



A11 & A11V User Manual

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Directory

Directory	1
1 Picture	3
2 Table	5
3 Safety Instruction	6
4 Overview	7
5 Install Guide	8
5.1 Use POE or External Power Adapter	8
5.2 Appendix	8
5.2.1 Common Command Modes	8
5.2.2 Function Key LED Status	9
6 User Guide	10
6.1 Panel Overview	10
6.2 Interface Description	10
6.3 Installation Instructions	12
6.4 Device IP Address	14
6.5 Web Configuration	15
6.6 SIP Configurations	15
6.7 Volume Setting	16
7 Basic Function	18
7.1 Making Calls	18
7.2 Answering Calls	18
7.3 End of the Call	18
7.4 Auto Answer	18
7.5 Call Waiting	19
8 Advance Function	21
8.1 Intercom	21
8.2 MCAST	21
8.3 Hotspot	23
9 Web Configurations	25
9.1 Web Page Authentication	25
9.2 System >> Information	25
9.3 System >> Account	26
9.4 System >> Configurations	26
9.5 System >> Upgrade	27

9.6 System >> Auto Provision	29
9.7 System >> Tools	31
9.8 Network >> Basic	32
9.9 Network >>Service Port	33
9.10 Network >>VPN	35
9.11 Network >> Advanced	36
9.12 Line >> SIP	37
9.13 Line >> SIP Hotspot	43
9.14 Line >> SIP Hotspot	43
9.15 Line >> Basic Settings	46
9.16 Intercom Settings >> Features	48
9.17 Intercom Settings >> Media Settings	50
9.18 Intercom Settings>>Local IP Camera	51
9.19 Intercom Setting >> MCAST	59
9.20 Intercom Setting >> Action URL	59
9.21 Intercom Setting >> Time/Date	60
9.22 Intercom Settings>>Time Plan	61
9.23 Security Settings	62
9.24 Humanoid Recognition	66
9.25 Call List >> Call List	67
9.26 Snap Log	68
9.27 Call Button	68
9.28 Security >> Web Filter	73
9.29 Security >> Trust Certificates	74
9.30 Security >> Device Certificates	75
9.31 Security >> Sever Certificates	75
9.32 Security >> Firewall	76
9.33 Device Log	77
10 Trouble Shooting	78
10.1 Get Device System Information	78
10.2 Reboot Device	78
10.3 Device Factory Reset	78
10.4 Network Packets Capture	78
10.5 Get Device Log	79
10.6 Common Trouble Cases	79

1 Picture

Picture 1	- Panel	10
Picture 2	- Interface	11
Picture 3	- Wall-mounted Bracket	12
Picture 4	- EX611 Wall-mounted Bracket	13
Picture 5	- Device Manager	14
Picture 6	- Web Login	15
Picture 7	- SIP Line Configuration	16
Picture 8	- Volume Set	17
Picture 9	- Call Button Settings	18
Picture 10	- Web Line Enable Auto Answer	19
Picture 11	- Enable Auto Answer For IP Calls	19
Picture 12	- Call Waiting	20
Picture 13	- Call Waiting tone	20
Picture 14	- Web Intercom	21
Picture 15	- MCAST	22
Picture 16	- SIP Hotspot	24
Picture 17	- Web Account	26
Picture 18	- Configurations	26
Picture 19	- Upgrade	27
Picture 20	- Auto Provision Settings	29
Picture 21	- Tools	32
Picture 22	- Network Basic Setting	32
Picture 23	- Service Port Setting Interface	34
Picture 24	- Network VPN	35
Picture 25	- Network Setting	36
Picture 26	- SIP	39
Picture 27	- Action Plan	43
Picture 28	- Basic Settings	46
Picture 29	- Line Basic Setting	47
Picture 30	- Feature	48
Picture 31	- Media Settings	50
Picture 32	- Camera Settings	53
Picture 33	- Camera Settings	58
Picture 34	- Action URL	60
Picture 35	- Time/Date	60
Picture 36	- Time Plan	61

Picture 37	- Security Settings	64
Picture 38	- Humanoid Recognition Trigger	67
Picture 39	- Snap Log	68
Picture 40	- Call Button	69
Picture 41	- Memory Key	72
Picture 42	- MCAST Paging	73
Picture 43	- PTT	73
Picture 44	- Web Filter	74
Picture 45	- Trust Certificates	74
Picture 46	- Device Certificates	75
Picture 47	- Server Certificates	75
Picture 48	- Firewall	76
Picture 49	- Firewall Rules List	77
Picture 50	- Delete Firewall Rules	77

2 Table

Table 1	- Common Command Mode	8
Table 2	- Function Key LED Status	9
Table 3	- Panel Introduction	10
Table 4	- Interface	11
Table 5	- Configuration Instructions	14
Table 6	- Intercom	21
Table 7	- MCAST	22
Table 8	- SIP Hotspot	23
Table 9	- Firmware Upgrade	28
Table 10	- Auto Provision	29
Table 11	- Network Basic Setting	33
Table 12	- Server Port	34
Table 13	- Network Setting	37
Table 14	- SIP	39
Table 15	- Action Plan	43
Table 16	- Line Basic Setting	47
Table 17	- Common Device Function Settings	48
Table 18	- Media Settings	50
Table 19	- Camera Settings	53
Table 20	- Camera Settings	58
Table 21	- Action URL	59
Table 22	- Time/Date	60
Table 23	- Time Plan	61
Table 24	- Security Settings	64
Table 24	- Humanoid Recognition Trigger Settings	67
Table 26	- Call Button	69
Table 27	- Memory Key	72
Table 28	- MCAST Paging	73
Table 29	- Web Firewall	76
Table 30	- Trouble Cases	79

3 Safety Instruction

Please read the following safety notices before installing or using this unit. They are crucial for the safe and reliable operation of the device.

- Before using the external power supply in the package, please check the home power voltage. Inaccurate power voltage may cause fire and damage.
- Please do not damage the power cord. If power cord or plug is impaired, do not use it because it may cause fire or electric shock.
- Do not drop, knock or shake the product. Rough handling can break internal circuit boards.
- Do not install the A11/A11V in areas with condensation, high temperature, grease or dust.
- Install the unit at a suitable viewing height (recommended: 120–140 cm). For indoor installation, keep it at least 2 meters away from light sources and 3 meters away from doors and windows to avoid direct sunlight.
- Avoid strong vibration, collision or impact, as this may damage the internal precision components and the casing.
- Before using the product, please confirm that the temperature and humidity of the environment meet the working requirements of the product.
- Avoid wetting the unit with any liquid.
- Do not attempt to open it. Non-expert handling of the device could damage it. Consult your authorized dealer for help, or else it may cause fire, electric shock and breakdown.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean it. Wipe it with a soft cloth that has been slightly dampened in a mild soap and water solution.
- When lightning, do not touch power plug, it may cause an electric shock.
- Do not install this product in an ill-ventilated place. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.

4 Overview

The A11 & A11V series is SIP audio/video intercom product developed specifically for the needs of users in the security industry, featuring high reliability, high quality audio/video and other advantages, integrating intelligent security, audio/video intercom and broadcasting functions, with waterproof and dustproof rating of IP66, and vandal-proof rating of IK10, which is suitable for outdoor scenarios, and is able to provide users with high-quality communication and video intercom services.

This manual will detail the functional configuration and operation methods of the A11 and A11V. Among them, the A11V is equipped with a built-in camera and supports two-way audio/video intercom; the A11 is an audio-only intercom device without a built-in camera. Please refer to the relevant content according to your device model.

5 Install Guide

5.1 Use POE or External Power Adapter

A11 & A11V support two power supply modes, power supply from external power adapter or over Ethernet (POE) complied switch.

POE power supply saves the space and cost of providing the device additional power outlet. With a POE switch, the device can be powered through a single Ethernet cable which is also used for data transmission. By attaching UPS system to POE switch, the device can keep working at power outage just like traditional PSTN telephone which is powered by the telephone line.

For users who do not have POE equipment, the traditional power adaptor should be used. If the device is connected to both POE switch and external power adapter, A11 & A11V will get power supply from POE switch in priority, and change to external power adapter once the POE power supply fails.

Please use the power adapter and the POE switch met the specifications to ensure the device work properly.

5.2 Appendix

5.2.1 Common Command Modes

Table 1 - Common Command Mode

Action behavior	Description
Standby report IP	In standby mode, press and hold any call button for 3 seconds. After a beep sounds, press any speed dial button once within 5 seconds, and the device will announce the IP address.
Switch network mode	In the standby mode, long-press the Call button for 3 seconds and the beep will last for 5 seconds. Within 5 seconds, press the Call button three times quickly to switch the network mode. If there is no IP at present, switch to the default static IP (192.168.1.128). Then switch to DHCP mode when it is the default static IP

	(192.168.1.128) When DHCP gets to IP, then do not switch and report the IP directly. Report the IP after the successful switch.
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5.2.2 Function Key LED Status

Table 2 - Function Key LED Status

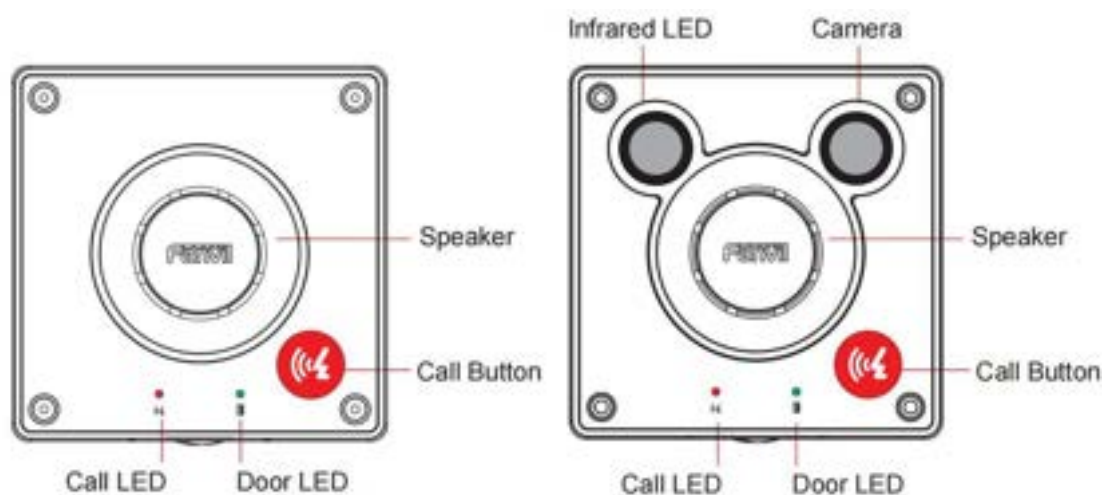
Type	LED	Status
SIP/NET	Normally on	Network normal
	Fast Flashing	Network abnormal

Type	Call LED (Red)	Status
SIP/NET	Off	Successfully Registered
	Fast Flashing	Registration failed
	Slow Flashing	In call

Type	Door LED (Green)	Status
	Normally on	Powered on and working normally

6 User Guide

6.1 Panel Overview



Picture 1 - Panel

Table 3 - Panel Introduction

Number	Name	Description
1	Speaker	Play sound
2	Call Button	For speed dial, multicast, intercom, IP broadcast and other functions
3	Call LED	Reflect call status
4	Door LED	Audio acquisition
5	Infrared LED	Infrared fill light for night vision
6	Camera	Video signal acquisition and transmission

6.2 Interface Description

Open the rear case of the device, there is a row of terminal blocks for connecting the power supply, electric lock control, etc. The connection is as follows:



Picture 2 - Interface

Table 4 - Interface

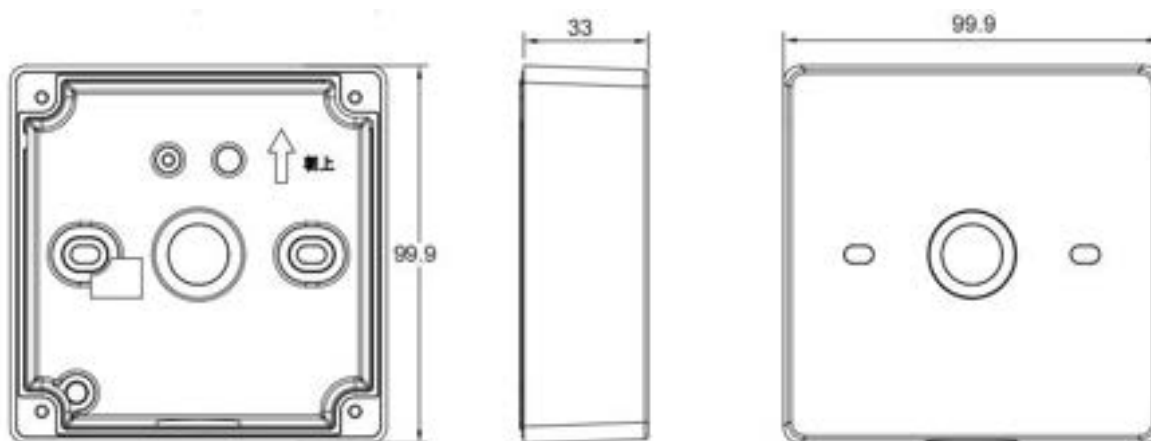
SN	Description	Wiring port description(example above)
①	Power port: DC12V~24V/2A input	DC +,DC -
②	Short-circuit output control port: used to control electric lock, alarm, etc	NC: Normally Close Contact COM: Common Contact NO: Normally Open Contact
③	Short-circuit input detection port: for connecting switche, infrared probe, door magnet, vibration sensor and other input device.	GND, IN
④	4pin Jumper module	Relay operating mode: External power supply (i.e. the relay does not supply external power):Connect PIN2 and PIN3 of the jumper module, and leave PIN1 and PIN4 in the air. (Default) Internal power supply (i.e. relay

		external power supply):Connect PIN1 to PIN2 and PIN3 to PIN4 of the jumper module. <table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td colspan="4">External power supply</td> <td colspan="4">Internal power supply</td> </tr> </table>	1	2	3	4	1	2	3	4	External power supply				Internal power supply			
1	2	3	4	1	2	3	4											
External power supply				Internal power supply														
⑤	Micro SD card slot	SD cards up to 256GB can be attached. Note: The back cover should be removed before inserting the card. 																
⑥	Line Out Interface	It is used for connecting external headphones or active speakers.																

6.3 Installation Instructions

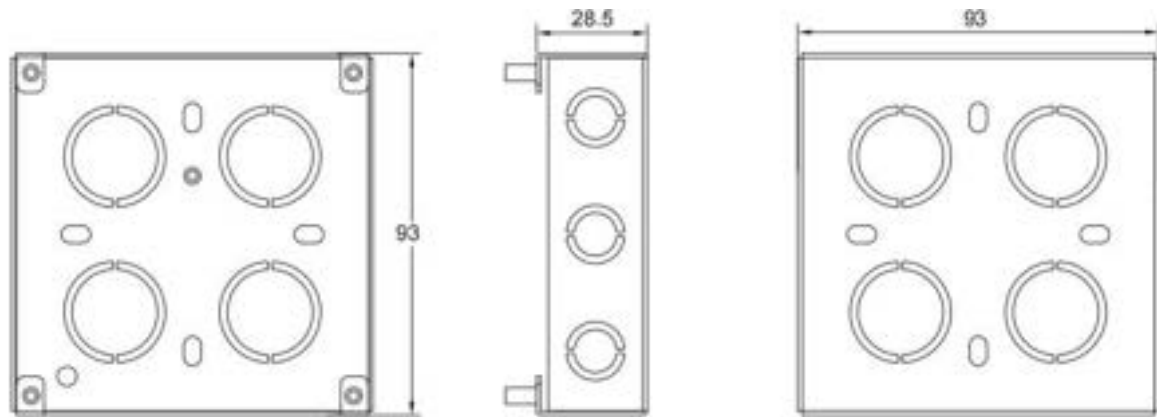
A11 and A11V have two installation methods: wall mounting and embedded wall installation. Before installation, you need to select the corresponding mounting accessories. Among them, wall mounting is the standard configuration, while the embedded wall bracket EX611 is an optional item and needs to be purchased separately.

Wall-mounted bracket(standard):



Picture 3 - Wall-mounted Bracket

EX611 Flush Mount Bracket(optional):



Picture 4 - EX611 Flush Mount Bracket

Installation Steps:

1. Wall-mounted installation (CN:86 embedded box, EUR:80 embedded box)

Without 86 embedded box in the wall

- 1) Paste the mounting template of the wall-mounted bracket on the wall, and then use the electric drill to make the corresponding hole position.
- 2) Hammer two rubber stoppers into the holes.
- 3) Use the L-shaped screwdriver from the accessory kit to remove the rear cover of the entire device. Then, thread the wiring harness through the holes in the rear cover and the waterproof rubber ring.
- 4) Fix the rear cover to the wall using two PA4X30 screws.
- 5) After connecting the power cord, network cable and the corresponding security interface cable, power on the device for testing. If it works properly, use an L-shaped screwdriver to lock the front cover, and the installation is completed.

With 86 embedded box in the wall

- 1) Use the L-shaped screwdriver from the accessory kit to remove the rear cover of the entire device. Then, thread the wiring harness through the holes in the rear cover and the waterproof rubber ring.
- 2) Fix the rear cover to the 86 box using two KM4X30 screws.
- 3) After connecting the power cord, network cable and the corresponding security interface cable, power on the device for testing. If it works properly, use an L-shaped screwdriver to lock the front cover, and the installation is completed.

2. Flush-mounted installation:

- 1) Make holes on the wall with the corresponding dimensions (suggested dimensions: length 94mm, width 94mm, depth 30mm), and stick the installation dimension diagram of the

wall-mounted box inside the wall. Then, use an electric drill to drill the corresponding holes.

2) Insert the rubber plug into the wall, and use the matching PA4*30 screws to fix the wall-mounted box in the wall hole.

3) Fix the sealed silicone ring in the corresponding positions on the back of A11V.

4) After connecting the power cord, network cable and the corresponding security interface cable, power on the device for testing. If it works properly, use an L-shaped screwdriver to lock the front cover, and the installation is completed.

6.4 Device IP Address

Method one:

1. Go to the official website of Fanvil [Support] >> [Download Center] >>[Tools]>> [IP Scanner] module,click and download the Device Manager,

2.Open the IP scan tool, the tool supports LAN scan and cross network segment scan.

3. For LAN scanning: Click the desktop icon, run the Device Manager tool

4. Cross-segment scan: Fill in the cross-segment setting in the upper right corner of the page in the format of: IP address/mask. That is: IP address/N.



Picture 5 - Device Manager

Method two:

After the device boots up (about 30s), in standby mode, press and hold the Call button (the key with the serial number 2 in the [6.1 panel Overview](#)) for 3s, release the key immediately after the speaker beeps, and then press the Call button quickly within 5s (the same button as the above long press), and the device starts to broadcast IP.

Method three:

After the device boots up (about 30s), in standby mode, press and hold the Call button (the key with serial number 2 in [6.1 panel Overview](#)) for 3 seconds, release the button immediately after the speaker beeps, and then press the Call button three times quickly within 5s (the same key as the above long press) to complete the operation. After successfully switching to dynamic IP, the system automatically announces the IP address by voice.

Table 5 - Configuration Instructions

Default configuration			
DHCP mode	Default enable	Static IP	192.168.1.128
Broadcast IP address	Long press the Call button for 3 seconds, press the Call button one times within 5 seconds	Server port	80

6.5 Web Configuration

When the device and your computer are successfully connected to the network, enter the IP address of the device on the browser as `http://xxx.xxx.xxx.xxx/` and you can see the login interface of the web page management.



