

VISSONIC

CLASSIC-D Full Digital Network Conference system User Manual

V2.0



VISSONIC ELECTRONICS LIMITED

The meaning of symbols

■ Safety instructions

For your safe and correct use of equipment, we use a lot of symbols on the equipment and in the manuals, demonstrating the risk of body hurt or possible damage to property for the user or others. Indications and their meanings are as follow. Please make sure to correctly understand these instructions before reading the manual.

	<p>This is A level product, which may cause radio interference in the living environment. In this case, users may need to take the feasible measures to get around the interference.</p>
	<p>Remind users that the dangerous voltage without insulation occurring within the equipment may cause people suffer from shock.</p>
	<p>CE certification means that the product has reached the directive safety requirements defined by the European Union. Users can be assured about the use of it.</p>
	<p>SGS certification means that the product has reached the quality inspection standards proposed by the world's largest SGS.</p>
	<p>This product passed the ISO9001 international quality certification (certification body: TUV Rheinland, Germany).</p>
	<p>Warning: in order to avoid electrical shock, do not open the machine cover, nor is the useless part allowed to be placed in the box. Please contact the qualified service personnel.</p>

■ General information instructions

	<p>It lists the factors leading to the unsuccessful operation or set and the relevant information to pay attention to.</p>
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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

- ◆ 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

- ◆ 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.

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.

Version

Version	Update	Date
1.0	/	2018.08.06
2.0	Adding VIS-DOC/DOD-T, modifying Camera Track.	2023.06.28

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1. About this manual

This manual introduces how to use or install the conference system in the common way and how to control it by commands. We insist you reading the **SAFETY INSTRUCTIONS** and **QUICK START** before using it. In most of our user manual, we are putting important note, instructions and hints in frames of different color, please pay attention to those symbols.

NOTE: This information is the supplementary explanation to the contents, usage or glossary.

CAUTION: Avoid improper operations to damage the products or third-party devices connecting to it.

Safety Instructions

Avoid plug in power connector with power on, otherwise will lead to electric shock, or cause damage to the circuit

Installation and wiring must be solid and reliable, otherwise it may result in malfunction on device.

Make sure the device has been well connected to the ground before using

Do not touch the terminals while power on, or may cause electric shock, malfunctions

Do not disassemble the equipment without permission, to avoid damage to the internal electrical components and will void the warranty.

The user manual gives the installers and operators the guide to install, configure and operate the CLEACON system.

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2. System Overview

The CLASSIC-D system is based on the AUDIO-LINK™ audio distribution and processing technology. The system is combined with wired CAT5 and can be used for camera tracking and simultaneous controlling by PC software.

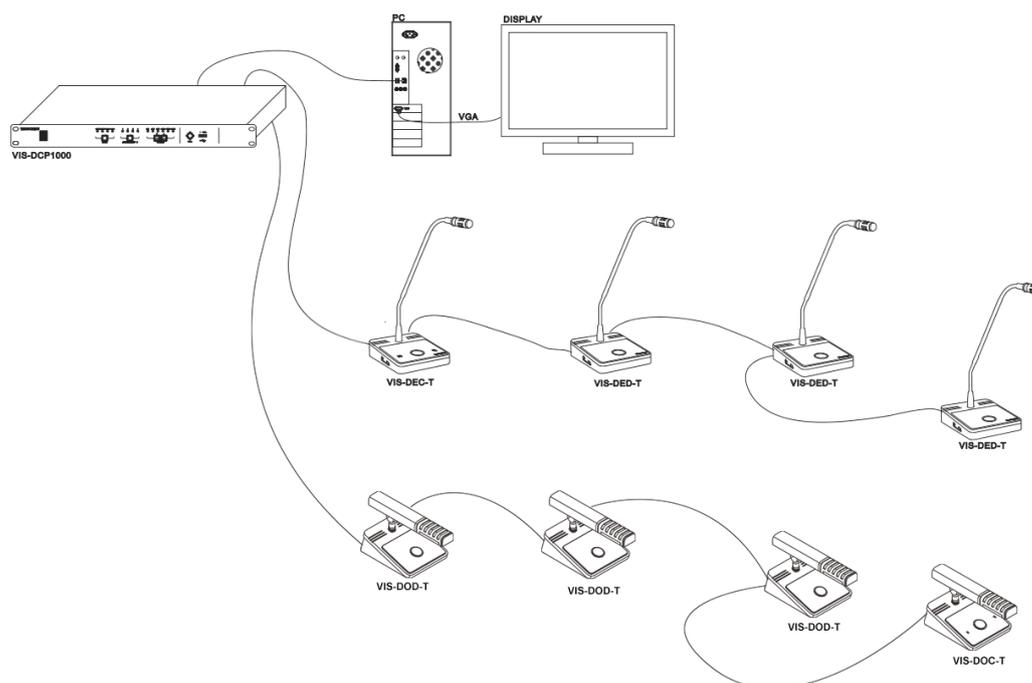


Figure 2.1 CLASSIC-D system overview

The CLASSIC-D system comprises:

- ✓ Full Digital Networked Conference Controller VIS-DCP1000
- ✓ CAT5 Digital Discussion Chairman/Delegate Unit VIS-DEC-T/VIS-DED-T
- ✓ CAT5 Digital Discussion Chairman/Delegate Unit with Physical Button VIS-DOC-T/VIS-DOD-T

2.1 Conference Controller VIS-DCP1000

The full digital networked conference controller VIS-DCP1000 controls all the units in the chain, and supplies power to all. You can configure it by the button on front panel.

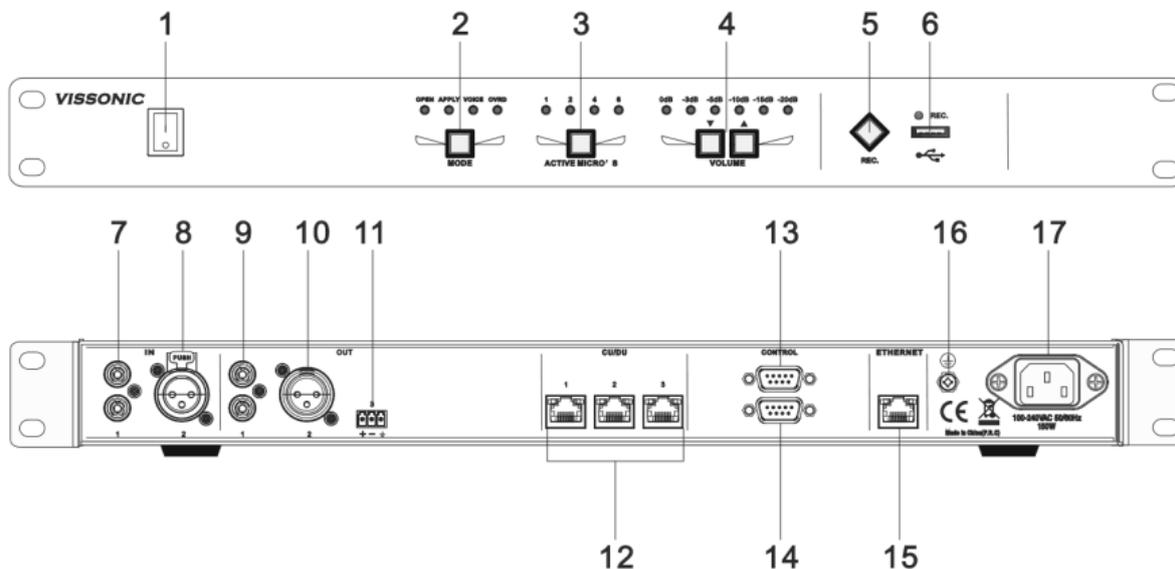


Figure 2.1.1 Front and rear view of VIS-DCP1000

On front panel, the controller contains:

