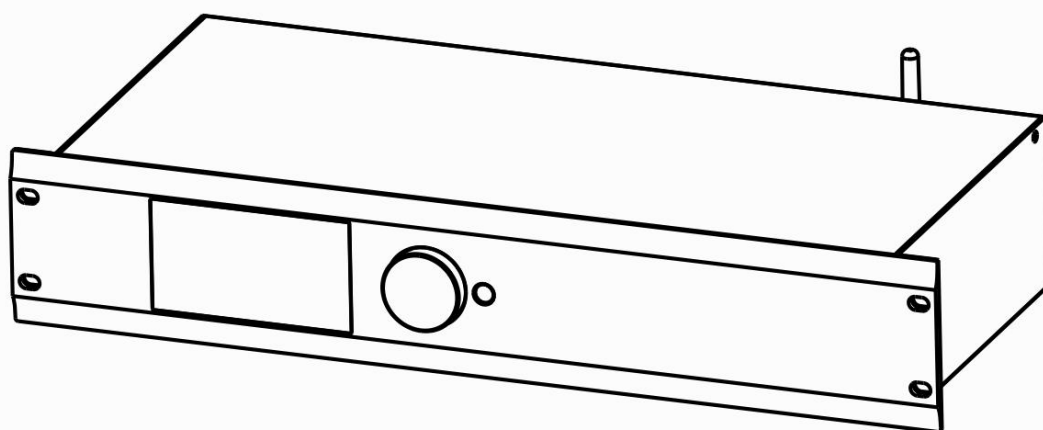




# DIGITAL CONFERENCE SYSTEM CENTRAL UNIT

## User Manual



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  - 4.3 Basic Function
  - 4.4 Troubleshooting

# 1. Important Safety Precaution

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Please read this User Manual carefully before using this product and follow all the safety precautions mentioned herein.

## **During Installation:**

(1) Avoid humidity:

Please do not expose the device to rainy environment or other humid environment, otherwise it may lead to fire or electric shock.

(2) Use correct power supply:

Please use the specified power adapter for the device, using high voltage power supply may lead to fire or electric shock.

(3) Protect the electric wire:

Do not scratch, cut or twist the power cord, keep the power cord away from any heating device, do not place heavy objects on top of the power cord, otherwise it may lead to fire or electric shock.

## **During Use:**

(1) If anything goes wrong:

During use of this device, if any of these anomalies mentioned below happens, please cut off the electricity immediately, otherwise it may lead to fire or electric shock.

- smoke or strange smell coming out of the device.
- water or other foreign object gets into the device.
- damage on the product shell.
- damage of the power cord (cable core exposed or broken).
- malfunction of the device (no network connection or no sound).

(2) Do not open the product shell:

There are high voltage parts inside of the product shell, opening the product shell without permission may lead to fire or electric shock.

(3) Do not touch the device when it thunders:

To avoid electric shock, please do not touch the device or power plugs when it thunders.

(4) Do not place liquid containers on top of the device:

If accidentally knock over the liquid container and let any liquid get into the device, it may lead to fire or electric

shock.

(5) Cautions when the device is not in use:

If the device is not in use for 10 days or longer, please cut off the electricity and unplug the power plug from the power socket, otherwise it may lead to fire or electric shock.

## 2. Product Overview

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Here is what you can find in this section:

- **2.1 Basic Introduction**
- **2.2 Hardware Interface Description**

## 2.1 Basic Introduction

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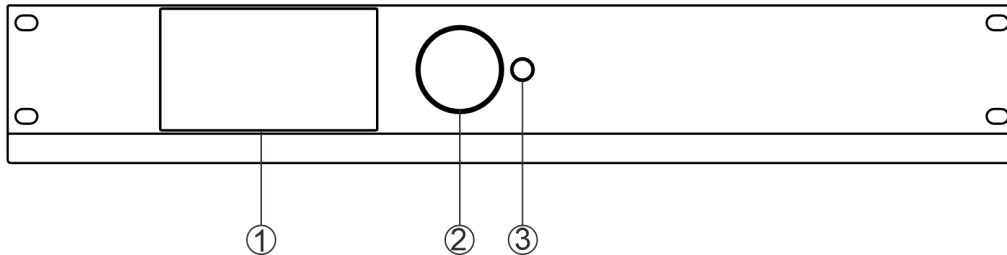


- Support ring network digital transmission and hand in hand cascade, support up to 2 independent ring network to meet different networking needs.
- 48KHz digital audio sampling lossless transmission, <10ms transmission delay, audio quality is not affected by the length of the network cable.
- The input volume, AGC, EQ and other audio parameters of each speaking unit can be adjusted separately, or uniformly.
- Support PC, mobile phone, tablet and other devices wireless access device hotspot, real-time adjustment of the parameters through the web page and UI interface.
- Support U disk real-time recording function, support 64G FAT32 format U disk for the maximum.
- Conference unit supports hot plug and play, plug and play without setting.
- Support loop monitor the front-end devices; The ring network supports power-on self-test, automatic diagnosis, and fault cause prompt.

## 2.2 Hardware Interface Description

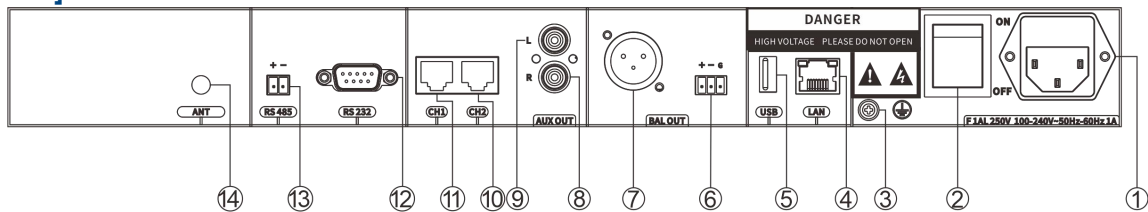
### Interface Description

#### Central Unit: [Front panel]



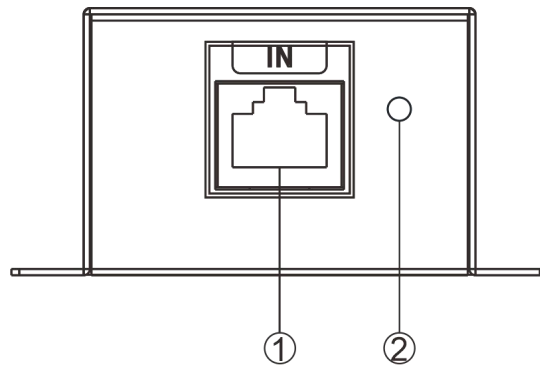
- ① LCD screen: Display central unit status information.
- ② Shuttle type button: Set the central unit status information.
- ③ Return button

#### [Back panel]



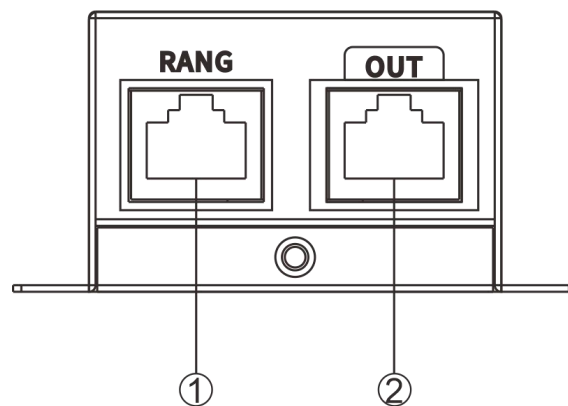
- ① Power outlet: connect to 220V/50HZ mains
- ② Power switch
- ③ Ground hole: safe ground point
- ④ RJ45 network interface
- ⑤ USB interface: connect to a computer for device upgrades, or connect to external storage.
- ⑥ Phoenix Audio Balance output interface.
- ⑦ XLR audio balance output interface.
- ⑧ Stereo line right channel output interface.
- ⑨ Stereo line left channel output interface.
- ⑩ Looped network 2
- ⑪ Looped network 1
- ⑫ RS232 interface
- ⑬ RS485 interface
- ⑭ 2.4G antenna interface

**Splitter:**  
**[Front view]**



- ① IN: Connect to the Digital conference system central unit.
- ② Status light: Light up when there is an electric pass ; when there is no electric pass, or the splitter is failure, the light will go off.

**[Back view]**



- ① RANG:Connect to the black port of the Digital conference system chairman unit.
- ② OUT:Connect to the white port of the Digital conference system chairman unit.

# 3.Unpacking and Installation

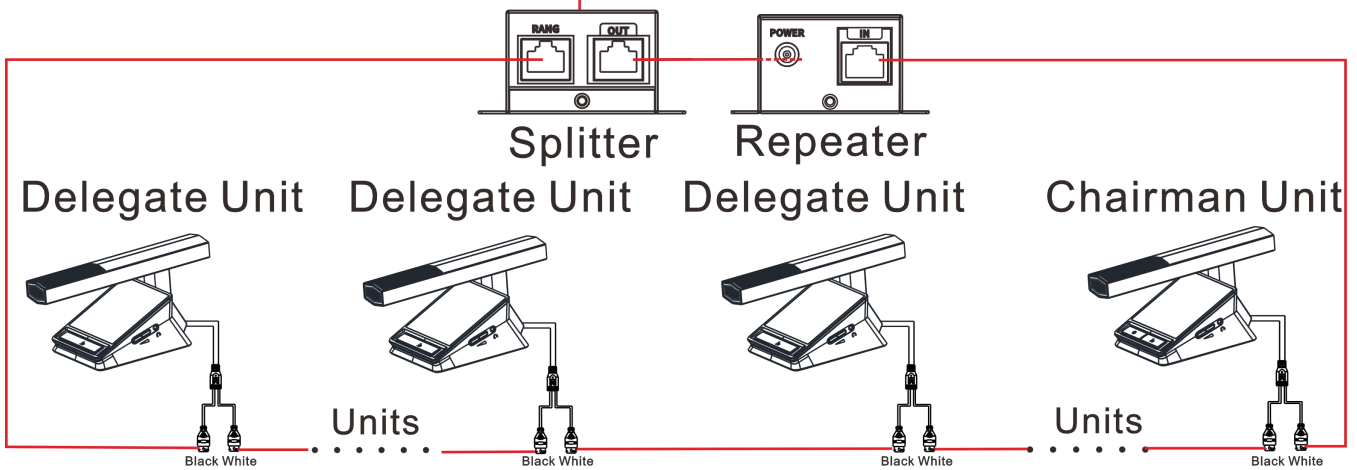
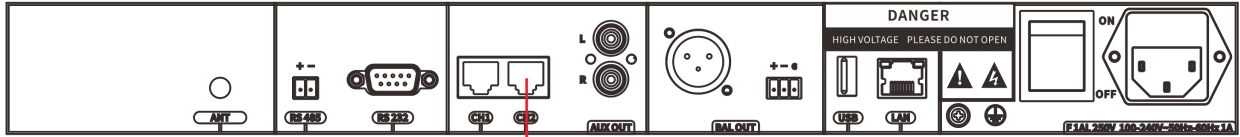
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Here is what you can find in this section:

- **3.1 Wiring**

# 3.1 Wiring

## Central Unit



# 4. Quick Operation Guide

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Here is what you can find in this section:

- **4.1 Network Settings**
- **4.2 User-Defined Terminal Parameter Settings**
- **4.3 Basic Function**
- **4.4 Troubleshooting**

## 4.1 Network Settings

---

After the Digital conference system central unit is properly wired, and the power is switched on, the network parameters of the terminal need to be changed according to the live environment. There are two methods:

### 4.1.1 Using the IP Device Configuration Tool

- (1) Run "IP DevConfig Tool", after the tool is started, the interface will display the IP terminal that has been scanned, or you can click the "Quick scan" button to scan the terminal again.
- (2) Configure the terminal's IP network information.

**Method 1:** Check the designated terminal and click "Terminal Configuration"- "Parameter Configuration" to configure IP network information for the terminal.

