

■ Clear ■ Concise ■ Captivative



# DCS3000 Series

Digital Network Conference System











Digital Network Conference System



#### **Technical Specifications**

Frequency Res	ponse	20 Hz ~ 20 kHz (-3 dB @ nominal) < 0.05% > 85 dB > 96 dBA		
Total Harmoni	Distortion (THD)	< 0.05%		
Channel Crosstalk		> 85 dB		
Signal to Noise Ratio (S/N)		> 96 dBA		
Dynamic Range		> 94 dB		
Power to Dele	gate Units	PoE (48 VDC), max. 150W		
Interface	RS-485 / RS-232:	: 9-pin D-Sub (M) & (F)		
	Ethernet:	RJ45		
Power Requirements		110~240VAC, 50/60 Hz; 12W (Idle) / 150W max.		
Operating Temperature 0°C ~ 40°C;		0°C ~ 40°C;		
Operating Humidity		Humidity 10~85% (Non-Condensing)		
Dimensions (WxHxD)		4800 x 44 x 260 mm		
Weight		3 kg		

#### DCS3064-CC

# Fully Digital Network Conference Controller

- Simple and intuitive function key design, self-explainatory and immediate use out of the box.
- ♦ AUDIO-LINK<sup>™</sup> digital ring network technology to realize alldigital signal transmission and processing
- One CAT5e network cable transmits 64 channels of audio and data control.
- High fidelity sound quality, lossless audio transmission technology, 48K audio sampling frequency, 20 Hz ~ 20 kHz frequency response.
- User selection of numbers of simultaneous delegates (1, 2, 4 or 6 units) with various operation mode (OPEN, APPLY, VOICE, OVERRIDE).
- Ring redundant loop network connection enables the system to operate and perform a hot-swap with automatic recovery function when there is a unit failure or a break in the line.
- Independent level control and 8-band equalizer for individual tone adjustment.
- Support USB interface for USB storage disk for audio recording with advanced noise elimination technology to realize clearer recording.
- Utilising the expansion unit (DCS3020-E), the conference system is able to be extended up to 5200 delegates.
- The unit automatically assigns each delegate unit a unique ID to eliminate ID conflicts.
- Supports 1 channel of additional audio input and 1 channel audio output to the room AV system.
- Supports TCP/IP connection to the host PC for synchronous control of the system (unit ON/OFF, Priority & Level Control).
- RS-485 / RS-232 output to send PELCO & VISCA protocols for PTZ camera telemetric control.





## Digital Network Conference System



DCS3010-CU Fully Digital Chairman Unit

DCS3010-DU Fully Digital Delegate Unit

#### **Technical Specifications**

Frequency Response	20 Hz ~ 20 kHz (-3 dB @ nominal)			
Sensitivity	-46 dBV / Pa			
Microphone	Cardioid Condenser 2-Section Gooseneck			
Input Impedance	2 kW			
Signal to Noise Ratio (S/N)	70 dB			
Dynamic Range	125 dB max (THD <3%)			
Power from Controller	PoE (48 VDC), max. 2W			
Interface	RJ45			
Request to Talk	Capacitive Touch Panel with Bi-Colour LED			
Headphone Output	3.5 mm stereo, 10 mW			
Headphone Impedance	16W			
Operating Temperature	0°C ~ 55°C;			
Operating Humidity	Humidity 10 ~ 85% (Non-Condensing)			
Dimensions (WxHxD)	120 x 140 x 33 mm			
Weight	1.1 kg			

#### DCS3010-CU

### Digital Chairman Unit

#### DCS3010-DU

#### Digital Delegate Unit

- Fully-digital signal transmission and processing, completely eliminating RF interference from cell phone or similar devices.
- Stylish, low profile design with capacitive touch panel.
- The use of standard off-the-shelf UTP/STP cable coupled with RJ45 connectors makes installation & maintenance a breeze.
- Looping of the units at the bottom or rear allows multiple choice of installation & cabling according to client requirement.
- Internal high fidelity loudspeaker with headphone output at the side of the unit with adjustable volume knob.
- Multiple chairman units can be set as VIP mode (up to 32 units) where every VIP unit can be simultaneously used.
- 16-level equaliser for individual tone control, limiter circuit to cap the output level of the unit and prevent clipping & distortion and Active Noise Control (ANC) to turn on the microphone only when in use.
- Automatic Gain Control (AGC) automatically adjusts the level of the unit in use for the optimum output level, Adaptive Feedback Cancellation (AFC) to prevent acoustical feedback and Auto-Mix to provide a uniform loudness for every delegate.
- Precision uni-directional high sensitivity condenser gooseneck microphone coupled with an acoustically transparent foam windshield to prevent noise pop.
- Bi-colour LED indicator ring at the gooseneck microphone and at the unit to indicate the unit status.
- Built-in high fidelity speaker unit which is automatically muted when the unit is in use to prevent acoustic feedback.
- Chairman unit (DCS3010-CU) comes with PRIORITY Override button to mute all delegate units.





