

# **VISSONIC**

## **Multimedia Digital Conference Unit with Touch Screen VIS-DMD-T User Manual v2.0**



VISSONIC Electronics Limited

# Important note



## Warning

In order to ensure the reliable performance of the equipment and the safety of the user, please observe the following matters during the process of installation, use and maintenance:

### The matters needing attention of installation

- ◆ The power plug shall be handled for easy disconnection, and the disconnect coupler on the front panel shall also be maintained for easy disconnection.
- ◆ The device must not be exposed to water droplets or splashes, and no objects filled with water, such as vases, should be placed on the device.
- ◆ Please do not use this product in the following places: the place of dust, soot and electric conductivity dust, corrosive gas, combustible gas; the place exposed to high temperature, condensation, wind and rain; the occasion of vibration and impact. Electric shock, fire, wrong operation can lead to damage and deterioration to the product, either.
- ◆ In processing the screw holes and wiring, make sure that metal scraps and wire head will not fall into the shaft of controller, as it could cause a fire, fault, or incorrect operation.
- ◆ When the installation work is over, it should be assured there is nothing on the ventilated face, including packaging items like dust paper. Otherwise this may cause a fire, fault, incorrect operation for the cooling is not free.
- ◆ Should avoid wiring and inserting cable plug in charged state, otherwise it is easy to cause the shock, or electrical damage.
- ◆ The installation and wiring should be strong and reliable, contact undesirable may lead to false action.
- ◆ For a serious interference in applications, should choose shield cable as the high frequency signal input or output cable, so as to improve the anti-jamming ability of the system.

### Attention in the wiring

- ◆ The equipment shall be connected to the grid power output socket with protective grounding connection.

- ◆ Only after cutting down all external power source, can install, wiring operation begin, or it may cause electric shock or equipment damage.

- ◆ This product grounds by the grounding wires. To avoid electric shocks, grounding wires and the earth must be linked together. Before the connection of input or output terminal, please make sure this product is correctly grounded.

- ◆ Immediately remove all other things after the wiring installation. Please cover the terminals of the products cover before electrification so as to avoid cause electric shock.

### Matters needing attention during operation and maintenance

- ◆ Please do not touch terminals in a current state, or it may cause a shock, incorrect operation.

- ◆ Please do cleaning and terminal tighten work after turning off the power supply. These operations can lead to electric shock in a current state.

- ◆ Please do the connection or dismantle work of the communication signal cable, the expansion module cable or control unit cable after turning off the power supply, or it may cause damage to the equipment, incorrect operation.

- ◆ Please do not dismantle the equipment, avoid damaging the internal electrical component.

- ◆ Should be sure to read the manual, fully confirm the safety, only after that can do program changes, commissioning, start and stop operation.

- ◆ Button batteries must be replaced when the power is off. When you indeed need to replace the button batteries with the power on, the operation should be performed by a qualified electrical technician wearing insulated gloves.

### Matters needing attention in discarding product

- ◆ Electrolytic explosion: the burning of electrolytic capacitor on circuit boards may lead to explosion.

- ◆ Please collect and process according to the classification, do not put into life garbage.

- ◆ Please process it as industrial waste, or according to the local environmental protection regulations.

# Preface

This manual mainly describes the use, performance parameters and troubleshooting of VISSONIC VIS-DMD-T 5GWiFi wireless touch screen conference unit.

Changes and updates may be applied to this manual after it was issued, please check with the manufacturer or your distributor for the latest version.

All rights related to this manual is reserved by VISSONIC Electronics Limited. This manual is protected by the “Copyright Law of the People's Republic of China” and other IPR protection laws, no disperse or copy is accepted without paper permission from VISSONIC Electronics Limited.

Version	Update	Date
1.0	Publish	2020.11.12
2.0	Hardware Updates	2022.08.29

# Catalog

1. Product Overview .....	5
1.1 Product description and layout .....	5
1.2 Product connection diagram .....	8
2. Basic functions .....	9
2.1 Home screen information display .....	9
2.2 Speech timing and request .....	10
2.3 Unit language and luminance settings .....	10
2.4 Unit EQ settings and unit information display .....	11
2.5 Call service .....	11
2.6 Conference mode .....	11
3. Unit ID settings, unit type settings, and authority settings .....	14
3.1 Editing unit ID .....	14
3.2 Unit type settings .....	14
3.3 Unit authority settings .....	15
3.4 Microphone status indication .....	15
4. Optional functions .....	16
4.1 IC card sign-in and information display function (software license model: VIS-LIDEN) .....	16
4.2 Voting function (software license model: VIS-LVOTE) .....	16
4.3 Dual 64-channel selector software module (software license model: VIS-LLGE) .....	18
4.4 Dual-user software (software license model: VIS-LDUAL) .....	19
5. Upper computer software settings .....	20
5.1 Software connection .....	20
5.2 Basic configuration .....	21
5.3 Information uploading .....	21
5.4 Display of person requesting to speak .....	22
5.5 Dynamic text .....	22
6. Debugging .....	24

# 1. Product Overview

## 1.1 Product description and layout

The VIS-DMD-T is a multimedia conference unit based on the VISSONIC AUDIOLINK multimedia IP network technology. It is equipped with a 5-inch IPS touch screen, which improves the flexibility of the conference and the interactivity of the meeting content. This unit can set as chairman, delegate, VIP or dual-user unit according to the requirements of the conference. As the various requirements of meeting, it can upgrade the software to achieve more functions without changing unit or hardware.

The current software module contains four different options: Vote, NFC card identification, Simultaneous interpretation channel and Dual user.

By chairman unit, you can use the touch screen on the VIS-DMD-T unit to manage different aspects of the meeting. It allows you to start, pause meetings, view request-to-speak lists, approve request, view addresser profiles and speaking times, and even record meetings, easily start and stop voting etc.

By delegate unit, you can view the agenda and the remaining time to speak. You can even see who is speaking and the position you are on the speaking list.



