to restore the residential gateway to factory settings.

## Firmware Upgrade

St	atus Ne	twork	FX0	FXS	Security	Application	Administra	tion		
Ma	anagement	Firmwa	are Upgra	ide S	cheduled Tasks	Certificates	Provision	SNMP	TR-069	Diag
Fi	Firmware Management									
Firm	ware Upgra	ade —								
Lo	Local Upgrade 选择文件 未选择任何文件									
	Upgrade									
Desc	ription									
1.	Choose ι	upgrade	e file typ	e from	lmage File an	d Dial Rule				
2.	Press "Br	owse"	button t	to brow	ser file					
3.	Press	Upgrade	to st	art upg	rading					

## **Scheduled Tasks**

Status Network			Application	Administrat			
Management Firr	mware Upgrade	Scheduled Tasks	Certificates	Provision	SNMP	TR-069	Di
Scheduled Task	S						
heduled Reboot							
neutied Rebool							
Scheduled Reboot	Disable	• •					
Uptime Days	0						
Time	00 🗸	: 00 🗸					
heduled PPPoE							
Scheduled PPPoE	Disable	• •					
Scheduled Mode	Every I	Day 🗸					
Time	00 🗸	: 00 🗸					

Field Name	Description
Scheduled Reboot	
Scheduled Reboot	Enable / disable scheduled reboot
Scheduled Mode	Choose work mode every day / week
Time	Set the time for scheduled reboot
Scheduled PPPoE	
Scheduled PPPoE	Enable / disable restart PPPoE
Scheduled Mode	Choose work mode every day / week
Time	Set the time for scheduled PPPoE

## **Provision**

Provisioning allows the ATA to auto-upgrade and auto-configure devices which support TFTP, HTTP and HTTPs.

- Before testing or using TFTP, user should have TFTP server and upgrading file and configuring file.
- Before testing or using HTTP, user should have HTTP server and upgrading file and configuring file.
- Before testing or using HTTPS, user should have HTTPS server and upgrading file and configuring file and CA Certificate file (should same as https server's) and Client Certificate file and Private key file.
- User can upload a CA Certificate file and Client Certificate file and Private Key file in the Security page.

Status Ne	twork	FX0	FXS	Security	Application	Administrat	tion			
Management	Firmw	are Upgra	ide S	cheduled Tasks	Certificates	Provision	SNMP	TR-069	Diag	
Provision										
onfiguration A	Profile									
Provision Enal	ble				Enable 🗸					
Resync on Re	set				Enable 🗸					
Resync Rando	m Delay	(sec)			40					
Resync Period	lic (sec)				3600					
Resync Error	Retry Dela	ay (sec)			3600					
Forced Resyn	c Delay (s	ec)			14400					
Resync after (	Jpgrade				Enable 🗸					
Resync from 9	SIP				Disable 🗸					
Option 66					Enable 🗸					
Option 67					Enable 🗸					
Config File Name					\$(MA)					
User Agent										
Profile Rule					http://prv1.fly	ingvoice.net:69	/config/\$(	MA)?mac=\$	(MA)&:	

Field Name	Description
Provision Enable	Enable provision or not.
Resync on Reset	Enable resync after restart or not.
Resync Random Delay(sec)	Set the maximum delay for the request of synchronization file. The default is 40.
Resync Periodic(sec)	If the last resync was failure, The ATA will retry resync after the "Resync Error Retry Delay" time, default is 3600s.
Resync Error Retry	Set the periodic time for resync, default is 3600s.
Forced Resync Delay(sec)	If it's time to resync, but the device is busy now, in this case, the ATA will wait for a period time, the longest is "Forced Resync Delay", default is 14400s, when the time over, the ATA will forced to resync.
Resync After	Enable firmware upgrade after resync or not. The default is Enabled.
Resync From SIP	Enable/Disable resync from SIP.
Option 66	It is used for In-house provision mode only. When use TFTP with option 66 to realize provisioning, user must input right configuration file name in the webpage. When disable Option 66, this parameter has no effect.
Config File Name	It is used for In-house provision mode only. When use TFTP with option 66 to realize provisioning, user must input right configuration file name in the webpage. When disable Option 66, this parameter has no effect.

Profile Rule

URL of profile provision file.

Note that the specified file path is relative to the TFTP server's virtual

root directory.