1. **Power Switch** - Power on or off the controller.
2. **Conference Mode Selector** - Show the current conference mode status and select the mode option as “Open”, “Apply”, “Voice”, “Override”.
3. **Maximum Active Delegate Unit Quantity** - Show the current maximum active delegate unit microphone quantity and select the quantity option as “1”, “2”, “4”, “6”.
4. **Volume Buttons** - Control output volume level of the system.
5. **Audio Recording** - Press to start/stop recording the audio of whole conference content.
6. **USB Slot** - To insert USB disk (Up to 32G) for recording, with status light indicator which is flashing during the recording.

On rear panel, the controller contains:

7. **Audio Inputs (IN 1)** - RCA audio input from external audio sources like MP3.
8. **Audio Inputs (IN 2)** - XLR audio input from external audio sources like Microphone and remote audio input.
9. **Audio Outputs (OUT 1)** - RCA audio output to external audio devices like PA system, loudspeakers etc. and can be set as zone output.
10. **Audio Outputs (OUT 2)** - XLR audio output to external audio devices like PA system, loudspeakers etc. and can be set as zone output.
11. **Audio Outputs (OUT3)** - Phoenix audio output.
12. **CU/DU** - Connect to the delegate unit, chairman unit and interpreter unit. The **CU/DU** port 1

- and **CU/DU** port 2 or **CU/DU** port 2 and **CU/DU** port 3 can be the closed loop.
13. **Control** - Female DB9 connector is used to connect with camera auto-tracking controller.
 14. **Control** - Male DB9 connector is used to connect with the camera (or third-party central control device).
 15. **Ethernet** - Connect to PC or switch for the software control.
 16. **Ground Screw** - Connect the controller to the ground.
 17. **Power Inlet** - Connect the controller to the power supply with a power cable (100-240V AC, 50/60Hz, 150W).

