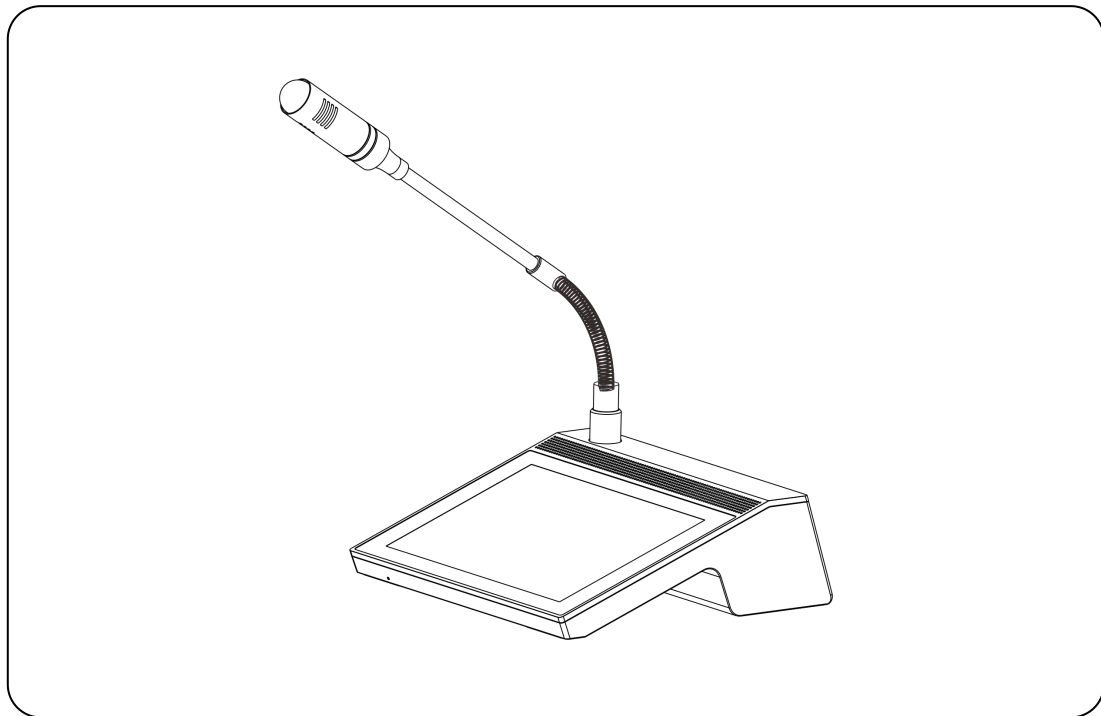




User Manual

IP Remote Microphone

IP-107RM



Thank you very much for purchasing this TOA product.

Please read the instructions carefully to ensure long-term, and trouble-free operation of the unit.

TOA Corporation

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8.1 Specifications 45

1. SAFETY PRECAUTIONS

- Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation
- Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
- After reading, keep this manual handy for future reference.

Safety Symbol and Message Conventions

Safety symbols and messages described below are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating your product, read this manual first and understand the safety symbols and messages so you are thoroughly aware of the potential safety hazards.

WARNING

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.



WARNING

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

When Installing the Unit

- Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in fire or electric shock.
- Use the unit only with the voltage specified on the unit. Using a voltage higher than that which is specified may result in fire or electric shock.
- Do not cut, kink, otherwise damage nor modify the power supply cord. In addition, avoid using the power cord in close proximity to heaters, and never place heavy objects -- including the unit itself -- on the power cord, as doing so may result in fire or electric shock.
- Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down and causing personal injury and/or property damage.
- Since the unit is designed for indoor use, do not install it outdoors. If installed outdoors, the aging of parts causes the unit to fall off, resulting in personal injury. Also, when it gets wet with rain, there is a danger of electric shock.

When the Unit is in Use

- Should the following irregularity be found during use, immediately cut off the power supply from a PoE switching hub and contact your nearest TOA dealer. Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.
 - If you detect smoke or a strange smell coming from the unit If water or any metallic object gets into the unit.
 - If the unit falls, or the unit case breaks.
 - If the LAN cable is damaged (exposure of the core, disconnection, etc.).
 - If the speaker suddenly stops producing sound.
- To prevent a fire or electric shock, never open nor remove the unit case as there are high voltage components inside the unit. Refer all servicing to qualified service personnel.
- Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.
- Do not insert nor drop metallic objects or flammable materials in the ventilation slots of the unit's cover, as this may result in fire or electric shock.
- Do not touch the unit and LAN cable during thunder and lightning, as this may result in electric shock.

CAUTION

Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.



CAUTION

Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

When Installing the Unit

- Never plug in or remove the power supply plug with wet hands, as doing so may cause electric shock.
- When unplugging the power supply cord, be sure to grasp the power supply plug; never pull on the cord itself. Operating the unit with a damaged power supply cord may cause a fire or electric shock.
- When moving the unit, be sure to remove its power supply cord from the wall outlet. Moving the unit with the power cord connected to the outlet may cause damage to the power cord, resulting in fire or electric shock. When removing the power cord, be sure to hold its plug to pull.
- Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down and causing personal injury and/or property damage.

IMPORTANT NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

2. PRODUCT DESCRIPTION

2.1 Overview

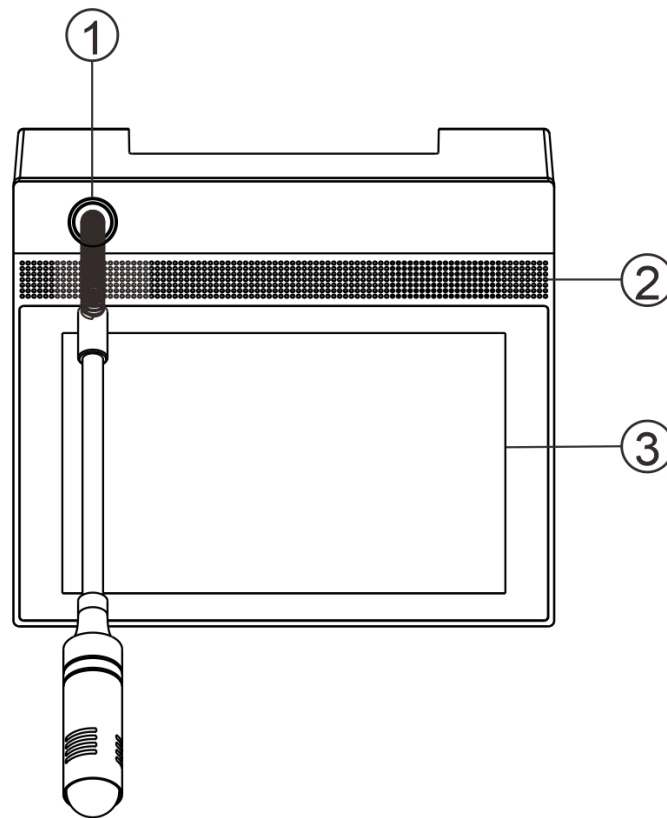
IP Remote Microphone IP-107RM is a high-performance intercom paging device based on TCP/IP, SIP, UDP and other transmission protocols. As a simplified IP-based paging device, its commonly used functions include emergency broadcasting, zone paging, initiate/receive intercom and device monitoring;

IP Remote Microphone IP-107RM adopted modern minimalist style product appearance design. The product shell is designed with integrated hardware structure of glass and aluminum alloy. This unique product is equipped with high-definition 7" digital HD touch screen, user-friendly interactive GUI design and simple & straightforward HMI (Human-Machine Interaction), which can significantly improve user experience while still guarantee the reliability and ease of use for most of its critical operations. Other features are as follows:

- (1) 7 inch high definition display; Capacitive touch screen (resolution: 800*1280).
- (2) Support file broadcast、 pre-record broadcast、 TTS(Text-To-Speech)broadcast to designated zones or terminals.
- (3) Support of initiating & receiving offline call without server.
- (4) Support standard SIP protocol for easy integration with mainstream SIP PBX.
- (5) Support online viewing of the working status of other terminals, which is convenient of debugging and maintenance.
- (6) Support self-defined ringtone of incoming call and broadcast.
- (7) Support incoming/outgoing call record and query function.

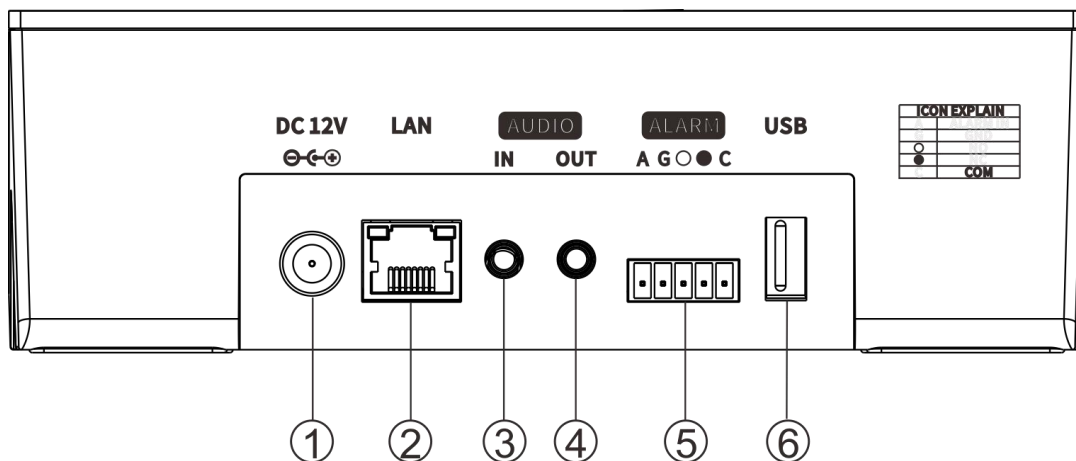
2.2 Interface Description

Front Panel Layout



- ① Rods Socket: Plug the microphone rods to collect sounds.
- ② Speakers: Restore remote and local sound
- ③ Touch Screen

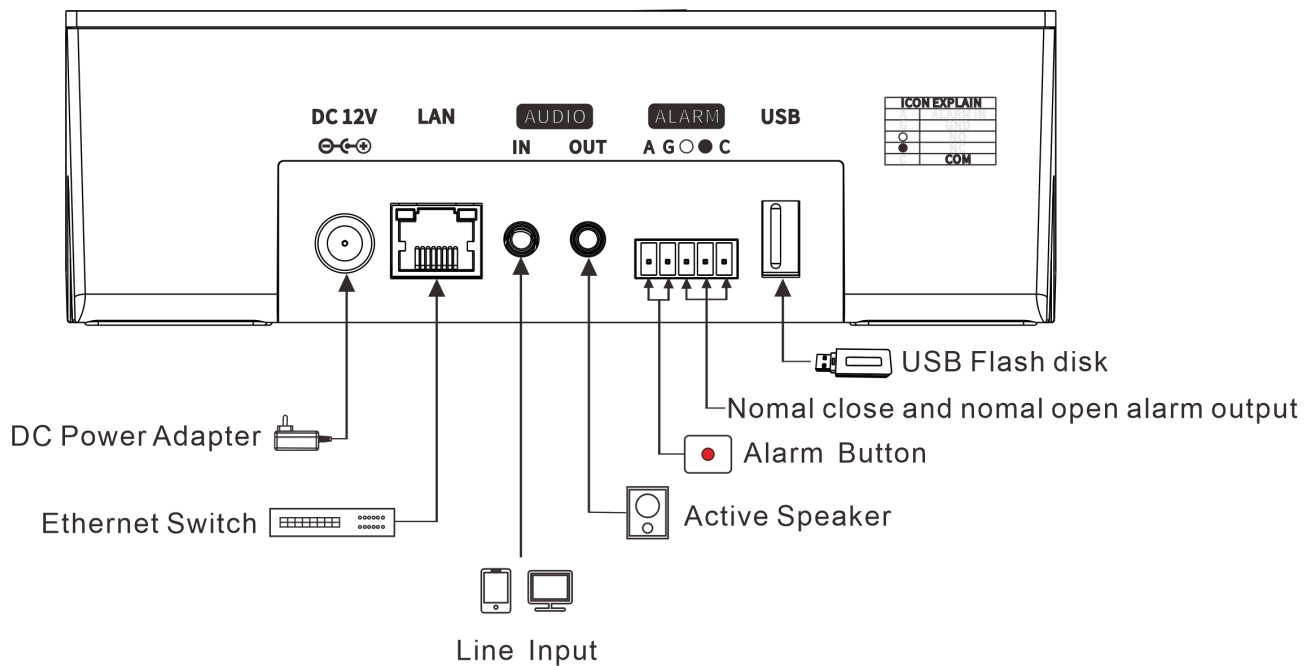
Connector Layout



- ① Power Input Port: Connect with DC12V/1.5A power adaptor
- ② Network Port: To connect with Ethernet switch
- ③ Audio Input Port: To connect with mobile phone or laptop.etc
- ④ Audio Output Port: To connect with active speaker or amplifier
- ⑤ Alarm Input/Output Port
- ⑥ USB Port: Store the audio/TXT file for broadcast

3. WIRING AND INSTALLATION

3.1 Wiring



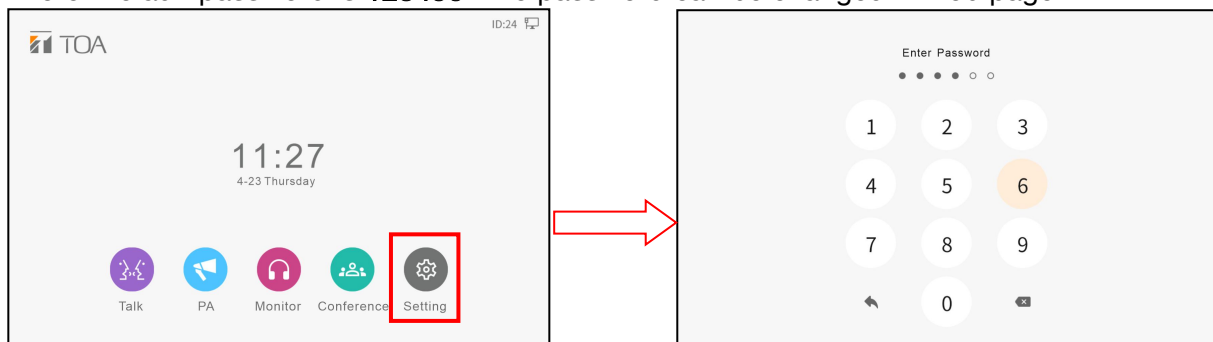
3.2 Basic Network Setting

After connecting IP remote microphone to a standard local area network, please change the network parameters according to site usage environment. There are two methods for reference:

1. Setting up on devices

(1) Click on **【Setting】** button and enter password to log into setting page.

Note: Default password is **123456**. The password can be changed in web page.



(2) Click on **【Network】** after enter setting page. Set the device ID, local IP, server IP, gateway, sub net mask, and other network parameters in this page.

Note: After setting, you need to reboot the device to take effect

← Network Function Info ID:24 2019-11-14 11:27 Thu	
Unit ID	24
IPConfiguration Mode	Static 
Unit IP	192.168.3.165
Subnet mask	255.255.255.0
Default Gateway	192.168.3.1
SIP local port	5060
SIP server IP	192.168.10.102
SIP server port	5060
SIP server HTTP port	80



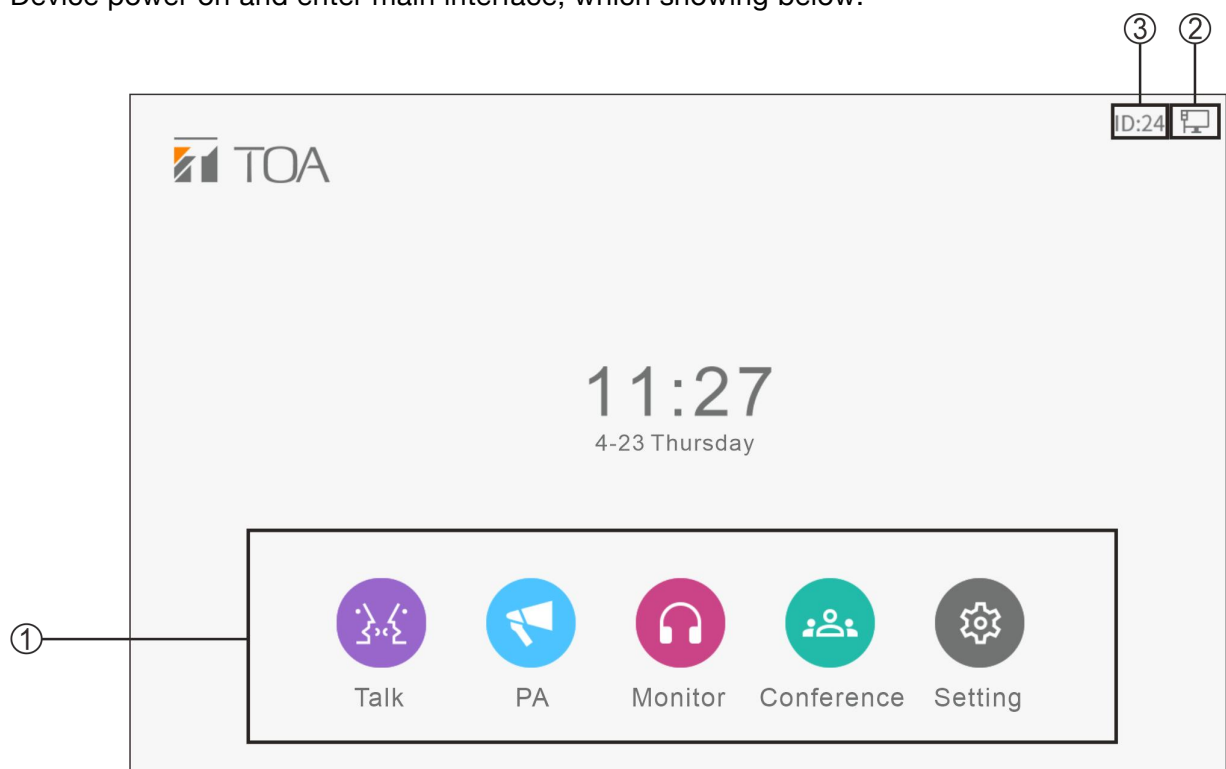
2. Setting up on web page

After enter the web page, you can change the network parameters according to site usage environment.

For details, refer to Protocol Settings and Terminal Settings in below basic setting.

4. MAIN INTERFACE INTRODUCTION

Device power on and enter main interface, which showing below:



①Function Menu: click to enter the corresponding function interface

②Network Status Icons

Name	Icons	Introductions
Network Status Icons		The device logs in to the server successfully
		The device has connected to the network but have not logged in to the server
		The network cable is not inserted.

③Devices ID (Note:The ID contains a maximum of 7 characters)

5. WEB BROWSER SETUP

5.1 Accessing the web page

After connecting IP remote microphone to a standard local area network via the RJ-45 Ethernet port on its bank panel, you can try to log in to the device's web interface.

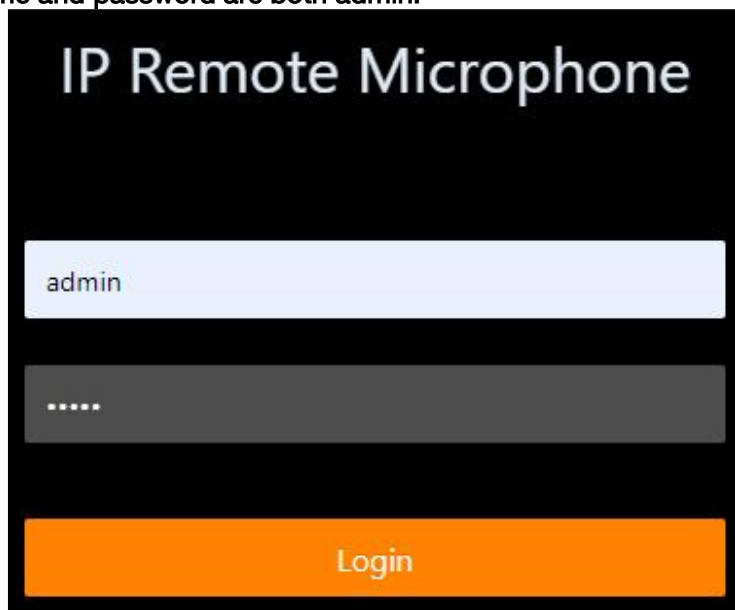
(1) The web interface can be accessed by entering IP remote microphone's IP address into a web browser (Microsoft Edge, Google Chrome, Mozilla Firefox, etc.).

Note: Default IP Address: <https://192.168.1.101>

(2) Enter the username and password to log in.

It is highly recommended to change the default password after the first login, especially when the device is directly connected to public network.

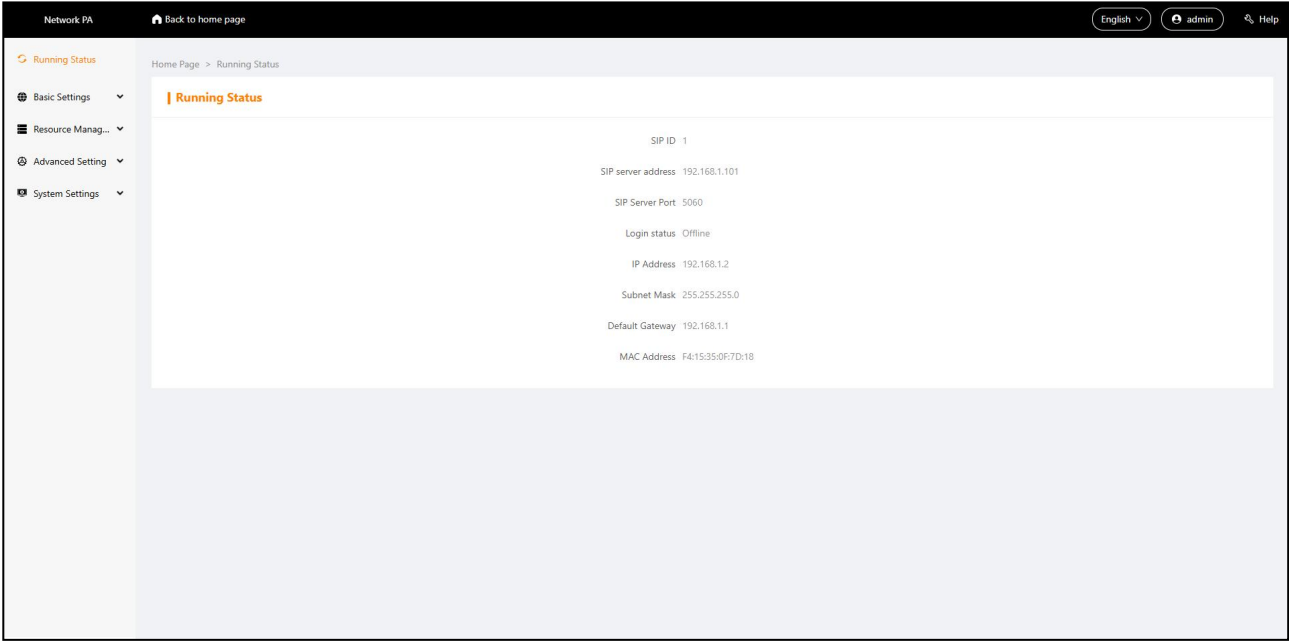
Note: Default username and password are both admin.



(3) Click the [Login] button to access IP remote microphone's web interface.

5.2 Running State

When login to the web page, click 【Running Status】 will shown the information of:Sip ID, Sip server address, Sip server port, Login status, Device IP address, Default gateway, Device MAC address, and other information.



5.3 Terminal Settings

Please set the terminal's network parameters according to the environment of the terminal. Click [save] after setting, the device will automatically reboot and the parameters will take effect after reboot.

Network PA

Back to home page

EnglishadminHelp

Running Status

Basic Settings

Terminal Settings

Protocol Settings

PA Params

Talk Params

Alarm Params

System Params

Resource Manag...

Advanced Setting

System Settings

Home Page > Basic Settings > Terminal Settings

Save

Terminal Settings

IP Configuration Mode

Static

IP Address

Subnet Mask

192.168.1.2

255.255.255.0

Gateway

192.168.1.1

DNS1

DNS2

192.168.4.249

114.114.114.114

Description:

IP Configuration Mode	Supports static IP and dynamic IP address configuration mode. Static IP: User-defined IP address and other information, the default is static IP. Dynamic IP: Assign IP address via DHCP.
IP Address	IP address of the device, the factory default IP is 192.168.1.101, not to be repeated with other terminals.
Subnet mask	The subnet mask to the network on which the Unit is located.
Gateway	The default gateway to the network on which the Unit is located.
DNS1	The IP address of the preferred domain name resolver for the network on which the Unit is located.
DNS2	The IP address of the alternate domain name resolver for the network on which the Unit is located.

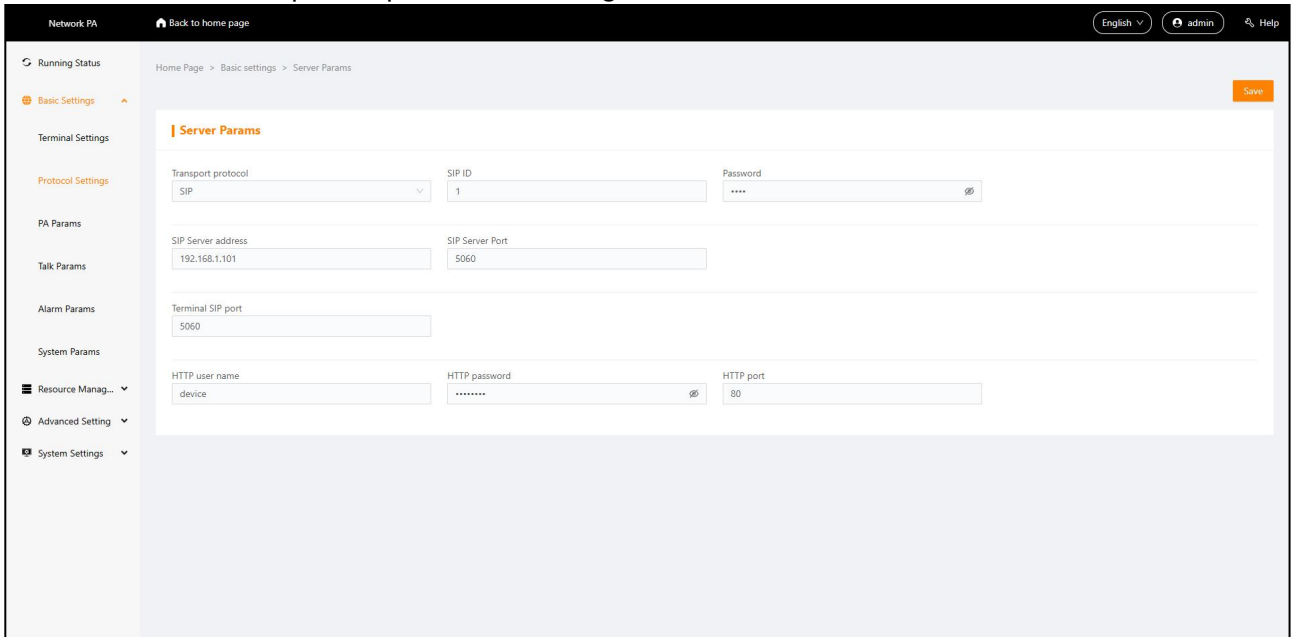
5.4 Protocol Settings

IP remote microphone support with SIP protocol and NAS protocol, you can choose the transport protocol based on the actual server you log in to.

Note: Default protocol is SIP protocol.

SIP Protocol

The default is SIP protocol. If the device is logged into the NAS (intercom) protocol server, you need to select the NAS protocol here, please refer to the NAS protocol setting introduction for specific parameter settings.



Description:

Transport Protocol	Setting the protocol for normal communication between device and sever. (Default is SIP protocol)
SIP ID	Unique number to identify the device, it cannot be duplicated with terminals or other hosts.
Password	Password for terminal login to SIP server, default is 1234.
SIP Server IP & Port	IP address of the SIP server that the terminal logs into. Please enter the correct IP address or domain name of the SIP server. The port number cannot be changed except in special cases (the default is 5060)
Terminal SIP Port	Set the local network port based on the actual situation. The default is 5060.
HTTP user name	Used to obtain server parameters. The default value is device.
HTTP password	Works with HTTP username to get server parameters. Password must be consistent with that of the server and cannot be the default one.
HTTP Port	Port for logging in to the WEB page. Default is 80.

NAS Protocol

Network PA

Back to home page

English

admin

Help

Running Status

Basic Settings

Terminal Settings

Protocol Settings

PA Params

Talk Params

Alarm Params

System Params

Resource Manag...

Advanced Setting

System Settings

Home Page > Basic settings > Server Params

Save

Server Params

Transport protocol

NAS

NAS ID

1

NAS Server address

192.168.1.13

NAS Server Port

2048

Server Spare IP

192.168.1.14

Server Spare Port

2048

Terminal NAS port

2046

Description:

Transport Protocol	Setting the protocol for normal communication between device and sever. (Default is SIP protocol)
NAS ID	Unique number to identify the device, cannot be duplicated with terminals or other hosts.
NAS Server IP & Port	IP address of the NAS server that the terminal logs into. Please enter the correct IP address or domain name of the NAS server. The port number cannot be changed except in special cases (the default is 2048)
Server Spare IP & Port	The IP address and port of the backup NAS service.
Terminal NAS Port	Set the local network port based on the actual situation. The default is 2046.

5.5 PA Params

Network PA

Back to home page

EnglishadminHelp

Running Status

Basic Settings

Terminal Settings

Protocol Settings

PA Params

Talk Params

Alarm Params

System Params

Resource Manag...

Advanced Setting

System Settings

Home Page > Basic settings > PA Params

PA Params

Broadcast input volume

9

Broadcast output volume

9

Broadcast tone

Enable

Encode Format

L16

Broadcast Output Channel

Speaker

Sub zone broadcast

Disable

Save

Description:

Broadcast Input Volume	You can modify the broadcast input volume as required.
Broadcast Output Volume	You can modify the broadcast output volume as required Note: The broadcast input and output volume is only effective in the offline state. When the device is online, the broadcast input and output volume is controlled by the server.
Broadcast tone	Enable or disable the broadcast prompt tone. When enabled, a broadcast prompt tone will be played when a broadcast is received.
Encode Format	Setting the broadcast encoding format, L16 and MP3 are optional.
Broadcast Output Channel	When you setting a broadcast, the audio output channel can be selected from the speaker/line out output. Default is speaker output.
Sub zone broadcast	Set whether to enable sub zone broadcast function.

