Fully Digital Conference System

User Manual

TS-0236/0236A

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.

● 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℃~60℃.

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.

CONTENTS

1. System introduction

1.1 Brief description

TS-0200 series full digital conference system using ITC's original independent intellectual property rights with network communications and digital transmission processing technology, the digital technology and network technology are applied to conference system products, so that the conference field has a new breakthrough changes.

1.2 System connection diagram
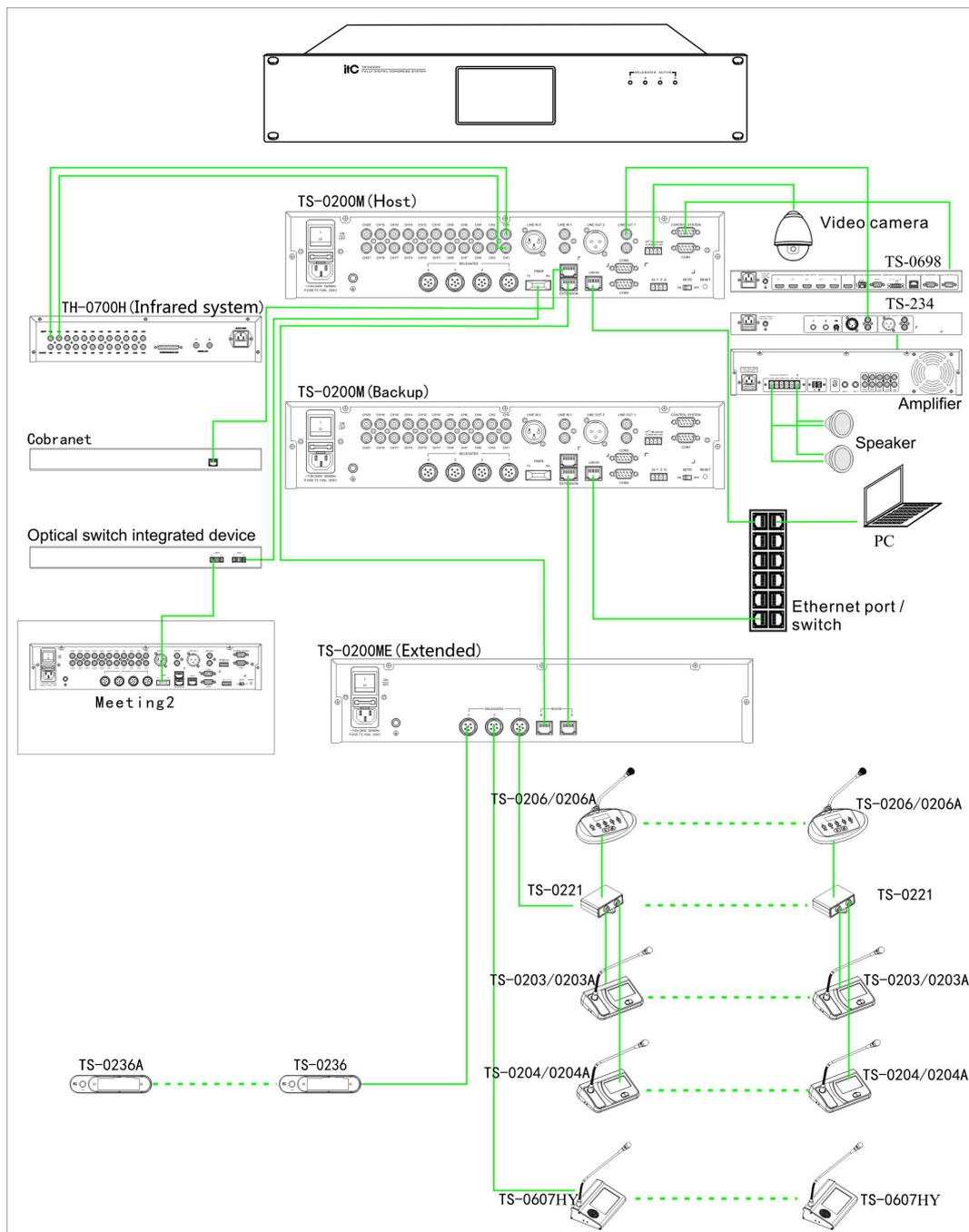
2. Product description

2.1 TS-0236/TS-0236A Full Digital Conference Embedded with simultaneous interpretation chairman unit / delegate Unit


2.2 Features

1. The microphone adopts 48KHZ sampling rate, higher than CD sound quality, the voice is clear and bright. Internal DSP audio processing, there is no "puff" low-frequency impact sound.

