Wifi Digital Conference System

User Manual

TS-W302/W302A

Before using this system, please read this manual carefully

Notification

⚠ **WARNING**

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.

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● 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.

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.

6. Note

If it is not used for a long time or stored for more than half a year, it must be taken out and fully charged again to avoid battery damage.

CONTENT

1. System introduction

The wireless all-digital conference system adopts ITC's original network communication and digital transmission processing technology with completely independent intellectual property rights. The digital technology and network technology are applied to the conference system products. The perfect combination of wireless wifi and wired all-digital makes new breakthrough in the conference field.

2. Product introduction

TS-W302/TS-W302A third-generation wireless conference chairman/delegate controller

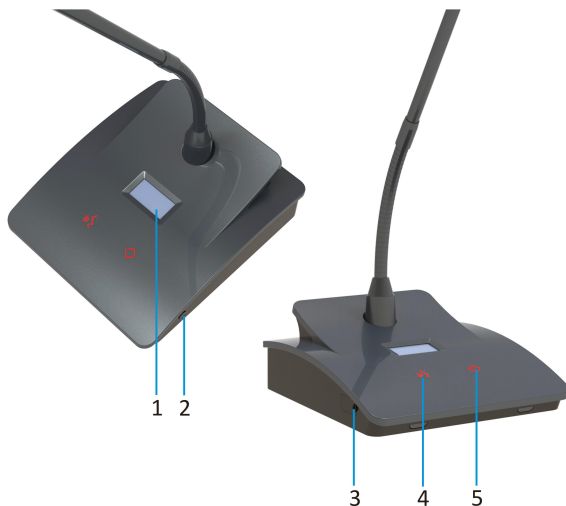TS-W302 Chairman controller   TS-W302A Delegate controller

Feature

1. With 48KHz sampling rate, it has the better sound quality than CD's, clear and loud sound. There is DSP audio processing inside, there is no "pop" low-frequency impact sound.
2. Advanced processing chip architecture, and unique processing algorithms, microphone boot connection time is only 5 seconds.
3. With the function of intelligent detection of faults, it prompts the user for AP failure, controller communication failure, weak signal,etc.
4. Support simple TYPE-C setting SSID, password function, ensure that the system will not connect to the wrong AP;
5. With speech countdown and speech timekeeping function.
6. With voice control, the microphone can be turned on intelligently. You can adjust voice sensitivity and set set the off time by the PC software.
7. With 5 stages of EQ adjustment function (adjustable with PC software), you can adjust the

overall sound effect of all microphone controllers to be perfect result.

8. Support sign-in function, set and initiate sign-in through PC software.
9. Adopt 128-bit AES encryption technology, support WPA/WPA2 wireless security technology, prevent eavesdropping and unauthorized access, provide higher confidentiality of the conference system.
10. With wireless transmission technology, the venue can be carried out with very little time to conduct venue activities.
11. The chairman has a priority function to close all delegates that are currently speaking.
12. The internal feedback suppression function can effectively prevent howling.
13. Built-in lithium battery, battery capacity supports 15 hours of continuous speech.
14. Built-in antenna to greatly improves WIFI network transmission efficiency.
15. Support TYPE-C port for upgrade program and online charging.

Product function introduction

TS-W302 Chairman controller: TS-W302A Delegate controller:
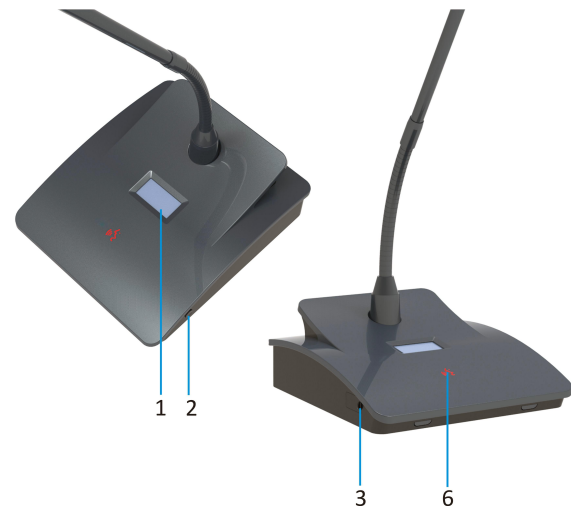
1.0.96 inch OLED screen;

2. Power switch button;

3. Charging interface;

4. Chairman controller microphone button

5. The microphone priority button of the chairman controller;

6. Delegate controller microphone button.

Charging method

1) It needs to be turned off and charged to be fully charged, and it is fully charged when the red power indicator goes out.