**Method 2:** If the scanning tool does not scan the terminal, you can click "Advanced" to perform mandatory IP configuration. This method will force all terminals in the network to be configured to the same IP address and other information, so when using this method, please ensure that only one target terminal is connected in connected to the network.

For specific operation steps, please refer to the User Manual of "IP Device Configuration Tool".

#### Remark:

1. If you use Windows 7 system to operate, please use the administrator mode to run the IP DevConfig Tool, and turn off the firewall and related software;
2. If the terminal is not scanned, the mandatory configuration method can be used. At this time, the IP DevConfig Tool can only configure the network parameters of one terminal at a time. When using this method to configure terminal network parameters, please make sure that one computer corresponds to only one target terminal.
3. If you need an IP DevConfig Tool, please contact our company's after-sales service.

### 4.1.2 Using intercom built-in WEB page

Use a web browser and navigate to the Web page of the Digital conference system central unit. The default IP address is <http://192.168.1.101>. configuring the network parameters of the terminal according to the live environment Click "save" after modified.

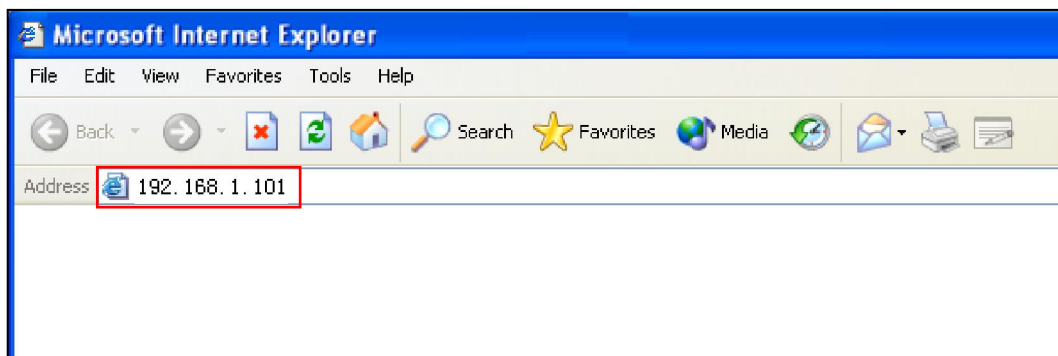
For specific operations, please refer to the user-defined terminal parameters.

## 4.2 User-Defined Terminal Parameter Settings

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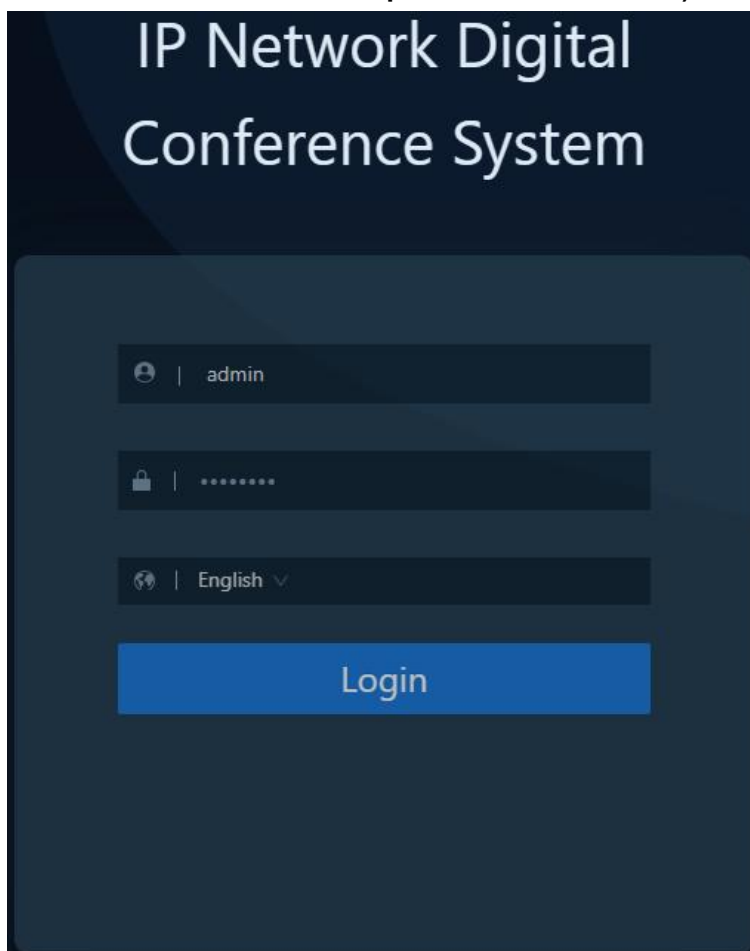
### Login Webpage

(1) Please input the IP address of the Digital conference system central unit into the address column of the browser (the factory default IP address is 192.168.1.101), then enter.



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

**(Note: Default username is admin and default password is Rdc070#\*)**

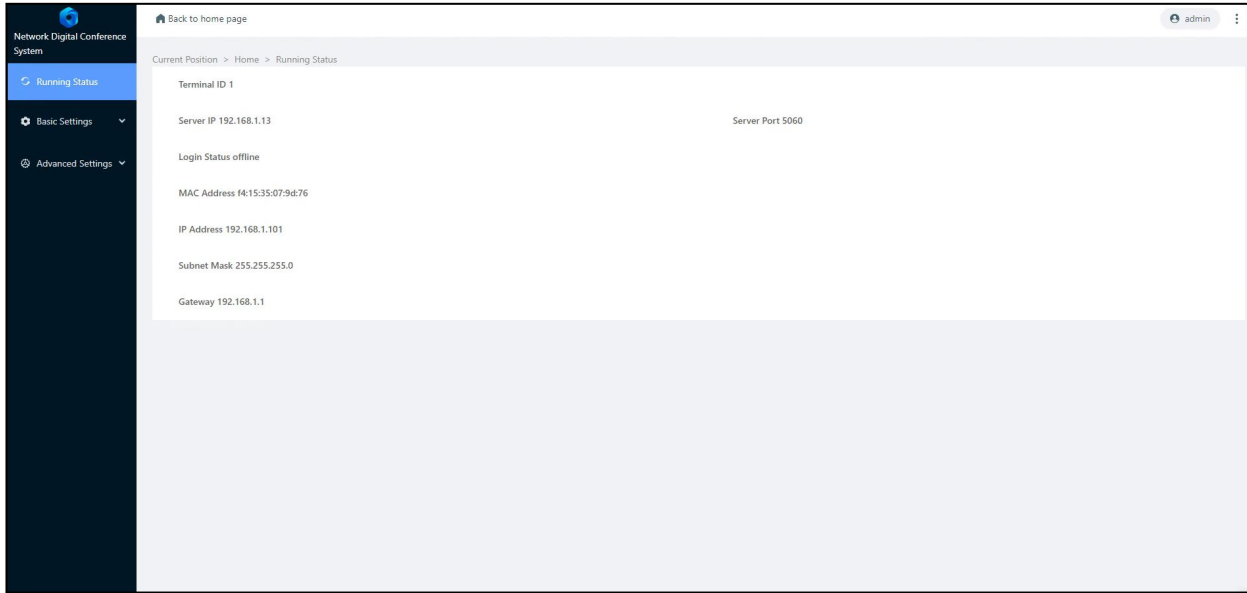


(3) Press login to enter the Digital conference system central unit web page.

**(Note: If the relevant parameter modification in the web page does not take effect after saving, please clear the cache and set them again.)**

## Running Status

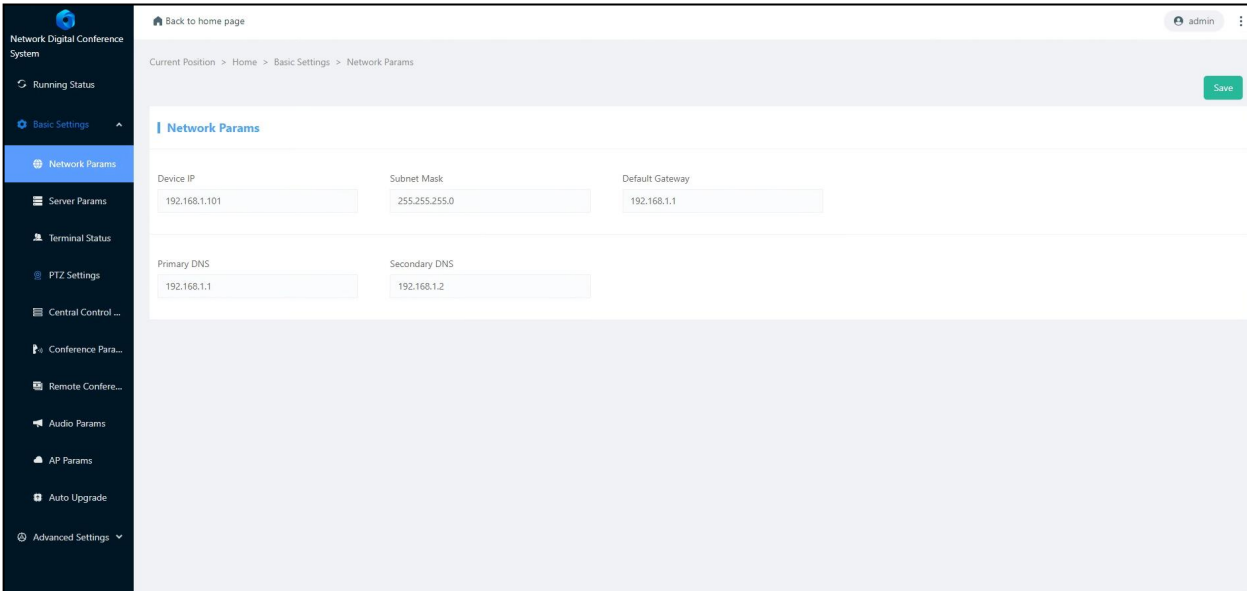
After login to the web page, click “Running Status”, it will show the information of: Account number, server IP, server port, device login status, MAC address, terminal IP, default gateway and other information.



## Basic Settings

### Network Params

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



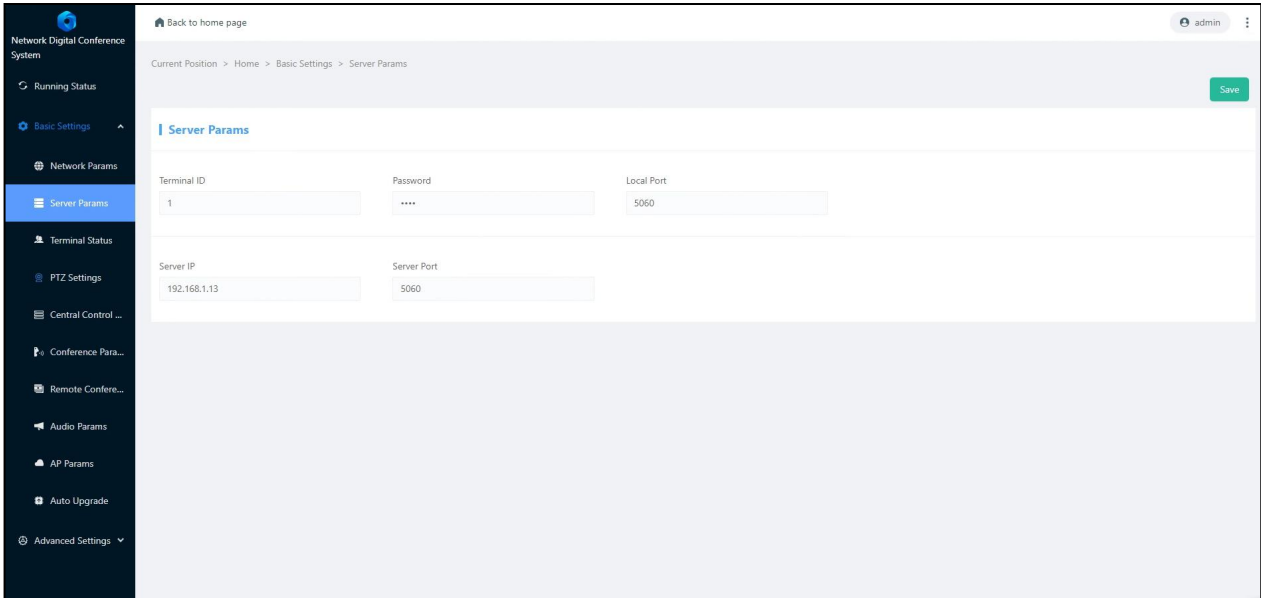
The relevant settings of network parameters are as follows:

IP Address	The IP address of the device, the factory default IP is 192.168.1.101, which cannot be duplicated with other terminals.
Subnet Mask	The subnet mask of the LAN network.
Default Gateway	The gateway of the network.
Primary DNS	The IP address of the preferred DNS server (domain name resolver) for the network.
Secondary DNS	The IP address of the alternate DNS server (domain name resolver)

for the network.

