



Software Version: 2.12.50.5

Models: PA2S

Date: 2025.9.16



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1 Revise History

No.	Version	Release Time
1	2.8.11	2021.5.28
2	2.12.4	2022.8.4
3	2.12.11	2022.9.21
4	2.12.44.9	2023.10.23
5	2.12.48.12	2024.12.6
6	2.12.50.1	2025.5.28
7	2.12.50.5	2025.9.16

2 Release 2.12.50.5

Models	Software Version	Comment
PA2S	2.12.50.5	

2.1 Optimization

1. Optimize the multicast prompt tone function to support custom prompt tones.

2.2 Bug Fix

1. Fix the issue that the MCAST-Xfer function in Action Plan incorrectly multicast the device's own audio (instead of the remote end's audio) to the target address.

2.3 Optimizations Descriptions

1. **Optimize the multicast prompt tone function to support custom prompt tones.**

Function description: The multicast prompt tone now supports custom audio files. After configuration, the selected prompt tone will automatically play when the device receives a multicast broadcast.

Setting method: Go to Device Settings → MCAST, find the Multicast Tone option, and select the desired tone.

In addition to the built-in ringtones, you can also upload custom tones via

System → Upgrade → Ring Upgrade

Fanvil PA2S Default password is in use. Please change English Logout (admin) Keep Online

Features | Media Settings | Camera Settings | **MCAST** | Action | Time/Date | Time Plan | Tone

- System
- Network
- Line
- Device Settings**
- Call List
- Function Key
- Security
- Device Log
- Security Settings
- Platform Access

MCAST Listening

Sip Priority: Intercom Priority:
Enable Page Priority: Mcast Listening Renew Time:
Enable Prio Chan:
Enable Emer Chan: Multicast Tone:

Index/Priority	Name	Host:port	Channel
1	<input type="text"/>	<input type="text" value="239.1.1.2:1399"/>	<input type="text" value="0"/>
2	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
3	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
4	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
5	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
6	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
7	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
8	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
9	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
10	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>

MCAST Dynamic Current Software Version: 2.12.50.5
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3 Release 2.12.50.1

Models	Software Version	Comment
PA2S	2.12.50.1	

3.1 New Features

1. Add the feature of supporting ONVIF scanning and configuration.
2. Add the feature that enables voice transmission via RTSP and ONVIF protocols to achieve synchronized audio and video transmission.
3. Add the feature of limiting output duration with the time parameter when triggering an output via URI.
4. Add the feature of an SOS function key for initiating discreet calls.

3.2 Optimization

1. Optimize the OpenVPN function: support entering username and password for user authentication.
2. Optimize the line configuration of Memory Key by adding an AUTO option to automatically switch to available SIP lines.
3. Add configuration items for ring timeout and call timeout on the webpage for user-friendly settings.
4. Optimize and supplement relevant NC configuration items for noise alarm.

3.3 Bug Fix

1. Fix the issue of missing configuration items for external speakers and

external speaker power on the web page.

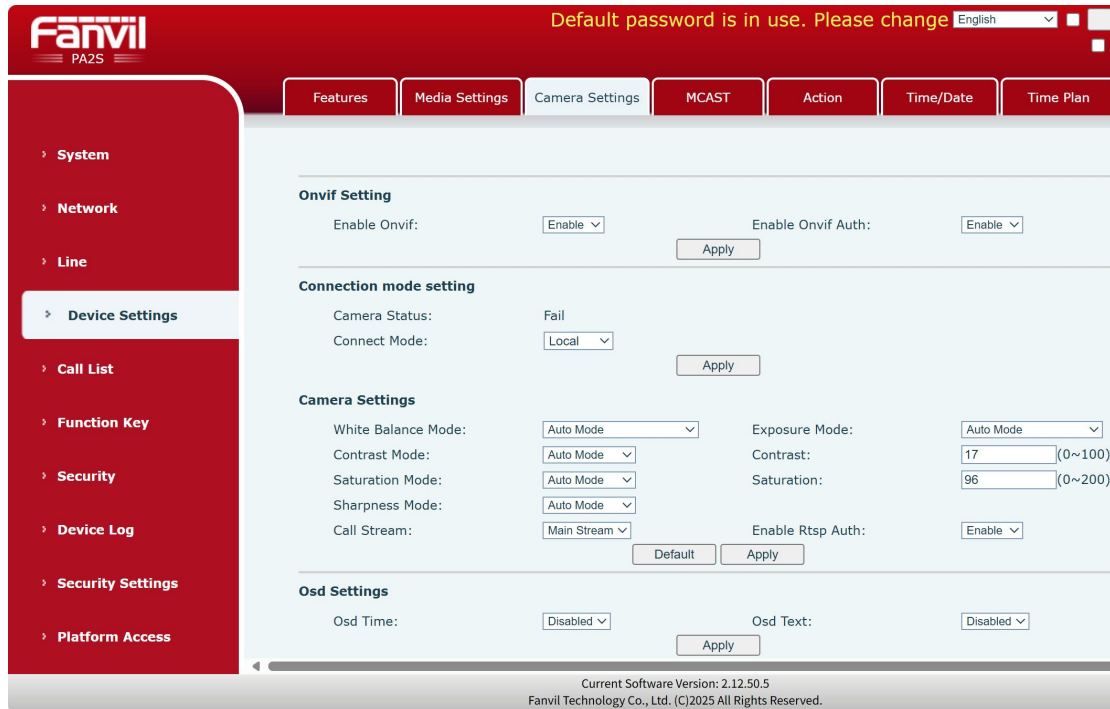
2. Fix the issue that the device restarts during a long call in specific environments.
3. Fix the issue that in primary-secondary mode, when multiple numbers are configured for the Memory Key, there is no sound in the call after answering from a non-starting number.
4. Fix the issue that if a call is made while audio is playing via Time Plan, the audio cannot resume after the call ends.
5. Fix the issue that the device's web page cannot be logged into after setting a static IP in specific environments.
6. Fix the issue that the device crashes when a function key is pressed to initiate a video call after binding a camera in specific environments.