### Features

- Compatible with IEC 60914, GBT 15381-94 standard.
- The unique AUDIO-LINK digital network technology realizes full digital signal transmission and processing.
- Single CAT5e cable transmits 64 channels of audio and various information.
- High-fidelity sound quality, lossless audio transmission technology, 48K audio sampling frequency, 20Hz ~ 20KHz response frequency.
- Conference controller can output 16 segment equalized EQ to achieve sound field adjustment; pressure limit, which can recognize the noise gate passed by human voice; AGC automatic volume gain control; AFC automatic feedback suppression and auto-mix technology.
- 5-inch capacitive touch screen and built-in NFC card reader can quickly identify participants.
- All-in-one touch screen conference unit, it can be configured as a chairman unit, delegate unit, VIP unit or dual delegate unit.

- Easily expand functions by setting software modules.

### **Functions**

- The design is compact, modern and with latest VISSONIC technology.
- Adopt standard CAT5e with RJ45 connector as the connection cable, which is convenient for standardized engineering wiring installation and maintenance.
- All-in-one touch screen unit can be set as the chairman, delegate, VIP or dual delegate unit via conference system software or the menu of conference controller front panel.
- Chairman unit can pause the delegate's speech, close the delegate's speech, view the speaking request list, agree or reject the delegate's speech request, and functions of starting conference recording, stopping recording, selecting conference topics, initiating sign-in, and voting.
- Delegate unit can request to speak and view your position in the request list, information of the addresser, and view the meeting topic.
- The system can set up to 32 VIP delegate units. As long as the total number of microphones already turned on in the system does not exceed 8, the VIP delegate unit can be turned on freely.
- Contains four optional function modules:
  - Voting: three-button / two-button voting
  - NFC identification: Sign in with NFC card to accurately identify user information.
  - Simultaneous interpretation channel: support 2 language channel selectors, each selector supports 64 languages independent selection.
  - Dual users: Support two participants sharing one unit to achieve camera tracking at two locations; enabling two delegates to vote on one unit.
- 5-inch capacitive touch screen displays conference information, such as agenda, addresser information, addresser list and request-to-speak list, speech timing, timing speaking, current time and date, Chinese and English switching, and checking unit version information.
- The conference unit has sign-in function and service function through the touch screen.
- Supports set the current microphone sensitivity, supports - 12dB to+12dB adjustment and 8-band equalizer EQ adjustment.
- Dual headphone port design, volume can be adjusted through touch screen.
- Built-in 2W@8Ω high-fidelity speaker, when speaking in the unit, it will automatically mute to prevent howling.
- Hand-in-hand-loop-network connection and star connection, the system is more reliable. Replacement one unit and failure of cable will not affect the normal operation of other units in the system.
- Hot plug-and-play, automatic recovery.
- Can be configured with gooseneck microphone or rectangular digital and analog dual backup microphone.
- The number of speakers limit function: you can set the speaker units that are turned on at the same time (the number is 1/2/4/6, and a maximum of 32 units are allowed to speak in the full-open mode)
- Has the following speaking modes:  
"OPEN" open mode, "VOICE" voice control mode, "OVERRIDE" mode, "APPLY" application mode, "PTT" press and hold to speak (optional), "ALL" full open mode (optional)
- Combined with camera and a camera tracking controller, it has an automatic camera tracking function.

### **Control and indicators**

- Microphone with two-color LED ring, red indicates speaking status, green indicates request to speak.
- 5-inch capacitive IPS touch display.
- Microphone switch button.

- Chairman unit with priority button and approve to speak button.

## Connection

Pluggable microphone connection base  
Two 3.5mm stereo Headphone jacks  
Two RJ45 connectors

## Technical parameters

### General parameters

Screen size: 109.22 mm (5.0 inches)  
Resolution: 800x480  
Screen type: Capacitive multi-touch  
Contactless NFC cards in following standards: ISO / IEC14443 Type A  
Connection method: CAT5 / CAT6 cable + buckle

### Electrical parameters

Power: 48V DC  
Supply consumption: 5 W  
Frequency response: 20~20000Hz  
THD at rated level <0.1%  
Dynamic range> 90 dB  
S / N ratio> 90 dB  
THD at rated level <0.1%

### Audio input

Nominal microphone input 80 dB SPL in accordance with IEC60914  
Maximum sound pressure 125dB (THD <3%), in line with IEC60914  
Sensitivity -46 dBV / Pa

### Audio output

Headphone load 16  $\Omega$  Headphone volume 10mW  
Headphone port 3.5mm stereo socket Input impedance 2k  $\Omega$

### Mechanical parameter

Installation: desktop  
Dimensions (mm, without microphone): 160L x 100W x 65H  
Color: Black  
Weight: 0.7KG (base)