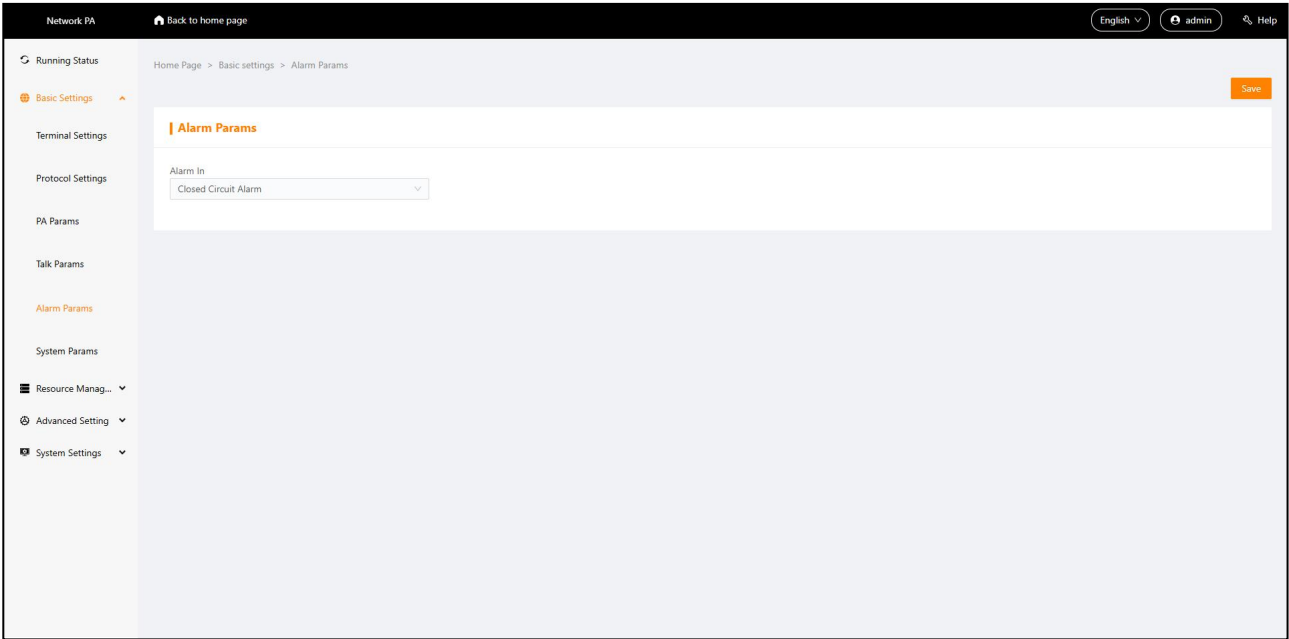
5.6 Talk Params

Description:

Talk And Monitor Input Volume	Setting the input volume for offline intercom and monitoring.
Talk And Monitor output volume	Setting the output volume for offline intercom and monitoring. Note: Talk and Monitor input and output volume is only effective in the offline state. When the device is online, the broadcast input and output volume is controlled by the server
TTS Play	When this function is enabled, IP remote microphone will broadcast the terminal name of device who is calling in. Default is disable.
Ring output volume	Setting the volume of broadcast and intercom ringtone.
Talk Input Channel	When you setting intercom, the audio input channel can be selected from the microphone/ Line in/Auto. Default is microphone input. When set to auto, insert the audio cable, the microphone pole light will go off, the audio input will be “line in” input.
Talk Output Channel	When you setting intercom, the audio output channel can be selected from the speaker/ line out.
Answer mode	Manual answer and auto answer are available. Default is manual answer, when calling is coming, you need to press answer button to answer the call.
Auto Answer Time	Setting the auto answer time of the device.
Three party call	Setting whether to enable Three party call function.
Echo Cancellation	Setting whether to enable echo cancellation function.
Echo Cancellation Mode	Speex and webrtc are available.

Monitor enable	After it is enabled,The device can receive monitor from other terminals. If it is disabled,the device can not be monitored. Default is disable
Loop Monitoring Interval	When monitoring multiple terminals in a loop, set the monitoring interval for each terminals and skip to the next terminal according to the set time.

5.7 Alarm Params



Description:

Alarm In	Closed Circuit Alarm: The external device is normally in open circuit, when the alarm input is closed it will be reported to the server. Open Circuit Alarm: The external device is normally in closed circuit, when the alarm input port is closed, it will be reported to the server. Status-change Alarm: The external device is normally in open or closed state, when the alarm input is closed or broken, it will be reported to the server.
----------	--

5.8 System Settings

After finished setting, you need to click [save] and reboot the device to take effect.

The screenshot shows the 'System Params' configuration page in a web interface. The page has a dark header with 'Network PA', a 'Back to home page' link, and user information 'English' and 'admin'. A left sidebar contains navigation links: 'Running Status', 'Basic Settings' (selected), 'Terminal Settings', 'Protocol Settings', 'PA Params', 'Talk Params', 'Alarm Params', 'System Params', 'Resource Manag...', 'Advanced Setting', and 'System Settings'. The main content area is titled 'System Params' and contains several settings: 'FEC' (Close), 'RTX' (Close), 'Jitter' (Close), 'Jitter Adaptive' (Close), 'Telnet' (Disable), 'Screensaver parameters(Seconds)' (Disable), 'Setting Param Password(input 6 digits when modifying)' (123456), 'Screen off time(Seconds)' (60), and 'Time zone switch' (Disable). A 'Save' button is in the top right corner.

Description:

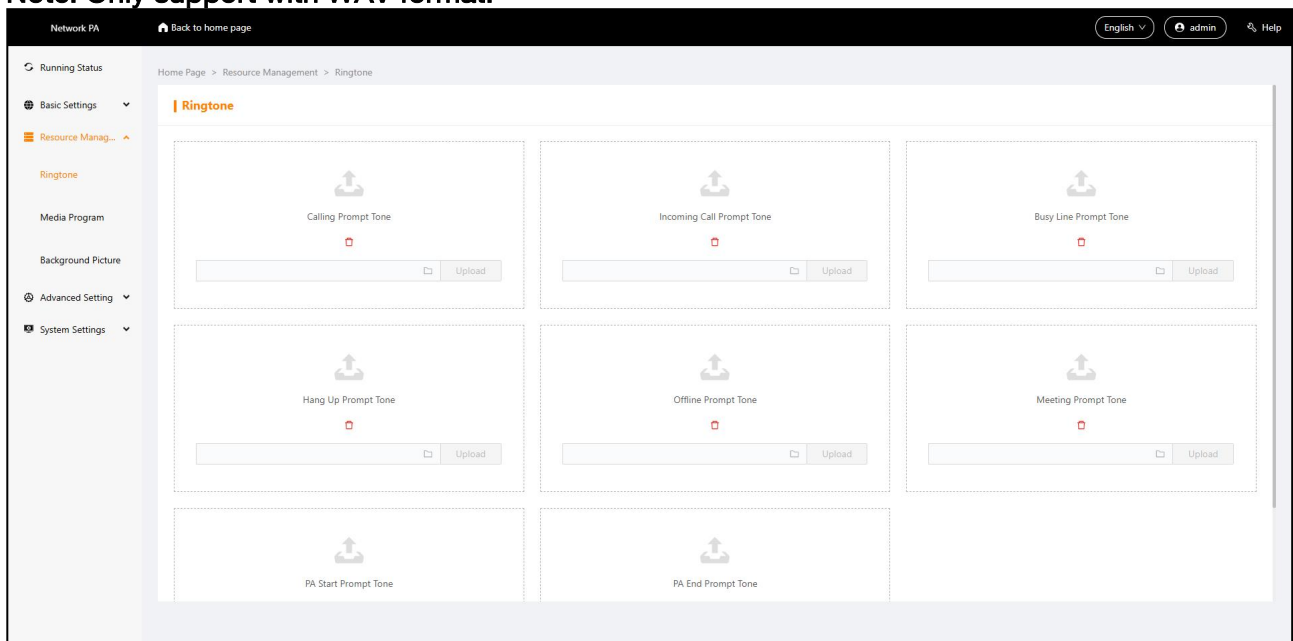
FEC	When it is enabled, within 15% of the network packet loss, the device can still make normal audio and video intercom. In a poor network environment, you are recommended to enable this function
RTX	When it is enabled, it will improve video quality in poor network environments.
Jitter & Jitter Adaptive	These two are only available in SIP protocol, but not in NAS protocol. After enabling, you must also "Enable" the "FEC and RTX function in "Advanced Settings" - "Composite"--"Network Adaptive" of SIP service software. (Note: The way to open FEC and RTX function is based on SIP service software manual)
Telnet	When it is enabled, the device can be remotely logged in via Telnet command
Screensaver parameters(Seconds)	Enable the screen saver interface when the device is idle; the default is disabled. After enabling the screen saver, you can set the automatic screen lock time according to actual needs, and the screen will be automatically locked according to the set time when the terminal does not have any operation.
Setting Param Password(Input 6 digits when modifying)	If the device has enabled the screen saver function, you need to set the unlock password, the password only supports 6 digits, the default is 123456. (Note: The screen saver password is the same with the password for device entering into the "Settings" module)
Screen off	In a certain period of time, no operation, and no intercom,

time(Seconds)	broadcast, monitor and other tasks, the screen will automatically turn the backlight to the lowest. Default time is 60s.
Time zone switch	Set whether to enable the time zone setting function.
Timezone setting	If enabled, configure the terminal's time zone.

5.9 Audio Ringtones

You can customize the prompt tones for calling, incoming calling, busy line, etc. according to your needs. Click "📁" button to select the audio file you want to modify for upload, and press "Upload" button to upload the audio.

Note: Only support with WAV format.

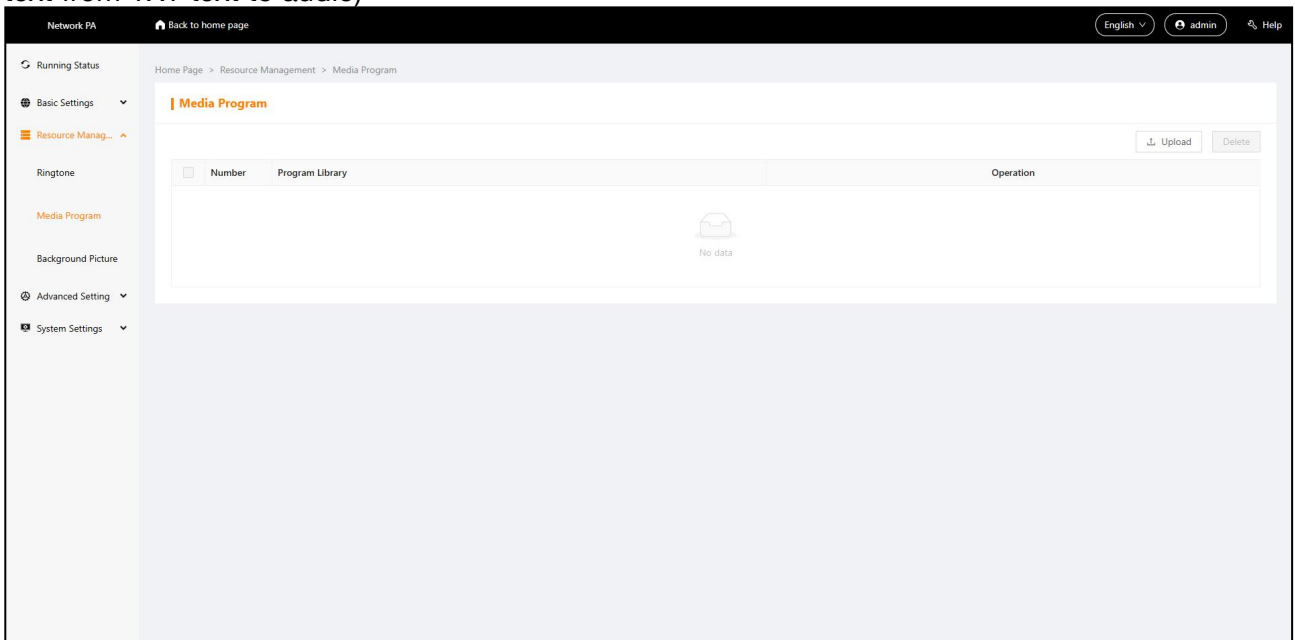


5.10 Media Program

You can upload WAV, MP3, TXT format files to be used as broadcast audio sources. After the file is successfully uploaded, you need to reboot the device to take effect

Note: The size of a single WAV file must be 22K. A single TXT file supports up to 2500 Chinese characters (including punctuation) . TXT files are recommended to use UTF-8 encoding format)

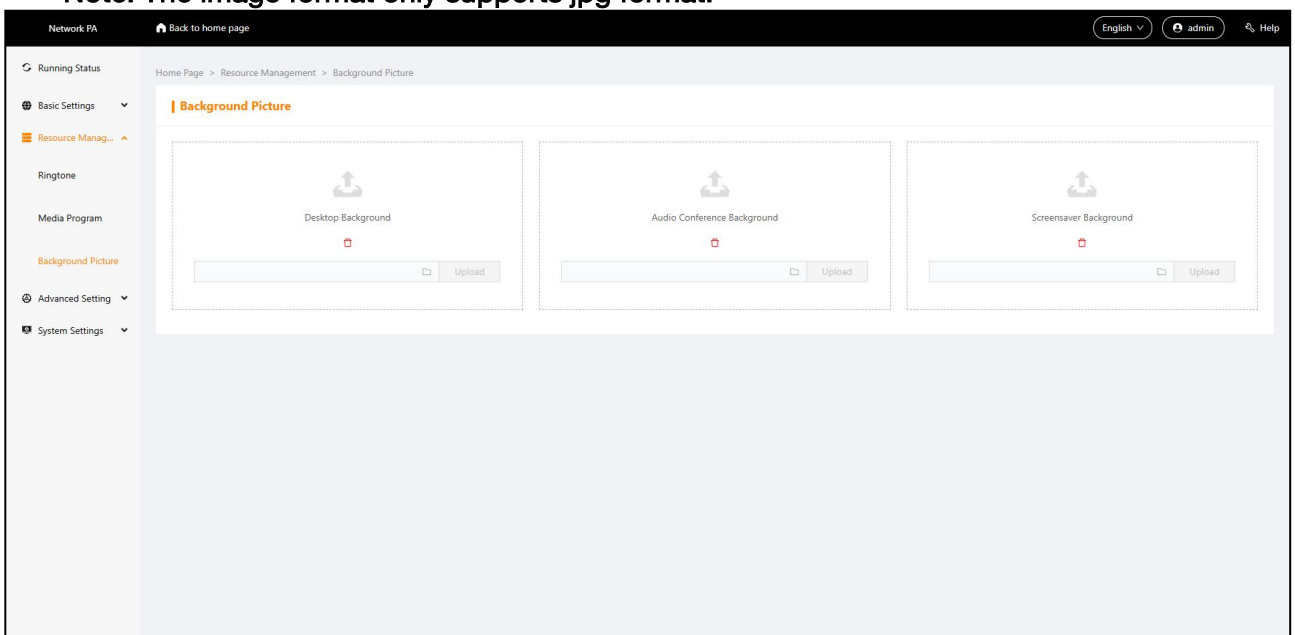
When initiating a broadcast operation, click "Source Selection" to select an uploaded audio file or TXT file for broadcasting. (TXT file is Initiating a broadcast to the target area by converting text from TXT text to audio)



5.11 Background Images

You can customize terminal desktop background, audio conference background, terminal screensaver background according to your needs, click " "button, select the image to be modified for upload, press the "Upload" button to upload the image, and it will take effect after rebooting the device.

Note: The image format only supports jpg format.



5.12 Security Settings

You can change the password for logging into the WEB in this page. After saving the password change, reboot the web page to take effect.

Network RA

Back to home page

EnglishadminHelp

Running Status

Home page > Advance Setting > Security Setting

Save

Basic Settings

Resource Manag...

Advanced Setting

Security Setting

Language Setting

System Settings

Security Setting

Current User Nameadmin

Current Password

New Password

Confirm Password

5.13 Language Setting

You can change the language in this page, supporting Chinese and English. After saving setting, reboot the web page to take effect.

Network RA

Back to home page

EnglishadminHelp

Running Status

Home Page > Advance Setting > Language Setting

Save

Basic Settings

Resource Manag...

Advanced Setting

Security Setting

Language Setting

System Settings

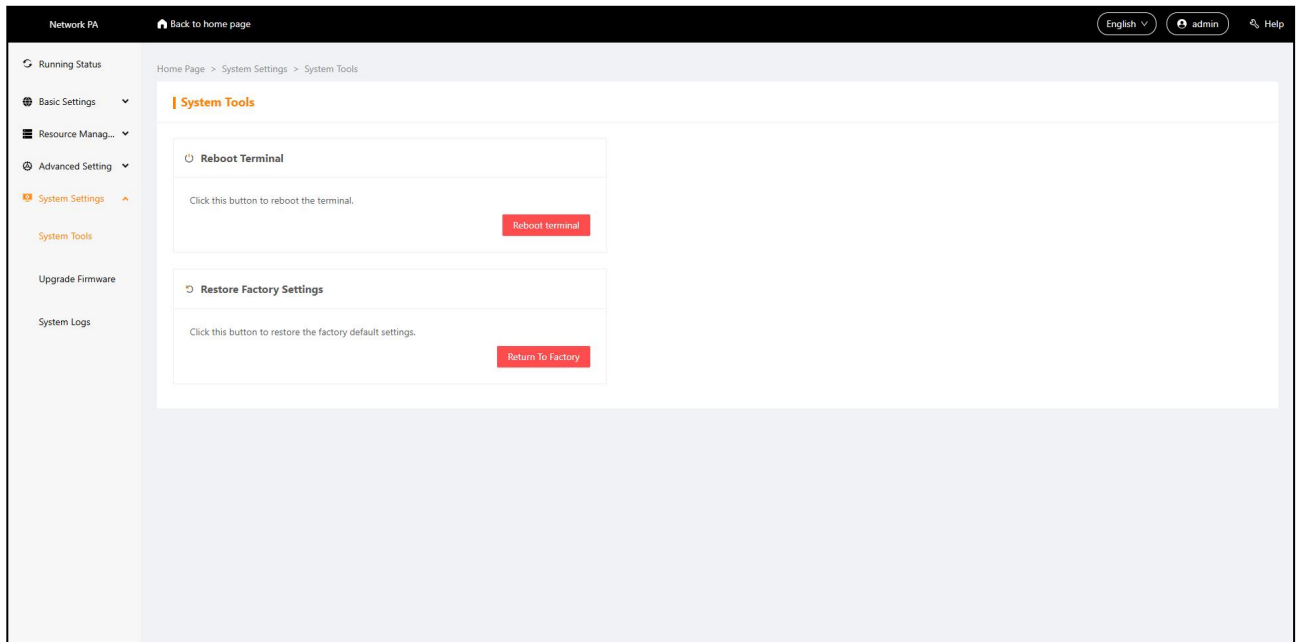
Language Setting

English

5.14 System Tools

Reboot Terminal: Clicking on this button to reboot the terminal.

Return to factory: Clicking on this button and all parameters of the device will be restored to factory Settings (please use it with caution)

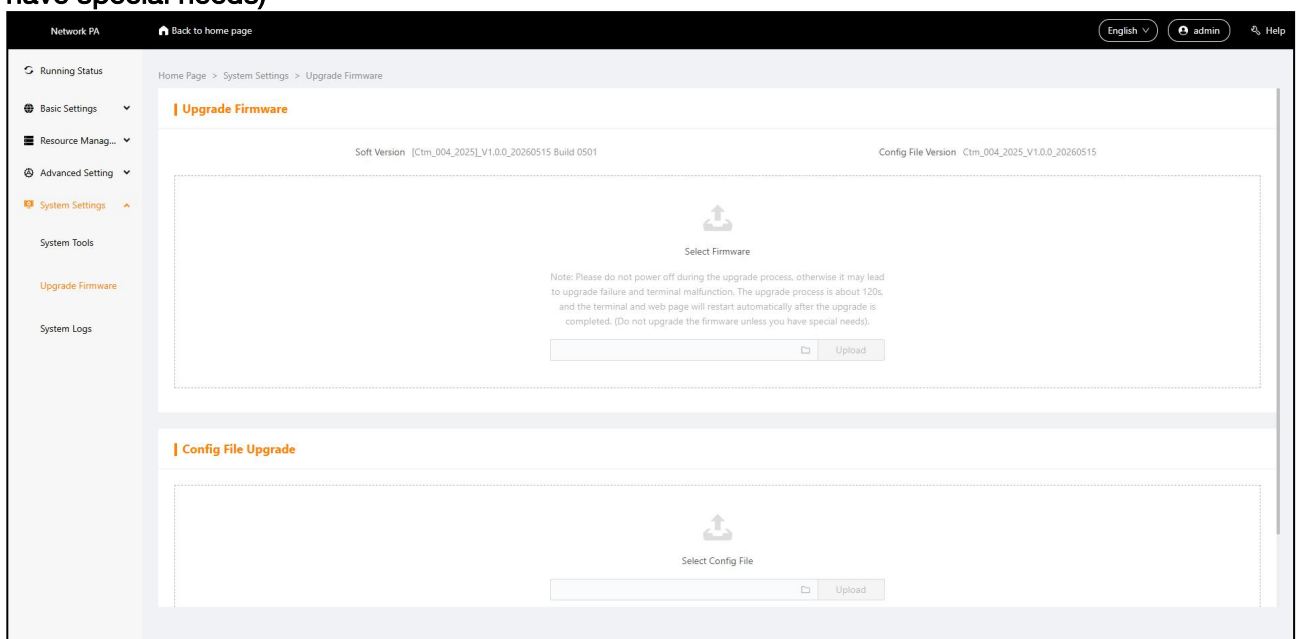


5.15 Update Firmware

Soft Version, Config File Version: It displays the current soft version, and config file version of the device.

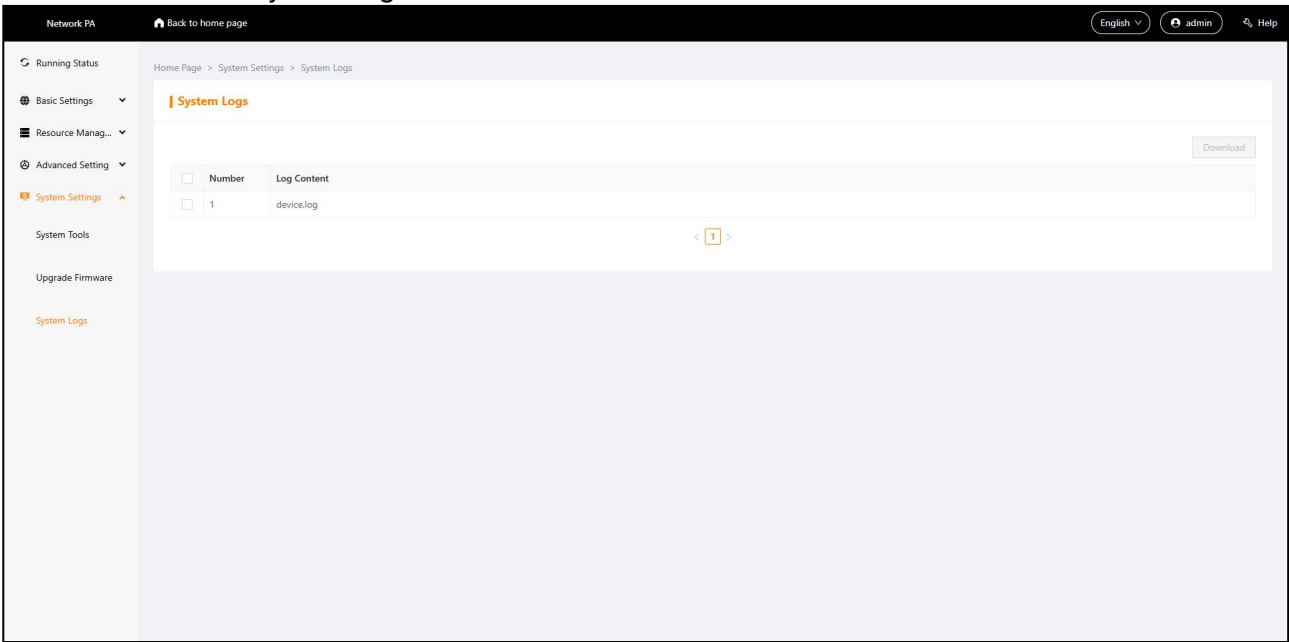
Terminal Upgrade, Config File Upgrade: Click "📁" button, select the firmware upgrade file or config file provided by the manufacturer, click "Upload" button to start the upgrade

Note: Please do not power off during the upgrade process, otherwise it may lead to upgrade failure and device malfunction. The upgrade process is about 120s, the device and WEB page will reboot automatically after the upgrade is completed. (Do not upgrade the firmware unless you have special needs)



5.16 System Logs

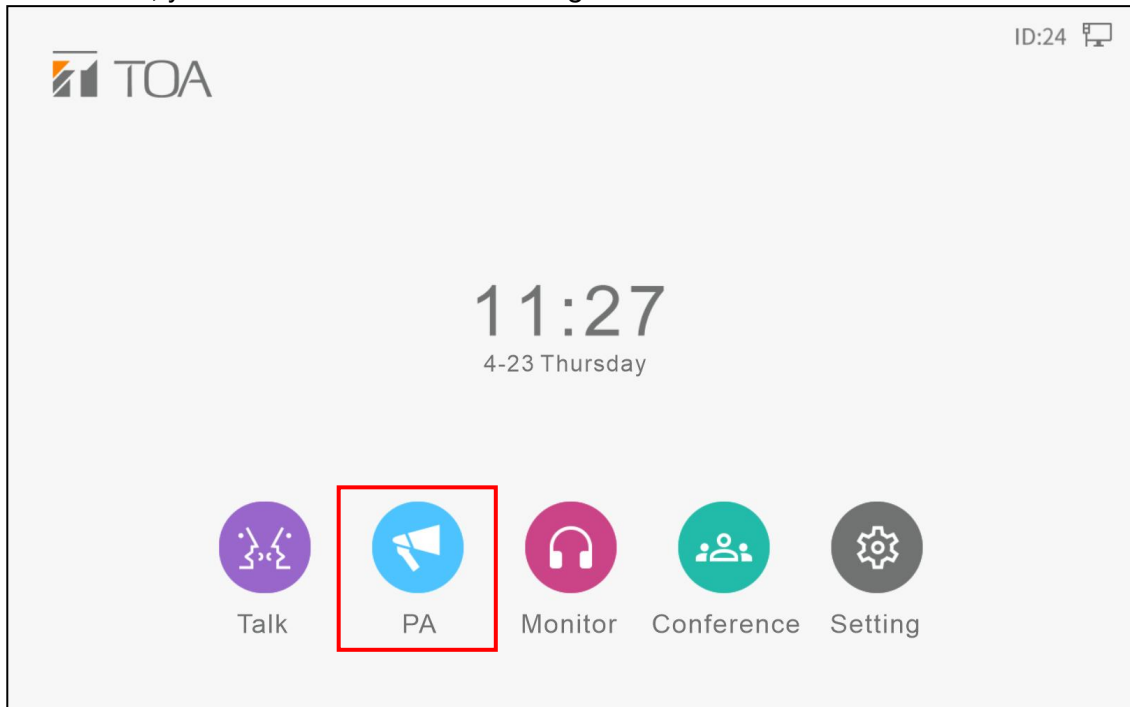
The device can automatically record the running process and generate logs, and support users to download system logs.



6. BASIC FUNCTIONS

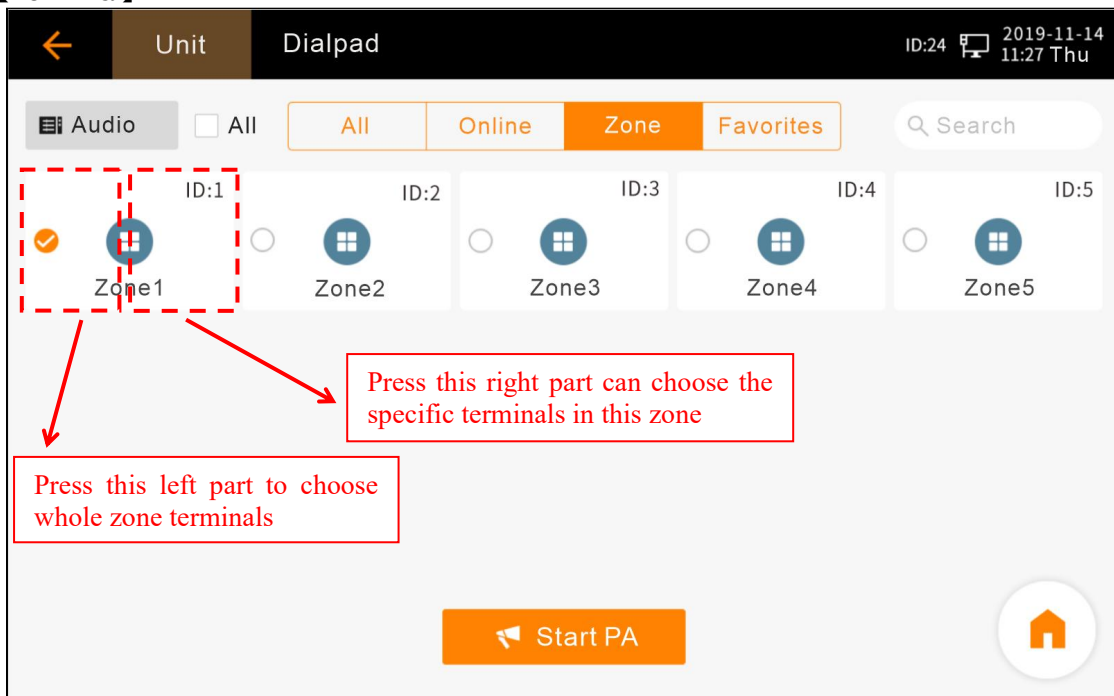
6.1 Broadcasting Function

Press 【PA】 , you can enter into broadcasting module.



6.1.1 Zone/ Terminal Broadcasting

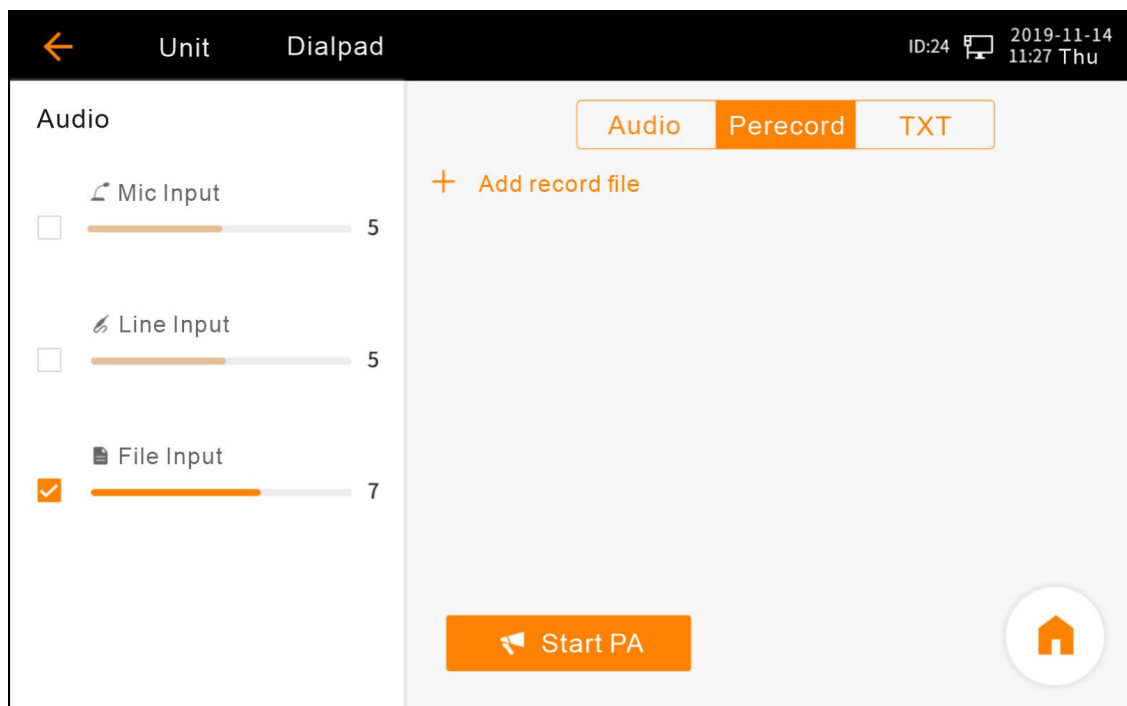
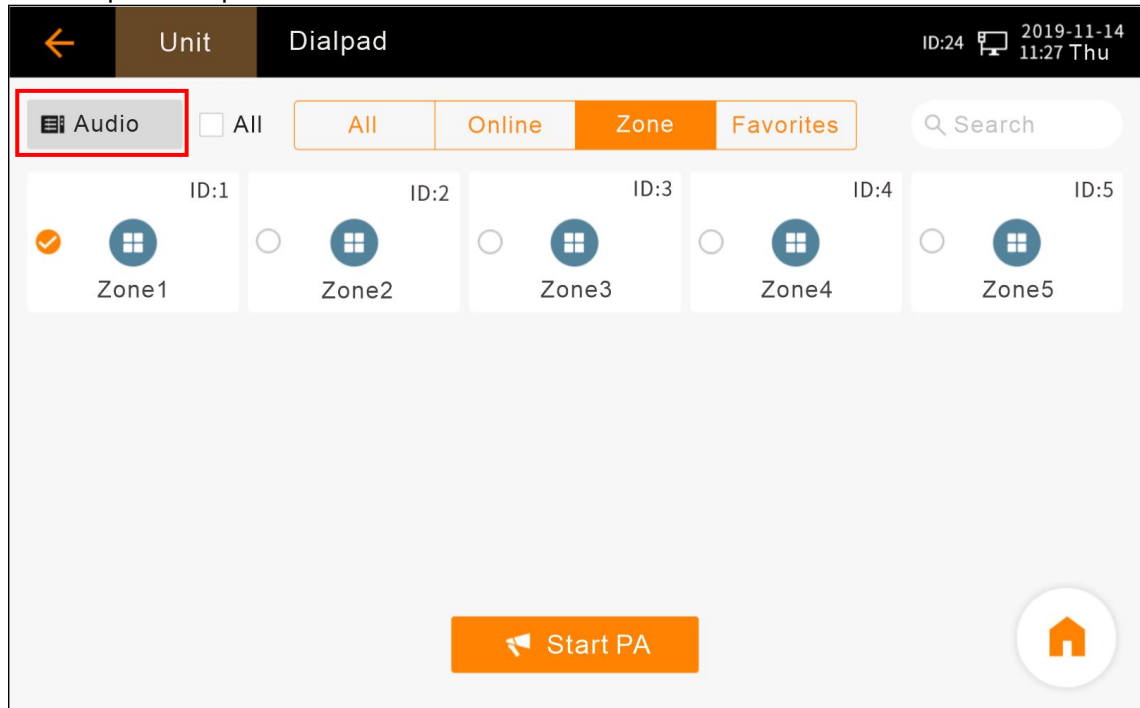
(1) You can choose the target zones or terminals to receive broadcasting by press 【Terminal】



(2) Audio Source

There are three different broadcasting audio source are available: Mic input, line input and file input.

