

NEXT-GEN DIGITAL CONFERENCE SYSTEM

AVC 6000 Series



i INTRODUCTION

Experience the next generation of communication with AVC's digital conference system. Designed for clarity and cost-efficiency, our solution scales effortlessly from intimate meeting rooms to massive halls with up to 4,000 delegates. By combining seamless camera tracking with high-resolution visual integration, we provide a complete, plug-and-play AV ecosystem.

The CU6000 stands at the core of this system. With industry-leading noise-canceling technology, it delivers ultra-clear speech while filtering out ambient distractions, ensuring your professional environment stays focused and productive.





CU6000

Central Control Unit

NEW



Technical Specifications

Operating voltage	220 - 240V AC, 60Hz, 2A
Power consumption	Single unit: 25W (Maximum of 420W)
Conference unit capacity	80 units (Cascadable up to 4094 units)
Audio input	RCA x 2: 2V (PnP) XLR x 1: 50 dB 6.3mm x 1: 50 dB
Audio output	RCA x 2: 2V (PnP) XLR x 1: 50 dB
Output impedance	47 kΩ
Frequency response	20 Hz - 20 kHz
SNR	102 dBA
Dynamic range	106 dB
THD	<0.05 %
Microphone connector	6-pin DIN
No. of HDMI ports	Input: 4 Output: 2
HDMI interface bandwidth	6.5 Gbps
Build material	Aluminum alloy
Physical dimensions	432 (L) x 90 (H) x 350 (W) mm
Net weight	8.0 kg

CU6000 is a main controller of the AVC Digital Conference System, designed for professional meeting environments from small meeting rooms to large-scale conference halls. It manages and controls the conference units and is equipped with a 2.8" LCD display and rotary knob for intuitive front-panel operation of all conference functions.

Key Features

- Supports up to **80 delegates units**, including 1 Chairman unit
- Built-in 4x2 video matrix switching and **camera video tracking**
- Multiple MIC control modes (**FIFO, Limited, Apply, Free Discussion**)
- High quality sound reproduction at **20Hz - 20kHz for minimal distortion**
- Support **standby controller as hot backup** for uninterrupted conference
- Built-in **input and output volume control** (balanced & unbalanced)
- High-speed **RISC embedded architecture**



CM6640

Chairman Unit



DM6640

Delegate Unit

NEW

Technical Specifications

Operating voltage	24V DC via controller
Operating current	50mA ±5%
Power consumption	2W max
Device control protocol	RS485
Frequency response	30 Hz - 20 kHz (Optimized for human voice)
Microphone type	Condenser or cardioid microphones
Microphone sensitivity	-47 dB
Microphone length	425 mm
SNR	102 dB
THD	<0.45%
Earphone	16Ω, 250mW / 32Ω, 125mW (3.5mm phone jack)
Connection mode	Hand-in-hand ring or Y-type hand-in-hand
Connector type	6-pin DIN
Physical dimensions	140 (W) x 120 (H) x 58 (D) mm
Net weight	0.6 kg (Including microphone)

The **CM6640** and **DM6640** units are professional-grade conference microphones designed for high-stakes discussion environments like government chambers and corporate boardrooms. The chairman, CM6640 has the ultimate authority to approve or deny requests to speak with overriding priority to maintain order.

They are engineered to capture sensitive speech capture without distortion and actively filters out background distractions.