### Environmental parameters

Operating temperature: 5 °C to +55 °C  
Relative humidity: <90%

## Optional function license

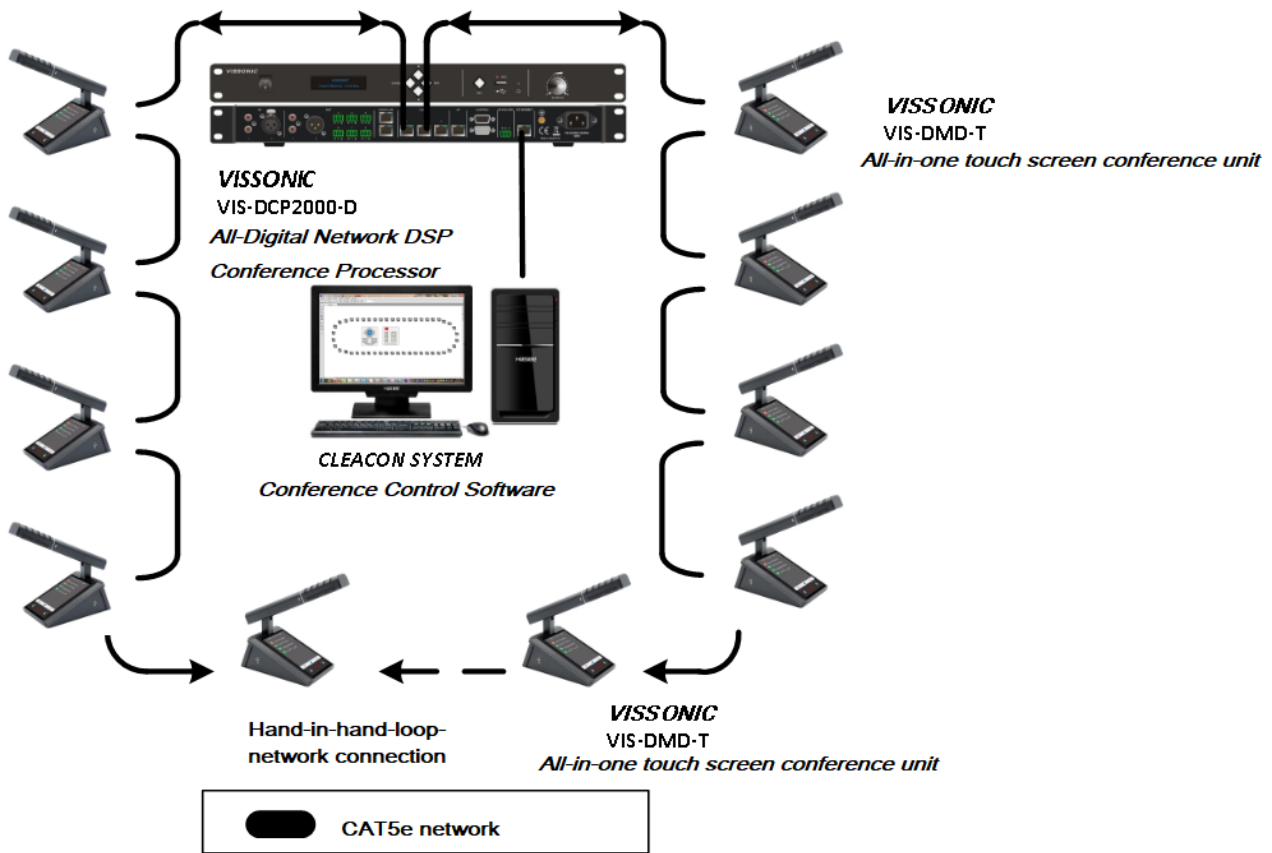
VIS-LLGE ..... Dual 64-channel selector software module  
VIS-LVOTE ..... Vote software module  
VIS-LIDEN ..... NFC identification software module  
VIS-LDUAL ..... Dual user software module

In order to fully configure, manage and use the device, the CLEANON SYSTEM management software of CLEANON is required.

**Provide the following standard authorizations:**

- VIS-CLEACON SETUP Conference basic setting software module
- VIS-CLEACON MIC Microphone control software module
- VIS-CLEACON VOTE Conference voting management software module
- VIS-CLEACON INTERP Simultaneous interpretation management software module

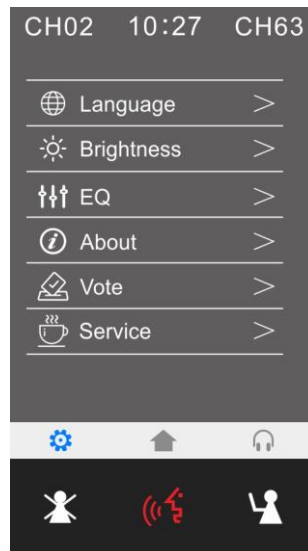
**1.2 Product connection diagram**






## 2. Basic functions


### Settings interface:




Click the settings button  to enter the settings menu. You can set the unit language, luminance, EQ, unit information, vote, and service.

### 2.1 Home screen information display



The home screen displays two interpretation channels that can be used by two users. The dual display of digital time and dial time, as well as the date display, make the appearance of the unit more concise and attractive. By clicking the setting button  on the left, you can enter the unit function setting interface. By

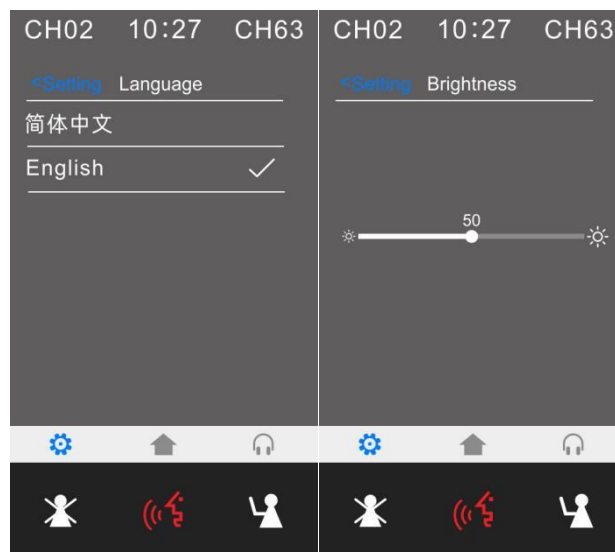
clicking the interpretation button  on the right, you can enter the interpretation channel setting interface.

## 2.2 Speech timing and request



When you click the microphone-enabling button, the microphone-enabling interface displays the speech time of the conference participants in real time. When the microphone is disabled, the information of the addresser and addresser in the request list can be displayed. The chairperson unit can disable the microphone of the addresser's delegate unit, and has the authority to agree to or reject the delegate unit's request for speaking (except for other hosts). User information corresponding to the unit shall be set in the upper computer software of VIS-DCP2000 series conference host (refer to the operation instructions of VIS-DCP2000 series upper computer software).