When initiating a broadcast, click the audio source icon, where you can adjust the volume of the microphone input.



Mic Input: The audio source is input from Mic, users can make real-time broadcasting from Mic to target areas;

Line Input: The audio source in phone and computer can be played by contacted from AUDIO IN interface;

File Input:

①**Audio:** The audio source are the media audio files uploaded under "Media Programs" in the WEB interface, or the audio files in WAV and MP3 formats read from USB.

(Note: You need to upload audio files in advance on WEB page "Resource Management" - "Media Program", WAV and MP3 format audio are supported)

②**Pre-recording Files:** The audio source are the recording files set from IP remote microphone by follow steps:

In the pre-recording interface, click "Add record file"  **Add record file** to add a new recording, then click  to start Recording, then IP remote microphone will automatically capture the audio input from the microphone and save it, click  to stop recording. After recording, click the audition icon  to check the audio. Click  to clear the current recording. Note: Support up to 10 groups of recording files

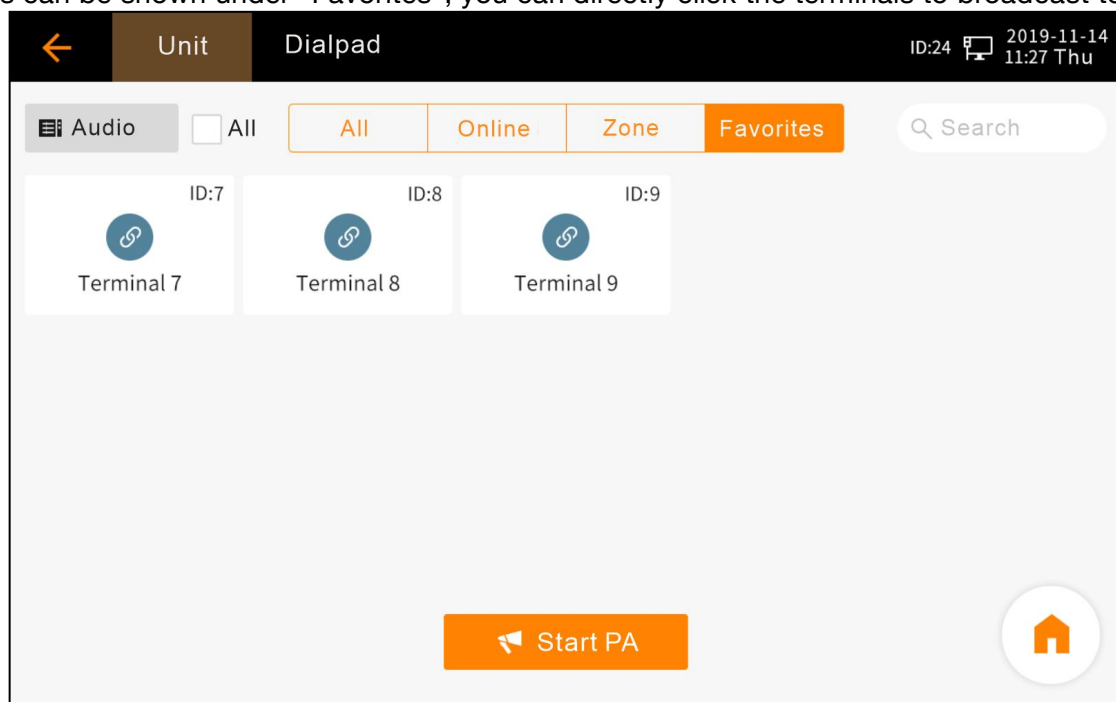
③**TEXT Files:** The audio source is a TXT file uploaded under "Media Programs" in the WEB interface, or a TXT file read from USB. You need to upload the TXT files in advance on WEB page "Resource Management" - "Media Program".

(Note: Pre-recorded and text files cannot be mixed with the Mic input and Line input.)

(3)After you selected the terminal and audio source, press the "Start PA" button on the interface to initiate the broadcast.

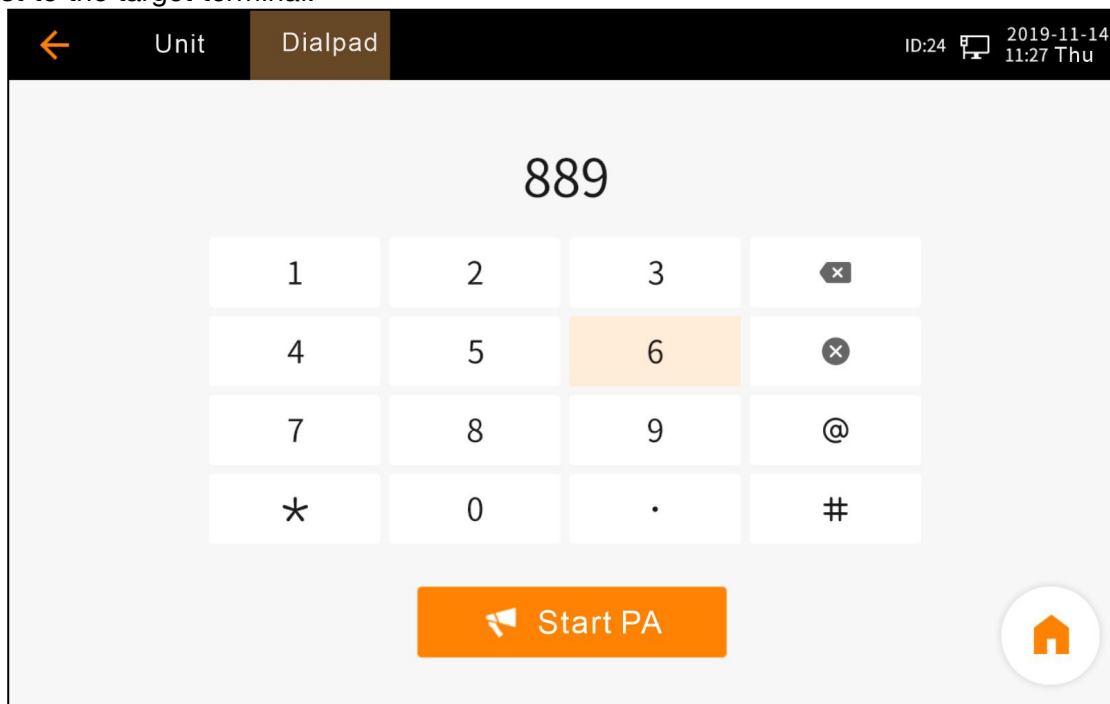
6.1.2 Favorites Broadcasting

You can set the favorites in the terminal "Setting"- "Function"- "Add Favorite". The favorites terminals can be shown under "Favorites", you can directly click the terminals to broadcast to it.



6.1.3 Dialpad Broadcasting

In the broadcast module, select "Dialpad", enter the ID number of the target terminal in the pop-up numeric keyboard and then click "Start PA", the IP remote microphone will launch a broadcast to the target terminal.



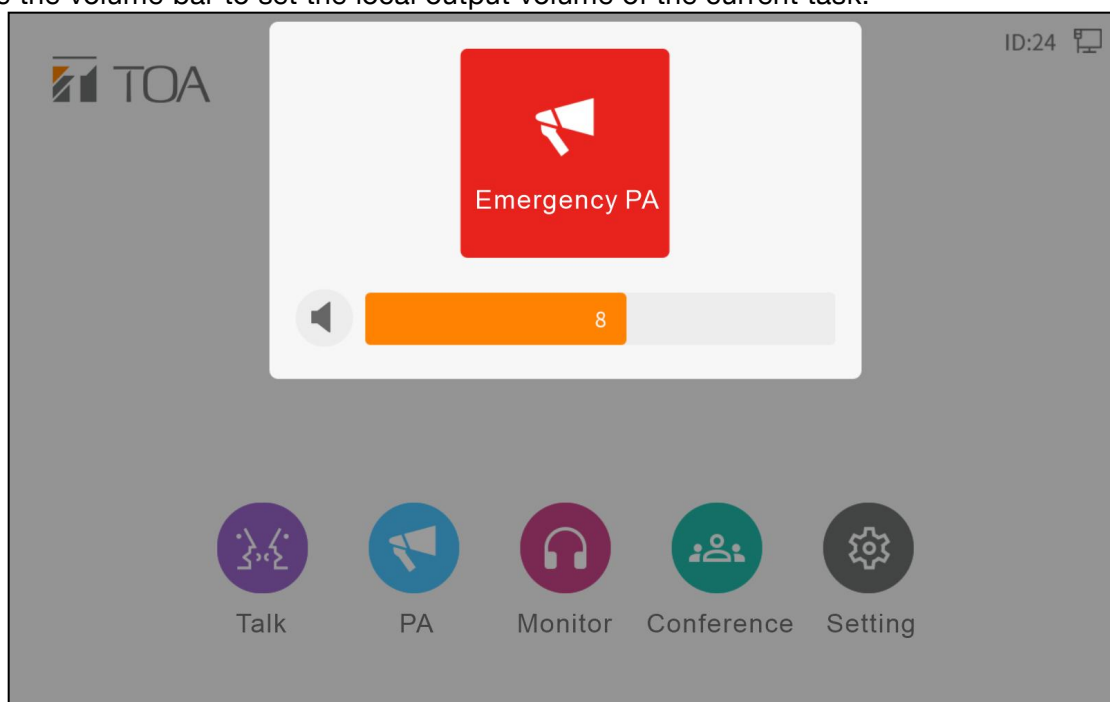
6.1.4 Offline Broadcasting

When the device is offline, enter the target terminal ID@IP, such as 1@192.168.1.101 in the broadcast dialpad and click Call to make offline broadcast.

6.1.5 Emergency Broadcasting

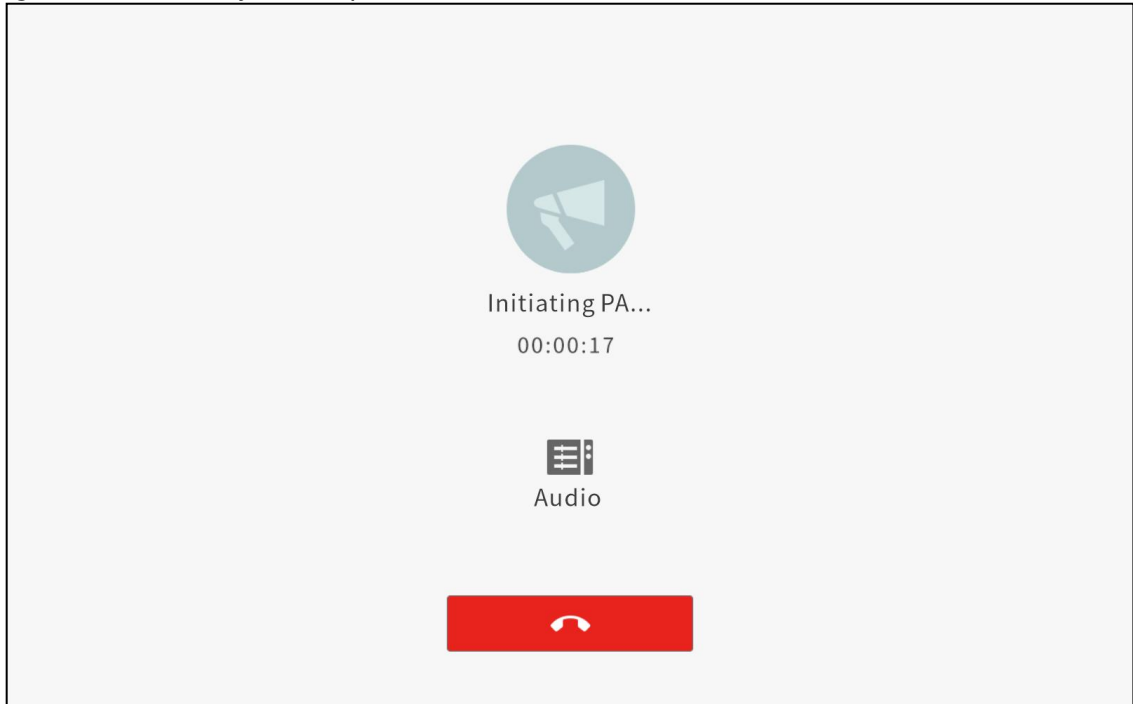
Pull down and slide out emergency broadcast menu at the main interface top edge of the device, press the "Emergency PA" button to make a quickly whole zone broadcasting , and all terminal IDs will enter the receiving broadcast status. Press the Emergency Broadcast menu again to stop broadcasting.

Slide the volume bar to set the local output volume of the current task.



6.1.6 End Broadcasting

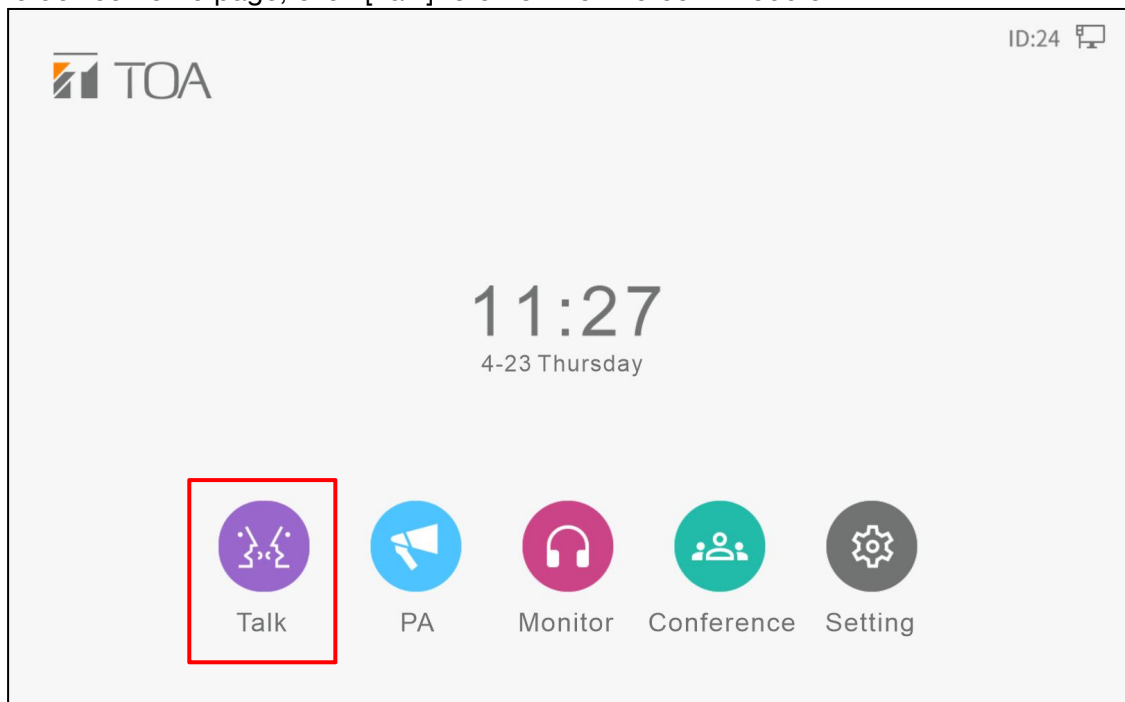
During the broadcast, you can press  button to end the broadcast.



6.2 Intercom Function

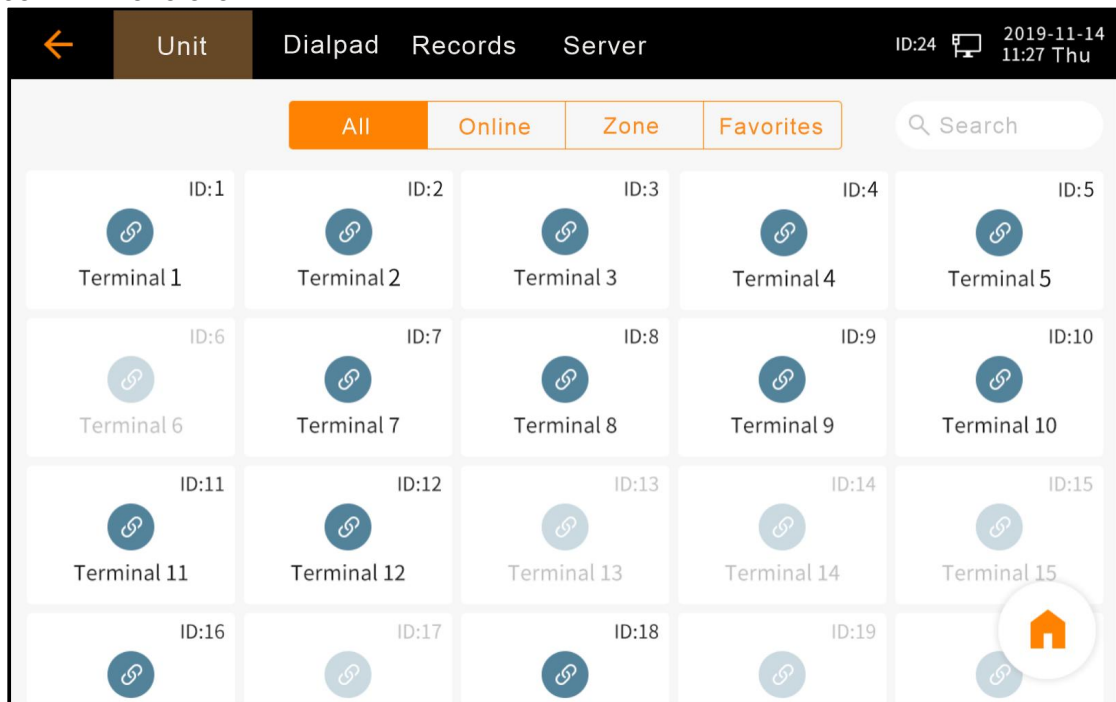
6.2.1 Initiate Intercom

In the device home page, click [Talk] to enter the intercom module.



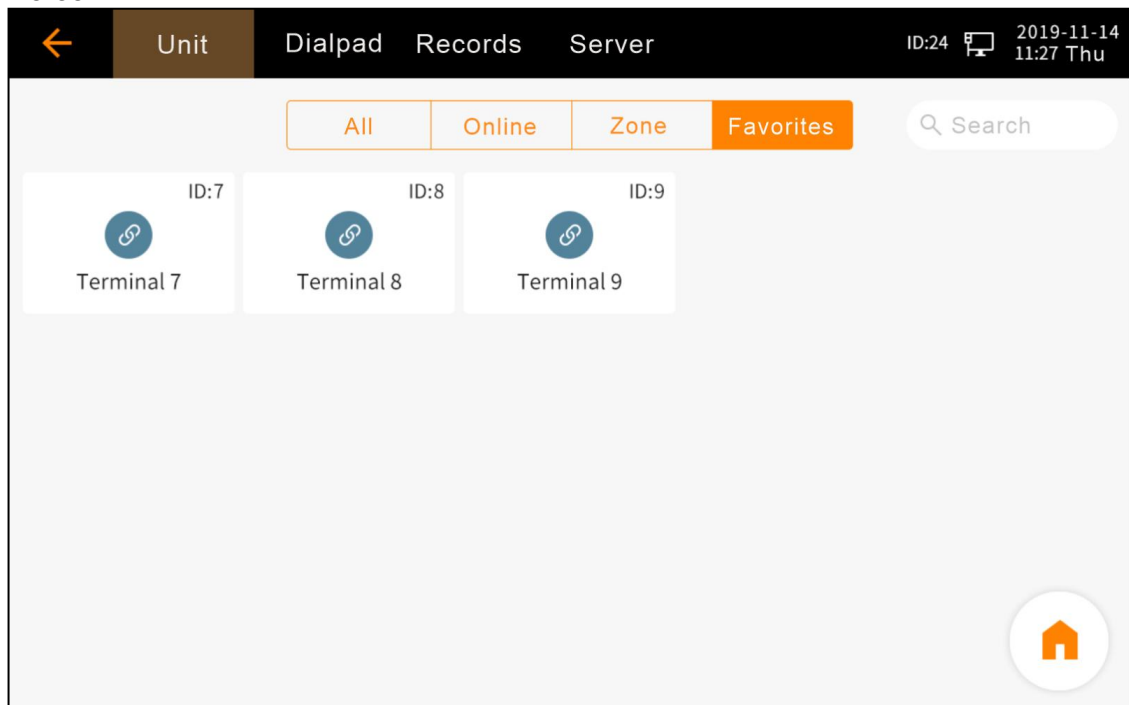
(1) One Click Call

In the intercom module, select [Terminal], then click [All], [Online], [Zone] or [Favorites], a list of terminals or a list of Zones will be displayed, then click the target terminals to initiate a intercom with one click.



(2) Favorites Call

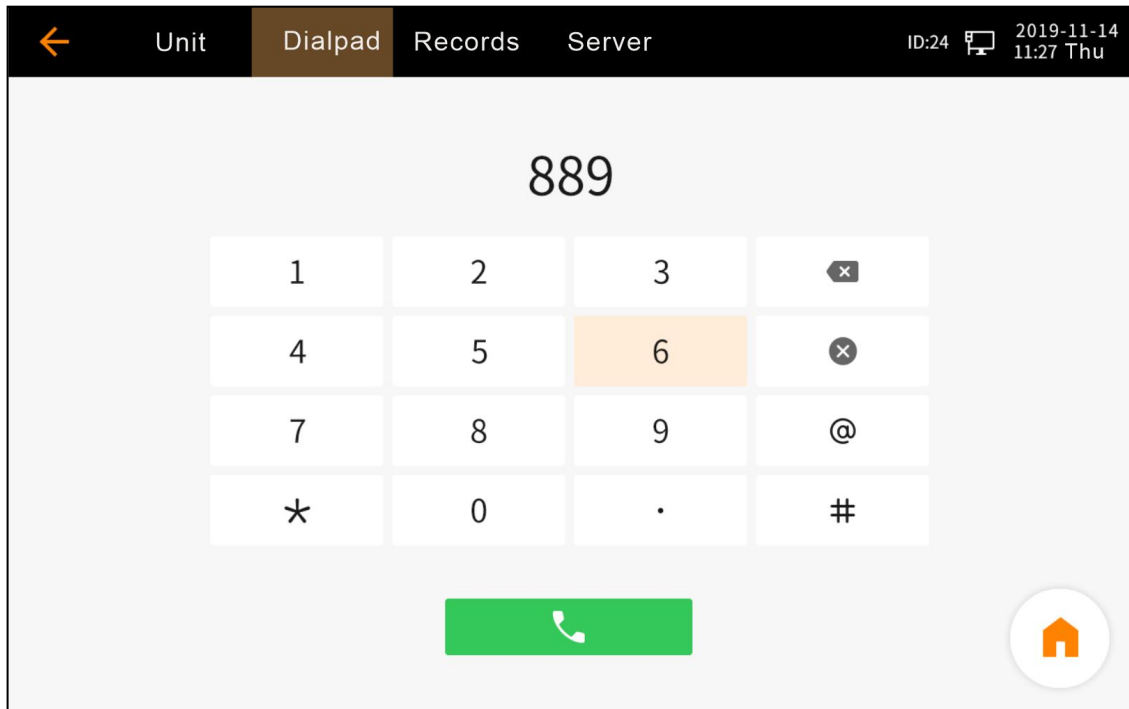
You can add a favorite terminals under "Settings" -"Function"-"Add Favorite". The favorite terminals will be displayed under "Favorites", and you can directly click the terminals to initiate an intercom.



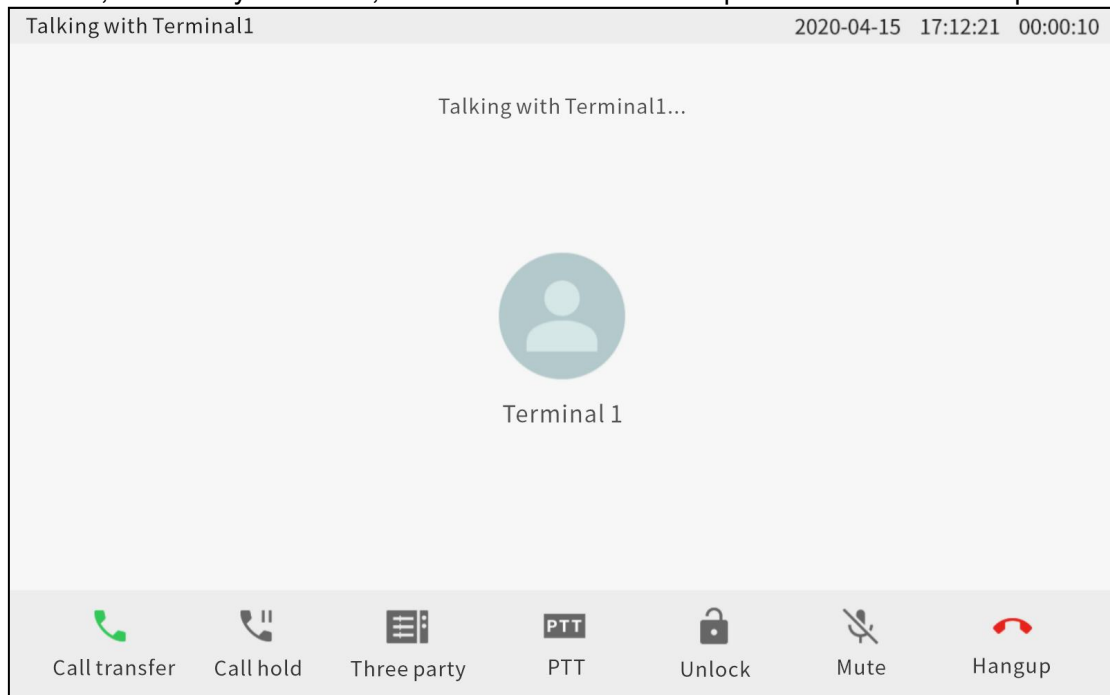
(3) Dialing Call

In the intercom module, click [Dialpad], enter the ID number of the target terminal in the dialpad interface and then click the call button, the IP remote microphone will initiate a call to the target terminal.

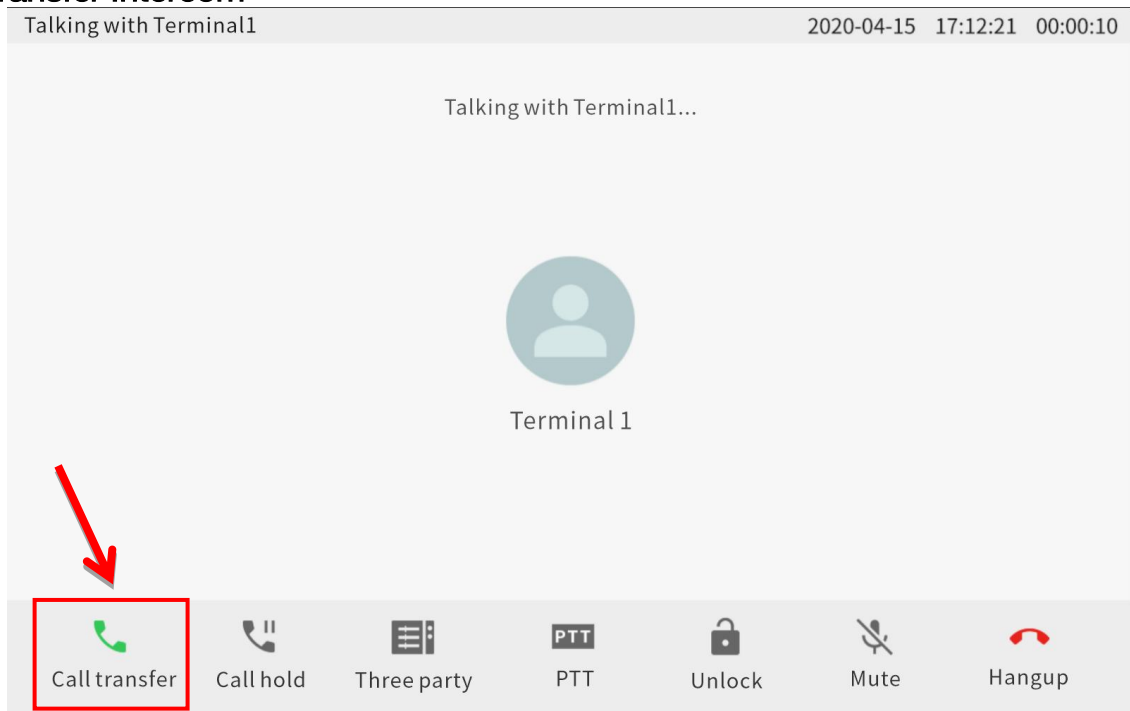
Dialing mode supports calling to the panel, enter the target terminal number # panel number and then click the call button to talk to the panel, for example, "1#7" means calling panel #7 under terminal #1



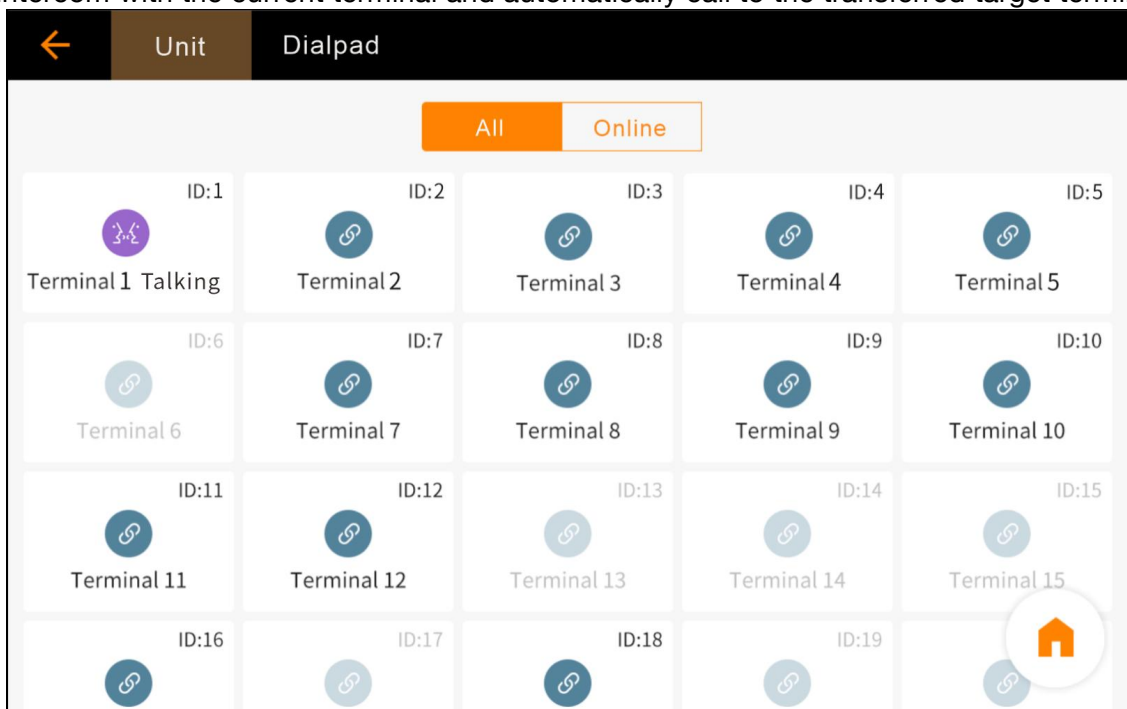
After the other party is connected, it enters the intercom status. During the intercom process, call transfer, three-way intercom, PTT intercom and other operations can also be performed.