3.4 New Features Description

- 1. Add the feature that enables voice transmission via RTSP protocol and ONVIF protocol to achieve synchronized audio and video transmission.**

Function description: Device supports voice monitoring via ONVIF protocol and RTSP audio-video streams.

Setting method: In Device Settings - Camera Settings, the ONVIF and RTSP configurations can be modified; ONVIF and RTSP are enabled by default.



2. Add the feature that when triggering the output port via URI, it supports limiting the output duration through the time parameter.

Function Description: When triggering the device's output port via URI, an additional time parameter can be carried to set the output duration (unit: milliseconds), enabling the output port to reset automatically at a scheduled time. If the time value is set to 0, the output port will maintain a continuous output state and not reset automatically.

Setting Method: Taking triggering Output1 as an example, use a URL in the following format:

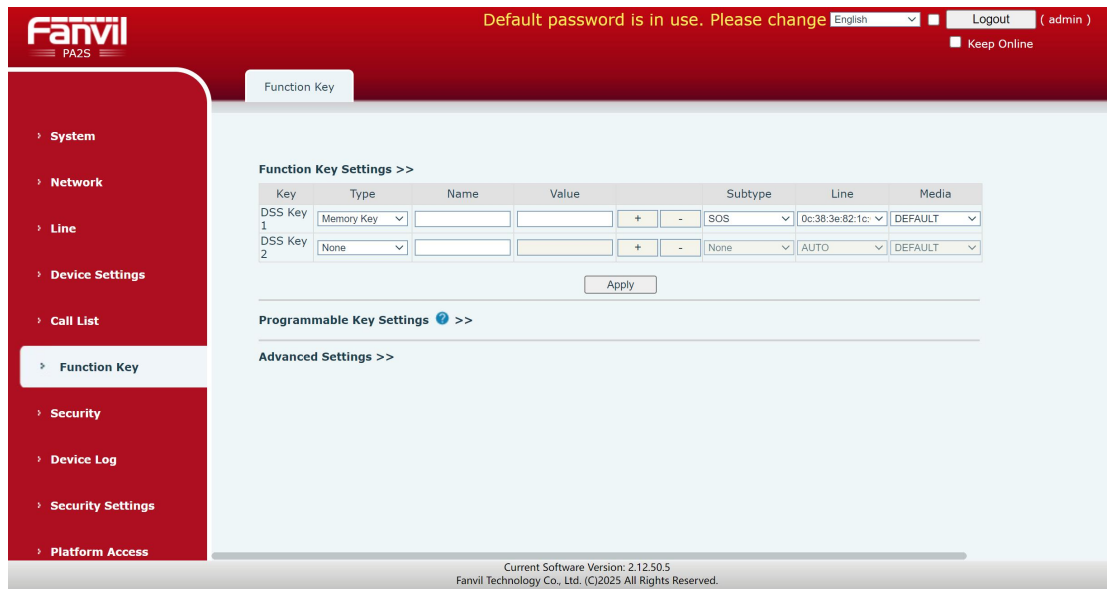
`http://[Device IP]/cgi-bin/ConfigManApp.com?egs&output1=[Trigger Message]&time=[Specific Millisecond Value].`

After executing this URL, Output1 will implement scheduled output or continuous output (when time=0) according to the set time parameter.

