itC

Full-Digital Conference System

User Manual

TS-0314
TS-0314A

Please read this manual carefully before usage

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.

● 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.

Content

1.Product Introduction

The integrated array microphone can ensure high-quality sound even when the speaker moves in a wide range. And speakers can stand up, sit down, turn their heads, move forward, and move away from the microphone at will without affecting the sound.

2.Product Description

Full-Digital Electric Array Conference Chairman/Delegate unit

TS-0314 (chairman unit):

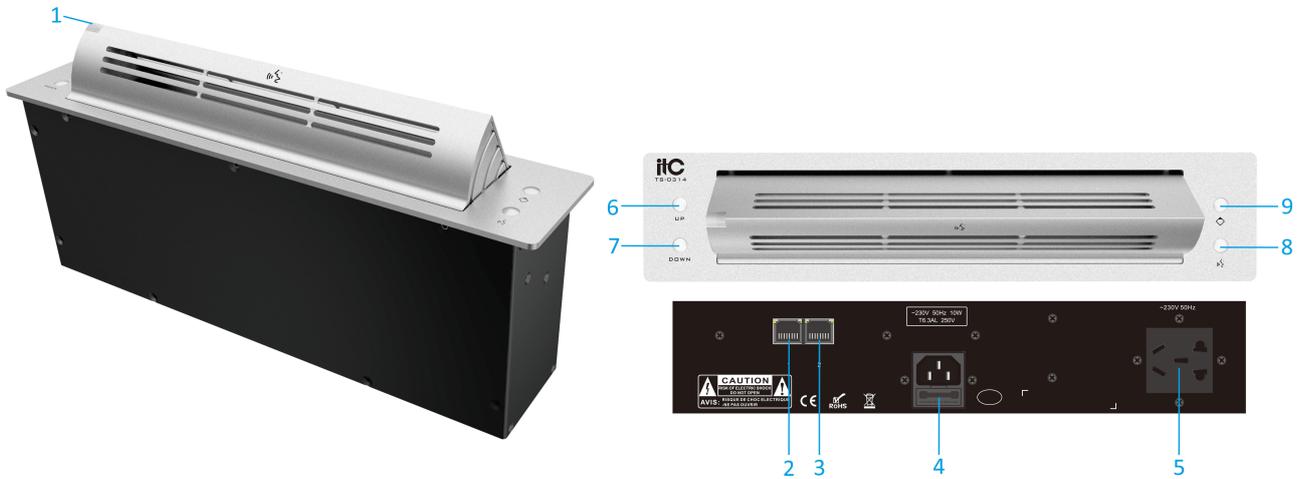**TS-0314A (delegate unit):**

2.1.Product Features

1. Using 48kHz sampling rate, the sound is clear and sonorous, better than the CD sound quality; with internal DSP audio processing, there is no "pop" low-frequency impact noise.