Picture 6 - Web Login

The username and password should be correct to log in to the web page. **The default username and password are "admin"**. For the specific details of the operation of the web page, please refer to [9 Web Configurations](#)

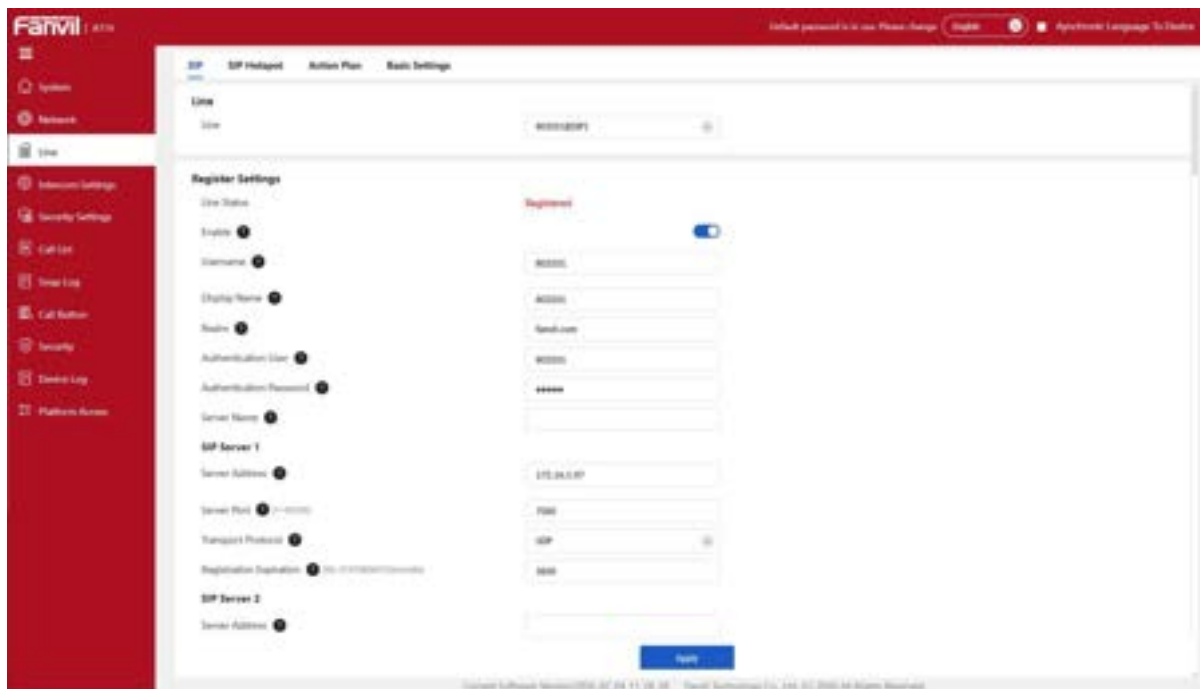
6.6 SIP Configurations

At least one SIP line should be configured properly to enable the telephony service. The line configuration is like a virtualized SIM card. Just like a SIM card on a mobile phone, it stores the service provider and the account information used for registration and authentication. When the device is applied with the configuration, it will register the device to the service provider with the

server's address and user's authentication as stored in the configurations.

The SIP line configuration should be set via the WEB configuration page by entering the correct information such as phone number, authentication name/password, SIP server address, server port, etc. which are provided by the SIP server administrator.

- WEB interface : After logging into the phone page, enter **[Line]** >> **[SIP]** and select **SIP1/SIP2** for configuration, click apply to complete registration after configuration, as shown below:



Picture 7 - SIP Line Configuration

6.7 Volume Setting

Set the volume:

[Intercom Settings] >> **[Media Settings]** >> **[Media Settings]**, as shown below, click **[Apply]**.

Speakerphone Volume: Set the speaker output volume.

Hand Free Mic Gain: microphone volume level.



Picture 8 - Volume Set

7 Basic Function

7.1 Making Calls

After setting the Call Button to Memory key and setting the number, press the Call Button to immediately call out the set number, as shown below:



Picture 9 - Call Button Settings

See detailed configuration instructions [9.27 Call Button](#).

7.2 Answering Calls

After setting up the automatic answer and setting up the automatic answer time, it will hear the ringing bell within the set time and automatically answer the call after timeout. Cancel automatic answering. When a call comes in, you will hear the ringing bell and will not answer the phone over time.

7.3 End of the Call

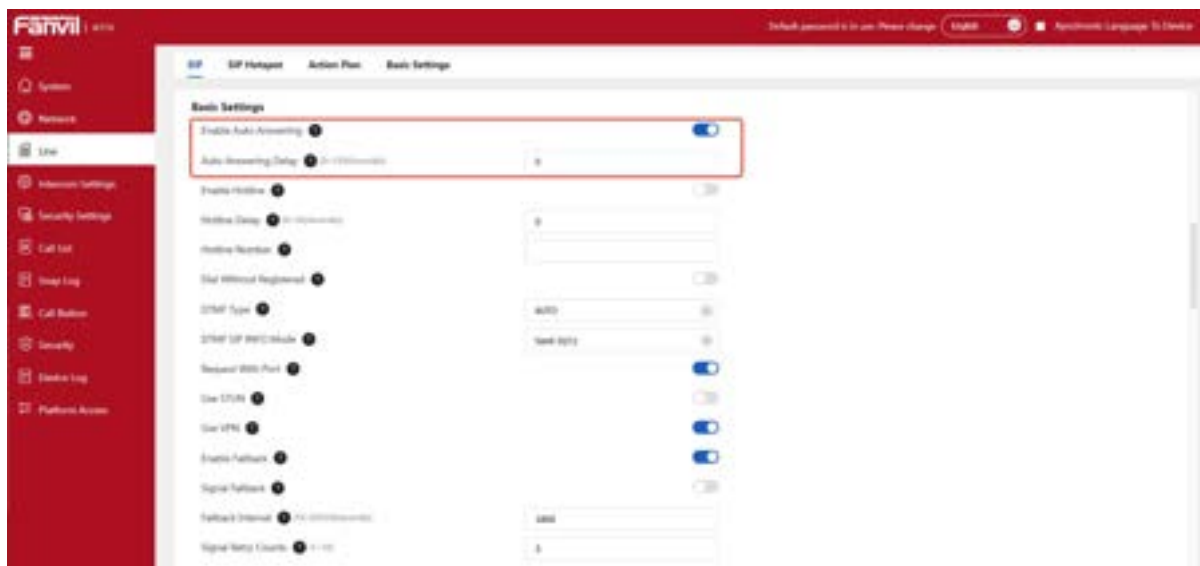
During a call, the Call button defaults to the "End Call" function; pressing it will hang up the call. For customizing the speed dial key function, please refer to [9.27 Call Button](#).

7.4 Auto Answer

The user can disable the Auto Answer function (enabled by default) on the device's web interface. When disabled, the incoming call ringtone will sound and the call will not be answered automatically after a timeout.

Web interface:

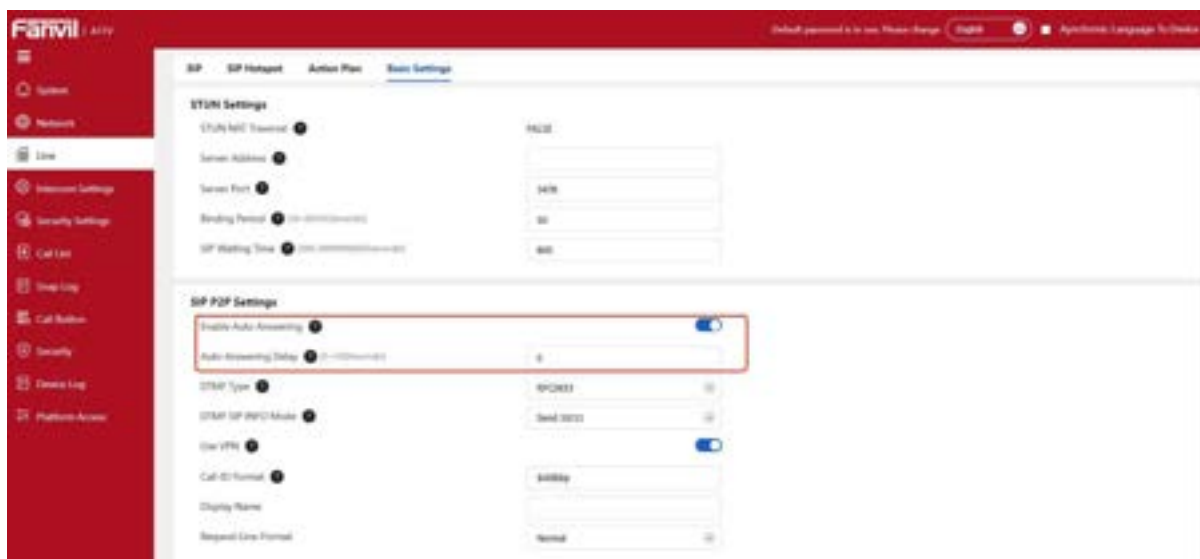
Enter [Line] >> [SIP], Enable auto answer and set auto answer time and click submit.



Picture 10 - Web Line Enable Auto Answer

SIP P2P auto answering:

Enter [Line]>>[Basic settings], Enable auto answer and set auto answer time and click submit.



Picture 11 - Enable Auto Answer For IP Calls

- Auto Answering Delay (0~120)

The range can be set to 0~120s, and the call will be answered automatically when the timeout is set.

7.5 Call Waiting

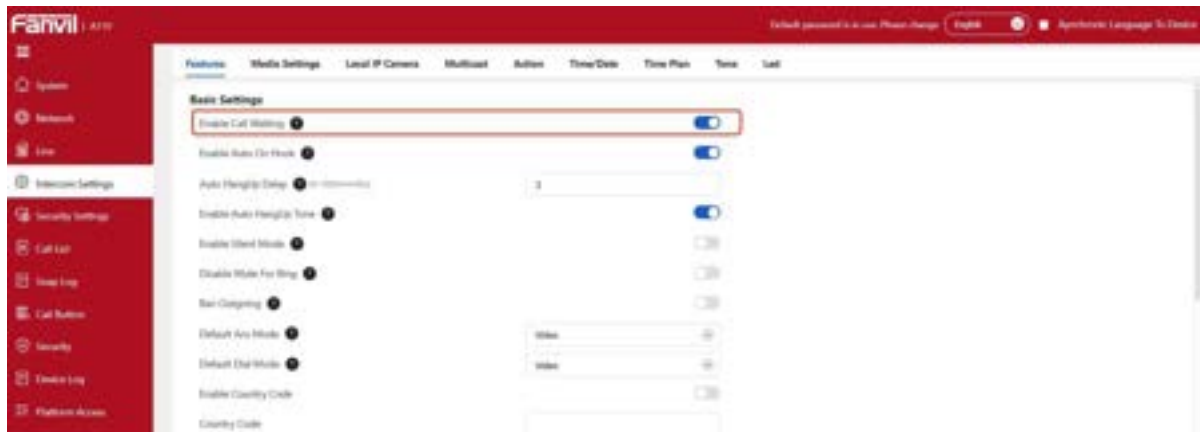
- Enable call waiting: new calls can be accepted during a call.
- Disable call waiting: new calls will be automatically rejected and a busy signal will be

prompted

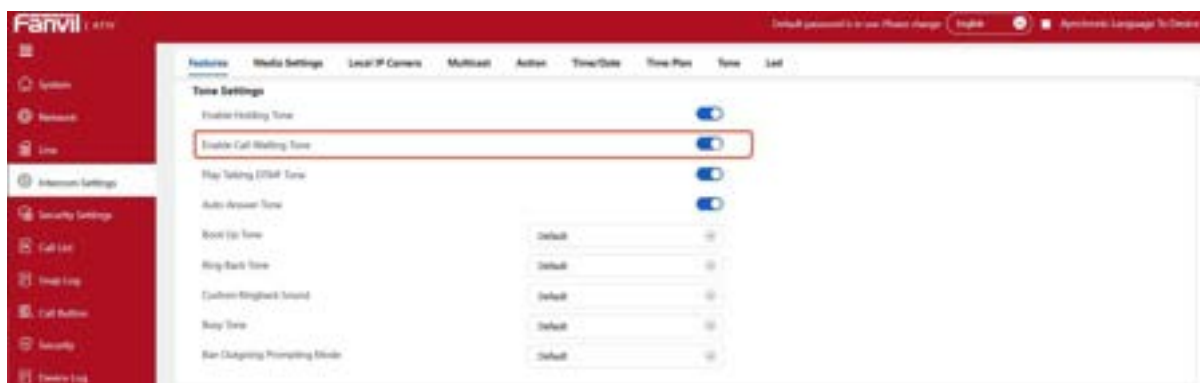
- Enable call waiting tone: when you receive a new call on the line, the device will beep.

Users can enable/disable call waiting in the device interface and the web interface.

- Web interface: enter **[Intercom Settings]** >> **[Features]**, enable/disable call waiting, enable/disable call waiting tone.



Picture 12 - Call Waiting

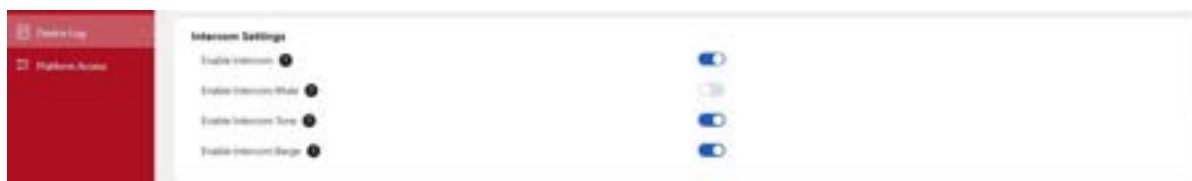


Picture 13 - Call Waiting tone

8 Advance Function

8.1 Intercom

The equipment can answer intercom calls automatically.



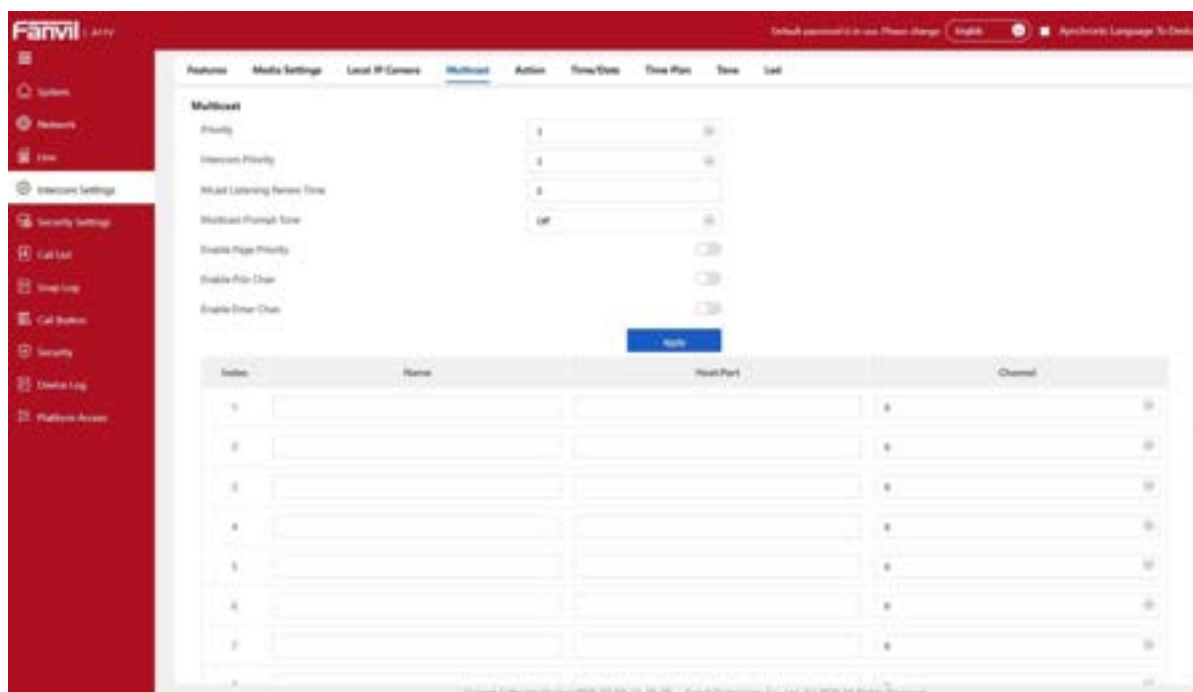
Picture 14 - Web Intercom

Table 6 - Intercom

Parameters	Description
Enable Intercom	When the intercom system is enabled, the device will accept the SIP header call-info of the Call request Command automatic call
Enable Intercom Barge	If the option is enabled, device will answer the intercom call automatically while it is in a normal call, and it will reject new intercom call if there is already one intercom call
Enable Intercom Mute	Enable mute during intercom mode
Enable Intercom Ringing	If the incoming call is intercom call, the device plays the intercom tone.

8.2 MCAST

This feature allows user to make some kind of broadcast call to people who are in multicast group. User can configure a multicast DSS Key on the phone, which allows user to send a Real Time Transport Protocol (RTP) stream to the pre-configured multicast address without involving SIP signaling. You can also configure the phone to receive an RTP stream from pre-configured multicast listening address without involving SIP signaling. You can specify up to 10 multicast listening addresses.



Picture 15 - MCAST

Table 7 - MCAST

Parameters	Description
Priority	Defines the priority in the current call, with 1 being the highest priority and 10 being the lowest.
Intercom Priority	Compared with multicast and SIP priority, high priority is pluggable and low priority is rejected
Mcast Listening Renew Time	Set the wait time for re-receiving multicast
Multicast Prompt Tone	Enable or disable multicast tone
Enable Page Priority	Regardless of which of the two multicast groups is called in first, the device will receive the higher priority multicast first.
Enable Prio Chan	When enabled, only the same port and channel can be connected. Channel 24 is the priority channel, with a higher priority than Channels 1–23; Channel 0 means the channel function is not used.
Enable Emer Chan	When enabled, Channel 25 has the highest priority.
Name	Listened multicast server name
Host:port	Listened multicast server's multicast IP address and port.
Channel	0–25 (Channel 24: Priority Channel, Channel 25: Emergency Channel)

Multicast:

- Go to web page of [Call Button] >> [Call Button Settings], select the type to MCAST

Paging, set the multicast address, and select the codec.

- Click Apply.
- Set up the name, host and port of the receiving multicast on the web page of **[Intercom Settings]** >> **[MCAST]**.
- Press the DSSKey of Multicast Key which you set.
- Receive end will receive multicast call and play multicast automatically.

MCAST Dynamic:

Description: send multicast configuration information through SIP notify signaling. After receiving the message, the device configures it to the system for multicast monitoring or cancels multicast monitoring in the system.

8.3 Hotspot

SIP hotspot is a simple utility. Its configuration is simple, which can realize the function of group vibration and expand the quantity of sip account.

Take one device A as the SIP hotspot and the other devices (B, C) as the SIP hotspot client. When someone calls device A, devices A, B, and C will ring, and if any of them answer, the other devices will stop ringing and not be able to answer at the same time. When A B or C device is called out, it is called out with A SIP number registered with device A.

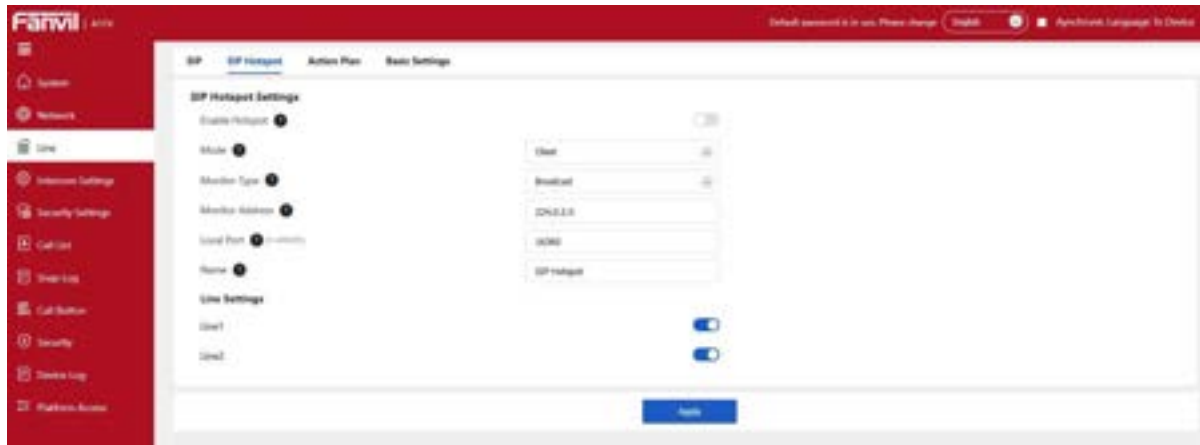
Table 8 - SIP Hotspot

Parameters	Description
Enable Hotspot	Enable or disable hotspot
Mode	This device can only be used as a client
Monitor Type	The monitoring type can be broadcast or multicast. If you want to restrict broadcast packets in the network, you can choose multicast. The type of monitoring on the server side and the client side must be the same, for example, when the device on the client side is selected for multicast, the device on the SIP hotspot server side must also be set for multicast
Monitor Address	The multicast address used by the client and server when the monitoring type is multicast. If broadcasting is used, this address does not need to be configured, and the system will communicate by default using the broadcast address of the device's wan port IP
Local Port	Fill in a custom hotspot communication port. The server and client ports need to be consistent
Name	Fill in the name of the SIP hotspot. This configuration is used to identify different hotspots on the network to avoid connection conflicts

Line Settings	Sets whether to enable the SIP hotspot function on the corresponding SIP line
---------------	---

Client Settings:

As a SIP hotspot client, there is no need to set up a SIP account, which is automatically acquired and configured when the device is enabled. Just change the mode to "client" and the other options are set in the same way as the hotspot.



