



Fully Digital Conference System

User's Manual

TS-0210

Please read this manual carefully before using the system

Notification



To ensure the reliability of the equipment and the safety of personnel, please observe the following when installing, using and maintaining:

- If any of the following conditions are found, please immediately turn off the power, plug out and quickly contact your nearest dealer. Do not continue using this unit, which may cause a fire or electric shock.
 - If you find smoke or have a strange taste from the machine.
 - If water or metal falls into the machine.
 - If the unit is dropped or the case is damaged.
 - If the wire is damaged (wire core exposure, broken wire, etc.).
- If the machine contains high-pressure parts, in order to avoid the fire or electric shock, absolutely don't open the case, if any questions please inform your nearest dealer.
- Do not place cups, bowls, vases or metal and other water-filled substances on the unit. Serious spilled liquid may cause a fire or electric shock.
- Never expose the unit to rain and any moisture or water, which may cause electric shock or fire.
- Do not place metal objects or flammable materials from the vents on the machine cover, nor place coins, which may cause fire or electric shock.
- Do not place heavy objects on the unit to avoid personal injury or property damage when the unit is slipping.
- Make sure that the volume is turned on at the beginning of the boot, and the high volume of the boot may cause hearing problems.
- Make sure that the volume is turned on at the beginning of the boot, and the high volume of the boot may cause hearing problems.
- For long-term accumulation of dust to be cleaned, please inform your dealer to regularly clean the machine, so as to avoid damage to the machine or cause a fire.
- The battery must be replaced with the same type of product and the correct installation should be made in order to avoid electrical damage and explosion hazard.
- The product is a Class III device. The device must be well connected to ground. The power plug must be connected to a power outlet with a grounding device to ensure that the equipment is fully grounded.
- This product uses a power plug or appliance input socket as a disconnecting device with the power supply, and must be disconnected if necessary for safety reasons.



- This equipment is only suitable for safe use at altitudes under 2000 meters.

Precautions

1. The installation environment

When installing the unit, in order to ensure the normal cooling of the host, should avoid the poor ventilation of the place or high temperature environment, to avoid direct sunlight.

Recommend to install cabinet or other well-ventilated place indoor. If you use the machine in the outdoors, please pay attention to waterproof, moisture, lightning protection measures.

Avoid installing in a violent place of vibration; do not place other equipment on the machine.

Working temperature : -10°C~ 60°C.

Humidity is limited to 5% to 90% (non-condensing).

2. To avoid electric shock and fire

Do not touch the hands and the source with wet hands

Do not spill liquid on the machine, so as to avoid short-circuit or fire inside the machine.

Do not place other equipment directly on the top of the unit.

Non-professional service personnel Do not disassemble the unit yourself to avoid damage and electric shock.

3. Transport and handling

The packaging of the machine is designed and tested to ensure that the host will not be accidentally damaged during transport. It is best to use the original packaging when handling the unit.

Do not move the host device between the place or cold or over hot to avoid condensation inside the machine, affecting equipment life.

4. Please follow the warning instructions on this product, the warning signs on behalf of:

	Applicable to 2000 meters above sea level and below safe use
	Safe use only in non-tropical climates

5. Agreement

Please strictly follow the instructions in this manual. The software, hardware and appearance of this product will be upgraded and updated continually. The above changes will be made without notice.

Non-professional maintenance personnel, do not remove the product, to avoid damage and electric shock.

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1. System Introduction

The digital conference system microphone unit has a 7-inch capacitive touch color screen and an 8.8-inch electronic nameplate. It has conference functions such as conference speech, conference sign-in, voting, simultaneous interpretation, electronic nameplate, camera tracking, conference service, etc. It is widely used in round table room, square table conference room, multi-function hall, banquet hall, lecture hall and other places.