2. With speech timekeeping and speech countdown functions.

3. The chairman unit has a priority function to shut down all delegate microphones that are
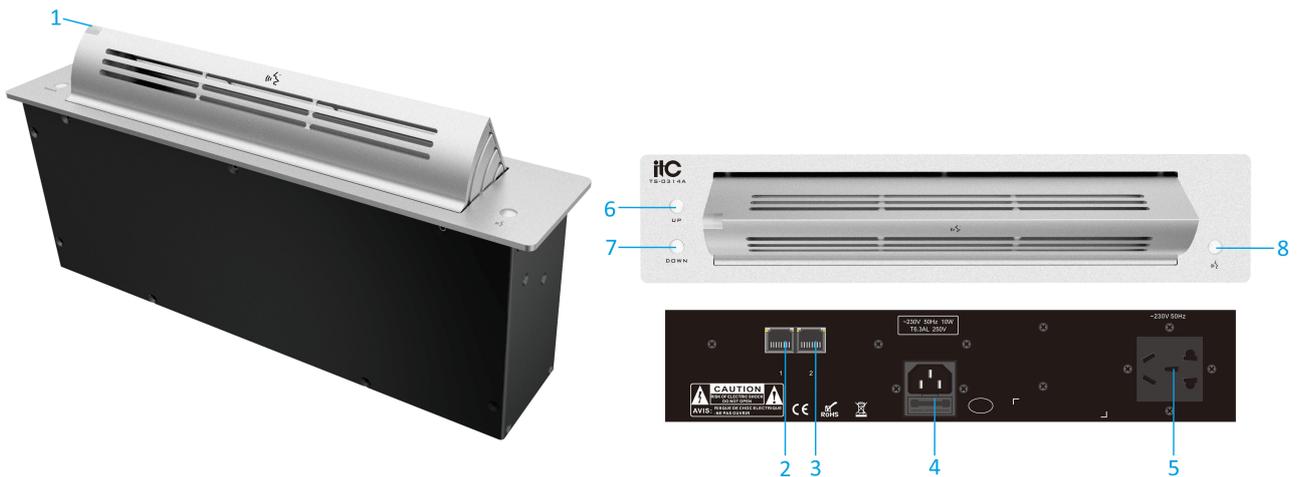
speaking.

4. With 5-band EQ adjustment function (PC software input password), the sound effect can be adjusted according to the sound characteristics of different speakers to achieve the perfect effect.

5. Using 100M network transmission, it can realize hand-in-hand cascading, and long-distance transmission will not cause any impact on sound quality.

6. Non-gooseneck array microphone, pickup distance up to 60cm, good directivity, capsule pickup area, surrounding noise pickup can be effectively controlled.

7. Embedded electric flip structure, mute button design, ultra-quiet motor.

8. Support unified flip control through the conference host touch screen and PC software.

9. Equipped with a power input interface and a power output interface, the device is connected to the mains power supply, and supports hand-in-hand cascading of power supplies.

10. When the conference controller sends out a fire alarm message, the status indicator of the microphone will flash until the conference controller cancels the fire alarm, and the unit returns to the previous status.

11. Support button sign-in function.

12. Support voice control function, and adjustable voice control sensitivity. In the voice control mode, the microphones of the chairman unit and delegate unit can be turned on by voice control. After the delegate microphone is turned on, if no one speaking lasts for 30 seconds (default), the microphone will be automatically turned off. But the chairman unit is not subject to this limitation.

13. Used with the conference controller and the central control tracking system to realize the camera tracking function; press the Speak button to realize the automatic camera tracking.

