

VISSONIC

CLASSIC-D Full Digital Network Conference system

User Manual









V1.0 Version

VISSONIC ELECTRONICS LIMITED


The meaning of symbols

■ Safety instructions

For your safe and correct use of equipments, we use a lot of symbols on the equipments 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.

	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.
	Remind users that the dangerous voltage without insulation occurring within the equipment may cause people suffer from shock
	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
	SGS certification means that the product has reached the quality inspection standards proposed by the world's largest SGS.
	This product passed the ISO9001 international quality certification (certification body: TUV Rheinland, Germany).
	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.

■ General information instructions

	It lists the factors leading to the unsuccessful operation or set and the relevant information to pay attention to
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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		2018.8.6

VERSION:V1.0

Edit by Jackson Huang

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1 About this manual

This manual introduce about the conference system family, how to use and install it in the common way and how to control it in 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: Those information is the supplementary explanation to the contents, usage or glossary

CAUTION: Avoid improper operations to damage the product or third party devices connecting

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 give the installers and operators the guide to install, configure and operate the CLEACON system.

Date:5 September 2016

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2 System Overview

The CLASSIC-D system is based on the AUDIO-LINK audio distribution & processing technology and Wi-Fi 2.4G/5G Hz technology. The system is combined with wired CAT5 and can be used for camera tracking and simultaneous control by PC software control.

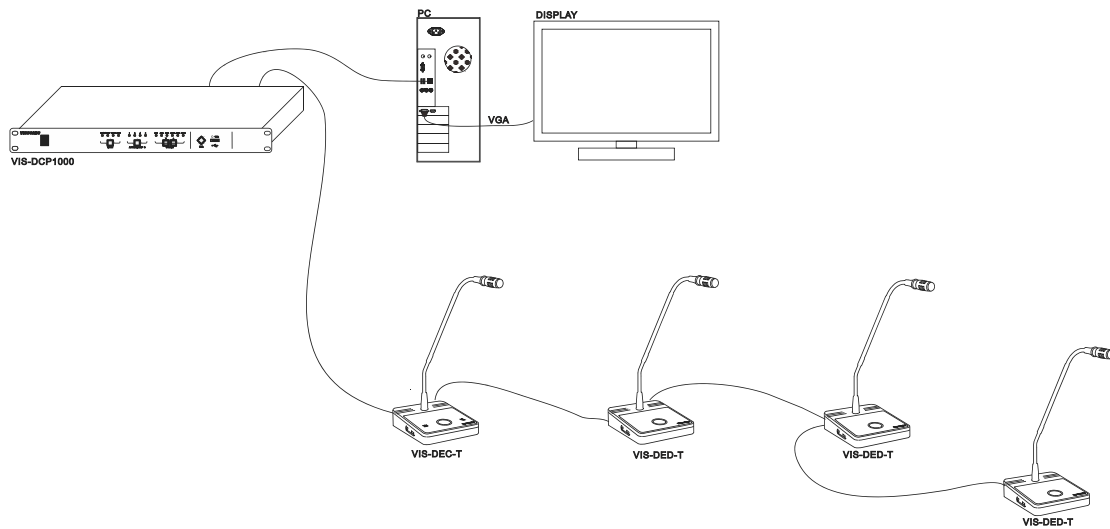


Figure 2.1 CLASSIC-D system overview

The CLASSIC-D system comprises:

- ✓ Full Digital Networked Conference Main Unit VIS-DCP1000
- ✓ CAT5 Digital Discussion Chairman/Delegate Unit VIS-DEC-T/VIS-DED-T

2.1 Full Digital Networked Conference Main Unit VIS-DCP1000

This processor controls all the units in the chain, and supply power to all. You can configure it by the button on front panel.

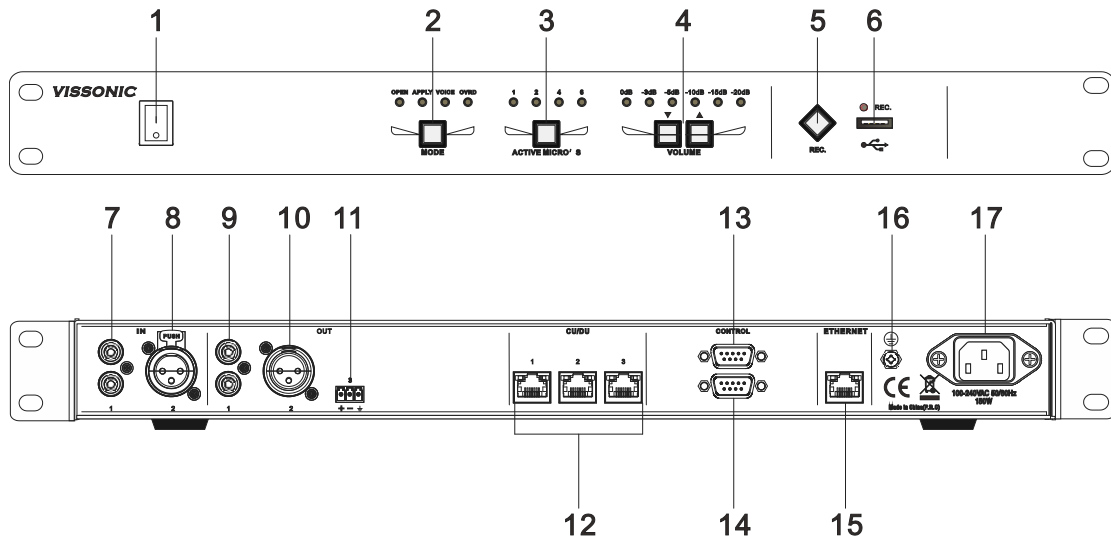


Figure 2.2 Front and rear view of VIS-DCP1000

On front panel, the processor unit contains:

