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Before you start



This is a compact, easy-to-setup, and easy-to-use wired conference system, yet it provides advanced features and exceptional versatility. Embedded with advanced network operation system, configuration and control can be done via built-in web browser, it's an ideal option for innovated design conference venue.

FEATURES

- Digital signal processing
- Embedded management system
- Anti-interference system design
- Built-in USB audio recording
- Voice activation support
- RS-232 controller interface
- Up to 100 discussion microphones

- Intuitive touch operation
- Camera tracking support
- VISCA & PELCOL-D/P camera control
- RS-232 and RS-485 camera control
- Various meeting modes support
- Multiple microphone design option
- Up to 1000 discussion microphones via extension



Product overview

Controller Front Panel



3. Power switch & indicator

Controller Rear Panel



- 1. AC Power socket & fuse 2. Camera RS-232 3. Camera RS-485/RS-422 4. Controller RS-232 RXD 5. Video switch RS-232
- 6. Controller RS-232 TXD

7. Ethernet interface 8. PC USB 9. Balanced audio output 10. Line in/out, Tel in/out 11. Microphone interface 12. Extension interface

Product overview

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Chairman unit

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- 1. Condenser microphone capsule Detachable design, to pickup audio signal from speaker.
- 2. Mic indicator

To indicate the working status of microphone.

- 3. Display
- 4. Volume control The volume control headset.
- 5. Priority key When this key is pressed, delegate units in use will be switched off.
- 6. Mic On/Off key





Delegate unit

1. Condenser microphone capsule Detachable design, to pickup audio signal from speaker.

2. Mic indicator To indicate the working status of microphone.

- 3. Display
- 4. Volume control
 - The volume control headset.
- 5. Mic On/Off key

Product overview

System connection diagram



Note:

- Microphone units' ID are set in factory, but users can reset the ID for each microphone after the installation.
- Please ensure the system is running by required power supply.
- Avoid using the system in high humidity environment.
- It is recommended to use the system cable from manufacturer.

Operation

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Controller system interface



CONFERENCE CONTROL

The menu includes various parameters setup related to pre-meeting program.

CAMERA TRACKING

Configuration window which allows operator to configure the camera position for each microphone.

RECORDING

The window for audio recording operation.

SYSTEM SETUP

To configure the basic info the system such as : IP add, time, host ID etc.

QUICKMARK

QR code which allows operator to access the web management system easier.

RESTART

To reboot the system.



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Conference control – Queue mode



FIFO

First in first out, under certain OPEN MIC qty, this pattern applied to delegate units. For instance, OPEN MIC qty is 2, the 1st active unit will be switched off when 3rd unit switched on.

LIFO

Last in first out, under certain OPEN MIC qty, this pattern applied to delegate units. For instance, OPEN MIC qty is 2, the 2nd active unit will be switched off when 3rd unit switched on.

SOUND CONTROL ON/OFF

To allow delegate to open the microphone unit with voice.

Note: Please adjust SOUND CONTROL (at volume setting menu) at a lower level prior to the activation of SOUND CONTROL function, and to adjust it as needed. High sensitivity level setup could lead to system overload failure sometime, please reboot the controller when system failure happened.

Operation

Conference control – Meet mode



DISCUSSION MODE

Camera related setup, camera tracks to the last switched on microphone unit.

CHAIRMAN MODE

Only chairman unit can be switched on.

AUTO MODE

Camera related setup, camera tracks to microphone unit which received voice signal.

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ALL ON MODE

All microphone units can be switched on, no limit on OPEN MIC qty.

Conference control – Meet setup



CHAIRMAN QTY To define the gty of chairman unit.

SPEAKING QTY Applied to delegate unit only, to define the qty of delegate unit can open.

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AUTO OFF

TIME OFF

To switch off the microphone when no voice signal pickup in set time frame. OS means when the time set is up. this setup is disable.

To set the time frame for the microphone unit in active. the unit will be switched off

Conference control – Chairman setup



MANUAL RECOVER

Delegate units will be switched off when priority key is pressed, delegate unit can open by pressing the ON key again.

AUTO RECOVER

Delegate units will be muted if priority key keeps being pressed, the delegate unit will unmuted when priority key released.

Conference control – Control unit



Operation

ALL UNIT OFF/ON

All microphone units connected will be switched on/off.

CERTAIN UNIT OFF/ON

To switch on/off specific microphone unit by input its ID.

Note: All units can be active when the system set to "ALL ON MODE".

CERTAIN UNIT ADDRESS

To allow user to allocate a specific ID to a microphone unit. For example: A system consisted 30 mics, when an extra microphone to be included into the system, then user can define this mic's ID as 31 separately.