2.2.Interface Function

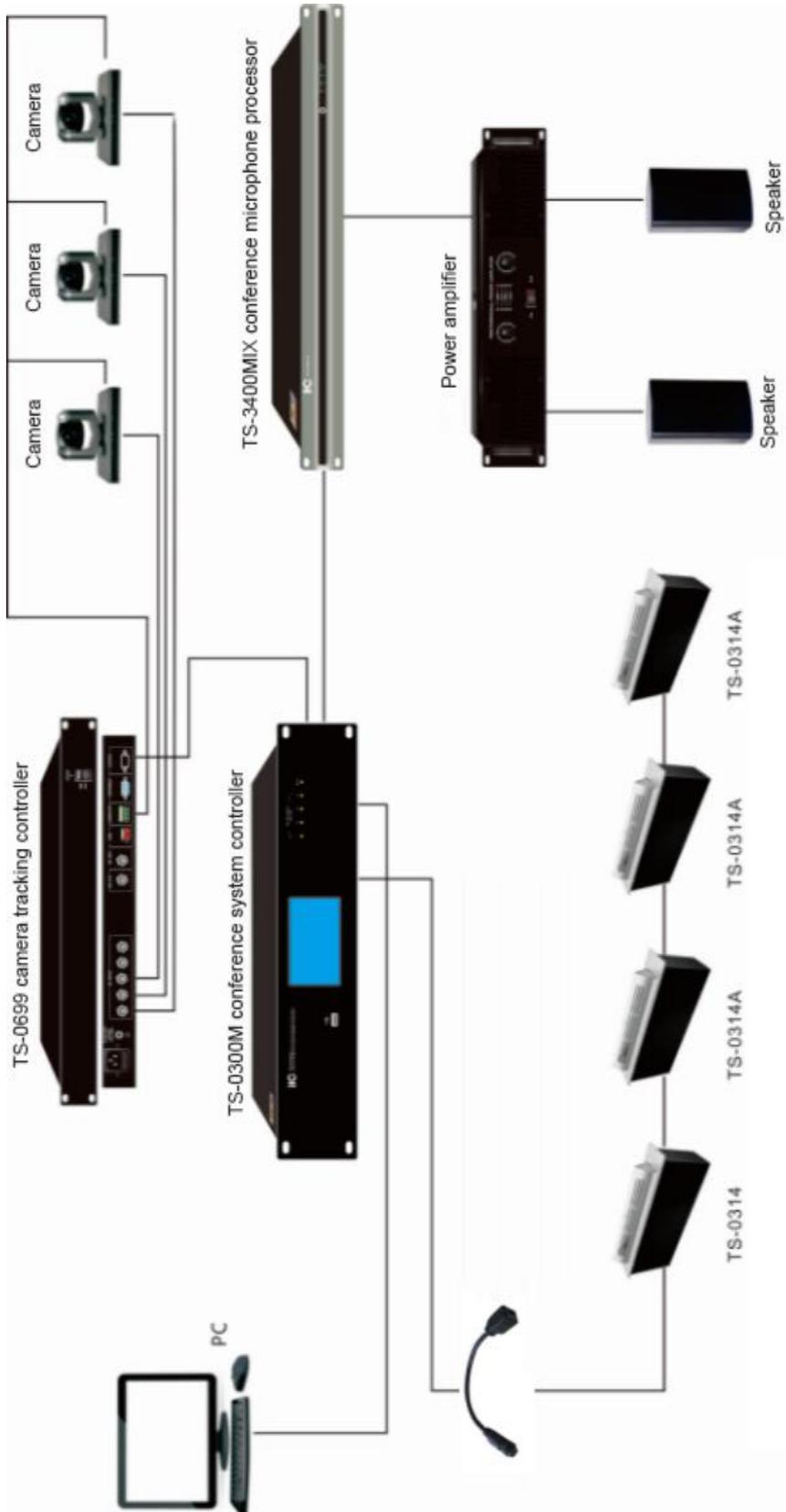**TS-0314 (chairman unit)**

TS-0314A (delegate unit):

1.Microphone status indicator light;

2.Connect to the port of the last conference unit;

3.Connect to the port of the next conference unit;

4.AC power supply 220V input port;

5.AC power supply 220V output port;

6.UP - Microphone up button;

7.DOWN - Microphone down button;

8.ON/OFF - Switch button of the delegate unit;

9.PRIOR - Microphone priority button. The chairman unit (TS-0314) has priority to cancel the speaking authority of all the delegate units at any time, and open the MIC of the chairman unit.

2.3.Specification

Model	TS-0314/TS-0314A
Microphone type	ECM Array Wired Microphone (Electret Condenser Microphone)
Microphone cores	13 pieces
Frequency response	80Hz~16kHz
Input impedance	200Ω
Sensitivity	-30dB (0dB=1V/pa, @1kHz)
SNR	>80dB(A)
Dynamic range	>80dB
Maximum SPL	112dB (THD≤0.5%, @1KHz)
THD	<0.1%
Directivity	Corridor type
Connection method	Network cable connection
Power supply	~220V-240V 50-60Hz
Power consumption	10W
Loop out power	~220V-240V 50-60Hz
Color	Silver
Sign-in function	Button sign in
Weight	1.9Kg
Dimension (L×W× H)	330×70×138 mm
Desktop opening size (through hole	314×66mm) (L×W)
Sinking hole size (L×W×D)	332×72×3mm
Installation method	Embedded installation

3.Connection Diagram

4.Operating Instruction

4.1.Startup

Turn on the power of the controller and start the conference system, and wait for a few seconds. If the microphone switching is normal, the system works normally. If the microphone switching is abnormal, troubleshooting need to be performed.