## 2.3 Unit language and luminance settings

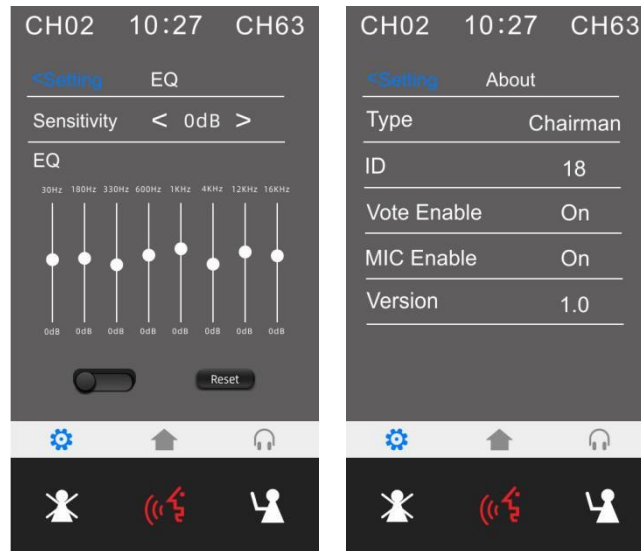


In the unit settings, the system provides Chinese and English display switching (if other languages are required, customized services are available) and screen luminance settings.

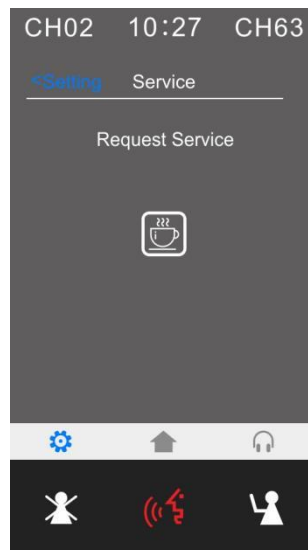
## 2.4 Unit EQ settings and unit information display

"EQ" settings provide 8-band equalizer adjustment and +/-12dB sensitivity adjustment. The settings can be enabled or disabled and can also be reset with one key if the settings are disturbed.

In "About" settings, you can view the unit authority and status information, including the unit type, current ID number, vote authority, speaking authority, and software version.



## 2.5 Call service

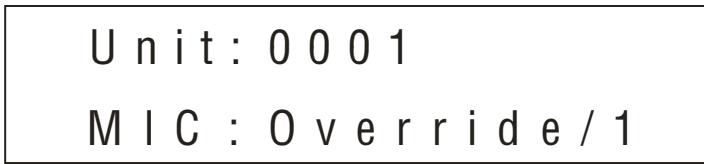


The system provides the call service function, as well as customized one-key call services such as paper, pen, and tea. The upper computer software can receive the call information and provide comfortable and fast service for the conference.

## 2.6 Conference mode

When you turn on the conference processor, the initialization message of "Initializing..." will be displayed on the screen. After 3 seconds, the home screen menu will be displayed.

**Home screen**





The information displayed on the home screen is shown in the figure above, including unit (indicating the number of conference microphone units connected to the system from "0001" to "4000"), conference mode (Override, Voice, Open, or Apply), and the maximum number of speeches (1, 2, 4, or 6).

**Microphone mode**

On the home screen, you can quickly enter the microphone mode setting interface by pressing "▽". If the conference host is connected to the PC, you can also set the conference mode through the conference software.

Menu	Parameter	Description
MIC mode	Override	Override
	Open	Open
	Voice	Voice control
	Apply	Request

Mode	Description
Override	In the Override mode, the delegate unit turns on or off the microphone directly via the microphone on/off button. When the number of enabled delegate units reaches the maximum, the unit that turns on the microphone earliest will be automatically turned off if the next delegate unit turns on the microphone.
Open	In the Open mode, the delegate unit turns on or off the microphone directly via the microphone on/off button. When the number of enabled delegate units reaches the maximum, the delegate unit to be turned on next will be added to the waiting list and enter the waiting state until any enabled unit turns off the microphone.
Voice	In the Voice mode, the delegate unit controls the microphone by intelligently recognizing the nearest human voice. When the microphone detects the nearest voice source, it will immediately turn on automatically. When the number of enabled delegate units reaches the maximum, the unit that turns on the microphone earliest will be automatically turned off if the next delegate unit turns on the microphone. (For special requirements, 20 microphones can be turned on freely.)
Apply	In the Apply mode, the delegate unit requests to turn on the microphone through the microphone button. In the request status, the LED of the conference unit is green.  The chairperson presses the agree button  or reject button  to decide whether a delegate unit can turn on the microphone. When the maximum number of speech delegates is reached, the system allows the same number of delegate units to enter the waiting list.

**Active MIC (maximum number of microphones)**

On the home screen, you can press the "△" button to quickly enter the screen for setting the maximum number of microphones allowed.

<b>Menu</b>	<b>Parameter</b>	<b>Description</b>
Active MIC	1, 2, 4, 6	Limits the number of delegates' microphones allowed to be turned on.

**Monitoring information (displaying unit connection)**

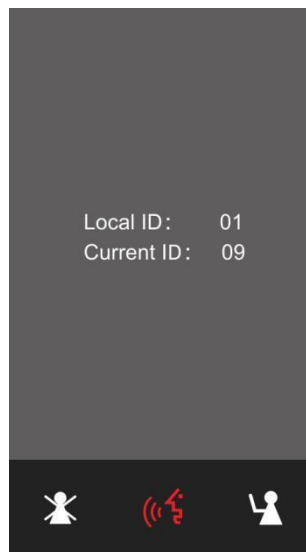
<b>Menu</b>	<b>Parameter</b>	<b>Description</b>
UNIT	0000 - 4000	Displays the number of conference microphones connected to the system, and monitors the connection status of the system in real time for timely detection of unit failures and connection failures.

### 3. Unit ID settings, unit type settings, and authority settings

#### 3.1 Editing unit ID

Press and hold the "ESC" button on the host panel for 2 seconds. The system will enter the ID editing status. Click the microphone-enabling button of the unit in turn (the button turns red, and the ID starts from No. 1 by default and increases by 1 when the button is pressed once) until the last unit. During editing, the unit displays the local ID (ID before editing) and the current ID (ID after editing).