3. Add the feature of an SOS function key for initiating discreet calls.

Function Description: This feature allows users to initiate an SOS discreet call. Once the call is established, the device provides no local audio or LED indicators.

Setting Method: On the web interface, enter the function key configuration page, select "Memory Key" for the function key type, and choose "SOS" for its subtype. After completing the configuration and saving it, press the corresponding shortcut key to initiate a silent call.

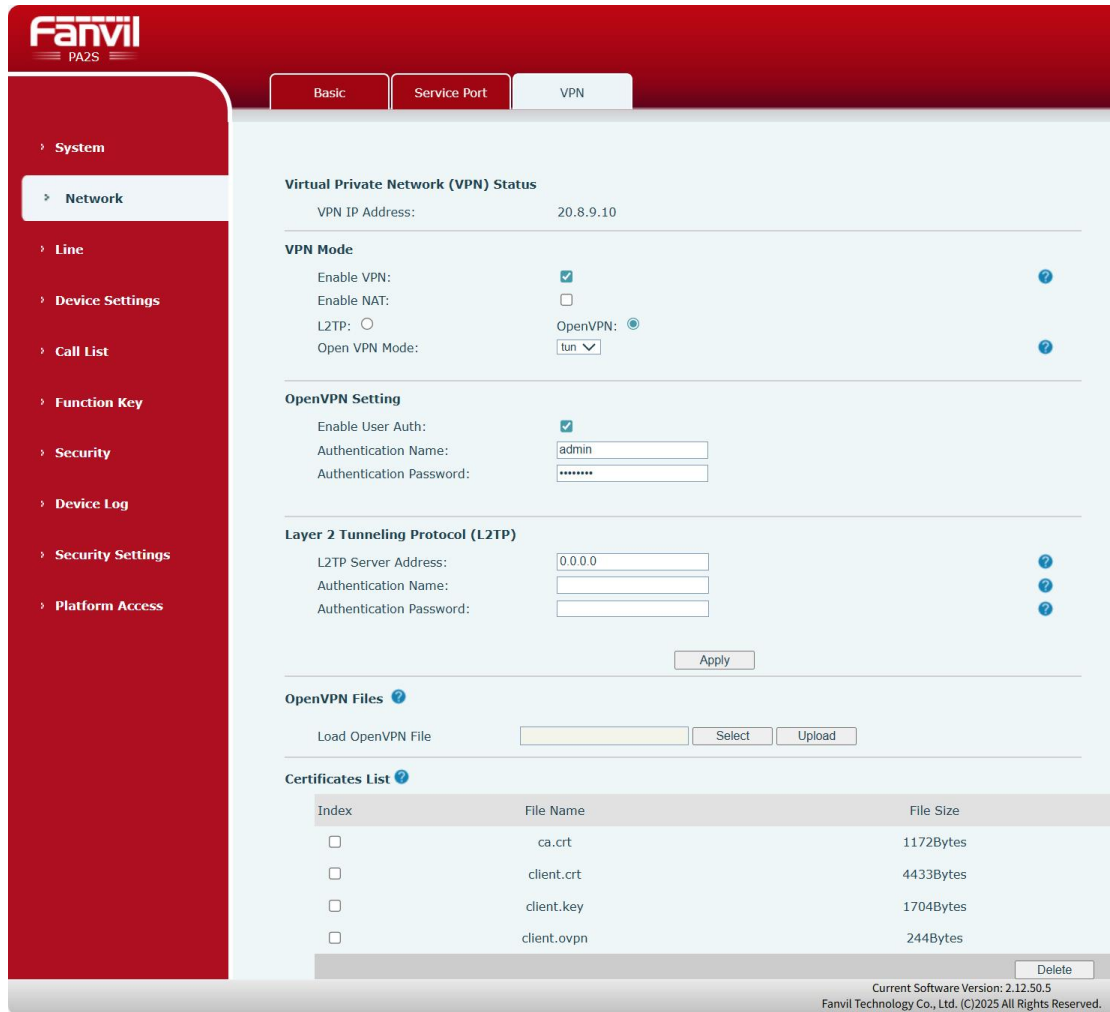


3.5 Optimizations Descriptions

1. Optimize the OpenVPN feature to support entering username and password for user authentication.

Feature description: Support entering username and password to implement a dual authentication mechanism of certificate authentication + user authentication.

Setting method: Network - VPN - OpenVPN Setting, check [Enable User Authentication] and enter authentication and password; select and upload the corresponding certificate in [Load OpenVPN File]; finally, check [Enable VPN] and [OpenVPN] in [VPN Mode] to complete the configuration.