2) Please use the USB cable and charger provided with the product for the charging cable.

Specification

Model	TS-W302/TS-W302A
Microphone type	Cardioid directional electret
Frequency response	80Hz~16KHz
Microphone input impedance	1 k Ω
Sensitivity	-46dBV/Pa
Maximum SPL	100dB(THD>3%)
SNR	>80dB(A)
Crosstalk	>70dB
Dynamic range	>80dB
THD	< 0.1%
Maximum power consumption	1W
Standard	IEC60914
Power supply	18650 lithium battery
Charging method	Connect the charging box through the TYPE-C interface
Color	Graphite grey
Sign in function	Touch button to sign in
Display screen	OLED screen
Installation method	Desktop
Wireless frequency range	5.15 GHz to 5.85 GHz
)Battery capacity	5200mAh
Size (LxWxH	120*104*43mm
Weight	0.6 Kg
Speech mode working hours	15 hours
Mixed mode working time	16 hours

3. System connection diagram
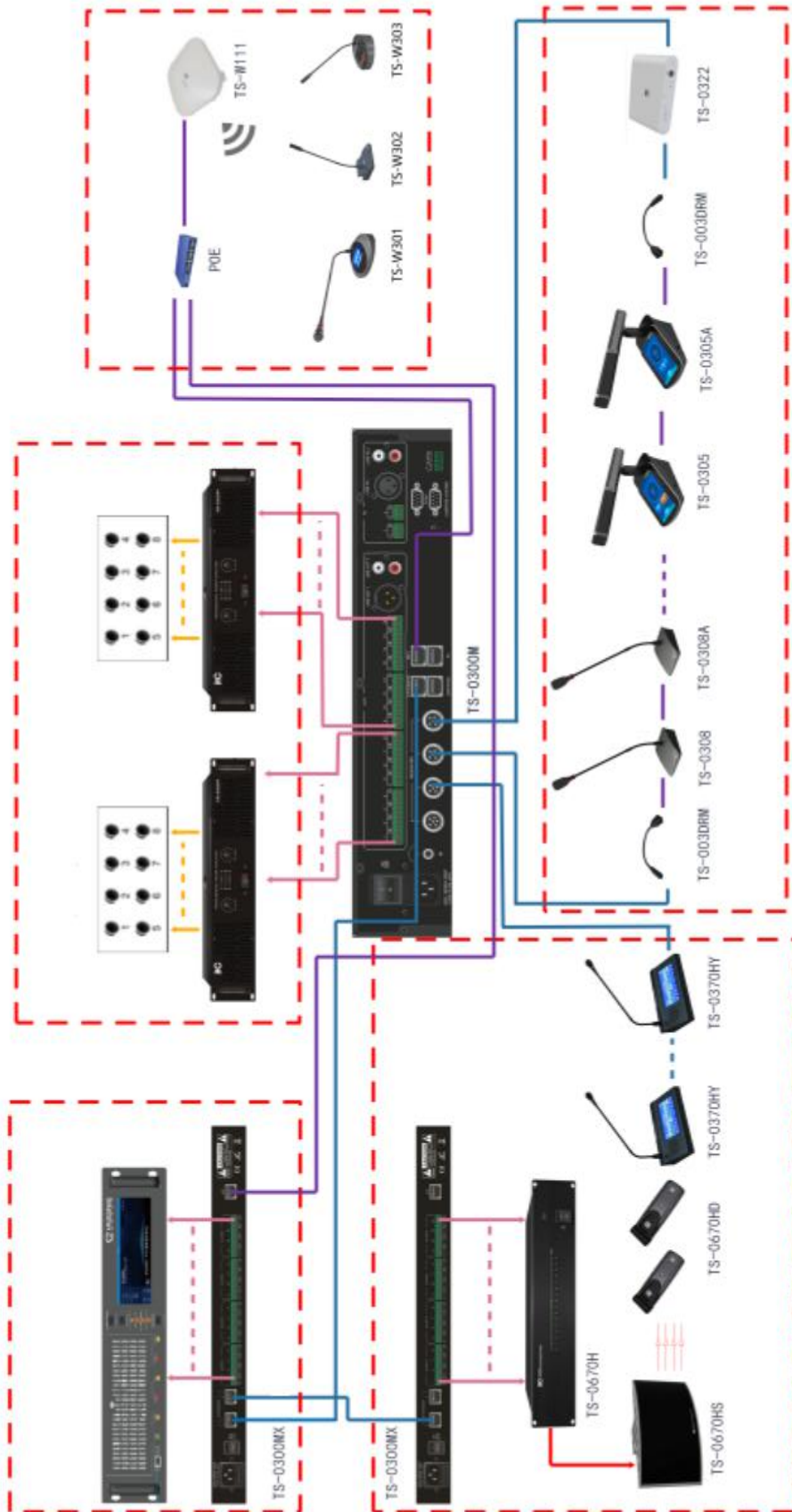
4. Instruction

4.1. Boot

Turn on the power of the controller to start the conference system, and the controller will display on the screen"System Loading...", The page is as follows:


The approximate connection time is 5 seconds, and the touch screen will display the WIFI wireless conference system after the boot is complete.
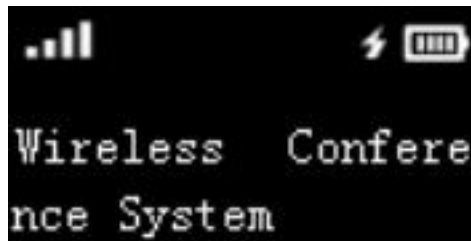