**Note: The unit IDs cannot be the same; otherwise, the units may be on and off at the same time due to an ID conflict, and there is noise or there is no audio output when the microphone is turned on. In this case, it is required to edit the unit ID again.**



#### 3.2 Unit type settings

Press "ENTER" to enter the main menu, press ▼ to find "Delegate Setup" and enter the sub-menu settings "Unit Type Set".

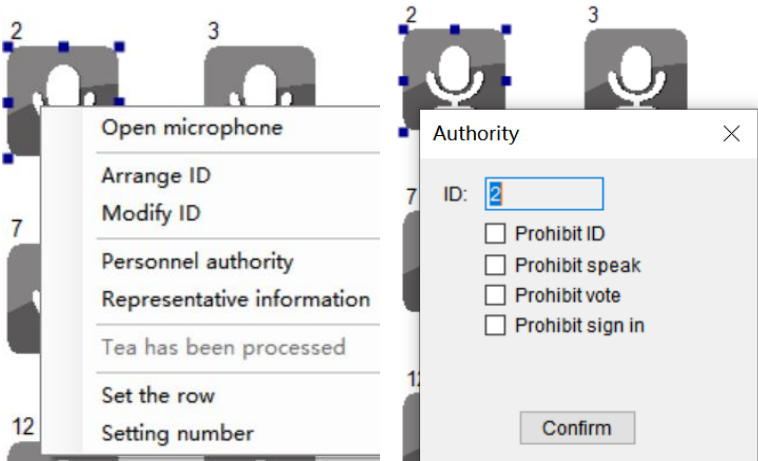


If a unit is a delegate unit by default, and most of the units are delegate units, set the status "Type: ON". Press the unit microphone button, and the screen will display "Delegate->Chairperson->Interpreter->VIP" circularly. You can set the unit type according to conference needs. After setting all the types, exit the type setting state and then restart the host to complete the setting process.


Type: Off  
 - > Off

### 3.3 Unit authority settings

Log in to the upper computer management software of the conference system. In the management mode, right-click the unit icon and click "Personnel authority" to set unit authority, such as ID, speaking, vote, and sign-in authority.



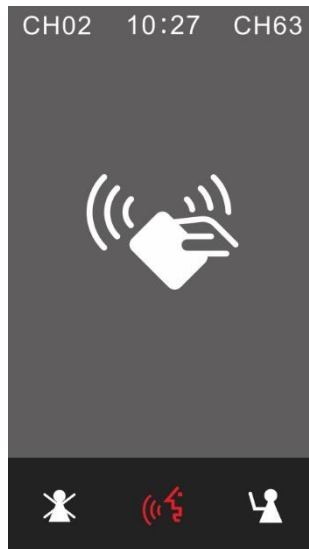
### 3.4 Microphone status indication

The microphone on/off button , LED ring on the gooseneck microphone and the screen show the working status of the conference unit.

Microphone button color	LED ring color	Screen	Status
Red (on)	Red (on)	Microphone on	Microphone on
White (off)	Green (wait)	Requesting to speak Please wait...	Request to speak

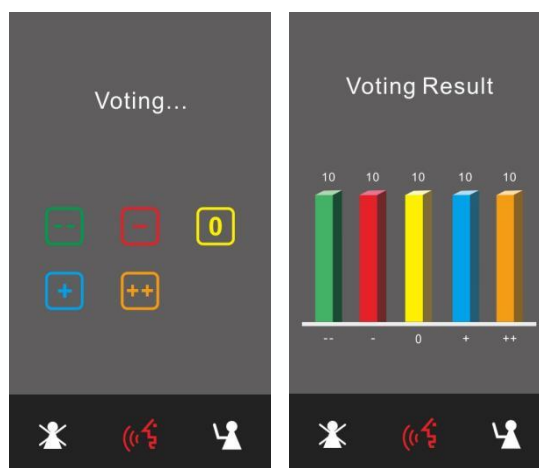
## 4. Optional functions

### 4.1 IC card sign-in and information display function (software license model: VIS-LIDEN)



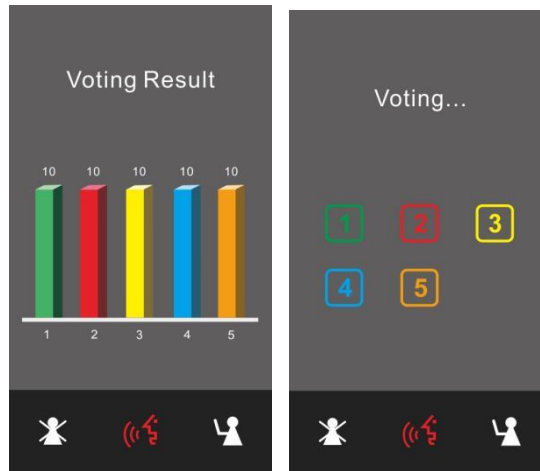
Sign-in by NFC card allows accurate identification of user image, name, position, etc. (Add user details in the system management software. Refer to 5.2 - 5.3.)