Picture 16 - SIP Hotspot

The device is the hotspot server, and the default extension is 0. The device ACTS as a client, and the extension number is increased from 1 (the extension number can be viewed through the [SIP hotspot] page of the webpage).

Calling internal extension:

- The hotspot server and client can dial each other through the extension number before
- Extension 1 dials extension 0

9 Web Configurations

9.1 Web Page Authentication

Users can log into the device's web page to manage user device information and operate the device. Users must provide the correct user name and password to log in. If the password is entered incorrectly three times, it will be locked and can be entered again after 5 minutes.

The details are as follows:

- If an IP is logged in more than the specified number of times with a different user name, it will be locked
- If a user name logs in more than a specified number of times on a different IP, it is also locked

9.2 System >> Information

User can get the system information of the device in this page including,

- Model
- Hardware Version
- Software Version
- Uptime
- Last uptime
- MEMInfo
- System Time

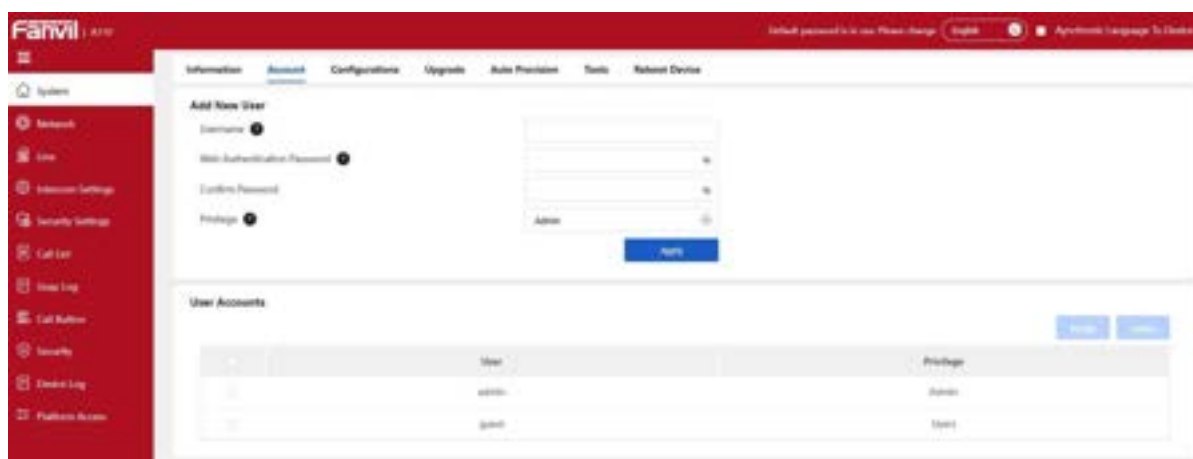
And summarization of network status,

- Network Mode
- MAC Address
- IP
- Subnet Mask
- Default Gateway

Besides, summarization of SIP account status,

- SIP User
- SIP account status (Registered / Unapplied / Trying / Timeout)

9.3 System >> Account



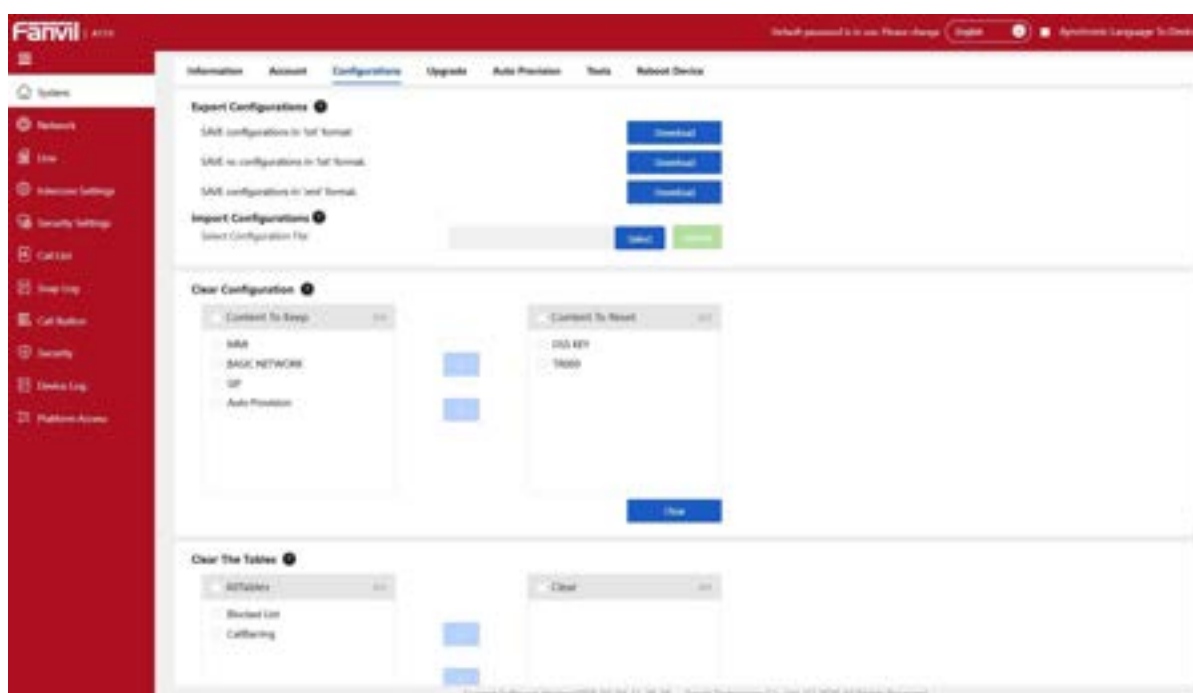
Picture 17 - Web Account

On this page the user can change the password for the login page.

Users with administrator rights can also add or delete users, manage users, and set permissions and passwords for new users

9.4 System >> Configurations

On this page, users with administrator privileges can view, export, or import the phone configuration, or restore the phone to factory Settings.



Picture 18 - Configurations

■ Export Configurations

Right click to select target save as, that is, to download the device's configuration file, suffix “.txt”. (Note: profile export requires administrator privileges)

■ Import Configurations

Import the configuration file of Settings.

■ Clear Configurations

Select the module in the configuration file to clear.

SIP: account configuration.

Auto Provision: automatically upgrades the configuration

TR069:TR069 related configuration

MMI: MMI module, including authentication user information, web access protocol, etc.

DSS Key: DSS Key configuration

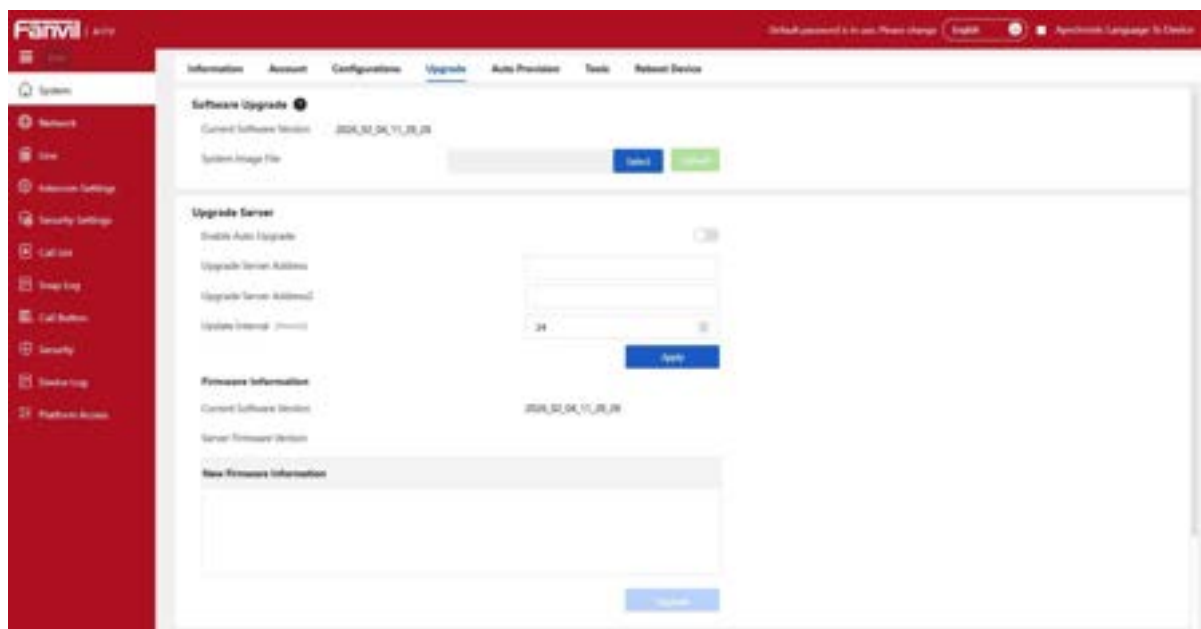
■ Clear Tables

Select the local data table to be cleared, all selected by default.

■ Reset Phone

The phone data will be cleared, including configuration and database tables.

9.5 System >> Upgrade



Picture 19 - Upgrade

Upgrade the software version of the device, and upgrade to the new version through the webpage. After the upgrade, the device will automatically restart and update to the new version. Click select, select the version and then click upgrade.

Upgrade the ringtone,support wav and mp3 format.

Firmware Upgrade:

- Web page: Login phone web page, go to **[System]** >> **[Upgrade]**.

Table 9 - Firmware Upgrade

Parameter	Description
Upgrade Server	
Upgrade Server Address	Enter the address of the available primary upgrade server (HTTP server).
Upgrade Server Address2	Enter the address of the available backup upgrade server (HTTP server). If the primary server is unavailable, the device will request from the backup server.
Firmware Information	
Current Software Version	It will show Current Software Version.
Server Firmware Version	It will show Server Firmware Version.
[Upgrade] button	If there is a new version txt and new software firmware on the server, the page will display version information and upgrade button will become available; Click [Upgrade] button to upgrade the new firmware.
New version description information	When there is a corresponding TXT file and version on the server side, the TXT and version information will be displayed under the new version description information.

- The file requested from the server is a TXT file called vendor_model_hw10.txt.Hw followed by the hardware version number, it will be written as hw10 if no difference on hardware. All Spaces in the filename are replaced by underline.

- The URL requested by the phone is HTTP:// server address/vendor_Model_hw10.txt: The new version and the requested file should be placed in the download directory of the HTTP server.

- TXT file format must be UTF-8

- vendor_model_hw10.TXT The file format is as follows:

Version=1.6.3 #Firmware

Firmware=xxx/xxx.z #URL , Relative paths are supported and absolute paths are possible, distinguished by the presence of protocol headers.

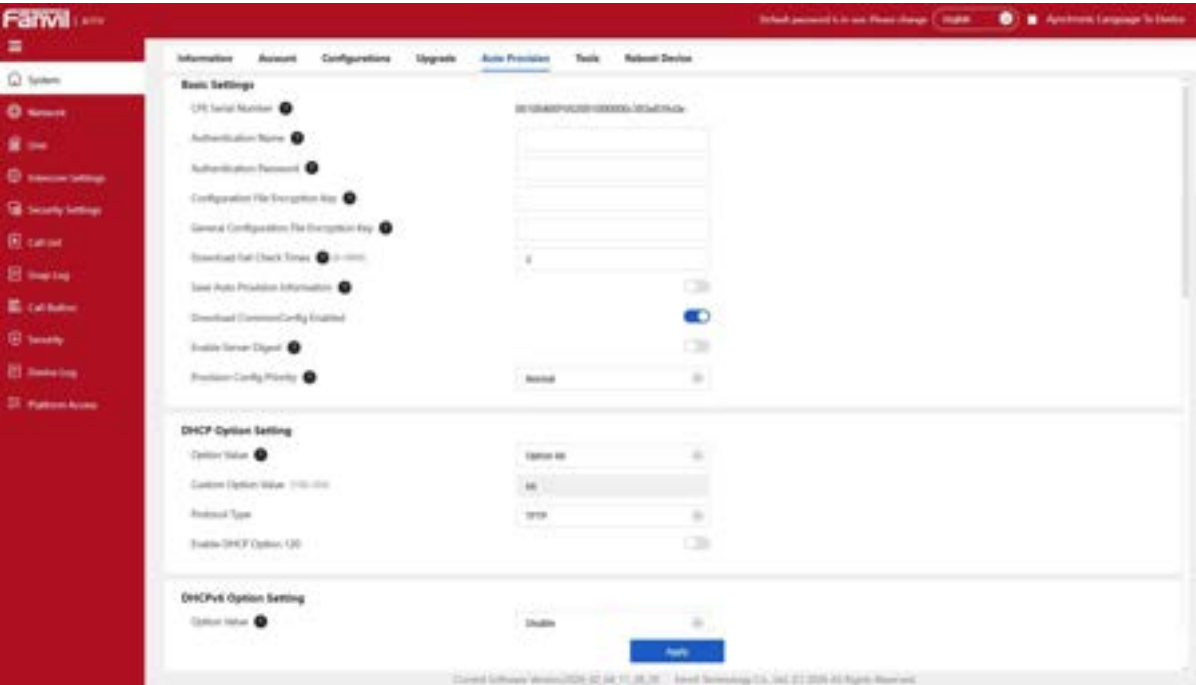
BuildTime=2018.09.11 20:00

Info=TXT|XML

Xxxxx
Xxxxx
Xxxxx
Xxxxx

9.6 System >> Auto Provision

Webpage: Login and go to [System] >> [Auto provision].



Picture 20 - Auto Provision Settings

Devices support SIP PnP, DHCP options, Static provision, TR069. If all of the 4 methods are enabled, the priority from high to low as below:

PNP>DHCP>TR069> Static Provisioning

Transferring protocol: FTP、TFTP、HTTP、HTTPS

Table 10 - Auto Provision

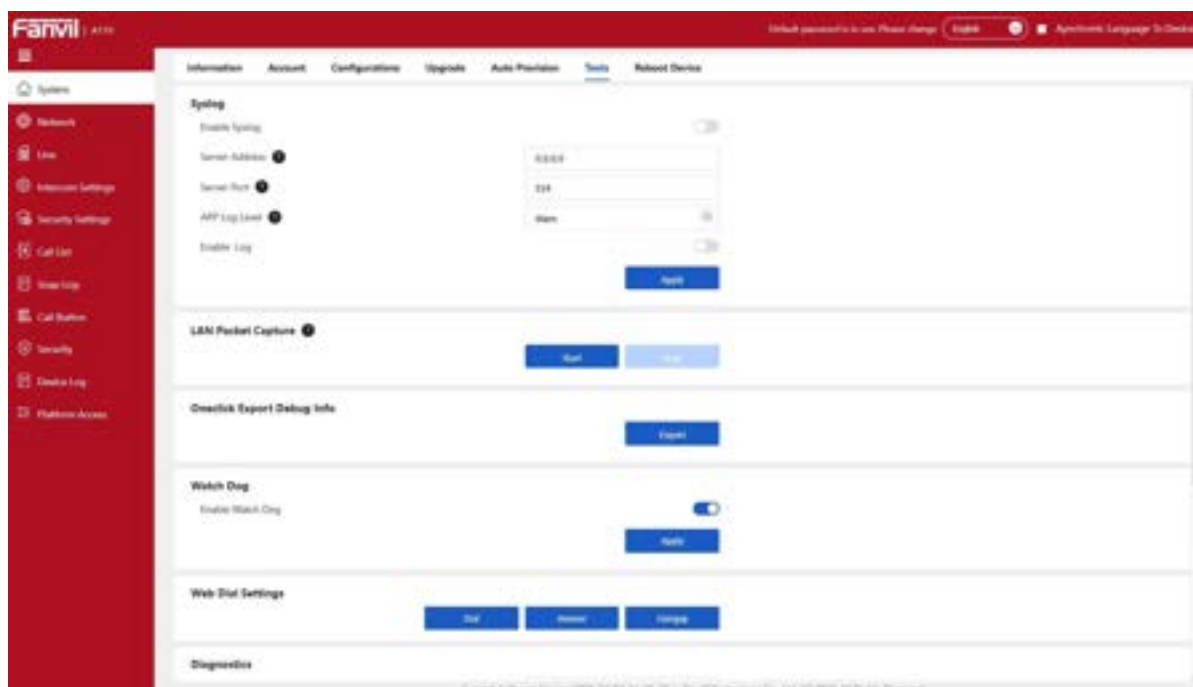
Auto provision	
Parameters	Description
Basic settings	
Current Configuration Version	Shows the current config file's version. If the version of the downloaded configuration file is same with this one, the configuration file will not be applied. If the device confirm the configuration by the Digest method, once the configuration of server is modified or the device's configurations are different from server's,

	the device will download and apply the configurations.
General Configuration Version	Shows the common config file's version. If the version of the downloaded configuration file is same with this one, the configuration file will not be applied. If the device confirm the configuration by the Digest method, once the configuration of server is modified or the device's configurations are different from server's, the device will download and apply the configurations.
CPE Serial Number	Serial number of the equipment
Authentication Name	Username for configuration server. Used for FTP/HTTP/HTTPS. If this is blank the phone will use anonymous
Authentication Password	Password for configuration server. Used for FTP/HTTP/HTTPS.
Configuration File Encryption Key	Encryption key for the configuration file
General Configuration File Encryption Key	Encryption key for common configuration file
Download Fail Check Times	The default value is 5. If the download configuration fails, it will be downloaded 5 times.
Enable Get Digest From Server	When the feature is enable, if the configuration of server is changed, phone will download and update.
DHCP Option	
Option Value	The equipment supports configuration from Option 43, Option 66, or a Custom DHCP option. It may also be disabled.
Custom Option Value	Custom option number. Must be from 128 to 254.
Enable DHCP Option 120	Set the SIP server address through DHCP option 120.
SIP Plug and Play (PnP)	
Enable SIP PnP	Whether enable PnP or not. If PnP is enable, phone will send a SIP SUBSCRIBE message with broadcast method. Any server can support the feature will respond and send a Notify with URL to phone. Phone could get the configuration file with the URL.
Server Address	Broadcast address. As default, it is 224.0.0.0.
Server Port	PnP port
Transport Protocol	PnP protocol, TCP or UDP.
Update Interval	PnP message interval.
Static Provisioning Server	
Server Address	Set FTP/TFTP/HTTP server IP address for auto update. The address can be an IP address or Domain name with subdirectory.

Configuration File Name	The configuration file name. If it is empty, phone will request the common file and device file which is named as its MAC address. The file name could be a common name, \$mac.cfg, \$input.cfg. The file format supports CFG/TXT/XML.
Protocol Type	Transferring protocol type, supports FTP、TFTP、HTTP and HTTPS
Update Interval	Configuration file update interval time. As default it is 1, means phone will check the update every 1 hour.
Update Mode	Provision Mode. 1. Disabled. 2. Update after reboot. 3. Update after interval.
TR069	
Enable TR069	Enable TR069 after selection
Enable TR069 Warning Tone	If TR069 is enabled, there will be a prompt tone when connecting.
ACS Server Type	There are 2 options Serve type, common and CTC.
ACS Server URL	ACS server address
ACS User	ACS server username (up to is 59 character)
ACS Password	ACS server password (up to is 59 character)
STUN server address	Enter the STUN address
Enable the STUN	Enable the STUN
TLS Version	TLS Version

9.7 System >> Tools

This page gives the user the tools to solve the problem.