4.2. Meeting management

The microphone switch of the controller is controlled by the conference management, and its permission is configured by the conference controller, including first-in first-out, application, normal, and voice control modes. Refer to the controller's conference mode description for the logic of use.

Press the MIC switch button to switch the microphone, the microphone light turns red, and the display prompts "Microphone is turned on"; when the microphone is turned on, press the switch microphone button again, the microphone light is off, and the display prompts "Microphone is turned off". The display is as follows:
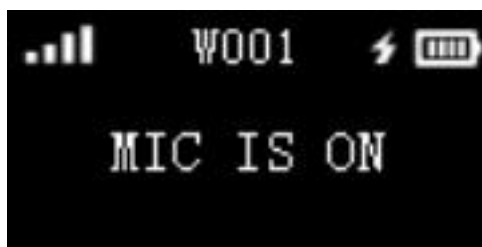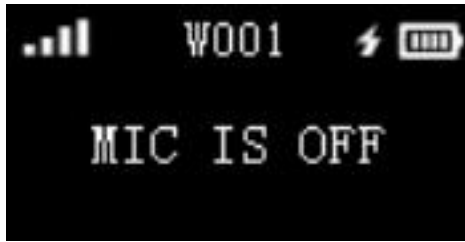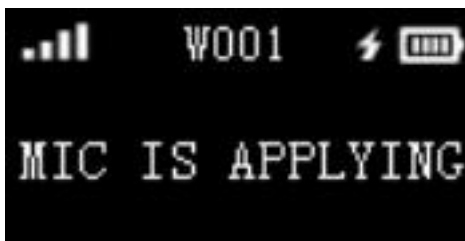
If the current controller is to be turned on, the microphone light turns green and the display shows as follows:
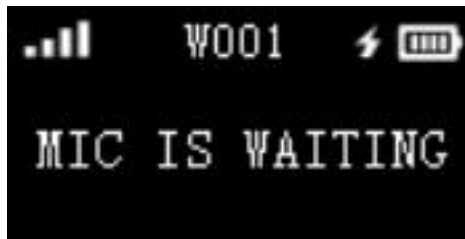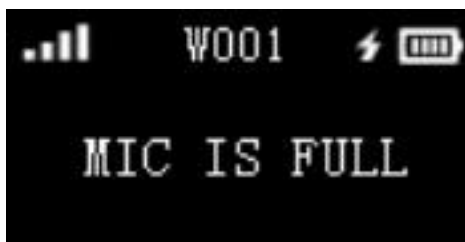

If the delegate controller is in the application mode, the microphone light turns green, and the screen displays as follows:

※ **Note:**If you want to realize the approval function of the chairman conference controller, you need to add a TS-W301.