### 4.2 Voting function (software license model: VIS-LVOTE)

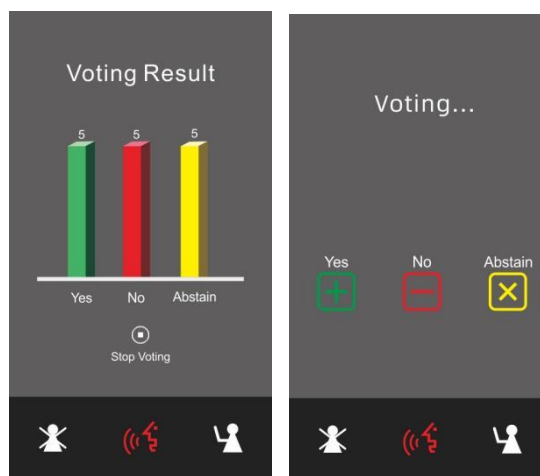


Voting at election





Voting for rating



Voting for ballot



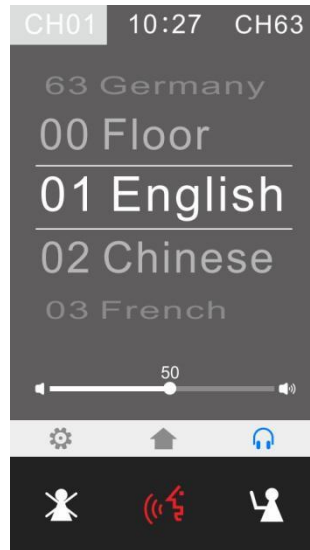
Sign-in

The results of the election, rating, ballot, and sign-in are displayed in real time, and the data is displayed in bar charts, which is more intuitive and reliable. The chairperson unit can start and end the voting, and the voting authority of units can be customized. In the conference system management software, you can enable voting and sign-in (sign-in via IC card can be set).

### 4.3 Dual 64-channel selector software module (software license model: VIS-LLGE)

Enter the host menu "Interpretation" to set relevant parameters of the interpretation unit. Select the number of channels to be opened, the corresponding language of the channel, and the serial number of the interpretation booth.

Menu item	Parameter	Parameter value	Description
Max. channel	-	00 to 64	Set the number of interpretation channels according to the conference demands to simplify channel selection on the unit.
Channel	00 01 ... 64	Chinese, English... (104 languages)  Chinese, English... (104 languages)  Chinese, English... (104 languages)	Bind the language for each channel. The number of microphone channels can be selected according to the number of languages to be interpreted. The corresponding number of channels can be set on the host to bind the corresponding languages.
Auto floor	-	On/Off	On - When the interpretation unit turns off the microphone to stop interpretation, the channel that the interpretation unit is responsible for automatically switches to the original sound of the channel.  Off - When the interpretation unit turns off the microphone to stop interpretation, the channel that the interpretation unit is responsible for has no audio output.
Channel lock		On/Off	On - The output channel of the interpretation unit is locked, and the interpreter cannot change it randomly.  Off - The output channel of the interpretation unit can be set by the interpreter.
Booth setup	Max. booth  Start set	02 to 64  On/Off	Max. booth - Sets the number of interpretation booths.  On - Start setting. All interpretation units display the booth No., which can be changed by pressing the speech key. The booth No. of interpretation units in the same booth must be the same.  Off - Complete setting.  Function - When the microphone of any interpretation unit is turned on, the loudspeaker of interpretation units in the same booth will automatically be turned off.



The microphone unit can choose two interpretation channels for dual users at the same time. There is a 3.5mm headphone jack on each side of the unit, so you can listen to the interpretation of two channels in the interface. As shown in the figure, there are two channels CH01 and CH63 on the left and right sides of the interface. You can click any channel to enter the channel selection interface, slide up and down to select the language channel corresponding to the interpretation you want to listen to, and slide the desired language channel to the middle of the double horizontal line.

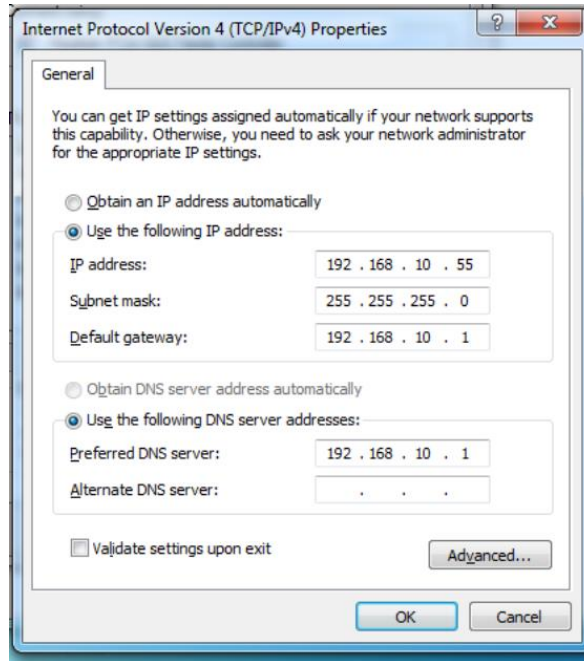
#### **4.4 Dual-user software (software license model: VIS-LDUAL)**

To be updated

## 5. Upper computer software settings

### 5.1 Software connection

The computer and conference host are connected to the same network, and the default IP address of the conference host is 192.168.10.100. Set the computer IP address to a static one, and keep it in the same network segment as the conference host.

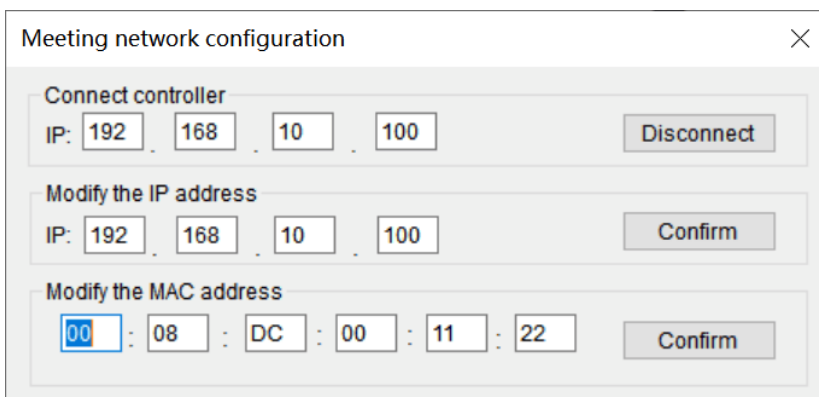


Install the upper computer software CLEACON SYSTEM of the conference host.



You can use the conference template or user-defined project. For specific operations, please refer to the upper computer software manual.

Right-click the host icon and click network settings to connect to the host. Then click basic configuration to set functions such as conference voting and sign-in.