2. Add the feature that function key enables automatic switching of SIP lines.

Feature Description: When the function key line is set to AUTO, pressing the shortcut key will automatically use the first available SIP line to make an outgoing call.

Setting method: Web >> Function Key >> Function Key Settings >> Select "AUTO" for Line, press the function key, and the SIP line can be switched automatically.



4 Release 2.12.48.12

Models	Software Version	Comment
PA2S	2.12.48.12	

4.1 New Features

1. Supports simultaneous calling to multiple numbers, with up to four live previews of access control video during incoming calls.
2. Enables diagnostics through FDMCS to retrieve device information.
3. Features automatic discovery to identify and configure indoor units on the local network.
4. Supports HTTP API for reporting door opening logs.

4.2 Optimization

1. Enhanced HTTP preview function, supporting up to five simultaneous previews.
2. Improved methods for adding card and password lists.
3. Upgraded features for automatic deployment.
4. Supports one-click export of debug information via the web.

4.3 Bug Fix

1. Fixed issues related to video and monitoring on door phone devices.
2. Resolved stability issues with the devices.

3. Corrected the missing call forwarding numbers in password list exports.



5 Release 2.12.44.9

Models	Software Version	Comment
PA2S	2.12.44.9	

5.1 New Features

1. Support the function of calling multiple numbers at the same time
2. PA2S supports noise alarm settings.
3. Supports configuring the type of server accessed via web page

5.2 Optimization

1. Support with the intercom broadcasting APP for timed broadcasting, real-time broadcasting and shouting and other functions
2. PA2S supports the function of playing specified audio when a specific number is on the line.
3. Support to set Relay through ONVIF management tool.
4. Supports updating the list of allowed incoming calls, restricted incoming calls and restricted outgoing calls through automatic deployment.
5. Add RTP detection function, if it can't detect the RTP of the other end for a period of time, it will hang up the call automatically.
6. Support uploading .ovpn certificate file.
7. Add missing NC configuration items.

5.3 Bug Fix

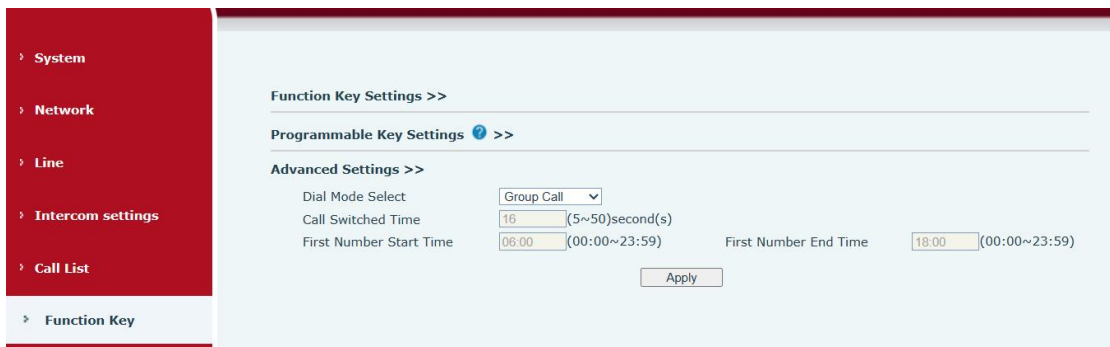
1. Fixed the issue where the device becomes abnormal during multiple video calls during multi-channel video preview.
2. After enabling ONVIF and event reporting on the Restore device, the device becomes abnormal after being used for a period of time.
3. Fix the problem of slow video loading when using NVR video preview
4. Fixed the problem of occasional exceptions after device upgrade.
5. Fixed the problem that after the device is set with the PTT function, the call cannot be automatically hung up after the button is released.
6. Fixed the problem of the device being disconnected after being used for a period of time after being registered to some SIP servers.
7. Fix the problem of blurry screen display between device and webrtc video call
8. Fixed the problem of inserting a call during multicast and the multicast is not restored after the call is hung up.
9. Fixed the problem that the setting port is not used when the input port is triggered to send short messages.
10. Fixed the problem of inaccurate response results during device self-test
11. Fixed the issue where the negotiated maximum power is incorrect when the device is connected to a Cisco switch.
12. Fixed the issue where the device does not output ringback tone from line out or spk according to the set call status during a call.