2.2 Conference Unit VIS-DEC-T/VIS-DED-T

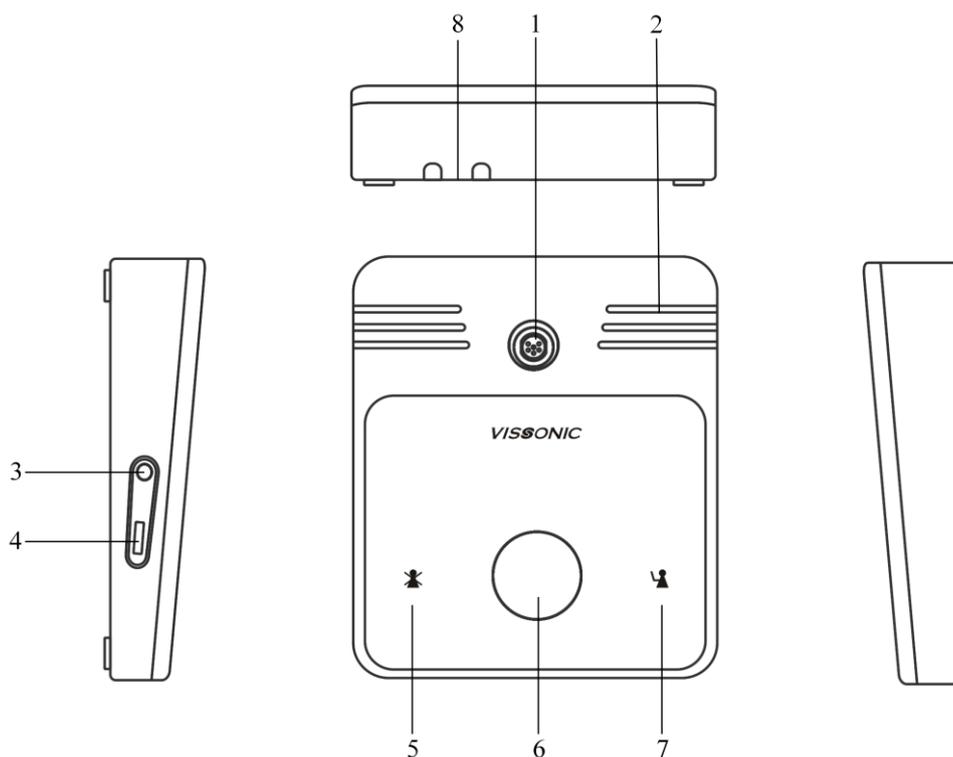


Figure 2.2.1 Full Digital Discussion Chairman Unit VIS-DEC-T

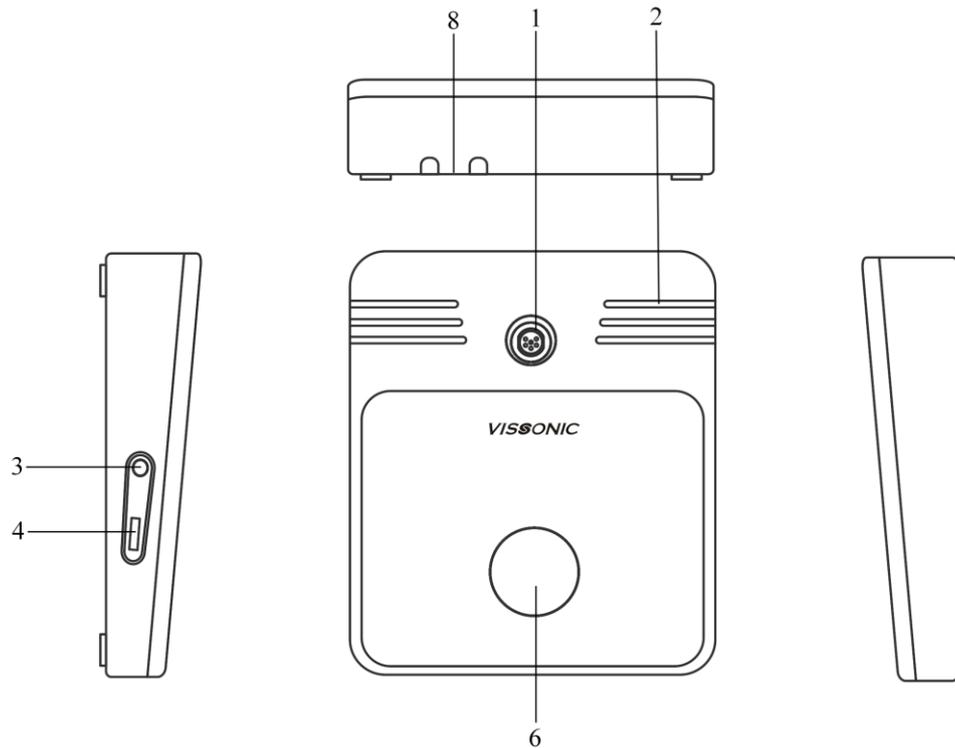


Figure 2.2.2 Full Digital Discussion Delegate Unit VIS-DED-T

1. **Microphone Socket** - Connect a pluggable gooseneck microphone (Model no.: VIS-M330, VIS-M410, VIS-M485, VIS-M600) to the discussion units.
2. **Loudspeaker** - Give the audio signal from the floor to the delegate unit, when the microphone is enabled, the signal of the loudspeaker is muted.
3. **Headphone Socket** - Headphone connection.
4. **Volume Knob** - Adjust the earphone and speaker volume.
5. **Clear Button** - Clear/deactivate all active delegate unit microphone or mute the system.
6. **Microphone Button** - Enables or disables the microphone. The microphone button has a LED that shows the condition of the microphone.
7. **Approval Button** - Approve the applying microphone to be enabled under the apply mode and work as mute while pressed clear button.
8. **CU/DU RJ45 Socket** - Makes a loop-through in the CEALCON system with the discussion unit.

2.3 Conference Unit with Physical Button VIS-DOC-T/VIS-DOD-T

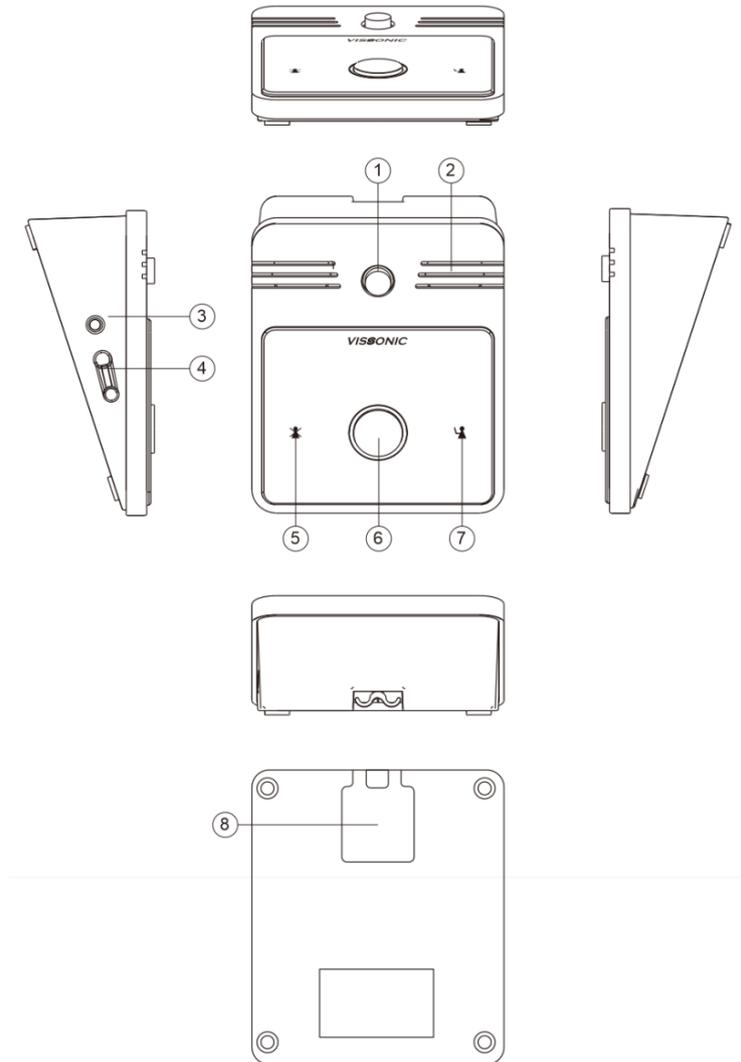


Figure 2.3.1 Full Digital Discussion Chairman Unit with Physical Button VIS-DOC-T

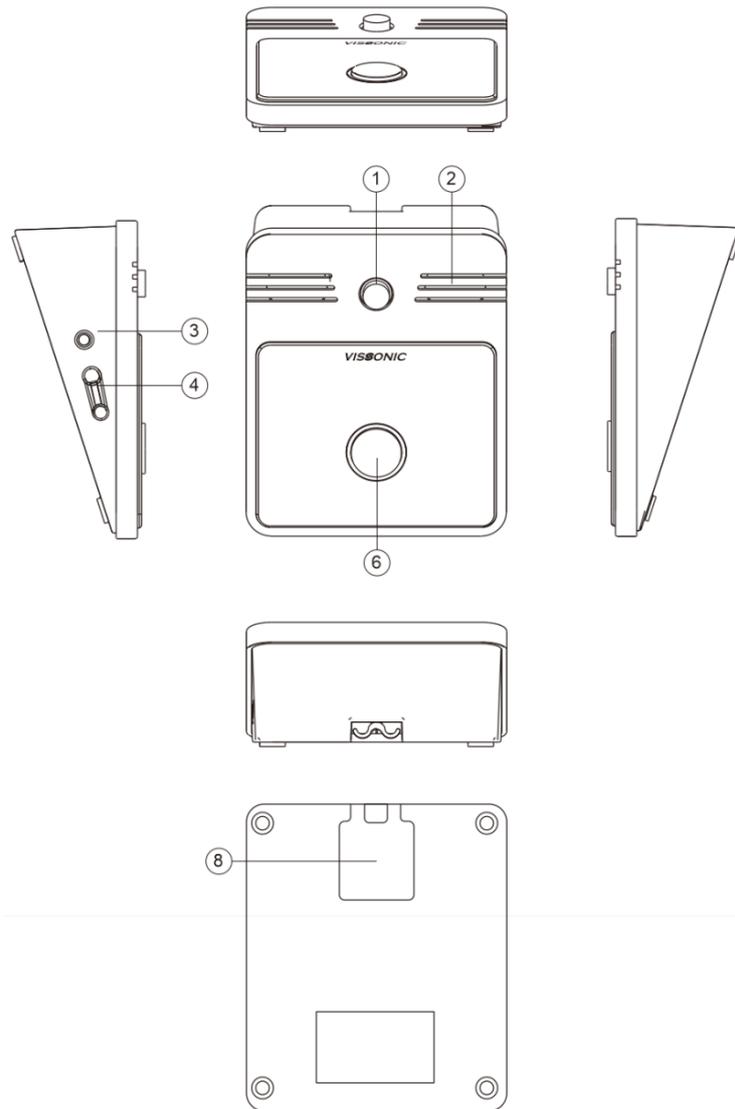


Figure 2.3.2 Full Digital Discussion Delegate Unit with Physical Button VIS-DOD-T