2. Product Introduction

2.1 TS-0210 7 inch + 8.8 inch dual screens with microphone electronic nameplate

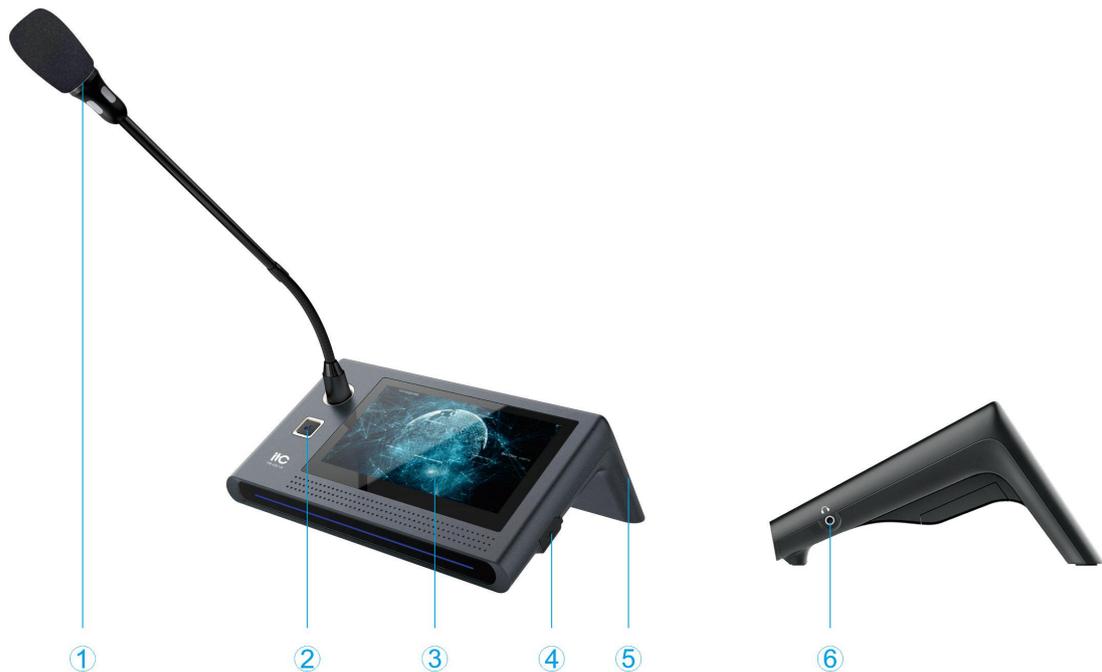


2.2 Features

1. The microphone adopts the sampling rate of 48KHz, which is higher than the sound quality of the CD with clear and bright sound. With the internal DSP audio processing, there is no low-frequency sound of “poop-poop” .
2. It adopts quad-core Cortex™-A7 architecture processor and is equipped with Android 4.4.2 system.
3. The system is highly compatible and can be mixed with other wired units.
4. Electronic nameplate display function: 13 kinds of fonts and free color and font size settings. Can be input locally using input method, or uniformly distributed by PC software.
5. The conference information can be uniformly distributed through the PC software, which can be viewed or previewed on the main page.
6. Can call a variety of service needs. View the needs of participants through the PC platform.

7. Support short message communication inside the conference room and text sending function.
8. Multi-language compatibility. You can choose Simplified Chinese, Traditional Chinese, English.
9. Read document in USB: Can be inserted into the USB device to open reading or editing office documents.
10. It has the functions of calculating the time of the speech and timing the speech.
11. The delegate unit has the function of applying for a speech, and the applicant is allowed to speak through the chairman unit.
12. With voice control function, you can open the microphone intelligently, adjust the voice sensitivity and set the off time with the PC software.
13. With 10-band EQ adjustment function (PC software adjustable), it can adjust the different sound effects of all microphones to achieve perfect effects.
14. With sign-in function, it sets and initiates sign-in through PC software or chairman unit.
15. The chairman has a priority to turn off all delegate microphones that are speaking.
16. Internal feedback suppression can effectively prevent howling.