1. **Power Switch**- Power on or off the processor unit
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 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 processor unit 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**- 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 chain 1 and chain 2 or chain 2 and chain 3 can be the closed loop.
13. **Control**-Female DP9 connector is used to connect with camera auto-tracking processor or control system
14. **Control**-Male DP9 connector is used to connect with the camera chains.
15. **Enthernet**-Connect to PC or switch for the software control
16. **Ground screw**-Connect the processor unit to the ground
17. **Power inlet**-Connect the processor unit to the main power supply with a power cable.

2.2 CLASSIC-D Digital Networked Delegate/Chairman Unit

With the discussion units, the delegates can make contribution to a conference.

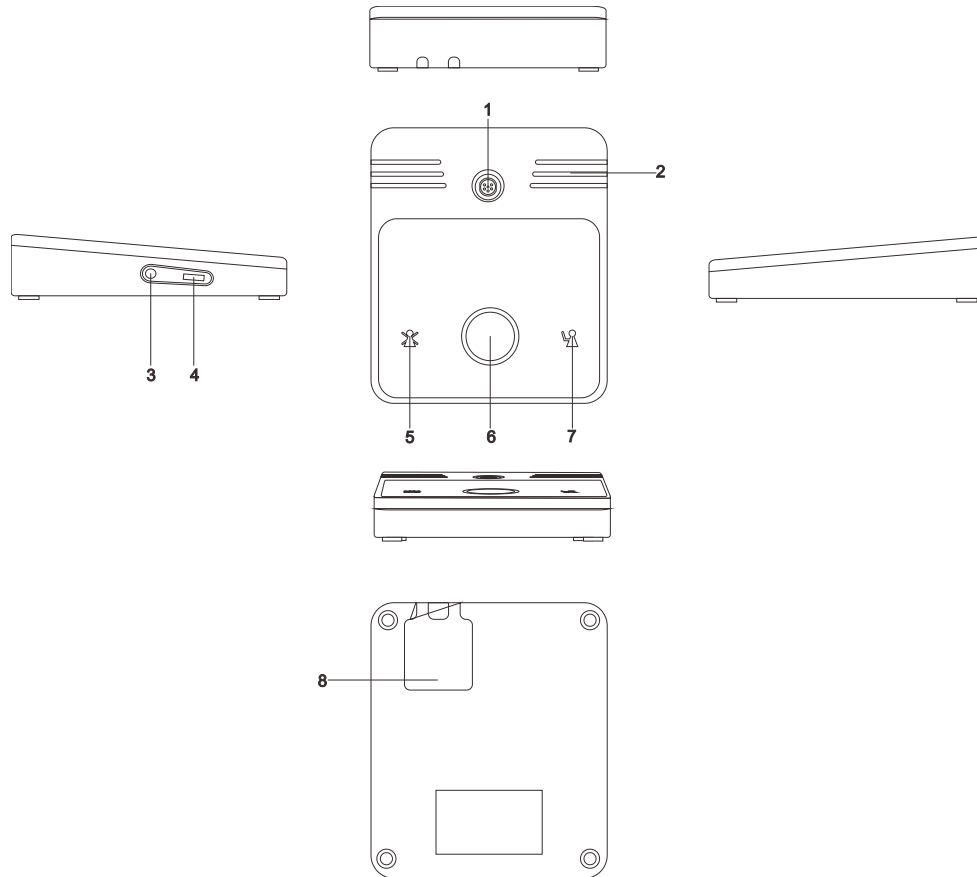


Figure 2.5 VIS-DEC-T chairman unit

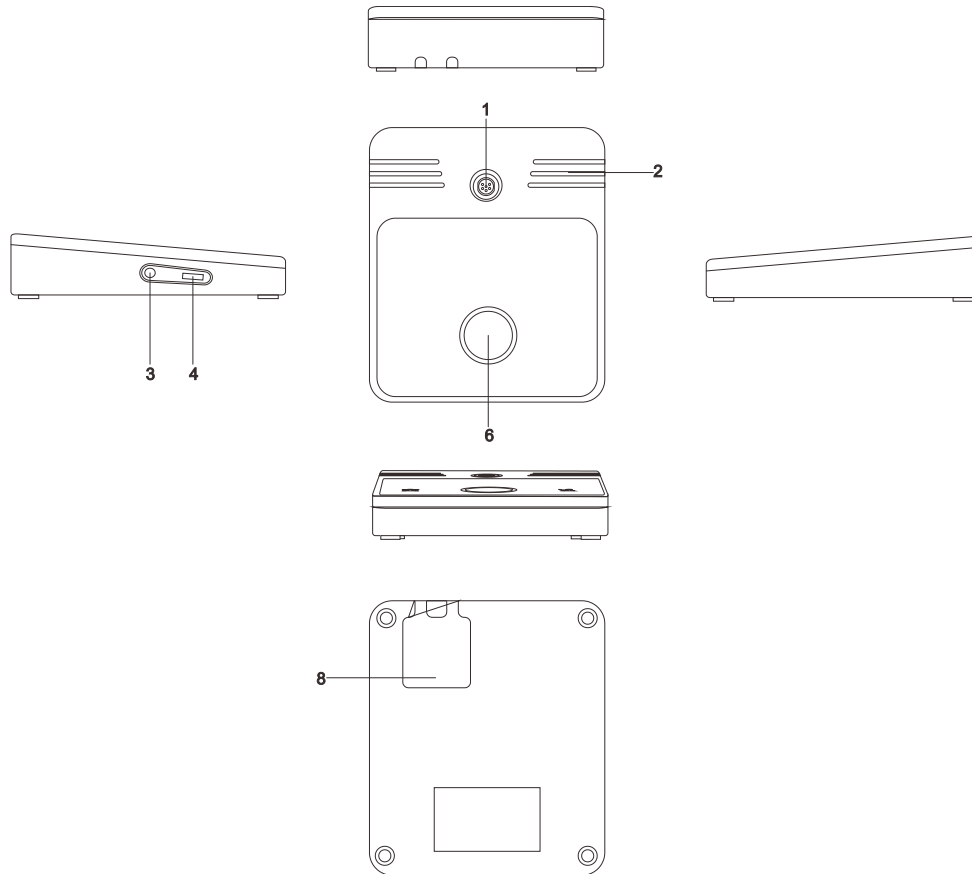


Figure 2.6 VIS-DED-T Delegate Unit

1. **Microphone socket**-Connects a pluggable gooseneck microphone to the discussion units. (VIS-M330, VIS-M410, VIS-M485, VIS-M600)
2. **Loudspeaker**-Gives 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 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.

3. System Design and Plan

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