- ① **Microphone Socket** - Connect a pluggable gooseneck microphone (Model no.: VIS-M330, VIS-M410, VIS-M485, VIS-M600) to the discussion units.
- ② **Loudspeaker** - Give the audio signal from the floor to the delegate unit, when the microphone is enabled, the signal of the loudspeaker is muted.
- ③ **Headphone Socket** - Headphone connection.
- ④ **Volume Knob** - Adjust the earphone and speaker volume.
- ⑤ **Clear Button** - Clear/deactivate all active delegate unit microphone or mute the system.
- ⑥ **Microphone Physical Button** - Enables or disables the microphone. The microphone button has a LED that shows the condition of the microphone.
- ⑦ **Approval Button** - Approve the applying microphone to be enabled under the apply mode and work as mute while pressed clear button.
- ⑧ **CU/DU RJ45 Socket** - Makes a loop-through in the CEALCON system with the discussion unit.

3. System Design and Plan

Before using our conference system, there are some basic points for you to plan/design a conference room.

The controller is powered by 110V to 220V wide range power supply, while it has a basic control capacity (with power relay devices it can load more units). Here we list a basic capacity of active units for one controller.

Model	Extension cable (m)	VIS-DCP1000			
		CU/DU1	CU/DU2	CU/DU3	Max. total
VIS-DEC-T	0m	30	30	30	90
	5m	30	30	30	90
VIS-DED-T	10m	28	28	28	84
VIS-DOC-T	20m	24	24	24	72
VIS-DOD-T	50m	20	20	20	60
	100m	10	10	10	30

The capacity is decided by:

1. Number of active units in the system.
2. Length of extension cable from the first delegate or chairman unit to conference controller VIS-DCP1000.

NOTE: Extension cable has direct effect on the control capacity. The longer extension cable is used, the less power is available to drive the devices connected in the system. The length of the cable needs to be selected according to the practical situation.

3.1 Install in the 19' rack

The conference controller VIS-DCP1000 can be installed in a standard 19-inch cabinet. The unit has standard accessories of a pair of installation supports. Below is the following diagram for installation:

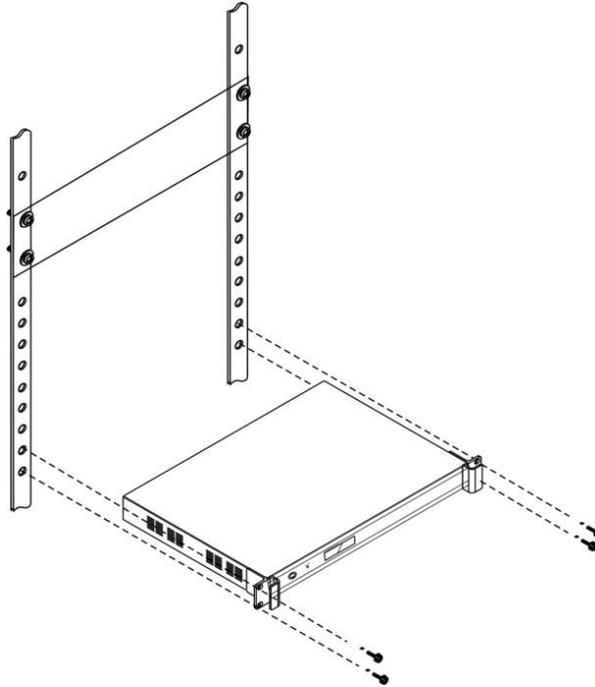


Figure 3.1 Installation of the conference controller

4. Connection

4.1 Power supply

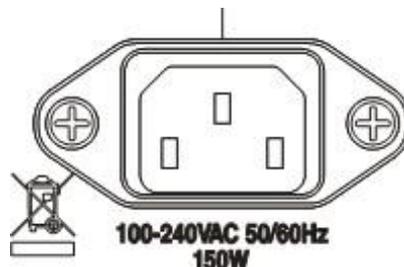


Figure 4.1 Power connection

Connect the conference controller and the power supply firmly together.

CAUTION: Main power supply should well grounded, otherwise it may cause fatal incident.

4.2 Audio inputs

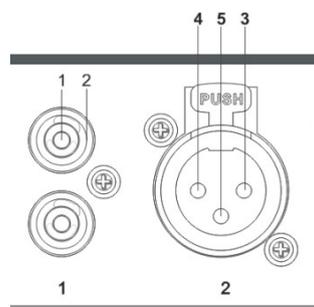


Figure 4.2 Audio input connection

The conference controller provides RCA or XLR type audio input connector.

Pin	Type	Signal	Description
1	RCA	Hot	Positive
2		Ground	Shield Ground
3	XLR	Ground	Shield Ground
4		Hot	Positive
5		Cold	Negative

4.3 Audio outputs

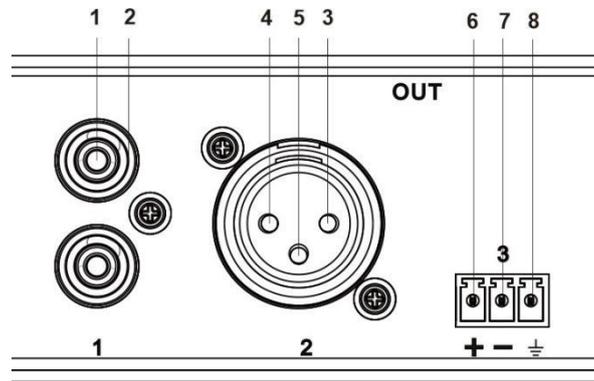


Figure 4.3 Audio output connection

The conference controller provides RCA, XLR or phoenix type audio output connector

Pin	Type	Signal	Description
1	RCA	Hot	Positive
2		Ground	Shield Ground
3	XLR	Hot	Positive
4		Ground	Shield Ground
5		Cold	Negative
6	Phoenix	+	Positive
7		-	Negative
8		G	Shield Ground

4.4 CU/DU

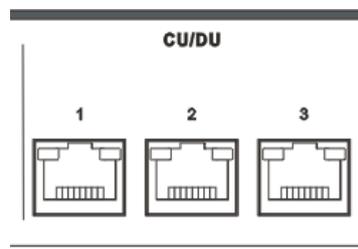


Figure 4.4 CU/DU port

Use the CU/DU socket to connect to the chairman/delegate unit or extension main unit. Use the VISSONIC tested CAT5e cable or better.

There are three connection ways available for CLASSIC-D conference system.

- **Hand in Hand Loop Network**

Hand in Hand Loop Network is an important feature for CLASSIC-D conference system. You can use this connection way to make the system steadier.