2. Support timekeeping of speech and timing speech function.

3. Delegate unit has speech-apply function, the chairman unit can approve the applicant.

4. Internal feedback-inhibition function, which can effectively prevent the squeaking.

5. The Microphone has voice-control function, can intelligently turn on the microphone

6. 5-section EQ regulating function, different sound effects can be adjusted according to the characteristics of the speaker's voice, to achieve perfect effect

7. The chairman has the priority function, can turn off all speaking delegate units

8. With 100M network transmission to realize hand in hand cascade, long distance transmission does not have any effect on sound quality

9. Support voting, election, rating function. Chairman unit can start voting, check-in function. System can do data statistics without PC

10. Support choosing language receiving channel, factory default setting is 15+1 channels (can customize 31+1 channels and 63+1 channels).

11. Touch button design, to ensure that the venue without percussion when operating, convenient and beautiful

2.3 Functions
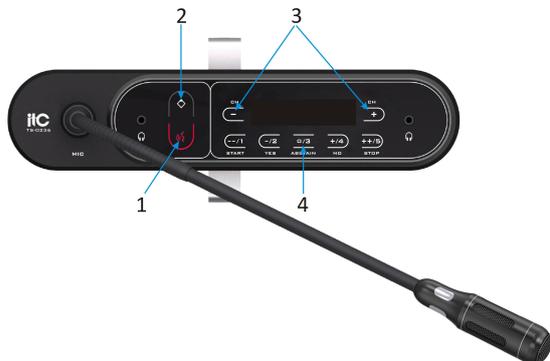
Chairman Unit: TS-0236   Delegate Unit: TS-0236A
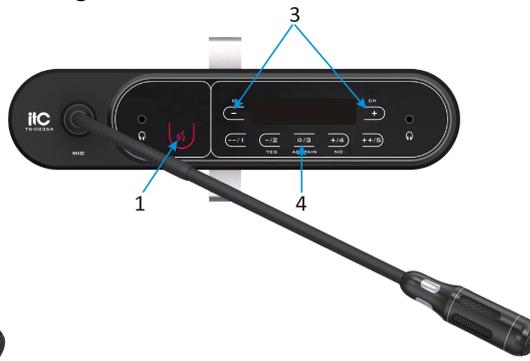
① MIC switch button.

② Microphone priority button. Chairman unit (TS-0236) has priority, which can cancel the speaking authority of all speaking delegates unit at any time and to open the MIC of the chairman unit.

③ Channel selection button, used to select the current translator channel.

④ Multi-function voting button and status indicator

　　——Conference Voting, number 2, 3, 4 respectively express favor, abstained, against.

　　——Conference election, number 1-5 represent different candidates.

　　——Conference evaluation, number 1-5 respectively represent level --, -, 0, +, ++..

2.4 Specification

Model	TS-0236/0236A
Microphone types	Heart-shaped directivity electret
Frequency response	80Hz~16KHz
Microphone Input impedance	1KΩ
Sensitivity	-46 dBV/Pa
Maximum SPL	125dB(THD>3%)
SNR	>80dB
Crosstalk	>70dB
Dynamic Range	>80dB
THD	<0.1%
Maximum consumption	3W
Headset load	8-32Ω
Headset Volume	Maximum 40mW
Headset Interface	3.5mm Mono jacks
Standard	IEC60914
Connector	Comes with 1.8m 6-core
Connection expansion interface	Provided

Power supply	Powered by controller DC 36V
Color	Black
Voting function	Five-key voting, three-key voting
Simultaneous interpretation	16,32,64 channels (default 16)
Check-in function	Touch the key to check-in
Display screen	OLED
The microphone height	409mm
Weight	0.6Kg
Dimension(L×W×H)	250×55×85mm
Installation method	Embedded
The hole dimension	206×48 mm

3. Conference MIC Unit TS-0236/0236A Operation Instruction

3.1 Power On

Turn on the controller to start conference system, the unit screen display "digital conference system starting ...", after starting up, the screen display LOGO interface, " delegate unit " or "chairman unit" and the corresponding channel. If the unit is not normal, it can not automatically switch to LOGO interface.