### Server Params

Set the server related parameters of the terminal login, click [Save] after the modification, and the parameter modification will take effect after the restart.



The relevant settings of server parameters are as follows:

Terminal ID	Unique number to identify the terminal and cannot be duplicated with terminals or other terminals. The default value is 1.
Password	The password for terminal to login to SIP server.
Local Port	Please configure the local port according to the actual situation; the default is 5060.
Server IP, Port	IP address of the SIP server that the Digital conference system central unit logs into. Please enter the correct IP address of the SIP server. The default is 192.168.1.13. The port number cannot be changed except in special cases. (Default is 5060)

## Terminal Status

Terminal status interface displays the input volume, status, attribute of units that connected to the Digital conference system central unit, and support to add, modify, delete unit seat.

After units connected, click "Generate all seats" to add unit seat.

Microphone number	Seating	Zone Name	Input volume	Status	Attribute	S/N	Model	Ring number	Wireless	More Actions
1	1	Microphone 1	0dB	Online	Delegate	CF455AE2	5252D	0	Yes	
2	2	Microphone 2	0dB	Online	Chairman	350A4193	5252C	0	Yes	
3	4	Microphone 4	0dB	Online	Delegate	350A41DB	5252D	0	Yes	
4	5	Microphone 5	0dB	Online	Delegate	350AC046	5252D	0	Yes	
5	6	Microphone 6	0dB	Online	Delegate	350AC438	5252D	0	Yes	
6	7	Microphone 7	0dB	Online	Delegate	350AC439	5252D	0	Yes	
7	8	Microphone 8	0dB	Online	Delegate	350AC43A	5252D	0	Yes	
8	9	Microphone 9	0dB	Online	Delegate	350AC43B	5252D	0	Yes	
9	10	Microphone 10	0dB	Online	Delegate	350AC43C	5252D	0	Yes	
10	11	Microphone 11	0dB	Online	Delegate	350AC43D	5252D	0	Yes	

Click the "Modify" button to modify the information of the unit seat.

**Zone Name:** You can customize the name of the unit seat.

**Role:** "Host", "Chairman", "Represent" are optional. (Note: only "Represent" is optional for delegate units. "Host", "Chairman" and "Represent" are optional for chairman units.)

**Input parameters:** Set the unit seat input volume.

**AGC parameters:** The AGC parameters can be customized, no need to modified if there is no special situations.

**Input EQ parameter:** it can adjust the sound effect of the unit.

**Note:** EQ value must be adjusted by personnel with relevant professional knowledge, non-professional personnel please do not adjust it at will, otherwise it will lead to a poor sound quality.



Clink on the “+” button beside wireless microphone, you can view the power, charging status, firmware version of wireless microphone, and also the wifi Ssid, password, wiifi signal strength, wifi channel of the AP that wireless microphone connected.

5	5	Seat5	0dB	● Online	Delegate	350AC438	5252D	0	Yes				
Power:		Signal: 60		Charging:		Ssid: meeting_ap							
Psk: spon888888		IP Address:		Version: V1.0.4_20240226		Channel: 108							

## PTZ Settings

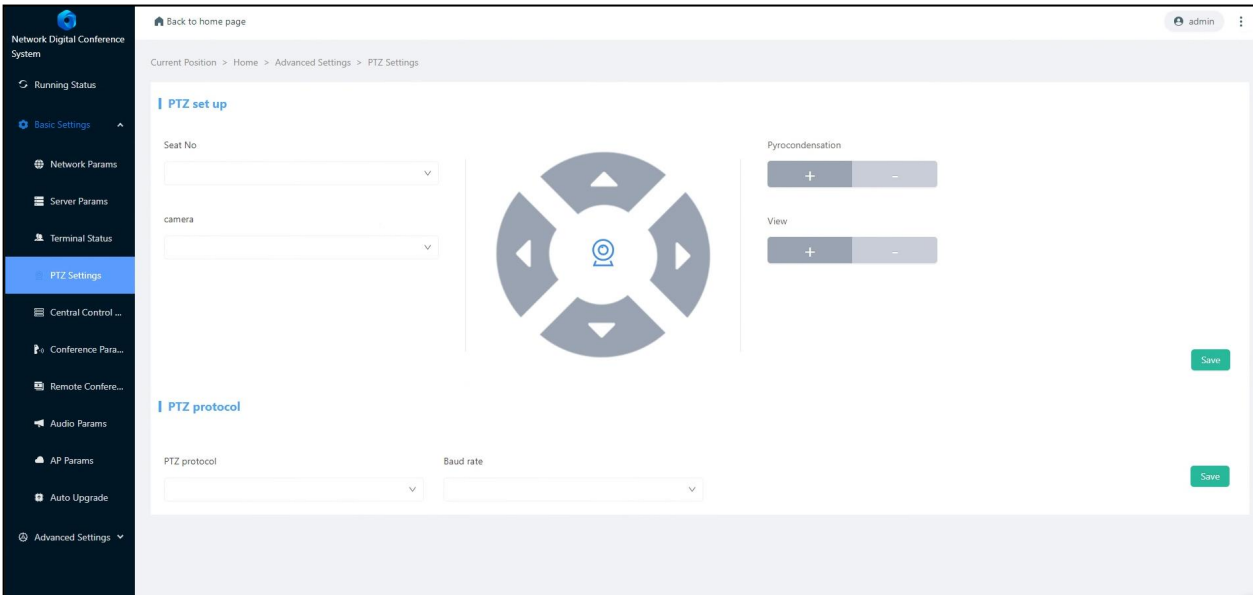
PTZ set up:

In this interface, the preset position of the camera connected to the Digital conference system central unit and

the unit seat can be set. After the unit seat is set, when the unit seat speaks, the camera will be turned to the unit seat and display the screen of the unit seat.

PTZ protocol:

Select the protocol and baud rate for the camera that the Digital conference system central unit connected.

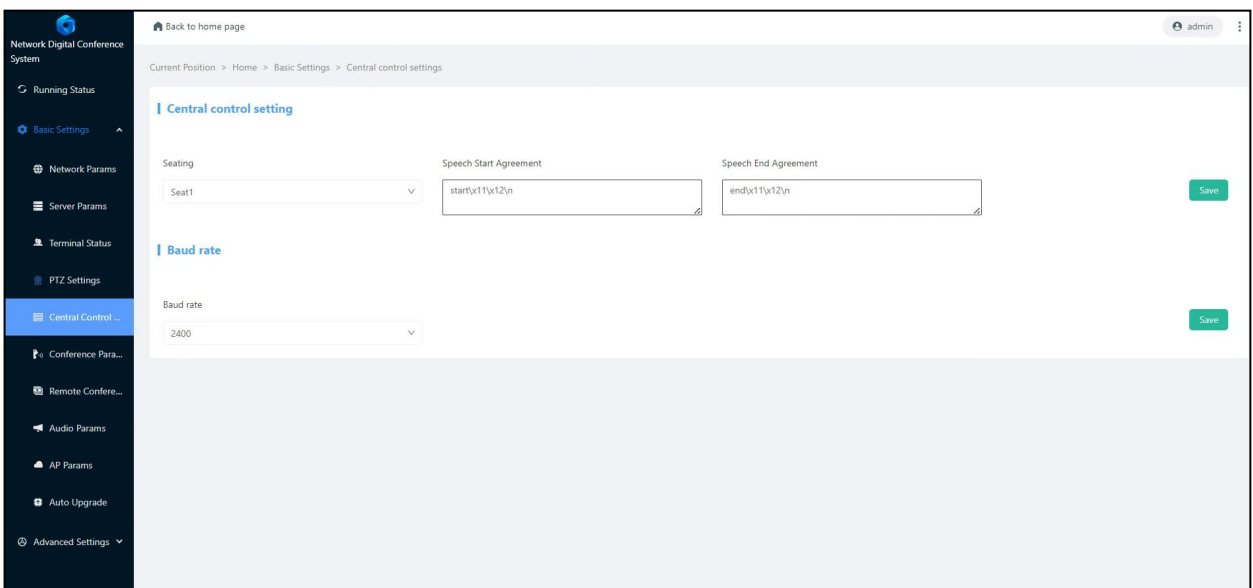


## Central control setting

Conference start agreement and speak end agreement can be customized according to the matrix connected to the Digital conference system central unit.

**Baud rate:** Set the baud rate according to the baud rate of the matrix connected.

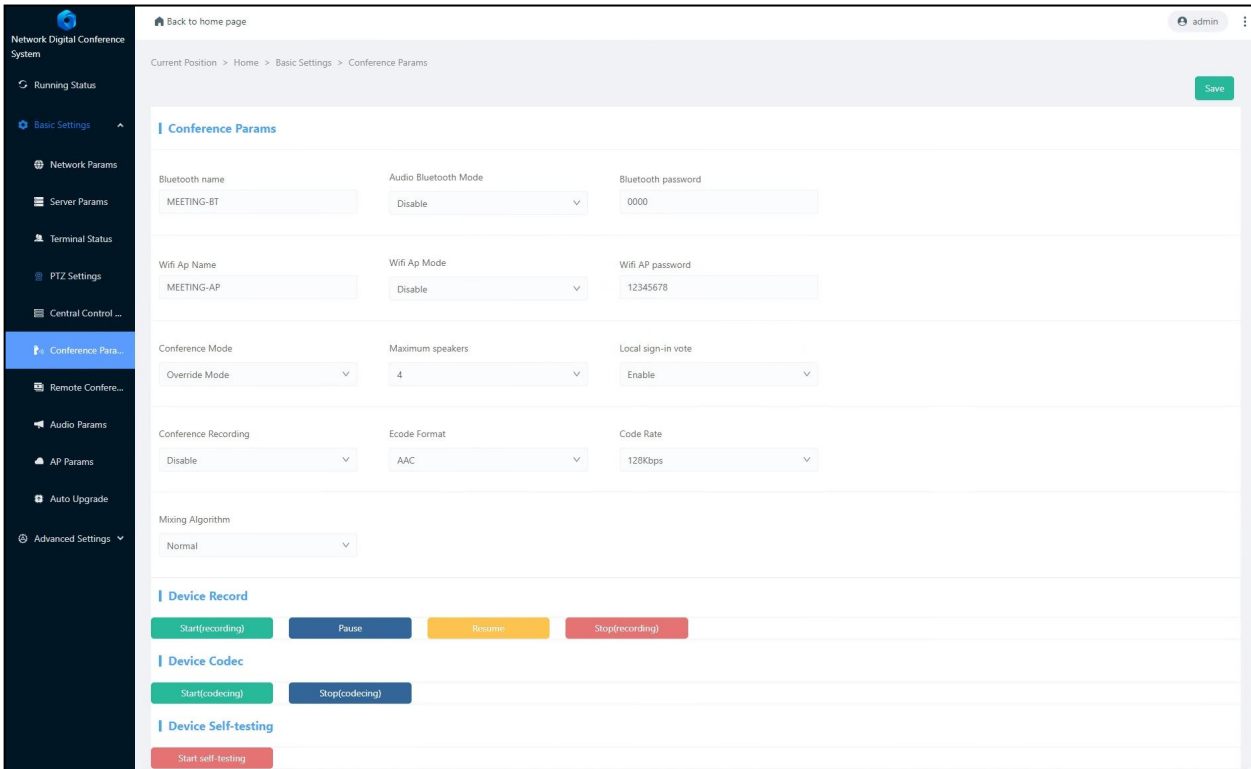
Click on [Save] after modified, the parameter modification will take effect after the restart.