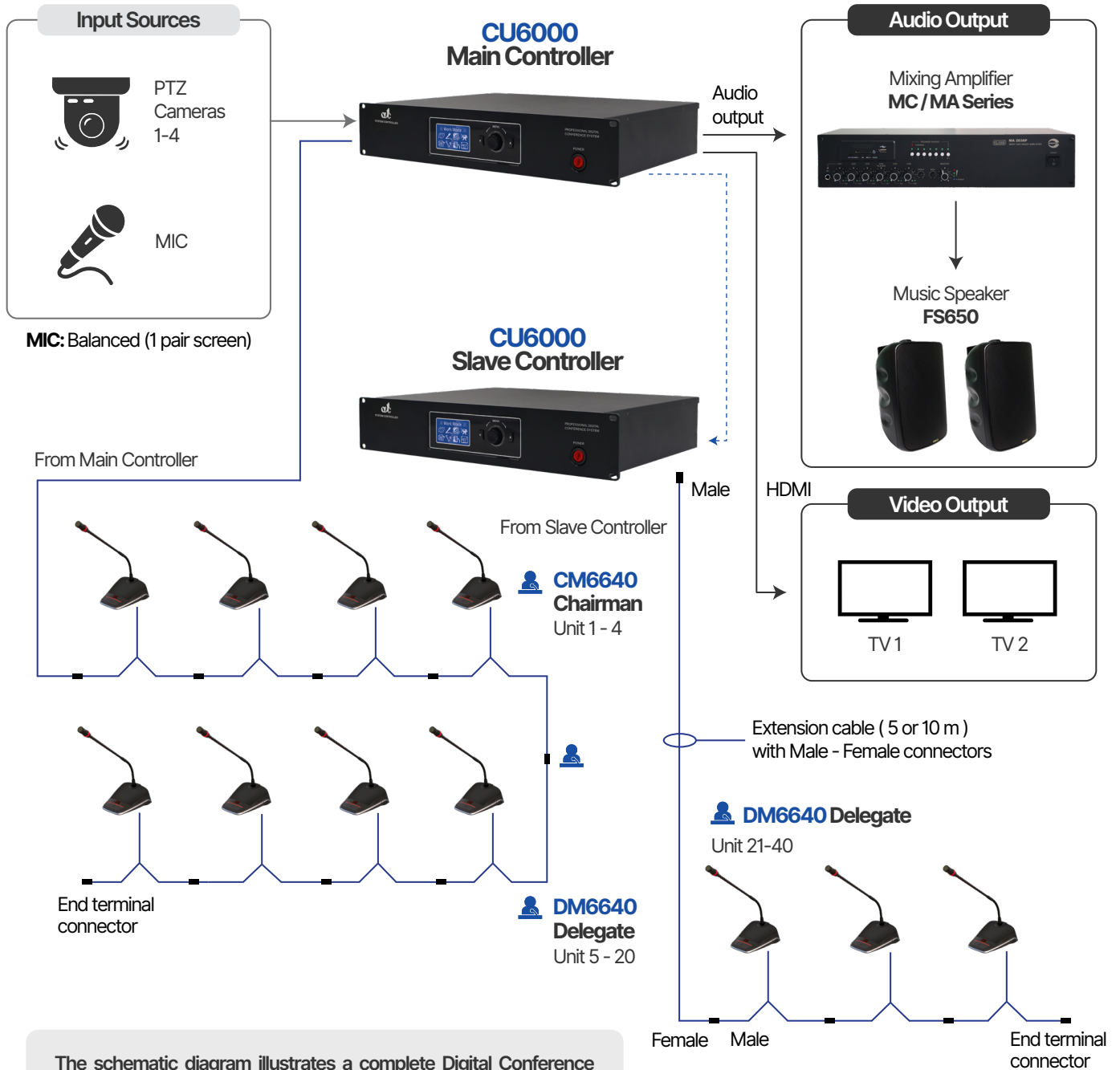
Packing Information

	CU6000	CM6640 / DM6640
Carton size	535 (L) x 470 (W) x 165 (H) mm	425 (L) x 272 (W) x 100 (H) mm
Gross weight	9.50 kg	1.65 kg
Qty/carton	1 unit per carton	2 units per carton



Application Schematic for AVC CU6000 Conference System

PTZ Camera to Controller :
RS485 controls (1 pair Screen) x 1
HDMI x 1



The schematic diagram illustrates a complete Digital Conference System architecture, integrating audio, video, interpretation and control subsystems into a centralized conference management solution.

Each delegate is provided with Y cable with male and female 6-pin connectors.





CU100 Central Unit

CU100 is a versatile conference system controller featuring an integrated power supply. It manages up to 45 delegate units out of the box with each trunk able to connect to 15 units. Using multiple CU100, your system can be scaled to 255 units for larger venues.

With balanced line outputs for seamless audio integration, it easily connects to audio recorder and multimedia sources. It is a robust, flexible hub for any professional environment with plug and play convenience.

Key Features

- Easy **plug-and-play** setup
- Supports up to **45 delegate units per controller** (15 per trunk, 3 trunks in total)
- **LCD display** for status monitoring and volume control
- Offers **6 discussion modes** to suit different meeting needs

Technical Specifications

Power supply	AC 100 - 240V (50 / 60 Hz)
Frequency response	100 Hz - 12.5 kHz
Output impedance	RCA: 200 Ohm Line: 200 Ohm Balanced: 6.9k Ohm Unbalanced: 6.8k Ohm
Input impedance	Line: 50k Ohm
Trunk connections	3 trunks, up to 15 delegates units per trunk
Delegate connections	Up to 255 delegates (including chairman)
Max. trunk length	40m (including main cable)
Conference modes	6 modes (C-ONLY, FIFO, LIFO, LIMIT, FREE, U.SINGLE)
S/N ratio	100 dB
Physical dimensions	480 (W) x 44 (H) x 220 (D)
Accessory	10m 8-pin shielded cable