6.2.2 Transfer Intercom



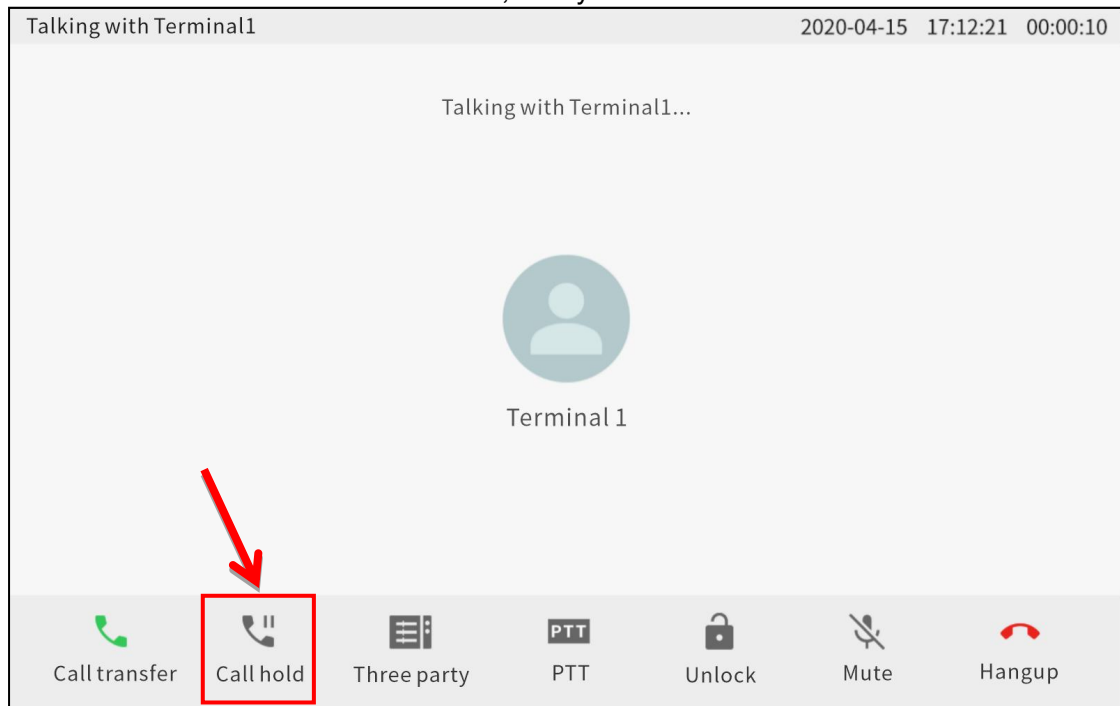
During the intercom process, select call transfer, click the target terminal or enter the ID number of the transferred target terminal in the dial pad, the IP remote microphone will cut off the intercom with the current terminal and automatically call to the transferred target terminal.



6.2.3 Hold Intercom

During the intercom process, select "Call hold", the terminal will hold the current intercom and the speaker will play the hold waiting tone.

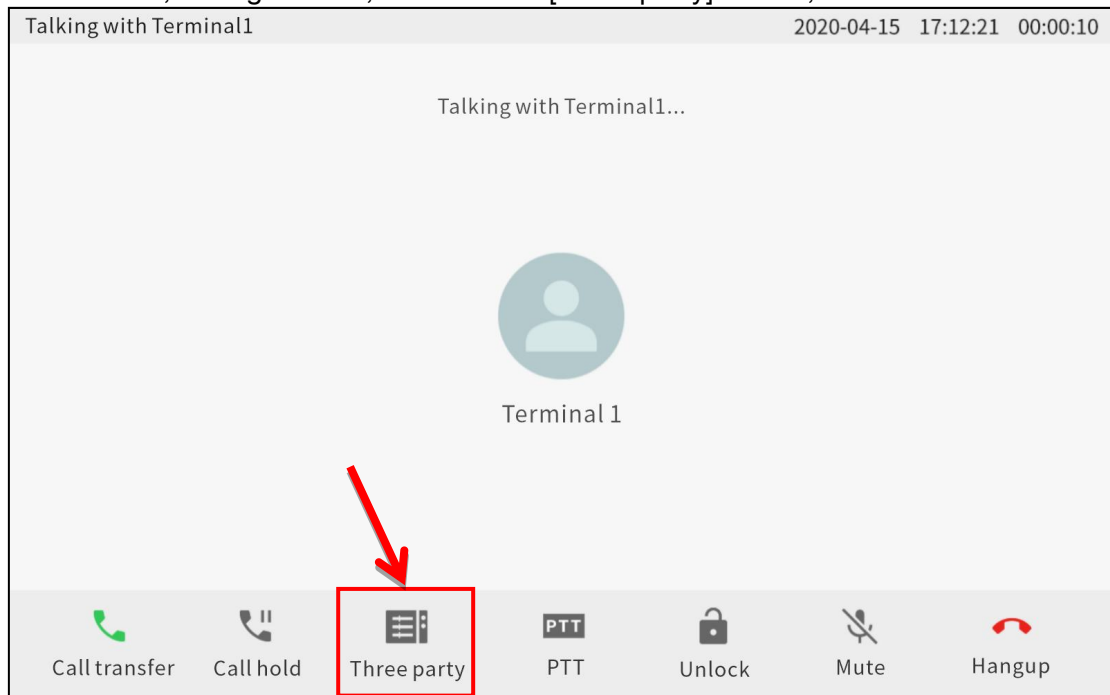
Press "Cancel Hold" to end the hold state, and you can continue the intercom.



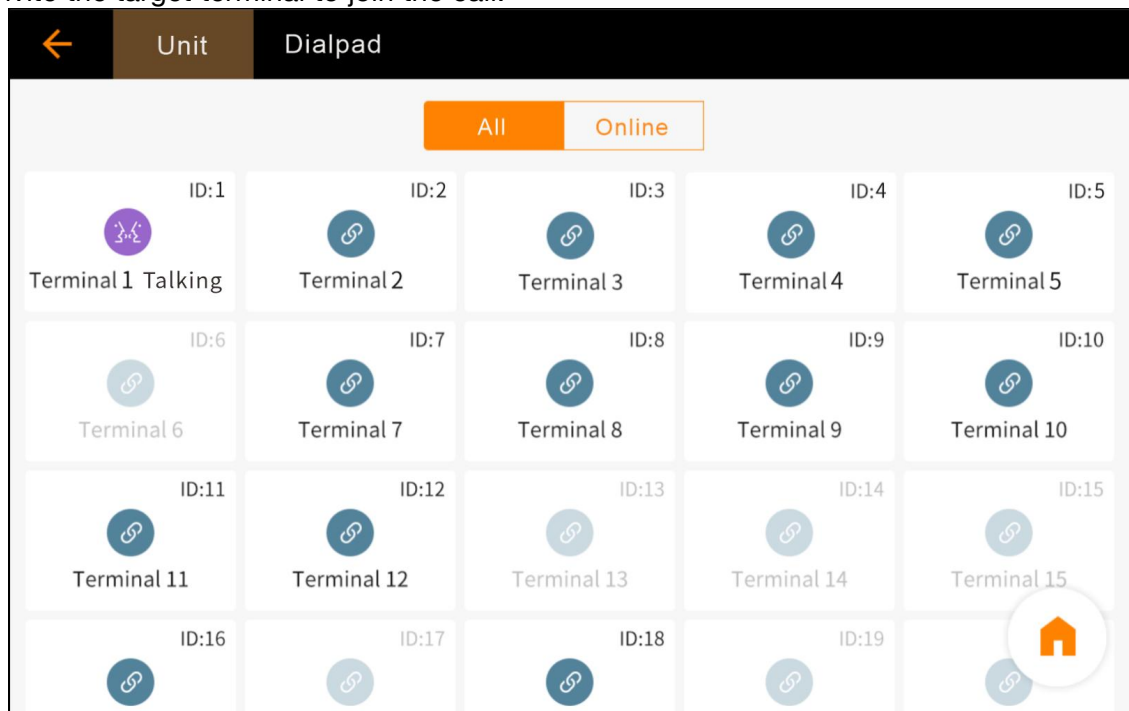
6.2.4 Three Party Intercom

(1) The three party talk is disabled by default, you must set the function of three party talk to "Enable" on the WEB page "Talk Params", or open it in the "Settings" module of the device under the "Function" interface.

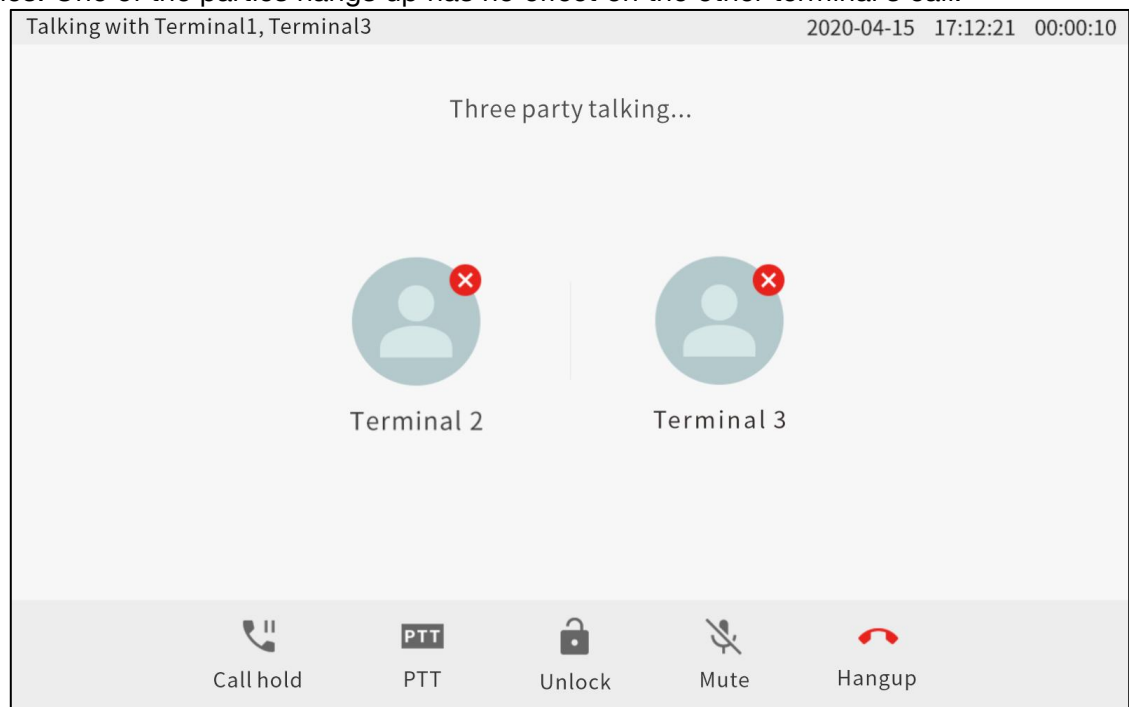
(2) After enabled, during the call, there will be [Three party] button, click the button.



(3) Invite the target terminal to join the call.



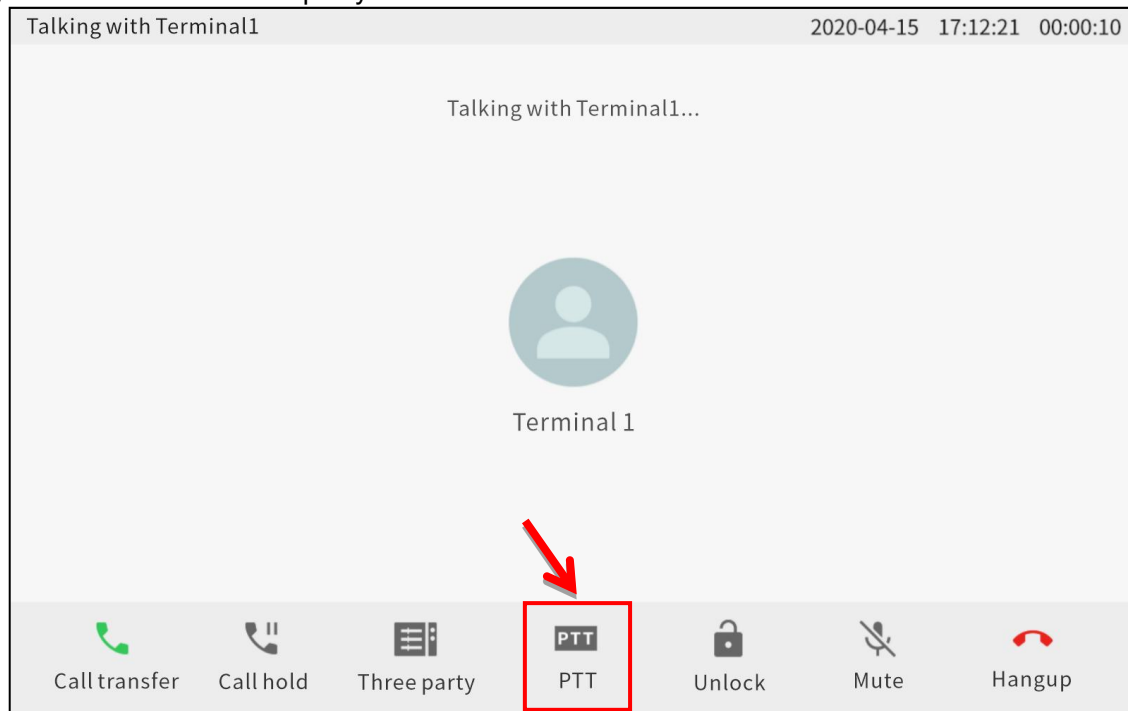
(4) When the invited parties answered, it will enter to the three party intercom. During the three party intercom, the terminals involved in the intercom can clearly hear the voice of other parties. One of the parties hangs up has no effect on the other terminal's call.



Note: During three party intercom, the call transfer and remote unlock functions are unavailable.

6.2.5 PTT Intercom

IP remote microphone supports PTT intercom function. If you press the "PTT" button on the device during the intercom process, the IP remote microphone will enter PTT mode, and the audio will be turned off. Under PTT mode you must press the "PTT" button to talk, otherwise only the voice of the other party can be heard.

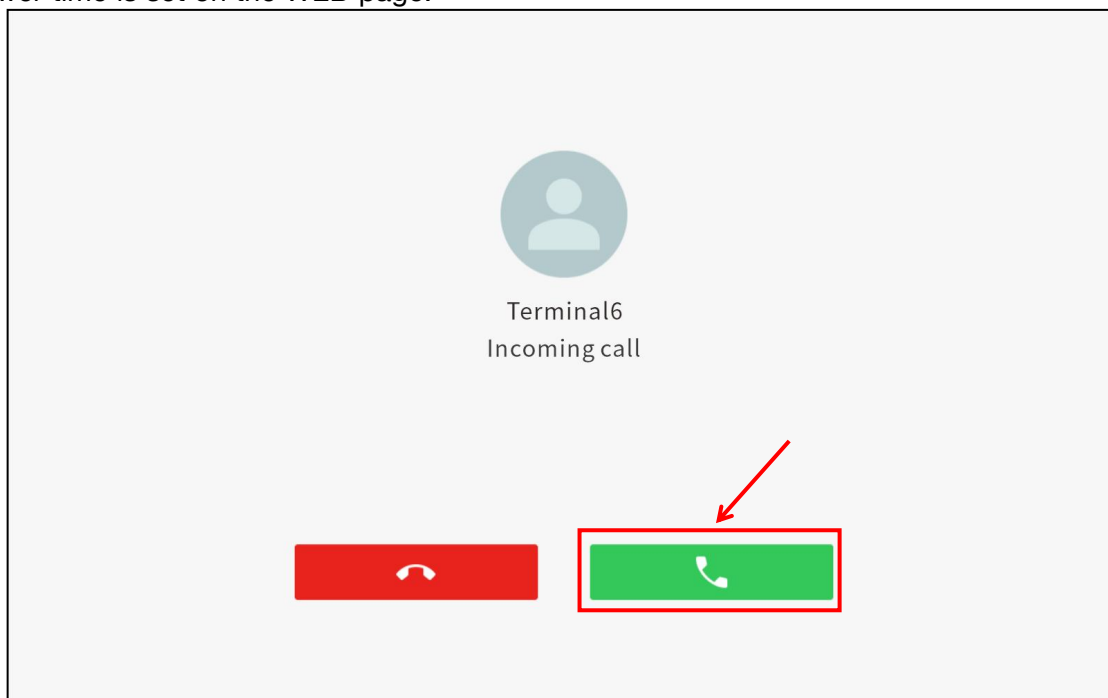


6.2.6 Receive Intercom

You can set the answer mode to "Auto Answer" or "Manual Answer" in "Talk Params" on WEB page.

The default is "Manual answer", when there is a terminal call, you need to manually press the answer button to receive the call;

If you set it to "Auto Answer", the intercom will be answered automatically. And the auto answer time is set on the WEB page.



6.2.7 Offline Intercom

When the device is offline, enter the ID@IP of the target terminal(Such as: 1@192.168.1.101) and click Call to make an offline intercom.

6.2.8 Intercom Records

IP remote microphone can save all call records and support filtering by category (missed calls, incoming call records and calling out records).

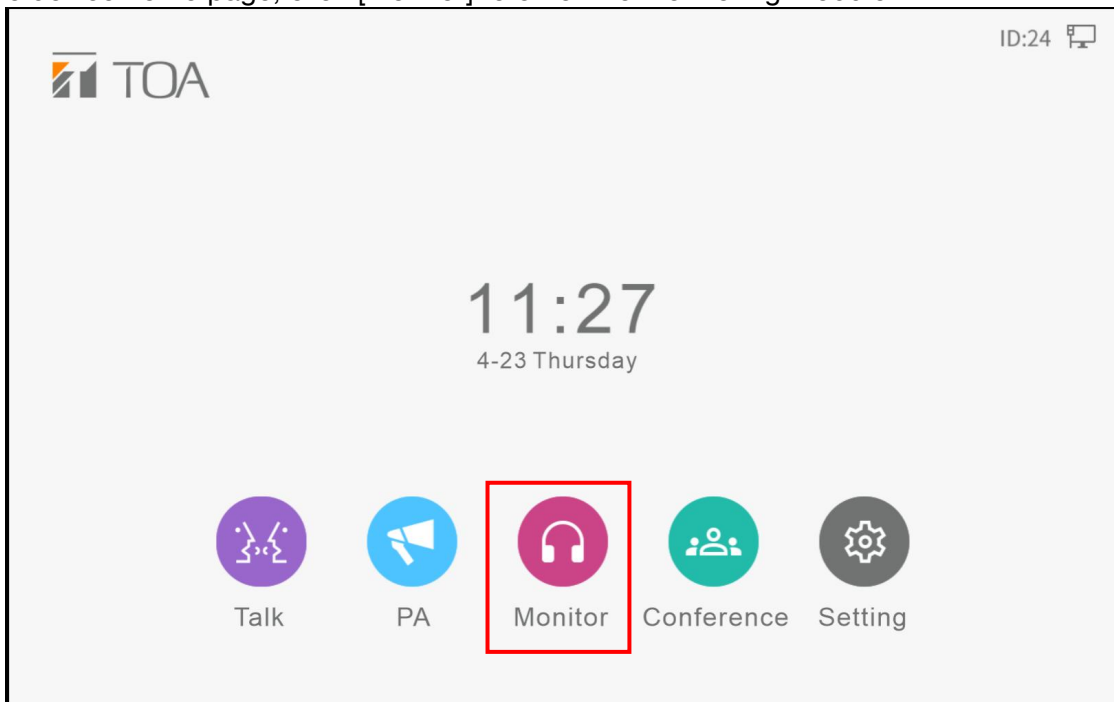
In the intercom module, click [Call Records] to enter the call records interface.

		Unit	Dialpad	Records	Server	ID:24  2019-11-14 11:27 Thu
		All Online Zone Favorites				
	Terminal1	1			2020-05-12 10:23	
	Terminal3	3			2020-05-12 09:18	
	Terminal3	3			2020-05-12 09:12	
	Terminal1	1			2020-05-13 10:23	
	Terminal3	3			2020-05-13 09:18	
	Terminal3	3			2020-05-13 09:12	
	Terminal3	3			2020-05-1	

6.3 Monitoring Function

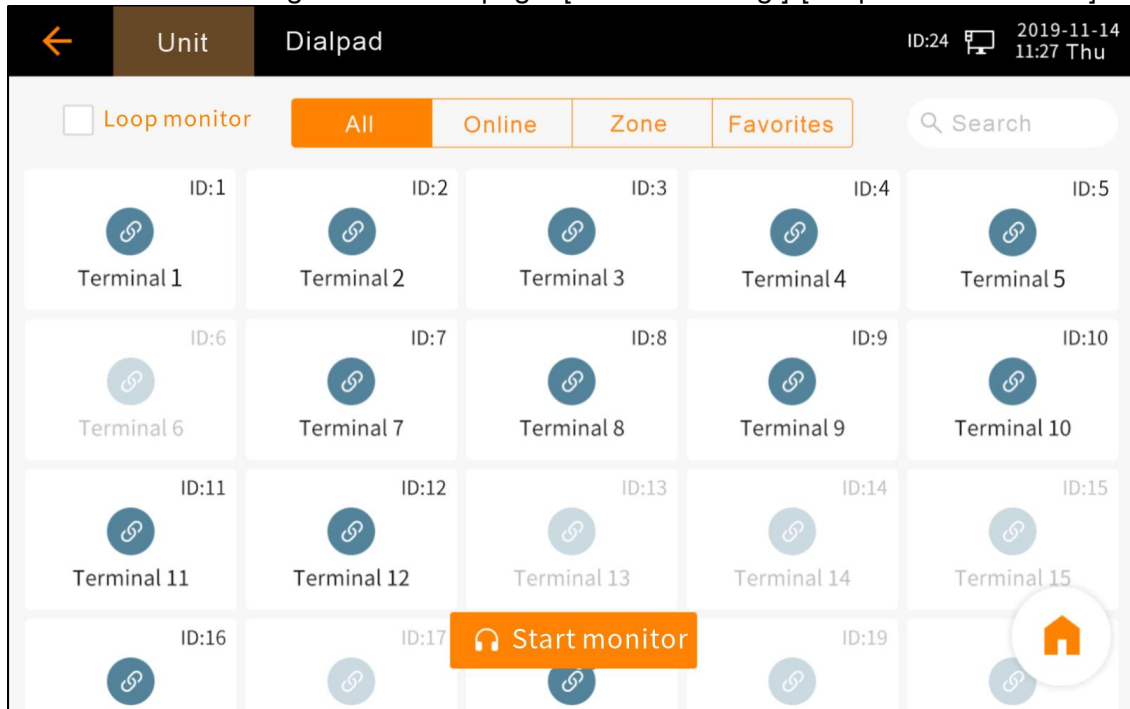
IP remote microphone can monitor one or more terminals online in the same server. If the monitored terminal is equipped with a camera, video monitor can be realized at the same time.

In the device home page, click [Monitor] to enter the monitoring module.



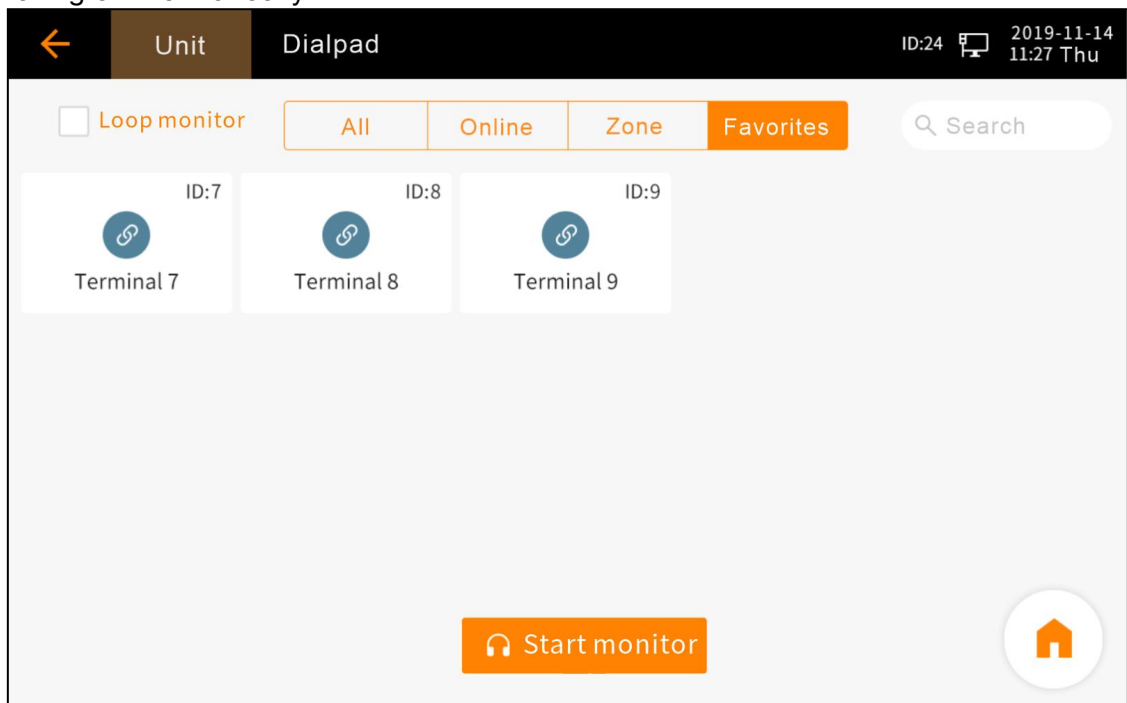
6.3.1 Single Monitoring/Loop Monitoring

You can set the monitoring time in WEB page: [Monitor Setting]-[Loop Monitor Interval].



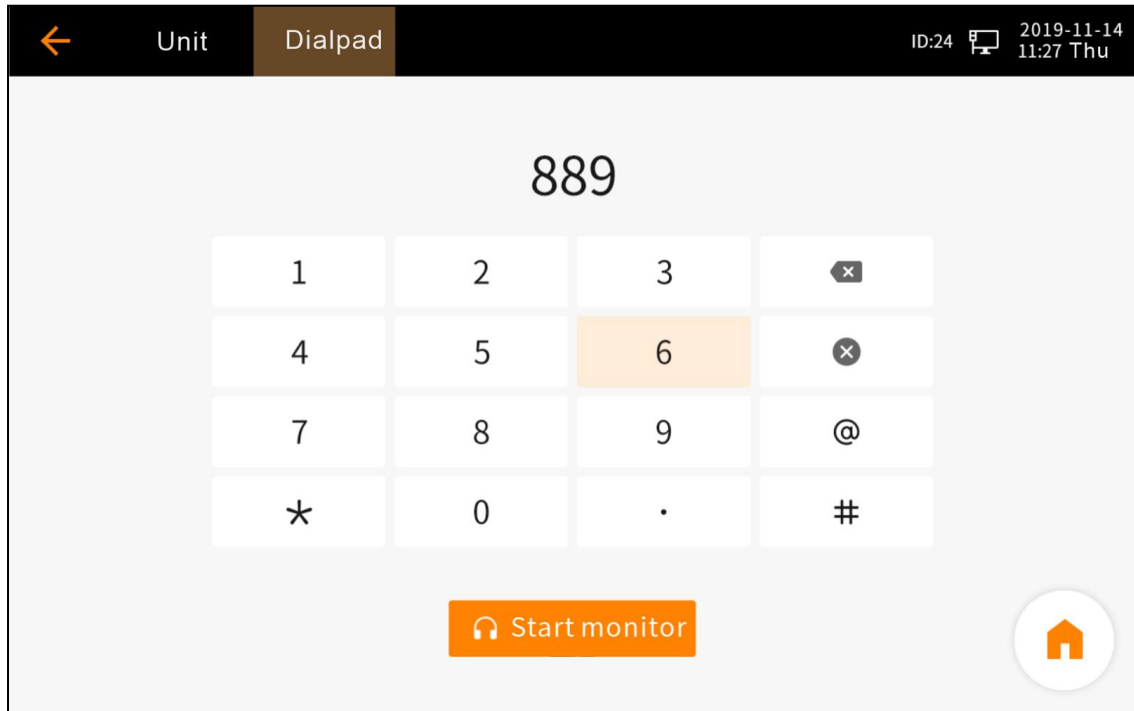
6.3.2 Favorites Monitoring

You can add a favorite terminal to the "Favorites" by below steps: [Settings]-- [Function]--[Add Favorite]. The favorite devices are displayed under "Favorites",and you can monitor to them by clicking on them directly.



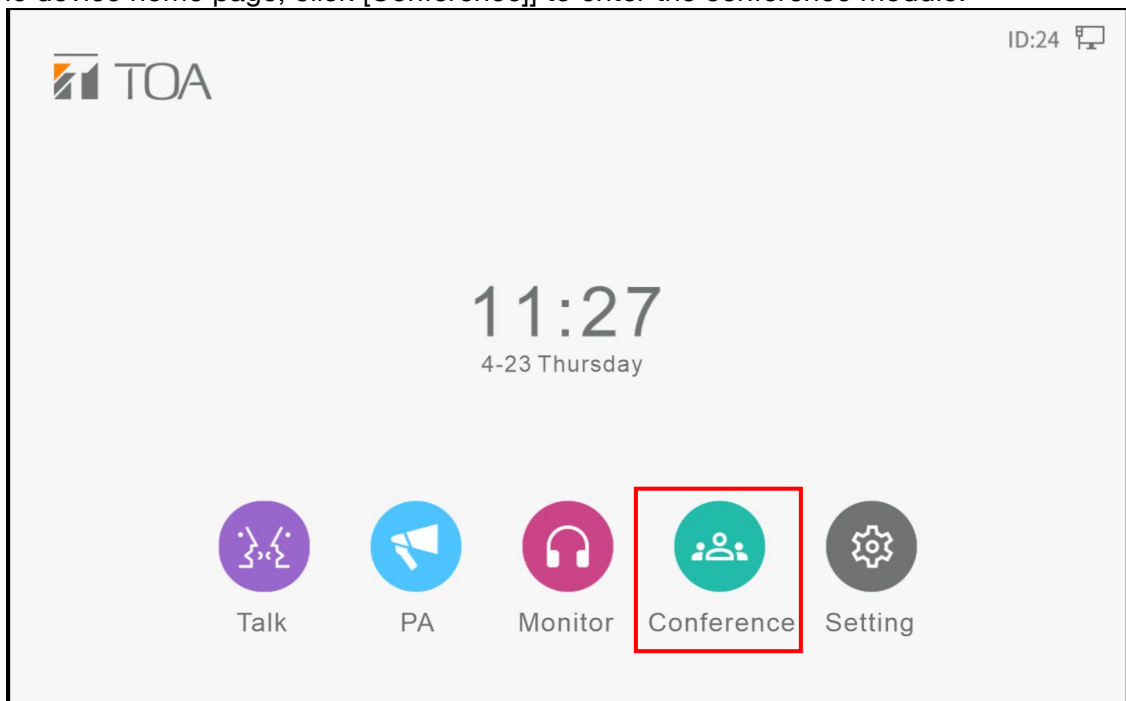
6.3.3 Dial-pad Initiated Monitoring

You can Click [Dialpad], and enter the ID of the target terminal you want to monitor, and press  Start monitor button to initiate monitor.



