

ADA 8x8 G4

SYSTEM UNIT



ADA 8x8 G4 System Unit is a highly adaptable system designed specifically for voice evacuation, public address, and background music needs. Importantly, this unit serves as the master unit for the entire AVEC product family, providing centralized command and control over all connected components. Its central role ensures seamless integration and management of the whole system, making it the core controller for AVEC solutions in complex audio environments.

The unit features enhanced digital signal processing (DSP), which means it uses advanced digital technology to optimize sound quality, ensure clear audio distribution, and provide precise control over audio settings. DANTE card can optionally be added to the DSP, providing a 32-channel audio matrix and digital audio inputs and outputs to the DANTE network.

The ADA 8x8 offers separately variable amplifier channels, allowing each channel's power level to be independently set to match the requirements of different zones or speaker groups. This flexibility ensures that every area receives the right amount of amplification, improving both efficiency and audio performance.

The ADA 8x8 G4 is available in three distinct versions.

CORE X

The smallest configuration, ideal for compact installations such as retail shops or schools, delivering essential amplifier functionality with straightforward operation and cost-effectiveness for less demanding applications.

CORE I

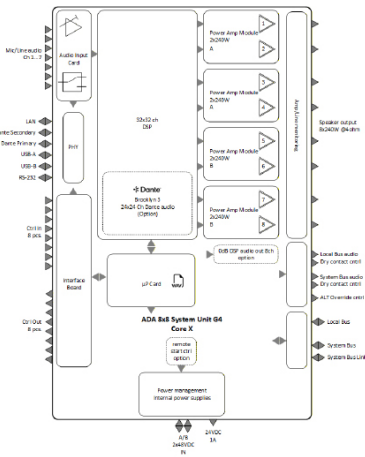
Designed for medium-sized environments like schools, office buildings, or small hospitals, CORE I balances channel count and power, offering robust performance and flexibility without unnecessary complexity.

CORE II

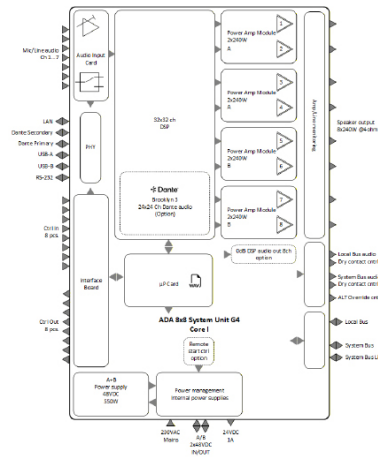
Built for the largest and most complex facilities—such as shopping centres or airports or large passenger and cruise vessels' CORE II provides the greatest power output, making it ideal for installations that require comprehensive coverage and advanced audio control across multiple zones.

MAIN FEATURES

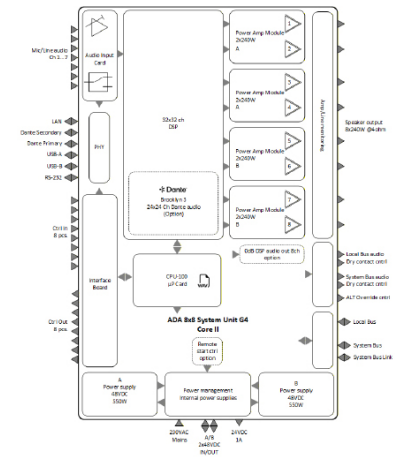
- Linux operation system
- 64 pcs of ADA 8x8 System Units in a single BUS structure, servicing 512 zones
- 2x240W Power Amplifier Module (1-4 modules/ADA 8x8)
- 32x32 Digital Matrix for signal routing
- DSP for all audio inputs/outputs with delay
- Optional DANTE connection with internal 2-port switch (primary & secondary connection)
- Multi Bus structure over entire system
- 7 balanced analogue audio inputs, mic/line
- Built-in message/ad. player (up to 128 messages)
- Info and Alarm Messages
- Calendar and timer functions for automatic functions
- 48 VDC Phantom voltages for microphones
- 8 programmable control inputs
- 8 programmable control outputs
- Open Application Program Interface (API)
- TCP/IP LAN port + USB port for communication and control
- Aveclizer PC-software for system conf. and management with password management in different access levels
- Volume and source controls on user's panel