DCN Conference	Chairman Unit 00	Delegate Unit 00
Starting...	DCN Conference	DCN Conference

3.2 MIC Unit type

Chairman unit has microphone key and priority key. In 1/2/3/4/5 key (- 0 + + +), long press key "1" can start the voting function, long press Key "2" to start the sign-in function. In voting, long press key "5" to pause the voting in order to view the results, continue to long press key "5" to exit voting. In the application mode, key "3" can be used as a function to allow the delegate to open the microphone. In addition, it can switch language channel through CH- / CH + key.
The delegate unit doesn't have priority key, 1/2/3/4/5 key only work as a voting key, other function is the same as chairman unit.

3.3 Meeting Management

Mic unit switch will be controlled by meeting management, the authority configured by main controller. Using logic refer to main controller meeting mode manual.
Press MIC switch key can switch on/off MIC, shown as below:

MIC ON   01

```
┌────────────────────────┐
│        MIC OFF         │
└────────────────────────┘
```

Under APPLY mode, if there is any delegate MIC apply to open MIC, delegate unit show as below:

```
┌────────────────────────┐
│     MIC IS APPLYING    │
└────────────────────────┘
```

Chairman unit show as below:

```
┌────────────────────────┐
│     MIC IS APPLYING    │
│         AGREE          │
└────────────────────────┘
```

Remind user MIC application is full.

```
┌────────────────────────┐
│    MIC APPLY IS FULL   │
└────────────────────────┘
```

Press Key 3 on Chairman Unit, applying delegate will open according to FIFO mode.
Under Normal Mode, outnumber delegate unit will enter into standby status, remind user standby QTY is full when standby QTY full.

```
┌────────────────────────┐
│     MIC IS WAITING     │
└────────────────────────┘
```

```
┌────────────────────────┐
│    MIC WAITE IS FULL   │
└────────────────────────┘
```

Press chairman unit priority key to close all delegate unit, this chairman unit is open.
Delegate unit shown as below:

```
┌────────────────────────┐
│      MIC WAS BREAK     │
└────────────────────────┘
```

3.4 Sign-in

Press chairman machine key 2 and the corresponding light on means the chairman sign-in function is on opening status, long press key 2 to start sign-in, then user can view the unit screen shows the sign-in total number and signed number, can press the delegate MIC key to sign-in, long press key 5 to sign out.

```
┌────────────────────────┐
│ Total  sign: 0999      │
│ Have signed: 0000      │
└────────────────────────┘
```

If the Chairman unit sign-in function is forbidden, long press key 2, display screen warn sign-in forbidden, then need to open sign-in function from PC server.

```
┌────────────────────────┐
│   Sign  in  be banned  │
└────────────────────────┘
```

3.5 Voting

Press the chairman unit key 1 and corresponding light on, means this chairman voting function is turned on, long press key 1 to start voting, view the option on screen: " Agree, Oppose, Abstain" , and select by key 2/3/4 on the unit.

```
Voted:   Yes
     Yes  Abstain  No
```

Press the Key 5 persistently to view the voting result

```
Yes    Abstain    No
0001   0000   0000
```

Press the Key 5 persistently again to exit the voting function, and go back to the LOGO interface. PC initiates the key 5 election shown as below, then press the corresponding button to select the result.

```
Seelected: 4
    1  2  3  4  5
```

PC initiates the key 5 rating shown as below, then press the corresponding button to select the result

```
Evaluated: 0
   --  -  0  +  ++
```

3.6 Channel Selection

By switching CH + / CH- key, you can select the language channel, and the factory default is 15 + 1, can be customized 31 + 1,63 +1. 0 is the original sound channel, 1 ~ XX is the interpreter channel.

```
Chairman Unit     00          Chairman Unit     21
  DCN Conference                 DCN Conference
```
......

Remark: According to the different models and grades, there are (15 + 1) / (31 + 1) / (63 + 1) channel language products.

3.7 Fire Alarm

When the host sends a fire alarm message, the unit screen will display a "Alarm" prompt, the red light of the microphone will flash until the host to cancel the fire alarm, and the unit to restore the state before the alarm.

```
      Alarm ! !
```

3.8 Other Function

3.8.1 Chinese and English interface switch

This function needs to be controlled by the conference PC software to switch, please refer to the PC instructions for details. After switching, it can be seen through the screen display.