Digital Network Conference System







#### **Technical Specifications**

Connection to Controller	1 x RJ45				
Connection to Next Expansion	1 x RJ45				
Connection to Delegate Unit	4 x RJ45				
Max. Nos. of Delegate Unit	120 delegates				
Max. Nos. of Delegate per port	30 delegates				
Power Requirements	110 ~ 240 VAC, 150W				
Operating Temperature	0°C ~ 55°C;				
Operating Humidity	Humidity 10 ~ 85% (Non-Condensing)				
Dimensions (WxHxD)	223 x 92 x 37 mm				
Weight	0.5 kg				

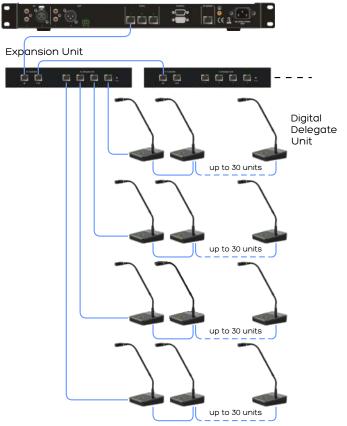
Length of Extension Cable from Controller to Expansion Unit	Number of Delegates Port 1 Port 2 Port 3 Port 4 Total				
5 m	30	30	30	30	120
10 m	28	28	28	28	112
20 m	24	24	24	24	96
50 m	20	20	20	20	80
100 m	10	10	10	10	40

#### DCS3020-E

### **Expansion Unit**

- Connects to the Conference Controller to expand the system up to 5200 delegate units.
- Each Expansion Unit has 4 ports that supports up to 30 delegates per port (depending on cable distance).
- AUDIO-LINK<sup>™</sup> digital ring network technology to realize alldigital signal transmission and processing.
- One CAT5e network cable transmits 64 channels of audio and data control.
- The use of standard off-the-shelf UTP/STP cable coupled with RJ45 connectors makes installation & maintenance a breeze.
- Loop out RJ45 connection to the next expansion unit.
- Self Powered unit from AC mains power supply and supply to all delegate units connected to it.
- Noiseless fan-free operation.

#### Conference Controller

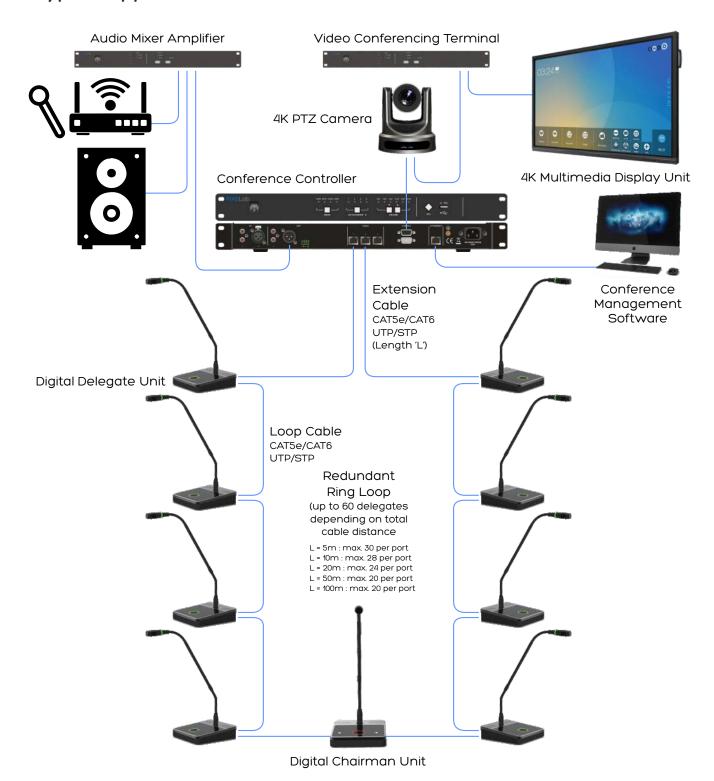






Digital Network Conference System

## **Typical Application**





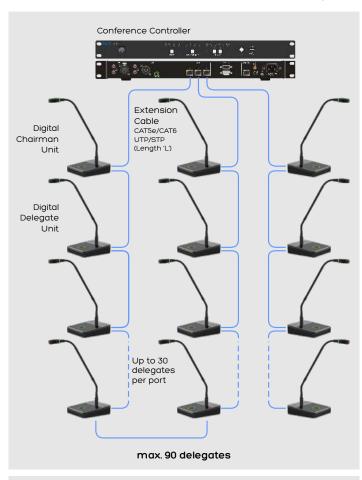




Digital Network Conference System

## **Typical Application**

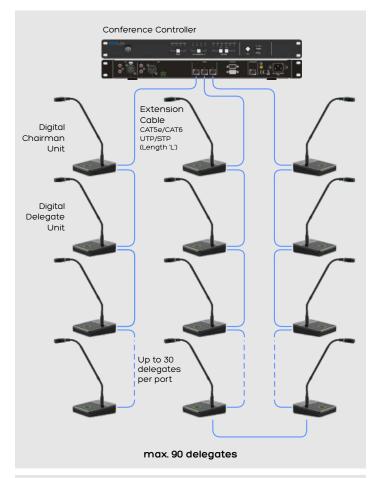
#### Scenario A - PORT 18 2 forms Redundant Loop



Maximum Delegates per CU/DU Port

L = 5m: max. 30 per port L = 10m: max. 28 per port L = 20m: max. 24 per port L = 50m: max. 20 per port L = 100m: max. 20 per port

#### Scenario B - PORT 2 & 3 forms Redundant Loop



Maximum Delegates per CU/DU Port

L = 5m: max. 30 per port L = 10m: max. 28 per port L = 20m: max. 24 per port L = 50m: max. 20 per port L = 100m: max. 20 per port





Digital Network Conference System

# **Typical Application**

#### Scenario C - Using the Expansion Unit to Increase the delegate units > 90