2.3 Product Features and Functions

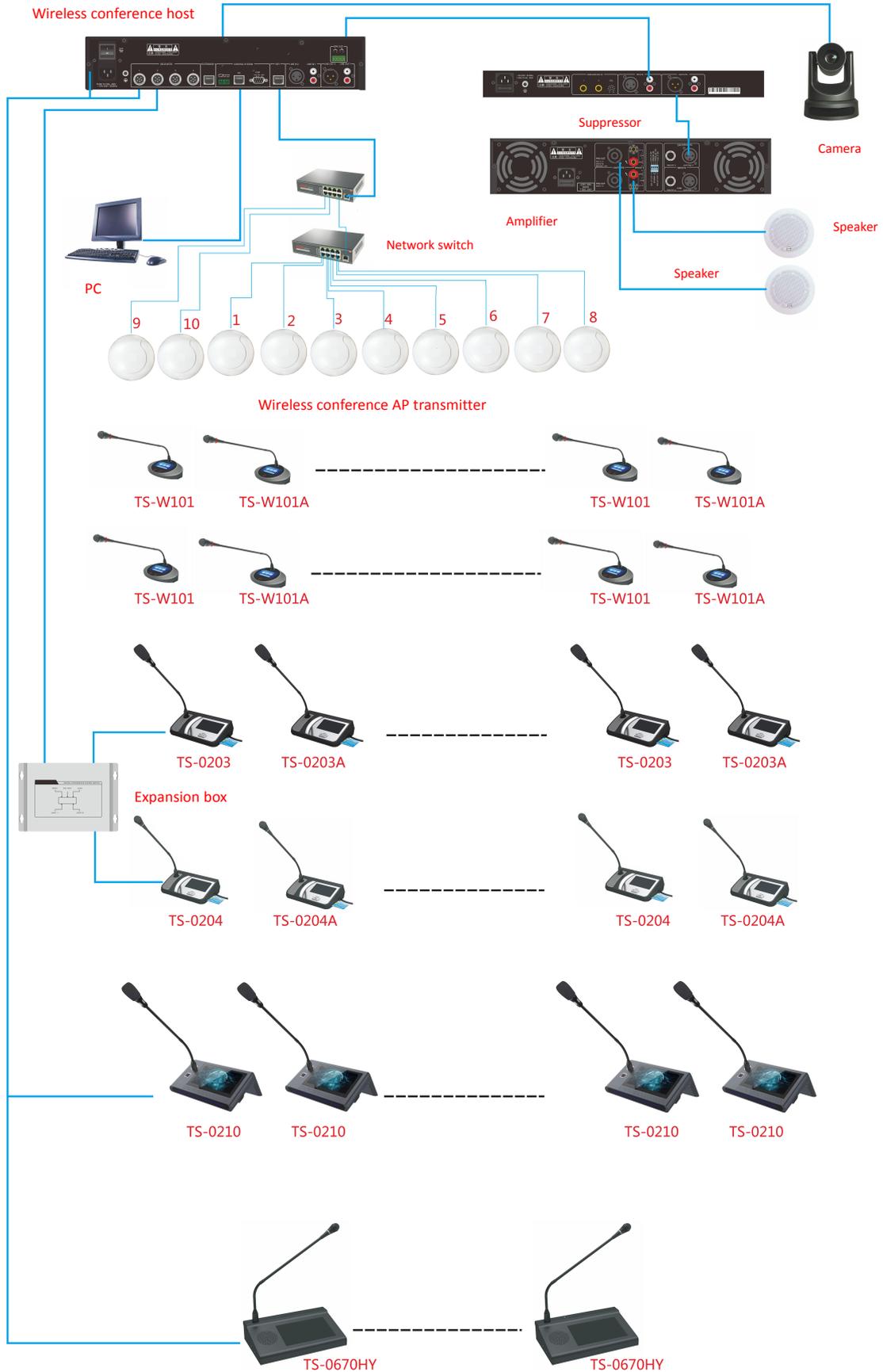


- ① Microphone rod;
- ② Microphone switch physical button;
- ③ 7-inch capacitive touch screen and display area;
- ④ Standard USB interface;
- ⑤ 8.8-inch display screen;
- ⑥ Headphone jack.

2.4 Specifications

Model	TS-0210
Microphone type	Cardioid directional electret
Frequency response	80Hz~16KHz
Microphone input impedance	1K Ω
Sensitivity	-46 dBV/Pa
Max SPL	100dB (THD>3%)
SNR	>80dB(A)
Crosstalk	>70dB
Dynamic Range	>80dB
THD	<0.1%
Maximum power consumption	7 W
Headphone load	>16 Ω
Headphone volume	MAX 40mW
Headphone jacks	3.5mm dual channel jacks
Standard	IEC60914
Power supply	Controller powered
Colour	Frosted graphite gray
Voting function	Five-button election, three-button voting
Check-in function	Button check-in
Display	7-inch color screen + 8.8-inch full-view color screen
Dimensions (LxWxH)	255x156x108 mm
Installation	Desktop
Weight	1.3Kg

3. System Connection Diagram



4. Operating Instructions

4.1. Boot

Boot into the system page. The boot time is about 25 seconds, as shown below:

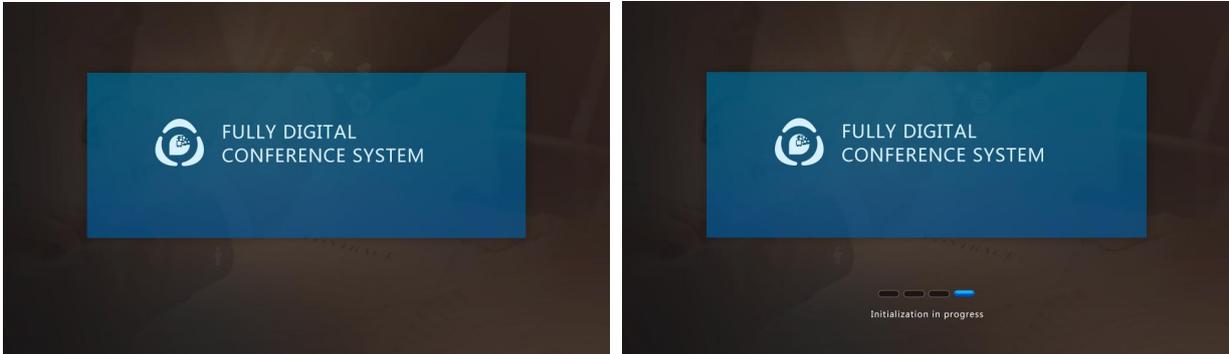


图 2

If it has just completed firmware burning, the boot time is about 40 seconds.

4.2. Home

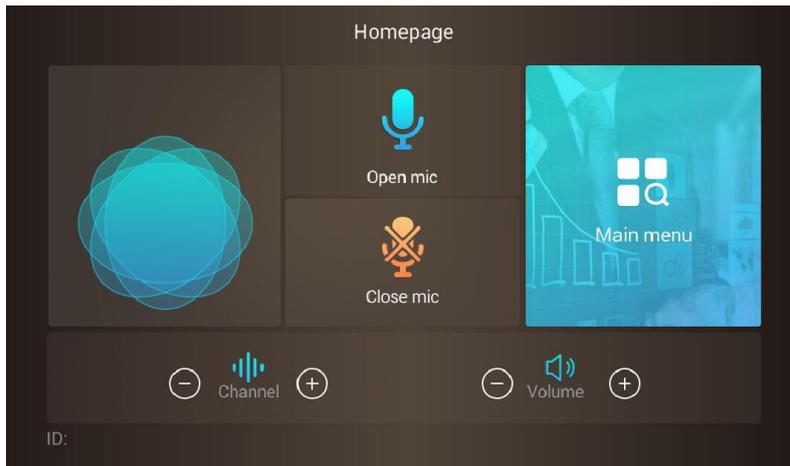


图 3

- ① The user name display area: should correspond to the nameplate name display (after the nameplate is updated), and the name sent via the PC should also be updated there.
- ② The microphone button: turn the microphone on or off.
- ③ The main menu button: click to enter the menu to use other functions.
- ④ Device ID number display area: show the current ID number. The edited ID number should be updated here in real time.
- ⑤ Channel specification adjustment function area: adjust the audio channel by adding and subtracting buttons.
- ⑥ Turn off the delegate microphone (priority button, only the chairman has the priority): turn off the delegate microphone and turn on the chairman microphone.
- ⑦ Volume parameter adjustment function area, adjust the volume by the addition and subtraction buttons.