3.8.2 Timing speaking and speaking timing

This function needs to be controlled and switched by the conference PC software, please refer to the PC manual for details. This function is for switching on/off microphone. Under timing speaking mode, PC issued a time for speaking, the unit will countdown to show the remaining time to speak, when the time is completed,it will automatically turn off the microphone; under speaking timing mode, PC designated unit to timing the speaking time, and the unit will account and display the speaking time.

If the PC initiates the speaking timing mode, the microphone opens as follows:
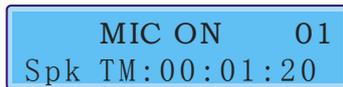
```
    MIC ON      01
Spk TM:00:01:20
```

If the PC initiates timing speaking mode, the microphone opens as follows:

```
    MIC ON      01
Rem TM:00:01:20
```

3.8.3 Audio Adjustment

This function needs to be controlled and switched by the conference PC software, please refer to the PC instructions for details.

3.8.4 Message

This function needs to be controlled and switched by the conference PC software, please refer to the PC instructions for details. This function is that PC can display / send message to the unit screen, to remind the unit users.

3.8.5 Edit ID function

Open the conference controller, in the system settings inside the ID settings, you can set the system write ID manually and write ID automatic mode.
When the controller is set to manual ID mode, dial the ID switch or click on the start button on the touch screen to enter the manual ID mode. At this time, the unit enters the ID status, press the unit's microphone key or the ID button, write the ID, the microphone rod and microphone lights flashing about a long light, indicate the unit ID success. In turn write all units ID, finish writing ID, the unit

returns LOGO page.

When the controller is set to auto ID mode, dial the ID switch or click on the start button on the touch screen to enter the auto ID mode. At this time, the unit enters the automatic ID status. When all the microphone button indicator lights and the microphone rod lights are in red bright , Indicating that the unit ID is set automatically successful. All units bright red light can press the microphone button to set the individual microphone ID, this time through the controller control and end of writing ID, the unit returns LOGO page.

When the system ID is repeated, it will prompt ID repeat, and any operation is invalid, you need to click on the controller manually write ID or automaticly write ID to re-encoding the unit ID.