The processor control unit is powered by 110V~220V wide range power supply, while it has a basic control capacity (with power relay devices it can load more devices). Here we list a basic capacity

of active units for one processor control unit.

Model	Extension cable (m)	VIS-DCP1000				
		Port 1	Port 2	Port 3	Max. total	Max. total
VIS-DEC-T VIS-DED-T	0m	30	30	30	90	120
	05m	30	30	30	90	120
	10m	28	28	28	84	112
	20m	24	24	24	72	96
	50m	20	20	20	60	80
	100m	10	10	10	30	40

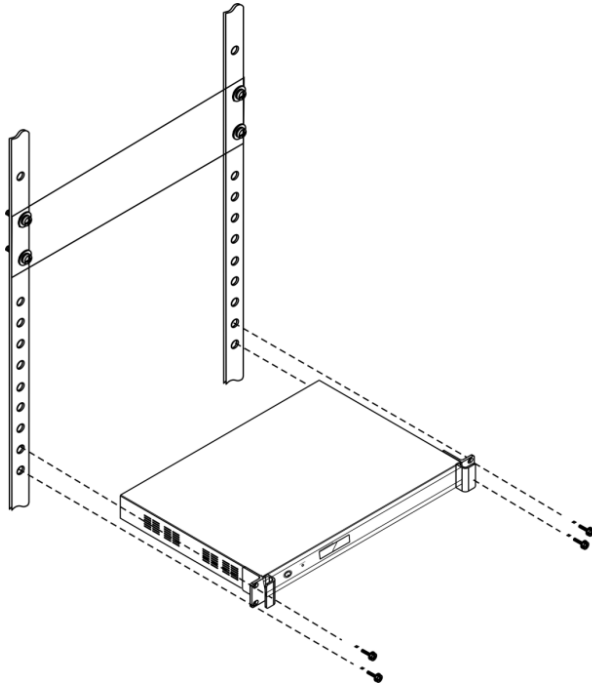
The capacity is decided by:

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

NOTE: Extension cable has direct effect on the control capacity. The longer and extension cable you use, the less power is available to drive the devices connected in the system. You must to choose the length of the extension cable exactly according to the practical situation.

3.1 Install in the 19'rack

The central unit can be installed in a standard 19-inch cabinet. The unit has standard accessories of a pair of installation supports. See the following diagram for installation:



4. Connection

4.1 Power supply

To connect the processor control unit to main power firmly

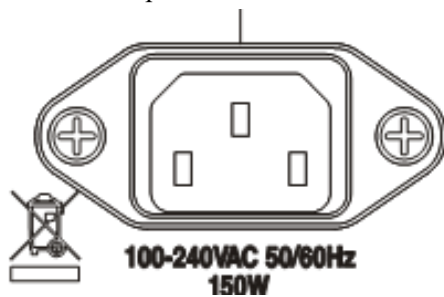


Figure 5.1

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

4.2 Audio inputs

The processor control unit provides RCA or XLR type audio input connector.