## Conference Params

Set device conference parameters, and click [Save] after modified. Parameter modification will take effect after restart.

inserting a U disk, you can click on the Start record/Pause record/Resume record/Stop record button on the page to record audio of the unit seats which are connected to the Digital conference system central unit.  
**(Note: The USB flash disk inserted must be in FAT 32 format)**



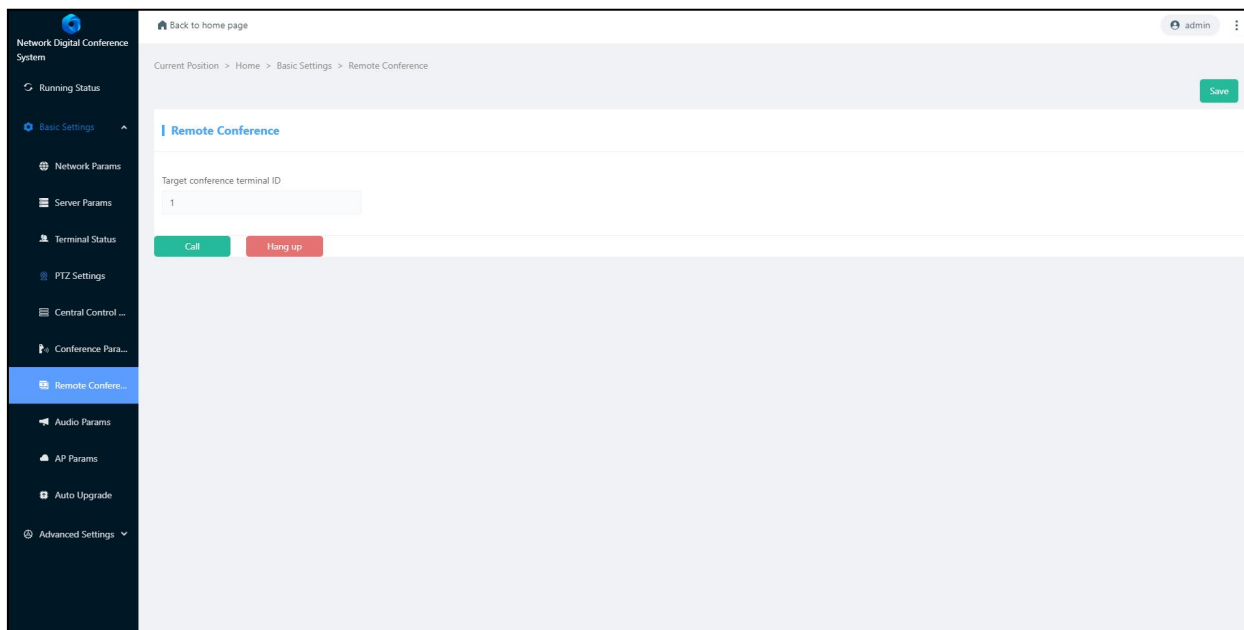
The relevant settings of conference parameters are as follows:

Bluetooth Name	Set terminal's Bluetooth name.
Audio Bluetooth Mode	Set whether to enable Bluetooth function.
Bluetooth password	Set terminal's Bluetooth password. The default Bluetooth password is "0000".
Wifi Ap Name	Set terminal's Wifi name
Wifi Ap Mode	Set whether to enable Wifi function.
Wifi AP password	Set terminal's Wifi password, the default Wifi password is "12345678".
Conference Mode	Conference Mode: "Fifo", "Request&Approve", "Chair First", "Limit mode", "Limited-speak mode" are optional.
Maximum speakers	Maximum speakers: Set the maximum number of speakers for a Conference. <b>Fifo:</b> When the number of speakers has reached to the maximum number of speakers, there are unit seats who want to join the conference, then it needs unit seats to exit the conference. In fifo conference mode, the first unit seat allowed to speak will be kicked out. <b>( Note: The "maximum number of speakers" in this mode includes the chairman unit.)</b>

	<p><b>Request&amp;Approve:</b> in this mode, if a "represent" wants to join the conference, it needs the approval of the "chairman". Only one "represent" can speak at a time, other "represent"s who apply for speak will in queue</p> <p>When the number of speakers has reached to the maximum number of speakers, it needs speakers to press the speaker button to exit the conference, and the next unit seat can speak.</p> <p><b>(Note: The "maximum number of speakers" in this mode is ineffective. When speakers of chairman reach to 9, "Fifo" mode will be followed among chairman. )</b></p> <p><b>Chair First:</b> in this mode, only chairman units can speak.</p> <p><b>(Note: The "Maximum number of speakers" is ineffective in this mode.)</b></p> <p><b>Limit Mode:</b> When the number of speakers has reached to the maximum number of speakers, there is a "chairman" who wants to speak, it needs speakers to exit the conference, In this mode, if a "chairman" wants to speak, the "represent" who allows to speak first will be kicked out of speak first.</p> <p><b>(Note: The "maximum number of speakers" in this mode includes the chairman unit.)</b></p> <p><b>Limited-Speak mode:</b> when select "limited-Speak mode", you need to set"Limited-Time"also, when a "represent" start to speak , it start the timer, and other "represent" can't speak. For "chairman", they can press speak button to speak at any time.</p> <p><b>(Note: The "maximum number of speakers" in this mode is ineffective. When speakers of chairman reach to 9, "Fifo" mode will be followed among chairman. )</b></p>
Local sign-in vote	Set whether to enable local sign-in and vote function.
Conference Recording	Set whether to enable conference audio record function.
Ecode Format	Set the audio encoding format of conference audio recording, AAC and PCM are optional.
Code Rate	Set the audio code rate of conference audio recording, 64Kbps ~ 192Kbps are optional.
Mixing Algorithm	Normal and Equalizing Gain are optional.
Device Codec	Click on "Start(codecting)" button, you can number microphone manually, after it finished, click on"Stop(codecting)"button.
Device Self-testing	Reserved.

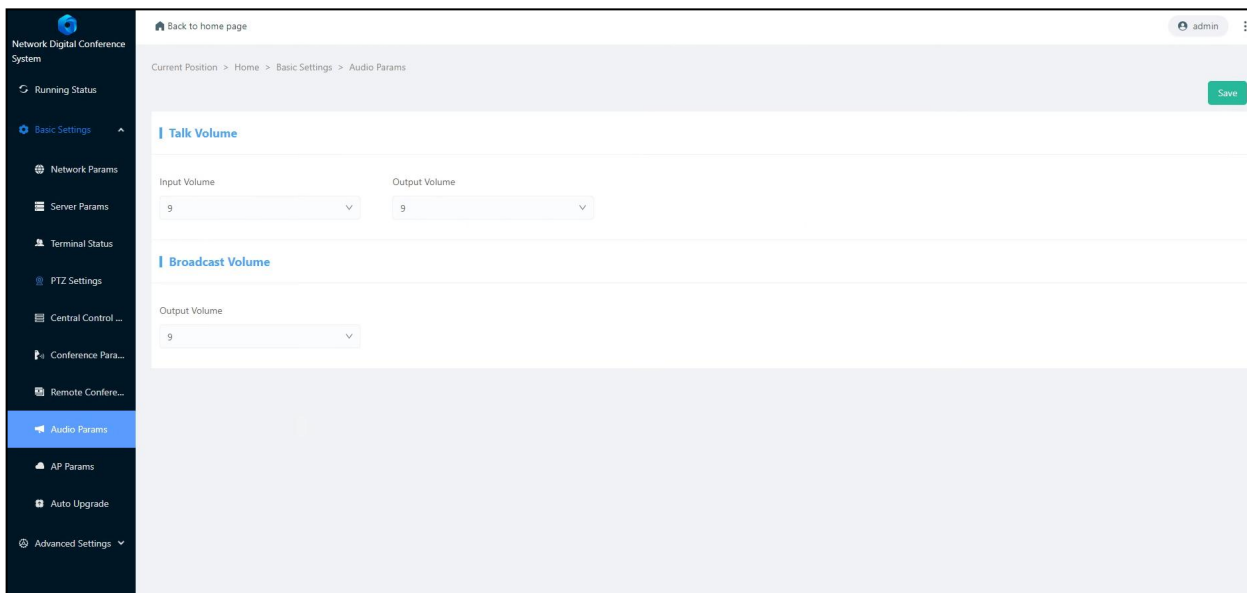
## Remote Conference

After filling in the target conference ID, click on "Save", and then click on "Call" button to start a remote Conference with the terminal. Click on "Hang up" button to end the remote Conference.



## Audio Parameters

Set device audio parameters, and click on [Save] after modified. Parameter modification will take effect after restart.

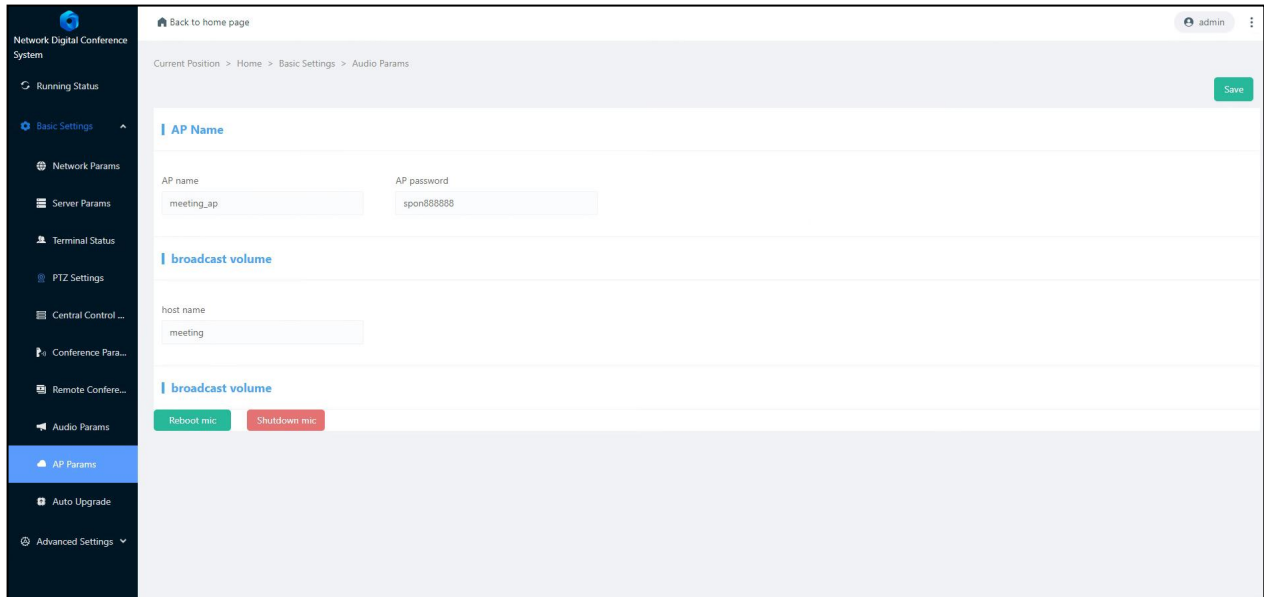


The relevant settings of audio parameters are as follows:

Talk input volume	Reserved.
Talk output volume	Set the output volume of other terminals initiating intercom to Digital conference system central unit.
Broadcast output volume	Set the output volume of other terminals initiating broadcast to Digital conference system central unit.

## AP Params

You can modify the wifi parameters that wireless microphone connected to, It takes effect when the microphone comes online. Click on [Save] after modified.