Appendix1

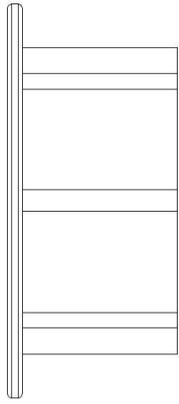## TS-0236/TS-0236A installation hole size diagram
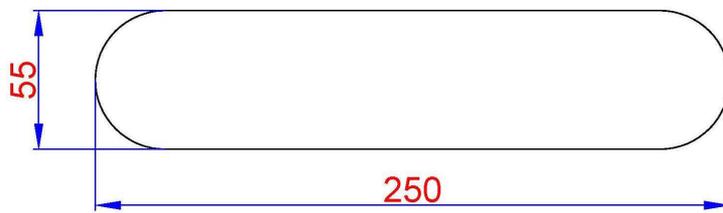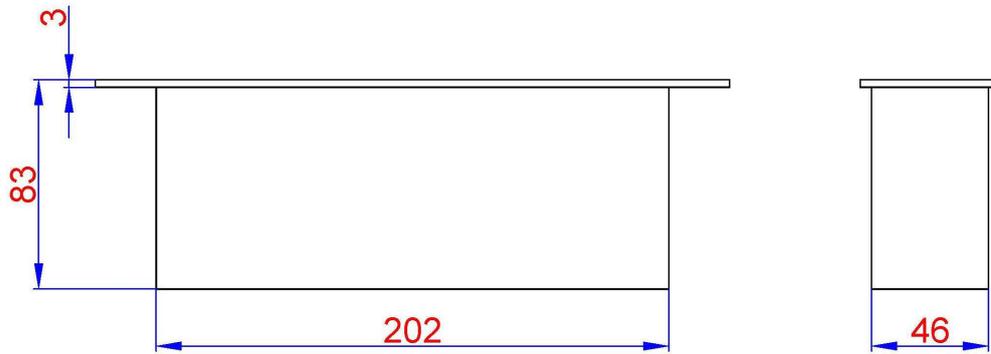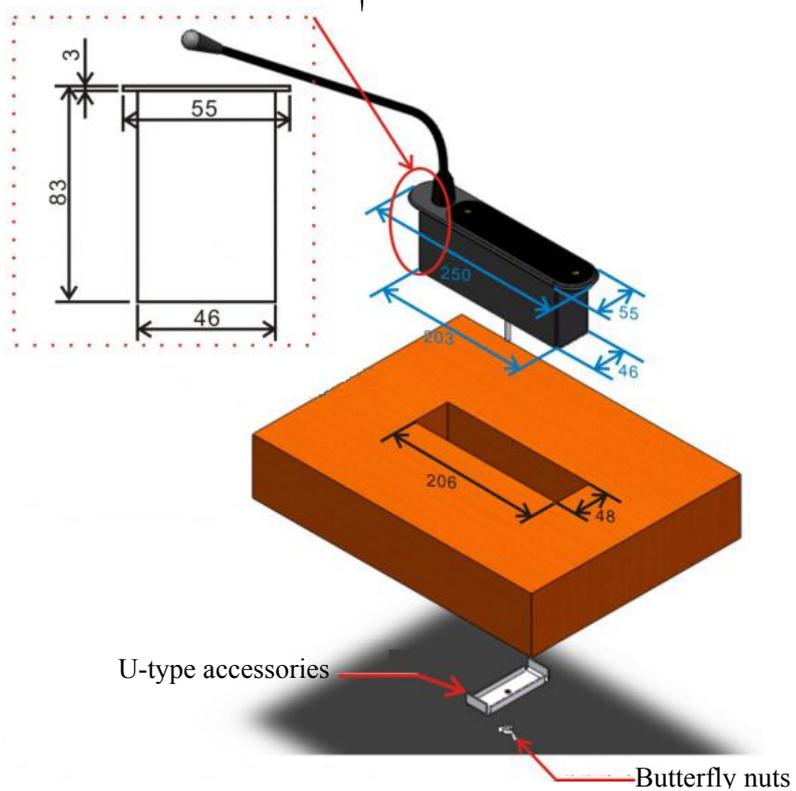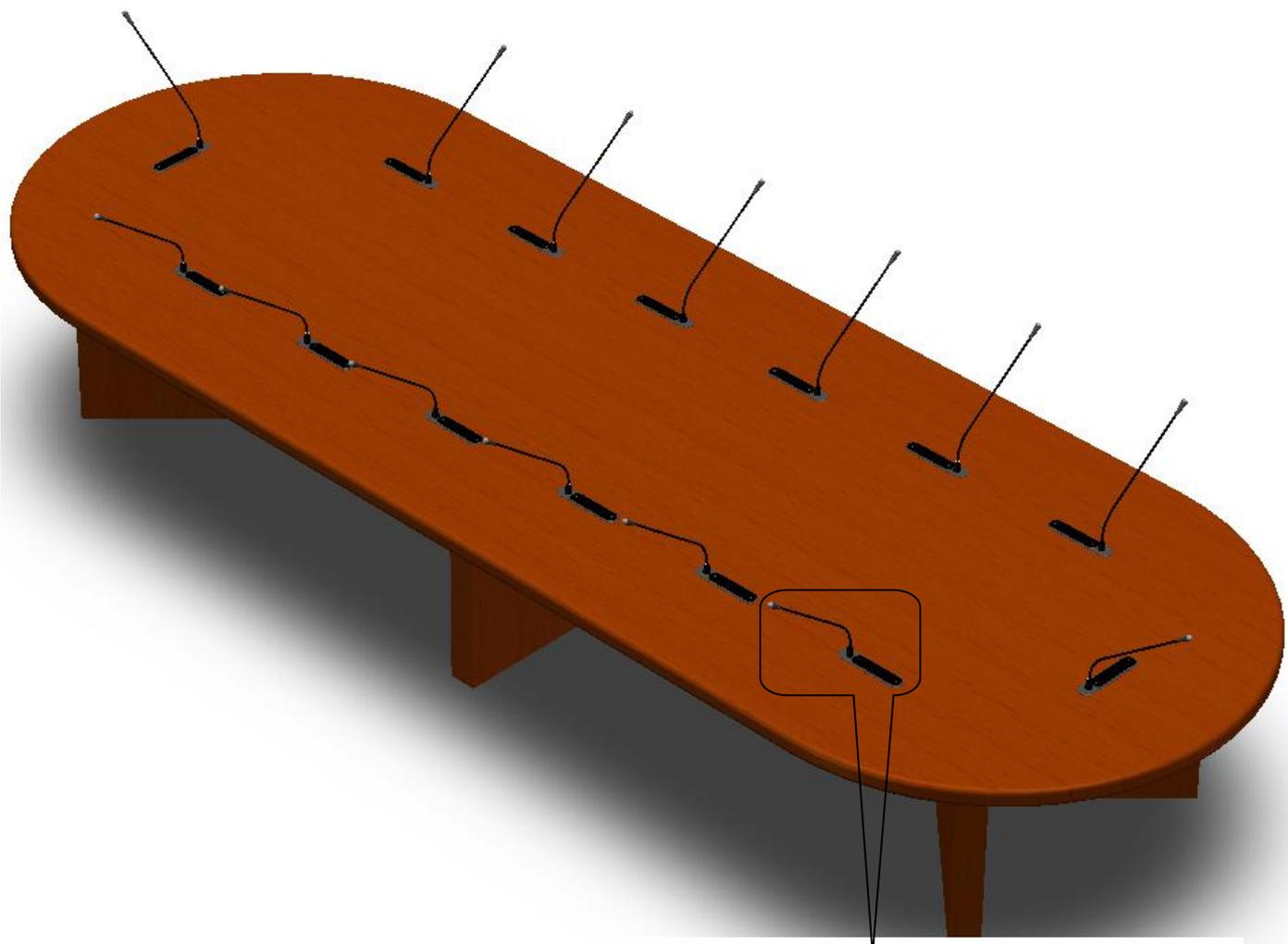
Product size diagram