If the current number of microphones is full, it will be displayed as follows:

Press the priority button of the chairman controller to turn off the microphones of all delegate controllers. The chairman controller turns on the microphone and the red light on the microphone is on; the delegate controller turns off the microphone and the red light on the microphone is off. For the display of the chairman and delegates, please refer to Switching Microphones.

4.3. Fire alarm

When the controller sends a fire alarm message, the controller screen will display "Fire warning"Prompt, the red light of the microphone pole will flash until the controller cancels the fire alarm and the controller resumes its pre-alarm state. In the fire alarm, the button is invalid.
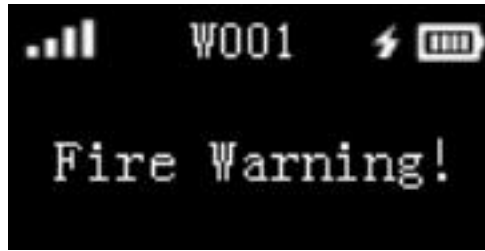
4.4. System status page

In the boot state and in the conference mode, short press the power button to query the SSID and the version number of the device connected to the AP. The page is as follows:


4.5. Wireless AP drop detection function

Turn off the wireless AP power or the AP network cable fails for about 10 seconds, the controller interface will pop up the following dialog box. If the wireless AP works normally, the interface will return to the main page.
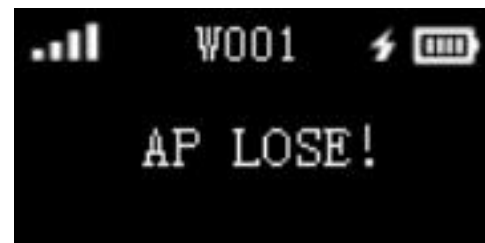

4.6. Controller offline detection function

Turn off the power of the controller or the controller network cable fails for about 60 seconds, the controller interface will pop up the following dialog box. If the controller works normally, the interface will return to the main page.
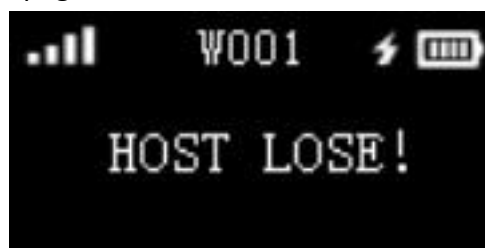
4.7. WIFI SSID and password modification

In the boot state, the USB port of the wireless controller is connected to the PC. Then use the SSID to modify the software. After the modification is successful, the wireless controller will prompt the following interface, and it will automatically shut down after 2 seconds.
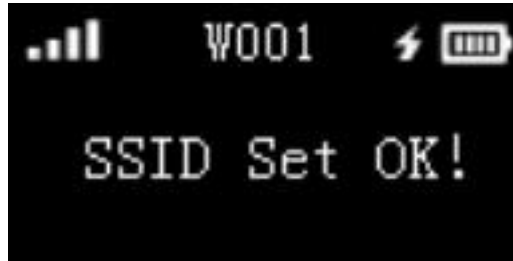

Steps to modify the SSID:

1. Use a USB cable to connect the controller and the computer when it is turned on.

2. Press search, when the done button below becomes optional, it means the connection is normal.

3. Fill in SSID and KEY (default SSID is WIFI_System, KEY is itc_sy4b).

4. After pressing done, the setting is successful, the controller will automatically shut down, and the AP can be connected after restarting.
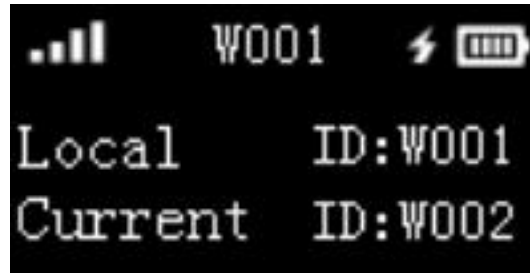
4.8. Duplicate ID detection

If the controller connected to the controller has the same ID, it will be displayed as follows. At this time, you need to press the ID button on the controller to reprogram the ID.
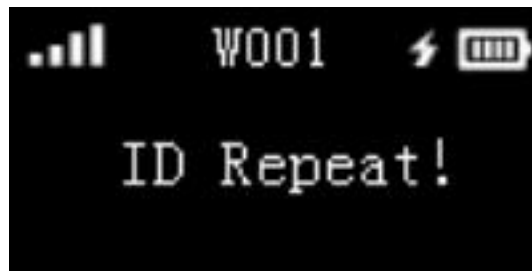
4.9. Edit ID function

After the controller presses the Edit ID, it enters the Edit ID mode. At this time, press the set button or press the microphone button to set the ID.

## 4.10. Charge, battery level and WIFI signal strength indication

WIFI signal strength, a total of 4 white bars, no signal means no icon: ;

There are 4 bars in full charge, the icon is: ;

The icon of the charging plug is: .

4.11. Automatic low-battery shutdown function

When the battery is too low, the wireless controller will automatically shut down after prompting the following picture.
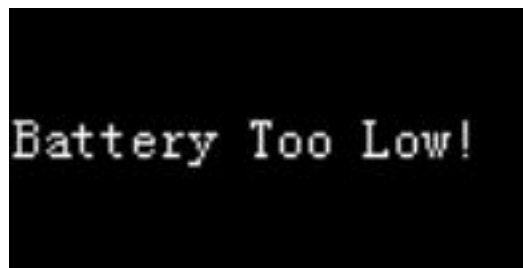
4.12. Switch button function

In the shutdown state, short press the button to turn on the system
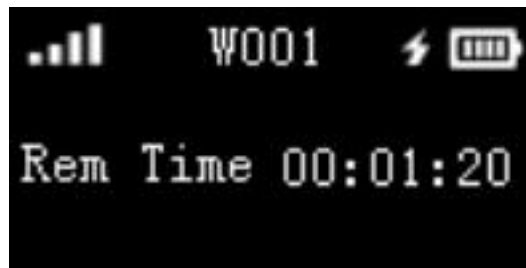
In the power-on state, long press the button for 3s, system shutdown; conference mode, short press to view SSID and version number.

4.13. Speech countdown and speech timekeeping function

When PC software sets speech timekeeping：

When PC software sets speech countdown：

4.14. Sign-in mode display

When the PC enters the sign-in mode, or the wired chairman controller initiates the sign-in, the controller enters the sign-in mode. In this mode, the mic light of the controller that has not checked in will flash, and the following figure shows that the mic button becomes the check-in function. After signing in, the mic light is always on, and the mic button restores the switch mark function. Note: In the sign-in mode, and the current microphone mode is application, the delegate controller will automatically close the application state and cannot enter the application state.
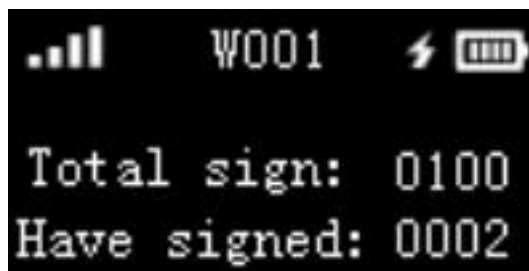