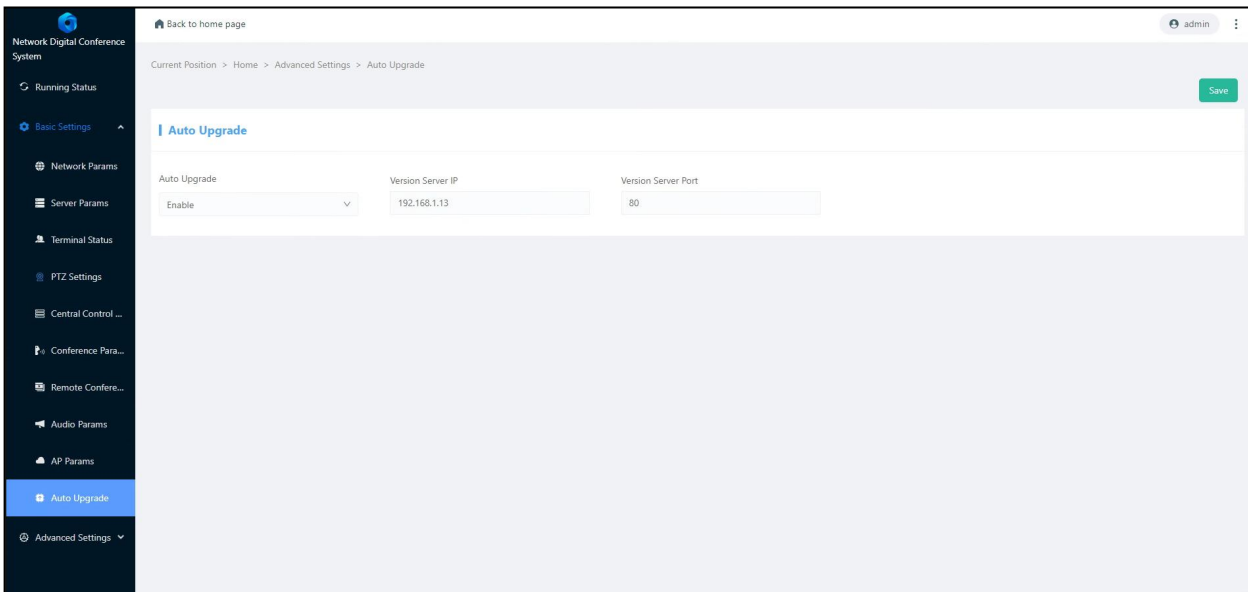


The relevant settings of AP parameters are as follows:

AP name	Modify the wifi name of the AP that wireless microphone connected.
AP password	Modify the wifi password of the AP that wireless microphone connected.
host name	Set the name of the central unit.
Mic control	Click on “Mic reboot” button to reboot microphones connected to the central unit. Click on “Mic shutdown” button to make microphones connected to the central unit shutdown.

## Auto Upgrade

Set the auto upgrade related parameters of the device, click [Save] after modified, and the parameter modification will take effect after restart.



The relevant settings of audio upgrade are as follows:

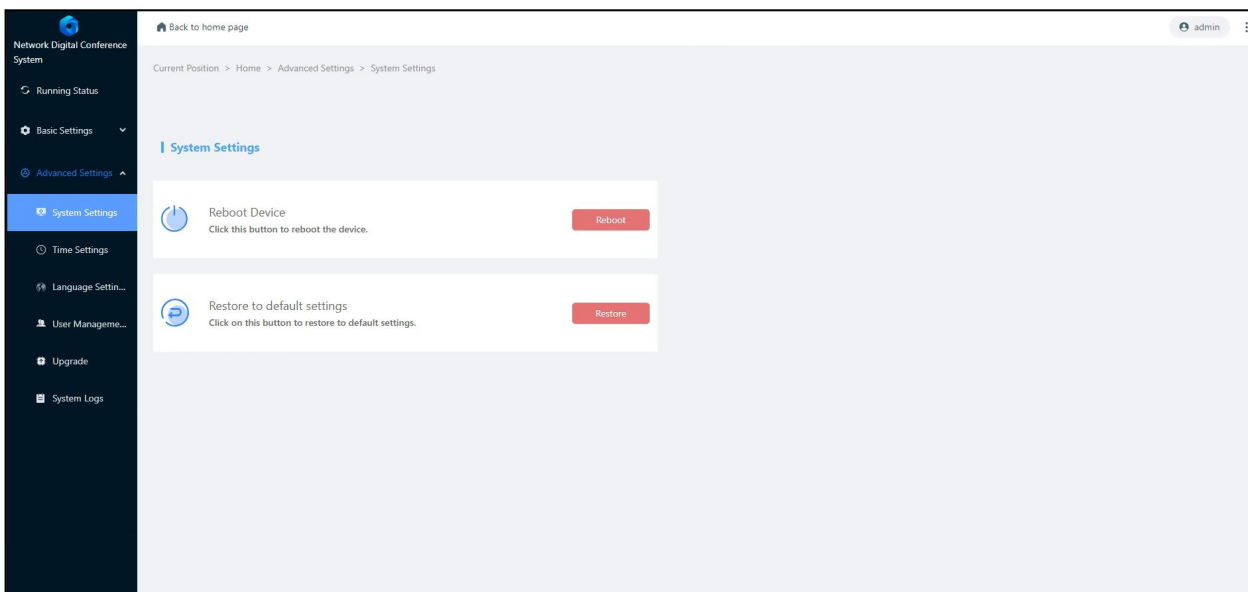
Auto upgrade	Set whether to enable auto upgrade function. When enabled, the central unit will automatically get the latest firmware from the version server, and upgrade.
Version server IP, port	Fill in the IP address and port of the version server.

## Advanced Settings

### System Settings

**Reboot:** Click on this button will reboot the device.

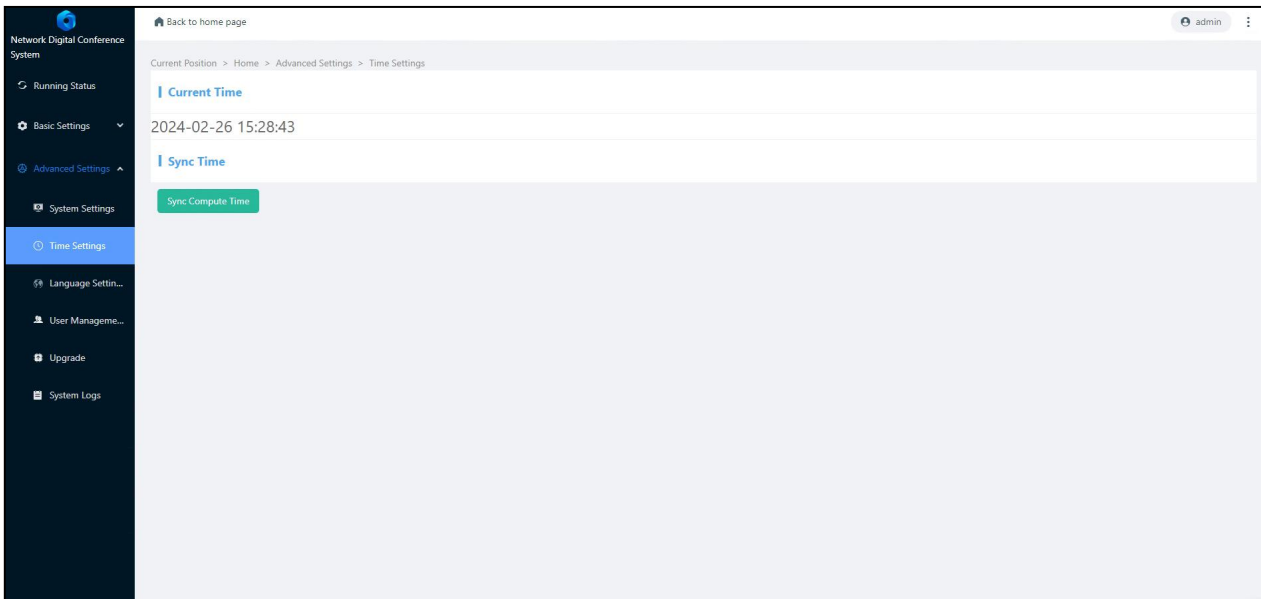
**Default:** Click the button to restore all the parameters of the device to the factory Settings (please use with caution)



## Time Settings

Click the "Sync Computer Time" button, the system will synchronize the computer time.

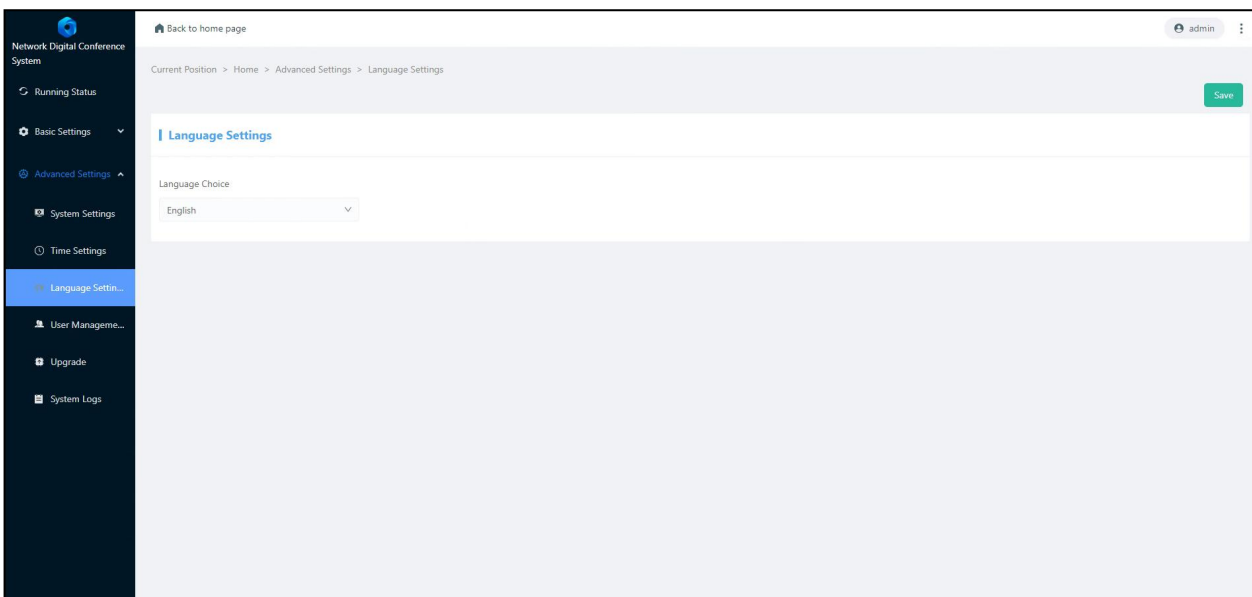
**Note: Login server will automatically get the time.**



## Language Settings

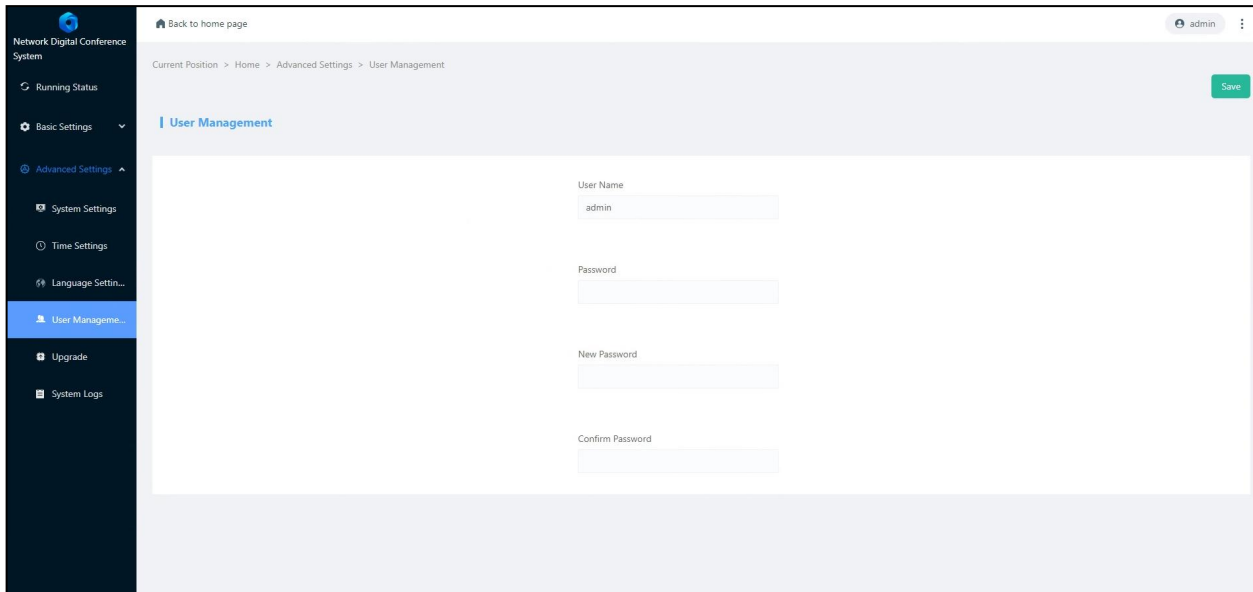
You can set the display language here, it supports Chinese and English.