Unit: mm
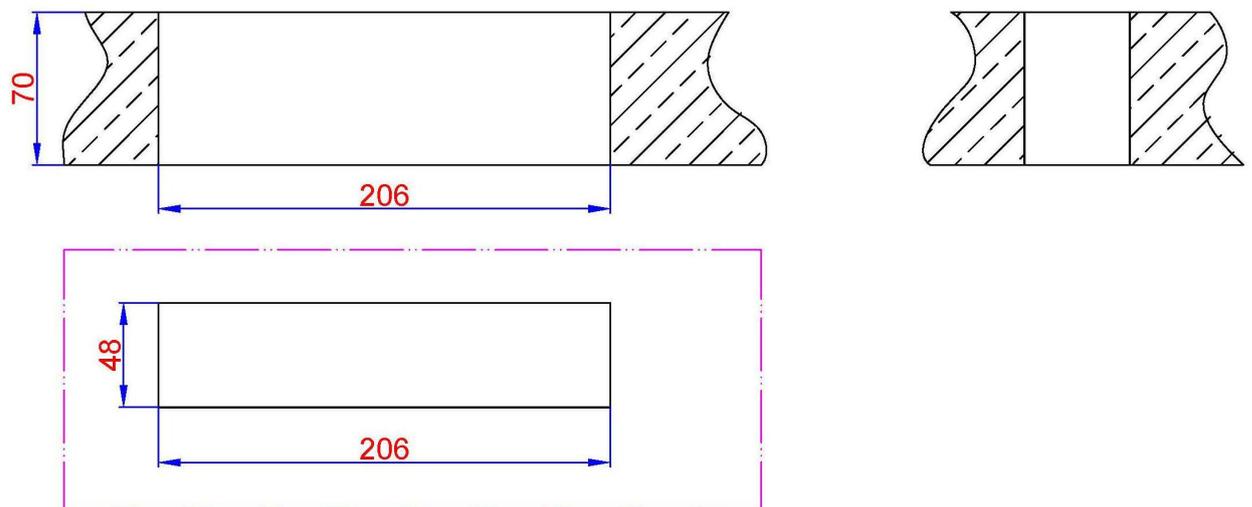
Dimension drawing of conference table