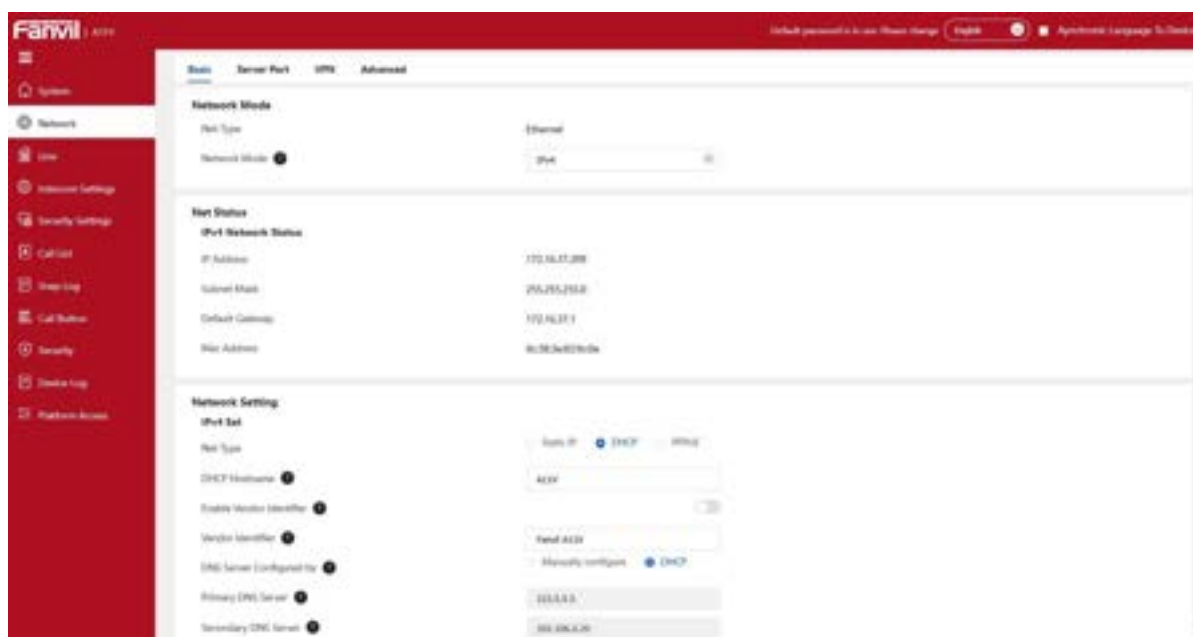


Picture 21 - Tools

Syslog: When enabled, set the syslog software address, and log information of the device will be recorded in the syslog software during operation. If there is any problem, log information can be analyzed by technical support.

9.8 Network >> Basic

This page allows users to configure network connection types and parameters.



Picture 22 - Network Basic Setting

Table 11 - Network Basic Setting

Field Name	Explanation
Network Status	
IP	The current IP address of the equipment
Subnet mask	The current Subnet Mask
Default gateway	The current Gateway IP address
MAC	The MAC address of the equipment
Settings	
Select the appropriate network mode. The equipment supports three network modes:	
Static IP	Network parameters must be entered manually and will not change. All parameters are provided by the ISP.
DHCP	Network parameters are provided automatically by a DHCP server.
PPPoE	Account and Password must be input manually. These are provided by your ISP.
If Static IP is chosen, the screen below will appear. Enter values provided by the ISP.	
DNS Server Configured by	Select the Configured mode of the DNS Server.
Primary DNS Server	Enter the server address of the Primary DNS.
Secondary DNS Server	Enter the server address of the Secondary DNS.
attention: 1) After setting the parameters, click 【Apply】 to take effect. 2) If you change the IP address, the webpage will no longer responds, please enter the new IP address in web browser to access the device. 3) If the system USES DHCP to obtain IP when device boots up, and the network address of the DHCP Server is the same as the network address of the system LAN, then after the system obtains the DHCP IP, it will add 1 to the last bit of the network address of LAN and modify the IP address segment of the DHCP Server of LAN. If the DHCP access is reconnected to the WAN after the system is started, and the network address assigned by the DHCP server is the same as that of the LAN, then the WAN will not be able to obtain IP access to the network	

9.9 Network >>Service Port

This page provides the settings of webpage login protocol, protocol port and RTP port.

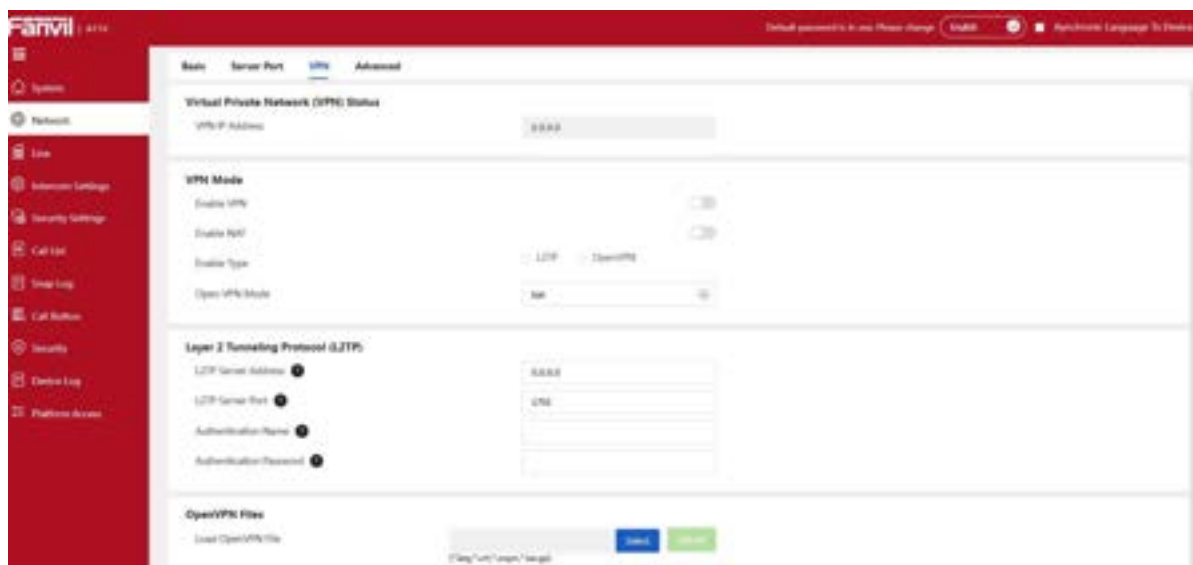


Picture 23 - Service Port Setting Interface

Table 12 - Server Port

parameter	description
Web Server Type	Restart after setting takes effect. Optional web login as HTTP/HTTPS
Web Login Timeout	The default is 15 minutes, the timeout will automatically log out of the login page, and you need to log in again
Web Auto Login	No need to enter the user name and password after the timeout, it will automatically log in to the web page.
HTTP port	The default is 80, if you want system security, you can set other port Such as: 8080, web page login: HTTP://ip:8080
HTTPS port	The default is 443, same as HTTP port usage
RTP Port Start Range	The value range is 1025-65535. The value of rtp port starts from the initial value set. Each time a call is made, the value of the voice and video ports is increased by 2
RTP Port Quantity	Number of calls

9.10 Network >>VPN



Picture 24 - Network VPN

Virtual Private Network (VPN) is a technology to allow device to create a tunneling connection to a server and becomes part of the server's network. The network transmission of the device may be routed through the VPN server.

For some users, especially enterprise users, a VPN connection might be required to be established before activate a line registration. The device supports two VPN modes, Layer 2 Transportation Protocol (L2TP) and OpenVPN.

The VPN connection must be configured and started (or stopped) from the device web portal.

■ L2TP

Note! The device only supports non-encrypted basic authentication and non-encrypted data tunneling. For users who need data encryption, please use OpenVPN instead.

To establish a L2TP connection, users should log in to the device web portal, open page [Network] -> [VPN]. In VPN Mode, check the "Enable VPN" option and select "L2TP", then fill in the L2TP server address, Authentication Username, and Authentication Password in the L2TP section. Press "Apply" then the device will try to connect to the L2TP server.

When the VPN connection established, the VPN IP Address should be displayed in the VPN status. There may be some delay of the connection establishment. User may need to refresh the page to update the status.

Once the VPN is configured, the device will try to connect to the VPN automatically when the device boots up every time until user disable it. Sometimes, if the VPN connection does not established immediately, user may try to reboot the device and check if VPN connection established after reboot.

■ OpenVPN

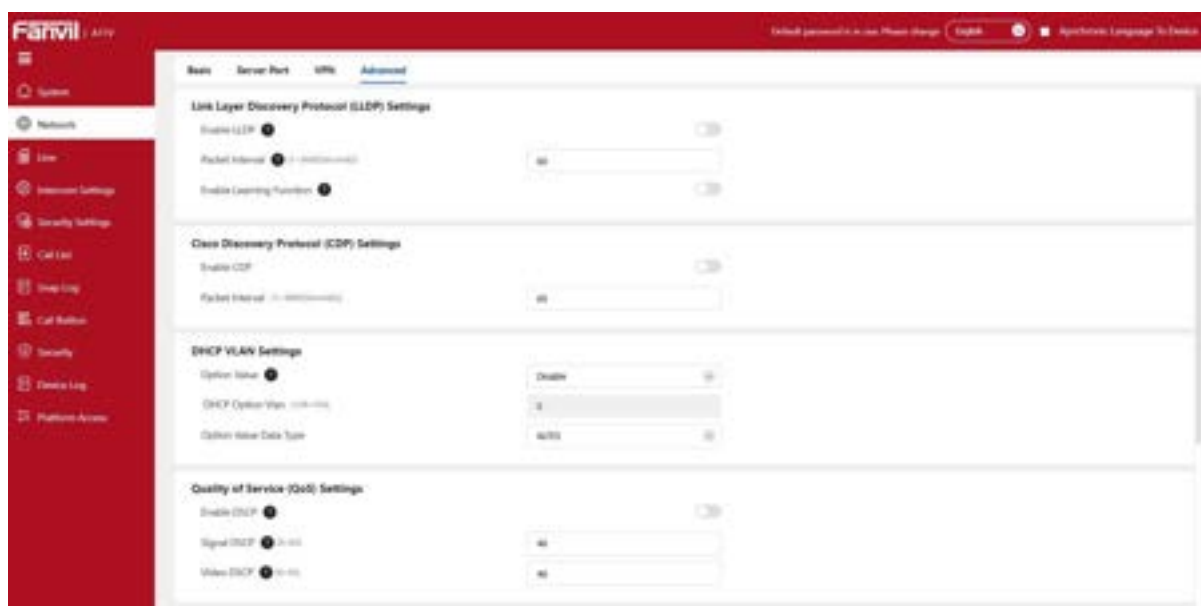
To establish an OpenVPN connection, user should get the following authentication and configuration files from the OpenVPN hosting provider and name them as the following,

OpenVPN Configuration file:	client.ovpn
CA Root Certification:	ca.crt
Client Certification:	client.crt
Client Key:	client.key

User then upload these files to the device in the web page [Network] -> [VPN], Section OpenVPN Files. Then user should check “Enable VPN” and select “OpenVPN” in VPN Mode and click “Apply” to enable OpenVPN connection.

Same as L2TP connection, the connection will be established every time when system rebooted until user disable it manually.

9.11 Network >> Advanced



Picture 25 - Network Setting

Network advanced Settings are typically configured by IT administrators to improve the quality

of device service.

Table 13 - Network Setting

Field Name	Explanation
LLDP Settings	
Enable LLDP	Enable or disable LLDP
Packet Interval	LLDP Send detection cycle
Enable Learning Function	Learn the discovered device information on the device
QoS Settings	
Pattern	Voice quality assurance (off by default)
DHCP VLAN Settings	
parameters values	128-254, Obtain the VLAN value through DHCP
WAN port virtual Wan	
WAN port virtual Wan	WAN port Settings
LAN port virtual LAN	
LAN port virtual LAN	LAN port Settings
802.1X	
Enable 802.1X	Enable or disable 802.1X
Username	Confirm Username
Password	Confirm Password

9.12 Line >> SIP

The screenshot displays the Fami SIP configuration web interface. The left sidebar contains navigation options: System, Network, Line, Extension Settings, Security Settings, Call List, Speed Ring, Call Station, Security, Clinical Log, and Platform Access. The main content area is titled 'SIP' and includes tabs for SIP, SIP Helpdesk, Action Plan, and Basic Settings. The 'Line' tab is active, showing a 'Line' dropdown menu with '8000000001' selected. Below this, the 'Register Settings' section includes a 'Line Status' dropdown set to 'Registered' and a 'Line' toggle switch. The 'Register Settings' section also includes fields for 'Username', 'Display Name', 'Realm', 'Authentication User', and 'Authentication Password'. The 'SIP Server 1' section includes fields for 'Server Address' (172.16.1.100), 'Server Port' (5060), 'Transport Protocol' (UDP), and 'Registration Expiration' (3600). The 'SIP Server 2' section includes a 'Server Address' field. A 'Save' button is located at the bottom right of the configuration area.

Basic Settings

Enable Auto Answering	☒
Auto Answering Delay	0
Enable Hotline	☐
Hotline Delay	0
Hotline Number	
Out Without Registered	☐
DTMF Type	AUTO
DTMF SIP INFO Include	Send INFO
Request With Port	☒
Use STUN	☐
Use VPN	☒
Enable fallback	☒
Signal fallback	☐
Fallback Interval	3000
Signal Retry Counts	3

Codecs Settings

Disabled Codecs	Enabled Codecs
☐ G726-16	☐ G722
☐ G726-24	☐ PCMU
☐ G726-32	☐ PCMA
☐ G726-40	☐ G729
☐ G723	☐ speex
☐ MPML	☐ iLBC
☐ mpml-rebuild	

Video Codecs

Disabled Codecs	Enabled Codecs
☐ No data	☐ H264

Advanced Settings

Use Feature Code	☐
Enable Blocking Anonymous Call	
Disable Blocking Anonymous Call	
Send Anonymous On Code	
Send Anonymous Off Code	
Enable Session Timer	☐
Session Timeout	3000
Response Single Codec	☐
Keep Alive Type	UDP
Keep Alive Interval	30
User Agent	
Keep Authentication	☐
Blocking Anonymous Call	☐
RTSP Encryption(SRTP)	Disable
Enable CSRTSP	☐
Specify Server Type	COMMON
SIP Version	SPICE
Anonymous Call Standard	Disable

Local Port ¹ (0-65535)	5060
Ring Type ²	Default
Enable user-phone ³	☐
Use Tel Call ⁴	☐
Auto TCP ⁵	☐
Enable PBACX ⁶	☐
Enable Report ⁷	☒
Call-ID format	ip4099p
DNIS Mode ⁸	DNIS
Enable Long Contact ⁹	☐
Enable Strict Proxy ¹⁰	☒
Connect URI ¹¹	☒
Use Queuein Display Name ¹²	☐
Enable GRUU ¹³	☐
Sync Clock Time ¹⁴	☐
Enable Inactive Hold	☐
Caller ID Header ¹⁵	NAME FROM
Use 182 Response for Call-waiting ¹⁶	☐
Enable Feature Sync ¹⁷	☐
Enable SCA ¹⁸	☐
TLS Version ¹⁹	TLS 1.2
useCSTA Number	
Enable Click To Talk	☐
Enable ChangePort	☐
Flash Info Content Type	
Flash Info Content Body	
Server Expires ²⁰	☒
Unregister On Boot	☐
Enable MAC Header	☐
Enable Register MAC Header	☐
PTime	Disable
Enable Dial 180	☒
Transaction Timer T1 ²¹ (0-1000000000000)	500
Transaction Timer T2 ²² (200-4000000000000)	4000
Transaction Timer T4 ²³ (200-4000000000000)	5000
SIP Global Settings	
Short Branch ²⁴	☐
Enable Group ²⁵	☐
Enable BPCAS71 ²⁶	☒
Enable Short UA Branch ²⁷	☐
Registration Failure Retry Time ²⁸ (0-600000)	30
Local SIP Port ²⁹	5060
Enable useCSTA	☐
SetTag Match	☒

Picture 26 - SIP

Table 14 - SIP

Parameters	Description
Register Settings	

Line Status	Display the current line status at page loading. To get the up to date line status, user has to refresh the page manually.
Server Address	Enter the IP or FQDN address of the SIP server
Server Port	Enter the SIP server port, default is 5060
Authentication User	Enter the authentication user of the service account
Authentication Password	Enter the authentication password of the service account
Username	Enter the username of the service account.
Display Name	Enter the display name to be sent in a call request.
Enable	Whether the service of the line should be activated
Realm	Enter the SIP domain if requested by the service provider
Proxy Server Address	Enter the IP or FQDN address of the SIP proxy server
Proxy Server Port	Enter the SIP proxy server port, default is 5060
Proxy User	Enter the SIP proxy user
Proxy Password	Enter the SIP proxy password
Backup Proxy Server Address	Enter the IP or FQDN address of the backup proxy server
Backup Proxy Server Port	Enter the backup proxy server port, default is 5060
Basic Settings	
Enable Auto Answering	Enable auto-answering, the incoming calls will be answered automatically after the delay time
Auto Answering Delay	Set the delay for incoming call before the system automatically answered it
Enable Hotline	Enable hotline configuration, the device will dial to the specific number immediately at audio channel opened by off-hook handset or turn on hands-free speaker or headphone
Hotline Delay	Set the delay for hotline before the system automatically dialed it
Hotline Number	Set the hotline dialing number
Dial Without Registered	Set call out by proxy without registration
DTMF Type	Set the DTMF type to be used for the line
DTMF SIP INFO Mode	Set the SIP INFO mode to send '*' and '#' or '10' and '11'
Registration Expiration	Set the SIP expiration interval
Use VPN	Set the line to use VPN restrict route

Use STUN	Set the line to use STUN for NAT traversal
Codec Settings	Set the priority and availability of the codecs by adding or remove them from the list.
Advanced Settings	
Use Feature Code	When this setting is enabled, the features in this section will not be handled by the device itself but by the server instead. In order to control the enabling of the features, the device will send feature code to the server by dialing the number specified in each feature code field.
Enable Blocking Anonymous Call	Set the feature code to dial to the server
Disable Blocking Anonymous Call	Set the feature code to dial to the server
Send Anonymous On Code	Set the feature code to dial to the server
Send Anonymous Off Code	Set the feature code to dial to the server
RTP Encryption	Enable RTP encryption such that RTP transmission will be encrypted
Enable Session Timer	Set the line to enable call ending by session timer refreshment. The call session will be ended if there is not new session timer event update received after the timeout period
Session Timeout	Set the session timer timeout period
Keep Alive Type	Set the line to use dummy UDP or SIP OPTION packet to keep NAT pinhole opened
Keep Alive Interval	Set the keep alive packet transmitting interval
Keep Authentication	Keep the authentication parameters from previous authentication
Blocking Anonymous Call	Reject any incoming call without presenting caller ID
User Agent	Set the user agent, the default is Model with Software Version.
Specific Server Type	Set the line to collaborate with specific server type
SIP Version	Set the SIP version
Anonymous Call Standard	Set the standard to be used for anonymous
Local Port	Set the local port
Ring Type	Set the ring tone type for the line
Enable user=phone	Sets user=phone in SIP messages.
Use Tel Call	Set use tel call

Auto TCP	Using TCP protocol to guarantee usability of transport for SIP messages above 1500 bytes
Transport Protocol	Set the line to use TCP or UDP for SIP transmission
Enable Rport	Set the line to add rport in SIP headers
Enable PRACK	Set the line to support PRACK SIP message
DNS Mode	Select DNS mode, A, SRV, NAPTR
Enable Long Contact	Allow more parameters in contact field per RFC 3840
Enable Strict Proxy	Enables the use of strict routing. When the phone receives packets from the server, it will use the source IP address, not the address in via field.
Convert URI	Convert not digit and alphabet characters to %hh hex code
Use Quote in Display Name	Whether to add quote in display name
Enable GRUU	Support Globally Routable User-Agent URI (GRUU)
Sync Clock Time	Time Syncn with server
Caller ID Header	Set the Caller ID Header
Use 182 Response for Call waiting	Set the device to use 182 response code at call waiting response
Response Single Codec	If setting enabled, the device will use single codec in response to an incoming call request
Enable Feature Sync	Feature Syncn with server
Enable SCA	Enable/Disable SCA (Shared Call Appearance)
Server Expire	Set the timeout for using the server.
TLS Version	Choose TLS Version
SIP Global Settings	
Strict Branch	Set strict matching for the Branch field
Enable Group	Enable group setting
Enable RFC4475	Enable RFC4475
Enable Strict UA Match	Enable strict UA match
Registration Failure Retry Time	Set registration failure retry time
Local SIP Port	Modify the SIP port
Enable uaCSTA	Enable the uaCSTA function

9.13 Line >> SIP Hotspot

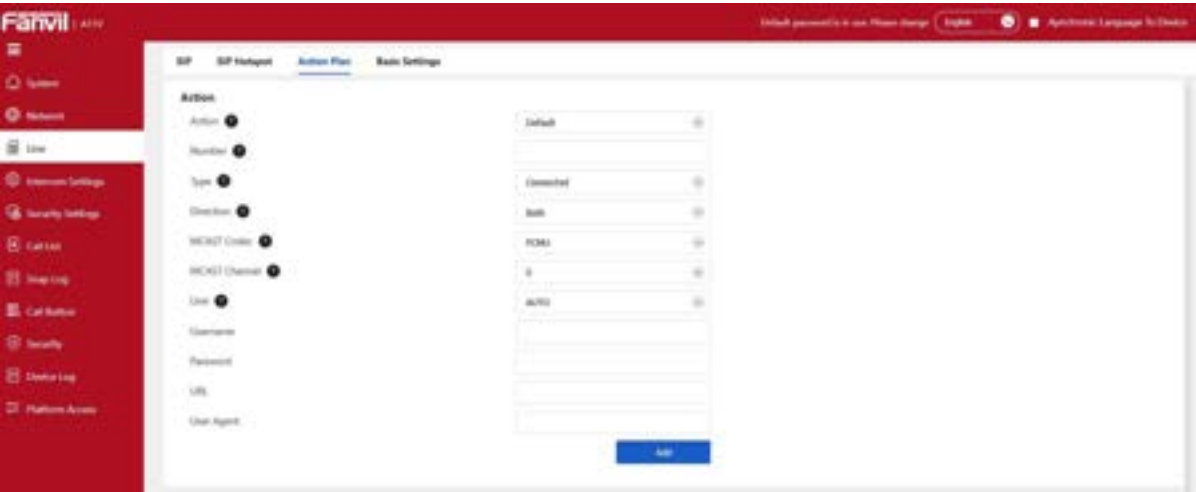
SIP hotspot is a simple and practical function. It is simple to configure, can realize the function of group vibration, and can expand the number of SIP accounts.