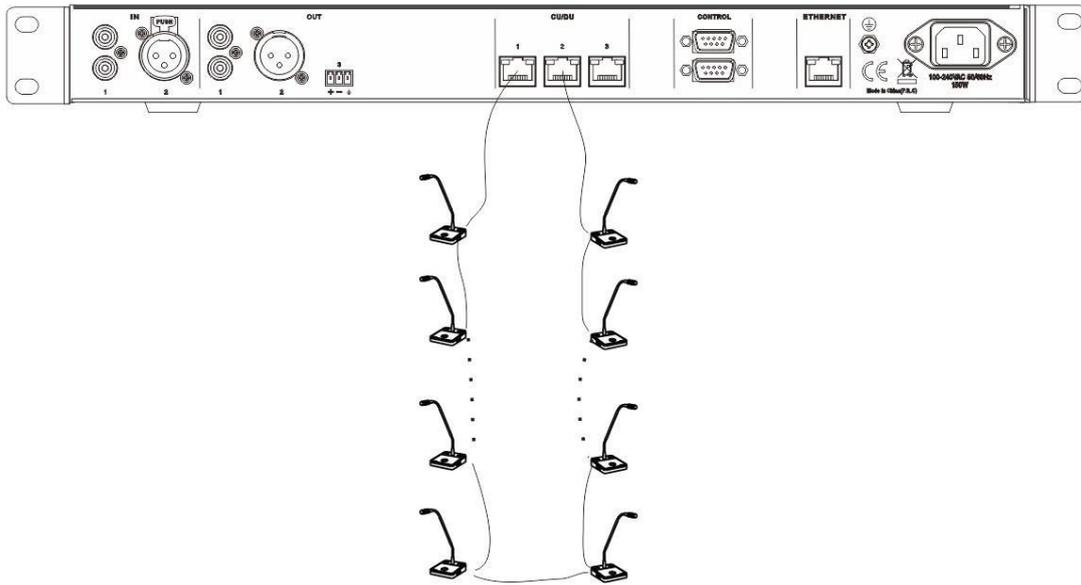


Figure 4.4.1 Hand in Hand Loop Network connection



“Hand-in-Hand-Loop-Network” connection is only available between CU/DU1 and CU/DU2, or CU/DU2 and CU/DU3, but not valid between CU/DU1 and CU/DU3.