Unit: mm

Unit: mm

770
70

5000
600
400
400
1800

15

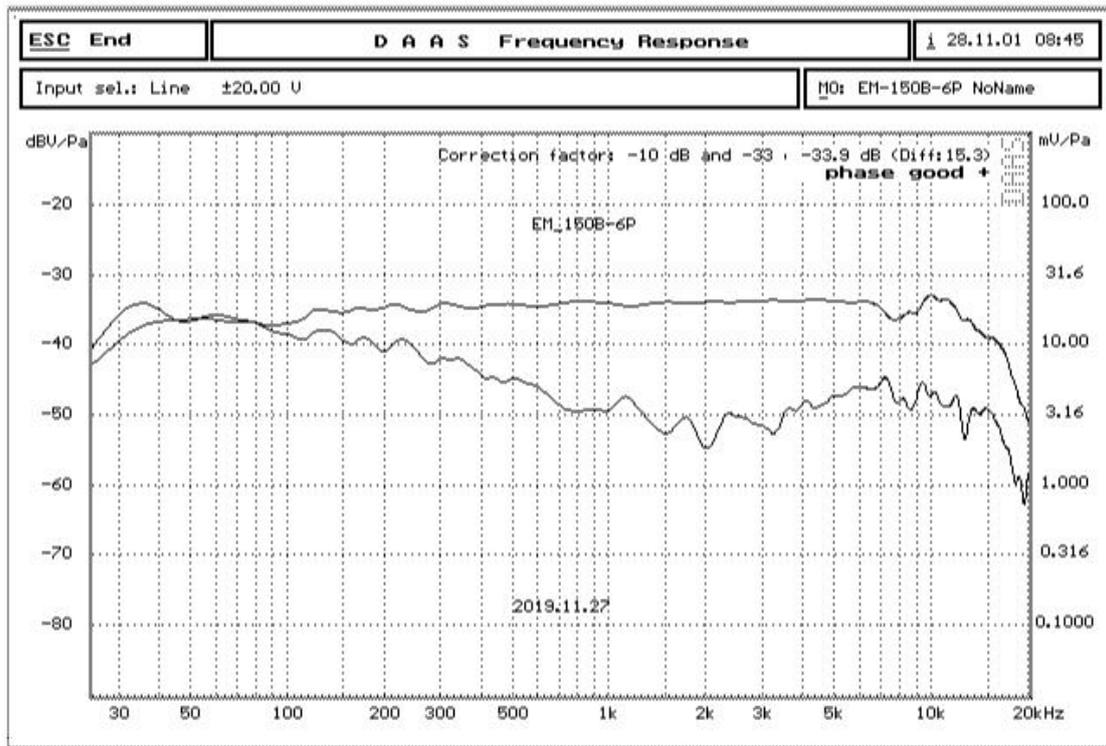U-type accessories
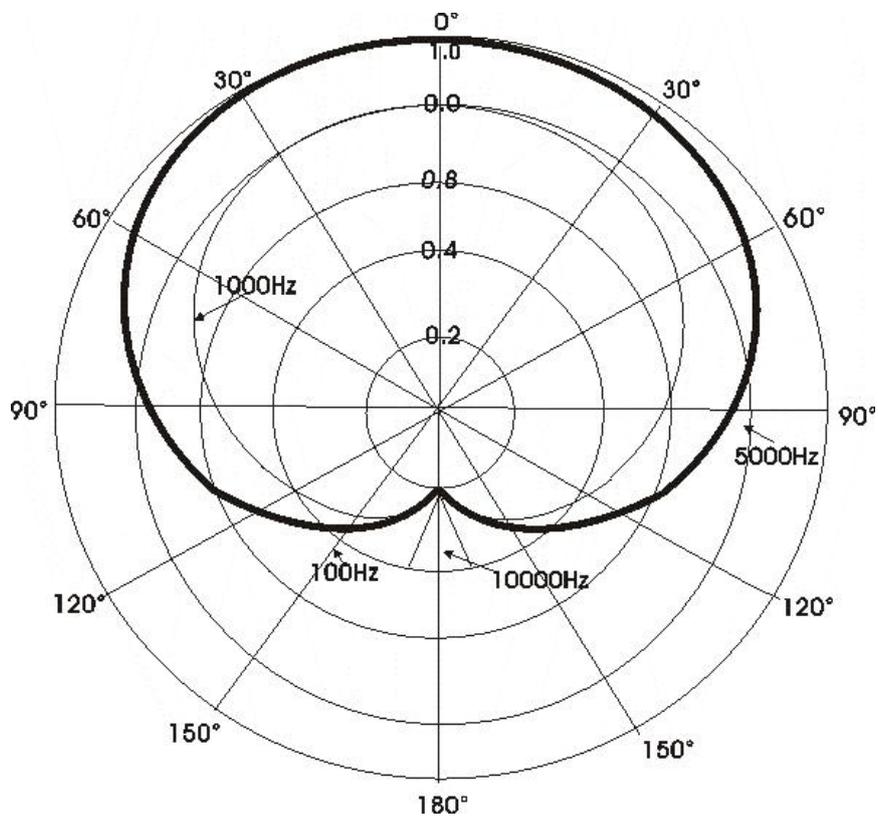
Butterfly nuts
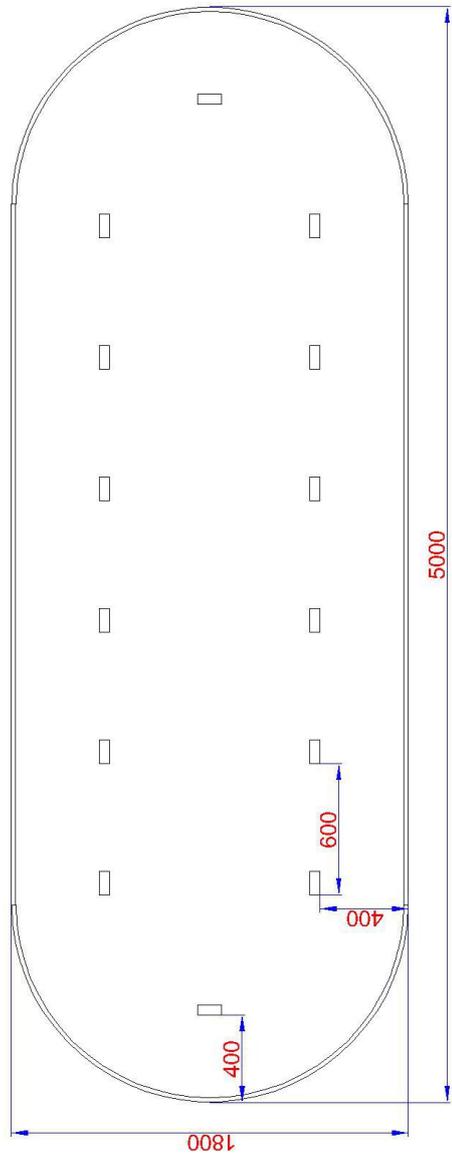