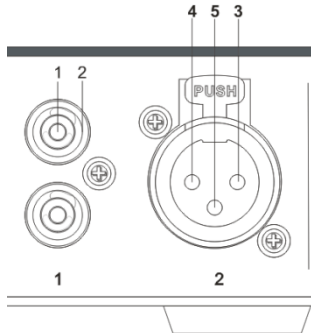


Figure 5.2 Audio input connection

Pin	Type	Signal	Description
1	Cinch	Live	Signal in
2		Return	Shield/Ground
3	XLR	Xternal	Shield/Ground
4		Live	Positive
5		Return	Negative

4.3 Audio outputs

The processor control unit provides RCA , XLR or phoenix type audio output connector

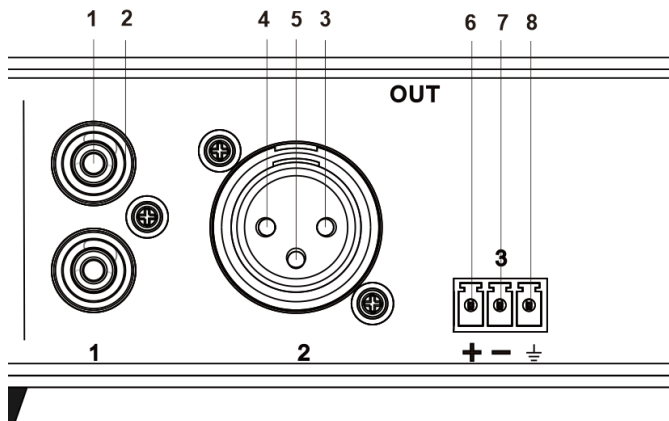
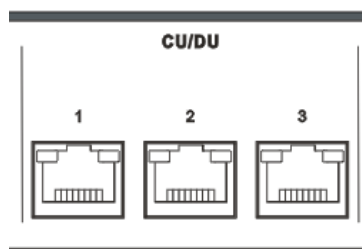


Figure 5.3 Audio output connection

Pin	Type	Signal	Description
1	Cinch	Live	Signal in
2		Return	Shield/Ground
3	XLR	Xternal	Positive

4		Live	Shield/Ground
5		Return	Negative
6	Phoenix	+	Positive
7		-	Negative
8		G	Shield/Ground

4.4 CU/DU

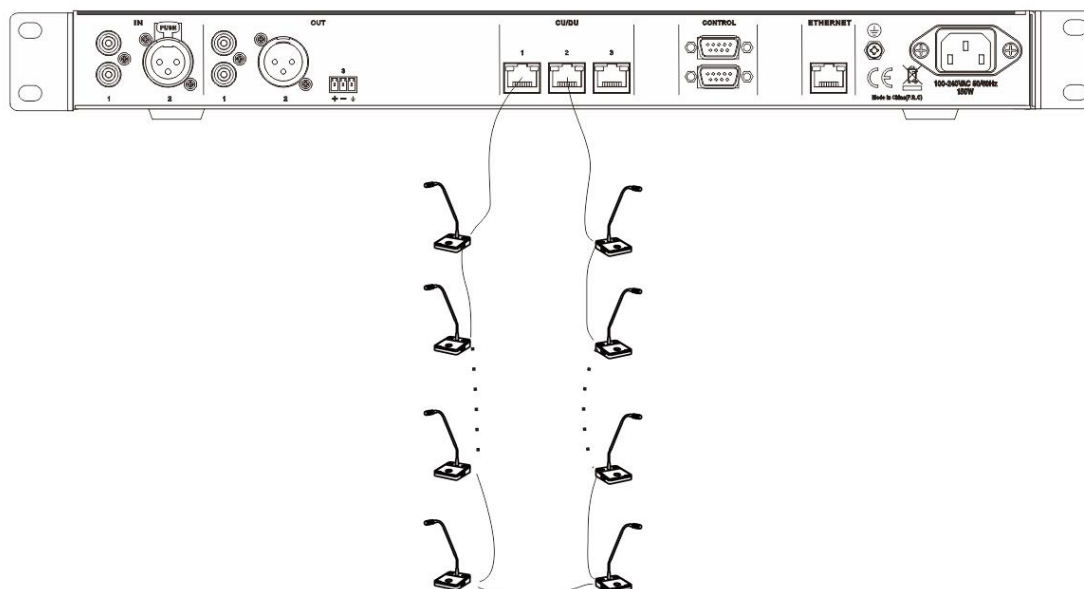


Use the CU/DU socket to connect to the chairman/delegate unit or extension main unit and use the VISSONIC tested CAT5E cable or better.

There are three connection ways available for CLEACON conference system.