4.15. Vote mode display

When the PC enters the voting mode, or the wired chairman controller initiates voting, the controller enters the voting mode. In this mode, because there is no response to the button, the controller cannot vote, as shown in the figure below. Note: In voting mode and the current microphone mode is application, the delegate controller will automatically close the application state and cannot enter the application state.
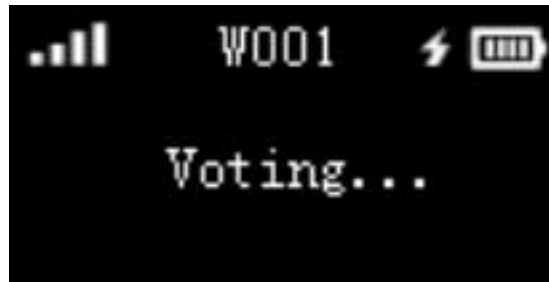
4.16. Low signal prompt

When the signal of the controller is low, it cannot be used normally, but it is not connected with AP When disconnecting, there will be the following prompt. When the signal reaches the normal value, the controller usage returns to normal.
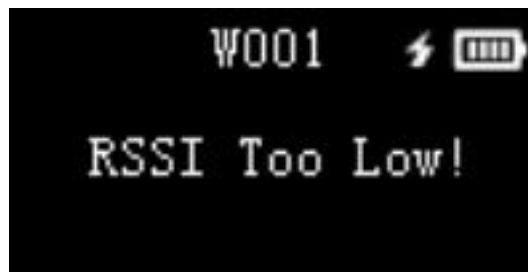
4.17. Fixed messages sent by PC software

In the conference mode, when the PC software sends out the two fixed messages "I am looking for you, please go to the door of the meeting room" and "I am looking for you, please go to the console", these two fixed messages will be displayed on the screen. Note: This controller can only display these two fixed messages, and does not support manual input of messages.
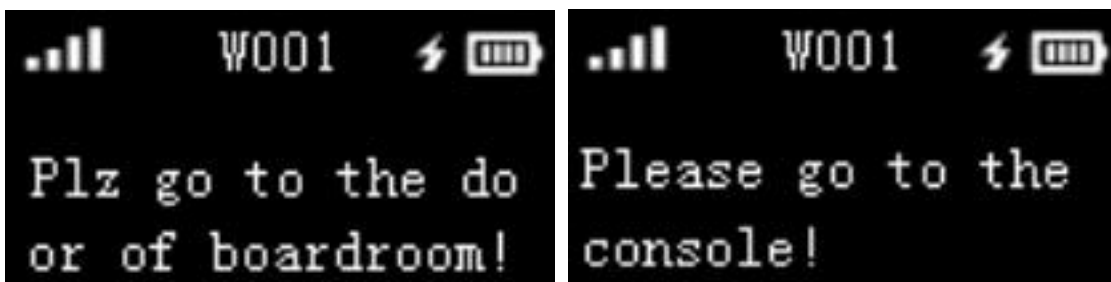

4.18. Language setting

Through the PC software, the language (Chinese/English) of all online controllers can be set uniformly.

5. Conference PC software introduction

The PC control software supporting the conference system is powerful and easy to operate, including most of the functions for a meeting, and it is designed according to the order of the meeting program. Users only need to follow from top to bottom on the left side of the column.