See [8.3 Hotspot](#) for details.

9.14 Line >> SIP Hotspot

Action plan: a technical implementation defined and designed by fanvil for remote control and behavior linkage between fanvil terminal equipment and other equipment. That is, when an event occurs on the fanvil terminal, the terminal can execute an action, which is completed according to a plan rule.

Log in to the phone web, visit [**Line**] >[**Action plan**], and configure action plan rules.



Picture 27 - Action Plan

Table 15 - Action Plan

Configuration Parameter Description	
Action	
Description	Action when the rule of number configuration is triggered.
Options	Default: when the rule is triggered, the device converts multicast according to the multicast address port set by the website. MCAST-XFER: when the rule is triggered, the device converts the incoming call or multicast into multicast and sends it to the set multicast address port. Mute: the device will mute automatically when the rule is triggered. Answer: when the rule is triggered, the device automatically answers the incoming call.

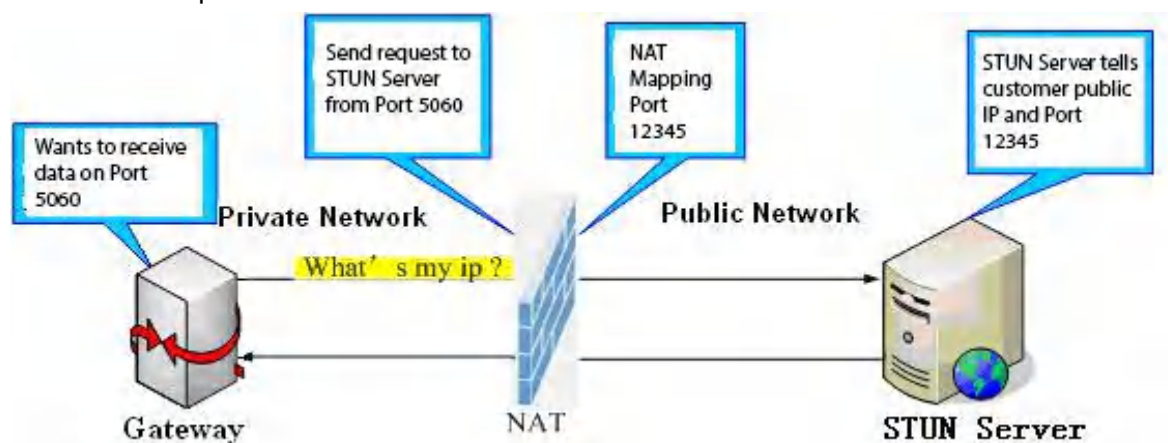
Configuration Parameter Description	
	Play Audio: When the rule is triggered, the specified audio file will be played on the local or remote device.
Default Value	Default
Number	
Description	Call number corresponding to each Action Plan; number expressions are supported.
Options	123; 1xx; 1.; 1[3,5,7,8]xxxxxxxx; 5753[5-6]xxxx; X matches any digit; . matches any number of digits; [] defines the matching rule for a specific digit.
Default Value	None
Type	
Description	Period type when the rule is triggered and executed
Options	Early: Triggered and executed before the call is established. Connected: Triggered and executed during a call. Disconnected: Triggered and executed after the call is hung up.
Line	
Description	The SIP line matched by the selected rule.
Options	Auto,SIP1~SIPN; N is the maximum number of SIP lines supported by the device.
Default Value	Auto
Direction	
Description	Behavior processing mode of the corresponding configuration rule.
Options	Both: Triggered for both incoming and outgoing calls Outgoing: Triggered only for outgoing calls Incoming: Triggered only for incoming calls
Default Value	Both
URL	
Description	Default , URL executed when the multicast conversion rule is triggered.
Options	Supports HTTP/HTTPS, multicast addresses, and ports. 1. When set to Default, it supports sending an Action URL, as well as configuring multicast addresses and ports. 2. When the multicast conversion rule is triggered, it supports configuring multicast addresses and ports. The configuration formats are as follows: When the action is set to "Default", the format is: mcast://[multicast

Configuration Parameter Description	
	address]:[port]. When the action is set to "Convert Multicast", the format is: [multicast address]:[port].
Default Value	None
User Agent	
Description	User Agent parameter carried when the rule is triggered.
Options	Any content
Default Value	None
Username	
Description	Username parameter carried when the rule is triggered.
Options	Any content
Default Value	None
Password	
Description	Password parameter carried when the rule is triggered.
Options	Any content
Default Value	None
MCAST Codec	
Description	Multicast codec sent when the multicast conversion rule is triggered.
Options	PCMU,PCMA,G729,G723,iLBC,AMR,AMR-WB,opus,G722; Note: Supported codecs vary by model. Please refer to the actual codec supported by the phone.
Default Value	PCMU
MCAST Channel	
Description	Multicast channel used when the multicast conversion rule is triggered.
Options	0-25
Audio Files	
Description	When the action is Play Audio , select the audio file to be played.
Options	After uploading the audio in 【System】 >> 【Upgrade】 >> 【Ring Upgrade】 , the file will be automatically synchronized to the option list.
Play Times	
Description	When the action is Play Audio , you can specify the playback count of the audio.
Options	The audio will be played according to the set number of times.

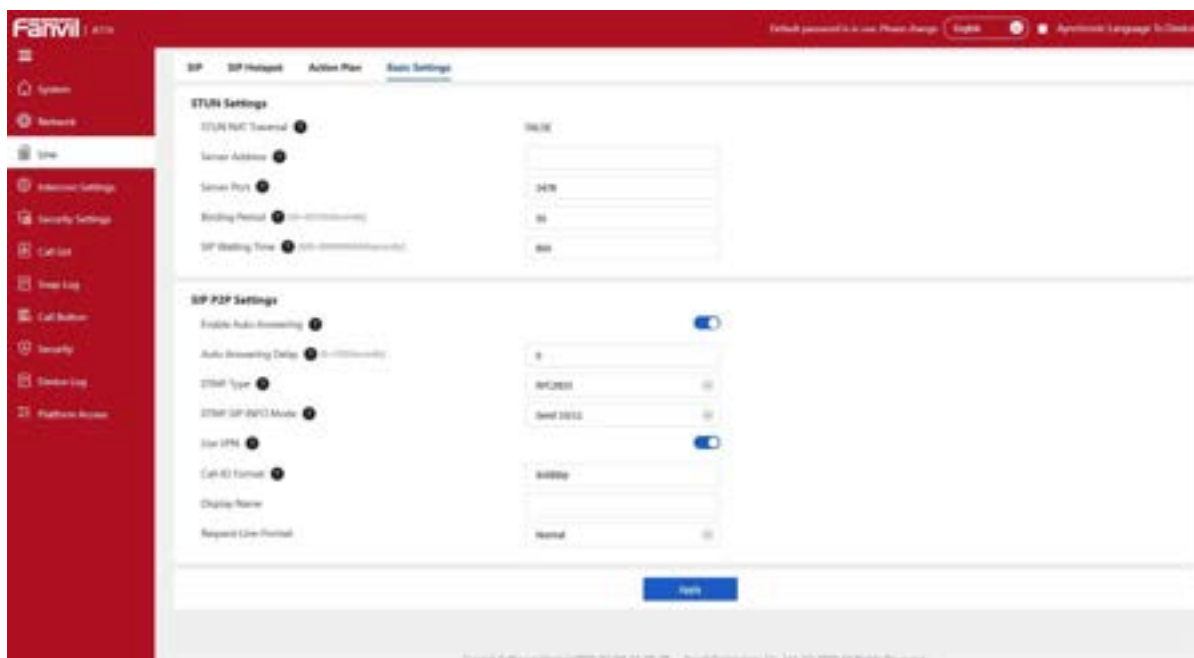
Configuration Parameter Description	
Automatic Disconnect	
Description	When the type is Connected, the call will be automatically hung up after the audio finishes playing.
Options	Enable / Disable
Play Interval	
Description	Set the interval between consecutive playbacks when looping audio multiple times.
Options	0-86400s

9.15 Line >> Basic Settings

STUN -Simple Traversal of UDP through NAT -A STUN server allows a phone in a private network to know its public IP and port as well as the type of NAT being used. The equipment can then use this information to register itself to a SIP server so that it can make and receive calls while in a private network.



Picture 28 - Basic Settings

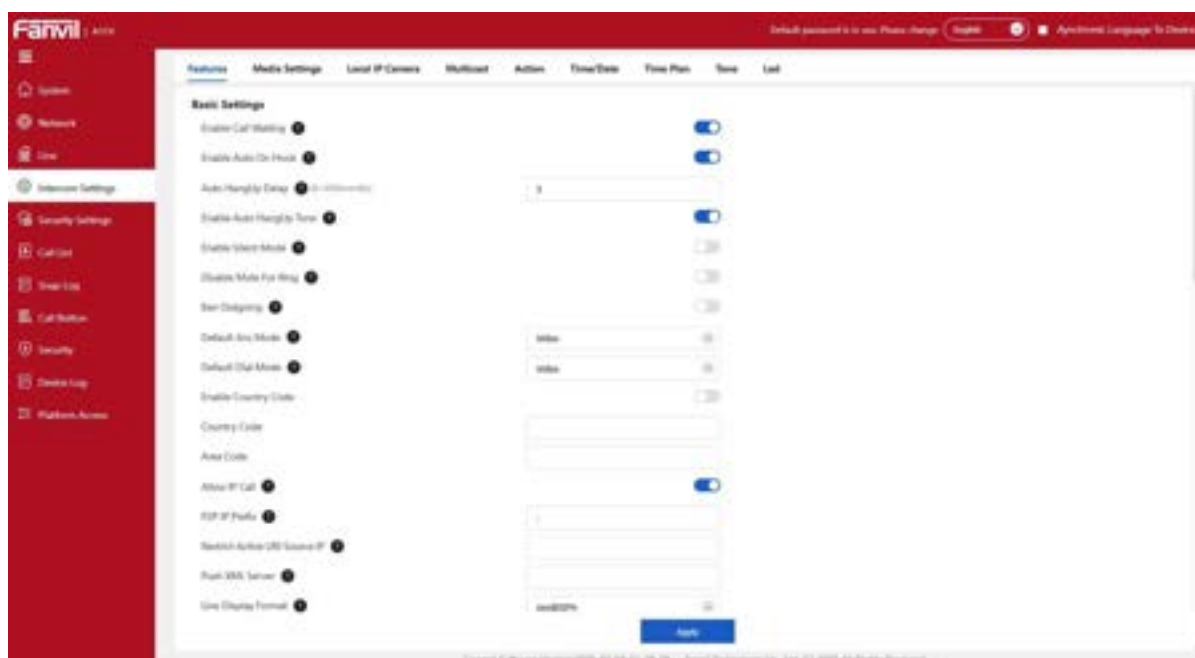


Picture 29 - Line Basic Setting

Table 16 - Line Basic Setting

Parameters	Description
STUN Settings	
Server Address	Set the STUN server address
Server Port	Set the STUN server port, default is 3478
Binding Period	Set the STUN binding period which can be used to keep the NAT pinhole opened.
SIP Waiting Time	Set the timeout of STUN binding before sending SIP messages
SIP P2P Settings	
Enable Auto Answering	Automatically answer incoming IP calls after the timeout period is enabled
Auto Answering Delay	Automatic answer timeout setting
DTMF Type	Set the DTMF type of the line.
DTMF SIP INFO Mode	Set SIP INFO mode to send '*' and '#' or '10' and '11'

9.16 Intercom Settings >> Features



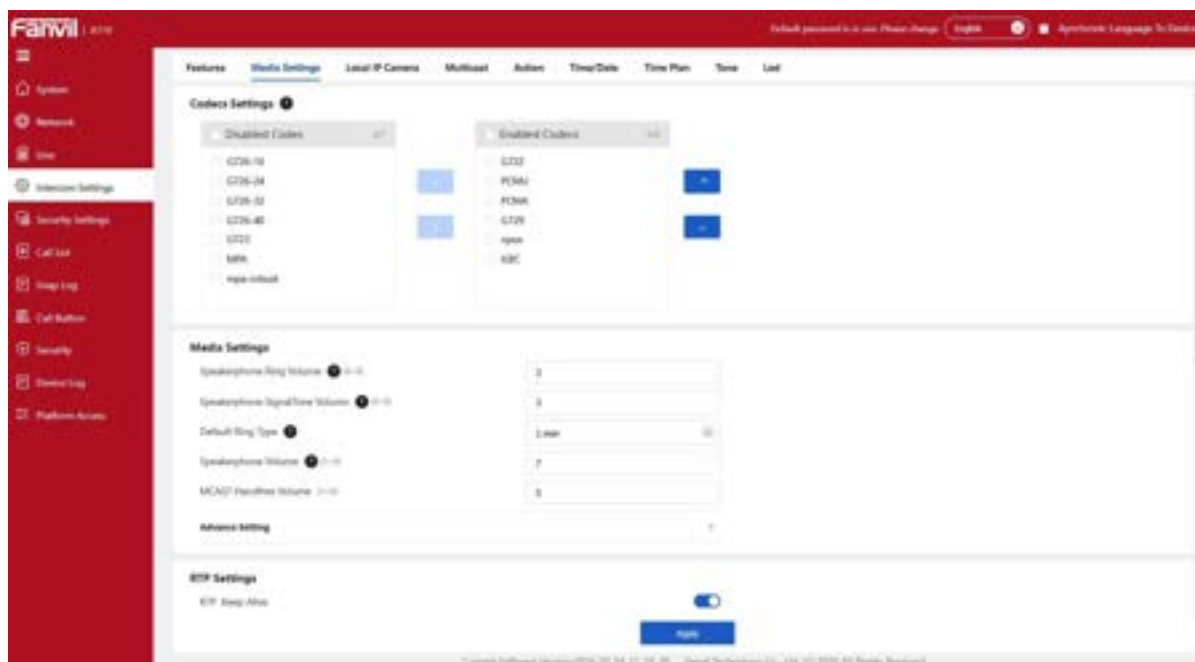
Picture 30 - Feature

Table 17 - Common Device Function Settings

Parameters	Description
Basic Settings	
Enable Call Waiting	Enable this setting to allow user to take second incoming call during an established call. Default enabled.
Enable Auto On Hook	The phone will hang up and return to the idle automatically at hands-free mode
Auto HangUp Time	Specify Auto HangUp time, the phone will hang up and return to the idle automatically after Auto Hand down time at hands-free mode, and play dial tone Auto HangUp time at handset mode
Enable Silent Mode	When enabled, the phone is muted, there is no ringing when calls, you can use the volume keys and mute key to unmute.
Disable Mute for Ring	When it is enabled,you can not mute the phone.
Ban Outgoing	If you select Ban Outgoing to enable it, and you cannot dial out any number.
Enable country Code	Whether enable country Code
Country Code	Country Code
Area Code	Area Code
Allow IP Call	If enabled, user can dial out with IP address
P2P IP Prefix	You can set IP call prefix,for example,i set it as "172.16.2.",then i

	input #160 in dialpad and press dial key ,it will call 172.16.2.160 automatically
Restrict Active URI Source IP	Set the device to accept Active URI command from specific IP address.
Push XML Server	Configure the Push XML Server, when phone receives request, it will determine whether to display corresponding content on the phone which sent by the specified server or not.
Line Display Format	Line display format including SIPn/SIPn: xxx/xxx@SIPn
Call Number Filter	Configure a special character & ,if the number is 78 & 9. The call will be filtered out&
Auto Resume Current	If the current path changes, the hold will be automatically resume
Limit Talking Duration	Automatically hang up the call after enabling the time set for the call
Duration	Call duration ,20-600s
Call Timeout	If the call is not answered, the call will be automatically hung up after the timeout
Enable Push XML Auth	To enable push xml auth, user password is required
Tone Settings	
Enable Holding Tone	When turned on, a tone plays when the call is held
Enable Call Waiting Tone	When turned on, a tone plays when call waiting
Play Talking DTMF Tone	Play DTMF tone on the device when user pressed a phone digits during taking, default enabled.
Intercom Settings	
Enable Intercom	When intercom is enabled, the device will accept the incoming call request with a SIP header of Alert-Info instruction to automatically answer the call after specific delay.
Enable Intercom Mute	Enable mute mode during the intercom call
Enable Intercom Tone	If the incoming call is intercom call, the phone plays the intercom tone
Enable Intercom Barge	Enable Intercom Barge by selecting it, the phone auto answers the intercom call during a call. If the current call is intercom call, the phone will reject the second intercom call
Response Code Settings	
Busy Return Code	Set the SIP response code on line busy
Reject Response Code	Set the SIP response code on call rejection

9.17 Intercom Settings >> Media Settings



Picture 31 - Media Settings

Table 18 - Media Settings

Parameters	Description
Codecs Settings	Select the enabled and disabled voice codecs codec:G.711A/U, G.726, G.723, G.722, G.729, ILBC, opus, MPA
Audio Settings	
Speakerphone Ring Volume	Set the ring volume in the speakerphone, the value must be 1~9
Speakerphone SignalTone Volumn	Set the volume of the handfree signal tone. The volume range is 0~9.
Default Ring Type	Set the default ring type. If the caller ID of an incoming call was not configured with specific ring type, the default ring will be used.
Speakerphone Volume	Set the speakerphone volume, the value must be 1~9
MCAST Handfree Volume	Set the multicast handfree volume. the value must be 1~9.
Advanced Settings	
DTMF Payload Type	Enter the DTMF payload type, the value must be 96~127.
Hand Free Mic Gain	Set the hands-free MIC gain. the value must be 1~9.
Opus Payload type	Enter the opus payload type, the value must be 96~127.

OPUS Sample Rate	Set the opus sample rate
ILBC Payload Type	Set the ILBC Payload Type
ILBC Payload Length	Set the ILBC Payload Length
Noise Reduction Mode	Select the noise reduction mode. When set to Intelligent Noise Reduction, it can effectively isolate noise.
Enable VAD	Enable Voice Activity Detection. When enabled, the device will suppress the audio transmission with artificial comfort noise signal to save the bandwidth.
H.264 Payload Type	Set the H.264 Payload type. The range is 96~127, default is 117.
Video Direction	Sendonly: Establishes a video call; the SDP in the INVITE packet is sendonly.
	Sendrecv: Establishes a call; the SDP in the INVITE packet is sendrecv.
Rtp Detection Time	If no RTP packet is received within the set time, the device will hang up the call automatically.
Disable AEC	
Enable Line-out	Disable: The device audio is output through the hands-free speaker.
	Enable: The device audio is output through the external speaker connected to the Line-out interface.
	Lineout && Handfree: The device audio is output through both the device hands-free speaker and the external speaker simultaneously.
Disabled / Enabled Status	When the device is in enabled status, audio will be automatically output through the external speaker via the Line-out interface. Displayed after the Line-Out function is enabled
RTP Control Protocol(RTCP) Settings	
CNAME user	Set the CNAME user
CNAME host	Set the CNAME host
RTP	
RTP keep alive	Keep talking, send a packet 30 seconds after enable it
Alert Info Ring Settings (alert-info)	
Value of notification message 1 to 10	Set the value of the specified ring type
ring type	The ring type

9.18 Intercom Settings>>Local IP Camera

A11V supports two configuration modes: local camera and external camera, which can be switched in [Connection Mode] >> [Connection Mode Settings].

A11 only supports external camera.

● Local Camera

Customers can configure camera related parameters and adjust video coding related settings.