## 5.2 Basic configuration

Basic configuration

### 1. Vote settings

Select settings such as "Sign in required", "Vote with names", and "First choice". Multiple choices are supported.

### 2. Vote mode settings

You can choose to start or end a vote, election or rating.

### 3. Microphone settings

Set the microphone mode and the maximum number of enabled microphones remotely.

### 4. Sign-in options

Set the number of people who sign in and the sign-in method. The sign-in methods include ordinary sign-in and sign-in via IC card. Sign-in via IC card requires the NFC function.

### 5. Starting ID settings

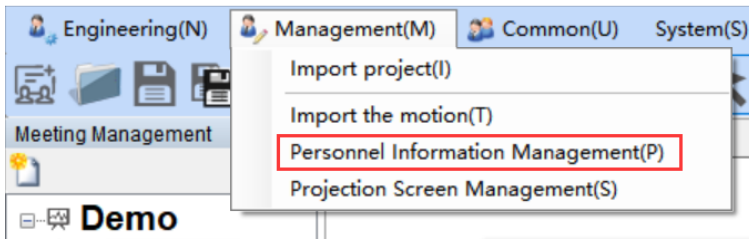
Set the ID No. of the microphone unit. Signing on behalf of others is supported.

### 6. Language channel settings

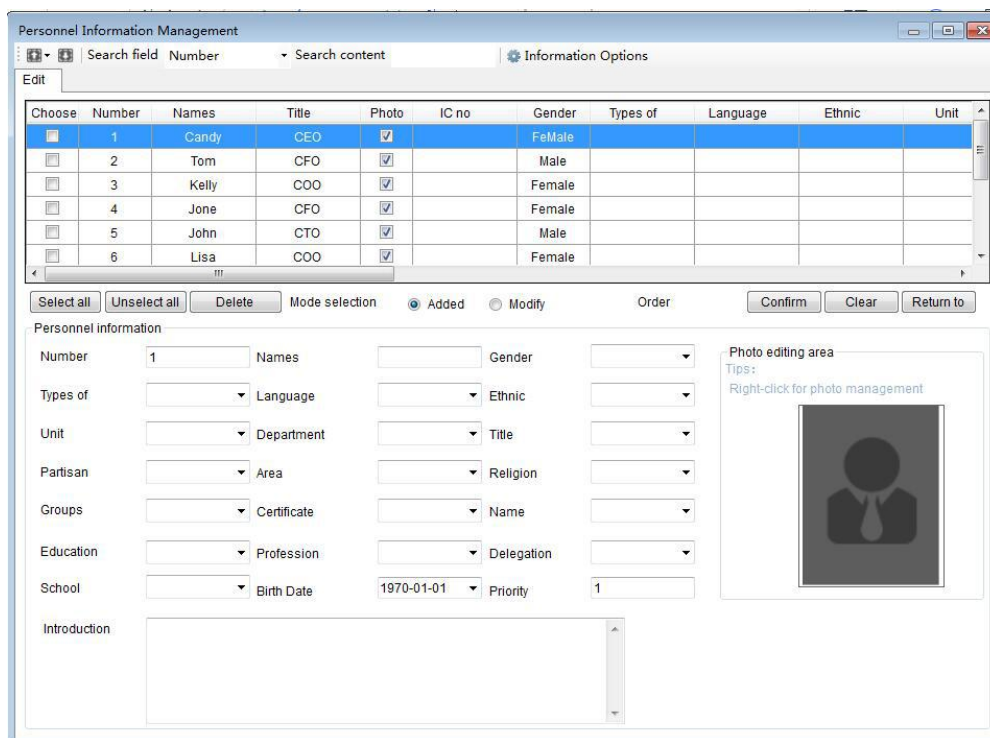
Select the channel number of microphone units and the languages corresponding to the channels.

## 5.3 Information uploading

In the navigation bar management option, click "Personnel Information Management".

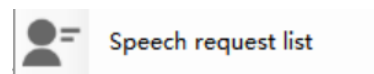


In the personnel information list, you can set the information of each conference participant, including the name, gender, nationality, language, institution, department, position, certificate number, and image. The information can be uploaded to the microphone unit, electronic nameplate, or other devices for display.

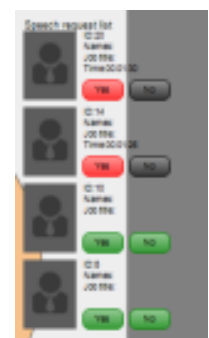


## 5.4 Display of person requesting to speak

In the engineering mode, click the element adding icon to add it.