Among them, the bottom bar of the software displays the current status of the conference controller and the number of interpreter controllers, the number of chairman controllers, the number of delegate controllers, and the current computer time. If a controller is plugged in or dropped during the conference, the number will change to remind the operator.
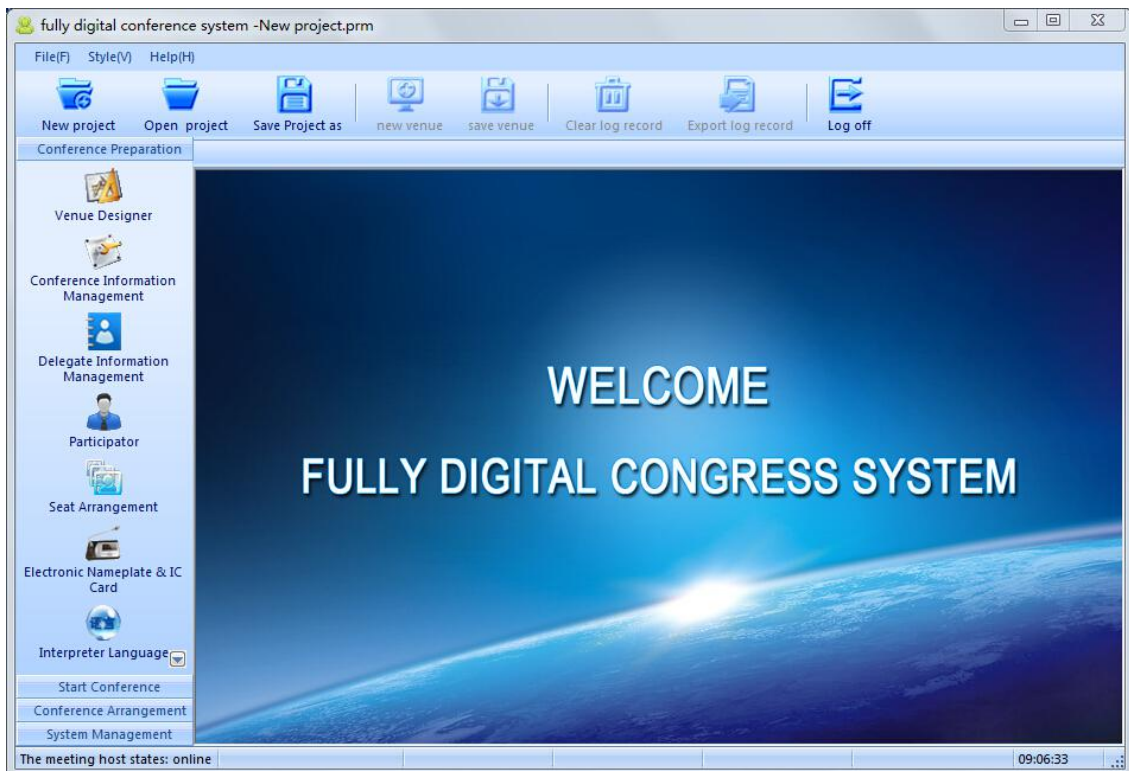
Introduction to the system management interface: The four major functional modules of the system are displayed on the left of the system management interface, which mainly include: preparation before the meeting, starting the meeting, management after the meeting, and system management.

Each module contains several small modules.

The pre-conference preparation includes sub-modules: venue design, meeting management, personnel management, delegates, personnel seat management, electronic nameplates and sign-in cards, interpreter machine languages and projection editing;

Start meeting includes sub-modules: sign-in control, agenda control, meeting control;

After the meeting: it includes sub-modules: data report, log record;

System management includes sub-modules: user management, controller configuration, etc.
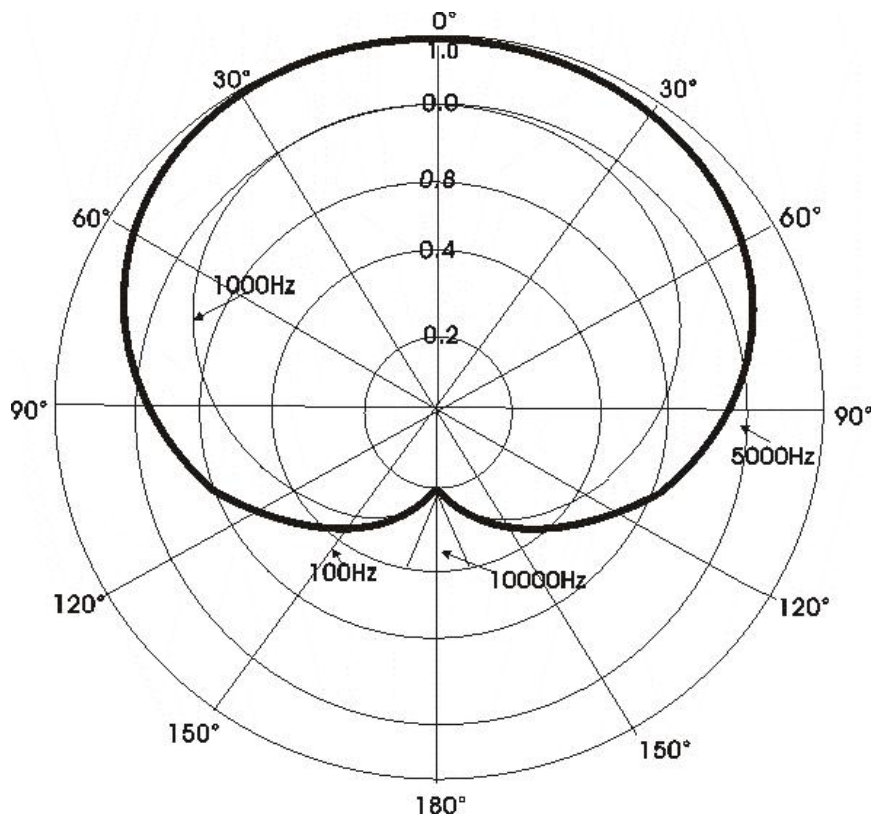
Due to the limited space of this manual, the specific operating instructions of the conference system software will not be introduced in detail here. For details, please refer to the "ITC Full Digital Conference System Software User Manual".