FAIMI | A11

Default password is 12345678901234567890 | English | System Language To Chinese

System

Network

Device

Interface Settings

Security Settings

Call List

Image Log

Call Station

Security

Device Log

Platform Access

Features

Media Settings

Local IP Camera

Multicast

Action

Time/Date

Time Plan

Time

Log

Connection Mode

Connection Mode Setting

Local

Apply

Camera Parameter Settings

White Balance Mode

Auto Mode

Exposure Mode

Auto Mode

Exposure Time (1/1000)

0

Exposure Gain (1/1000)

0

Contrast Mode

Auto Mode

Contrast (1/100)

10

Saturation Mode

Auto Mode

Saturation (1/100)

80

Sharpness Mode

Auto Mode

Sharpness (1/1000)

0

Wide Dynamic

Manual Mode

Wide Dynamic Range (1/100)

0

Dark NOISE

Optimization

Image Mode

AUTO

Image Mode

AUTO

Brightness Mode

Auto Mode

Brightness (1/100)

20

HDR

Enable

Call Code Flow Type

Main Stream

H.264 Payload Type (96~127)

117

Enable H265 Preview

Enable

1080P Preview Resolution

1080P

Infrared PIR Light

Auto Mode

Apply

Default

Character Overlay Setting

OSD Data Display

Enable

OSD Text Display

Enable

Color Style

white

Text Position

Upper Left

OSD Time/Date Format

YYYY-MM-DD

Title Position

Upper Left

Title Message

Font Size

18*18

Video Encoding Settings

H264Video Stream0

Code Stream Rate Control

VBR

Profile

Baseline Profile

Data Stream Frame Rate

25

Code Flow Rate

1 Mbps

Code Stream Resolution

720P

Code Stream I Frame Interval

30

H264Video Stream1

Code Stream Rate Control

VBR

Profile

Baseline Profile

Data Stream Frame Rate

25

Code Flow Rate

112 Kbps

Code Stream Resolution

VGA

Code Stream I Frame Interval

30

Apply

Onvif Setting

Enable Onvif

Enable

Enable Onvif Certification

Enable

Apply

RTSP Setting

Enable RTSP

Enable

Enable Rtp-Certification

Enable

RTSP Username

admin

RTSP Password

RTSP Stream

H264Main0URL

rtsp://admin:admin@192.16.37.209/h264/stream0.avi

H264Sub0URL

rtsp://admin:admin@192.16.37.209/h264/stream0.avi

Snapshot

Catch Trigger Mode Input Port Trigger

Output Trigger

Input1

Input2

Input Trigger

Talking

Ringling

Trying

Trigger By Call Status

Handset Recognition Trigger

Snapshot Save

Server

Server Address

Username

Password

Picture 32 - Camera Settings

Table 19 - Camera Settings

Parameters	Description
Camera Parameter Settings	
White Balance Mode	Auto mode: The camera automatically makes the most appropriate adjustments according to the color temperature of the shooting scene, and automatically compensates for the color of the light source.。 Lock mode: Fixed white balance parameters will not be

53

	automatically adjusted according to the actual color temperature. Incandescent lamp mode: To compensate for the hue of incandescent lamps, it is suitable for use under beige light sources (bulbs, tungsten lamps, candles) and other light sources of this type.。 Warm light mode: Compensate the hue of warm light, suitable for light sources with a color temperature of about 2700K.。 Natural light mode: It can be used for white balance in outdoor shooting and has a wide range of applications.。 Fluorescent lamp light: Compensate the hue of fluorescent lamps, suitable for use under fluorescent light sources (fluorescent lamps, energy-saving lamps) and other types of light sources.。
Exposure Mode	Auto mode : The camera automatically sets the parameters, no need for the operator to adjust. Manual exposure time : Set the exposure time by yourself, the range is 0~10000 Manual exposure gain: Set the exposure gain by yourself, the range is 0~1024 All manual : Manually set the exposure time and gain.
Exposure Time	It refers to the time to press the shutter. Increasing the exposure time can increase the signal-to-noise ratio and make the image clear. The longer the time, the more the sum of photons to the CCD\CMOS surface, the brighter the captured image will be, but if it is overexposed, the photo will be too bright and lose the image details; if it is underexposed, the photo will be too dark.
Exposure Gain	It refers to the amplification gain of the analog signal after double sampling, but the noise signal is also amplified in the process of amplifying the image signal. The gain is generally only used when the signal is weak, but you do not want to increase the exposure time.
Contrast Mode	Auto mode: The camera automatically sets the contrast according to the environment, no need for the operator to adjust Manual mode: Manually set the camera's contrast parameters.
Contrast	Contrast refers to the contrast between light and dark in the picture. Increase the contrast, the brighter areas will be brighter and the darker areas will be darker, and the contrast between light and dark will increase.

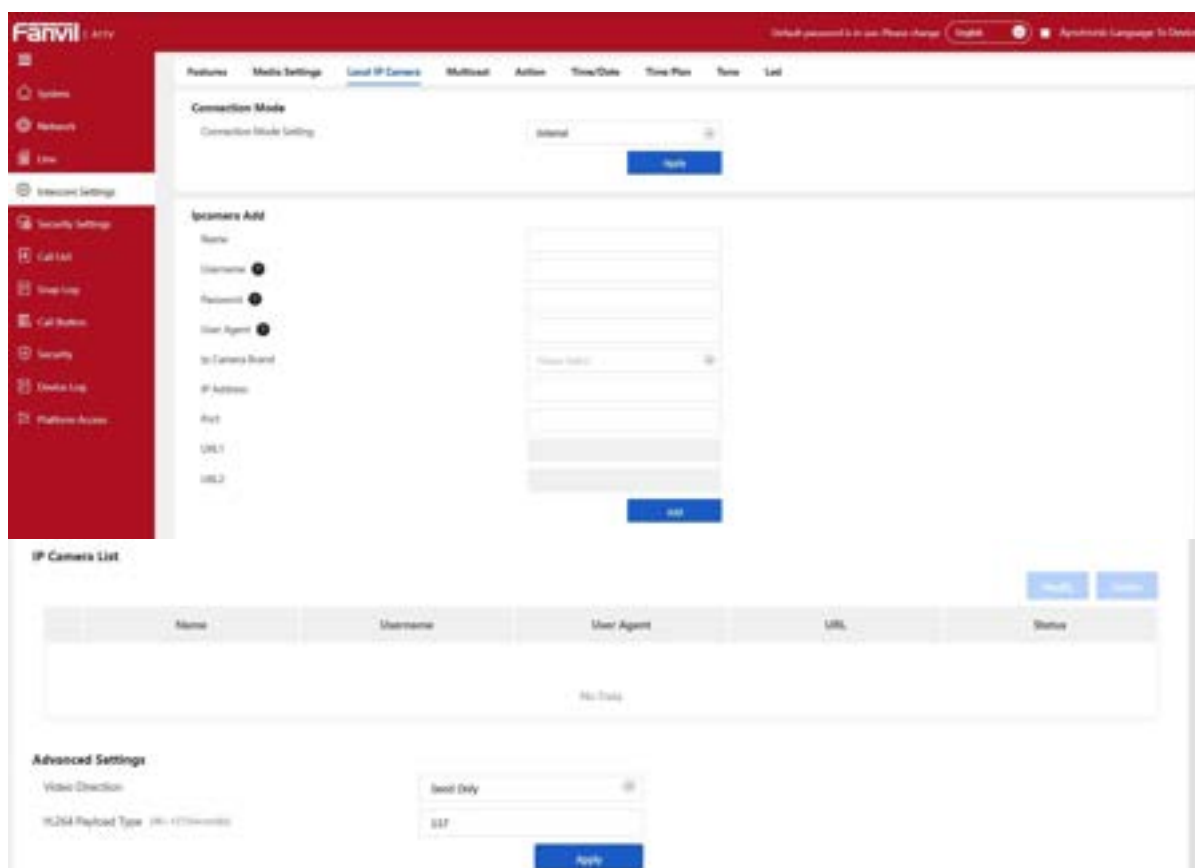
Saturation Mode	Auto mode: The camera automatically sets the saturation according to the environment, without the need for the operator to adjust Manual mode: Manually set the camera's saturation parameters.
Saturation	Saturation refers to the color. Adjusting the saturation will change the color. The greater the adjustment, the more distorted the image color. Adjusting the saturation is only suitable for pictures with insufficient colors. When the saturation is adjusted to the lowest, the image will lose its color and become a black and white image.
Sharpness Mode	Auto mode: The camera automatically sets the sharpness according to the environment, no need for the operator to adjust Manual mode: Manually set the sharpness parameters of the camera
Sharpness	Sharpness is sometimes called "sharpness", which is an indicator that reflects the sharpness of the image plane and the sharpness of the edges of the image. If you increase the sharpness, the contrast of the details on the image plane is also higher and it looks clearer.
Wide Dynamic	Enable or disable wide dynamic. Turning on wide dynamic allows the camera to see the image in a very strong contrast
Wide Dynamic Range	Set image brightness by yourself, range 0~10
Start IRCUT	Whether to open IRCUT
Image mode	Daytime (color): The camera transmits color images when there is sufficient light during the day Night (black and white): The camera transmits black and white images when there is insufficient light at night Automatic: The camera transmits color images when the light is sufficient during the day according to the light sensitivity, and transmits black and white images when the light is insufficient at night
Brightness	Set the image brightness by yourself, the range is 0~100
Call Code Flow Type	Main stream or sub stream used in video call
H.264 Payload Type	Set the load type of h.264, the range is 96~127
Enable Http Preview	Whether to enable Http preview
HTTP Preview Resolution	Set HTTP Preview Resolution
Infrared Fill Light	Disable: Turn off the IR fill light. Enable: Turn on the IR fill light.

	Auto Mode: The camera automatically turns on the fill light in dark environments and turns it off in bright environments based on light sensitivity.
OSD Settings	
OSD Date Display	Turn on/off the date display of the camera image interface.
OSD Text Display	Enable/disable the text display of the camera image interface.
Color Style	Text display color: Black, Red, Blue, Green, White.
Time Position	Display position: Top Left, Top Right, Bottom Left, Bottom Right.
OSD Time/Date Format	Date display format: YYYY-MM-DD, MM-DD-YYYY, DD-MM-YYYY, YYYY/MM/DD, MM/DD/YYYY, DD/MM/YYYY.
Title Position	Title information text position: Top Left, Top Right, Bottom Left, Bottom Right.
Title Message	Text display content on the camera image.
Font Size	Display font size: 16*16, 32*32.
Video Encoding Settings	
Code Stream Rate Control	VBR: Video call will adapt to the bit rate of the opposite end, so that the video effect is better. CBR: The video call will not change according to the bit rate set by itself.
Profile	Baseline Profile: Supports I/P frames, only supports Progressive and CAVLC. Generally used for low-level or extra error-tolerant applications, such as video calls and mobile video. Main Profile: Provides I/P/B frames, supports Progressive and Interlaced, and also supports CAVLC and CABAC.
Data Stream Frame Rate	The larger the value is, the more fluent the video is, and the higher the requirement for network bandwidth is; adjustment is not recommended
Code Flow Rate	It refers to the data flow used by video files in unit time, also known as code rate or code flow rate. Generally speaking, sampling rate is the most important part of picture quality control in video coding. Generally, the unit we use is KB / s or MB / s
Code Stream Resolution	Support 2K, 1080P, 720P, 4CIF, VGA, CIF, QVGA
Code Stream I Frame Interval	The larger the value, the worse the video quality, otherwise the better the video quality; adjustment is not recommended.
Onvif Setting	
Enable Onvif	Enable or disable the onvif protocol, after enabling it, the device can

	be discovered through a recorder that supports ONVIF
Enable Onvif Auth	Whether authentication is required when using onvif protocol (with username and password)
RTSP Setting	
Enable RTSP	Enable or disable the RTSP protocol. When enabled, the device can provide video streaming service via the RTSP protocol.
Enable Rtp Certification	When using rtsp protocol, whether authentication is required (with username and password)
RTSP UserName	Authentication username for accessing the RTSP video stream
RTSP Password	Authentication password for accessing the RTSP video stream
Main Stream Url	Display the main stream URL address
Sub Stream Url	Display the sub stream URL address
Snapshot	
Input trigger	Select the input port that triggers the capture
Output trigger	Select the output port that triggers the capture
Trigger By Call trigger	Select the call status that triggers the capture,including Talking, Ringing, Trying
Humanoid Recognition Trigger	Whether to turn on the Humanoid Recognition Trigger capture
Snapshot Save	Set how to save the captured image, including: Server, Storage Card, Server and Storage Card
Server Address	Enter the server address
Username	Enter a username
Password	Enter a password

● External Camera

When an external camera is selected, it can be added via the web interface. During subsequent video calls with other devices, the devices will directly display the real-time video from this external camera.



Picture 33 - Camera Settings

Table 20 - Camera Settings

Parameters	Description
Ipcamera Add	
Name	Enter a custom name for the external device to distinguish between different devices.
Username	Authentication username for the external device, used to verify the access permission of this device.
Password	Authentication password for the external device, used to verify the access permission of this device.
User Agent	Enter the user agent parameter to be included in the access URL.
Ip Camera Brand	Select the manufacturer of the external camera. Currently supported: TOPSEE\XM\HIK\Dahua\AXIS\Digital Watchdog\Custom ● If your camera is from one of the above manufacturers, after entering the username, password, IP address and port, the system will automatically generate the corresponding camera access URL during addition; manual configuration of the video stream address is not required. ● If your camera is not from the above manufacturers, select Custom and enter the full access URL of the camera to add it.

IP Address	Enter the IP address of the external camera.
Port	Enter the port of the external camera.
URL1/URL2	When the camera type is set to Custom, you can enter the full access URL of the camera to add it.

9.19 Intercom Setting >> MCAST

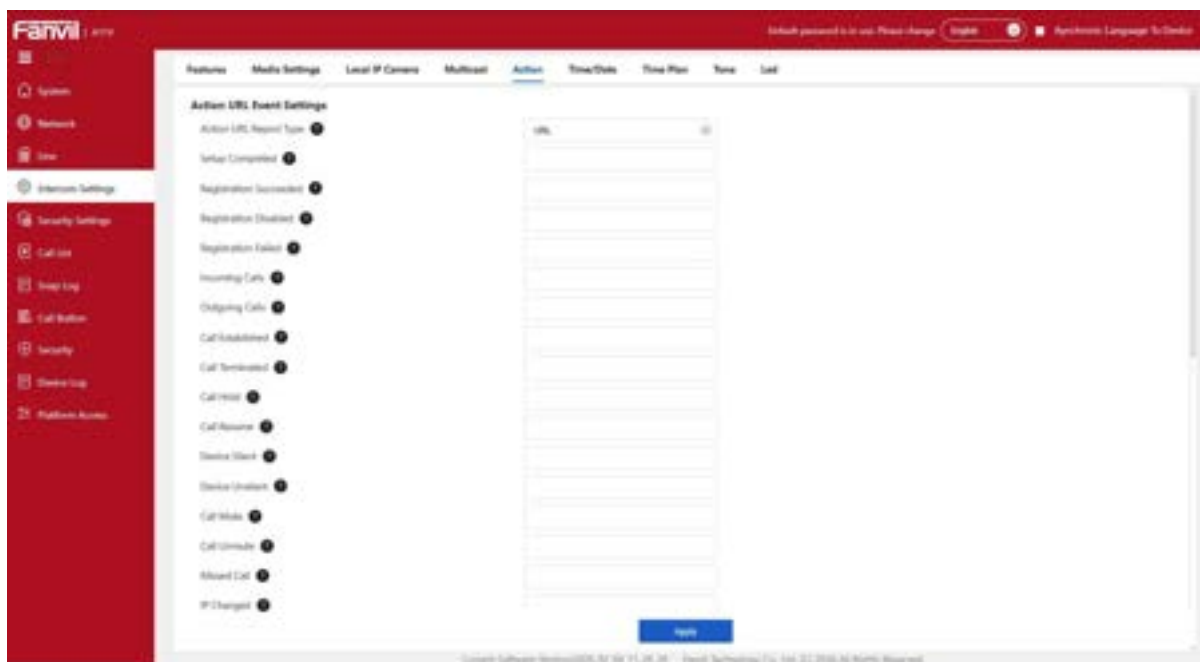
It is easy and convenient to use multicast function to send notice to each member of the multicast via setting the multicast key on the device and sending multicast RTP stream to pre-configured multicast address. By configuring monitoring multicast address on the device, monitor and play the RTP stream which sent by the multicast address.

The detail for [8.2 MCAST](#).

9.20 Intercom Setting >> Action URL

Table 21 - Action URL

Action URL Event Settings
Set URL for the device to report its action to server. These actions are recorded and sent as xml files to the server. Sample format is http://InternalServer /FileName.xml. (Internal Server: The IP address of server; File Name: the device's xml file used to report action.)

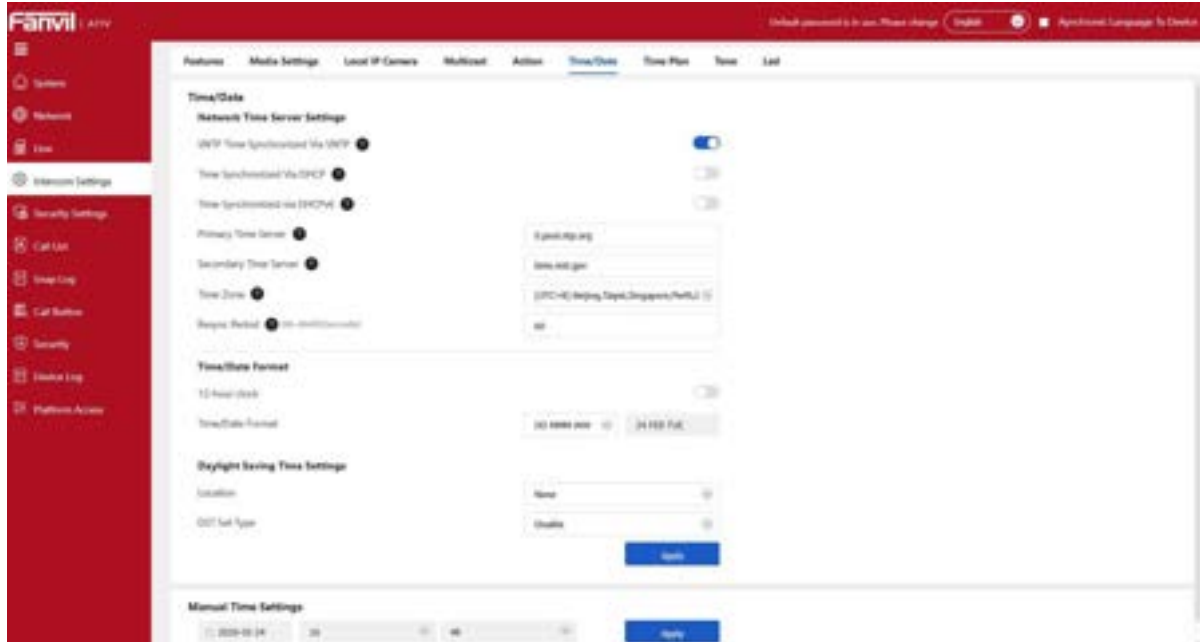


Picture 34 - Action URL

Note! The operation URL is used by the IPPBX system to submit device events.

9.21 Intercom Setting >> Time/Date

Users can configure the device's time Settings on this page.