4.3. Navigation bar

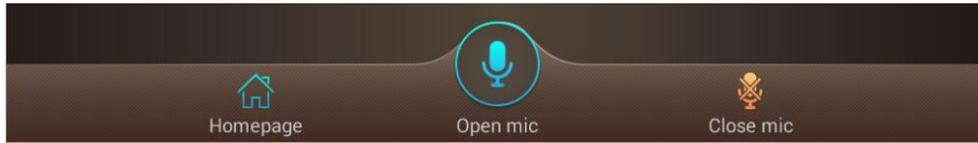


图 4

- ① Home button: click to return to the home page.
- ② The microphone button: turn the microphone on or off.
- ③ Turn off the delegate microphone (priority button, only the chairman has the priority): turn off the delegate microphone and turn on the chairman microphone.

4.4. Main menu

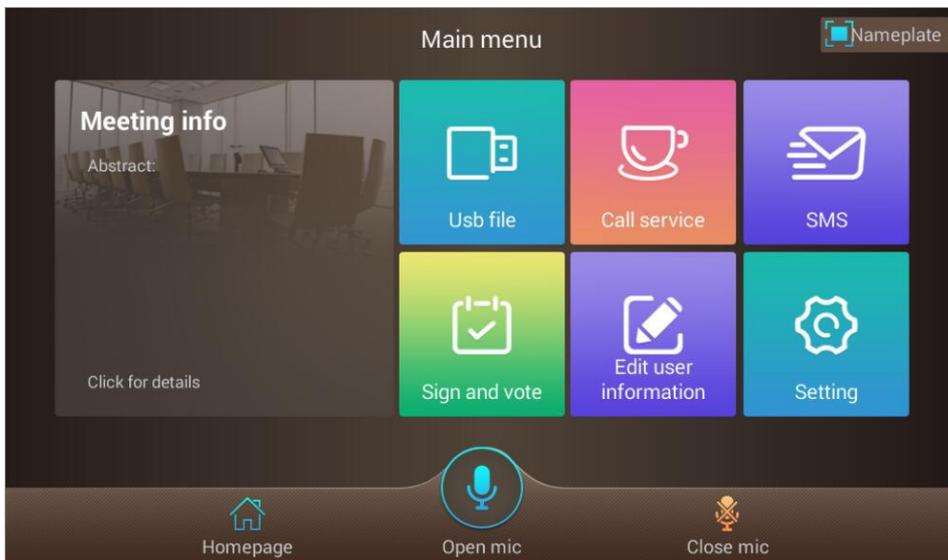


图 5

- ① Conference information: this page can view the conference information summary, click the conference information button to enter the information page for information details.
- ② U disk file: if the device has been inserted into U disk , click this button to enter the U disk file page.
- ③ Call service: click to enter the call service page, you can make a service demand call.
- ④ Visible nameplate: click to open the front screen to display the electronic nameplate information.
- ⑤ SMS function: click to enter the SMS function page, you can communicate in text between 0210 devices inside the conference room.
- ⑥ System settings: click to enter the system settings page.
- ⑦ Edit the user information and click to enter the edit user information interface to edit the electronic nameplate information of the machine.
- ⑧ Sign in to the voting (chairman authority): click to open the dialog box, select to start the sign-in or voting function.

4.5. Conference Information

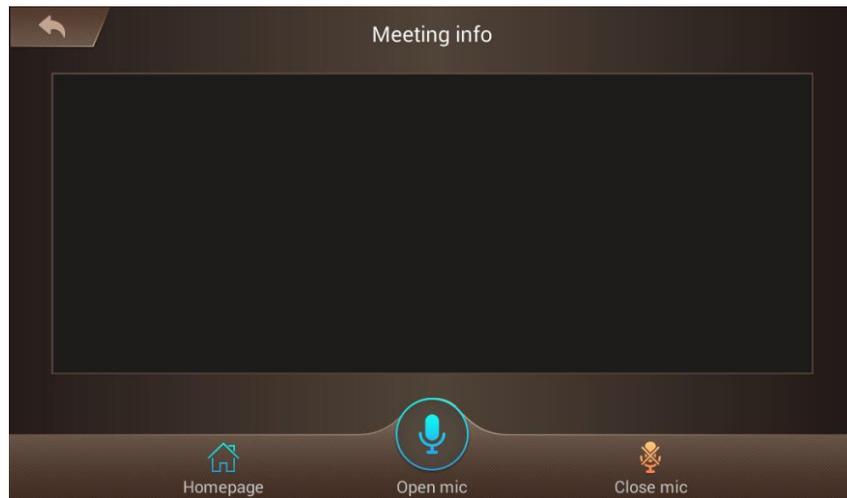


图 6

The conference information content box: all conference information sent through the PC will be updated in real time in the dialog box.

4.6. U disk files



图 7

- ① Return button: click the button to return to the previous page.
- ② The file display of current path: can display the contents of the currently selected path in the U disk, but only the file formats (pdf, word, excel, ppt, pdf) can be displayed. Double-click to open the file.
- ③ Path return: click to return to the previous path.
- ④ U disk current path: you can view the current U disk path, click a button in the path to return to the path files.

