AUDIOCENTER

Dynamic Audio Solutions

BrainCore®
Dante™
AES67

Artist Talent Series

Network Digital Audio Matrix

The Artist Talent Series Network Digital Audio Matrix is offered in four distinct hardware variants. The T88+ provides 8×8 channels of analog I/O, while the T16+ doubles that capacity with 16×16 analog channels. For networked audio applications, the T16A+ expands the platform to 32×32 AES67 channels, and the T16D+ delivers 32×32 Dante I/O with support for 16-channel redundant backup. This broad I/O portfolio supports flexible, reliable system integration for complex audio processing and centralized control applications.

Web-based network control is fully terminal-agnostic and compatible with all operating systems, enabling remote device management and fast parameter configuration over LAN. Linked debugging supports batch setup across multiple units of the same model, while wall panel controllers and RS 232/RS 485 central control systems provide localized scene recall and volume adjustment.

Highlights

1 GHz High-Performance DSP Core with Full Processing Power

Built around the ADI SHARC® 5th generation 21569 processor, the platform delivers a 1 GHz computing core capable of handling FIR filtering, Dynamic EQ, and fourteen filter types. With an integrated 5A algorithm, including AEC for every channel, and up to 2000ms of adjustable I/O delay, it provides precise acoustic optimization and meets the most demanding installs needs.

Five Intelligent Algorithms Integrated – One Click “Plug and Play” Operation

- **AFC** (Adaptative Feedback Cancellation) delivers dual loop AI-adaptive howling suppression with a 30% efficiency gain.
- **ANC** (Active Noise Cancellation) actively suppresses ambient noise for cleaner pickup.
- **AEC** (Acoustic Echo Cancellation) prevents your own voice from echoing during a call or video-conference, and features a unique adaptive algorithm constantly monitoring audio coming in from far-end.
- **AMX** (Auto mixer) intelligently manage the volume of multiple microphones open simultaneously, with up to 10 priority levels.
- **AGC** (Automatic Gain Control) automatically adjusts the volume of every channel signal to keep it at a constant and optimal level.

Multi Dimensional Management & Full Interface Compatibility

Flexible management meets scalable expansion through zone control, Audiocenter system presets, and user-defined presets for refined scenario based operation. Standard TCP/IP, RS 232, RS 485, and GPIO interfaces ensure seamless integration with central control systems and smart panel, accommodating diverse control and connectivity requirements.

Full Scenario Audio Source Compatibility – No Additional Hardware Required

A single unit accepts virtually any audio source, with analog, stereo Bluetooth, and USB sound-card I/O provided as standard. Optional AES67 or Dante digital interfaces support high fidelity professional applications. Integrated 48V phantom power supplies condenser microphones directly, eliminating the need for external adapters.

BrainCore™ is an innovative core application technology independently developed by Audiocenter, dedicated to delivering audio systems with supreme performance and high reliability.

Utilizing advanced technology and scientific methods, BrainCore™ optimally analyzes and processes signals, power amplifiers, and speakers. This results in excellent frequency response and audio reproduction, even at high SPL levels.

Audinate's Dante audio networking technology is a widely adopted networked audio solution in the world, extensively used in commercial installations, live performances, recording and production.

T16D+ Network Digital Audio Matrix feature full Dante capabilities, with a channel capacity of up to 512x512, ensuring immediate and seamless compatibility with the complete Dante system.