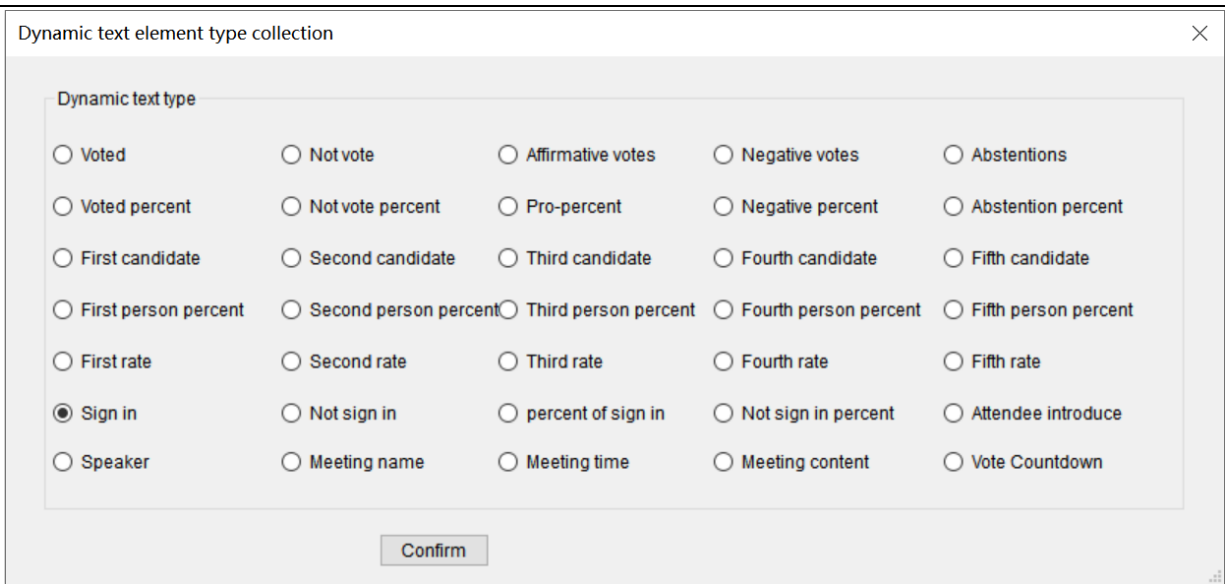


The information of the person requesting to speak can be displayed, and the administrator or chairperson unit can agree or reject the request to speak.



## 5.5 Dynamic text

It mainly displays the number of votes, the number of people, and the percentages used in the statistical results under the mode of voting, election, and rating. After binding, it can dynamically display the values bound in the corresponding voting mode. For example, addresser in progress, conference name, conference time, conference content, voting countdown, and speech countdown.



The dynamic text function is an important embodiment of statistical conference results. The dynamic text can bind relevant information in multiple modes. It dynamically displays the information change and is an important conference element to reflect the change of relevant parameters in the conference process.

1) How to create

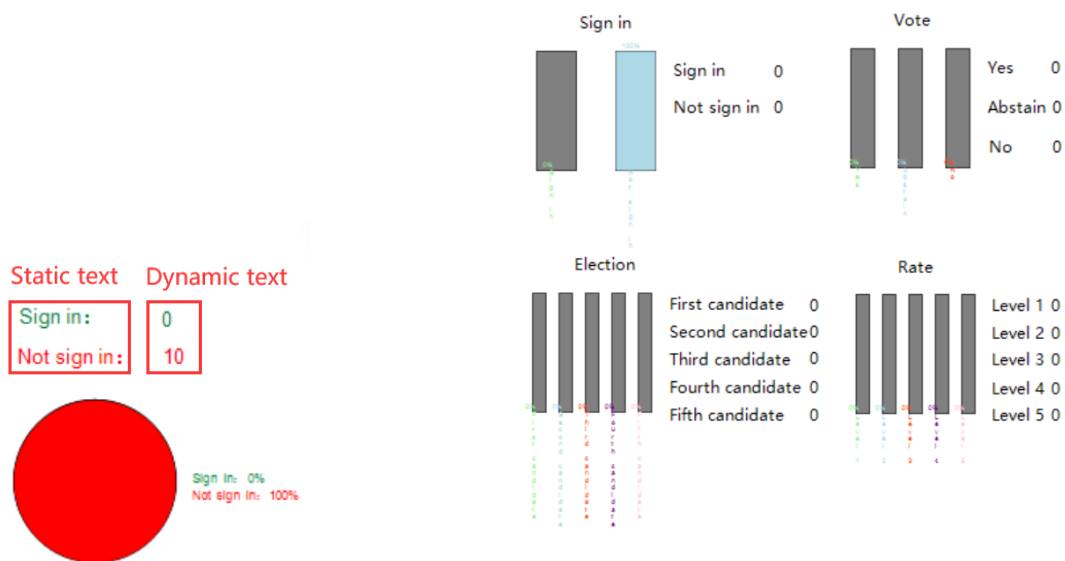
The operation is similar to creating a new unit. Select the dynamic text button in the conference element set to do so.

2) Dynamic text management

Right-click the dynamic text in the canvas to open its context menu.

Font design: Modify each property of its display font, including font size, font name, font color, etc.

Font type: The element type to which the dynamic text is bound, as shown in Figure 1-14.



It can be combined with static text and a bar chart or pie chart so that the dynamic statistical result of conference voting and sign-in can be visually displayed in real time.

## 6. Debugging

Generally, you do not need to set the host and unit. After the system is connected, the conference system is ready to use. The unit can display the current time. After the host is connected to the audio system, there is sound output.

**1. Adjust the main volume knob on the front panel of the conference host, and control the output gain. Taking account of the peripheral equipment, achieve the sound pickup distance required by the project on the premise of preventing howling.**

**2. Engineers can set the conference mode of the host and the maximum number of enabled microphones according to the needs of the venue. For other settings, refer to the user manual.**

**When you turn on the conference processor, the initialization message of "Initializing..." will be displayed on the screen. After 3 seconds, the home screen menu will be displayed.**

Home screen

```

Unit: 0001
MIC: Override / 1
    
```

The information displayed on the home screen is shown in the figure above, including the number of conference microphones connected to the system ("0001" to "4000"), conference discussion mode (Override, Voice, Open, or Apply), and the maximum number of speeches for delegate units (1, 2, 4, or 6).

One chairperson unit can be turned on when the number is 1 or 2, and two chairperson units can be turned on when the number is 4 or 6.

Take setting the maximum number of enabled microphones as an example. The conference mode setting process is the same.

1. Press "Enter" on the home screen to get the following menu.

```

Menu
-> MIC Mode
    
```

2. Press the "▽" button to select the Active MIC menu, which indicates the maximum number of enabled microphones.

```

Menu
-> Active MIC
    
```

3. Press "ENTER" to enter the menu.

```

Active MIC : 1
-> 1    2    4    6
    
```

4. Press the "▽" button to select the parameter "6".



```
A c t i v e M I C : 1
      1   2   4 - > 6
```

5. Press "ENTER" to confirm the current parameter "6", and make the parameter take effect. It will be displayed as Active MIC:6.

```
A c t i v e M I C : 6
      1   2   4 - > 6
```

6. Press "ESC" to return to the home screen.

```
U n i t : 0 0 0 1
M I C : O v e r r i d e / 6
```