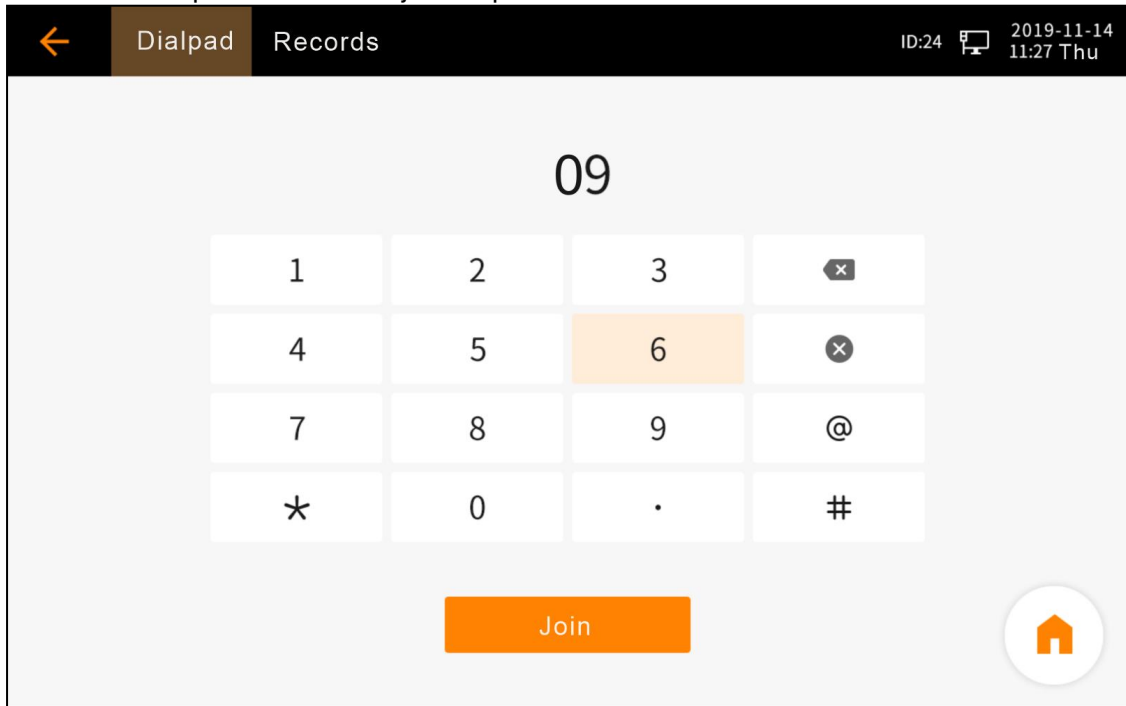
6.4 Conference Function

In the device home page, click [Conference]] to enter the conference module.



6.4.1 Join the Conference

Input 0 & meeting room No. in the dialpad and click on [Join],
The host can accept or refuse the join request.

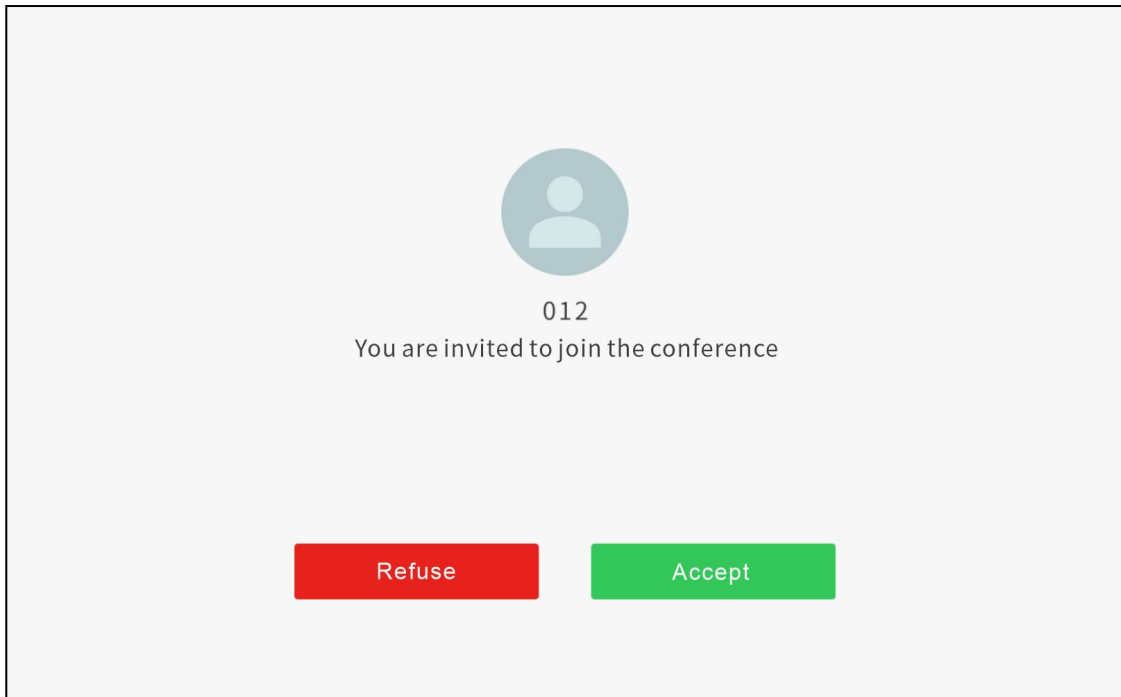


6.4.2 In the Conference

During the meeting, you can click the button [Apply] to speak, or you can click on [Exit] to exit the meeting.

6.4.3 Conference Invitation

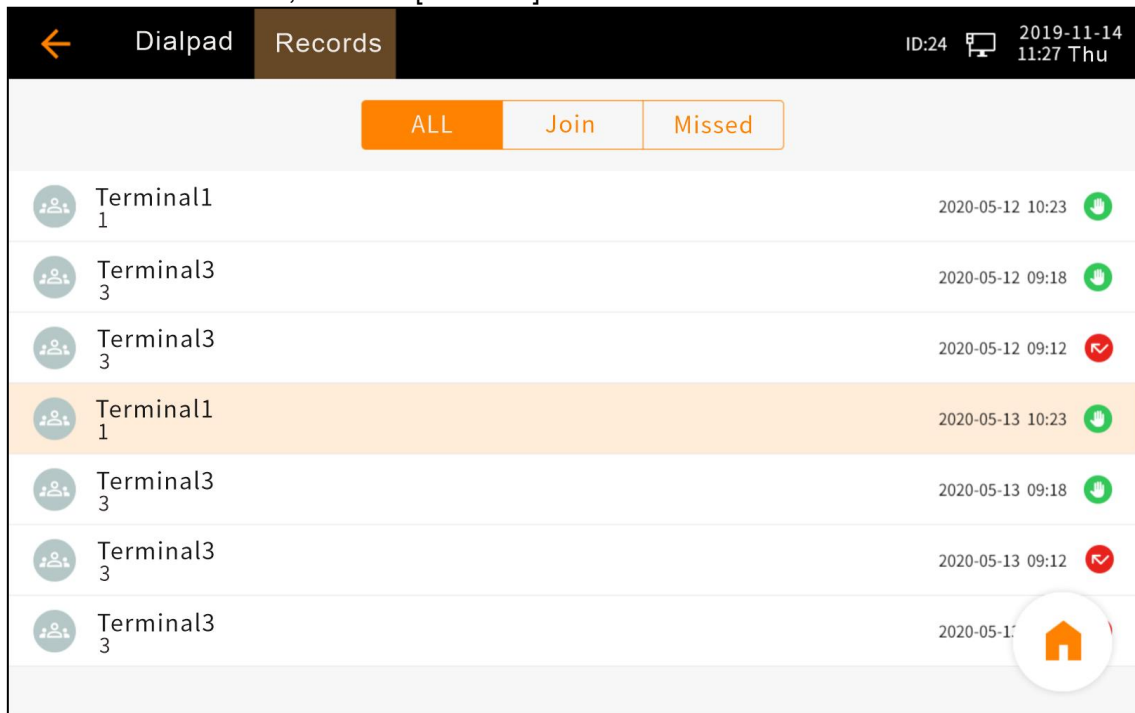
IP remote microphone can accept conference invitations from other devices. Click "Agree" to join the conference.



6.4.4 Conference Records

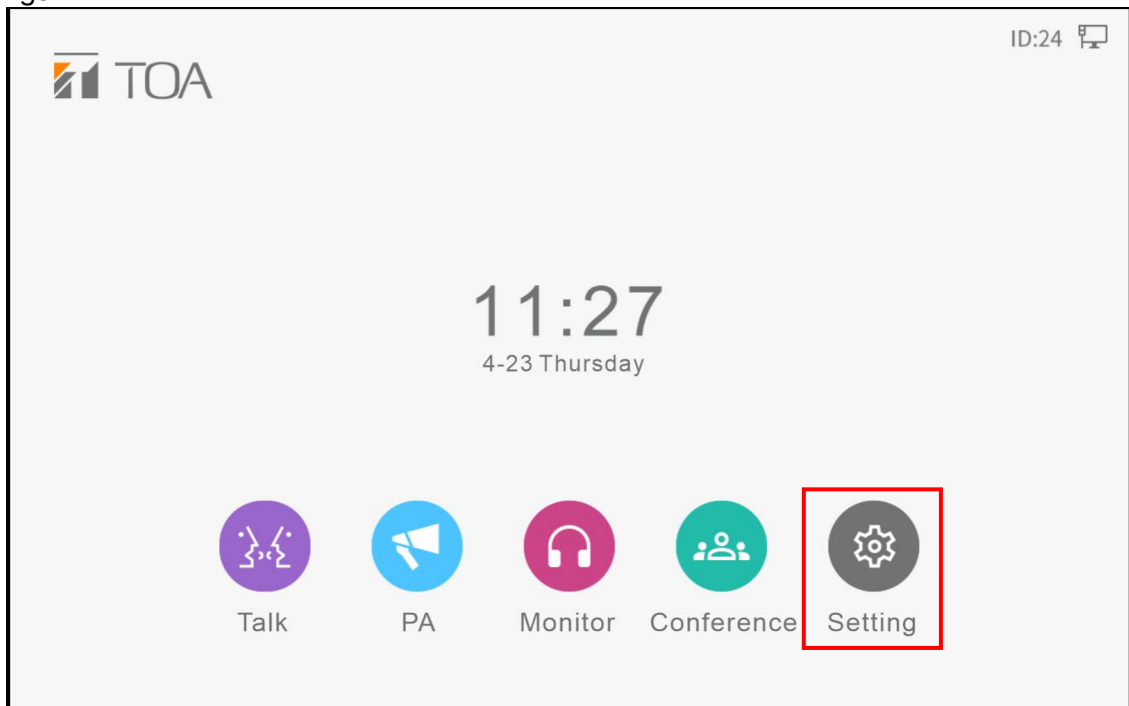
IP remote microphone can save all the conference records and you can search by different category like joined meeting, missed meeting.

In the conference module, click on [Records] to enter the conference record interface.



6.5 Settings

In the device home page, click on [Setting] and then enter the terminal password (default is 123456) you can make network parameters settings, function settings and other related settings.



Enter Password

● ● ● ● ○ ○

1	2	3
4	5	6
7	8	9
←	0	✕

6.5.1 Network Setting

In this page, you can set the device ID, IP address, server IP, default gateway, subnet mask and other network parameters. After saving the settings, restart the device to take effect.

Note: The IP address must be unique which can not be the same with other terminals. The default is: 192.168.1.101.

←	Network	Function	Info	ID:24 2019-11-14 11:27 Thu
	Unit ID		24	
	IP Configuration Mode		Static	
	Unit IP		192.168.3.165	
	Subnet mask		255.255.255.0	
	Default Gateway		192.168.3.1	
	SIP local port		5060	
	SIP server IP		192.168.10.102	
	SIP server port		5060	
	SIP server HTTP port		80	

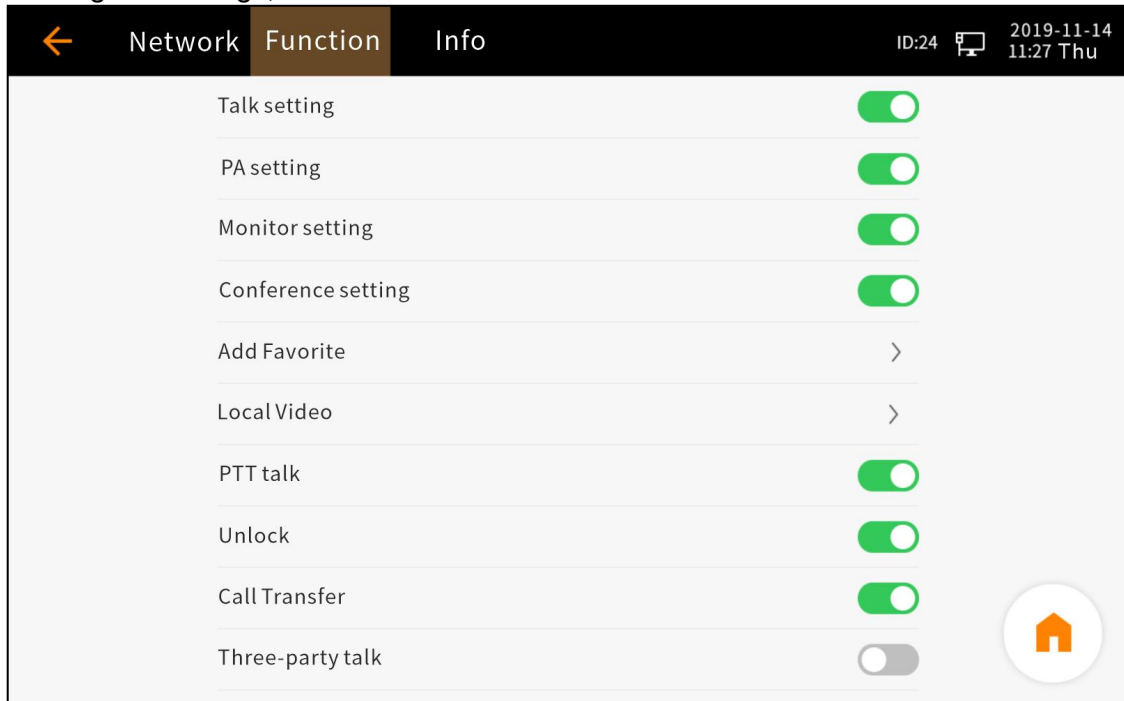


6.5.2 Function Setting

In this page, you can set whether to open the intercom interface, broadcasting interface and monitoring interface. The default is open, if you set it to close, in the home page, these modules will not be shown.

You also can set whether to enable PTT talk, remote unlocking, call transfer, three-way talk and other functions.

After saving the settings, restart the device to take effect.



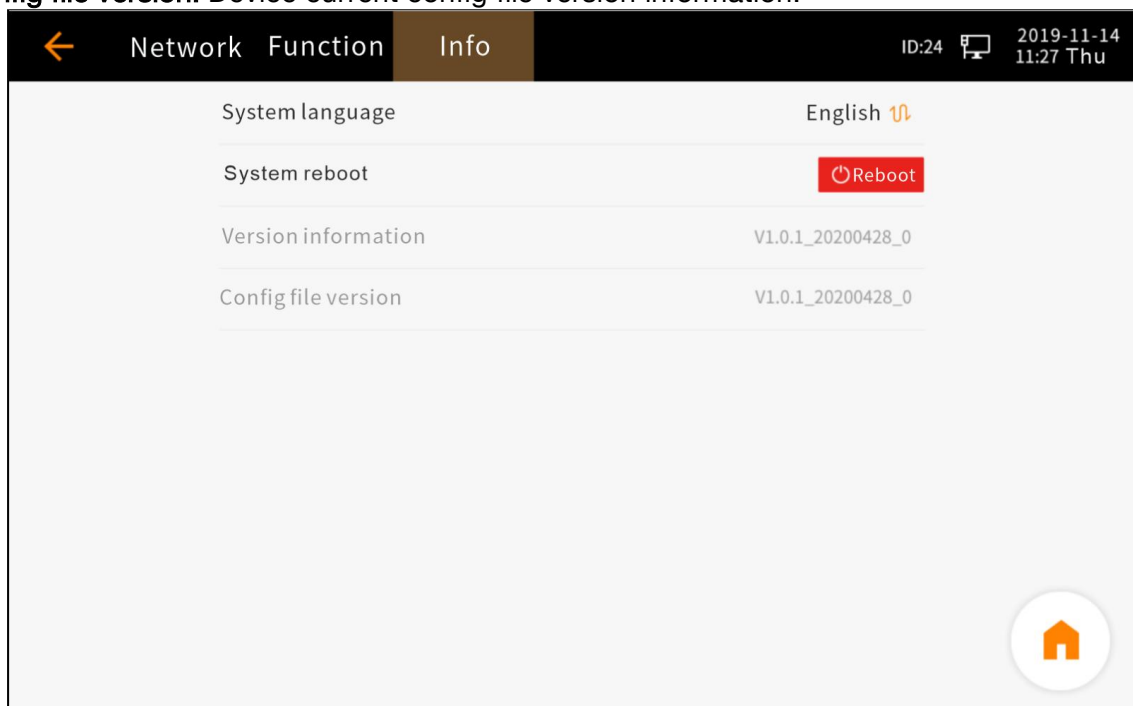
6.5.3 System Information

System Language: Support with English and Chinese.

System Reboot: Click on [Reboot] button, the device will reboot.

Version information: Device current firmware version information.

Config file version: Device current config file version information.

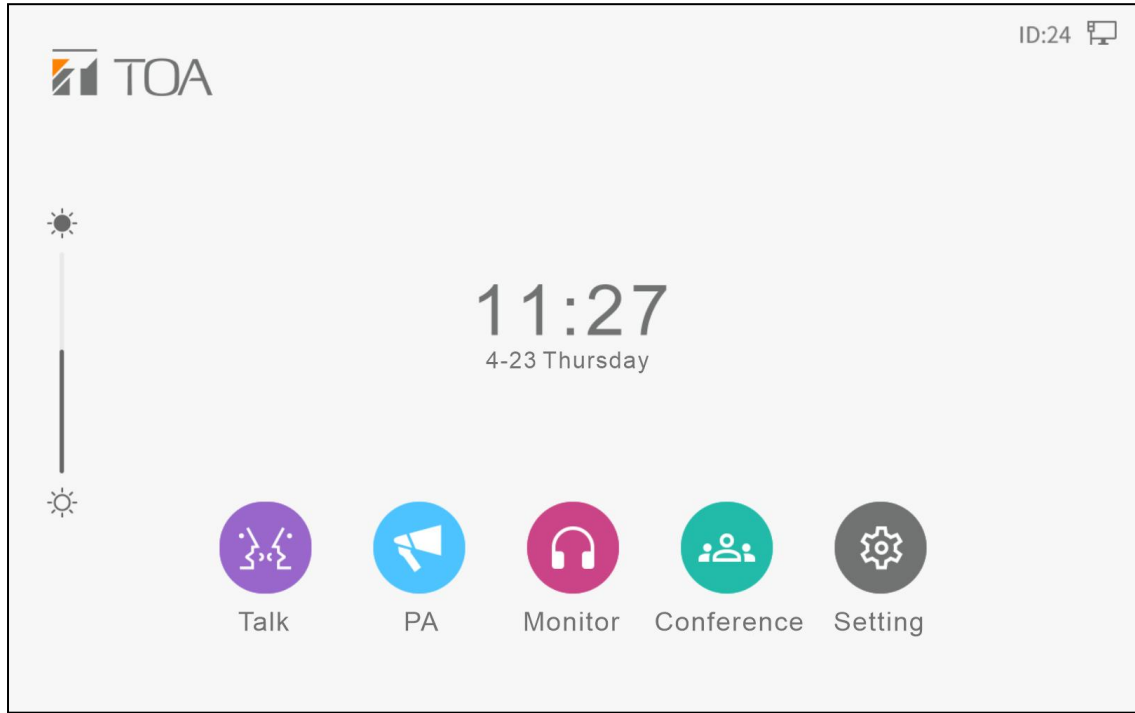


6.6 Turn to Home Page

Click on  button can return to the home page

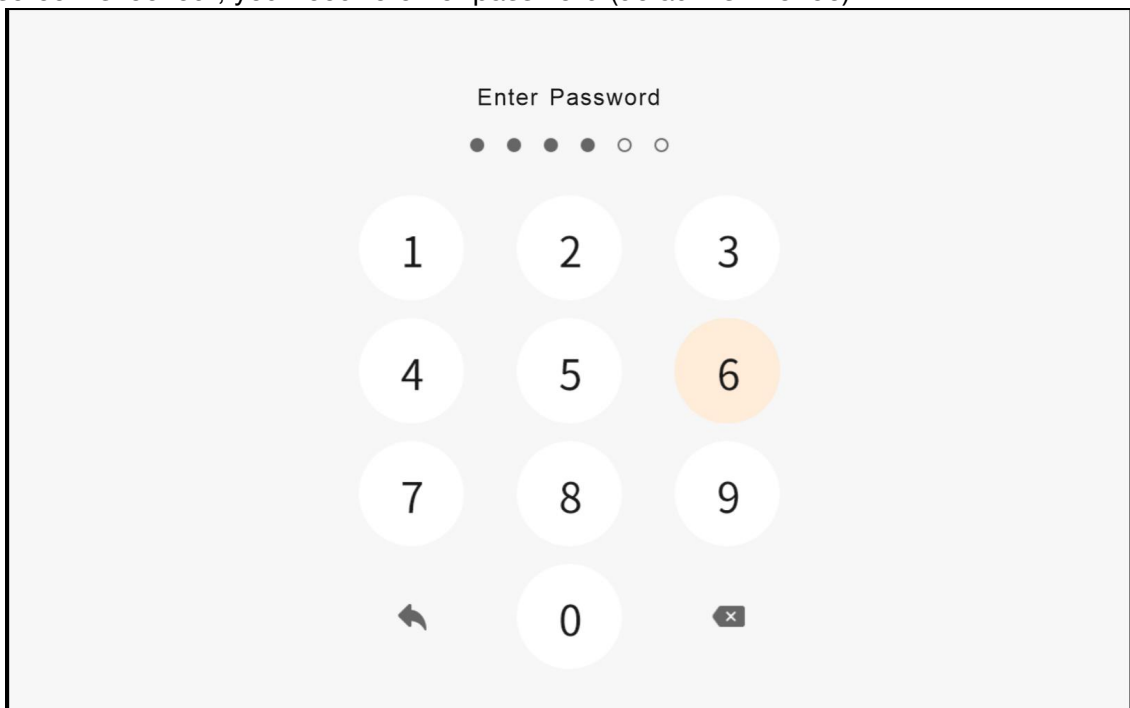
6.7 Brightness Adjustment

In the home page, slide your finger from top to bottom or from bottom to top to adjust the brightness of the screen.



6.8 Lock Screen

You can open the screen saver function in WEB "Basic Settings" - "System Parameters". If the screen is locked , you need to enter password.(default is 123456)



7. BASIC FUNCTION

7.1 Receive Broadcast

IP Remote Microphone can receive broadcasts initiated by server or other terminals.

8. APPENDIX

8.1 Specifications

Power Supply	DC12V/1.5A
Power consumption	≤10W (AC adapter)
Amplifier Rated Output	3W
Frequency response	40 - 18KHz
Microphone	Goose-neck type, electret microphone
Audio Digital Data	Sampling frequency: 8k – 44.1kHz, Quantization size: 16bit, Bitrate: 8k – 320kbps
Supported Audio codec	MP3, PCM, ADPCM
Internal messages	Maximum 1GB
Network I/F	100Base-TX, MDI/MID-X, RJ45
Network protocol	TCP/IP, UDP, ARP, ICMP, IGMP, HTTP, SIP, RTP
Interface	Control Input *1, Control Output (Normal Open/Normal Close) *1, Audio Line Input *1, Audio Line Output *1, RJ45 *1
Screen	7 inch touch panel color LCD screen
Language	English(default)/Chinese (Selectable)
Operating temperature	0 – 40°C
Operating humidity	90% or less (no condensation)
Finish	Aluminum black, ABS back
Dimensions	183.9(W) * 169.0(H) * 58.4(D) mm
Weight	0.72kg
Accessories	Gooseneck Microphone*1, Connection Terminal(3.5-5P)*1 Windscreen*1, AC adapter*1

Traceability Information for USA

Authorized representative:

TOA Electronics, Inc.

1 Harmon Plaza, Suite 700, Secaucus, New Jersey 07094, USA

Traceability Information for Canada

Authorized representative:

TOA Canada Corporation

3670 Odyssey Drive, Unit #1, Mississauga, ON L5M 0Y9, Canada

Traceability Information for Europe

Authorized representative:

TOA Electronics Europe GmbH

Suederstrasse 282, 20537 Hamburg, Germany

URL USA : <https://www.toaelectronics.com/>

URL Canada: <https://www.toacanada.com/>

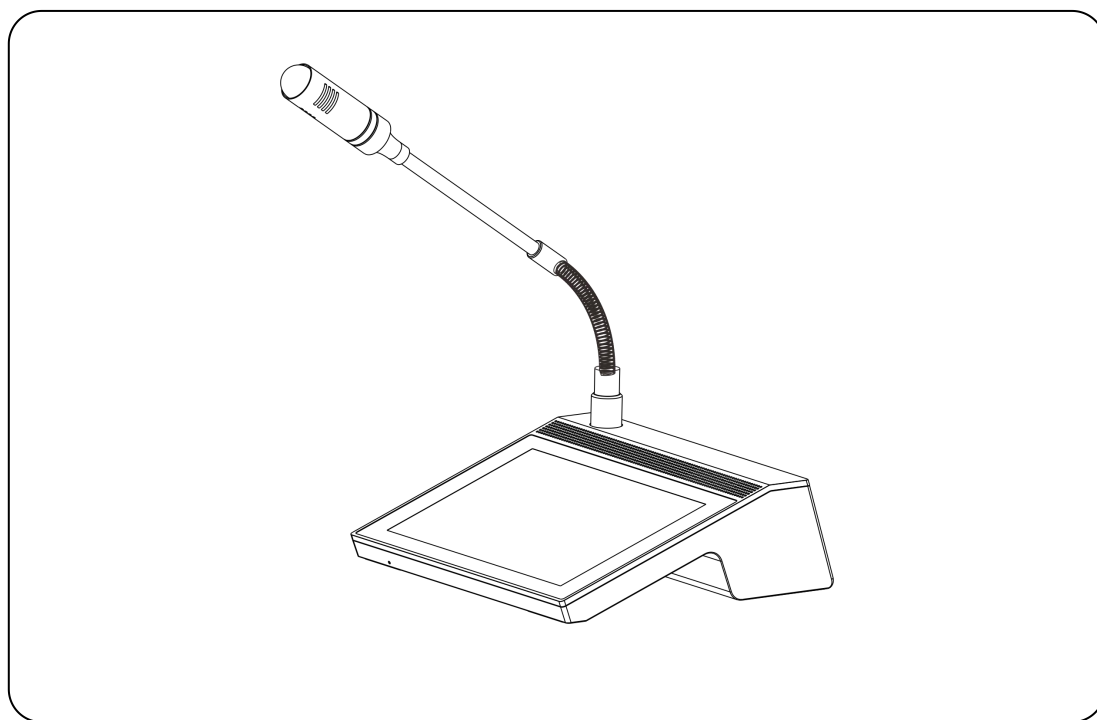
URL Global : <https://www.toa-global.com/en>



使用说明书

网络遥控话筒

IP-107RM



承蒙您购买 TOA 产品，深表感谢。

务请仔细阅读本手册的指导使用，以确保机器长期、无故障地运行。

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第一章：安全注意事项

请遵守警告以及有关安全提示。

请在阅读完毕后，将本手册置于取用方便之处，以备日后参考之用。

警告警示



该标志表示，设备打开操作潜在安全隐患，非专业人员误操作时可能导致严重伤害或死亡。



该标志用于提醒用户,本设备的随附资料中包含了重要的操作和维护(维修)说明。

设置及安装机器时

(1) 避免被水沾湿

请勿将机器暴露于雨天或可能被水或其它液体沾污的环境，否则可能导致火灾或触电。

(2) 请勿使用指定外的电源电压

必须使用机器所标识的电压连接机器。

使用高于所标识的电压时，可能会导致火灾或触电。

(3) 请勿刮伤电源线

请勿刮伤电源线，也请勿切割、扭绞电源线。

同时避免电源线靠近发热体，禁止在电源线上放置重物（包括机器本身），否则可能引发火灾或触电。

使用机器时

(1) 一旦发生异常

在使用中，发现以下异常现象立即切断电源，请与经销商联系。如继续使用，将有可能引发火灾或造成触电。

- 机器冒烟、或是发出怪味。
- 机器内部被水或异物侵入。
- 机器摔落，或机器外壳破损。
- 电源线受损（线芯外露或断线等）。
- 不能联网、没有声音等。

(2) 请勿打开机器内部或改造机器。

请勿让异物侵入机器内部

请勿让金属类物品或易燃性物体等异物丢入机器内部，否则将有可能引发火灾或造成触电。

(3) 打雷时请勿触摸

为避免触电，雷电时请勿触摸机器、插头等。

(4) 请勿将装有液体的容器或小的金属物体放置于机器上方

若不慎打翻容器，并让液体渗入机器时，将有可能引发火灾或造成触电。

(5) 请勿打开机器内部或改造机器

机器内部包含高电压零件，一旦打开外盖，或改造机器时，将有可能引发火灾或是造成触电。一切有关维修和机器内部改造等事项，需由专业人员操作。

(6) 维护保养时或长时间不使用时之注意事项

维护保养时，或机器10天或10天以上的时间不使用时，为确保安全，请切断电源开关，并将电源插头拔出。

若未遵守本项规定，将有可能造成触电或引发火灾。

第二章：产品说明

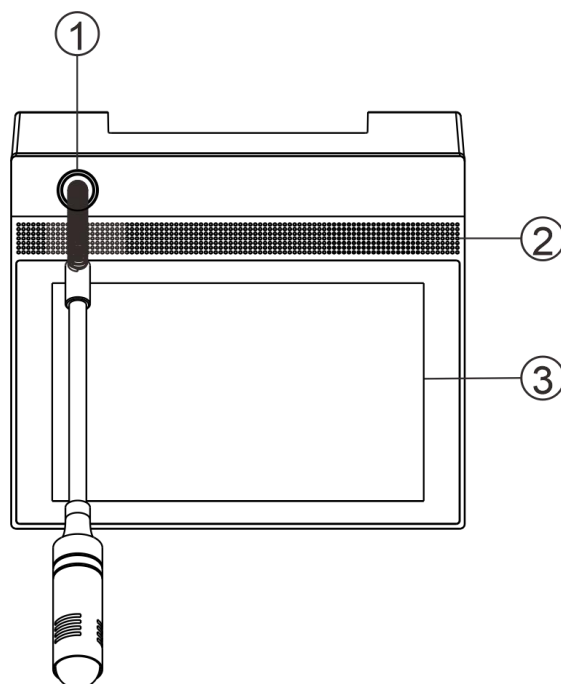
2.1 概述

网络遥控话筒应用于主控室或领导办公室，可进行广播、监听和对讲。

- ①具有 7 寸数字高清显示屏；分辨率达 1280*800。
- ②支持全区、分区、指定终端进行喊话广播。
- ③支持音频文件广播、预录音广播、文本转语音广播发送至指定区域或终端。
- ④支持一键紧急广播，可将广播发送到全部终端。
- ⑤支持循环监听前端设备。
- ⑥支持来电/去电显示功能，来电话音播报。
- ⑦支持来电、广播铃声自定义。
- ⑧支持查看其他终端的工作状态(登录状态、对讲状态、任务状态)。
- ⑨内置降噪处理算法，提升降噪效果、提高受话距离和音频音质。
- ⑩标准 RJ45 接口，有以太网口的地方即可接入，支持跨网段和跨路由。