- **Hand in Hand connection**

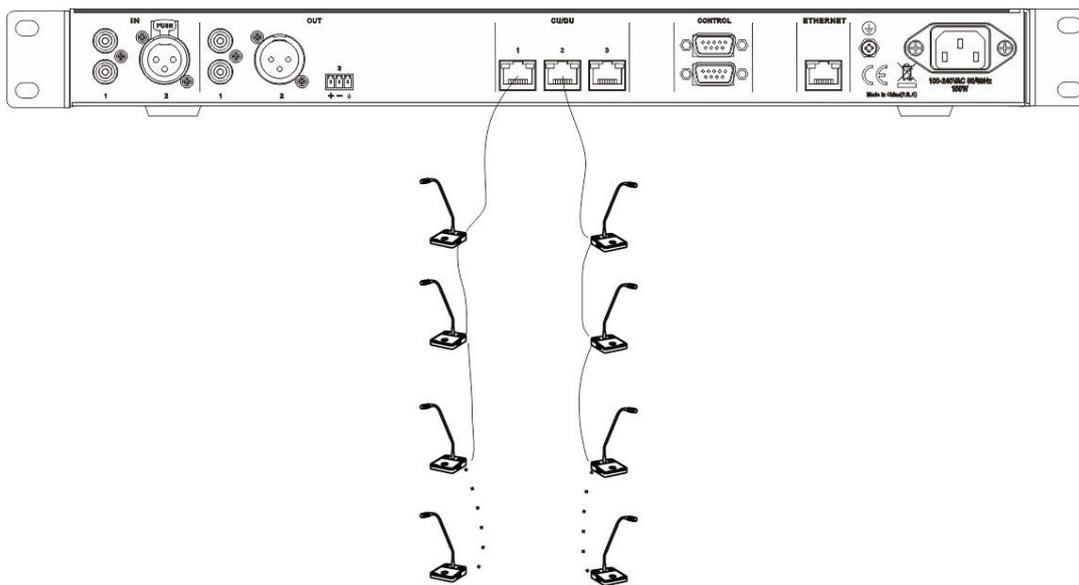


Figure 4.4.2 Hand in Hand connection

- **Hand in Hand connection + Hand in Hand Loop connection**

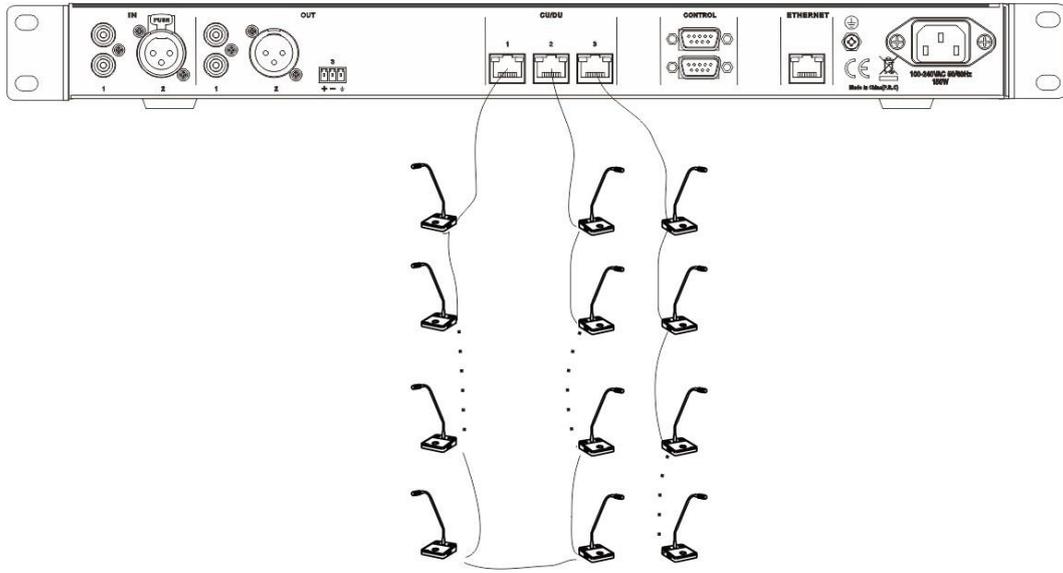


Figure 4.4.3 Hand in Hand connection + Hand in Hand Loop connection

- **Extension Main Unit + Hand in Hand Loop connection**

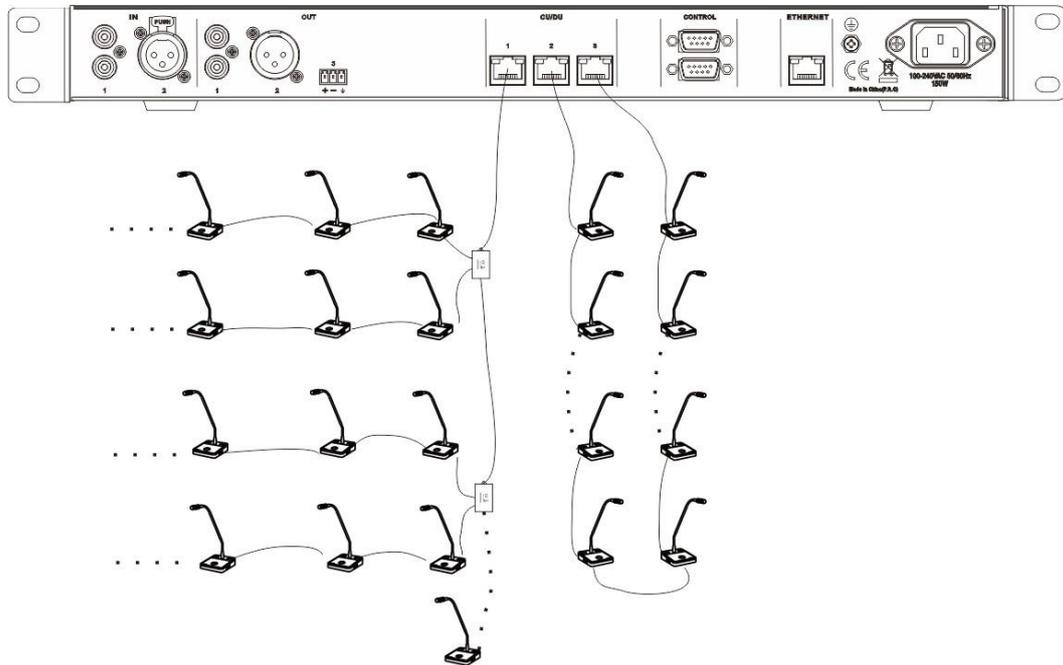


Figure 4.4.4 Extension Main Unit + Hand in Hand Loop Connection

4.5 CONTROL

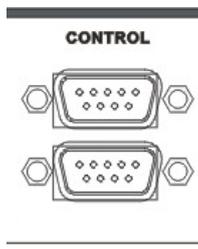


Figure 4.5.1 Control Port

Full digital conference system can be compatible with various control systems via RS232 serial interface. The **upper COM** port is used to connect with camera auto-tracking controller for camera auto-tracking function. The **lower COM** port is used to connect the camera (or third-party central control device).

The default switching command is

Baud rate: 9600 bps; Parity: 8; Stop: 1

Command	Description
1V1.	Switch the channel 1 to output
2V1.	Switch the channel 2 to output
3V1.	Switch the channel 3 to output
4V1.	Switch the channel 4 to output
.....
14V1.	Switch the channel 14 to output
15V1.	Switch the channel 15 to output
16V1.	Switch the channel 16 to output

If you need other commands, please contact with us to upgrade the firmware online.

COM port pin is described as follows:

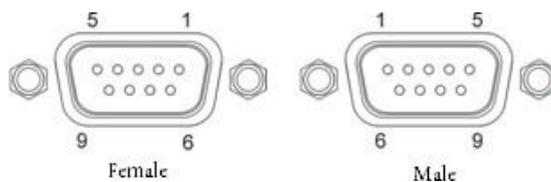


Figure 4.5.2 Description of COM port pin

RS232 (DB9 female/pin type) pin definition (Upper COM of conference controller)

Pin	Signal	Description
1	-	Null
2	TXD	Sending data
3	RXD	Receiving data
4	-	Null
5	GND	Signal ground
6	-	Null
7	-	Null
8	-	Null
9	-	Null

RS232 (DB9 male/pin type) pin definition (Lower COM of conference controller)

Pin	Signal	Description
1	-	Null
2	RXD	Receiving data
3	TXD	Sending data
4	-	Null
5	GND	Signal ground
6	-	Null
7	-	Null
8	-	Null
9	-	Null

4.6 ETHERNET

ETHERNET

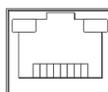


Figure 4.6 ETHERNET port

Connect the ETHERNET socket to the PC by CAT5 cable or better.

5. Configuration and Operation

5.1 Configuration on the VIS-DCP1000

Use the configuration menu of the conference controller to configure the system.

5.1.1 Basic Setting

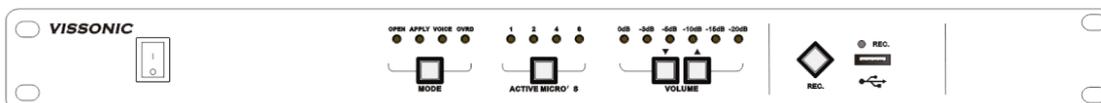


Figure 5.1.1 Front panel of VIS-DCP1000

The indicators show the system working status MIC mode “Override, Voice, Open, Apply”, the maximum active number “1, 2, 4, 6”, volume output “0dB, -3dB, -5dB, -10dB, -15dB, -20dB” and USB recording status.

MIC MODE

On the main screen, press the button “Mode” to set the microphone mode. When the conference controller is connected to the PC, you also can set the microphone mode from the PC software.

Button	Value	Description
MIC mode	Open Apply Voice Override	The microphone mode of CLASSIC-D conference system

Mode	Description
Open	In the open mode, the delegate unit directly turns on and off the microphone through the microphone switch button. When the maximum number of delegates speaker, the next delegate that enables his or her microphone is added to a request-to-speak list. The microphone is not enabled until another delegate disables his or her microphone.

Apply	In the apply mode, delegates can apply for turning on their microphones with the microphone button and the green LED on MIC will be on. When the chairman unit press the APROVAL button to enable the applying delegate microphone according to the applying order. When the maximum number of delegates speaker, the system allowing the same maximum number of applying microphone on the waiting list.
Voice	In the voice mode, the unit will be activated by the voice and no need the press the MIC button.
Override	In the override mode, delegates can activate their microphones with the microphone button. When the maximum number of delegates speak, the next delegate that activates his or her microphone automatically deactivates the microphone that was activated for the longest time.

ACTIVE MICRO’S

Press the button “ACTIVE MICRO’S” to change the max active unit MIC number.

Button	Value	Description
ACTIVE MICRO’S	1,2,4,6	Limited the max number of active microphones.

Volume

Press the button “Volume▲” and “Volume▼” to change the volume output of conference controller.

Button	Value	Description
Volume ▲▼	‘0dB’, ‘-3dB’, ‘-5dB’, ‘-10dB’, ‘-15dB’, ‘-20dB’	0dB is max. -20dB is min.

REC.

Insert the USB disk to the USB sock and press the button “REC.” to start recording and the indicator is flashing.