13. Fixed the problem of abnormal sound coming from the speaker when the device starts intercom

5.4 New Functions Description

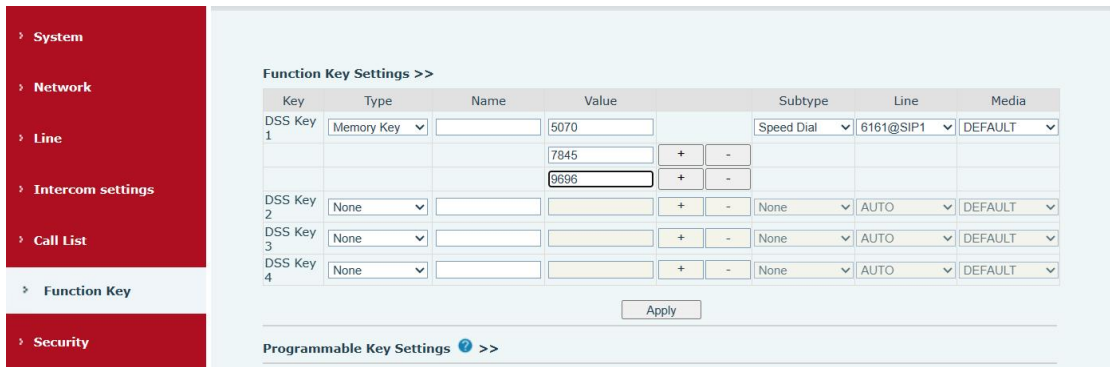
1. Supports calling multiple numbers at the same time

(1) Function Key>>Advanced Settings>>Dial Mode Select , select "Group Call".



(2) Set DSSKey1, type as "Memory Key", subtype as "Speed Dial", add multiple IP addresses or numbers, and click Submit.

(3) Press the Function Key, then it will call out all the numbers at the same time; when one number answers, it will hang up the other numbers automatically.



2. PA2S supports noise alarm settings

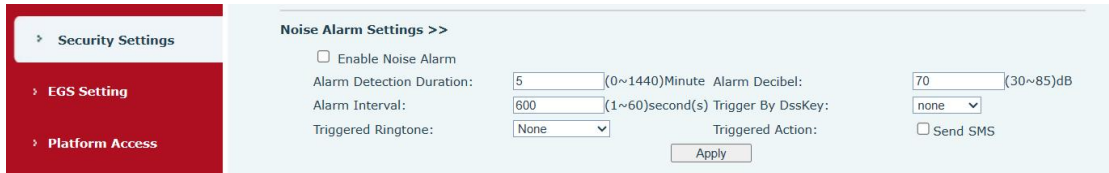
Function description: When the device continuously detects sound reaching

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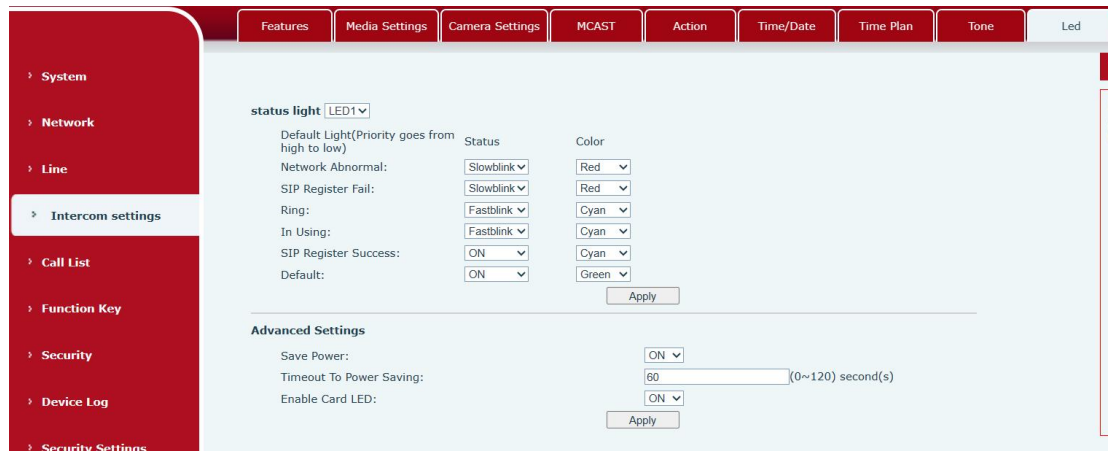
the set decibel, the device will sound an alarm.

Setting method: In Security Settings>>Noise Alarm Settings, you can turn on the noise alarm and set configuration items such as detection time, alarm interval, and alarm decibels.



3. Support control of card reader indicator light

In Intercom Settings>>LED>>Advanced Settings, you can control the card reader indicator to turn on. When configured to be off, it will only light up when a card is swiped; when configured to be on, the card reader indicator light will always be on.