After save the setting, rebooting the web page to take effect.



## User Management

You can change the password for logging into the WEB page in here. After save the password change, rebooting the web page to take effect.



The screenshot displays the 'User Management' page of a 'Network Digital Conference System'. The interface includes a dark sidebar with navigation options: Running Status, Basic Settings, Advanced Settings, System Settings, Time Settings, Language Settings, User Management (highlighted), Upgrade, and System Logs. The main content area features a breadcrumb trail: 'Current Position > Home > Advanced Settings > User Management'. A 'Save' button is located in the top right corner. The form contains four input fields: 'User Name' (pre-filled with 'admin'), 'Password', 'New Password', and 'Confirm Password'.

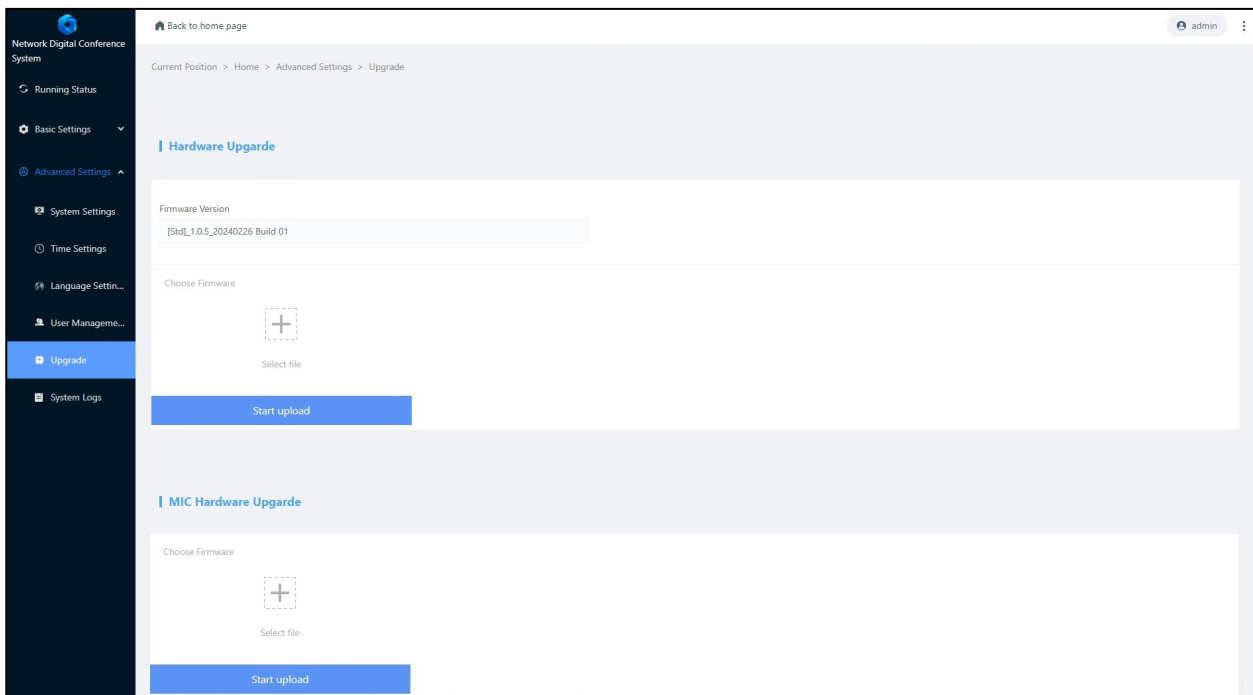
Field Label	Value
User Name	admin
Password	
New Password	
Confirm Password	

## Upgrade

You can upgrade the firmware version of the digital conference system central unit and microphones here.

On the Upgrade Firmware page, click "+ Select File", select the firmware upgrade file provided by the manufacturer, and click the "Start Upload" button to start the upgrade.

**Note: Do not power off during the upgrade process, otherwise it may lead to the failure of the upgrade and the failure of the device. The upgrade process takes about 120s. After the upgrade, the device and web page will be restarted automatically. (Do not upgrade firmware unless you have a special need)**



## System Logs

Digital conference system central unit can automatically record the running process and generate logs, and support users to download system logs.

The screenshot shows the 'System Logs' page in the Network Digital Conference System. The breadcrumb trail is 'Home > Advanced Settings > System Logs'. The page title is 'System Logs'. Below the title is a table with the following data:

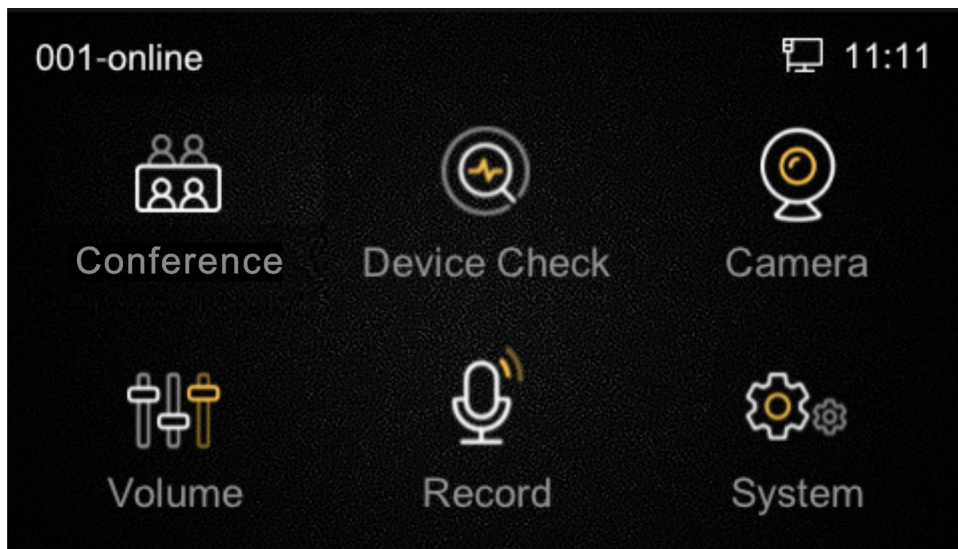
Index	Log content	Operation
1	sys_log	<a href="#">Download</a>
2	web_log_cn	<a href="#">Download</a>
3	web_log_en	<a href="#">Download</a>

At the bottom of the table, there are navigation buttons: '<', '1', and '>'.

## 4.3 Basic Function

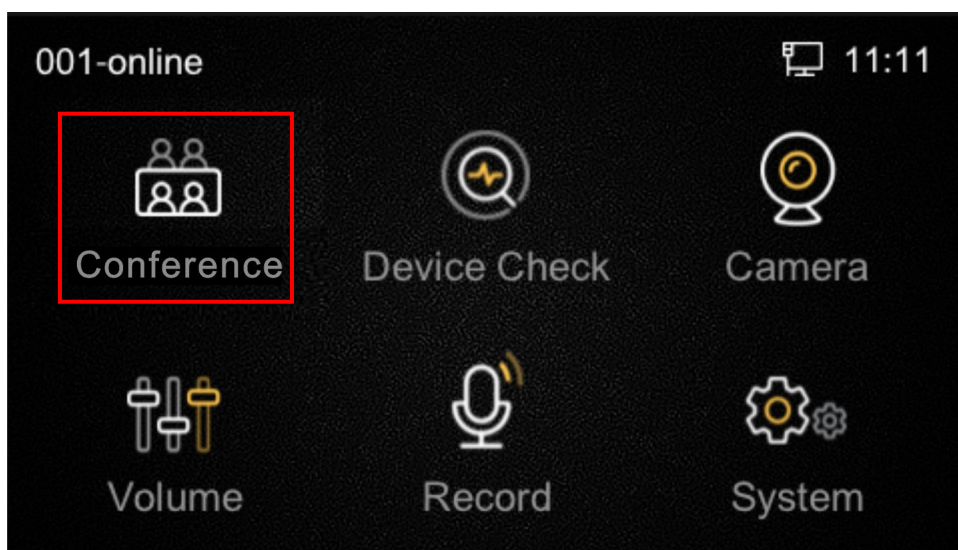
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On the device, Conference, device check, camera, volume, record and system settings can be configured by rotating the Jog-Dial and pressing the return button.



### Conference

Rotating the Jog-Dial to "Conference", we can set the conference mode, the maximum number of speakers, etc. After setting, press the return button to save the settings.



**Conference mode**

**Fifo:** When the number of speakers has reached to the maximum number of speakers, there are unit seats who want to join the conference, then it needs unit seats to exit the conference. In fifo conference mode, the first unit seat allowed to speak will be kicked out.

**( Note: The "maximum number of speakers" in this mode includes the chairman unit.)**

**Request&Approve:** in this mode, if a "represent" wants to join the conference, it needs the approval of the "chairman". Only one "represent" can speak at a time, other "represent"s who apply for speak will in queue

When the number of speakers has reached to the maximum number of speakers, it needs speakers to press the speaker button to exit the conference, and the next unit seat can speak.

**(Note: The "maximum number of speakers" in this mode is ineffective. When speakers of chairman reach to 9, "Fifo" mode will be followed among chairman. )**

**Chair First:** in this mode, only chairman units can speak.

**(Note: The "Maximum number of speakers" is ineffective in this mode.)**

**Limit Mode:** When the number of speakers has reached to the maximum number of speakers, there is a "chairman" who wants to speak, it needs speakers to exit the conference, In this mode, if a "chairman" wants to speak, the "represent" who allows to speak first will be kicked out of speak first.

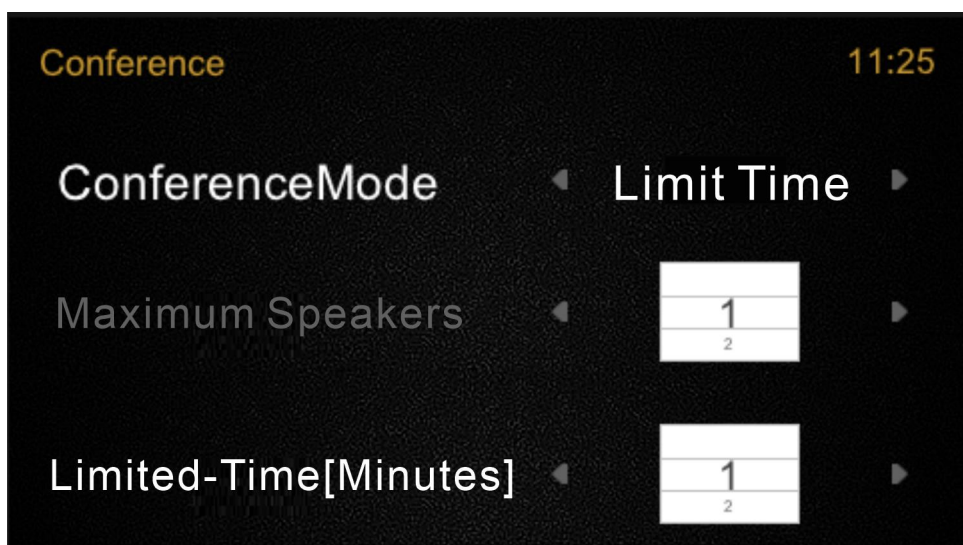
**(Note: The "maximum number of speakers" in this mode includes the chairman unit.)**

**Limited-Speak mode:** when select "limited-Speak mode", you need to set"Limited-Time"also, when a "represent" start to speak , it start the timer, and other "represent" can't speak. For "chairman", they can press speak button to speak at any time.