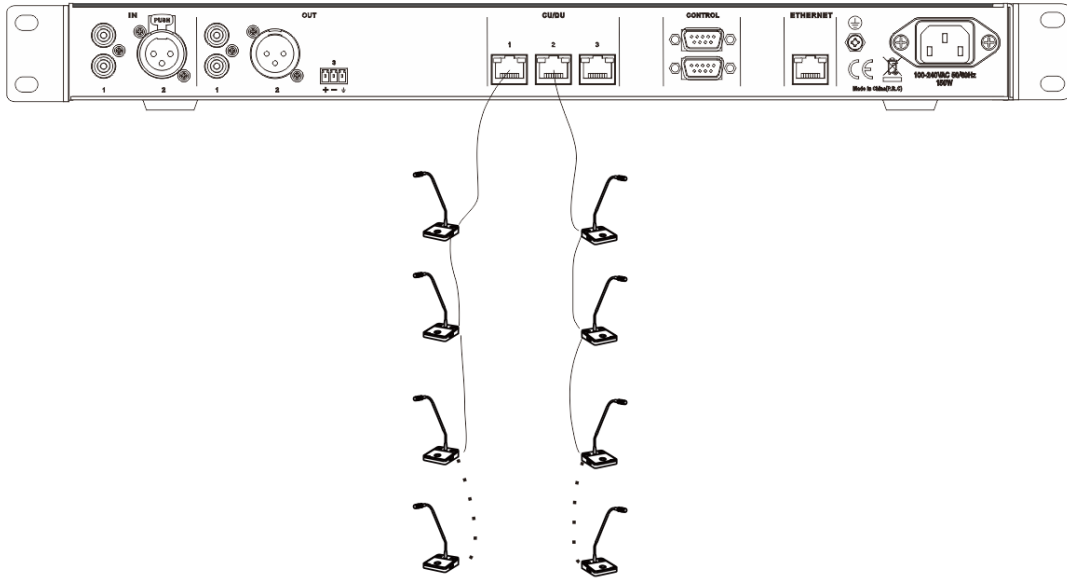
131.951 mm

1. Hand-in-Hand-Loop-Network is an important feature for CLEACON conference system. You can use this connection way to make the system more steady.

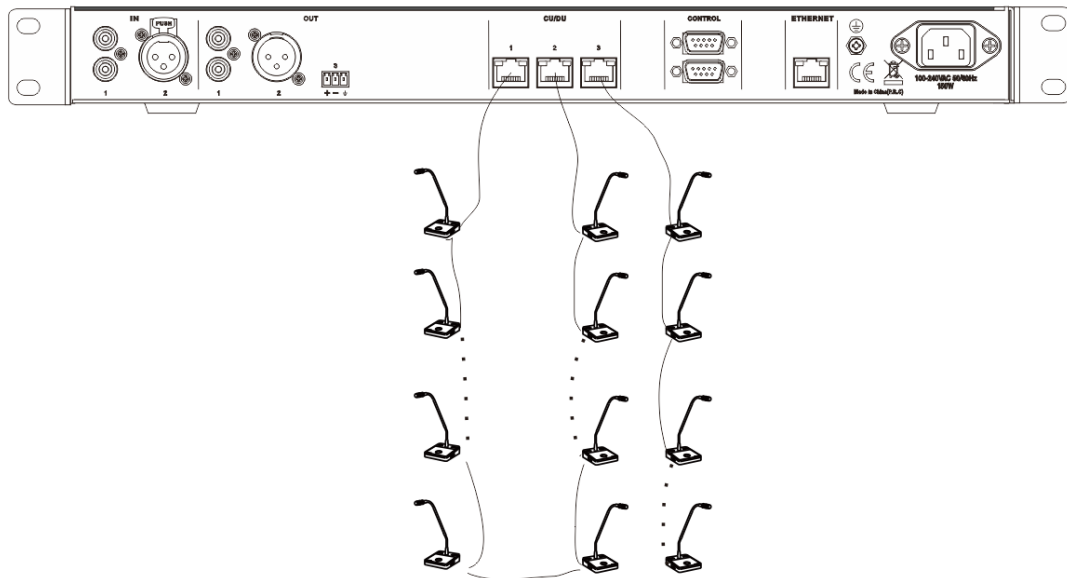


"Hand-in-Hand-Loop-Network" connection is only available between channel 1 and channel 2, or channel 2 and channel 3, but not valid between channel 1 and channel 3.