4. PA2S supports playing specified audio when calling a specific number

In Line >> Action Plan, set the action to "Play Audio", fill in the peer number, direction to "Outgoing Calls", type to "Connected", select the audio file to be played and the number of plays, and submit. At this time, the device dials the peer number, and after the peer is connected, it can automatically play the specified audio.

SIP SIP Hotspot GB28181 Dial Plan Action Plan Basic Settings Paging Server

> System
> Network
> Line
> Intercom settings

Action Plan Add

Action:	<input type="text" value="Play Audio"/>	Type:	<input type="text" value="Connected"/>
Number:	<input type="text" value="192.168.0.110"/>	Line:	<input type="text" value="AUTO"/>
Direction:	<input type="text" value="Outgoing Call"/>	Play Times:	<input type="text" value="1"/>
Audio File:	<input type="text" value=""/>		



6 Release 2.12.11

Models	Software Version	Comment
PA2S	2.12.11	

6.1 New Features

1. Add the function of automatic hanging up after the intercom opens the door
2. Support the function of multicast local music through key
3. Add the function of regular multicast music
4. The web page supports displaying USB and TF card information
5. The function key supports setting multiple numbers and supports the sequential call function
6. Support 802.1x function
7. Support the configuration of DHCP host name
8. Add OpenVPN to support TLS-auth key
9. Support equipment Echo Test function
10. Support the function of sending offline broadcast through SIP message
11. Add guest user to support editing time plan
12. Add the function of custom uploading audio files and playing the specified audio files after the call and call play.

6.2 Optimization

1. Improve Multicast, Intercom and SIP calls, which can be inserted into each

other

2. When using USB flash disk or SD card to play music, the call interrupts the music playing, and the music playing will resume automatically after the call ends.
3. Turn off the startup prompt tone by default
4. Improve the webpage to support setting alert tone and busy tone
5. Improve the prompt tone of the remote DTMF trigger output port, and support user-defined settings
6. The device supports dynamic downloading of ringtone files through the URL of alert info
7. When the input port is used as a function key, the behavior in various states can be set
8. Improve the ping function, and automatically return and display the results in case of failure
9. Support the device to push the configuration through HTTP API during the call
10. Improve the maximum value of talking duration to 12h
11. Support dynamic addition of function key values
12. Compatible with IPTech View platform

6.3 Bug Fix

1. Fix the problem that the voice fails when the device is calling in some environments

2. Fix the problem that the device does not take effect after VLAN is enabled
3. Fix the problem that the device is repeatedly disconnected from L2TP VPN
4. Fix the problem that when playing timed audio via USB flash drive, the file name is Chinese audio and cannot be played
5. Fix the problem that the content played in the first 1s of multicast is incomplete when receiving multicast
6. Fix the problem that the device can't actively hang up the call after the call is interrupted in the middle of the broadcast
7. Fixed the problem that the call was automatically hung up when the PTT function was used and the key was pressed for 5S
8. Fix the problem that there is no ring back when the device calls out in some environments
9. Fixed the problem that when connecting an external camera, the ip could not be called occasionally after using it for a period of time

6.4 New Functions Description

1. **Add the function of automatic hanging up after the intercom opens the door**

Function description: After the device triggers the output port by inputting DTMF, the device can automatically end the current call after the set on hook waiting time.

Trigger By DssKey:	None	
<input checked="" type="checkbox"/> Triggered Hangup	Hangup Delay	5

2. Support the function of multicast local music through key

Function description: By pressing the DSS key, you can play or pause local music files in a multicast manner.

Setting method: in the shortcut key setting, select "mcast paging" as the shortcut key type, set the value of 1 as the address of multicast, set the value of 2 as the path of local music file, select "remote only" or "remote&Local" as the media, and set the subtype to the corresponding encoding type to realize the function of local music playback.

"Remote Only" means that only local music is played at the remote end;

"Remote&Local" means that local music files are played at the same time in remote and local areas.

Key	Type	Name	Value	Subtype	Line	Media
DSS Key 1	MCAST Pagin		239.1.1.1:1378	G.711U	132@SIP1	Remote Only
			\\music1.mp3			

3. Add the function of regular multicast music

Function description: Within the set timing period, the set audio file can be played in the group domain.

Setting method: Under the setting of scheduled audio playback, you can set the local scheduled playback, multicast scheduled playback, and local and multicast scheduled playback. Among them, when the multicast is selected to play regularly, the corresponding multicast address can be set to realize the multicast function of playing music in different situations; Select local scheduled playback, and the audio will be played automatically at the set

scheduled time; Select local and multicast scheduled playback, and the devices on the local and corresponding multicast addresses will automatically play audio within the set timing period.