4.7. Call services

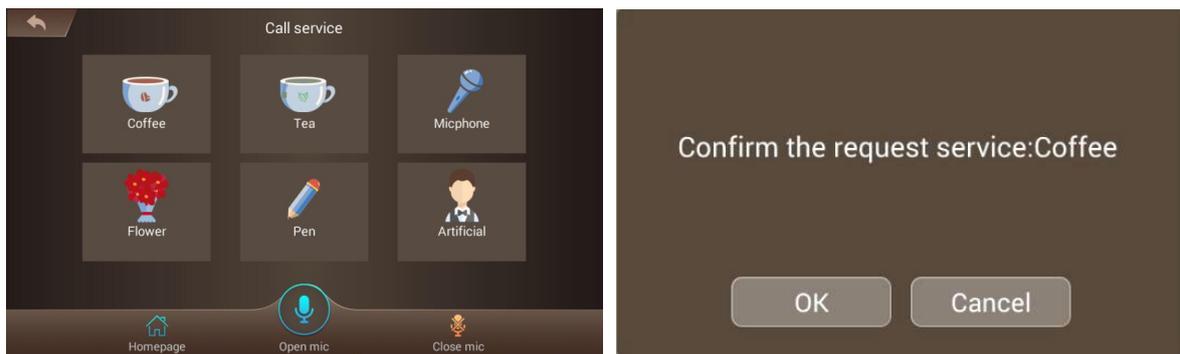


图 8

- ① Call service page: services optional.
- ② After choosing the service, a dialog box will pop up and prompt if you confirm the call.

4.8. SMS functions

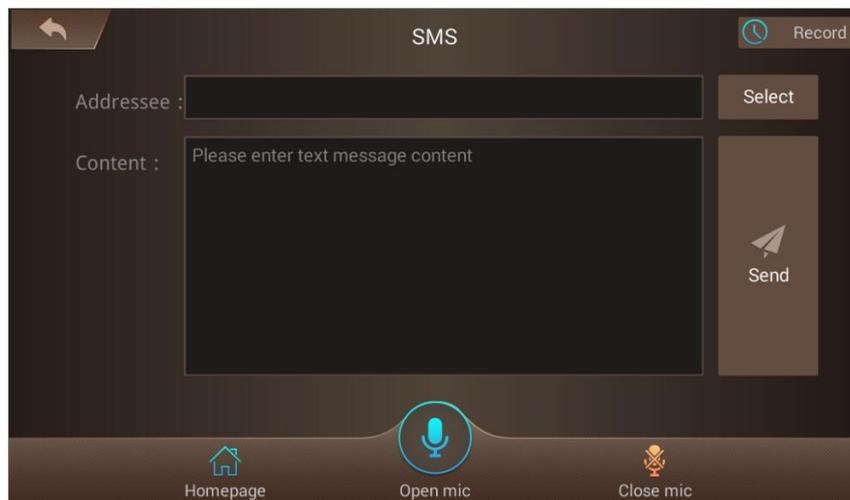


图 9

- ① Recipient display box: The selected recipient will be displayed in the dialog box. click the "-" sign to cancel the recipient.
- ② Message record: Click to enter the message record page, you can view the received message.
- ③ Select the recipient: Click to open the selection box for single or multiple recipients.
- ④ Sending button: Selecting the recipient and typing, you can click Send to send the short message.
- ⑤ Content input box: The input short message content will be displayed in the box. And the short message content can only be less than 30 Chinese characters.