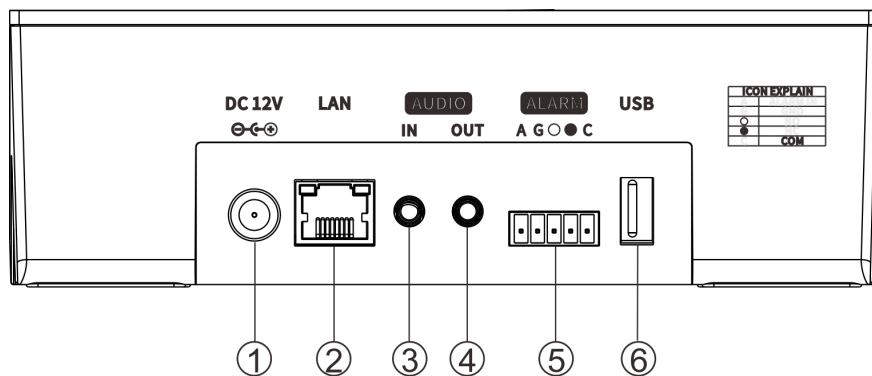
2.2 接口说明

【前面板】



- ①筒杆插座：插入话筒杆，采集对讲音频。
- ②扬声器：还原远端和本地声音。
- ③触摸屏：人机交互输入通道，接受指令输入。

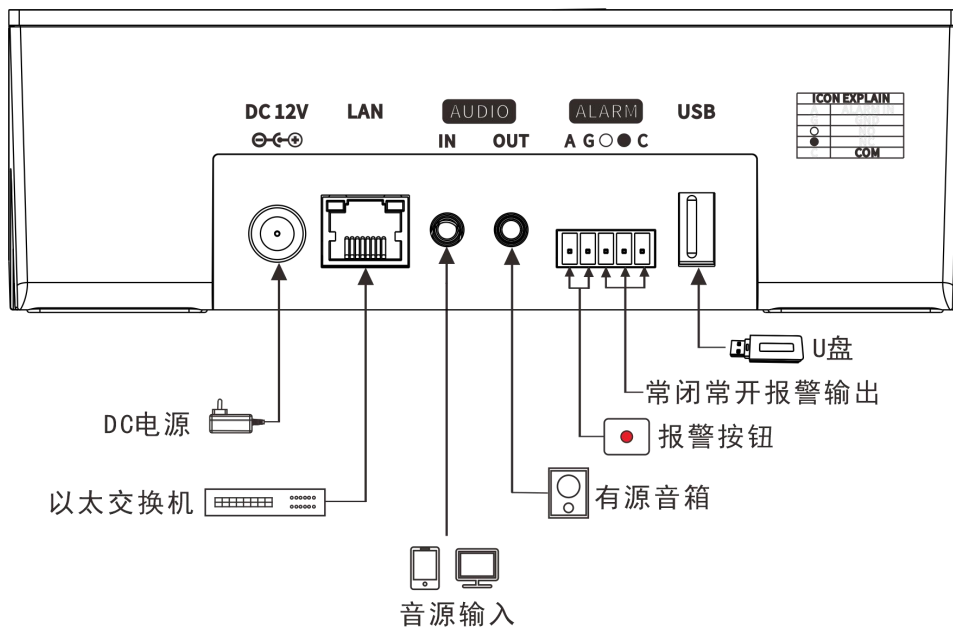
【后衬板】



- ①电源输入接口：连接 DC12V/1.5A 电源。
- ②网络接口：插入网线，连接交换机。
- ③线路输入接口：此接口可接手机，电脑等设备。
- ④线路输出接口：连接有源音箱或功放。
- ⑤报警输入输出接口。
- ⑥USB 接口：可插入 U 盘，U 盘中的音频文件和 TXT 文件可用于广播。

第三章：接线和安装

3.1 系统接线图



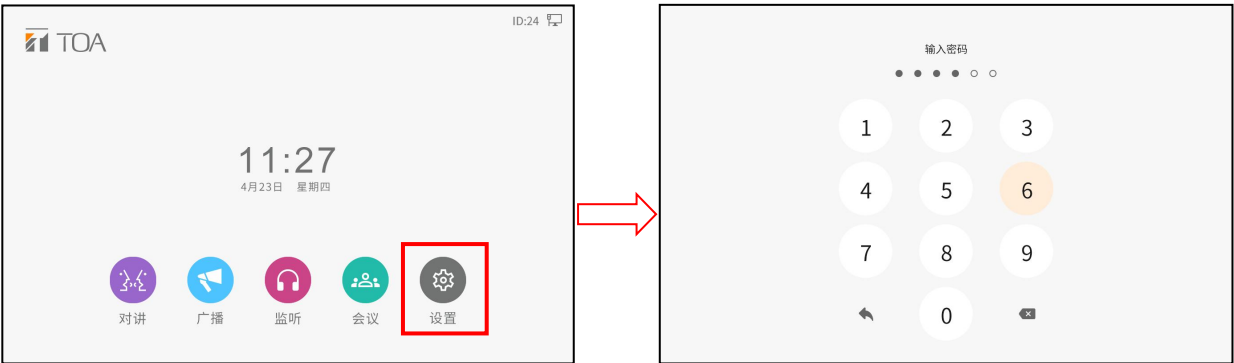
第四章：基本网络设置

将终端接通网络和电源，根据现场使用环境更改本终端的网络参数，方式如下：

4.1 液晶屏方式

(1) 输入密码登录

在设备主页，点击【设置】，输入设置的密码（修改密码，在 WEB 页面的“基本设置” -- “系统参数” -- “设置参数密码”下修改），默认密码为 123456。



(2) 网络参数的设置

进入设置界面后，点击网络参数，进入“网络参数”界面。在此界面设置终端的设备 ID、本机 IP、网关、子网掩码、服务器 IP、端口等网络参数。

设置完毕后，重启设备生效。



4.2 网页方式

进入网络遥控话筒的 WEB 界面，根据现场环境修改网络参数中的各项参数，设置完成后，点击“保存”。具体操作步骤参考基本设置中的“协议设置”和“终端设置”。

第五章：界面说明

设备上电开机后进入主界面，相关说明如下：



①功能菜单栏：点击可进入对应的功能界面。

②终端图标，相关图标说明如下：

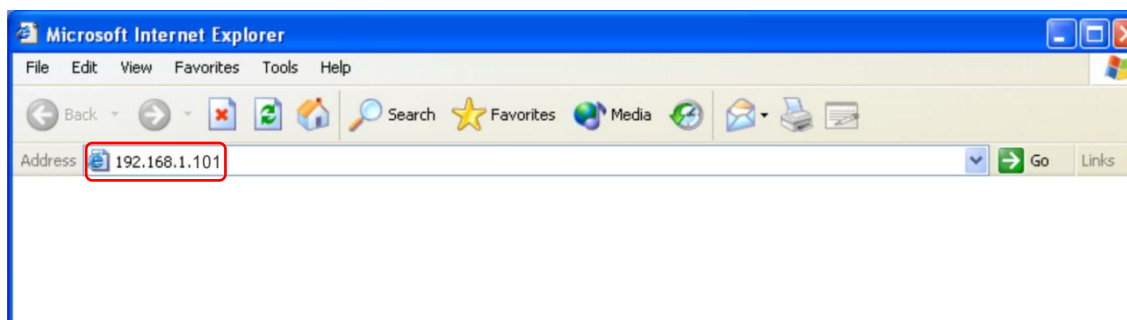
名称	图标内容	说明
网络状态图标		设备登录了服务器。
		已连接网络，但未登录上服务器，为脱机状态。
		未插入网线。

③设备 ID（备注：ID 最大长度为 7 位）

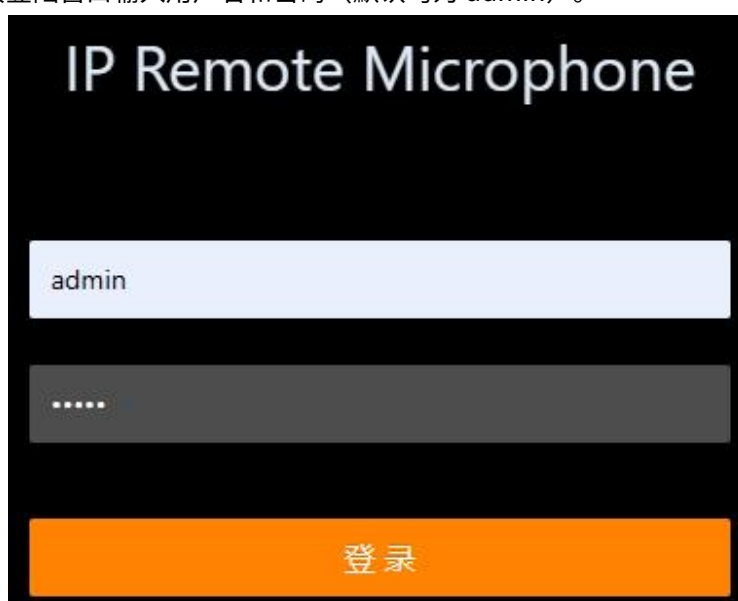
第六章：自定义终端参数

6.1 登录 WEB 界面

步骤 1.在浏览器地址栏中输入：**网络遥控话筒的 IP 地址**（出厂默认 IP 为 192.168.1.101）后按回车键。



步骤 2.在 Web 页登陆窗口输入用户名和密码（默认均为 admin）。

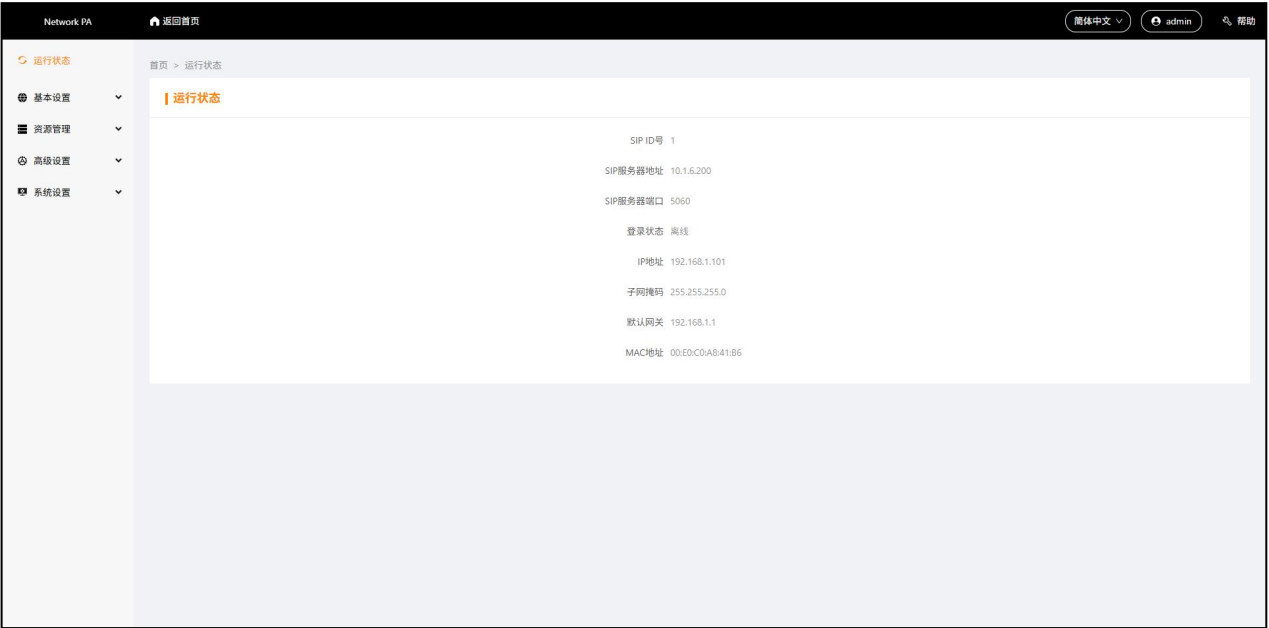


注意：用户名和密码有大小写之分。

步骤 3.按[登录]之后可进入网络遥控话筒的 WEB 页面。（备注：本文档中的截图仅供参考，具体请以实际界面为准。）

6.2 运行状态

显示设备 SIP ID、SIP 服务器地址、SIP 服务器端口、设备登录状态、设备 MAC 地址、设备 IP、默认网关等信息。



6.3 基本设置

6.3.1 终端设置

设置终端网络参数，请根据终端所在环境修改网络参数中的各项参数，完成后点击[保存]，设备会自动重启，重启后参数修改生效。

Network PA

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首页 > 基本设置 > 终端设置

保存

终端设置

IP配置模式

动态

IP地址

192.168.1.101

子网掩码

255.255.255.0

网关

192.168.1.1

DNS1

211.142.211.124

DNS2

211.142.211.124

终端设置相关参数含义如下：

IP 配置模式	支持静态 IP 和动态 IP 配置方式。 静态 IP：默认采用静态 IP，用户自定义 IP 地址等信息。 动态 IP：通过 DHCP 动态分配 IP 地址。
IP 地址	设备的 IP 地址，出厂默认 IP 为 192.168.1.101，不可与其它终端重复。
子网掩码	终端所处子网的掩码。
网关	终端所处网络的网关。
DNS1	终端所处网络的首选域名解析器的 IP。
DNS2	终端所处网络的备用域名解析器的 IP。

6.3.2 协议设置

此设备支持 SIP 协议和 NAS 协议。默认为 SIP 协议。
可根据实际登陆的服务器来选择使用的传输协议。

SIP 协议：

此设备默认为使用 SIP 协议。如设备登陆的是 NAS(内通) 协议的服务器，此处需选择 NAS 协议，具体参数设置请参考 NAS 协议的设置介绍。

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首页 > 基本设置 > 服务参数

保存

服务参数

传输协议

SIP

SIP ID号

1

密码

SIP服务器地址

192.168.1.101

SIP服务器端口

5060

终端SIP端口

5060

HTTP用户名

device

HTTP密码

HTTP端口

80

参数含义如下：

传输协议	设置终端与服务器正常通信的协议，默认为 SIP 协议。
SIP ID 号	标识设备的唯一编号，不能与终端或其他主机重复。
密码	终端登录 SIP 服务器的密码，默认为 1234。
SIP 服务器地址、端口	终端所登陆的 SIP 服务器地址，请正确填写 SIP 服务器 IP 地址或域名，端口除特殊情况外不得随意修改（默认为 5060）。
终端 SIP 端口	根据实际情况配置本地网络端口，默认为 5060。
HTTP 用户名	用于获取服务器参数，默认为 device。
HTTP 密码	与 HTTP 用户名对应使用，用于获取服务器参数。 密码需和服务器的密码一致，且不能为默认密码。
HTTP 端口	登录 WEB 页面的端口，默认为 80。

NAS 协议：

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服务参数

传输协议

NAS

NAS ID号

1

NAS服务器地址

192.168.1.13

NAS服务器端口

2048

备用服务器IP

192.168.1.14

备用服务器端口

2048

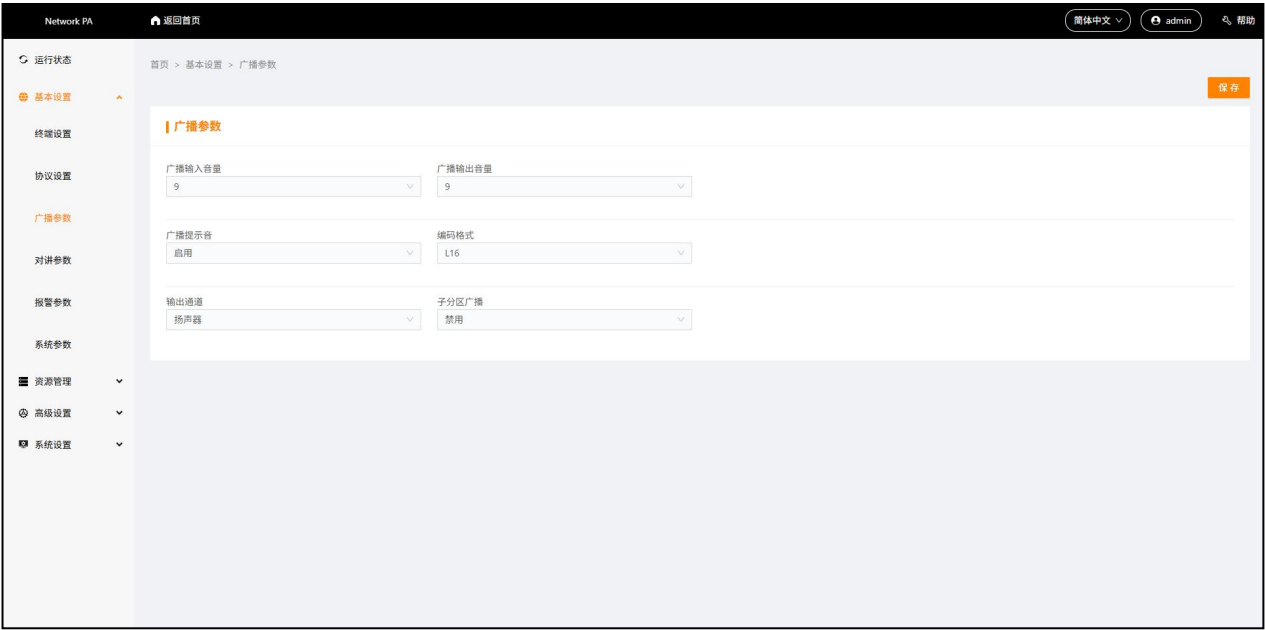
终端NAS端口

2046

参数含义如下：

传输协议	设置终端与服务器正常通信的协议，默认为 SIP 协议。
NAS ID 号	标识设备的唯一编号，不能与终端或其他主机重复。
NAS 服务器地址、端口	终端所登陆的 NAS 服务器地址，请正确填写 NAS 服务器 IP 地址或域名，端口除特殊情况外不得随意修改（默认为 2048）。
备用服务器 IP、端口	备用 NAS 服务的的 IP 地址和端口。
终端 NAS 端口	根据实际情况配置本地网络端口,默认为 2046。

6.3.3 广播参数



参数含义如下：

广播输入音量	可根据实际使用修改广播输入音量。
广播输出音量	可根据实际使用修改广播输出音量。 备注：广播输入输出音量仅在脱机状态下生效。设备联机时，广播输入输出音量由服务器控制。
广播提示音	启用或者禁用广播提示音。启用时，当接收到广播时，会有广播提示音。
编码格式	设置广播编码格式。可选 L16 或 MP3。
输出通道	设置广播时，音频输出通道，可选择扬声器/线路输出。 出厂默认为扬声器。
子分区广播	设置是否启用子分区广播功能。

6.3.4 对讲设置

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首页 > 基本设置 > 对讲参数

保存

对讲参数

对讲监听输入音量

9

对讲监听输出音量

9

TTS播报

禁用

铃声输出音量

9

输入通道

鹅颈话筒杆

输出通道

扬声器

接听方式

手动接听

自动接听时间

3

三方通话

禁用

回声抵消

启用

回声抵消模式

webrtc

被监听功能

禁用

循环监听间隔

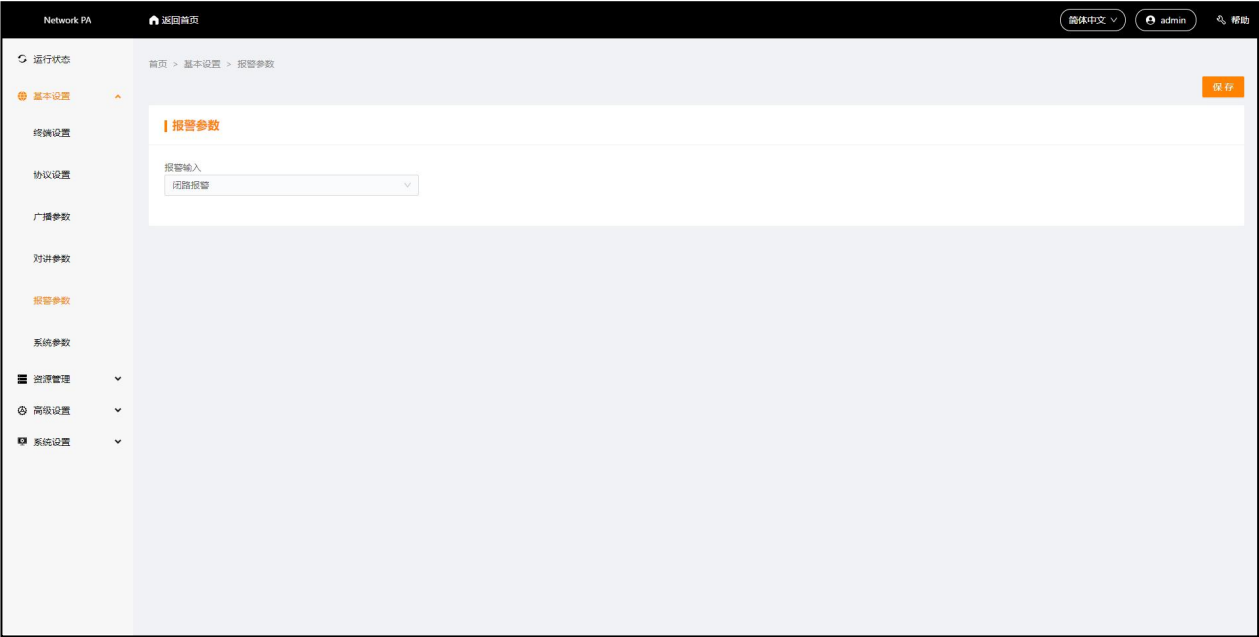
25

参数含义如下：

对讲监听输入音量	设置脱机对讲和被监听时的输入音量大小。
对讲监听输出音量	设置脱机对讲和监听时的输出音量大小。 备注：对讲监听输入输出音量仅在脱机状态下生效。设备联机时，对讲输入输出音量由服务器控制。
TTS 播报	开启 TTS 播报，在被呼叫时会播报对端设备的终端名称，默认关闭。
铃声输出音量	设置广播、对讲铃声提示音的音量大小。
输入通道	设置对讲时，音源输入通道，可选择鹅颈话筒杆/线路输入/自动。 出厂默认为鹅颈话筒杆输入。 设置为自动时，插入音频线话筒杆灯灭，音源由“线路输入”进行输入。
输出通道	设置对讲时，音源输出通道，可选择扬声器/线路输出，出厂默认为扬声器。
接听方式	可设置自动接听/手动接听。 手动接听：设备呼入时，按接听键才能接听对讲。 出厂默认为手动接听。
自动接听时间	设置设备自动接听时间。
三方通话	启用或禁用三方通话功能。
回声抵消	启用或禁用回声抵消功能。
回声抵消模式	可选 speex 和 WEBRtc。
被监听功能	选择开启，终端可以接收其它终端发起的监听； 选择关闭，终端将不支持被监听； 出厂默认为关闭。
循环监听间隔	循环监听多个终端时，设置每个终端的监听间隔时间，按设置的时间转跳下一个终端。

6.3.5 报警参数

设置终端报警参数，修改完成后点击[保存]，重启设备生效。

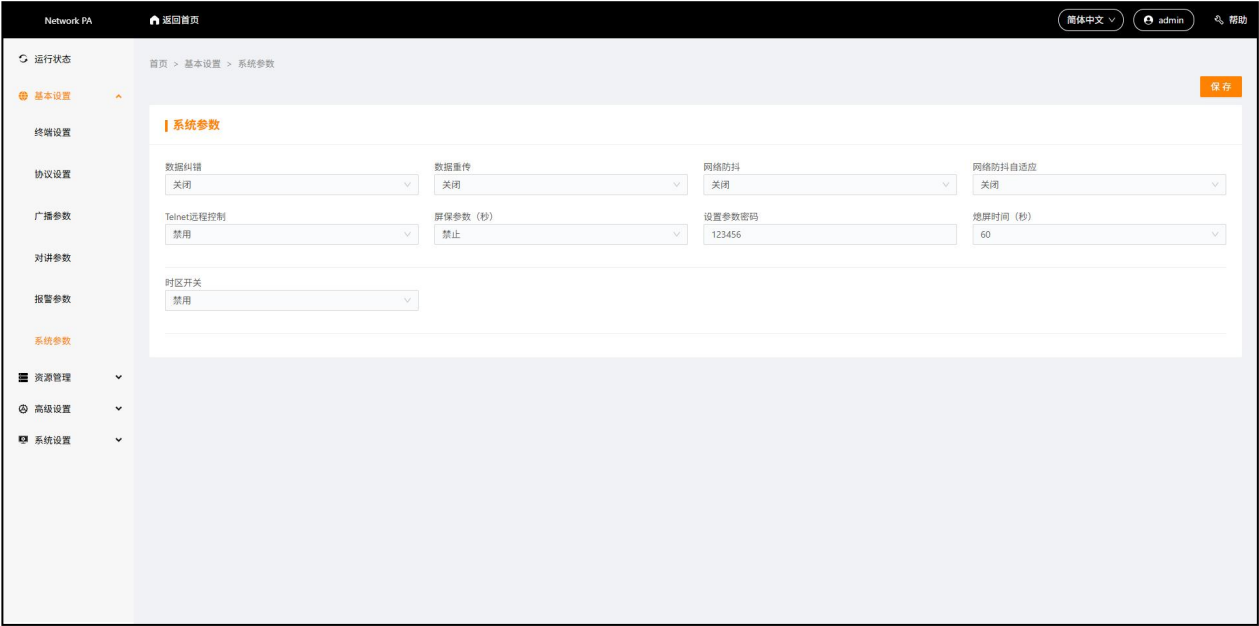


参数含义如下：

报警输入	闭路报警：外接设备平常处于开路状态，当报警输入口闭合会上报服务器。
	开路报警：外接设备平常处于闭路状态，当报警输入口断开会上报服务器。
	状态报警：外接设备平常处于开路或闭路状态，当报警输入口闭合或断开会上报服务器。

6.3.6 系统参数

设置系统参数，修改完成后点击[保存]，设备会自动重启，重启后参数修改生效。



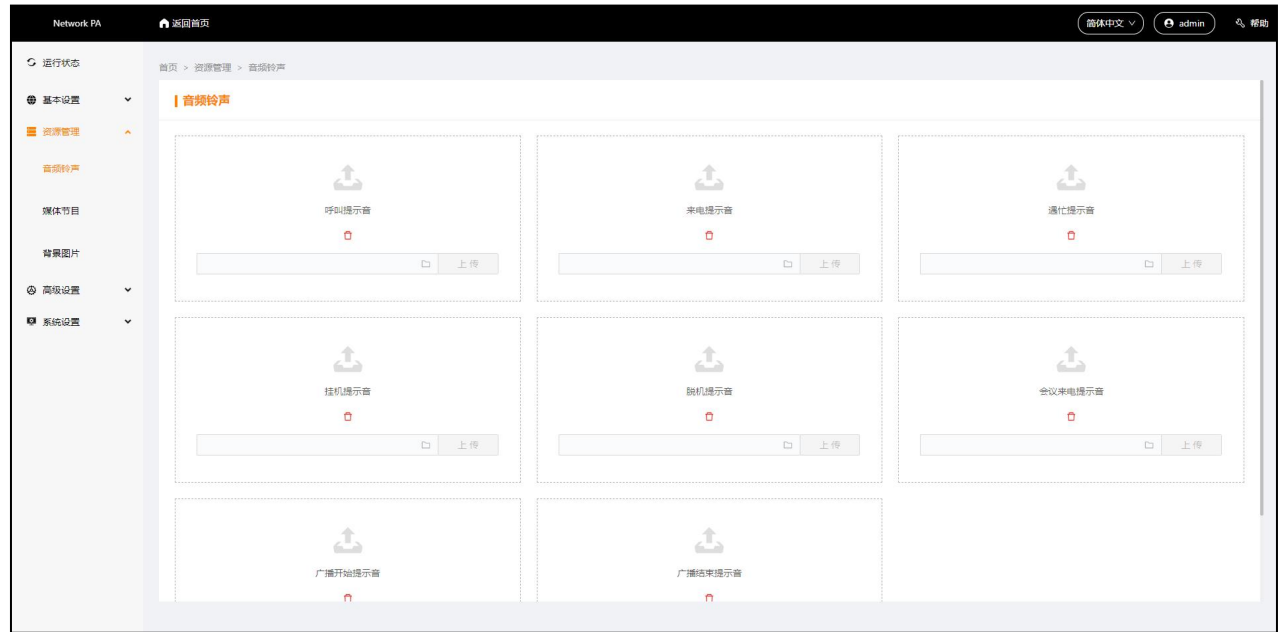
参数含义如下：

数据纠错	启用后，在网络丢包 15%以内，设备能正常音视频对讲。 在网络较差的环境下，建议开启数据纠错功能。
数据重传 网络防抖 网络防抖自适应	启用后，可改善网络较差环境下（例如出现网络丢包）的视频质量。 防抖、自适应仅在 SIP 协议下有效，NAS 协议无此功能。启用后还必须在 SIP 服务软件“高级设置”——“综合设置”中的“网络自适应”中同步“启用”自动纠错和丢包重传。（注：开启“自适应”跟“纠错”功能的页面以 SIP 服务软件说明书为主） 网络自适应 自动纠错FEC 启用 丢包重传RTX 禁用
视频数据包长度	请根据通信效率和传输延迟设置合适的值，默认为 1400。
Telnet 远程控制	开启后，能通过 Telnet 命令远程登录设备。
屏保参数	在设备空闲时启用屏幕保护界面；默认为禁用。 启用屏保后，用户可根据实际需要设置自动锁屏时间，当终端无任何操作时，会根据设置的时间自动锁屏。
设置参数密码	如设备启用了屏保功能，需要设置解锁密码，密码只支持 6 位数的正整数，默认为 123456。（备注：屏保密码跟设备进入“设置”模块的密码共用）
熄屏时间(秒)	在一定的时间内，没有任何操作，或者没有对讲、广播、监听等任务时，屏幕就会自动将背光调至最低，默认开启，为 60 秒。
时区开关、 时区设置	设置是否启用时区设置功能。 启用后，设置终端所处时区。

6.4 资源管理

6.4.1 音频铃声

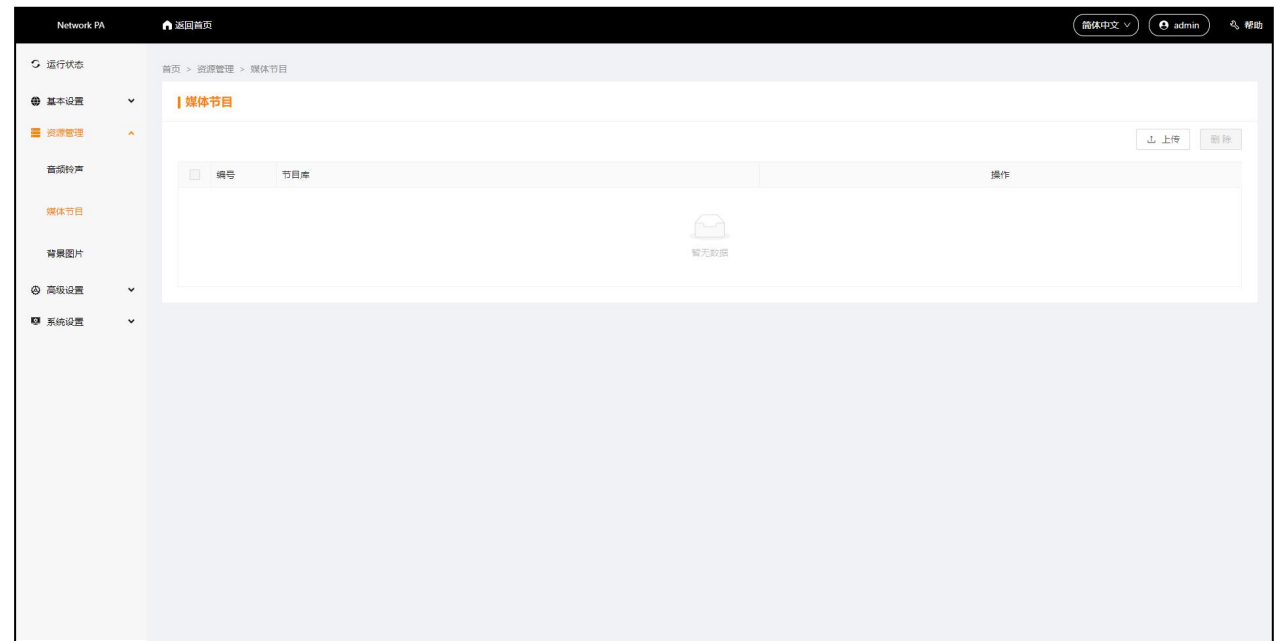
用户可根据需要自定义呼叫、来电、遇忙等提示音。点击“📁”按钮，选择需要更改的提示音文件进行上传，按“上传”按钮上传提示音。注：每条提示音必须 WAV 格式。