※Appendix：

Microphone frequency response curve
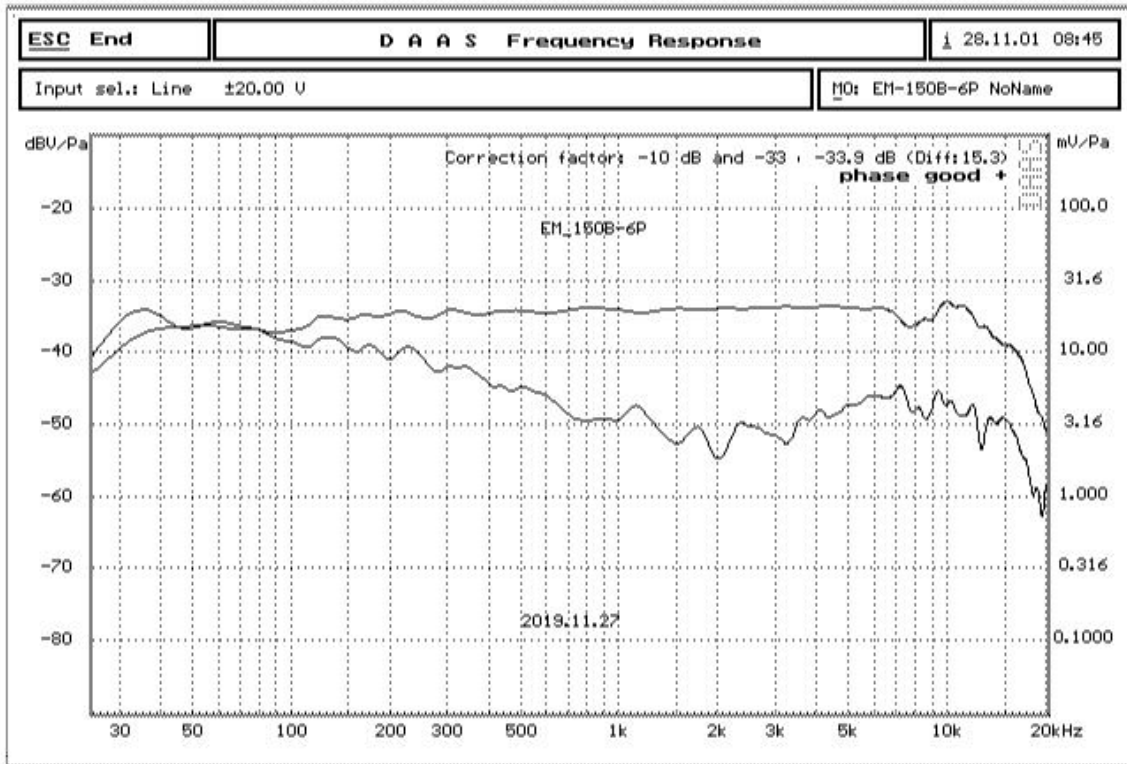
Microphone cardioid directivity curve

Wifi Digital Conference System

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