4.9. Sign-in & vote

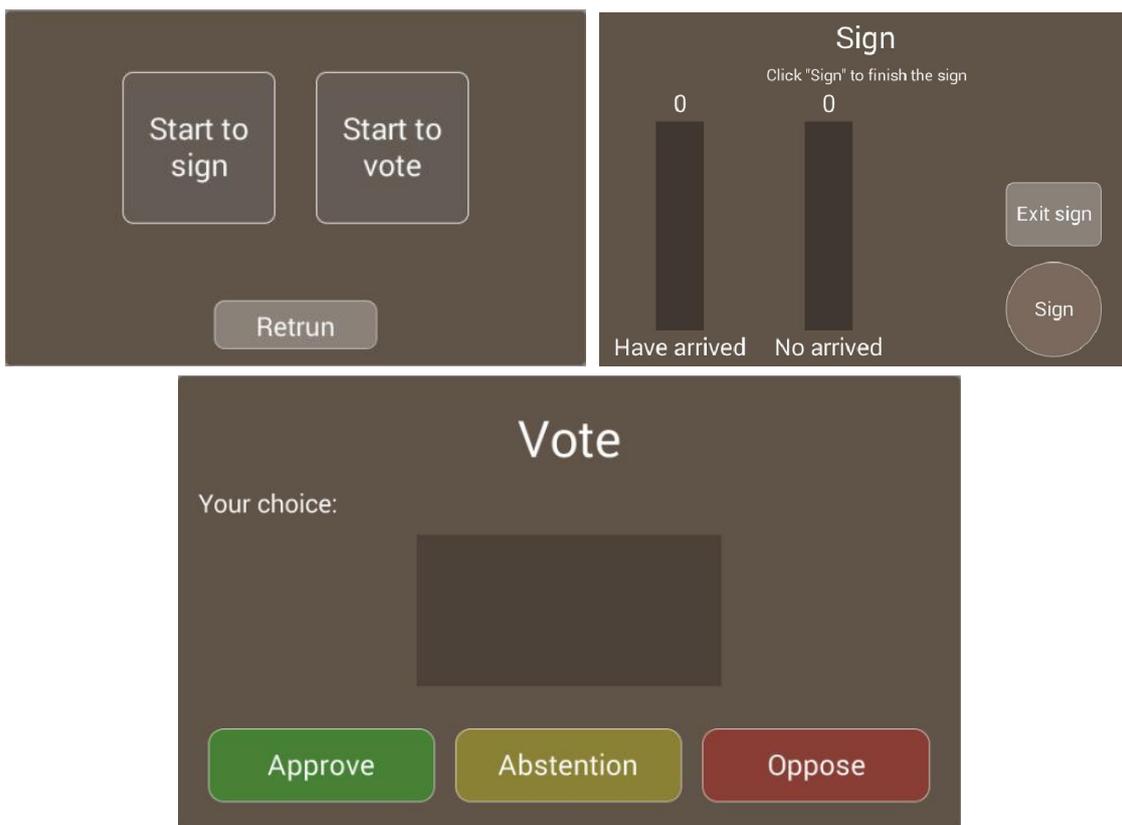


图 10

- ① A selection box to initiate sign-in and vote: you can choose the content to initiate, or choose to return.
- ② Sign-in page: click Sign in to complete the sign-in, and click Exit (initiator) to close the current page.
- ③ Vote page: Can be used to vote on the items. Click End vote button to close the current page (initiator).

4.10. Edit user Information

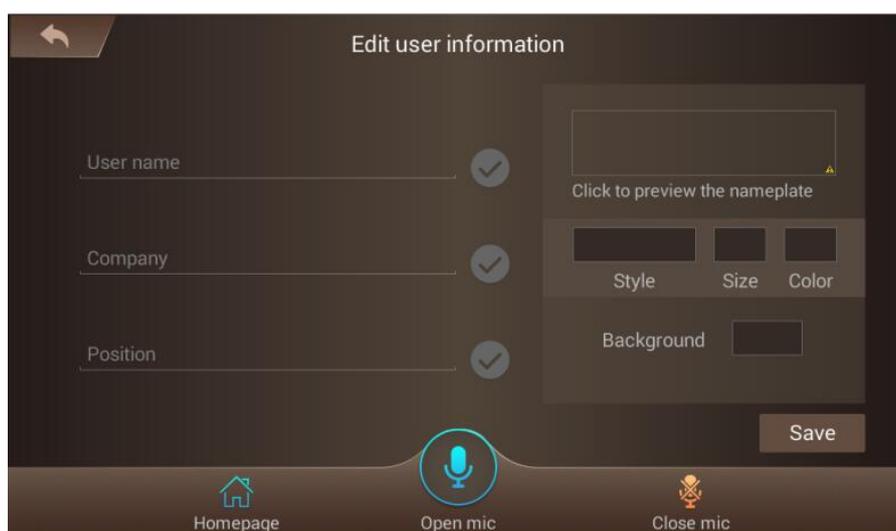


图 11

- ① Click the input box area to pop up the input method, and input the specifications.
- ② Click the Check button to select the name specifications corresponding to the specification setting list on the

right side;

- ③ Nameplate preview area: You can preview the nameplate design, click to enlarge the preview;
- ④ Set the nameplate text specifications;
- ⑤ Select the background color;
- ⑥ After the settings, click to save. If the setting specifications are not changed after saving, the button cannot be clicked again.

4.11. Nameplate preview



图 12

- ① Electronic nameplate preview area.
- ② Use the default layout of the electronic nameplate.
- ③ Confirm and update the electronic nameplate button.
- ④ Click to close the preview page.

4.12. System settings

1) IP address

This page displays information such as the device terminal ID, IP address, and port.