6.4.2 媒体节目

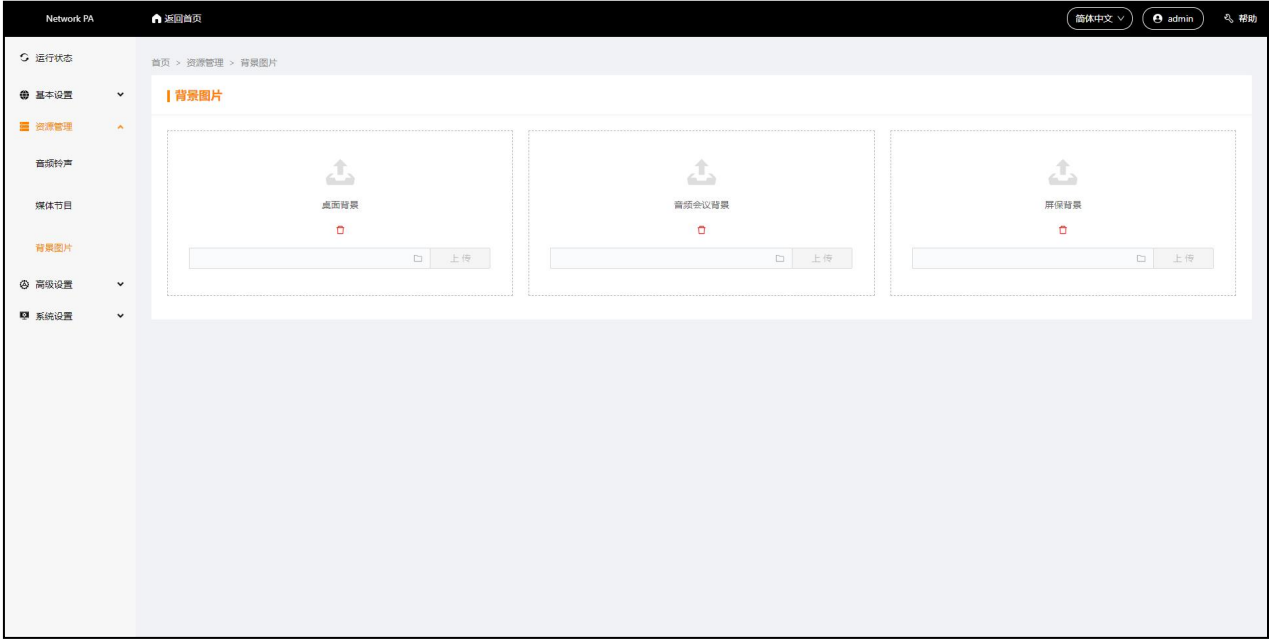
用户可上传 WAV、MP3、TXT 格式文件，作为广播音源使用。其中单个 WAV 文件大小必须为 22K，单个 TXT 文件最多支持支持 2500 个汉字（包括标点）（TXT 文件建议使用 UTF-8 编码格式）。文件上传成功后，重启设备生效。

在发起广播操作时，点击“音源选择”可选择已上传的音源文件或 TXT 文件（通过将 TXT 文本中的文字转换成音频对目标区域发起广播）进行广播。



6.4.3 背景图片

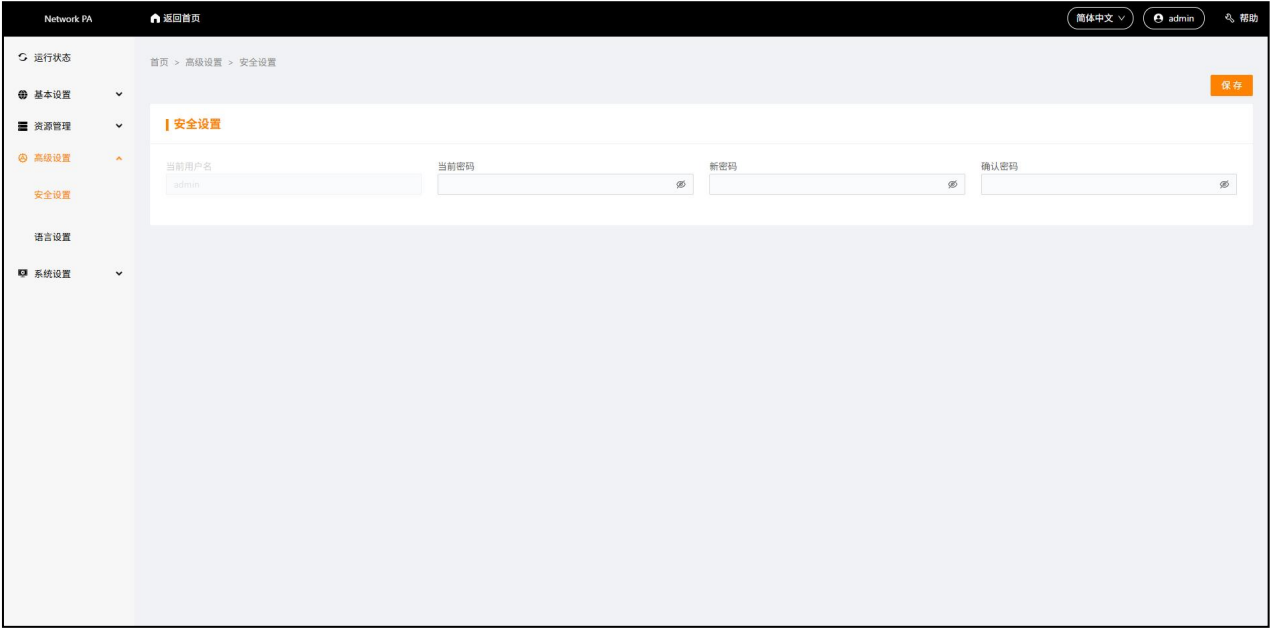
用户可根据需要自定义终端桌面、音频会议、及终端屏保背景，点击“”，选择需要更改的图片进行上传，按“开始上传”按钮上传图片，重启设备后生效。**注：图片格式只支持 jpg 格式。**



6.5 高级设置

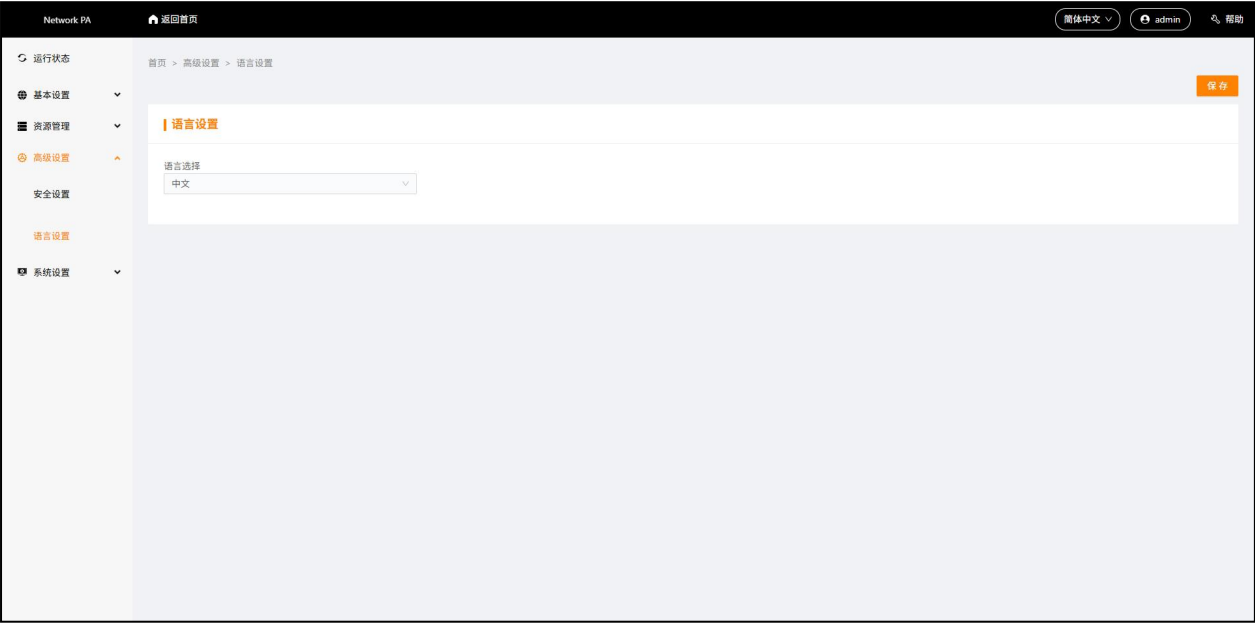
6.5.1 安全设置

在安全设置界面可修改登录 WEB 页面的密码。密码修改保存后，重启网页生效。



6.5.1 语言设置

设置终端显示语言，支持中文和英文。设置保存后，重启网页生效。

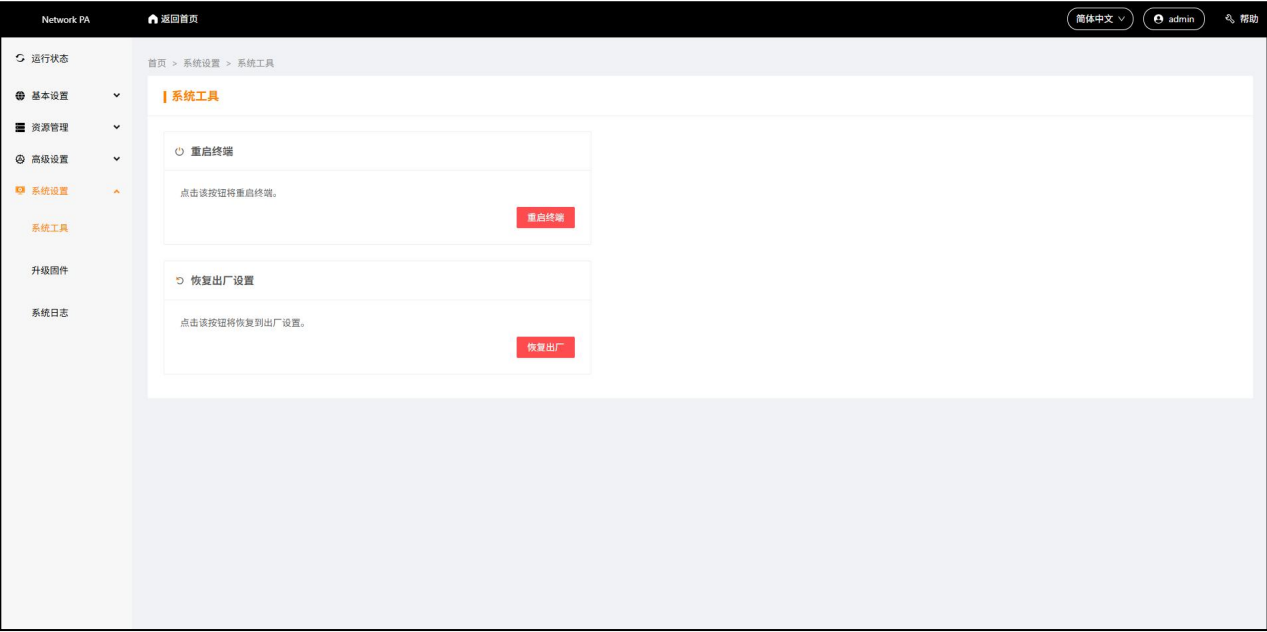


6.6 设备维护

6.6.1 系统工具

重启终端：点击该按钮将重启终端。

恢复出厂：点击该按钮设备所有的参数都将恢复到出厂时的设置（请慎用）。

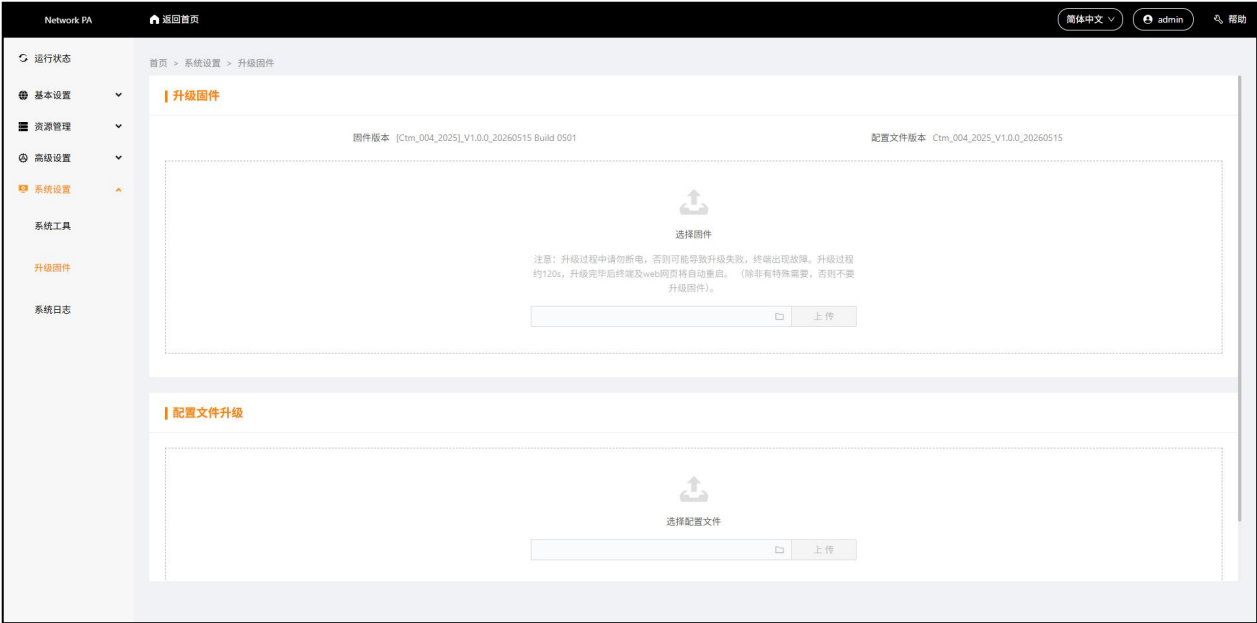


6.6.2 升级固件

固件版本、配置文件版本：显示设备当前的固件版本和配置文件版本。

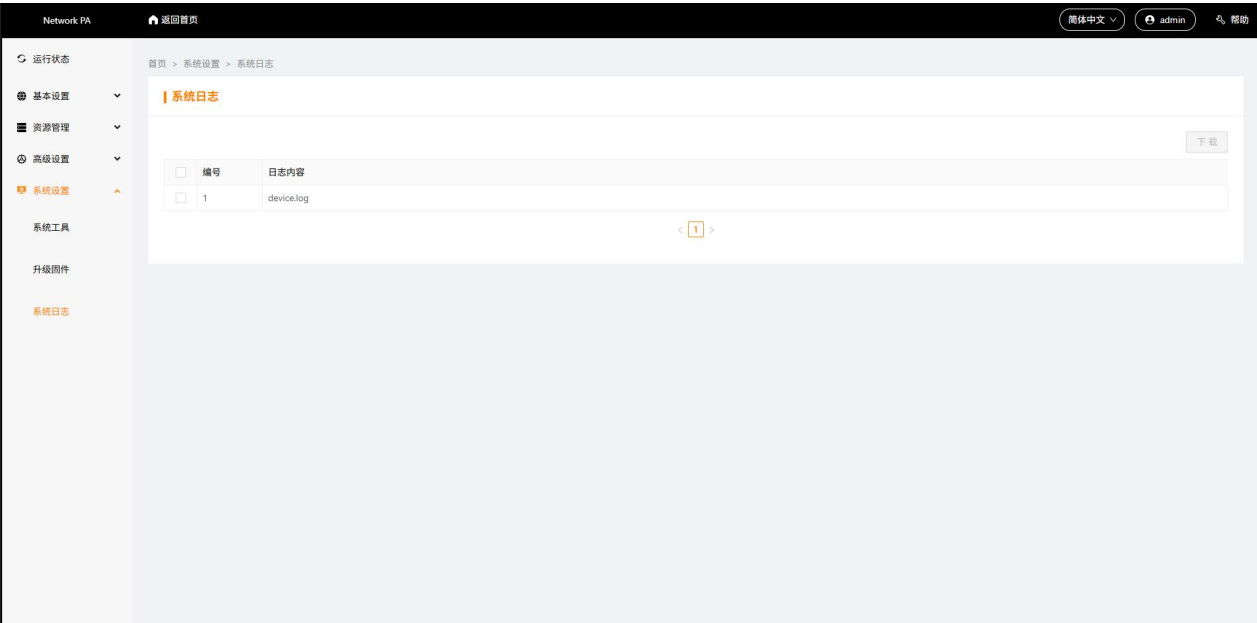
终端升级、配置文件升级：点击“”按钮，选择厂家提供的固件升级文件或配置文件，点“上传”按钮开始升级。

注意：升级过程中请勿断电，否则可能导致升级失败，设备出现故障。升级过程约 120s，升级完毕后设备及 WEB 网页将自动重启。（除非有特殊需要，否则不要升级固件）



6.6.3 系统日志

网络遥控话筒能自动记录运行过程并生成日志，同时支持用户下载系统日志。



第七章：基本功能

7.1 广播

在设备主页，点击【广播】，即可进入广播模块。



分区广播/终端广播

(1) 在广播模块中，点击【终端】，选择接收广播的目标分区或终端。



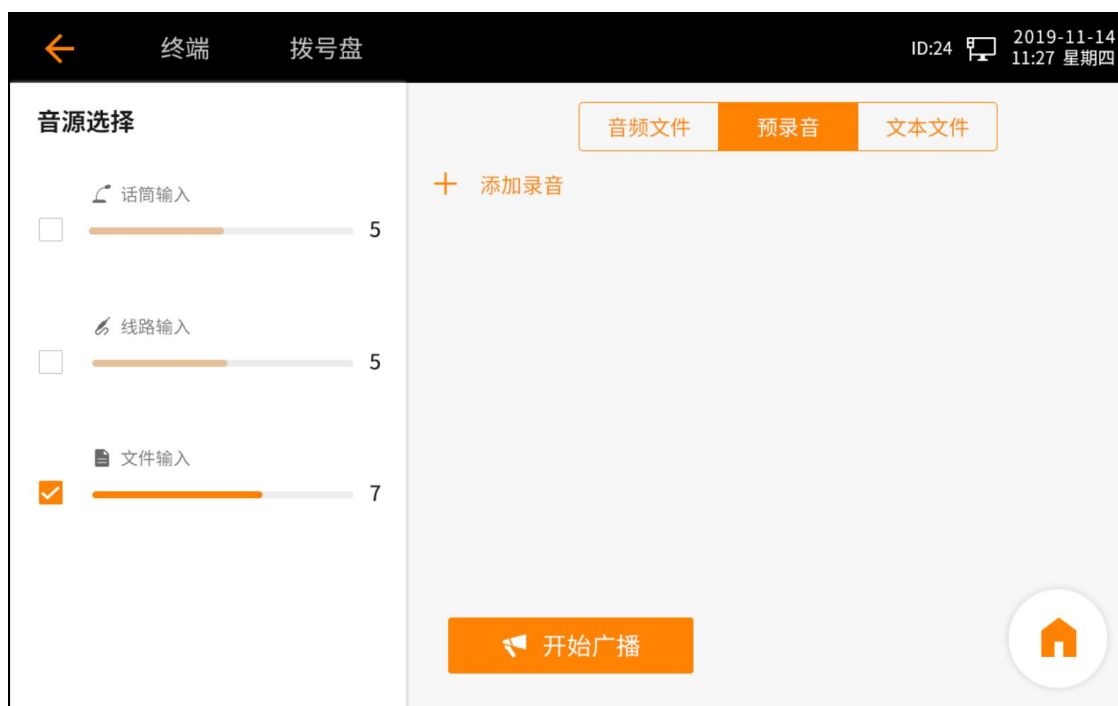
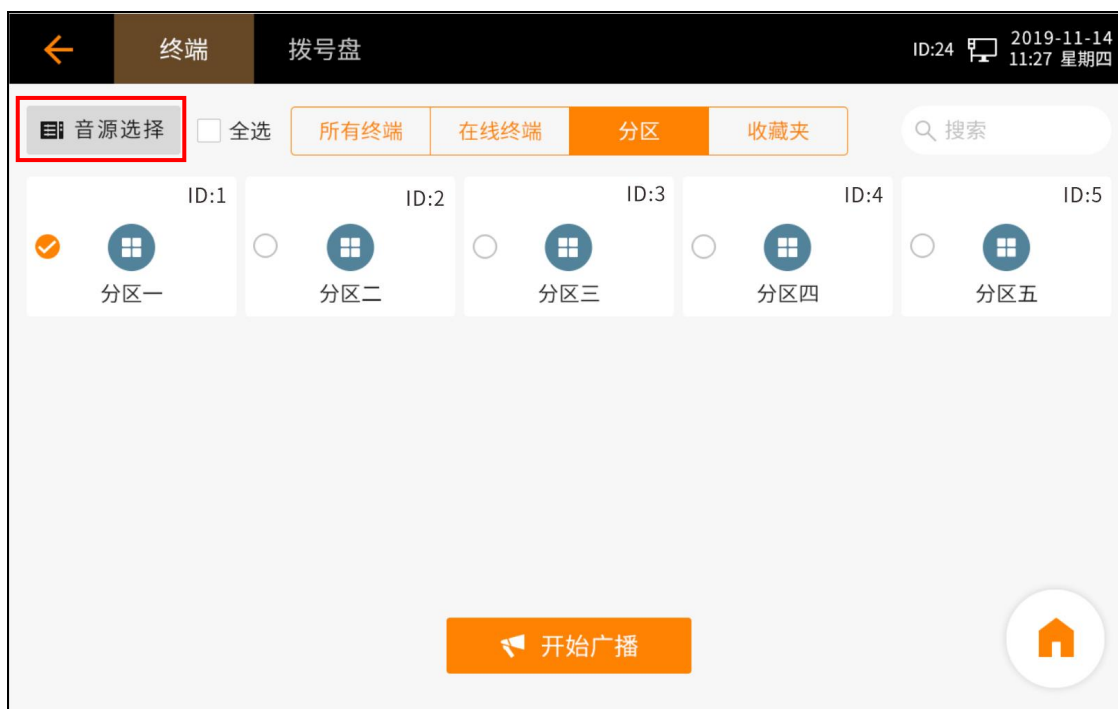
(2)广播音源选择

a.广播音源默认为话筒输入，发起广播时，点击音源选择图标，可在其中调节话筒输入的音量；当在 WEB 页将广播输入通道设置为线路输入并发起广播时，点击音源选择图标，可在其中调节线路输入的音量；当发起音频文件广播时，点击音源选择图标，可在其中调节文件音量的音量。

b.支持音频文件、预录音、文本文件本地试听跟广播（采用循环方式）。

（备注：话筒杆输入跟音频文件可以混音：先选择终端进行话筒广播，再音源选择—音频文件；

线路输入跟音频文件可以混音：先选择终端进行线路输入广播，再音源选择—音频文件。）



话筒输入：音源为话筒杆输入，用户从话筒杆向目标区域进行实时喊话广播。

线路输入：音源为设备线路输入接口 AUDIO IN 接口所接的手机，电脑等设备输入，可播放手机，电脑中的音频文件。

文件输入：

①**音频文件：**音源为 WEB 界面“媒体节目”下上传的媒体音频文件，或者 USB 读取的 WAV 及 MP3 格式的音频文件。

(备注：请提前在 WEB 页“资源管理”-“媒体节目”上传音频文件，支持 WAV 及 MP3 格式音频。)

②**预录音：**音源为网络遥控话筒设置的录音文件。

(备注：预录音和文本文件不能与话筒输入和线路输入混音。)

录音步骤如下：

在预录音界面，点击“添加录音” **添加录音** 添加新的录音对当前录音文件进行编辑，然后点击  开始录音，网络遥控话筒会自动采集从话筒杆输入的音频并保存，点击  停止录音。点击  可清除当前录音。音频录制完毕点击试听图标  可进行试听。

(备注：最多支持 10 组录音文件。)

③**文本文件：**音源为 WEB 界面“媒体节目”下上传的 TXT 文件，或者 USB 读取的 TXT 文件。

(备注：1、请提前在 WEB 页“资源管理”-“媒体节目”上传 TXT 文件。 2、预录音和文本文件不能与话筒输入和线路输入混音。)

(3) 选择好终端及音源后，按界面上的“开始广播”按键，即可发起广播。

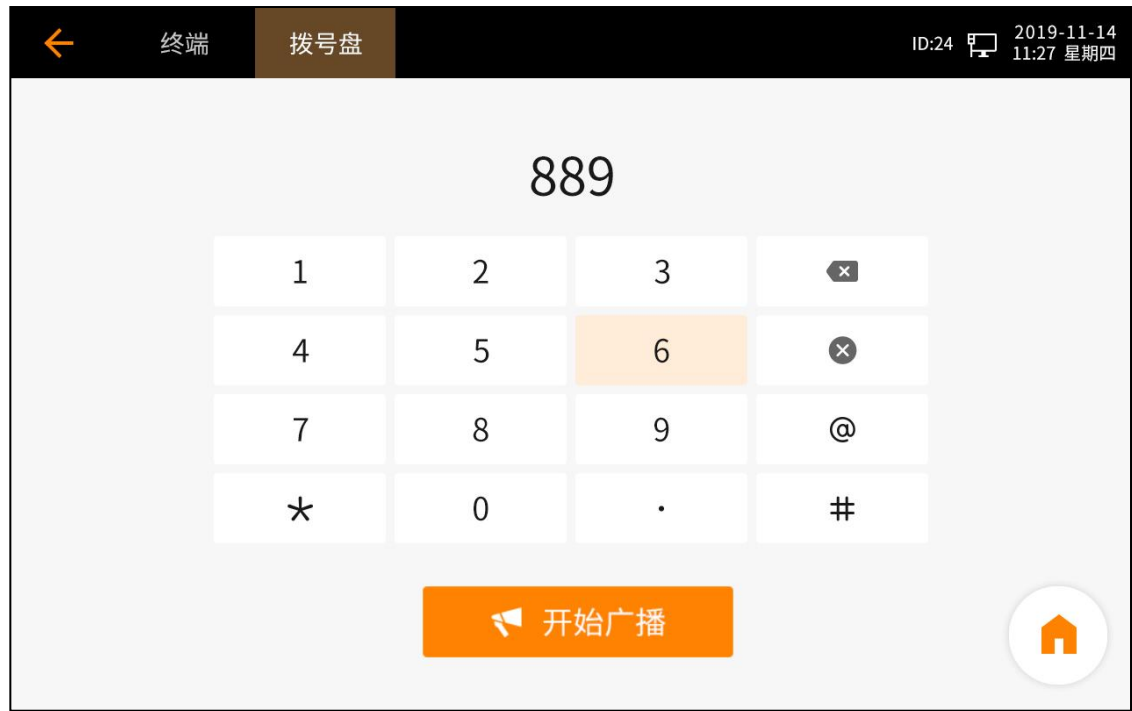
收藏夹广播

在终端“设置” -- “功能设置” -- “添加收藏” 下面，收藏终端。收藏的终端会显示在“收藏夹”下面，直接点击终端，可向终端发起广播。



拨号盘广播

在广播模块中，选择“拨号盘”，在弹出的数字键盘中输入目标终端的 ID 号后再点击“开始广播”键，网络遥控话筒会向目标终端发起广播。



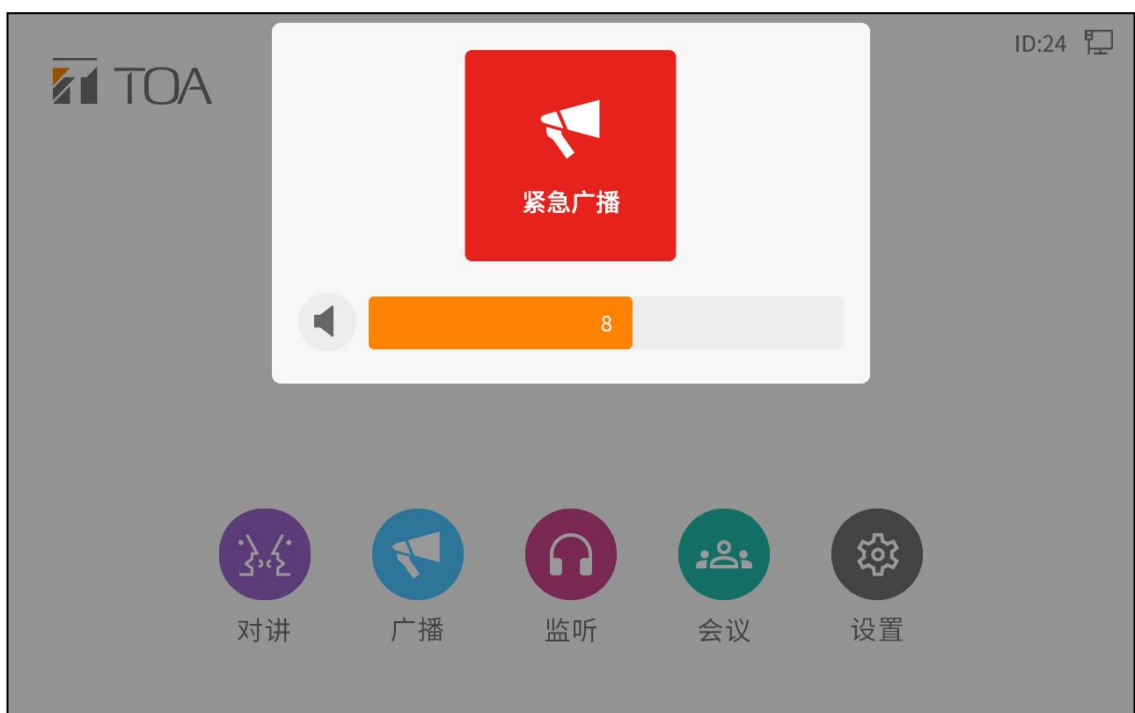
脱机广播

设备处于脱机状态时，在广播拨号盘中输入对方终端 ID@IP,如 1@192.168.1.101，点击呼叫，可进行脱机广播。

紧急广播

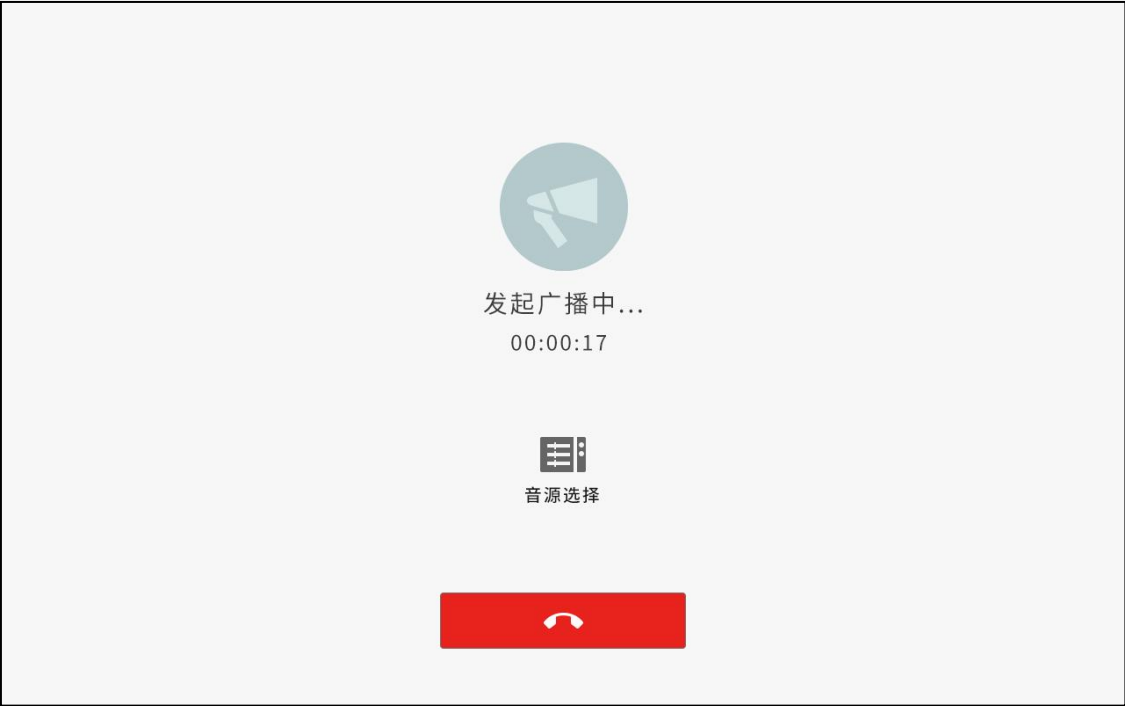
手指在设备主界面点击最上方边缘的下拉菜单，会看到“紧急广播”按钮，按下“紧急广播”按钮，可快速发起全区广播，所有服务器 ID 均进入接收广播状态。再次按下紧急广播键停止广播。