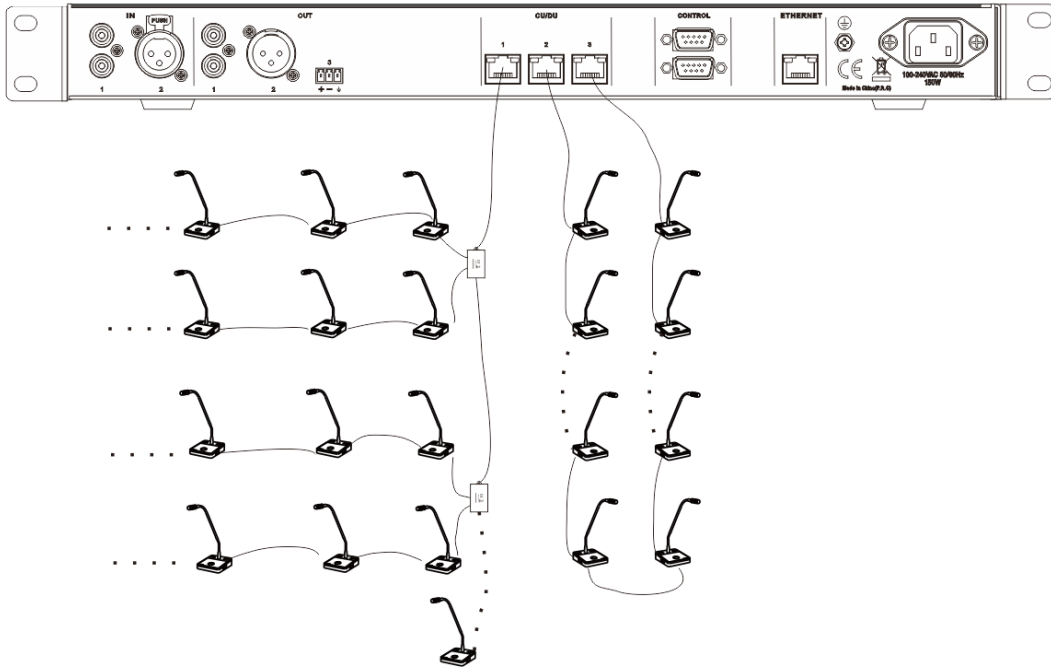
2. Hand in Hand Connection



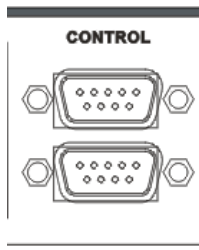
3.Hand in Hand Connection+ Hand-in-Hand-Loop connection



4.Connection box+ Hand-in-Hand-Loop connection



4.5 CONTROL



Full digital conference system can use a variety of control systems via RS-232 serial interface. **Upper COM** connected to video switcher/matrix for camera tracking or connect to the central controller

The default switching command is

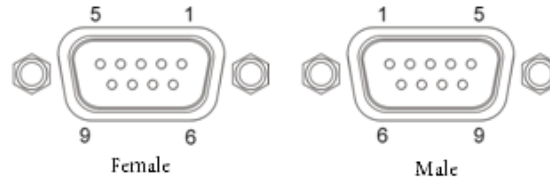
Baud rate: 9600bps, parity: 8, Stop: 1

Command	Discription
1V1.	Switch the channel 1 to output
2V1.	Switch the channel 2to 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 is needed to tell us for update the firmware.

Bottom COM connected to cameras or HD camera auto tracking controller **VIS-MSDI**.

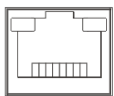
COM port pin is described as follows:



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

4.6 ETHERNET

ETHERNET



Use the ETHERNET socket to connect to the PC and use CAT5 cable or better.

5. Configuration and Operation

5.1 Configuration on the VIS-DCP1000

Use the configuration menu of the processor unit to configure the processor and the system.

5.1.1 Basic Setting



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 processor 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, delegates can enable their microphones with the microphone button on their contribution units. 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 enable until another delegate disables his or her microphone.
Apply	In the apply mode, delegates can apply to enable their microphones with the microphone button on their contribution units 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 on their contribution device. When themaximum 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 MIC number.

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

Volume

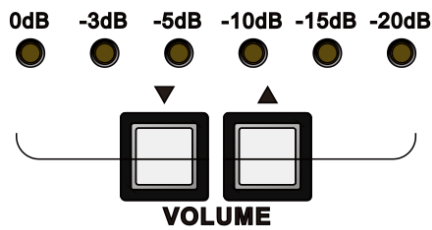
Press the button 'Volume▲' and 'Volume▼' to change the volume output of main unit.

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

REC.

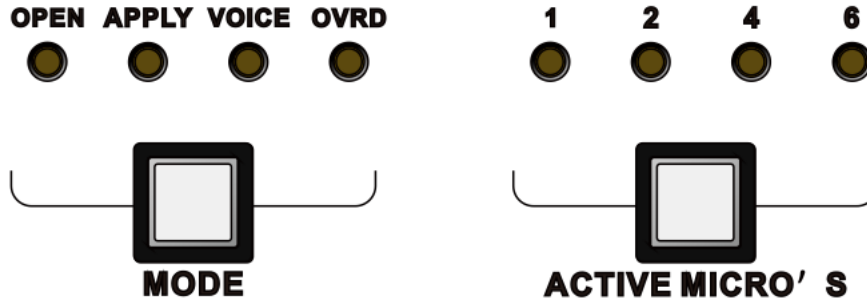
Insert the USB disk to the USB sock and press the button REC. to start recording and the indicator is flashing.

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



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 delegate/chairman unit



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 delegate/chairman units one by one and set the ID for them. After finished pressing delegate/chairman 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