4.2.Unit Type

The chairman unit has a microphone switch key and a priority key, and the delegate unit has no priority key, but other functions are the same as the chairman unit.

4.3.Edit ID

Turn on the TS-0300M conference controller. In the ID coding setting of the system settings, you can set the system for manual ID coding.

When the TS-0300M controller is set to the manual ID coding mode, dial the ID coding switch or click the ID coding button on the touch screen to enter the manual ID coding mode. At this time, the unit enters the ID coding state. Press the microphone button to perform ID coding, and the microphone indicator flash once and stay on, indicating that the unit ID coding is successful. All units complete ID coding in turn, and after finishing ID coding, the unit returns to conference mode. When there is a duplicate ID in the system, the TS-0300M controller will prompt that the ID is duplicated. At this time, any operation is invalid. You need to perform ID coding of the unit again.

4.4.Meeting Management

Microphone switching of unit is controlled by the conference management, and its authority is configured by the controller. Refer to the conference mode description of controller for use logic.

Press the MIC switch button to switch the microphone on and off.

In NOMAL mode, the excess delegate units enter the waiting state.

Long press the priority button of chairman unit to turn off the delegate microphone and turn on the chairman microphone.

4.5.Sign in

(1) PC initiates sign-in;

(2) PC enables and disables the sign-in function;

(3) Switch the microphone in the sign-in mode (limited by mode and quantity).

4.6.Fire Alarm

When the controller sends fire alarm, the red light on the microphone pole will flash. After the controller cancels the fire alarm, the unit returns to the state before the alarm.

4.7.Speech Countdown and Speech Timekeeping

This function needs to be controlled by the conference PC software. Please refer to the PC instructions for details. For speech countdown, the PC will issue the time for speech countdown and display the remaining speech time. When the time is up, the microphone will be automatically turned off; For speech timekeeping, the PC specifies units to perform the speech timekeeping, and the speaking time will be displayed on the PC.

4.8.Audio Adjustment

This function needs to be controlled by the conference PC software. Please refer to the PC instructions for details.
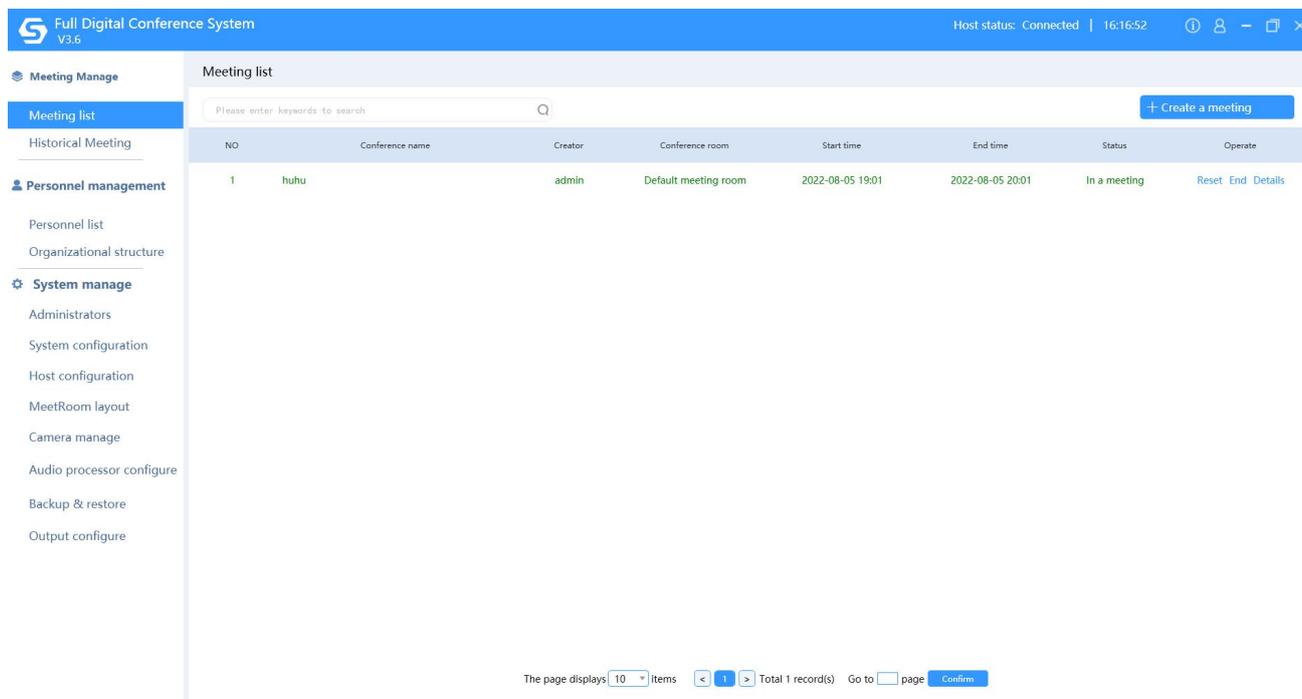
5.Precautions