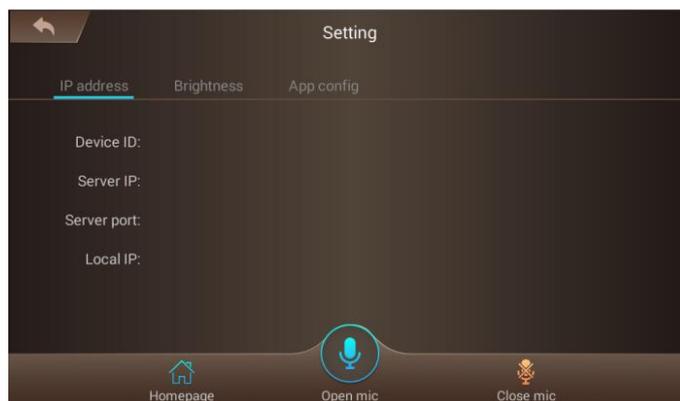


图 13

2) Brightness adjustment

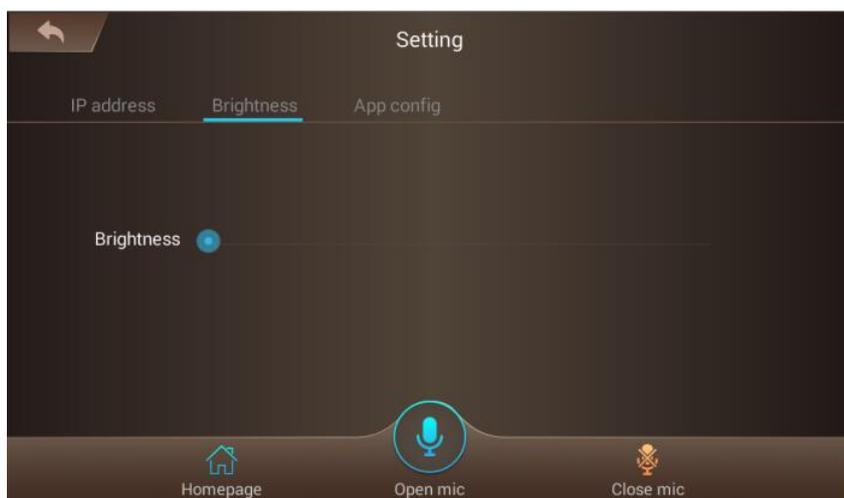


图 14

Drag the bar to set the backlight brightness of the device's home screen.

3) Application configuration

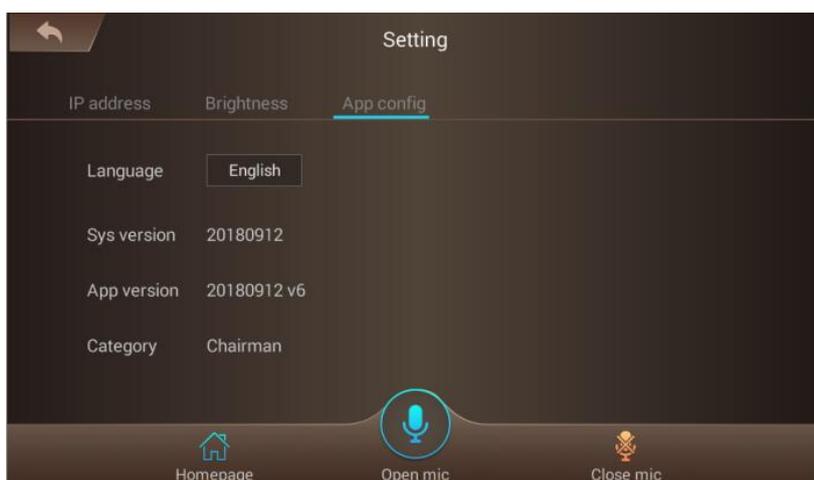
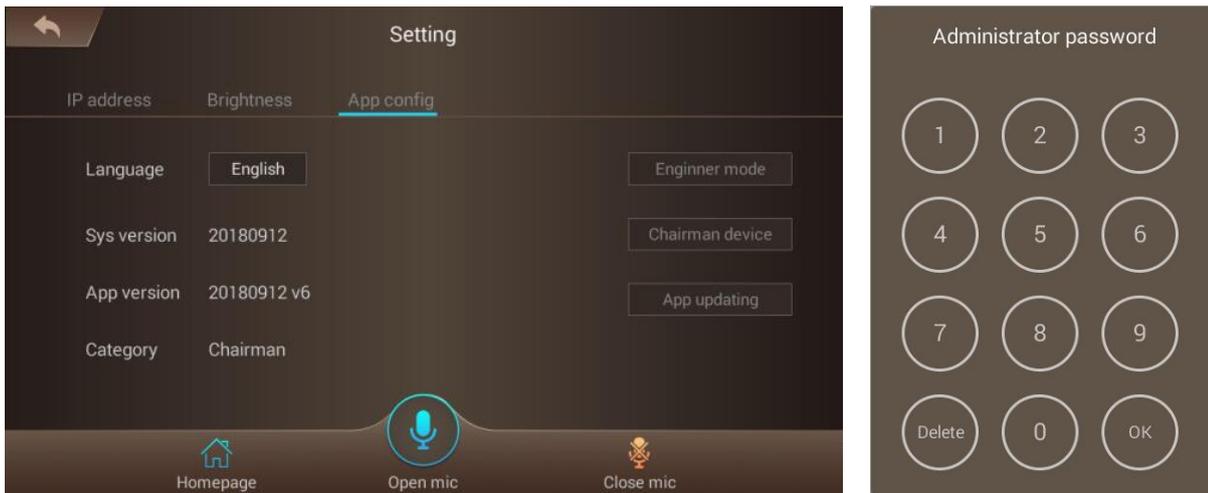


图 15

- ① Can set the system language. It currently supports Simplified Chinese, Traditional Chinese, English;
- ② Display the system version number;
- ③ Display the software version number;
- ④ Display device types. Currently, there are two kinds of chairman and delegate.