4. The function key supports setting multiple numbers and supports the sequential call function

Function description: Each dsskey supports adding 5 numbers. When the first call is blocked, rejected or unanswered, the next number will be called in sequence.

Function Key Settings >>

Key	Type	Name	Value	Subtype	Line	Media
DSS Key 1	Memory Key		312	Speed Dial	132@SIP1	DEFAULT
			123	+	-	
			456	+	-	
			789	+	-	
			321	+	-	

5. Add the function of custom uploading audio files and playing the specified audio files after the call and call play

Function description: Support user-defined uploading of audio files. When talking with a specified number, the user can play the customized audio files to the opposite end. After the set number of plays is completed, the call will be automatically hung up. Or play customized audio files locally after the call ends.

Action Plan Add

Action: Type:

Number: Line:

Direction: Play Times:

Audio File:

6.5 Optimization Description

6. Improve Multicast, Intercom and SIP calls, which can be inserted into each other

Function description: Set Multicast, Intercom, and SIP priorities. The smaller the number, the higher the priority. 1 is the highest priority. When there is a multi-way call, there is a high-priority call currently, and a low-priority call is in a waiting state; there is a low-priority call currently, and a high-priority call can preempt the low-priority call.

Priority: SIP Priority

Enable Page Priority: Multicast Priority

MCAST Listening

Priority: Intercom Priority:

Enable Page Priority: Mcast Listening Renew Time:

Enable Prio Chan:

Enable Emer Chan:

Index/Priority	Name	Host:port	Channel
1	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
2	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>

7. Turn off the startup prompt tone by default

Function description: If this option is checked, there will be no startup prompt sound when the equipment is powered on; Otherwise, if skip boot tone is unchecked, it is considered that there is a prompt tone when the device is powered on.**PA2S is off by default.**

Tone Settings >>

Enable Holding Tone:	<input checked="" type="checkbox"/> ?	Enable Call Waiting Tone:	<input checked="" type="checkbox"/> ?
Play Dialing DTMF Tone:	<input checked="" type="checkbox"/> ?	Play Talking DTMF Tone:	<input checked="" type="checkbox"/> ?
Auto Answer Tone:	<input checked="" type="checkbox"/>	Skip Boot Tone:	<input checked="" type="checkbox"/>
Ring Back Tone:	Default ▾	Busy Tone:	Default ▾
Open Success Prompting:	Voice ▾	Open Failed Prompting:	Voice ▾
Close Door Prompting:	Voice ▾	Issuing Success Prompting:	Default ▾
Issuing Failed Prompting:	Default ▾	Revoke Prompting:	Default ▾
Revoke Failed Prompting:	Default ▾	Door Sensor Prompting:	Default ▾

7 Release 2.12.4

Models	Software Version	Comment
PA2S	2.12.4	

7.1 Optimization

1. Improve RTSP video streaming to support TCP transmission
2. Pa2s turns off the startup prompt tone by default
3. Pa2s external LED supports custom settings
4. Add Russian
5. Webpage supports the function of setting alert tone and busy tone options

7.2 Bug Fix

1. Fix the problem that the device is connected to a third-party camera and the video screen is not displayed when making a video call with the mobile app.
2. Repair the problem that the device establishes a call, and the auxiliary device holds and cancels the hold for many times; After hanging up and establishing the call again, the auxiliary device will directly display the problem of held.
3. Fix the problem that the device cancels automatic answering and there is no ringing tone when calling.

4. Fix the problem that all selectable ringtones will be repeatedly displayed after the ringtone is upgraded on the web page.

5. Fix the problem that the call stream type does not take effect when it is a sub stream.



8 Release 2.8.11

Models	Software Version	Comment
PA2S	2.8.11	

8.1 New Features

1. Add the function of converting incoming calls to multicast
2. Add custom LED function
3. Support IPC linkage function
4. Add the function of playing U disk/TF card music through the button
5. Support to turn off the prompt tone of automatic answer
6. Add the ringing timeout time setting to the web page
7. Key event adds volume up/down, loop volume and other types

8.2 Optimization

1. Improve the output trigger without limitation time
2. Improve IP scan support to modify network parameters
3. Improve time plan to play audio to support the number of settings
4. Improve camera settings to support restore to default
5. Improve the server settings under the security settings to add prompt information
6. Improved that after the music is interrupted by the call, the music can be

restored after the call is ended

7. Improve Line-in related issues
8. Support closing AEC via HTTP API
9. Support triggering tamper and resetting tamper through active URI