Notice:

When searching the IP address of the device through unit search and scanning tool to log in to the WEB management interface, please note that the network port of the TS-0314/0314A unit cannot be directly connected to the network port of the computer, which will burn the computer.

Correct steps: connect the TS-0314 to the TS-0300M conference controller through the six-core network port adapter cable, connect the computer to the extension port of the conference controller, and then open 🗗 Unit Scanning Tool on the PC to scan the ID, IP address and other information of the current device number.

6.Conference PC software

The PC control software supporting the new conference system is powerful and easy to operate. It includes most of the functions required for a meeting, and is designed according to the sequence of the meeting procedure. Users only need to follow the usage order from top to bottom on the left sidebar.

Introduction to the system management interface: The left side of the system management interface displays the three functional modules of the system: Conference management, Personnel management, and System management.

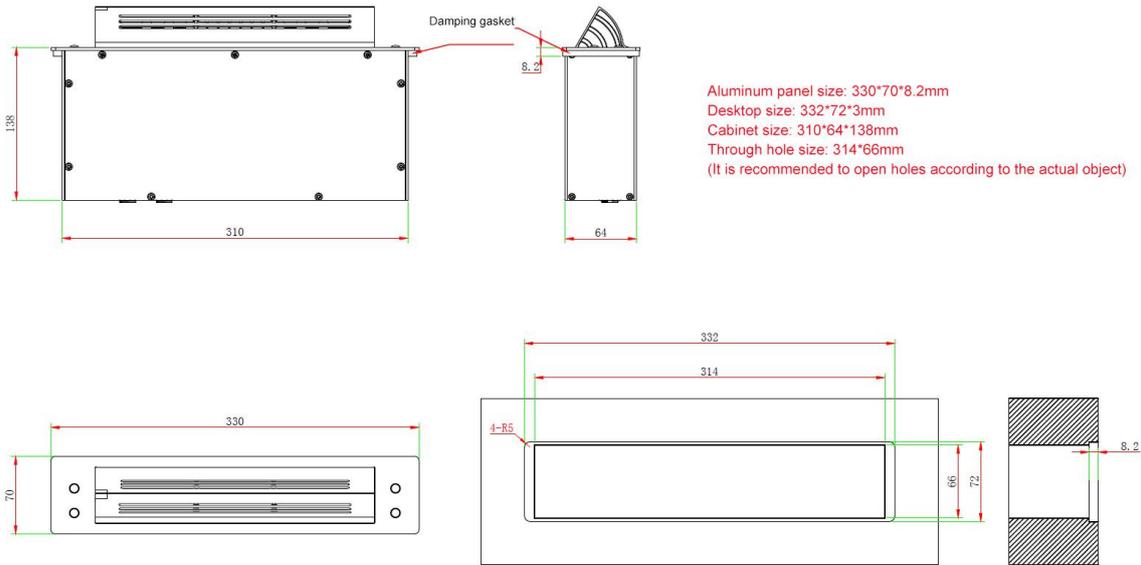Each of these modules contains several sub-modules.