1) Administrator page

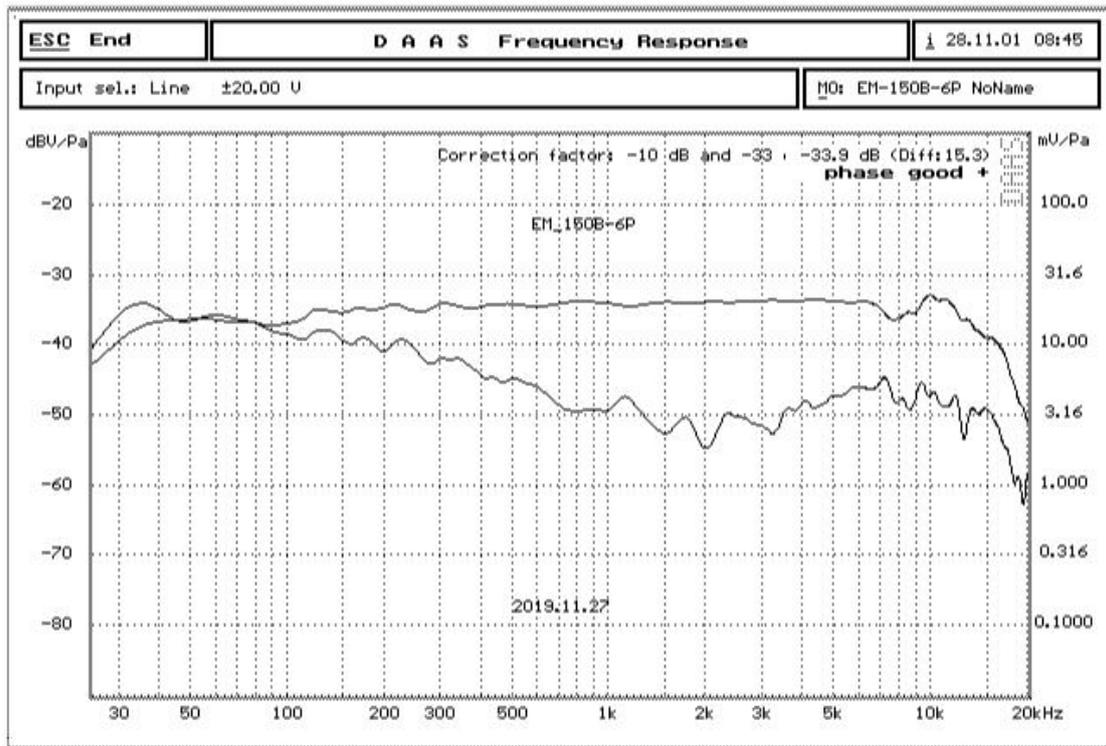
Click the number field of "System Version" or "Software Version" continuously for 5 times. The administrator password page will pop up. And enter the password "10241024" to activate the administrator page.



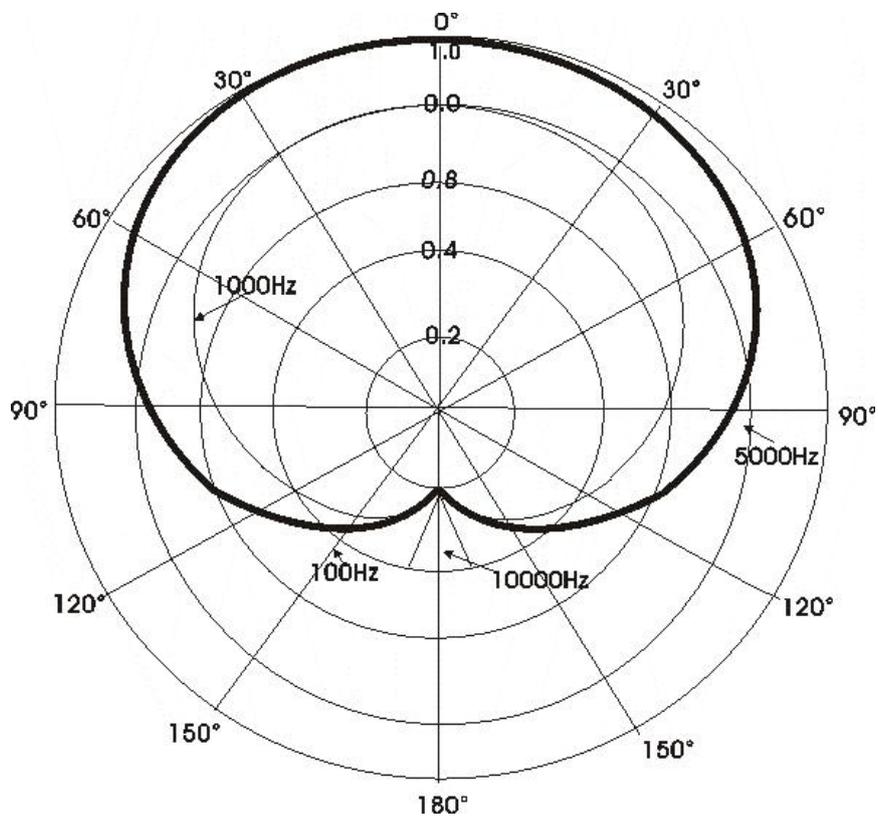
- ① Administrator function: Switch to the engineering mode dedicated to the research and development personnel. After the switch, the USB port is the device state. It can be connected to the computer, but not to the U disk.
- ② Switch to the chairman/delegate unit: This button can be used to set the device properties to the chairman or delegate unit.
- ③ Software upgrade: Put the APK file to be upgraded into the root directory of the U disk, insert the U disk and click the “Software upgrade” button. The software will automatically identify whether there is an APK application corresponding to the device in the U disk, and then upgrade.
- ④ The password box you need to enter before opening the administrator page: The password is currently set to “10241024” and cannot be modified at present.

Appendix

1. Microphone frequency response curve



2. Microphone cardioid curve



Fully Digital Conference System