ALL UNIT ADDRESS

To configure the ID of all microphone units connected to the system. User can input the initial ID, and ID will be set in ascending order to each microphone unit till all units assigned, then reboot the controller after the operation.

Conference control – Volume



LINE IN / OUT

To adjust the audio level of input / output. To adjust volume of speaker of all

UNIT LOUDSPEAKER

microphone units.

Speakers on the units will be muted when

UNIT LOUDSPEAKER MUTE

SOUND CONTROL

To adjust sensitivity of voice activation function.

BUZZER MUTE

To enable or disable the buzzer of the controller.

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this is on.

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Note: Should only 1 microphone unit connected to the controller on this operation. Other microphone units should be disconnected during this operation.

Camera tracking



CAMERA SETUP

Camera protocol: VISCA(SONY-D70)/Pelco-D/Pelco-P (baud rate:9600)/Yaan(baud rate:4800) **CAMERA NO.** Select needed camera for the tracking position setup.

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FOCUSING

ROTATE RATE

Rotation speed of the camera.

Camera tracking – Camera control

Camera will adjust it automatically, but

user can adjust it manually as needed.



The camera control window allows user to control the movement of selected camera.

Note: The system can support max.6 cameras with video switch, controller will distribute ID to each camera automatically, user should do the manual ID setup for camera if distribution might fail in some cases. And user should follow the boosting order to power on cameras first, then switch on the controller.

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Operation

Camera tracking – Setup preset



PRESET POINT

Preset point is the unit ID that assigned for the tracking position configuration in the pre-setup stage.

- Operation : Operator wanted to put camera configured to track the position of microphone unit no. 1, user should enter number 1 at PRESET POINT then go back to CAMERA TRACKING & CAMERA CONTROL interface to configure the tracking position for unit no.1 and press SAVE PRESET, then the position info of related camera with unit no.1 will be stored. Operator can go back to previous operation interfaces to configure the tracking position for each microphone by the same procedure.
- Note: System default preset point is set to 0 as the overview of the meeting room. When no microphone unit is in active, camera will track to the overview position.

TEST PRESET

To allow user to check if the tracking preset configured correctly.

DELETE PRESET To delete all the presets saved.

FREEZE

This function enables image freeze during the camera movement.

VIEW PRESET

To allow user to check the presets saved.

UNIT LIGHT ON/OFF

To lit the indicator on the microphone to assist operator to identify the unit on operation.

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Camera tracking – Preset proposal



System setup can be stored at this step as a proposal, different proposals can save and retrieve when needed.

Recording



System embedded audio recording function, user can record & replay through this window. Support thumb drive capacity in FAT 32G, file format MP2@128Kbps.

2021-07-14/00041.mp2			
00:00:00			00:00:00
			Back

The page of record playing.



Operation

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System setup



SETUP IP ADDRESS

To define the IP for accessing web management system.

HOST CONNECTION MODE

To enable or disable the extension connection.

RESTORE TO PRESET The system will be restored to factory setting.

QuickMark



This window allows user to access web management system by scanning the QR code.

TIME To configure the system time.

SETUP ID

The ID assigned to controller. Each controller should has its unique ID in extension connection.

Restart



To reboot the system.



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Web management system

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Login page



Web management system is the portal to allow operator to configure the system on computer .

User name: admin Password: 123456

The system is embedded in the controller, no software installation required. User should just enter the IP address in the browser to access the system.

IP address of the controller should be set in the same network segment as the computer device in advance, user can check and configure the IP address from SYSTEM SETUP **Setup address**

Unit Addressing	
Setup Address	
Conference Setup Complete	
Meeting Setup Tips:	
Camera_PC	
Camera_Touch Setup for a certain unit(Note: the host connect only one unit at this t	ime)
Conference Control	
Unit Control	
Setup System Tips:	
Parameter	
System Password	
Password	

SETUP ALL UNIT

To configure the ID of all microphone units connected to the system. User can input the initial ID, and ID will be set in ascending order to each microphone unit till all units assigned, then reboot the controller after the operation. Click SETUP to start the process , and COMPLETE to end the process.

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Web management system



CERTAIN UNIT ADDRESS

To allow user to allocate a specific ID to a microphone unit.

For example: A system consisted 30 mics, when an extra microphone to be included into the system, then user can define this mic's ID as 31 separately.

Note: Should only 1 microphone unit connected to the controller on this operation. Other microphone units should be disconnected during this operation.

Meeting setup

Unit Control		
Unit Addressing		
Setup Address	Queue mode: FIFO V Speaking QTY: 1 V	
Conference Setup	Sound control: OFF	
Meeting Setup		
Camera_PC	Meeting mode: Discussion Priority setup: Auto Recover	
Camera_Touch		
Conference Control		
Unit Control	Mute auto off: No Limitation v 999 S OK Sign in select: Cardless sign in v	
Setup System	Unit timing off: No Limitation - 999 M OK Buzzer mute: ON -	
Parameter		
System Password		
Password	Line in VOL: 0 · Line out VOL: 0 · Unit mute: 0N ·	
-		

QUEUE MODE

Provide FIFO & FILO options.