**(Note: The "maximum number of speakers" in this mode is ineffective. When speakers of chairman reach to 9, "Fifo" mode will be followed among chairman. )**

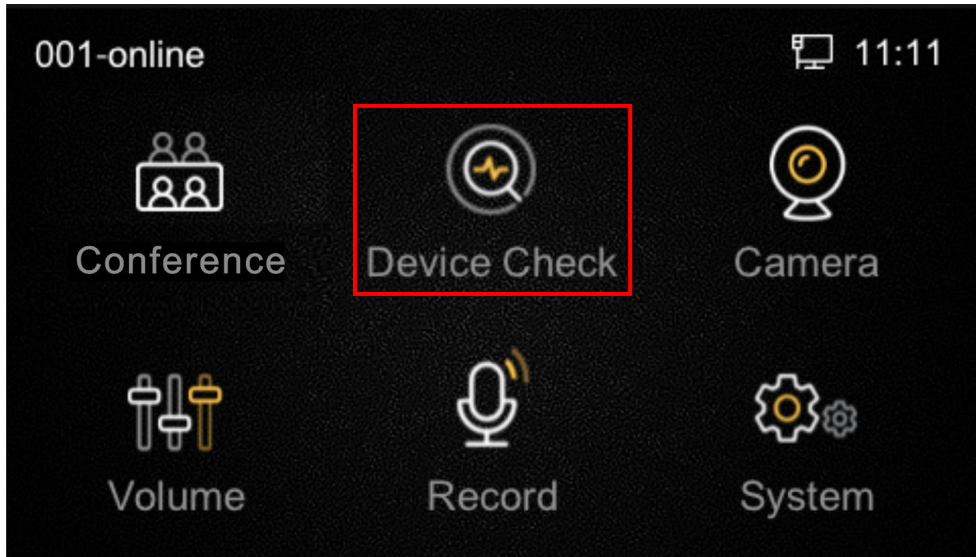
**Maximum number of speakers:**

Set the maximum number of speakers for a Conference.



## Device Check

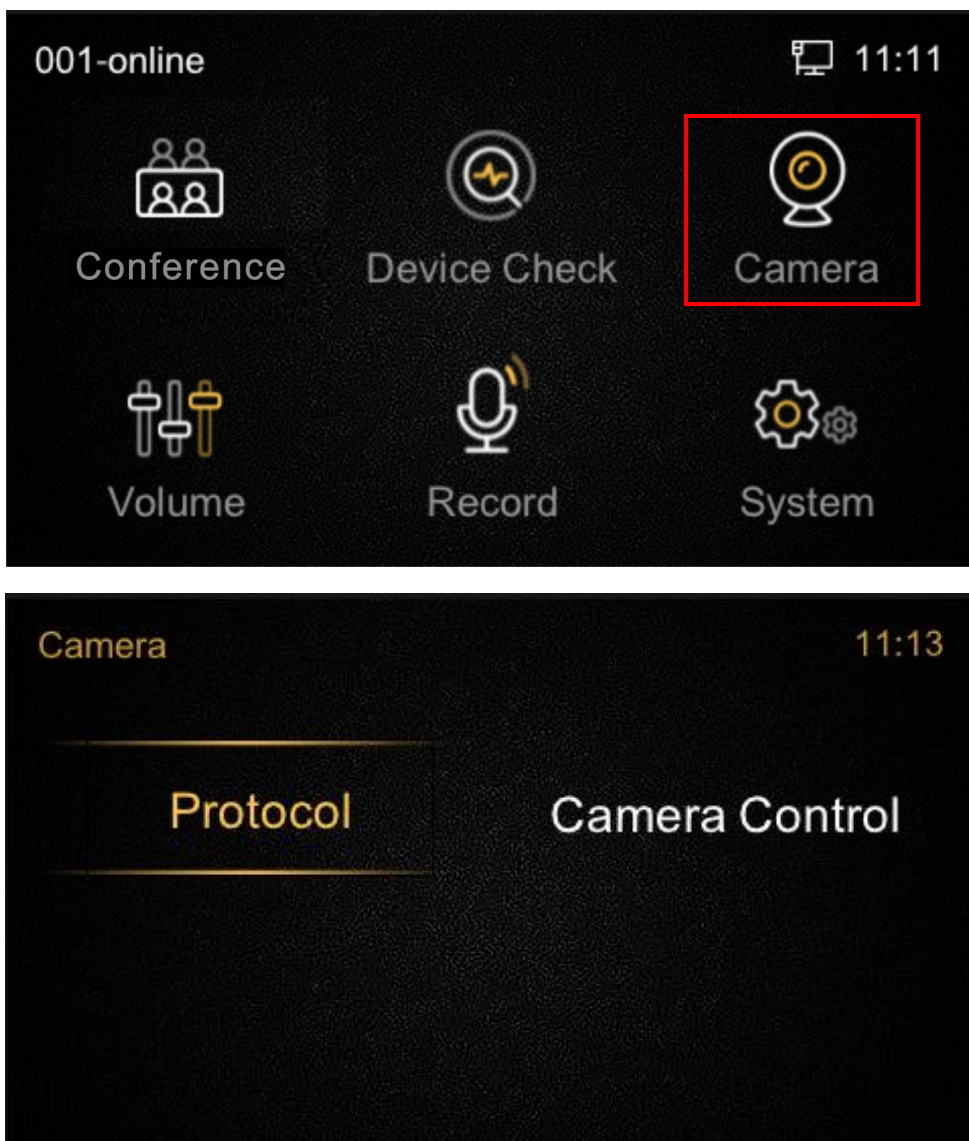
Rotating the Jog-Dial to "Device Check", we can real-timely check the connection status of Digital conference system central unit port and the units connected on the port. Press the return button to return to the main page.



The abnormal unit connection will be automatically detected. After the detection is completed, the interface will display the detection results . Users can check the port or unit connection according to the detection results shown.

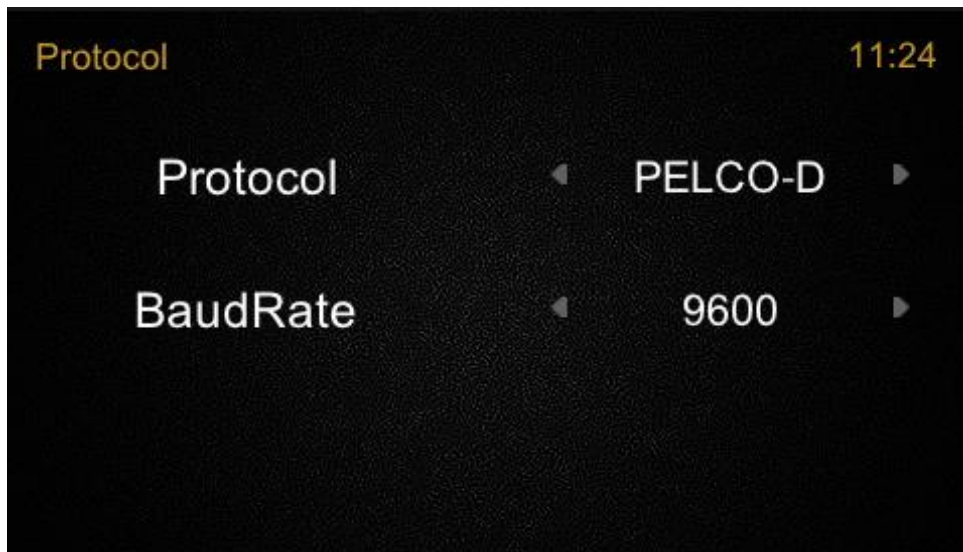
## Camera

Rotating the Jog-Dial to "Camera" to set the protocol of cameras which are connected to the Digital conference system central unit , and set the preset position of cameras and unit seats . Press the return button to save the settings.



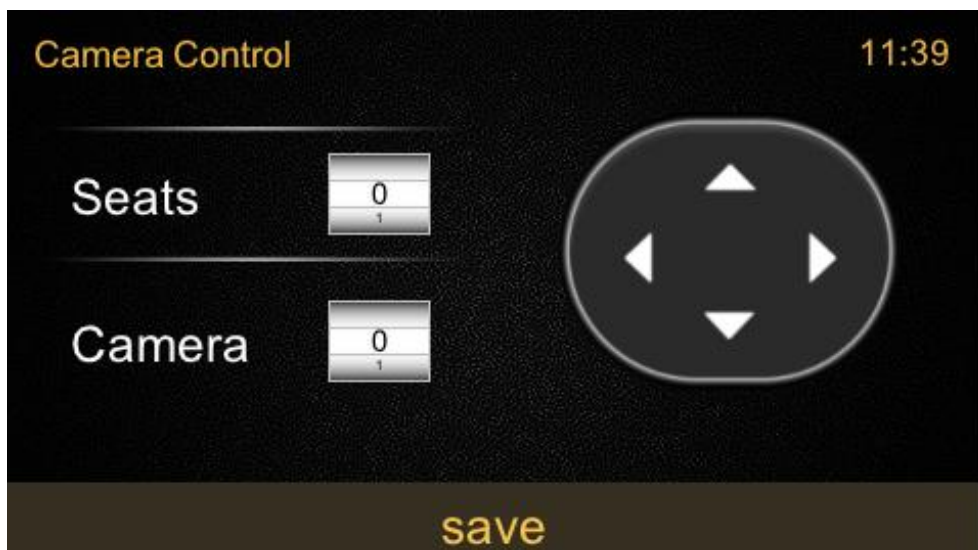
## Protocol

Select the protocol and baud rate for cameras which are connected to the Digital conference system central unit .



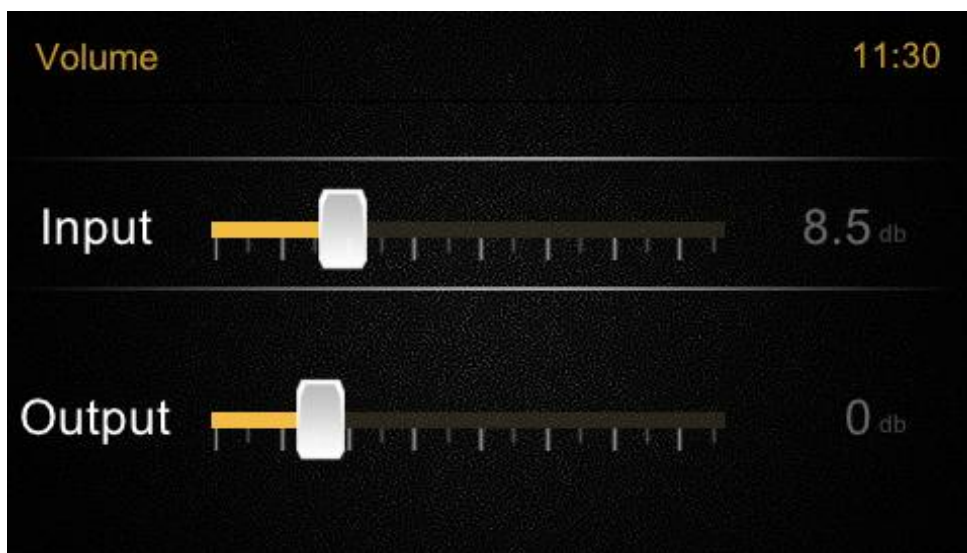
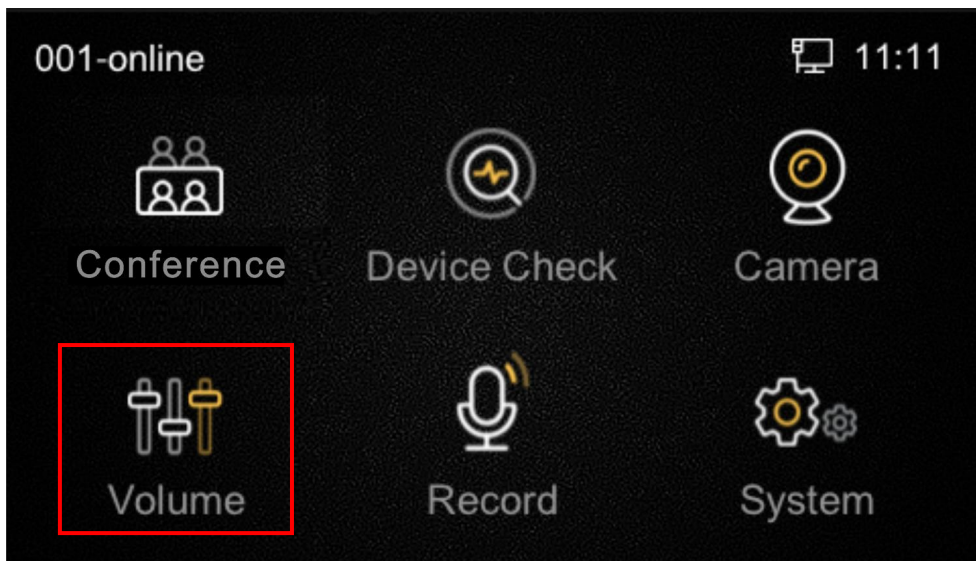
## Camera Control