Conference management includes sub-modules: conference list and historical conference;

Personnel management includes sub-modules: personnel list and organizational structure;

System management includes sub-modules: administrator, system configuration, host configuration, conference room layout, backup and recovery, and output configuration, etc.

Due to the limited space of this user manual, the specific operation instructions of the new conference system software will not be introduced in detail here. For details, please refer to the "New Conference System Software User Manual".
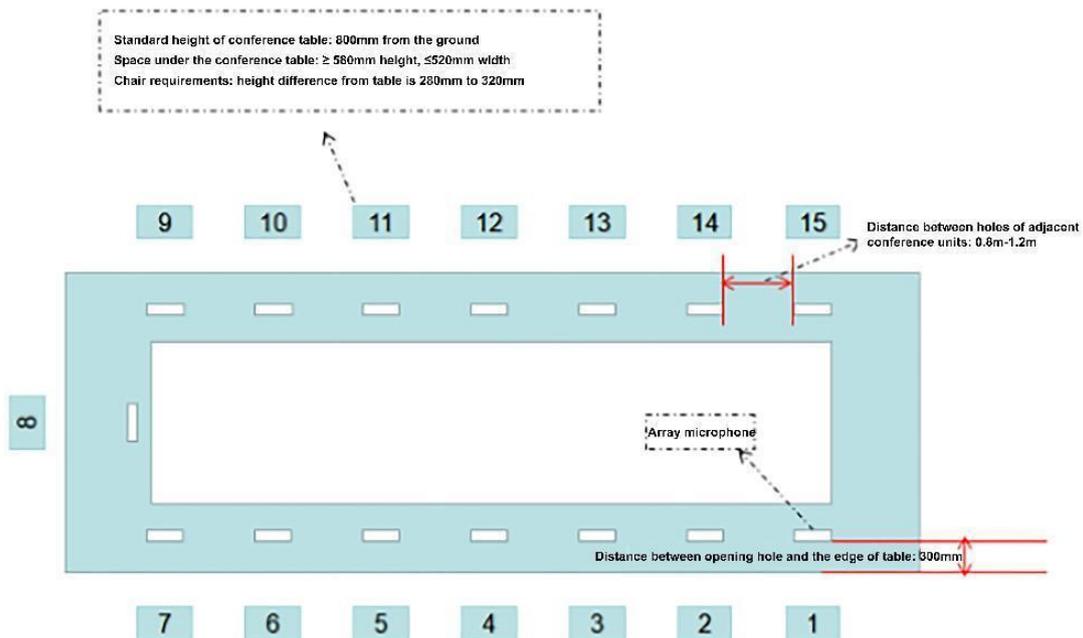
7.Installation Diagram

◆Installation Guide

The embedded microphone unit is required to open holes on the table so that the microphone can be embedded and fixed on the table. In order to ensure the aesthetic effect of the site, the conference table needs to be specially customized with reference to the size of the conference unit in advance.

Aluminum panel size: 330*70*8.2mm
Desktop size: 332*72*3mm
Cabinet size: 310*64*138mm
Through hole size: 314*66mm
(It is recommended to open holes according to the actual object)

When the array microphone is built separately, the distance between the installation holes of adjacent conference units is recommended to be 0.8m to 1.2m (note: refer to the size distribution of the table), and the distance between opening holes and the edge of table is 300mm. Refer to the symmetrical arrangement and install them one by one. The specific location of the microphone shall be subject to the design drawing.

Standard height of conference table: 800mm from the ground
Space under the conference table: ≥ 580mm height, ≤520mm width
Chair requirements: height difference from table is 280mm to 320mm

Distance between holes of adjacent conference units: 0.8m-1.2m

Array microphone

Distance between opening hole and the edge of table: 300mm

Full-Digital Conference System

Ver 0.1