5.1.2 Turn ON/OFF the built-in speaker of the delegate/chairman unit

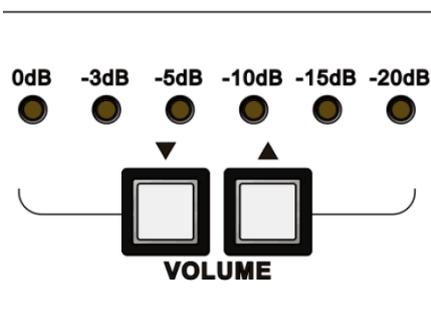


Figure 5.1.2 Button of VOLUME

Press the button “VOLUME▲” and “VOLUME▼” at the same time and hold, all indicators will be lighting and off. The setting is accepted and the speaker built-in delegate/chairman unit be on/off status reversely.

5.1.3 Setting ID for chairman/delegate unit

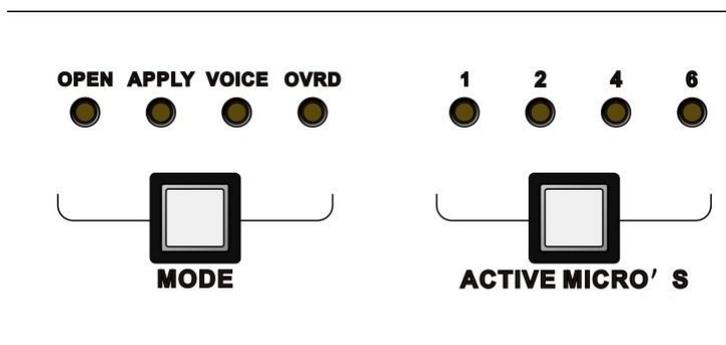


Figure 5.1.3 Button of MODE and ACTIVE MICRO'S

During the working status, press the button “MODE” and “ACTIVE MICRO'S” at the same time, all LED indicators start on/off flashing. The system is working on the setting ID mode.

Just press the MIC button on every chairman/delegate unit one by one and set the ID for them. After finished pressing chairman/delegate unit, press the button “MODE” and “ACTIVE MICRO'S” at the same time, all indicators stop flashing and the ID setting is saved and finished.

5.1.4 Setting the default system



Figure 5.1.4 Button of Switch, MODE and ACTIVE MICRO'S

1. Turn off the system.
2. Press the button “MODE” and “ACTIVE MICRO’S” at the same time and hold.
3. Switch on the system.
4. All the indicators will be lighting on/off two times and release the buttons.
5. The default setting is ok.

5.1.5 Camera Auto-tracking Setup & Application

Here we need to install the software “VIS-DCP1000 Conference Controller Setup Software” and set your PC to the same IP range: 192.168.10.XXX, default gateway: 192.168.10.1. as shown below.

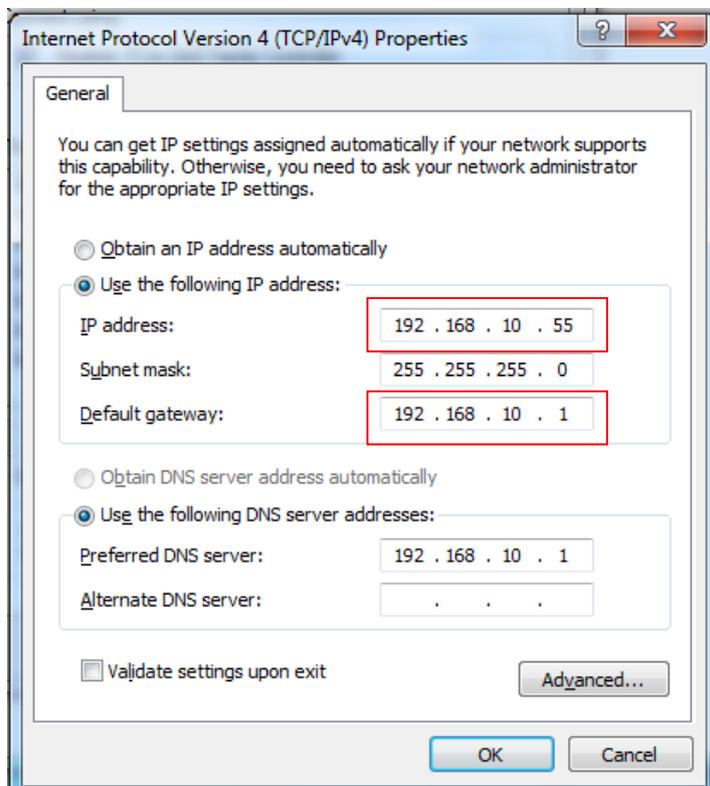


Figure 5.1.5 IP address and gateway of PC

Use CAT5 network cable to connect the network port of the PC and the Ethernet port of the VIS-DCP1000. Click the "Connect" button on the software and start set the camera tracking.