8.3 Bug Fix

1. Fix the problem of poor voice quality when using opus voice codec
2. Fix the problem that the line-in is set to local playback+talking, and the device does not respond after a few minutes of talking
3. Fix the problem that the device is abnormal as the called party in some cases
4. Fix the call timeout time is greater than a certain value, the device does not send a CANCEL when it times out

8.4 New Functions Description

1. Add the function of converting incoming calls to multicast

Function description: Convert the caller's number to multicast and send

2. Add custom LED function

Function description: The web page adds LED settings in various states, and can control the LED lights on, off, and blinking in various states



The screenshot shows a web interface for configuring LED settings. It is titled "status light" and is divided into two columns. The left column is for "In Using(Priority goes from high to low)" and has two settings: "Ring:" and "In Using:", both with a "Slowblink" dropdown menu. The right column is for "Default Light(Priority goes from high to low)" and has three settings: "Network Abnormal:" with a "Fastblink" dropdown, "SIP Register Fail:" with a "Fastblink" dropdown, and "SIP Register Success:" with an "ON" dropdown. At the bottom center of the form is an "Apply" button.

3. Support IPC linkage function

Function description: Support binding third-party cameras

Change the camera mode to external, add the address, user name, password, etc. of the third-party camera. After the setting is successful, you can use the bound camera.

The image shows two screenshots from a web interface. The top screenshot is titled "Connection Mode Setting" and features a "Native Camera:" label with a dropdown menu set to "IP Camera" and an "Apply" button. The bottom screenshot is titled "IP Camera Add" and contains several input fields: "Name:", "Username:", "Password:", "Ip Camera Brand:" (with a dropdown set to "TOPSEE"), "IP:", "Port:" (with the value "554"), "UserAgent:", "URL1:", and "URL2:". An "Add" button is located at the bottom right of this section.

4. Add the function of playing U disk/TF card music through the button

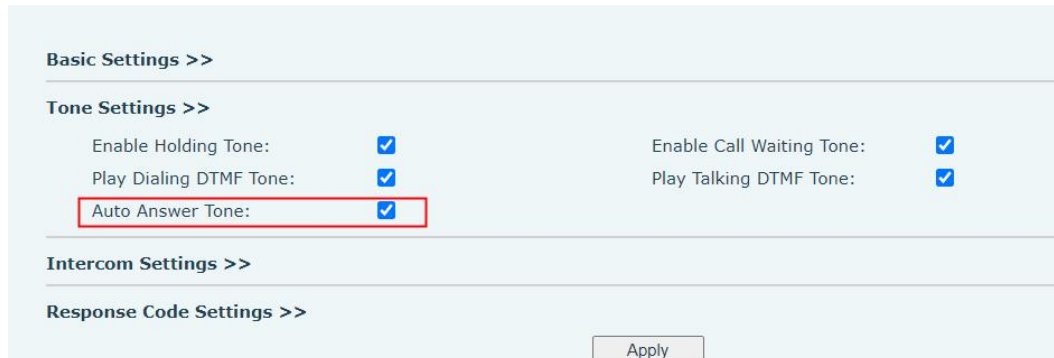
Function description : Add the playback audio type under the DSSKEY setting key event. The setting value is the path of the audio file. Press the set button to play the audio file of the set path. Press again to end; the audio file format supports MP3 and WAV, and the audio file needs to be played. On U disk and TD card

The image shows a screenshot of the "Function Key Settings" page. It features a table with the following columns: Key, Type, Name, Value, Value2, Subtype, Line, and Media. There are three rows of settings for DSS Key 1, DSS Key 2, and DSS Key 3. The "Value" field for DSS Key 1 is highlighted and contains the text "\usb\music".

Key	Type	Name	Value	Value2	Subtype	Line	Media
DSS Key 1	Key Event		\usb\music		Audio Play	AUTO	DEFAULT
DSS Key 2	None				None	AUTO	DEFAULT
DSS Key 3	None				None	AUTO	DEFAULT

5. Support to turn off the prompt tone of automatic answer

Function description: Add configuration to enable or disable the prompt tone of automatic answer, the default is enabled



Basic Settings >>

Tone Settings >>

Enable Holding Tone:	<input checked="" type="checkbox"/>	Enable Call Waiting Tone:	<input checked="" type="checkbox"/>
Play Dialing DTMF Tone:	<input checked="" type="checkbox"/>	Play Talking DTMF Tone:	<input checked="" type="checkbox"/>
Auto Answer Tone:	<input checked="" type="checkbox"/>		

Intercom Settings >>

Response Code Settings >>

Apply

6. Add the ringing timeout time setting to the web page

Function description : Incoming call automatically hangs up after ringing timeout

7. Key event adds volume up/down, loop volume and other types

Function description : Through the DSSKEY button, you can adjust the volume and other operations