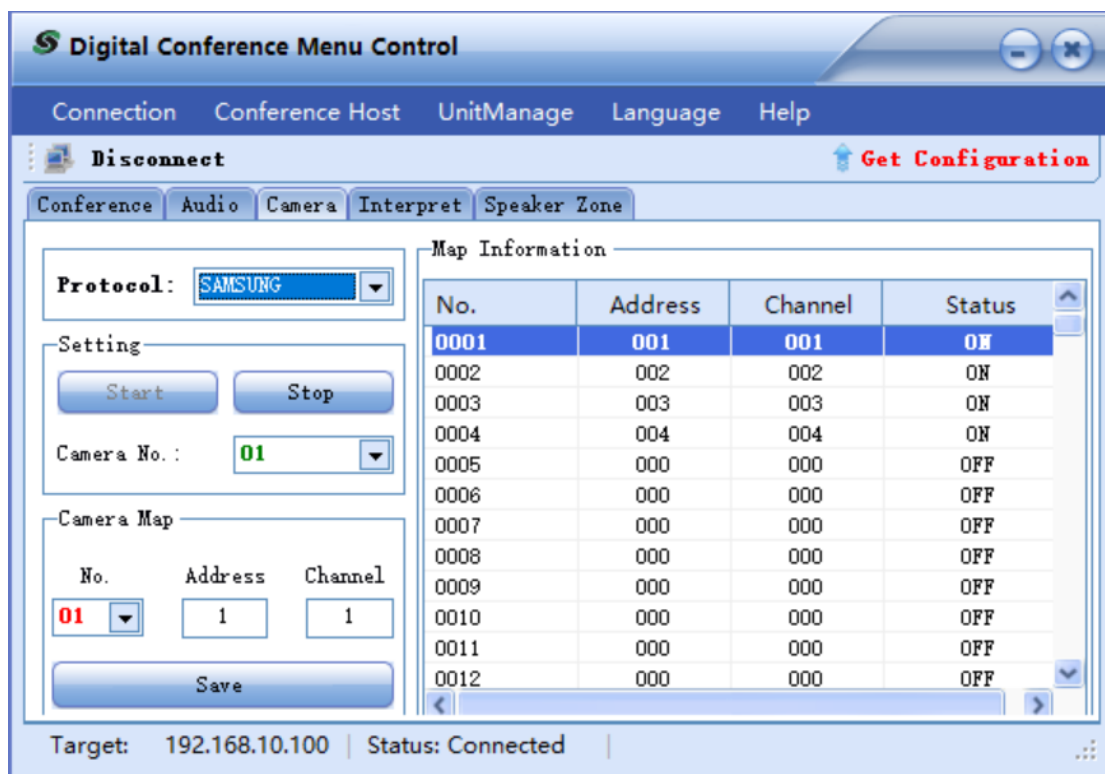


1. Turn off the system
2. Press the button 'MODE' and 'ACTIVE MICRO'S' at the same time and hold.
3. Switch on the system
4. All the indicators will lighting on/off two times and release the buttons.
5. The default setting is ok.

5.1.5 Camera Auto-tracking Setup & Application

Here we need to install the software "Digital Conference Menu Control" and set your PC to the same IP range, 192.168.10.XXX.

Connect the Software to the main unit VIS-DCP1000 and start set the camera tracking.



Menu item	Parameter	Value	Description
Protocol	-	SAMSUNG,PELCO-D,VISCA,CUSTOM	Select the protocol according to the camera model, The value 'CUSTOM' mean the processor connect the camera tracking controller VIS-MSDI and the preset information is saved on the camera controller and don't need to set the sub-menu ' Camera map ' and 'Start Set'
Camera map (Note: If you use the cameras using SAMSUNG or PELCO-D protocol need to set this menu. Use VISCA protocol, no need to set this menu)	Camera select Camera addr. Video channel	001 to 016 Off,001to 255 Off,001 to 255	Camera select --select the camera to setup, there totally support 16 cameras. Camera addr. --set the camera address for the camera selected on submenu 'Camera select'.(if SAMSUNG,PELCO-D need to set the address, VISCA is not need to set as Off) Video channel --Bind the camera(which set on submenu 'camera select') to the video channel number of video switcher, .(There are no video switcher connected to the main unit for camera tracking by RS232, just set as Off.) Note: To set next camera, we just repeat the same steps: 'Camera Select->'Camera addr' ->'Video channel' The main unit will record every times of setup for each cameras.
Start Set	-	01 to 16	Select the camera no.1 to 16 to start the camera

		<p>tracking setting.</p> <p>Step 1: Select "01" on main unit for no.1 camera</p> <p>Step 2: Adjust the camera to shoot the microphone.</p> <p>Step 3: Press ON and press Off the microphone that camera are shooting</p> <p>Step 4: Adjust the camera to shoot the next microphone.</p> <p>Step 5: Press ON and press Off the microphone that camera are shooting</p> <p>Step 6: Repeat the step 2 to step 5 until you preset all position for the camera '01'</p> <p>Step 7: Select "02" on main unit for no.2 camera</p> <p>Step 8: Repeat the step 2~step 6 to finish the camera '02'. More camera are set as the same way.</p> <p>Step 9: After setting the last microphone (on and off the MIC), we can adjust the camera to give a full view of the meeting and press 'ESC' to quit from the menu of 'Start Set'. The preset of full view will be active while there are no microphone on.</p> <p>Note: When exit the camera setting, the system will record the final camera position as the full view preset, so we finish the setting of last MICs covered by this camera, we need to adjust the camera to get the full view preset and next to exit the setting of the camera. (You can consider the chairman unit as the full view preset.)</p>
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Example

here we need to set up 2 cameras with VISCA, SAMSUNG/ PELCO-D or CUSTOM protocol and switch the video by a video switcher or camera auto-tracking controller VIS-MSDI

Step 1. Connect the main unit to the cameras or camera auto-tracking controller VIS-MSDI with the bottom CONTROL port.