CM100
Chairman Unit



DM100
Delegate Unit

Technical Specifications

Microphone type	Condenser with LED ring
Polar pattern	Cardioid
Frequency response	30 Hz - 18 kHz
Sensitivity	-43 ±3dB @1 kHz
Input voltage	9V DC (Powered by controller)
Min. input impedance	1k Ω
S/N ratio	>68 dB
Pick-up distance	30 cm
Output connector	8-pin DIN
Input and output wire	2m 8-pin Shielded cable
Mic length	420 mm
Controls	Press-to-talk mic activation, volume controls
	CM100 only: Priority button to override active delegates
Physical dimensions	125 x 165 x 65 mm (Excluding mic)
Net weight	0.8 kg

Designed for clarity and control, the **CM100** and **DM100** units are the core of a productive meeting. The CM100 Chairman unit provides essential moderation tools like priority override, while the DM100 Delegate unit facilitates smooth participation.

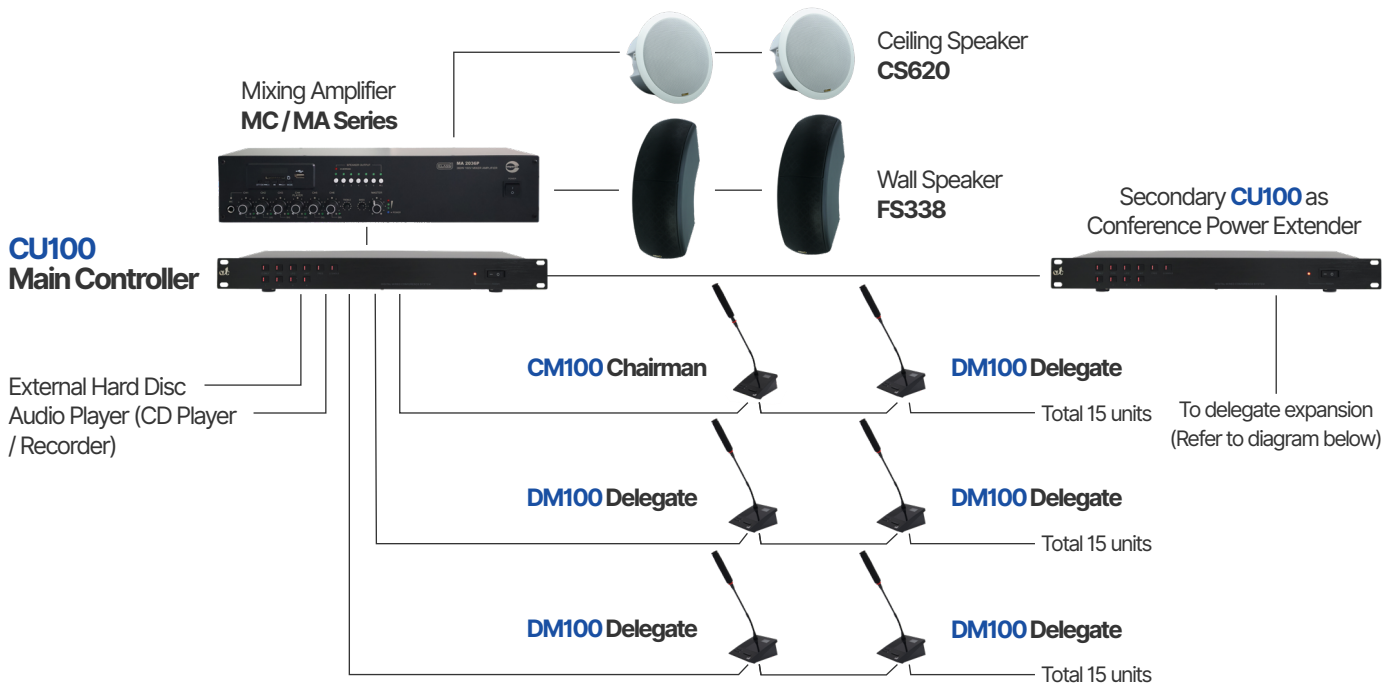
Each unit features an illuminated gooseneck microphone and a built-in speaker with digital volume control for premium audio quality. For added flexibility, they include 2-meter cables for easy daisy-chaining and a headphone jack for private monitoring.