Audico code: 002350



Audico code: 002351



Audico code: 002352

TECHNICAL SPECIFICATION

Analogue input 1...7, sensitivity	-45 dBu ... +6 dBu
Analogue input impedance (balanced)	20 kΩ
System and Local Bus audio (balanced)	+6 dBu
Digital message signal format (WAV)	16 bit, 16/32/44, 1 kHz sample rate
Frequency response -3 dB	20 Hz - 20 kHz
S/N level	96 dBA
THD+N @ 1W/1 kHz	< 0,05 %
Dynamic Power @4 Ω	max. 8 × 240W
Output power RMS @4 Ω or 100V all ch. driven < 1%THD	8 × 60W (Core X) 8 × 120W (Core I) 8 × 240W (Core II) *
Mains operating voltage	100-240 VAC, 50/60 Hz
Absolutely max. mains input voltage	345 VAC (1,5 × 230V)
Power consumption at VAC	42W-550W (Core I) 45W-1100W (Core II)
Power consumption	< 0,05 %
Power factor at full load	< 0,9 @ 230VAC 100% load
Main fuses 5x20mm	T6,3A (Core II) T3,15A (Core I)
DC Power Inlet	2 × 48 VDC 2 × 15 A max.
Operation temperature	-15 ... +55 °C
Operation humidity	0 ... 90 % RH, non-condensing
Measurements W x H x D	485 × 86 × 375 mm
Weight	7,7 kg netto

*Depending on the external power source's budget.

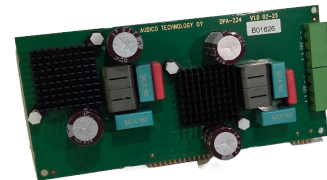
DPA-224 POWER AMPLIFIER CARD

2x240W @ 4Ω RMS Class D power amplifier card with Sigma Delta Modulation and GaN Cool Power Technology for 95% efficiency and minimal heat.

Features over-current, over-temperature, and under-voltage protections with auto-reset.

Supports up to 4 pcs of DPA-224 cards per ADA 8x8 CORE.

Audico code: 002340



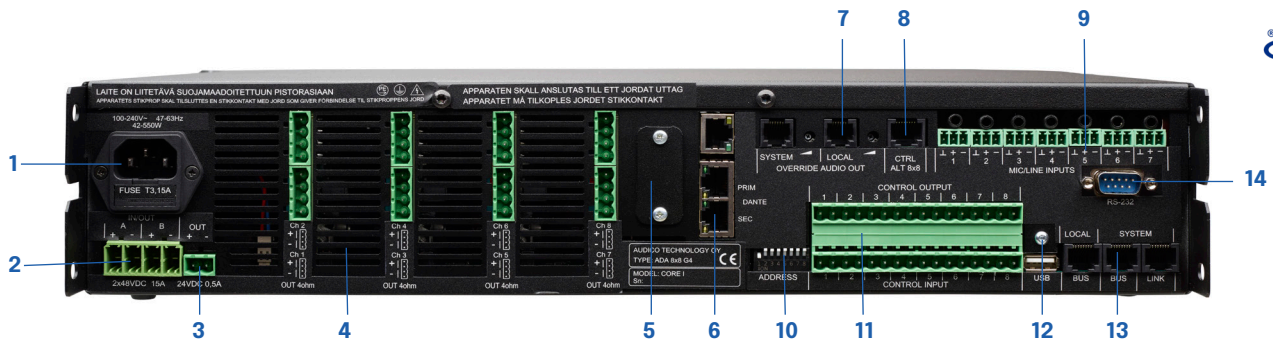
ABC 488 BATTERY CHARGER

ABC 488 G4 Battery Charger is EN 54-4 standard compliant, certificated secondary power supply to be used in EN 54-16 compliant systems. ABC 488 primary function is to provide redundancy power supply for the ADA 8x8 System Units in the event of a mains power failure. Moreover, ABC 488 can provide continuous power supply from the main (mains) or backup source to those components of the that are only adapted to 48V DC.

Batteries with capacity of 4Ah to 200Ah can be used. One charger can handle up to 6 ADA 8x8 G4 System Units.

Audico code: 002360





REAR PANEL

POWER SUPPLY

- 1 IEC power cord. Connect only to a grounded wall socket.
- 2 2 x 48 VDC 15A input/output connector.
- 3 24 VDC, 1A output for ALT 8x8 G4 Line Transfer Unit G4 etc.

AUDIO OUTPUTS

- 4 Speaker line 4ohm outputs Ch1...CH8.
- 5 Place for optional DEX-010 Card with 8 pcs of unbalanced line level audio channels.

NETWORK & DATA

- 6 LAN port (Ethernet).
Primary and Secondary DANTE ports will be available when the optional DANTE Brooklyn 3 module is installed in the DSP.

BUS CONTROLS

- 7 System bus override audio out. 0dBu audio output with level setting and relay control.
Local bus audio override out. 0dBu audio output with level setting and relay control.
- 8 Override control output for ALT 8x8 G3 Line Transfer Unit.

AUDIO INPUTS

- 9 7 balanced mic/line inputs with input gain trimmers for fine level tuning.
48VDC Phantom voltage activation switch for audio input 1...7.

CONTROL & CONNECTIONS

- 10 DIP switch. Used e.g. for address setting of each ADA 8x8 G4 System Unit.
- 11 Connector for 8 pcs. GPI.
Connector for 8 pcs. GPO.
- 12 USB-A connector. Connection for USB memory stick and/or third-party controls.
- 13 Local Bus (Spare Bus) connector.
System Bus (Main Bus) connector.
System Bus link connector.
- 14 RS-232 Connector for service purpose.