1. Use the VISCA protocol camera



2. Use the SAMSUNG/ PELCO-D protocol camera



3. Use the CUSTOM protocol camera (Set up the camera auto tracking by VIS-MSDI, please reference its user manual)

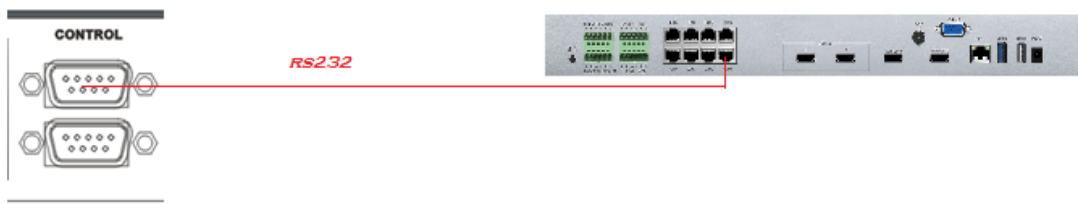


Step 2. If we don't use the VIS-MSDI on Step 1, here we need a seamless video switcher or HDMI camera switching recorder VIS-CRS02 to switching the video from cameras, we need to connect the main unit to the video switcher or switching recorder VIS-CRS02 with the upper CONTROL port.

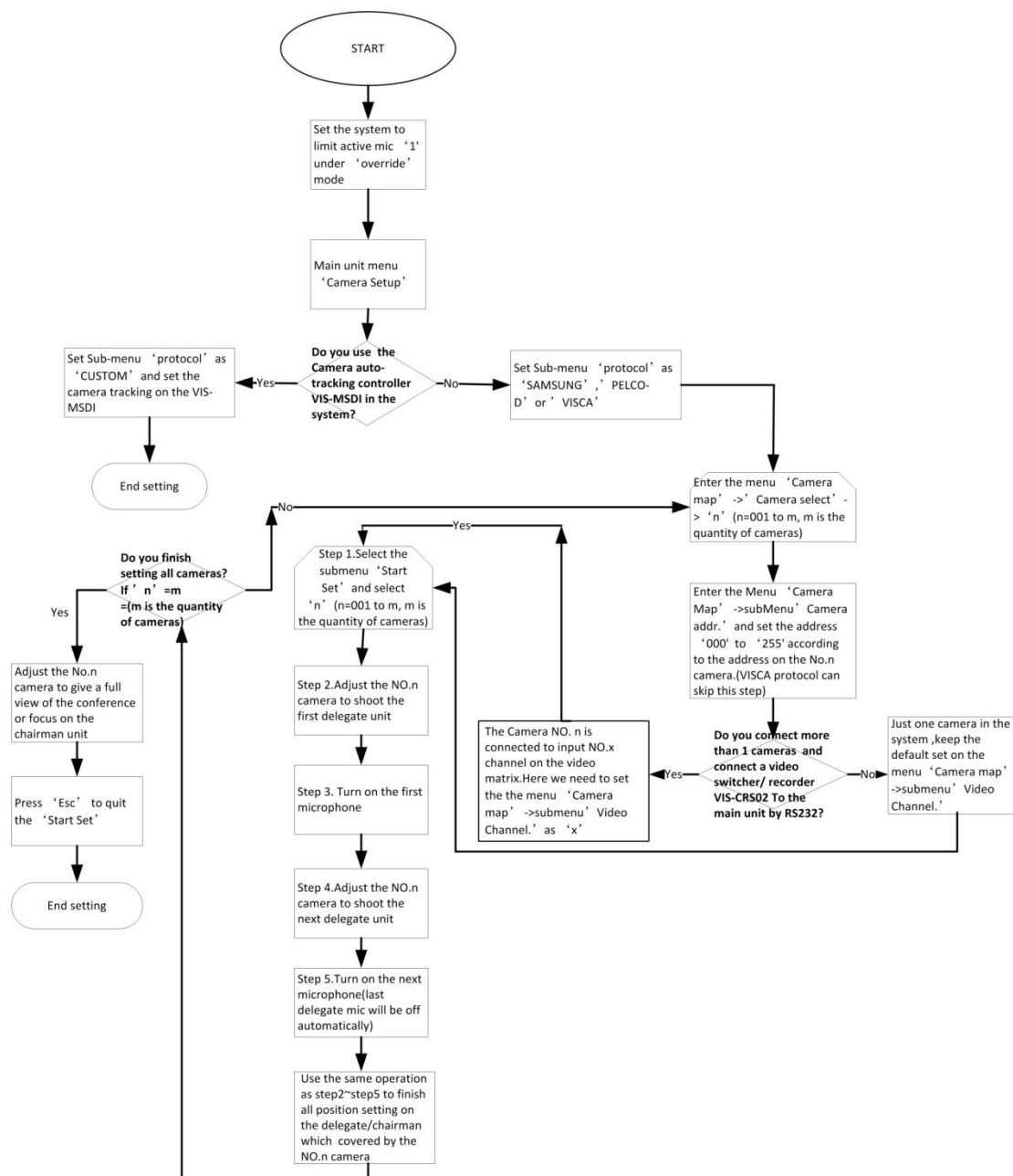
1. RS232 control the seamless video switcher



2. RS232 control HDMI camera switcher and recorder VIS-CRS02.



Step 3 Set the camera information to the main unit by the front panel and adjust camera to shoot the position by remote controller ,keyboard controller or CLEACON conference software as the bellowing step flow.



5.2 Chairman unit and 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