In this interface, the preset position of the camera which are connected to the Digital conference system central unit and the unit seat can be set. After the unit seat is set, when the unit seat speaks, the camera will be turned to the unit seat and display the screen of the unit seat.



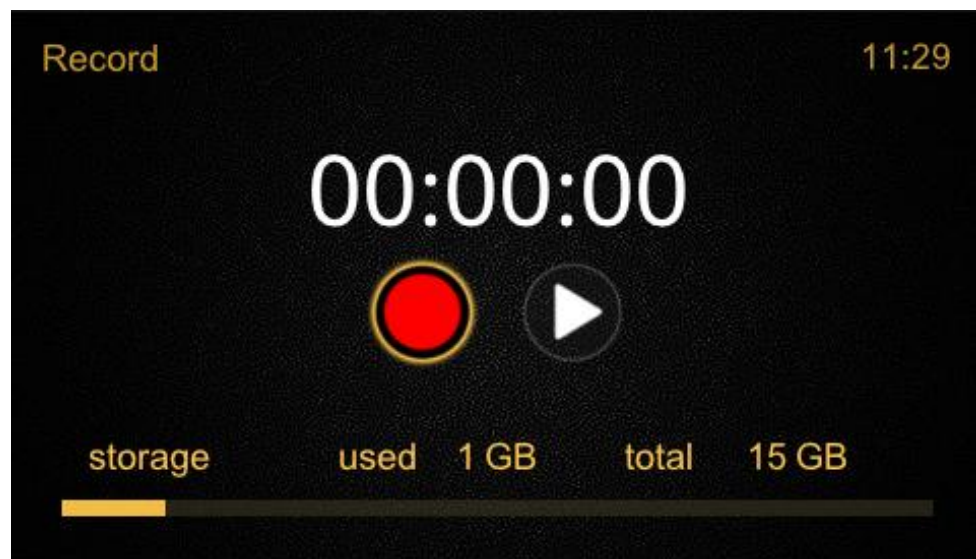
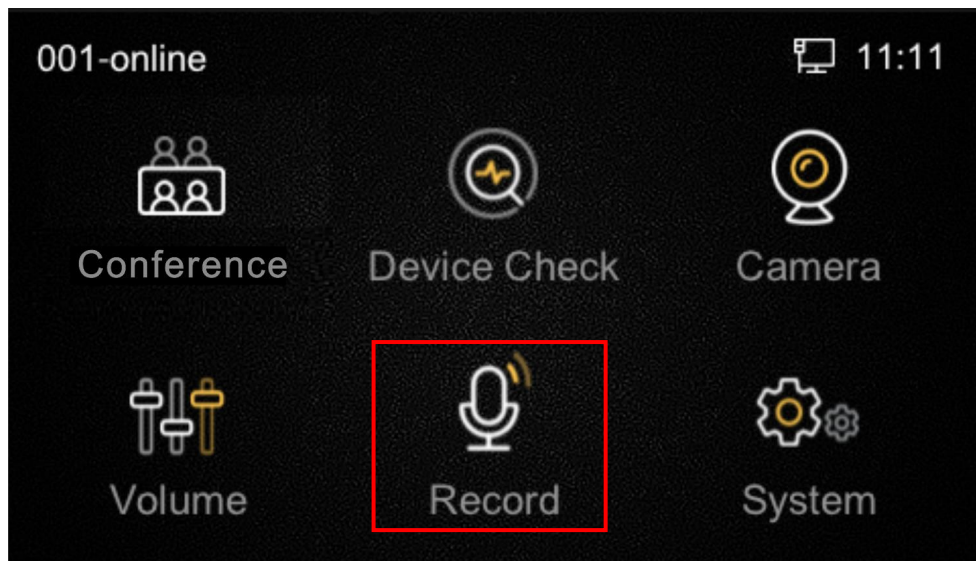
## Volume

Rotating the Jog-Dial to "volume" to set the input volume and output volume of the unit seat connected to the Digital conference system central unit. Press the return button to save the settings



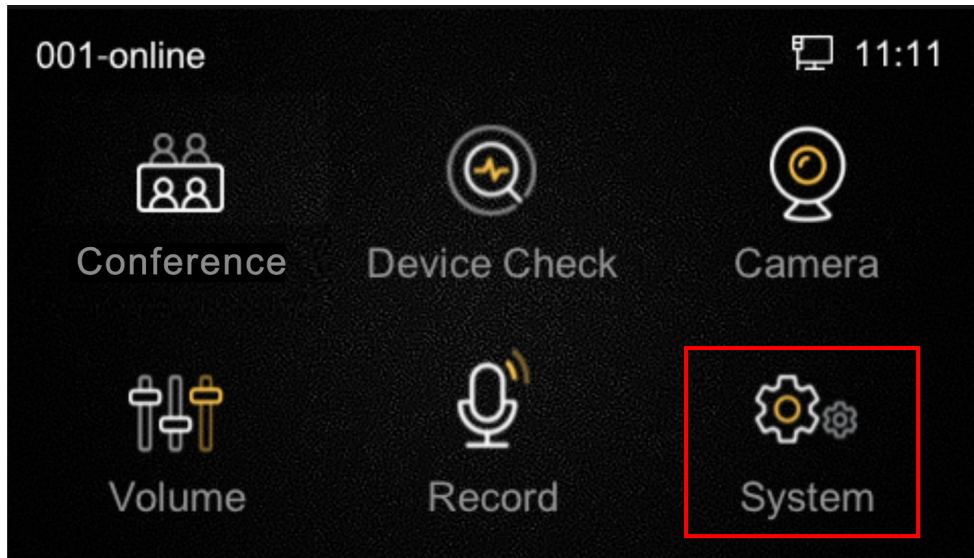
## Record

Rotating the Jog-Dial to "record", you can insert a U disk to record audio of the unit seats which are connected to the Digital conference system central unit. **(Note: The USB flash disk inserted must be in FAT 32 format)**



## System

Rotating the Jog-Dial to "System", you can view the network information of the Digital conference system central unit, and configure WLAN, Bluetooth, etc.



## Network

Set the IP address, subnet mask, gateway and other network information of the Digital conference system central unit. Press the Return button to save the settings.

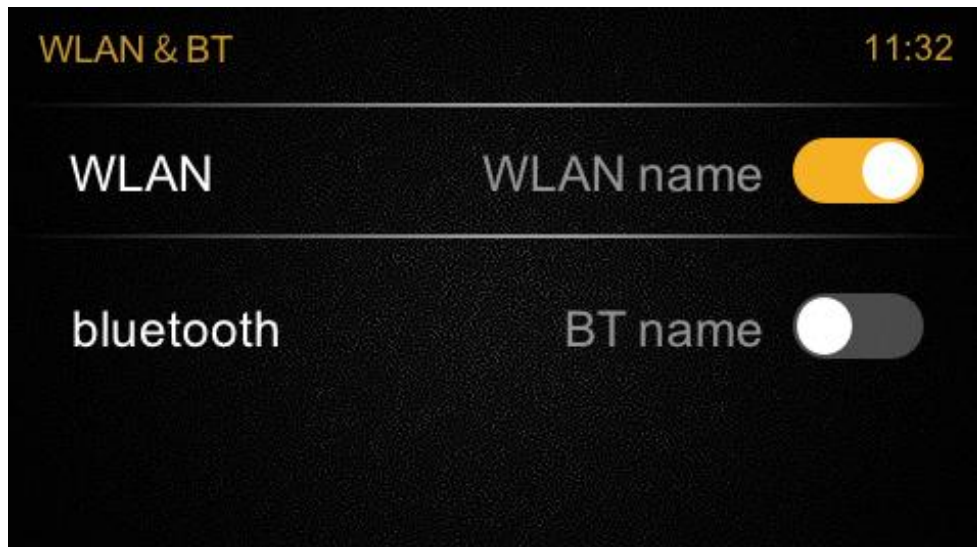


Network	11:27
IP ADDR	192.168.70.46
MASK	255.255.255.0
GATEWAY	192.168.70.1
MAC	00:00:00:00:00

## WLAN & BT

In this interface, you can open the WiFi and Bluetooth switch of the Digital conference system central unit. You need set the WiFi and Bluetooth names and password on the Web page.

**(Note: The default WiFi password is "12345678", and the default Bluetooth password is "0000".)**

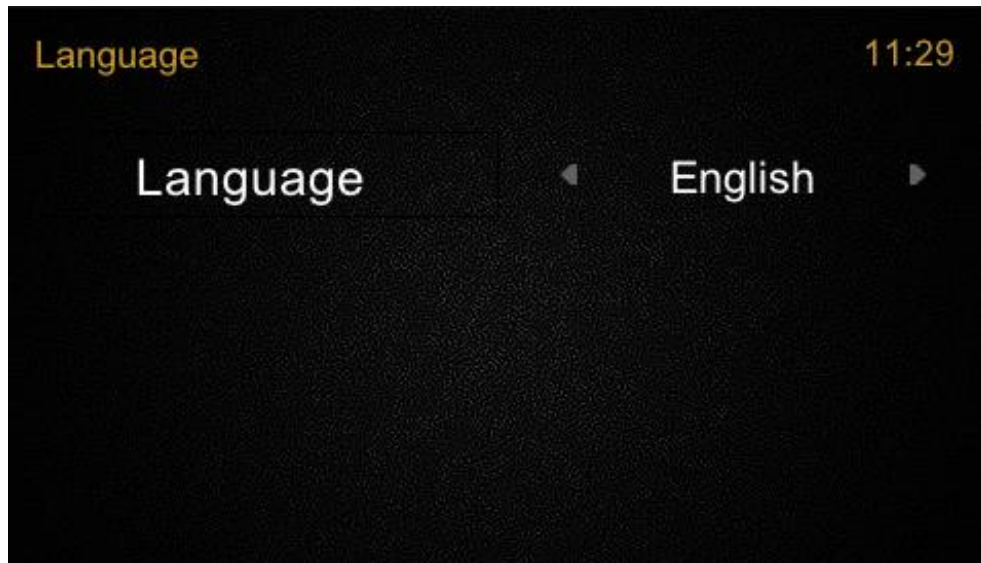


## Help

Scan the QR code in this interface to enter to the company's official website.

## Language

You can change the display language here. It supports Chinese and English. Press the Return button to save the settings.



## 4.4 Troubleshooting

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### System date back to initial value?

The battery needs to be replaced, please contact a professional to replace battery.

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