Picture 35 - Time/Date

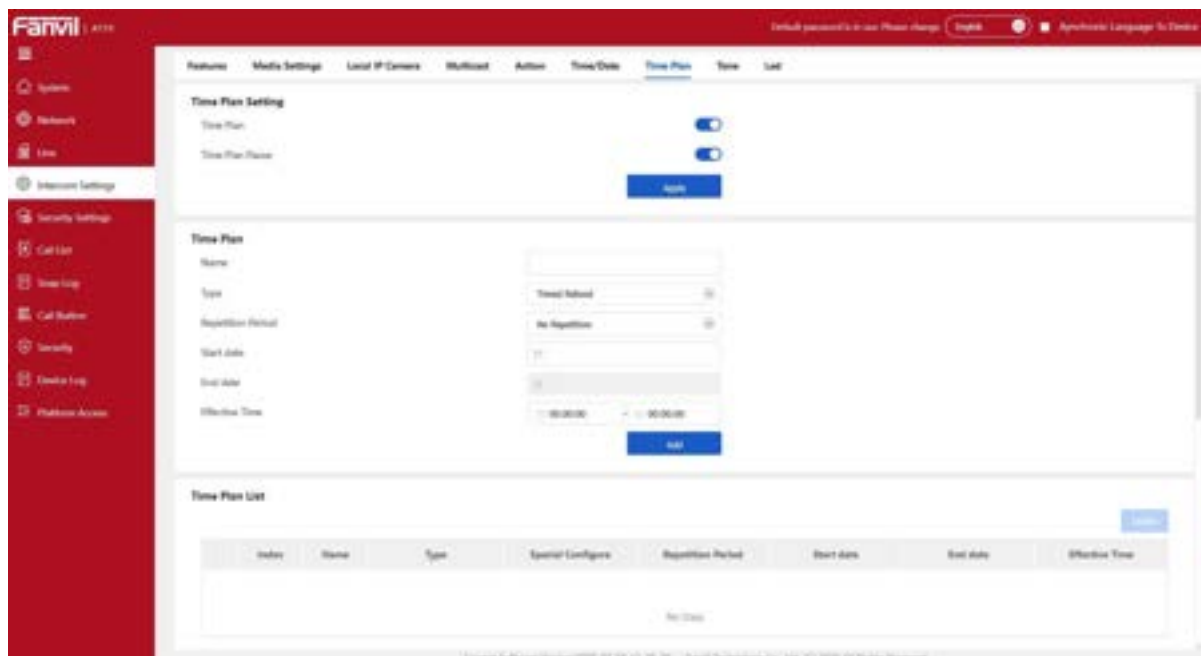
Table 22 - Time/Date

Field Name	Explanation
Network Time Server Settings	
Time Synchronized via SNTP	Enable time-sync through SNTP protocol
Time Synchronized via DHCP	Enable time-sync through DHCP protocol
Primary Time Server	Set primary time server address
Secondary Time Server	Set secondary time server address, when primary server is not reachable, the device will try to connect to secondary time server to get time synchronization.
Time zone	Select the time zone
Resync Period	Time of re-synchronization with time server
Daylight Saving Time Settings	
Location	Select the user's time zone specific area
DST Set Type	Select automatic DST according to the preset rules of DST, or the manually input rules
Offset	The DST offset time

Month Start	The DST start month
Week Start	The DST start week
Weekday Start	The DST start weekday
Hour Start	The DST start hour
Month End	The DST end month
Week End	The DST end week
Weekday End	The DST end weekday
Hour End	The DST end hour
Manual Time Settings	
To set the time manually, you need to disable the SNTP service first, and you need to fill in and submit each item of year, month, day, hour and minute in the figure above to make the manual settings successful.	
System time: Display system time and its source (SIP automatic get >SNTP automatic get >manual manual setting)	

9.22 Intercom Settings>>Time Plan

The user can set the time point and time period for the device to perform a certain action.



Picture 36 - Time Plan

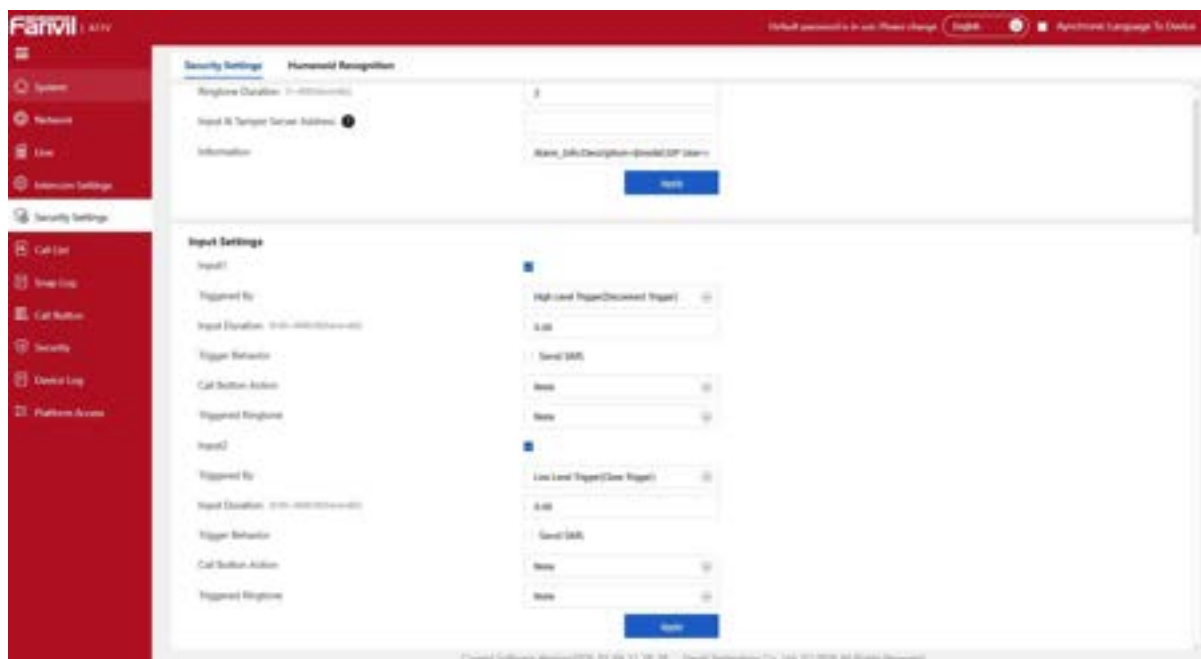
Table 23 - Time Plan

Parameters	Description
Type	Timed Reboot, Timed Upgrade, Timed Echo Test, Timed Play Audio,

	Timed Config.
Audio path	Support local and SD Card Local: select the audio file uploaded locally SD Card: After inserting the SD card, the system will automatically recognize and display the SD card options. The user can select and play audio files from the SD card.
Audio settings	Select the audio file you want to play, it supports trial listening, and you can play it immediately after clicking the trial listening
Play Type	The audio playback direction can be set to Local / Mcast / Local&Mcast.
Repeat cycle	No Repetition: Execute once within the set time range Daily: Perform this operation in the same time frame every day Weekly: Do this in the time frame of the day of the week Monthly: the time frame of the month to perform this operation
Effective time	Set the time period for execution

9.23 Security Settings

Enable Tamper: after enable, when the device is removed by force, the alarm information will be sent to the server and the alarm ring will be played.



Output Settings

Enable Logs

Triggered By DTMF Ringtone

Triggered By LRI Ringtone

Triggered By SMS Ringtone

Triggered By Call Button Ringtone

Output 1

Standard Status

Output Duration: (0-600 seconds)

Output Trigger Mode

Trigger By DTMF

DTMF Trigger Code

DTMF Reset Code

Reset By

Trigger By Active LRI

Trigger Message

Reset Message

Trigger By SMS

Trigger Message

Reset Message

Input Trigger

Trigger By Call Status

Disabled Status

No data



Enabled Status

☐ Calling

☐ Ring

☐ Talking(Calling)

☐ Talking(Called)

☐ Talking(Interncom)

☐ Talking(Misc)

Call Button Action

Triggered Hangup

Hangup Delay

None

None

None

None

AClosed

0

1234

4321

By Duration

OUTL_S00

OUTL_OUR

ALERT=OUTL_S00

ALERT=OUTL_OUR

☒ Input1

☐ Input2

NONE

0

Apply

Tamper Alarm Settings

Motion.Enable Tamper Alarm

Reset Command

Alarm Ringtone

Tamper_Reset

default

Apply

Tamper Alarm Reset

Reset Alarm Status

Reset

Noise Alarm Settings

Noise Alarm

Alarm Detection Duration: (0-600 seconds)

Alarm Decibel: (0-150)

Input Duration: (0-600 seconds)

Trigger Behavior

Call Button

Triggered Ringtone

☐

0

70

600

☐ Send SMS

none

default

Picture 37 - Security Settings

Table 24 - Security Settings

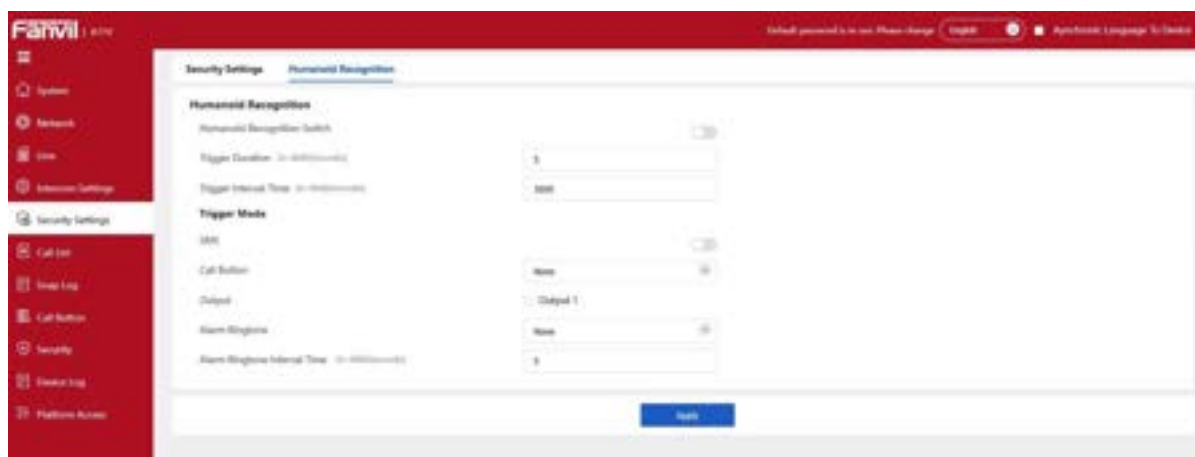
Security Settings	
Parameters	Description
Basic Settings	
Ringtone Duration	Set the ringtone duration, default value is 5 seconds.
Input & Tamper Server Address	Configure the remote response server address (including remote response server address and alarm trigger server address).When the input port is triggered, a short message will be sent to the server.
Information	Message format for sending short messages: Alarm_Info:Description=\$model;SIP User=\$active_user;Mac=\$mac;IP=\$ip;port=\$trigger,Name=\$triggerName
Input settings	
Input	Enable or disable Input
Triggered by	When choosing the low level trigger (closed trigger), detect the input port (low level) closed trigger.
	When choosing the high level trigger (disconnect trigger), detect the input port (high level) disconnected trigger.
Triggered Behavior	Send SMS: Set the alert message send to server if selected. Call Button Action: The device will perform corresponding Dss Key configurations if any key is selected, by default the value is none. Triggered Ringtone: Select triggered ring tone.
Output Settings	
Output	Enable or disable Output Response
Triggered by DTMF Ringtone	Select the DTMF trigger ring tone.
Triggered by URI Ringtone	Select the URI trigger ring tone.
Triggered By SMS Ringtone	Select the SMS trigger ring tone.
Triggered By Dsskey Ringtone	Select the Call Button trigger ring tone.
Standard Status	When choosing the low level trigger (NO: normally open), when meet the trigger condition, trigger the NO port disconnected.
	When choosing the high level trigger (NC: normally close), when meet the trigger condition, trigger the NC port close.

Output Duration	Set the output change duration time, the default is 5 seconds.
Trigger by DTMF	Enable or disable trigger by DTMF. The device will check the received DTMF sent by remote device, if it matches the DTMF trigger code, the device will trigger corresponding output port.
DTMF Trigger Code	Input the DTMF trigger code, default value is 1234.
DTMF Reset Code	Input the DTMF reset code, default value is 4321.
Reset By	Reset the output port mode by duration or state. By duration: Reset the output port status when output duration occurs. By state: Reset the output port status when device's call state changes.
Trigger by Active URI	Enable or disable trigger by URI. User can send commands from remote device or server to A11 series device, if the command is correct, then device will trigger corresponding output port.
Trigger Message	Input trigger message for trigger by URI mode.
Rest Message	Input reset message for trigger by URI mode.
Trigger by SMS	Enable or disable trigger by SMS. User can send ALERT command to A11 series device, if the command is correct, then device will trigger corresponding output port.
Trigger Message	Input trigger message for trigger by SMS mode.
Rest Message	Input reset message for trigger by SMS mode.
Input Trigger	Select the input port, when the input port meets the trigger condition, the output port will be triggered (The Port level time change, By < Output Duration > control)
Trigger By Call state	Select call state to trigger the output port, options are: Talking: When the device's talking status changes, trigger the output port. Ringing: When the device's ringing status changes, trigger the output port. Calling: When the device's calling status changes, trigger the output port.
Call Button Action	Enable or disable trigger by dsskey. If any of the Call Button is selected, when the Call Button application performs, the output port will be triggered.
Tamper Alarm Settings	

Motion Enable Tamper Alarm	When checked and enabled, if the terminal is violently removed, the tamper alarm will be triggered and play the set alarm tone continuously.
Reset Command	To stop the alarm tone, the remote end can send a short message to the terminal. The content of the short message is the value set in the reset command, and the terminal will stop playing the alarm tone.
Alarm Ringtone	Alarm tone settings.
Tamper Alarm Reset	Reset to stop the alarm tone playback.
Noise Alarm Settings	
Noise Alarm	When enabled, the device will automatically trigger an alarm when the ambient noise level and duration reach the preset thresholds.
Alarm Detection Duration	Sound trigger duration: range 1 – 60s, default 5s.
Alarm Decibel	Minimum alarm trigger volume: range 30 – 85dB, default 70dB.
Input Duration	Interval between consecutive alarms after the last alarm.
Triggered Behavior	Send SMS: Set the alert message send to server if selected. Call Button Action: The device will perform corresponding Dss Key configurations if any key is selected, by default the value is none. Triggered Ringtone: Select triggered ring tone.

9.24 Humanoid Recognition

The human figure recognition function is used in a variety of monitoring scenarios, when an outsider stays in the camera too much for a certain period of time, the alarm will be triggered. The related configuration functions are as follows:



Picture 38 - Humanoid Recognition Trigger

Table 24 - Humanoid Recognition Trigger Settings

Parameters	Description
Humanoid Recognition Trigger	
Humanoid Recognition Switch	
Trigger Duration	Trigger Detection Duration: A humanoid with the same characteristics continues to appear in the screen for xx seconds, then the trigger action configured below is triggered.
Trigger Interval Time	Interval between this trigger and the next trigger
Trigger Mode	
Trigger Short Message	Whether to trigger a short message
Trigger Call Button	Select the call key that needs to be triggered. Default is None, you can configure Dsskey1, Dsskey2
Trigger Output	Select the output port to be triggered
Alarm Ringtone	Select the alarm ringing tone
Alarm Ringtone Interval Time	Set the duration of alarm ringing

9.25 Call List >> Call List

■ Restricted Incoming Calls

It same as blacklist.By adding a number into the blacklist, user will no longer receive phone call from that number and it will be rejected automatically by the device until user delete it from the blacklist.

User can add specific number to be blocked, or a prefix where any numbers matched the prefix will all be blocked.

● Allowed Incoming Calls:

When DND is enabled, the incoming call number can still be called.

■ **Restrict Outgoing Call**

You can set the rule to restrict some numbers from dialing out,until you remove the number from the table.

9.26 Snap Log

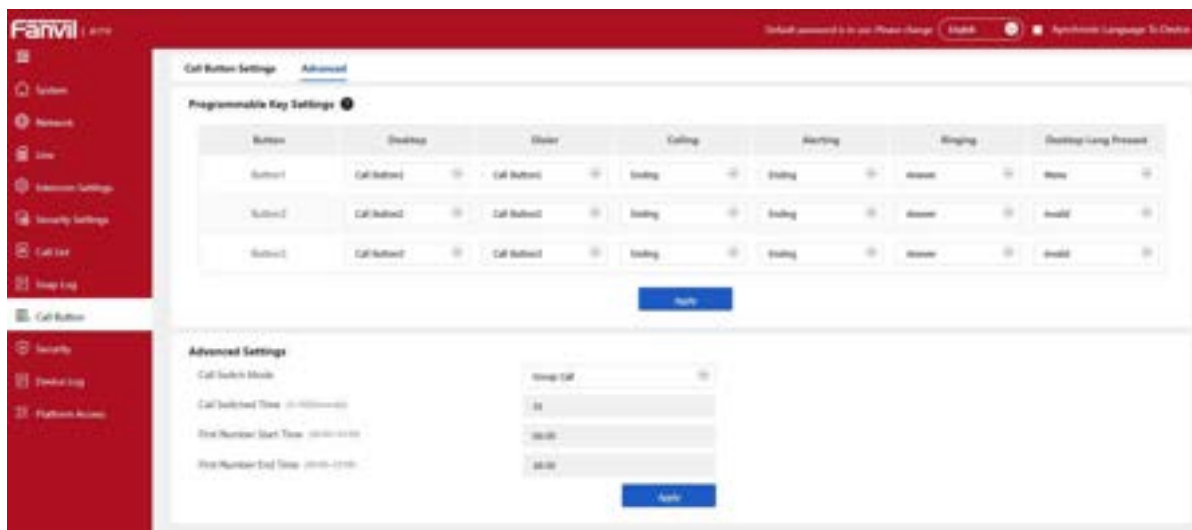
This list is used to display the captured images. If the image exists locally (device storage or SD card), then you can view the detailed image again in this list; if the image exists in a third party server, then the name of the image is displayed, and the customer can find the corresponding image in the server by comparing the name of the image.



Picture 39 - Snap Log

9.27 Call Button





Picture 40 - Call Button

Table 26 - Call Button

Parameters	Description
Call Button settings	
Memory Key	Speed Dial:The user can directly dial the set number. This feature is convenient for customers to dial frequent numbers. Intercom: This feature allows the operator or secretary to quickly connect to the phone, widely used in office environments SOS: After the user configures the SOS function, pressing the button will make the device call the configured number. During the call, the local device will not produce any prompt tone or indicator light. This function can be used for emergency calls.
Key event	The user can select a function key as a shortcut to trigger an event, including:None/Handfree/Redial/Release/Call Back/OK/Volume Up/Volume Down/Volume Circle/Audio play/Transfer Prefix
DTMF	Press during a call to send the set DTMF
MCAST Paging	Configure the multicast address and voice encoding. User can initiate multicast by pressing this key
Action URL	The user can use a specific URL to make basic calls to the device, open the door, etc.
MCAST Listening	In standby, press the function key, if the RTP of the multicast is detected, the device will monitor the multicast.
PTT	Speed Dial: Make a call when pressed, and end the call when lifted. Intercom: Start the intercom when pressed, and end the intercom when

	lifted. Multicast: Initiate multicast when pressed, and end multicast when lifted
Programmable Key Settings	
Desktop	None: Nothing happens when you press the button Call Button1: When it is set to Call Button1, follow the settings of Call Button1 to make call, answer, etc. Call Button2: When it is set to Call Button2, perform operations such as calling and answering according to the setting of Call Button2 Call Button3: When it is set to Call Button3, perform operations such as calling and answering according to the setting of Call Button3
Dialer	None: Nothing happens when you press the button Call Button1: When it is set to Call Button1, follow the settings of Call Button1 to make call, answer, etc. Call Button2: When it is set to Call Button2, perform operations such as calling and answering according to the setting of Call Button2 Call Button3: When it is set to Call Button3, perform operations such as calling and answering according to the setting of Call Button3
Ringling	Answer: Set to answer, when there is an incoming call, if auto answer is disabled, press the speed dial key to answer the call End: set to end, when there is an incoming call, press the speed dial button to hang up the call None: Nothing happens when you press the button Call Button1: When it is set to Call Button1, follow the settings of Call Button1 to make call, answer, etc. Call Button2: When it is set to Call Button2, perform operations such as calling and answering according to the setting of Call Button2 Call Button3: When it is set to Call Button3, perform operations such as calling and answering according to the setting of Call Button3
Calling	Ending: set to end, when there is a call, press the speed dial key to hang up the call Volume up: set as volume up button, when there is a call, press the speed dial button to increase the volume Volume down: set as volume up button, when there is a call, press the speed dial button to decrease the volume None: Nothing happens when you press the button Call Button1: When it is set to Call Button1, follow the settings of Call Button1 to make call, answer, etc. Call Button2: When it is set to Call Button2, perform operations such as

		calling and answering according to the setting of Call Button2 Call Button3: When it is set to Call Button3, perform operations such as calling and answering according to the setting of Call Button3
Desktop Pressed	Long	None: Long press the Call Button does not respond Main menu: Long press the Call Button to enter the command line mode, see 5.2.1 Common Command Mode for details Call Button1: When it is set to Call Button1, follow the settings of Call Button1 to make call, answer, etc. Call Button2: When it is set to Call Button2, perform operations such as calling and answering according to the setting of Call Button2 Call Button3: When it is set to Call Button3, perform operations such as calling and answering according to the setting of Call Button3
Advanced Settings		
Call Switch Mode		Number 1 call number 2 mode selection. <Main/Secondary>: If the first number is not answered within the set time, the second number will be automatically switched. <Time Period>: The system time is detected automatically during a call. The device calls the first number if within the set time period; otherwise, it calls the second number. <Group Call>: When this mode is enabled, pressing the call button will trigger all configured numbers to receive calls at the same time. Once one number is answered, the others will hang up automatically.
Call Switched Time		Set number 1 to call number 2 time, default 16 seconds
First Number Start Time		The start time of the time period when the <Time Period> mode is defined. Default "06:00"
First Number End Time		The end time of the time period when the <Time Period> mode is defined. Default "18:00"

➤ Memory Key

Enter the phone number in the input box. When you press the function key, the device will call out the set phone number. This button can also be used to set the IP address, press the function key to make an IP direct call.