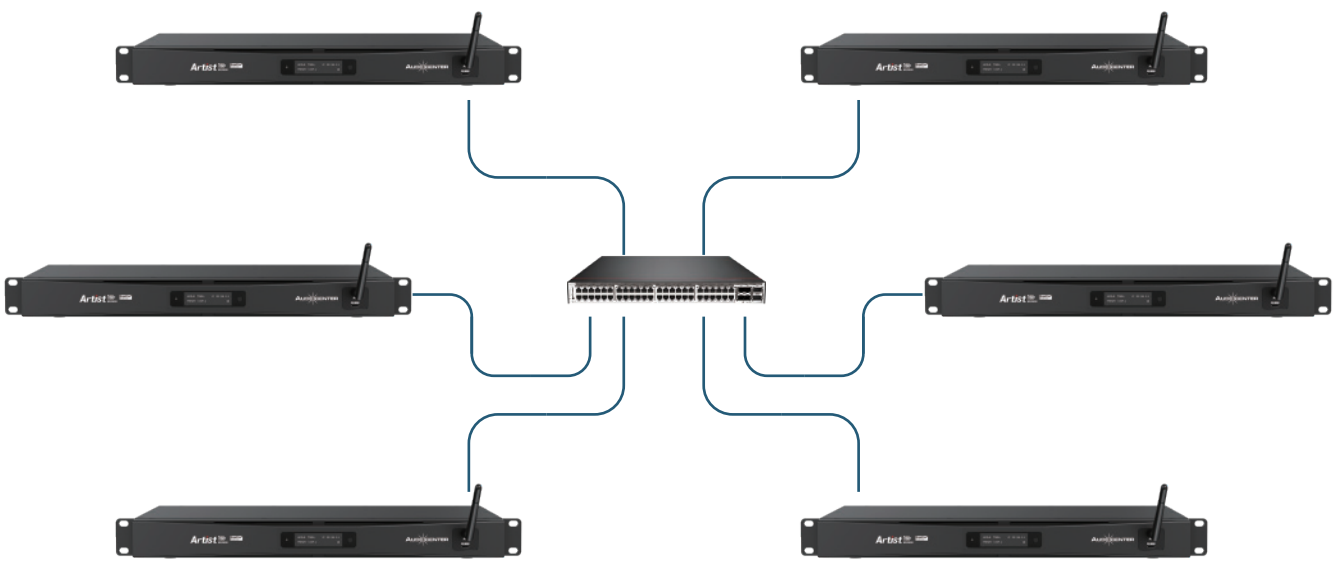
The T16A+ Network Digital Audio Matrix features complete AES67 open interoperability functionality, enabling seamless interconnection with Dante devices, achieving unified routing and management of analog signals and network audio.

Network Control

The Web-based network control system provides powerful real-time control and monitoring capabilities for complex system design, capable of managing up to 250 devices simultaneously.

Regardless of changes in DSP topology or device quantity, the Web-based network control system provides a centralized working platform, greatly simplifying the construction process of DSP design, making even complex DSP projects easy to handle.

The system supports multiple network topologies and is easy to configure, allowing system designers to flexibly select the topology solution best suited for each project requirement.



Star Topology

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High-Fidelity Audio Quality

BrainCore™ Technology Integration

BrainCore™ technology, combined with advanced Limita™ dynamic processing, delivers precise digital signal conditioning while ensuring safe and reliable system operation.

1 GHz High-Performance DSP Core

Powered by the ADI SHARC® 5th generation 21569 processor, the 1 GHz core supports FIR filtering, DEQ, and fourteen filter types. With a built in 5A algorithm and up to 2000ms of adjustable I/O delay, it provides accurate acoustic optimization for large venue signal synchronization and professional sound reinforcement.

FIR Filters

Linear phase response design preserves original transient characteristics, delivering refined, precise audio with enhanced dynamics and impact. Data imported via SMAART or third party software can be edited directly within the software and applied immediately. 512 tap high order processing ensures both precision and flexibility.

IIR Filters

Multiple Bessel, Butterworth, and Linkwitz Riley filter types are provided, supporting high pass, low pass and all-pass filters, with up to -48 dB/octave adjustment and full phase control.

Parametric Equalizer (PEQ)

Each I/O channel features 8 band PEQ with free switching across 14 filter types. Speaker preset channels extend this to 15 band PEQ, also with 14 filter types, enabling finer frequency band division for precise crossover correction.

Dynamic EQ (DEQ)

Each input channel includes 3 band DEQ, which dynamically adjusts frequency response in response to input signal variations, delivering more refined and automated audio control.

Five Intelligent Algorithms – One Click Plug and Play

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2000ms Ultra Long Delay, 0.01ms Precision

Input and output delay of up to 2000ms is available with 0.01ms resolution, ensuring precise synchronization across all audio applications.