SOUND CONTROL ON/OFF

To allow delegate to open the microphone unit with voice.

PRIORITY SETUP

Auto recover- Delegate units will be muted if priority key keeps being pressed, the delegate unit will unmuted when priority key released.

Manual recover- Delegate units will be switched off when priority key is pressed, delegate unit can open by pressing the ON key again.

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SPEAKING QTY

Discussion- camera tracks to the last switched on microphone unit. Auto- camera tracks to microphone unit which received voice signal. Chairman- Only chairman unit can be switched on. All On- All microphone units can be

Applied to delegate unit only, to define

the qty of delegate unit can open.

switched on, no limit on OPEN MIC qty.

Web management system

MUTE AUTO OFF

To switch off the microphone when no voice

signal pickup in set time frame. O S means this setup is disable.

SIGN-IN SELECT (optional)

This option available with system with voting function, user can choose either cardless sign-in or card sign-in, to enable the system to calculate the no. of attendee Speakers on the units will be muted when before the kick-off of voting.

LINE IN/OUT VOL

The main volume control of system.

Camera tracking



CAMERA_PC & CAMERA_TOUCH are offering the same camera setting function, but Camera Touch version is optimized for mobile devices user, it has touch release time (BUTTON TIME) adjustment option, user may choose it to operate as needed.

CAMERA TYPE

CAMERA ID

UNIT TIMING OFF

BUZZER MUTE

controller.

UNIT MUTE

this is on.

when the time set is up.

To set the time frame for the microphone

unit in active, the unit will be switched off

To enable or disable the buzzer of the

Camera protocol: VISCA(SONY-D70)/Pelco-D/ Pelco-P (baud rate:9600)/Yaan(baud rate:4800)

position setup.

UNITID

HOSTID The controller ID in the camera setup The microphone unit that needed to configure camera tracking setup.

Select needed camera for the tracking

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Web management system

TEST PRESET

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preset configured correctly.

DELETE PRESET

To delete all the presets saved.

Unit control

VIEW PRESET

To allow user to check if the tracking To allow user to check the presets saved.

UNIT LIGHT ON/OFF

To lit the indicator on the microphone to assist operator to identify the unit on operation.



UNIT CONTROL interface allows operator to check the real time status of each microphone unit connected to the system. Unit ID will indicate in green color when it is in use, clicking the unit ID can control the ON & OFF of corresponding unit.

Unit name



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Web management system

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UNIT NAME interface allows operator to enter the name of attendee by clicking the unit ID, then click "Save to device" to save as default name list. When user leaved this section and come back to this page, name list will not display until clicking "Load name" to retrieve the default list.

Setup system



SETUP SYSTEM interface allows operator to setup the time and IP address of the system, user should reboot the system after the new IP address applied.

System password



The name of administrator is fixed as admin, default password is 123456. Administrator can change password and add new user to the system, only administrator is authorized to make changes in this section.



General Specifications

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Controller

Power supply	AC 110- 220V/ 50- 60Hz	
Power consumption	200W	
Units capacity	100 units	
Frequency response	30Hz- 20KHz	
SNR	90dB	
Dynamic range	110dB	
Harmonic distortion	<0.05%	
Output impedance	XLR:2.2K, Line out:1K	
Audio input	Tel in :-3dBV Line in : 6.5dBV	
	Tel out : 15dBV	
Audio output	Line out : 0dBV	
	BAL out:-4dBV	
	MIC- RJ45 X 8	
	Tel. coupler- RCA X 2	
	Controller- RS-232 X 2	
	Video switch- RS-232 X 1	
	Camera- RS-232 X1,	
Connector	12P Terminal block	
	Audio input- RCA X 1	
	Audio output- XLR X 1, RCA X 1	
	PC-USBX1	
	Audio recording- USB X 1	
	Ethernet- RJ45 X 1	
Dimension	483 x 323 x 90mm	
Weight	5.5kg	
Color	Black	

General Specifications

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Microphone unit

Power supply	DC 24V
Working current	60mA
Cartridge	Condenser
Pattern	Cardioid
Sensitivity	-50dB/Pa
Frequency response	100Hz-12KHz
SNR	80dB
Dynamic range	95dB
Harmonic distortion	<0.1%
Input impedance	2.2K
MIC length	540mm
Connector	MIC- RJ45 X 1 Earphone- 3.5mm x 1
Dimension	146 x 124 x 46mm
Weight	0.95kg
Color	Black