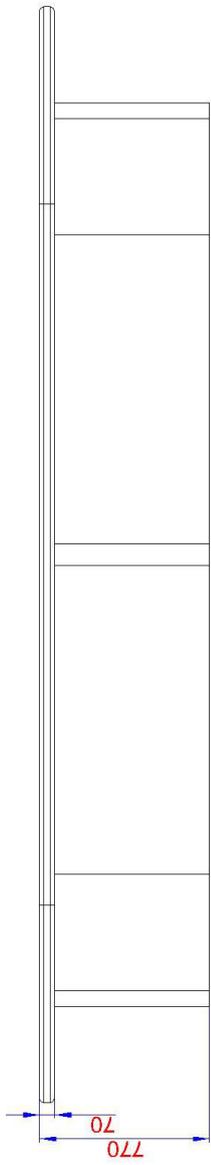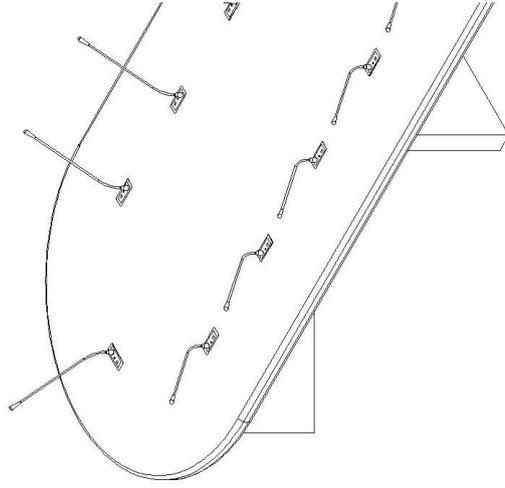
Appendix2

1. Microphone frequency response curve

2. Microphone cardioid curve

Fully Digital Conference System