Packing Information

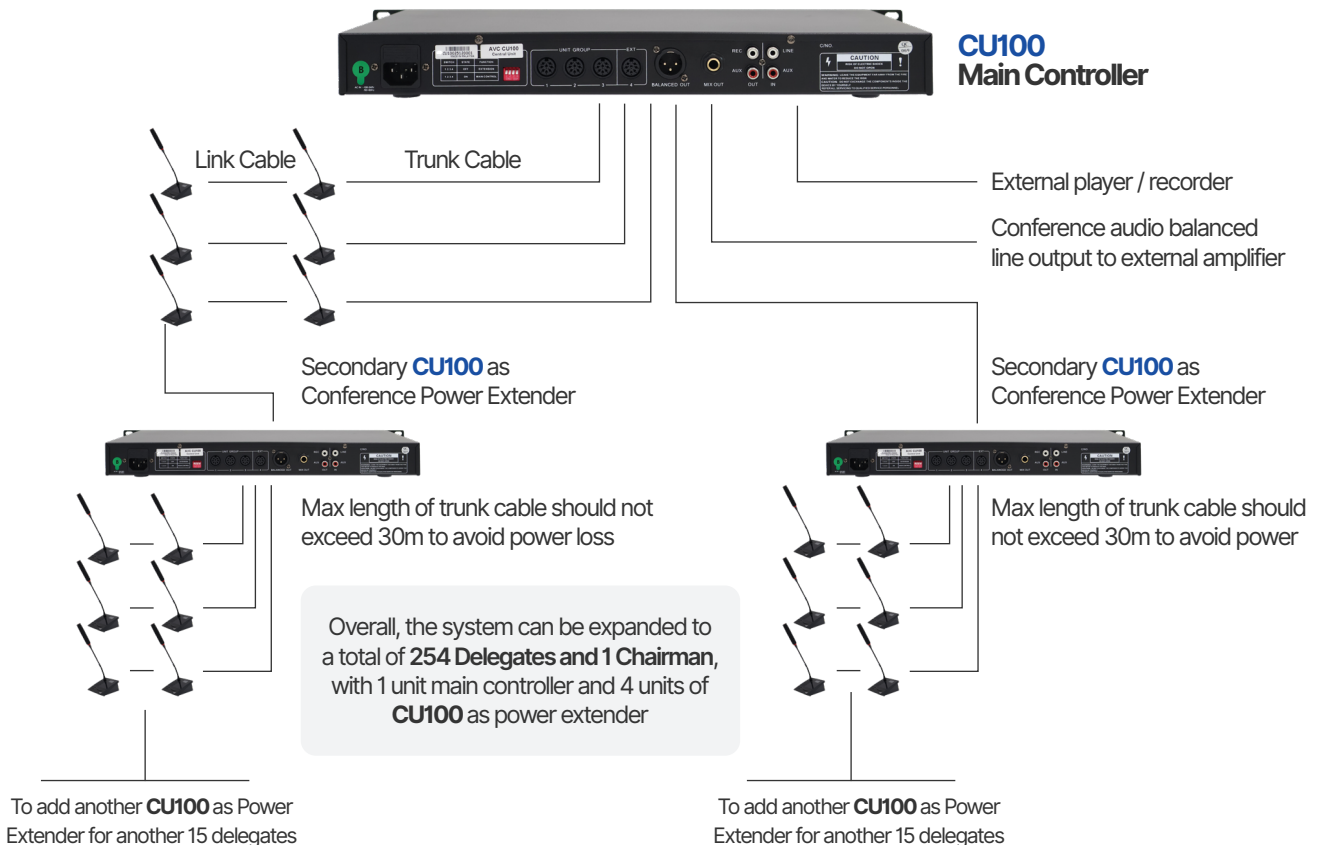
	CU100	CM100 / DM100
Carton size	565 (L) x 405 (W) x 420 (H) mm	440 (L) x 250 (W) x 370 (H) mm
Gross weight	9.95 kg	4.90 kg
Qty/carton	1 unit per carton	2 units per carton

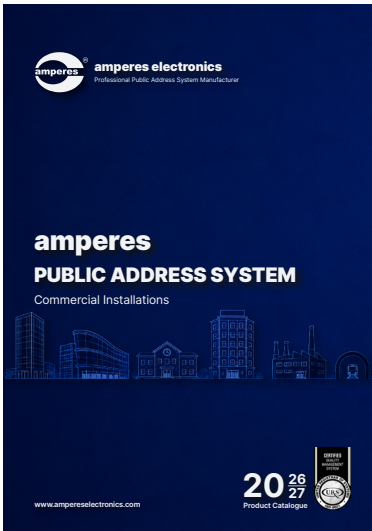


Application Schematic for AVC CU100 Conference System



Application Schematic for AVC CU100 Conference System - System Expansion





**2026/2027 Product Catalogue
Public Address System**

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