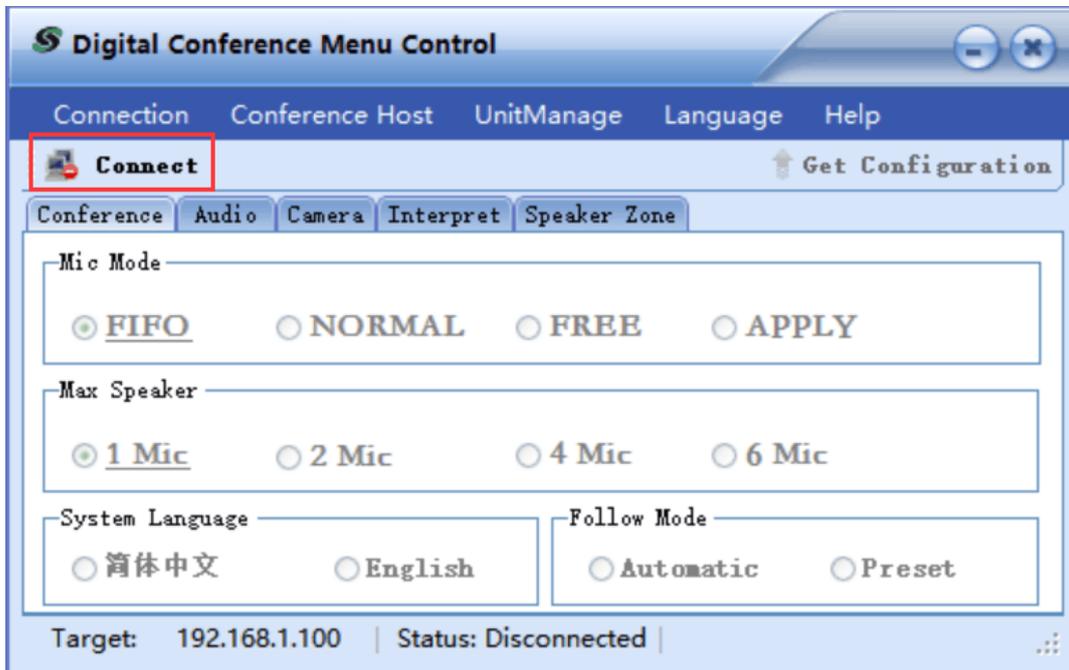


Figure 5.1.6 Connect VIS-DCP1000

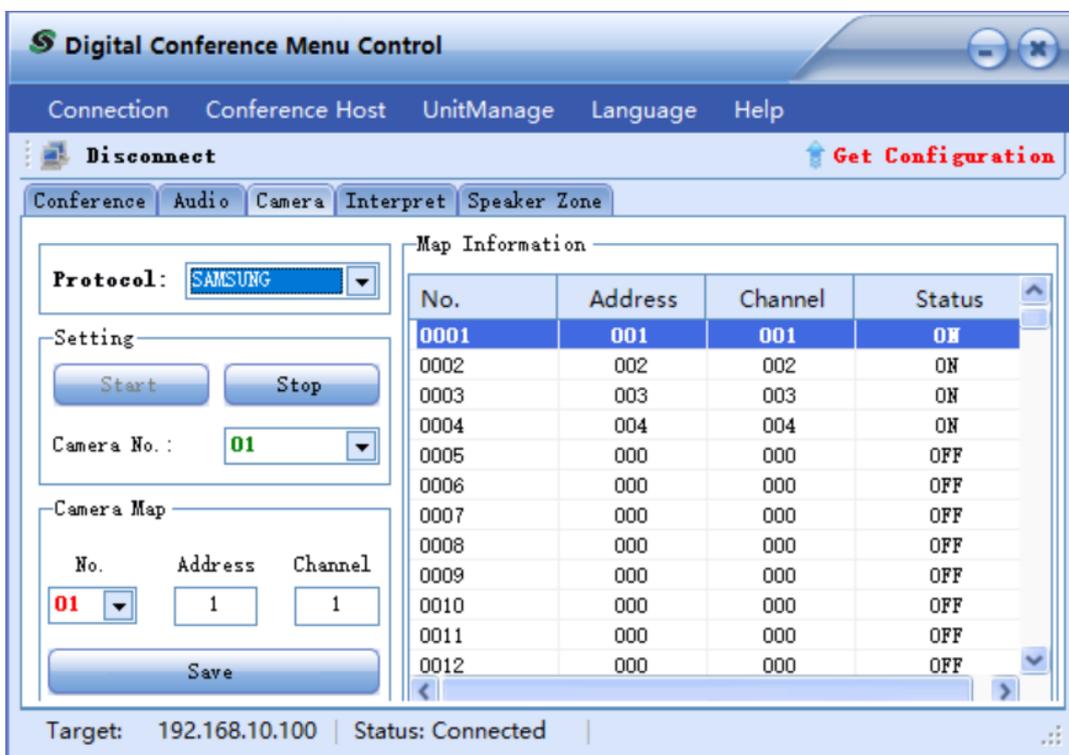


Figure 5.1.7 Camera setting interface

Menu item	Parameter	Value	Description
Protocol	-	SAMSUNG, PELCO- D, VISCA, CUSTOM	Select the protocol according to the camera model. If a third-party central control device is used, it needs to be set to “CUSTOM”, and there is no need to set the submenus “Camera map”, “Setting” and execute “Tracking setting steps”.
Camera Map	Camera No.	01 to 16	Camera No. --select the camera to setup, there totally support 16 cameras. Camera Address --set the camera address for the camera selected on “Camera No.” (SAMSUNG, PELCO-D need to set the address, VISCA need to set as off). Video Channel --Bind the current camera address(which set on “Camera No.”), if there is no video matrix switcher connected to the controller, you need to select off. Save --After setting the address and channel, save. Note: To set next camera, just repeat the same steps: “Camera Select”→“Camera addr” →“Video channel”. The controller will record the setting parameters of each camera.
	Camera Address	000(Off), 001 to 255	
	Video Channel	000(Off), 001 to 255	
	Save	-	
Setting	Start		Start setting the camera.
	Stop		Finish setting the camera.
	Camera No.	01 to 16	Select the camera by number.
Tracking setting steps			
<p>Step 1: Click “Start”, then select “01” of “Camera No. :” to choose camera no.1.</p> <p>Step 2: Use the remote control to operate the camera to aim at the first unit microphone it covers.</p> <p>Step 3: Press ON and then press Off of the microphone. This is to confirm the position of the first microphone.</p> <p>Step 4: Operate the camera to aim at the next microphone.</p> <p>Step 5: Press ON and then press Off of the microphone. This is to confirm the position of the next microphone.</p> <p>Step 6: Repeat steps 4 to 5 until all microphone positions covered by camera “01” are set.</p>			

Step 7: Select “02” on “Camera No. :” to choose camera no.2.
 Step 8: Execute steps 2 to 6 to complete the tracking settings of camera “02”. In the same way, complete the settings of all remaining cameras.
 Step 9: After setting the last microphone of the last camera, operate the camera to aim at the full view of the meeting (you can consider the chairman unit as the full view). Then click “Stop” to exit “setting” menu. The full view is activated when all unit microphones are turned off.

Application example

For example, we want to set up two cameras, using VISCA, SAMSUNG/PELCO-D or CUSTOM protocol, as follows.

1. Connect the lower COM of CONTROL port of the controller to the camera (or third-party central control device).

- Camera using VISCA protocol.

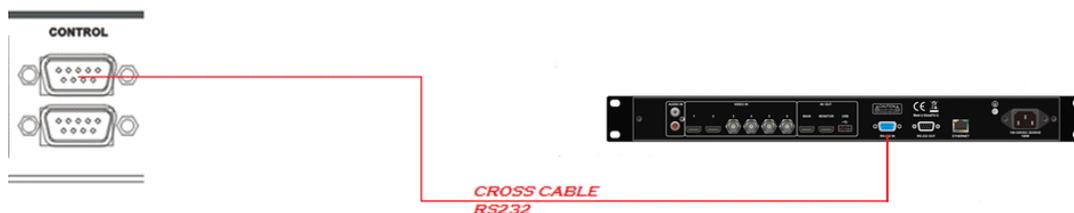


- Camera using SAMSUNG/PELCO-D protocol.



2. Connect the upper COM of CONTROL port of the controller to the camera auto-tracking controller (VIS-CATC-A).

- Use RS232 to connect camera auto-tracking controller VIS-CATC-A.



3. If using the CUSTOM protocol, there is no need to set the submenus “Camera map”, “Setting” and no need to execute “Tracking setting steps”.

4. If using the VISCA or the SAMSUNG/PELCO-D protocol:
 - a) Enter the submenu “Camera map”, select a camera, set the address of the camera and bind it. For details, refer to the menu parameter description in this chapter;
 - b) According to “**Tracking setting steps**”, set all cameras by the “VIS-DCP1000 Conference Controller Setup Software” software and operate camera by remote control.

5.2 Chairman/delegate unit operation

Microphones

The colors of the LEDs of the microphone buttons and the LED ring of MIC show the condition of the microphone that connected to the discussion unit.

MIC button color	LED ring color	Condition
Red (on)	Red (on)	Microphone enabled
White (off)	Green (on)	Request to speak

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