Button	Type	Name	Value	Subtype	Line	Media
Call Button 1	Memory Key		903215	Speed Dial	AUTO	Default
Call Button 2	None			None	AUTO	Default
Call Button 3	None			None	AUTO	Default

Apply

Picture 41 - Memory Key

Table 27 - Memory Key

Type	number	line	Subtype	usage
Memory Key	Fill in the SIP account or IP address of the called party	The line corresponding to the SIP account	Speed Dial	Using the speed dial mode, press the button to quickly dial the set number.
			Intercom	Using the intercom mode, when the SIP phone at the opposite end supports the intercom function, the call can be automatically answered.
			SOS	Invisible alarm call is used; there will be no prompt tone or indicator light changes on the local device during the call.

➤ MCAST Paging

Multicast function is to deliver voice streams to configured multicast address; all equipment monitored the multicast address can receive and play the broadcasting. Using multicast functionality would make deliver voice one to multiple which are in the multicast group simply and conveniently.

The Call Button multicast web configuration for calling party is as follow:

The screenshot shows the 'Call Button Settings' page with the 'Advanced' tab selected. The 'Call Button Settings' section contains a table with columns: Button, Type, Name, Value, Subtype, Line, and Media. The first row is configured for 'Call Button 1' with Type 'MCAST Paging', Name empty, Value '239.1.1.2:1367', Subtype 'PCMU' (selected from a dropdown), Line 'AUTO', and Media 'Remote Only'. The second row is for 'Call Button 2' with Type 'None', Name empty, Value empty, Subtype 'PCMU' (selected), Line 'AUTO', and Media 'Default'. The third row is for 'Call Button 3' with Type 'None', Name empty, Value empty, Subtype 'PCMU' (selected), Line 'AUTO', and Media 'Default'. A blue 'Apply' button is located below the table.

Picture 42 - MCAST Paging

Table 28 - MCAST Paging

Type	Number	Subtype
MCAST Paging	Set the host IP address and port number, they must be separated by a colon (The IP address range is 224.0.0.0 to 239.255.255.255, and the port number is preferably set between 1024 and 65535)	G.711A
		G.711U
		G.729AB
		iLBC
		opus
		G.722

➤ **PTT**

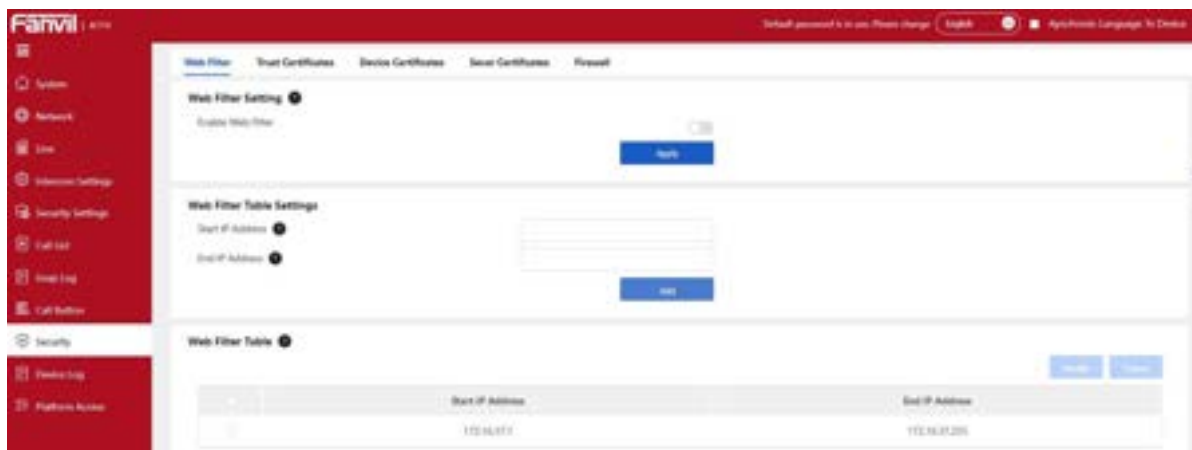
Keep pressing the shortcut key set to make a call, release it and hang up

The screenshot shows the 'Call Button Settings' page with the 'Advanced' tab selected. The 'Call Button Settings' section contains a table with columns: Button, Type, Name, Value, Subtype, Line, and Media. The first row is configured for 'Call Button 1' with Type 'PTT', Name empty, Value '003301E', Subtype 'Speed Dial', Line 'AUTO', and Media 'Default'. The second row is for 'Call Button 2' with Type 'None', Name empty, Value empty, Subtype 'None', Line 'AUTO', and Media 'Default'. The third row is for 'Call Button 3' with Type 'None', Name empty, Value empty, Subtype 'None', Line 'AUTO', and Media 'Default'. A blue 'Apply' button is located below the table.

Picture 43 - PTT

9.28 Security >> Web Filter

Users can set up to allow only a certain network segment IP to access the device



Picture 44 - Web Filter

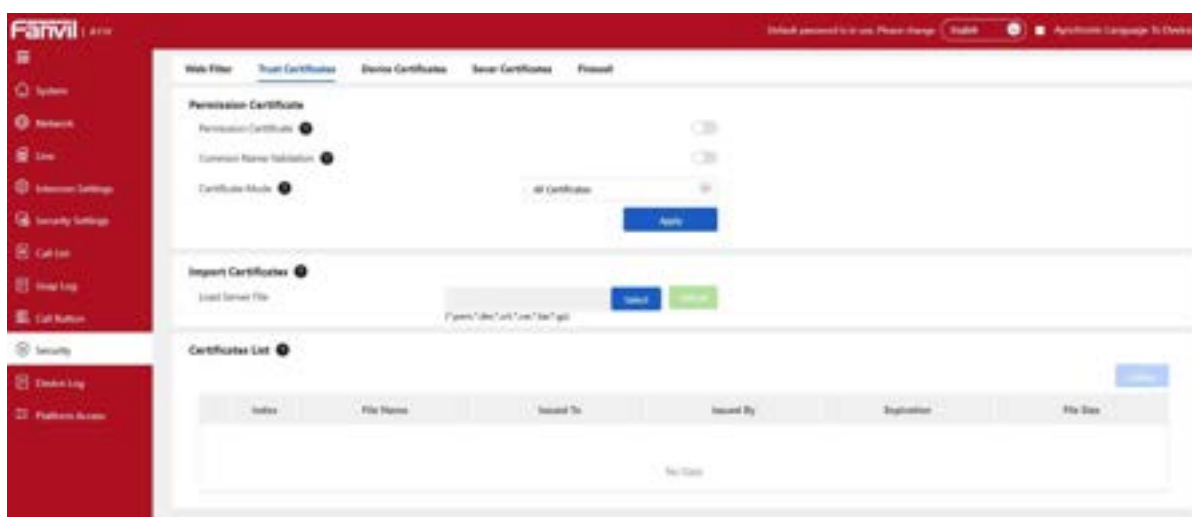
Add and delete the allowed IP network segments; configure the start IP address in the start IP, configure the end IP address in the end IP, and then click [Add] to add successfully. You can set a large network segment or add it into several network segments. When deleting, select the starting IP of the network segment to be deleted in the list, and then click [Delete] to take effect.

Enable web filtering: configure to enable/disable web access filtering; click the [Apply] button to take effect.

Note! If the device you access to the device is on the same network segment as the device, do not configure the web filtering network segment to be outside your own network segment, otherwise you will not be able to log in to the web page.

9.29 Security >> Trust Certificates

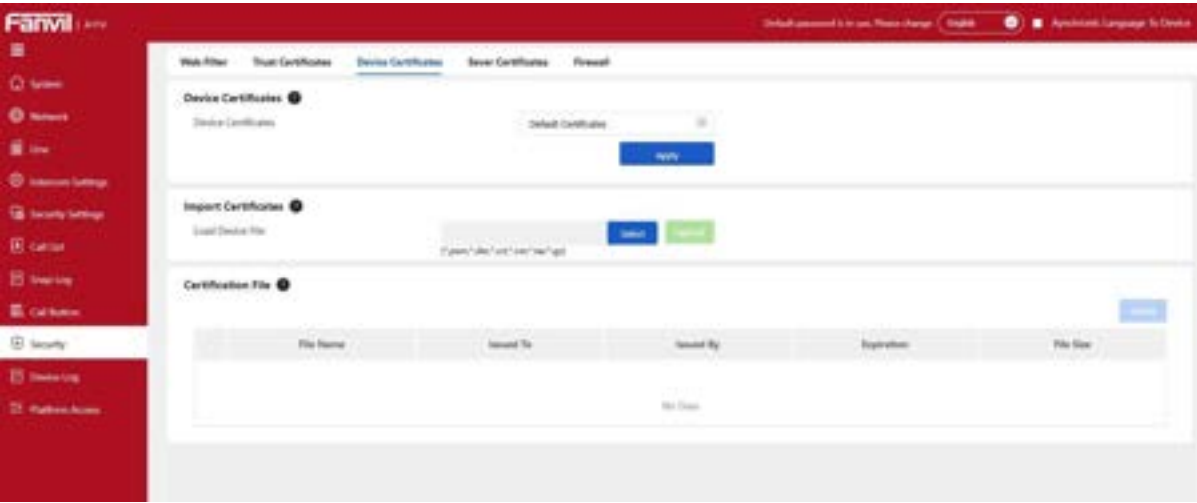
You can upload and delete uploaded trust certificates.



Picture 45 - Trust Certificates

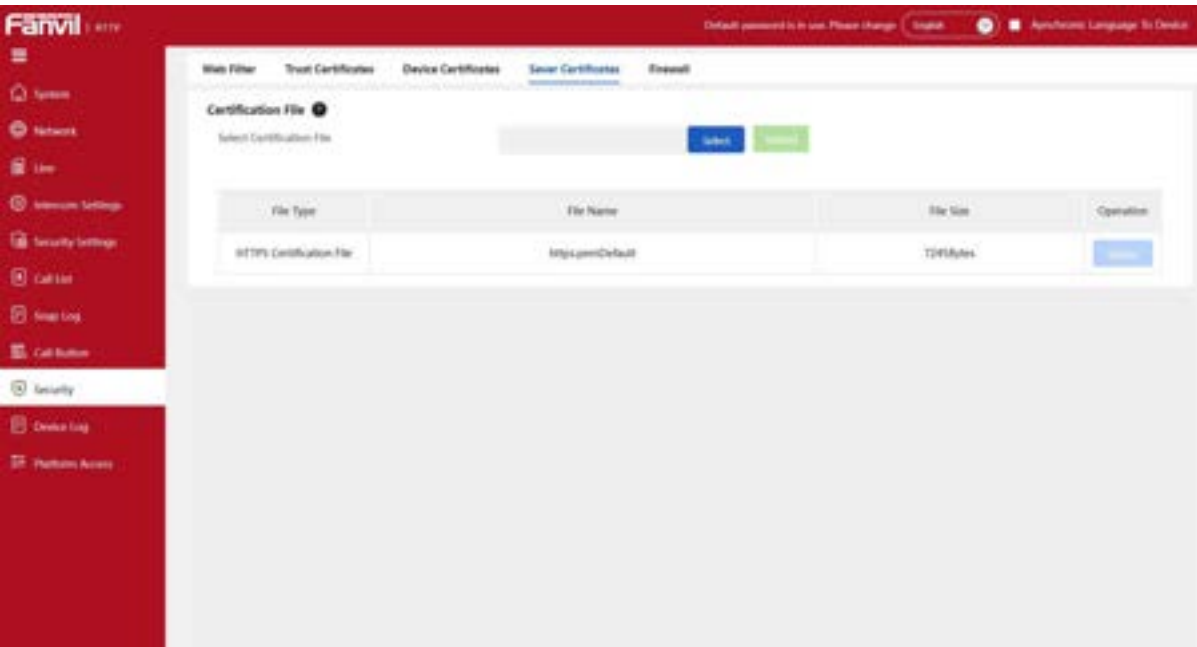
9.30 Security >> Device Certificates

Select the default certificate or the custom certificate as the device certificate.
You can upload and delete uploaded certificates.



Picture 46 - Device Certificates

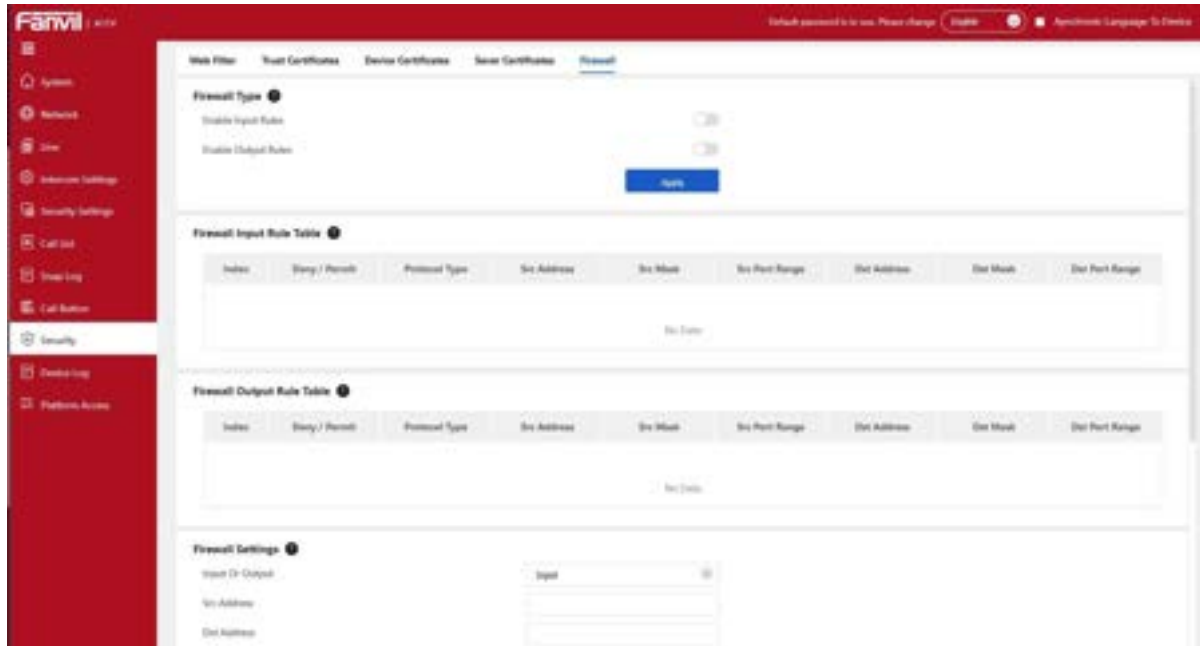
9.31 Security >> Sever Certificates



Picture 47 - Server Certificates

This page allows uploading https.pem certificate.

9.32 Security >> Firewall



Picture 48 - Firewall

Through this page, you can set whether to enable the input and output firewalls, and at the same time, you can set the input and output rules of the firewall. Use these settings to prevent malicious network access, or restrict internal users from accessing some resources of the external network, and improve safety.

The firewall rule setting is a simple firewall module. This function supports two kinds of rules: input rules and output rules. Each rule will be assigned a serial number, and a maximum of 10 each rule can be set.

Taking into account the complexity of firewall settings, the following will illustrate with an example:

Table 29 - Web Firewall

parameter	Description
Enable Input Rules	whether enable Input Rules
Enable Output Rules	Whether enable Output Rules
input/output	Select the current rule as an input or output rule
Deny/permit	Choose the current rule is deny or allowed;
protocol	There are four types of protocols: TCP, UDP, ICMP, IP.
Port range	Port range
Src Address	The source address can be the host address, network address, or all addresses 0.0.0.0; it can also be a network address similar to *.*.*.0,

	such as 192.168.1.0.
Dst Mask	The destination address can be a specific IP address or all addresses 0.0.0.0; it can also be a network address similar to *.*.*.0, such as 192.168.1.0.
Src Port Range	It is the source address mask. When it is configured as 255.255.255.255, it means it is a specific host. When it is set as a subnet mask of type 255.255.255.0, it means that the filter is a network segment;
Dst Port Range	It is the destination address mask. When it is configured as 255.255.255.255, it means it is a specific host. When it is set as a subnet mask of 255.255.255.0 type, it means that a network segment is filtered;

After setting, click [Add], a new item will be added to the firewall output rules, as shown in the figure below:



The screenshot displays two tables: 'Firewall Input Rule Table' and 'Firewall Output Rule Table'. Both tables have columns for Index, Deny / Permit, Protocol Type, Src Address, Src Mask, Src Port Range, Dst Address, Dst Mask, and Dst Port Range. Each table contains one rule with Index 1, Deny / Permit set to 'Deny', Protocol Type 'udp', Src Address '172.16.17.1', Src Mask '255.255.255.0', Src Port Range '0-65535', Dst Address '172.16.17.255', Dst Mask '255.255.255.0', and Dst Port Range '0-65535'.

Picture 49 - Firewall Rules List

In this way, when the device runs: ping 192.168.1.118, it will not be able to send data packets to 192.168.1.118 because of the prohibition of the output rule. But ping other IPs in the 192.168.1.0 network segment can still receive the response packets from the destination host normally.



The screenshot shows a 'Rule Delete Option' dialog box. It has a section for 'Input Or Output' with a dropdown menu currently showing 'Input'. Below this is a section for 'Index To Be Deleted' with an empty text input field. At the bottom right is a blue button labeled 'Delete'.

Picture 50 - Delete Firewall Rules

Select the list you want to delete and click [Delete] to delete the selected list.

9.33 Device Log

You can crawl the device log, when you encounter unusual problems, please send the device log to the technical staff for positioning problem. For more detail [10.5 Get Device Log](#).

10 Trouble Shooting

When the device is not working properly, users can try the following methods to restore the device to normal operation or collect relevant information to send a problem report to the technical support mailbox.

10.1 Get Device System Information

Users can obtain information through the **[System]** >> **[Information]** option on the device webpage. The following information will be provided:

Device information (model, software and hardware version) and Internet Information etc.

10.2 Reboot Device

User can restart the device through the webpage, click **[System]** >> **[Reboot Device]** and click **[Reboot]** button, or directly unplug the power to restart the device.

10.3 Device Factory Reset

Restoring the factory settings will delete all configurations, database and configuration files on the device and the device will be restored to factory default state.

To restore the factory settings, please go to **[System]** >> **[Configuration]** >> **[Reset Devices]** page, and click **[Reset]** >> **[Confirm]** button, the device will return to the factory default state.

10.4 Network Packets Capture

In order to obtain the data packet of the device, the user needs to log in to the webpage of the device, open the webpage **[System]** >> **[Tools]**, and click the **[Start]** option in the "LAN Packet Capture". A message will pop up asking the user to save the captured file. At this time, the user can perform related operations, such as starting/deactivating the line or making a call, and clicking the **[Stop]** button on the webpage after completion. Network packets during the device are saved in a file. Users can analyze the packet or send it to the Fanvil technical support mailbox.

10.5 Get Device Log

Log information is helpful when encountering abnormal problems. In order to obtain the log information of the device, the user can log on to the device web page, open the web page [Device Log], click the "Start" button, follow the steps of the problem until the problem appears, and then click the "Stop" button, "Save" to the local for analysis or send the log to the technician to locate the problem.

10.6 Common Trouble Cases

Table 30 - Trouble Cases

Trouble Case	Solution
Device could not boot up	1. The device is powered by external power supply via power adapter or POE switch. Please use standard power adapter provided or POE switch met with the specification requirements and check if device is well connected to power source. 2. If the device enters "POST mode" (the Call LED and Door LED slow flashing), the device system is damaged. Please contact your location technical support to help you restore your equipment system.
Device could not register to a service provider	1. Please check if the device is connected to the network. 2. If the network connection is good, please check your line configuration again. If all configurations are correct, contact your service provider for support, or follow the instructions in "10.4 Network Data Capture" to obtain a registered network packet and send it to the Support Email to help analyze the issue.