滑动音量条可设置当次任务本地输出音量的大小。



结束广播

在广播过程中，点击按键，可结束广播。



7.2 对讲

发起对讲

在设备主页，点击【对讲】，即可进入对讲模块。



(1) 一键式呼叫

在对讲模块中，选择【终端】，再点击【所有终端】、【在线终端】、【分区】或【收藏夹】，会显示终端列表或分区列表，再点击目标终端，一键发起呼叫。



(2) 收藏夹呼叫

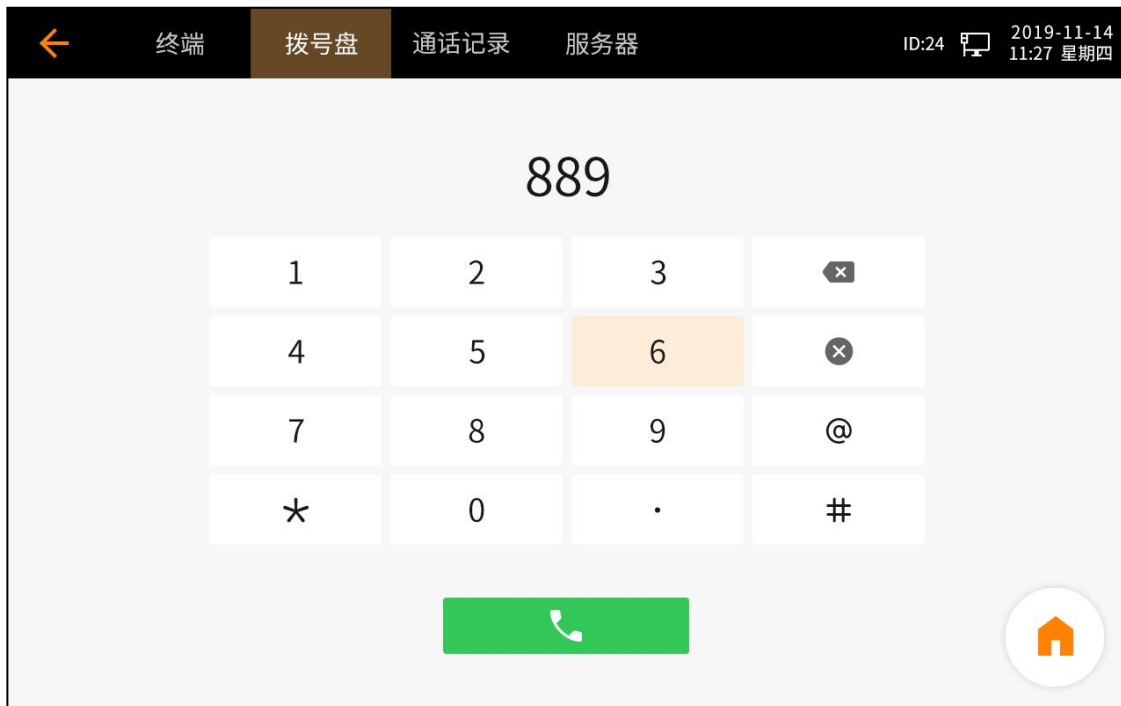
在终端“设置”--“功能设置”--“添加收藏”下面，收藏终端。收藏的终端会显示在“收藏夹”下面，直接点击终端，可向终端发起对讲。



(3) 拨号呼叫

在对讲模块中，点击【拨号盘】，在拨号盘界面输入目标终端的 ID 号后再点击呼叫键，网络遥控话筒会向目标终端发起呼叫。

拨号模式支持呼叫到面板，输入目标终端号#面板编号后再按点击呼叫键可与面板对讲，例如“1#7”表示呼叫 1 号终端下的 7 号面板。



对方接通后，进入对讲状态。在对讲过程中，还可进行呼叫转移、三方对讲、PTT 对讲等操作。



通话转移

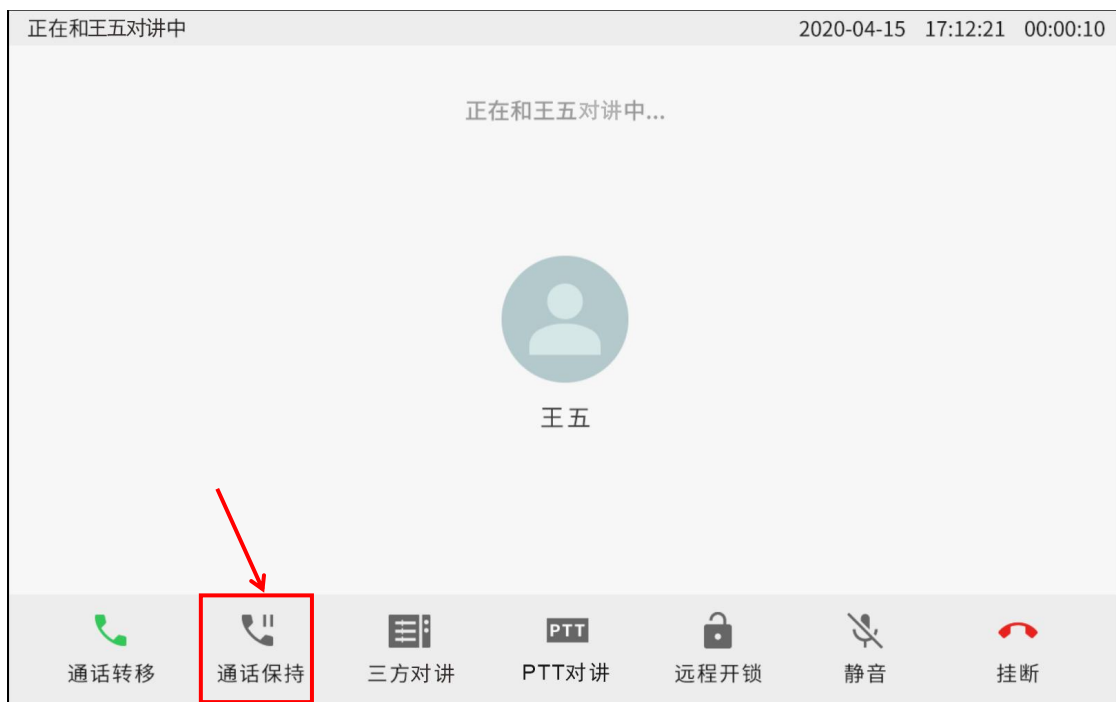
在对讲过程中，选择通话转移，点击目标终端或在拨号盘中输入转移的目标终端 ID 号，网络遥控话筒断开和当前终端的对讲，自动呼叫到转移的目标终端。



通话保持

在对讲过程中，选择“通话保持”，终端会保持当前通话，扬声器播放保持等待音。

按“取消保持”，结束通话保持状态，可继续对讲。



三方对讲

(1) 三方对讲默认为禁用，必须在 WEB 页“对讲设置”中将三方对讲的功能选择为“启用”，或者在设备“设置”模块下的“功能设置”界面可开启。

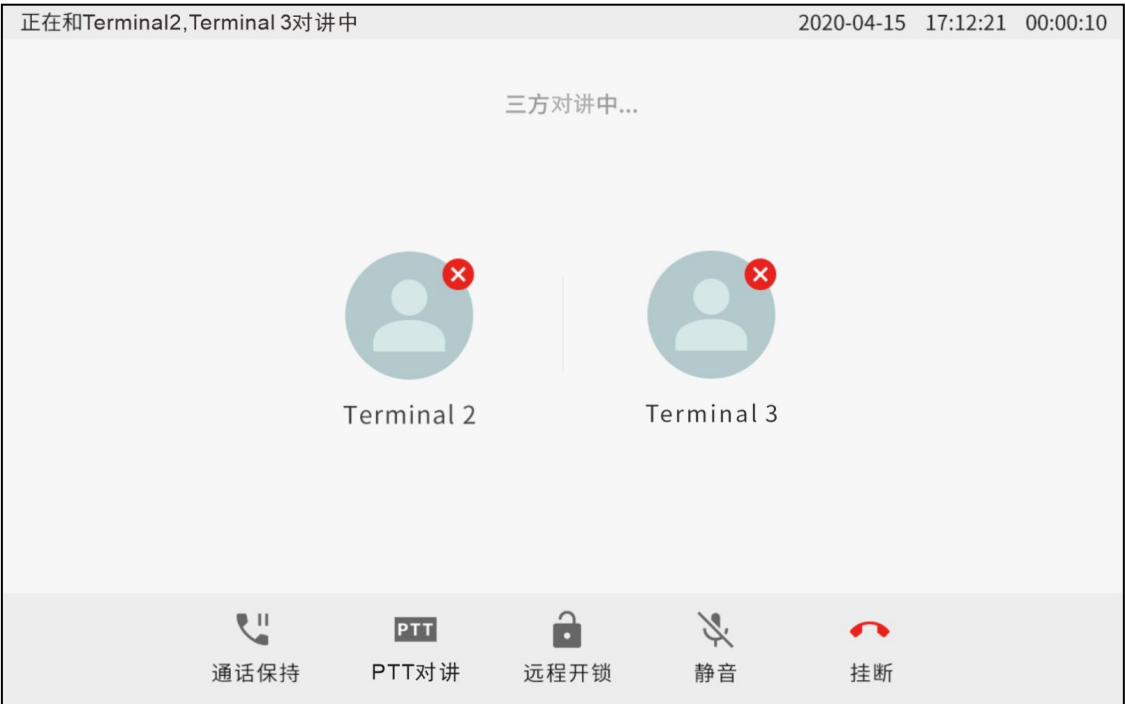
(2) 启用后，在通话过程中，会出现【三方对讲】按钮，点击该按钮。



(3) 在弹出的邀请人员面板邀请需要加入通话的目标终端。



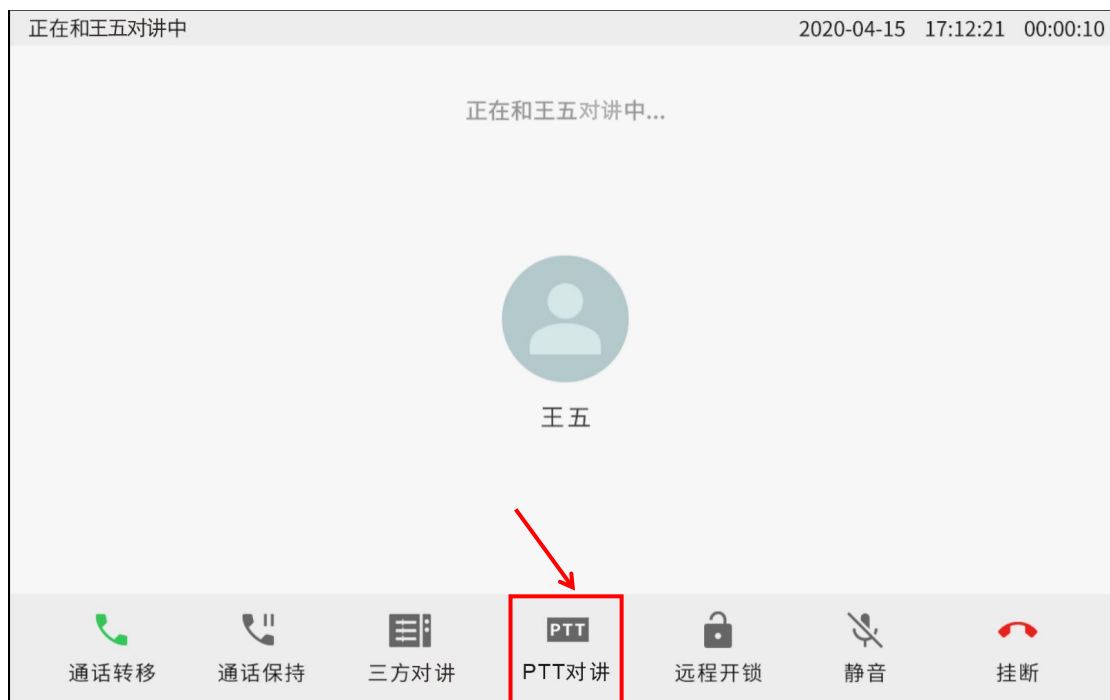
(4) 对方接通后，进入三方通话。三方通话过程中，参与对讲的终端均能清晰的听到其它方的声音。其中一方挂断不影响另外终端通话。



备注：使用三方通话，呼叫转移和远程开锁功能将不可用。

PTT 对讲

网络遥控话筒支持 PTT 对讲，在对讲过程按一下设备上的“PTT 对讲”按键，网络遥控话筒将进入 PTT 模式，音频关闭，必须按住设备上的“PTT 对讲”按键才能发起对讲，否则仅能听到对方声音。

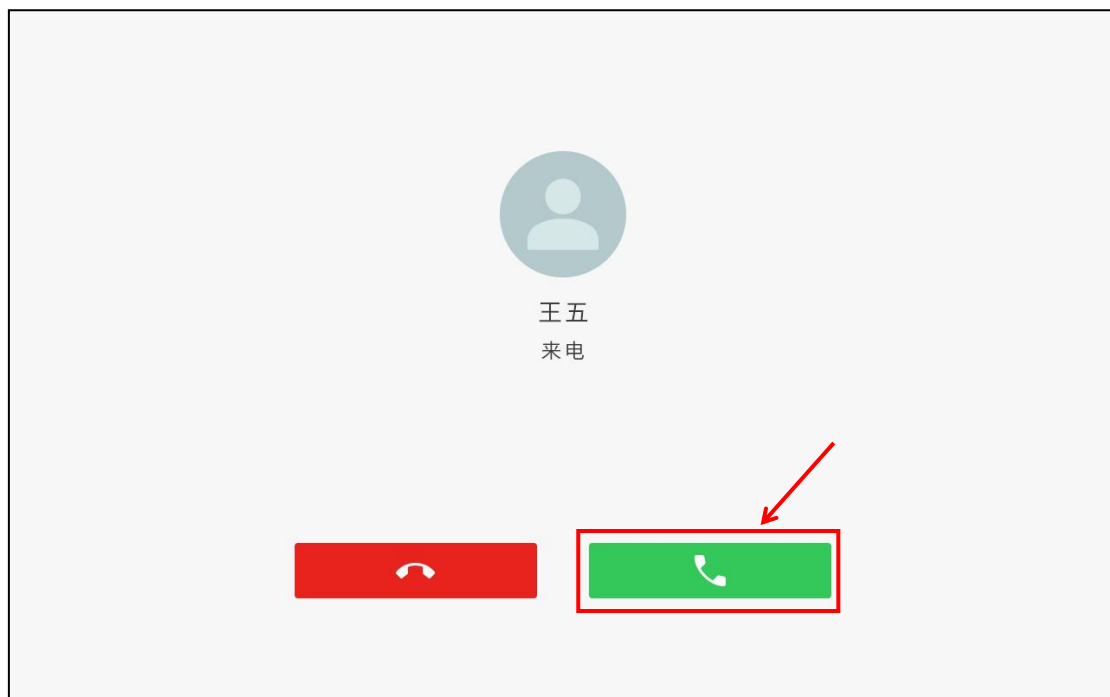


接听对讲

可在 WEB 页“对讲参数”设置接听方式为“自动接听”或“手动接听”；

默认为“手动接听”，当有终端来电时，需手动按接听键对讲；

设置为“自动接听”时，将按照 WEB 页“对讲设置”——“自动接听时间”自动接听对讲。



脱机对讲

设备处于脱机状态时，输入对方终端 ID@IP,如 1@192.168.1.101，点击呼叫，可进行脱机对讲。

通话记录

网络遥控话筒能保存所有的通话记录，支持按类别（未接来电、呼入记录和呼出记录）筛选，提高用户查找速度。

在对讲模块中，点击【通话记录】，即可进入通话记录界面。



服务器

可拉取跨服务器终端和分区信息。



7.3 监听

网络遥控话筒能对同一服务器下在线的某个或多个终端进行监听。若被监听的终端带摄像头，在监听的同时还可实现监视。

在设备主页，点击【监听】，即可进入监听模块。



单个监听/循环监听

(1) **单个监听：**在监听模块中，点击【终端】，然后再点击【所有终端】、【在线终端】或【分区】，选择需要监听的目标终端，网络遥控话筒即可监听该目标终端。

(2) **循环监听：**可一次性选择多个终端，对它们进行循环监听。网络遥控话筒会按照终端列表的顺序依次对每个目标终端按设置的时间进行循环监听。

监听时间设置方法：在 WEB 页“对讲设置” - “循环监听间隔”中进行配置。



收藏夹监听

在终端“设置” -- “功能设置” -- “添加收藏” 下面，收藏终端。收藏的终端会显示在“收藏夹”下面，直接点击终端，可监听终端。



拨号盘发起监听

点击【拨号盘】，输入想要监听的目标终端 ID，按“开始监听” 键，可监听目标终端。



7.4 会议

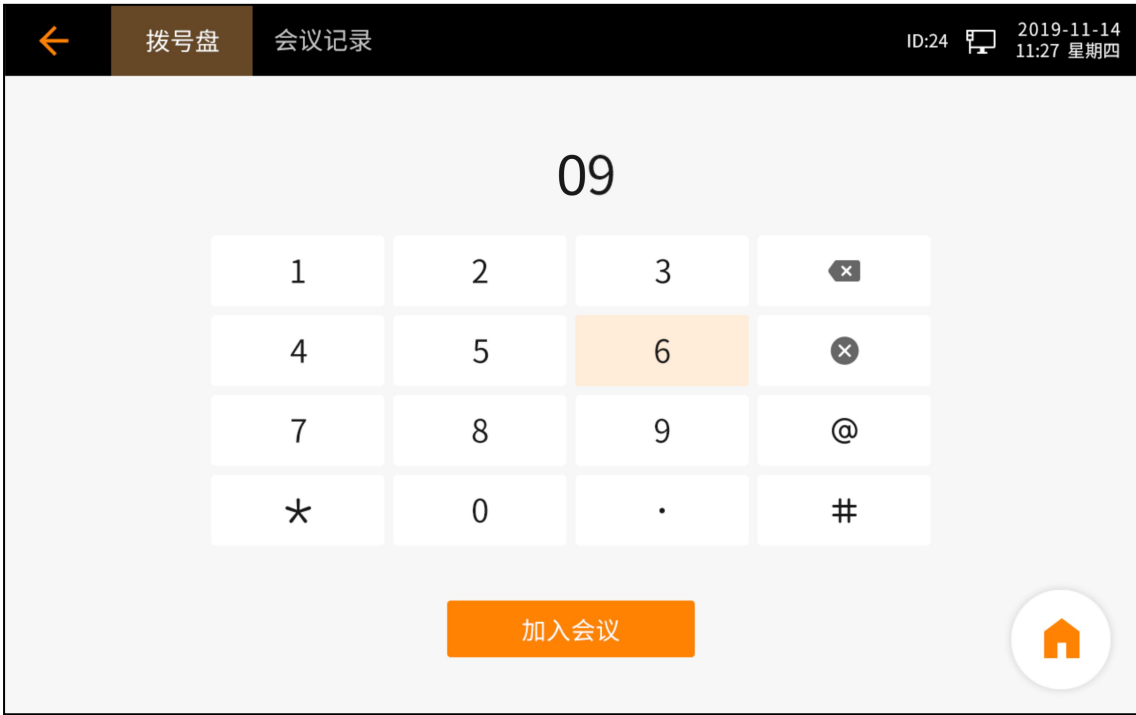
在设备主页，点击【会议】，即可进入会议模块。**备注：仅 SIP 协议下支持。**



加入会议

点击“拨号盘”，在拨号盘中输入“0+会议室 ID 号”（例如 08），最后点击【加入会议】按钮，可申请加入会议。

主持方收到会议加入申请后，可选择“同意”或“拒绝”加入。



会议中

在会议中，作为参会方，可“举手发言”或选择“结束会议”。

会议邀请

网络遥控话筒可接受其它设备发起的“会议邀请”。点“同意”即可加入会议。



会议记录

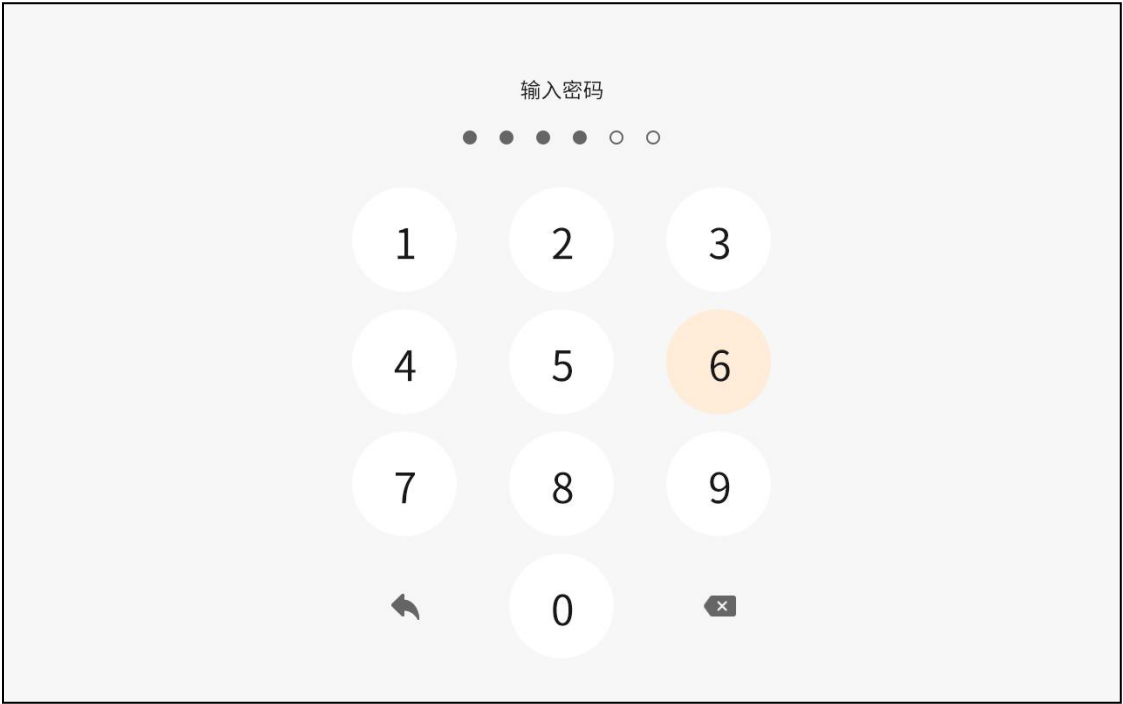
网络遥控话筒能保存所有的会议记录，支持按类别（加入会议、未接会议）筛选，提高用户查找速度。

在会议模块中，点击【会议记录】，即可进入会议记录界面。点击任意一条会议记录，可申请加入会议。



7.5 设置

点击设置，输入终端密码（默认为 123456），可进行网络参数、功能设置等相关设置。



网络参数

设置网络遥控话筒的设备 ID、IP 地址、默认网关、子网掩码、服务器 IP、端口等网络参数。
参数修改保存后，重启设备生效。

备注：网络参数中，本机 IP 不可与其他终端重复，出厂默认为 192.168.1.101。

←

网络参数

功能设置

系统信息

ID:24 2019-11-14 11:27 星期四

设备ID	24
IP配置模式	静态
本机IP	192.168.3.165
子网掩码	255.255.255.0
网关	192.168.3.1
本机SIP端口	5060
SIP服务器IP	192.168.10.102
SIP服务器端口	5060
SIP服务器HTTP端口	80

功能设置

设置对讲界面、广播界面、监听界面是否显示，默认为“开启”，如选择“关闭”，主界面将不显示这些功能模块。同时可设置 PTT 对讲、远程开锁、呼叫转移、三方对讲等功能是否开启。
参数修改保存后，重启设备生效。

←

网络参数

功能设置

系统信息

ID:24 2019-11-14 11:27 星期四

对讲界面	
广播界面	
监听界面	
会议界面	
添加收藏	>
本地视频	>
PTT对讲	
远程开锁	
呼叫转移	
三方对讲	

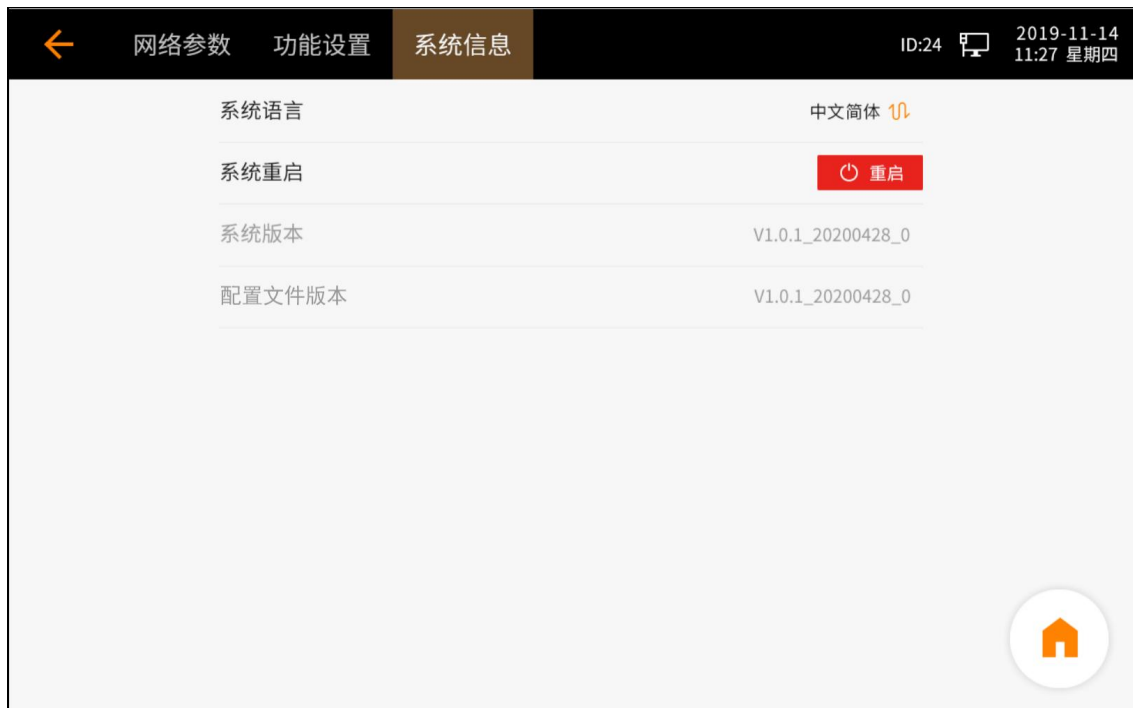
系统信息

系统语言：可切换设备界面显示语言，支持中文简体和英文。

系统重启：点击“重启”按钮，设备将重启。

系统版本：设备当前的固件版本。

配置文件版本：设备当前配置文件的版本。



返回主界面

点击设备上任意界面的  图标，可返回设备主界面。

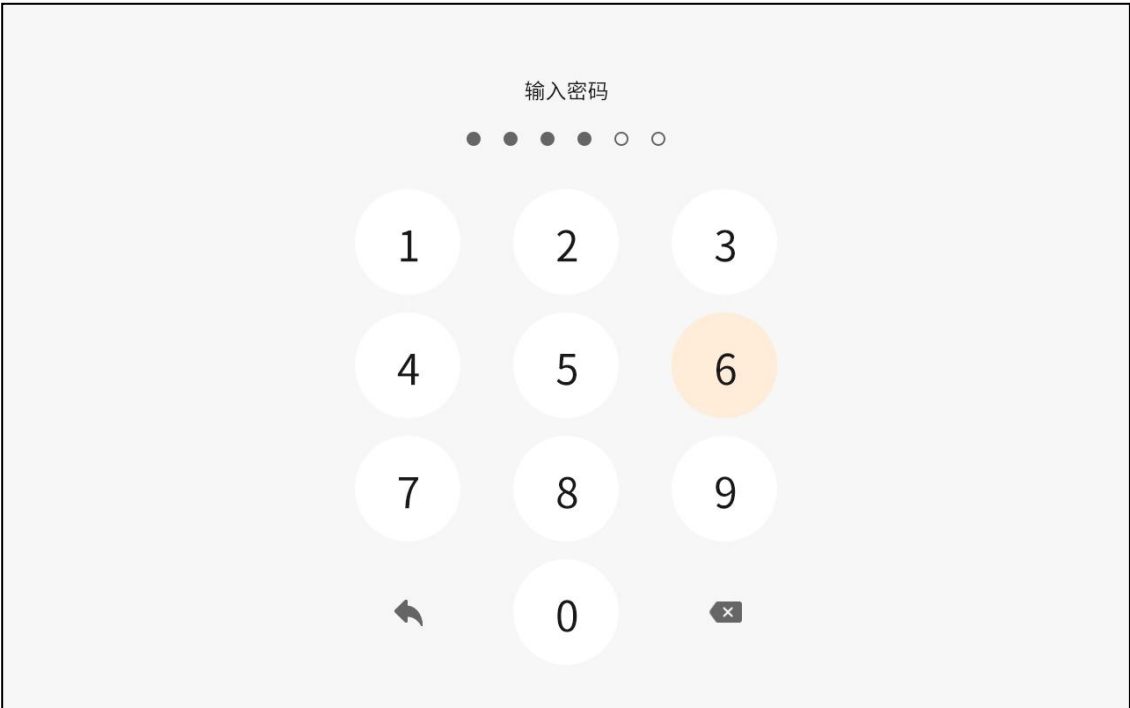
屏幕亮度调节

在设备主界面，手指从上往下，或从下往上滑动，即可看到屏幕亮度调节滑条，滑动滑条，可调节屏幕亮度。



锁屏

用户可在 WEB “基本设置”-“系统参数”中开启屏保功能。锁屏后进入主界面需要密码解锁 (默认为 123456)



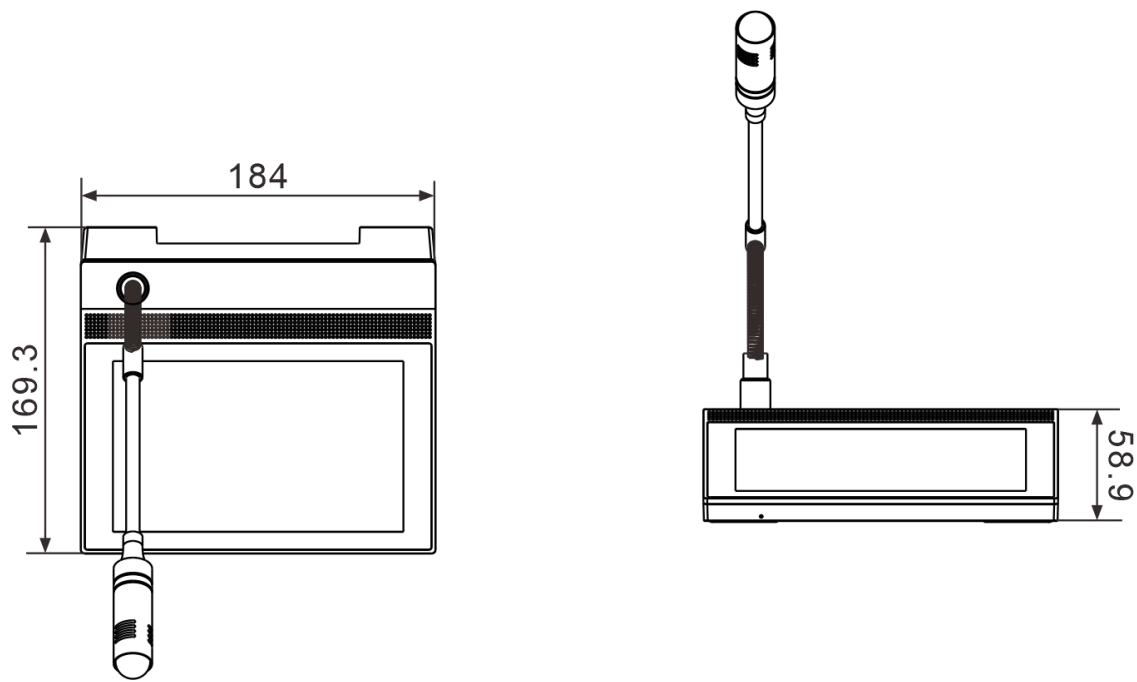
第八章：附录

8.1 仕様书

8.1.1 规格

电源	DC12V/1.5A
功耗	≤10W (AC 电源适配器)
额定输出功率	3W
频率响应	40 - 18KHz
话筒杆	鹅颈电容式话筒杆
音频	采样频率:8k - 44.1kHz，量化大小:16bit，比特率:8k - 320kbps
支持的音频编码	MP3, PCM, ADPCM
内存	最大 1GB
网络 I/F	100Base-TX, MDI/MID-X, RJ45
网络通讯协议	TCP/IP, UDP, ARP, ICMP, IGMP, HTTP, SIP, RTP
接口	控制输入*1，控制输出（常开/常闭）*1，音频线路输入*1，音频线路输出*1，RJ45 网口*1
显示屏	7 寸触摸彩色液晶屏
显示语言	英语（默认）/中文（可选）
工作温度	0 - 40℃
工作湿度	≤90%(无结露)
材料	铝 黑色，ABS 黑色
产品尺寸	183.9(W) * 169.0(H) * 58.4(D) mm
重量	0.72kg
附属品	鹅颈话筒杆×1，接线端子（3.5-5P）×1 海绵防风罩×1，AC 电源适配器×1

8.1.2 外观图



参考尺寸（单位：mm）