Firmware Upgrade	
Upgrade Enable	Enable 🔻
Upgrade Error Retry Delay(sec)	3600
Upgrade Rule	

Field Name	Description
Upgrade Enable	Enable firmware upgrade via provision or not
Upgrade Error	If the last upgrade fails, the ATA will try upgrading
Retry Delay(sec)	again after "Upgrade Error Retry Delay" period, default is 3600s
Upgrade Rule	URL of upgrade file

#### **SNMP**

Status Ne	twork FXO	FXS	Security	Application	Administra	uon			
Management	Firmware Upgr	ade S	Scheduled Tasks	Certificates	Provision	SNMP	TR-069		
SNMP Confi	iguration								
MP Configur	ation								
SNMP Service				Disable 🗸					
Trap Server Address									
Read Community Name				public					
Write Community Name			private						
Trap Community			trap						
Trap Period In	terval (sec)			300					

Save & Apply Save Cancel Reboot

Field Name	Description
SNMP Service	Enable or Disable the SNMP service
Trap Server Address	Enter the trap server address for sending SNMP traps
Read Community Name	String value that is used as a password to request information via SNMP from the device
Write Community Name	String value that is used as a password to write configuration values to the device via SNMP
Trap Community	String value used as a password for retrieving traps from the device
Trap period interval(sec)	The interval for which traps are sent from the device

## TR-069

TR-069 provides the possibility of auto configuration of internet access devices and reduces the cost of management. TR-069 (short for Technical Report 069) is a DSL Forum technical specification entitled CPE WAN Management Protocol (CWMP). It defines an application layer protocol for remote management of end-user devices. Using TR-069, the terminals establish connection with the Auto Configuration Servers (ACS) and get configured automatically.

#### **Device Configuration using TR-069**

The TR-069 configuration page is available under Administration menu.

Status Network FX	KO FXS Security Application Administration								
Management Firmware U	Jpgrade Scheduled Tasks Certificates Provision SNMP TR-069 Diagr								
TR-069 Configuration									
ACS									
TR-069 Enable	Enable 🗸								
CWMP	Enable 🗸								
TLS version	TLSv1 🗸								
ACS URL	https://acs.setngo.svc.khomp.com/								
User Name	tr069								
Password	•••••								
Enable Periodic Inform	Enable 🗸								
Periodic Inform Interval	86400								
Connection Request									
User Name	FTA5111								
Password									
Field Name	Description								
ACS parameters									
TR069 Enable	Enable or Disable TR069								
TR069 Enable	Enable or Disable TR069 Enable or Disable CWMP								
TR069 Enable CWMP									
	Enable or Disable CWMP								

Periodic Inform Enable	Enable the function of periodic inform or not. By default it is Enabled						
Periodic Inform Interval	Periodic notification interval with the unit in seconds. The default value i 3600s						
Connect Request parameters							
Connect Request param	eters						
Connect Request parame	eters The username used to connect the TR069 server to the DUT						

#### **Diagnosis**

In this page, user can do packet trace, ping test and traceroute test to diagnose the device's connection status.

Status	Network	FX0	FXS	Security	Application	Administra	tion		
Managem	Management Firmware Upgrade		de	Scheduled Tasks	G Certificates	Provision	SNMP	TR-069	Diagnosis
Packet	Capture								H
Packet Ca	pture								
Tracking	Interface			WAN 🗸	]				
Filtering Rule ALL Packets									
Upload F	Packet Enable			Disable	~				
Packet Capture start stop save									
FXO Captu	ire								
FXO Cha	annel			FX01 ¥					
FXO Cap	oture			start	stop save				
Ding Tr	het								



1. Packet Trace

Users can use the packet trace feature to intercept packets which traverse the device. Click the Start button to start home gateway tracking and keep refreshing the page until the message trace shows to stop, click the Save button to save captured packets.

#### 2. Ping Test

Enter the destination IP or host name, and then click Apply, device will perform ping test.

Ping Test	
ing Test	
Dest IP/Host Name	
WAN Interface	1_MANAGEMENT_VOICE_INTERNET_R_VID V
	/

## 3. Traceroute Test

Enter the destination IP or host name, and then click Apply, device will perform traceroute test.

Traceroute Test	
Traceroute Test	
Dest IP/Host Name	
WAN Interface	1_MANAGEMENT_VOICE_INTERNET_R_VID V
Apply Cancel	

## **Operating Mode**

Status	Netwo	ork	FX0	FXS	Security	Application	Administra	tion				
Managem	ient F	Firmwa	are Upgra	de S	heduled Tasks	Certificates	Provision	SNMP	TR-069	Diagnosis	Operating Mode	
Operat	ing Mo	de Se	ettings							Н	elp	
Operating	Mode Se	etting	s									
Operatin	ig Mode					Basic Mode	~					

#### Description

Choose the Operation Mode as Basic Mode or Advanced Mode.