Preset Management

Up to 60 preset slots are provided, with dual management for channel specific and system wide presets. One click recall allows users to quickly achieve optimal audio quality, simplifying onsite engineering and improving workflow efficiency.

Multiple Input Methods Support

- **Analog Audio Signal Input/Output**
  Provides 8x8 / 16x16 channels of analog audio signal input/output.

- **AES67 Network Audio Input/Output**
  Provides 32x32 channels of AES67 network audio signal input/output.

- **Dante Network Audio Input/Output**
  Provides 32x32 channels of Dante network audio signal input/output, with support for 16-channel redundancy backup.

- **Stereo Bluetooth Input**
  Provides 2 channels of stereo Bluetooth signal input.

- **Stereo USB Audio Interface Input/Output**
  Provides 2 channels of stereo USB audio interface signal input/output.

- **Supports free switching between microphone input and line input, with 48V phantom power.**

- **Built-in camera tracking function, controlling cameras through audio.**

- **GPIO programmable control interface.**

Dynamic Audio Solutions

Manufactured to Precision Standards

European R&D, German Engineering Standards

All power amplifier and DSP modules are developed by Audiocenter's European R&D team and manufactured to German engineering specifications, ensuring stable, efficient operation and consistent high quality audio performance.

Proven Reliable Electronics

With over 500,000 amplifier and DSP modules deployed globally, the platform has demonstrated exceptional stability and long term reliability across diverse applications.

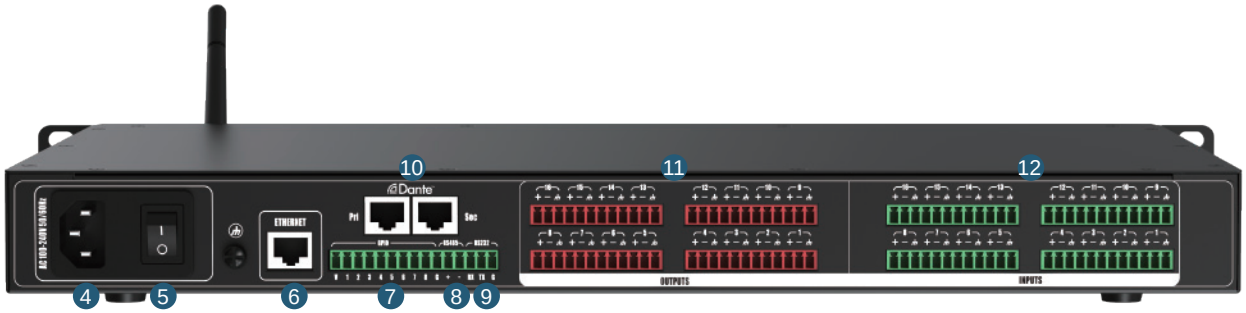
Premium-Grade Components

High quality componentry guarantees stable operation even in demanding or harsh environmental conditions. Input/output connectors are professional grade, selected for durability and signal integrity.

1 **2.08-inch TFT display**
It can display model number, IP address, current preset, show channel input/output status

2 **Bluetooth Antenna**

3 **USB AUDIO**
USB sound card, supports stereo input and output



4 **Power supply socket**
Connected via standard IEC plug

5 **Power switch**
When the processor is not in use, please keep its power switch off.

6 **ETHERNET computer control interface**
Rj45 interface, based on TCP / IP protocol, standard CAT5 or CAT6 network cable connection.

7 **GPIO interface**
GPIO control extension

8 **RS 485 interface**
It can be used as central control, panel control, camera tracking and expansion interface.

9 **RS 232 interface**
It can be used as central control, panel control, camera tracking and expansion interface.

10 **Network Audio Interface**
T16A+:32×32 channels,AES67
T16D+:32×32 channels,Dante
T88+/T16+: Not equipped with this interface

11 **16-channel analog output（T88+：8-channel analog output）**
Euro-block connector, balanced output

12 **16-channel analog input（T88+：8-channel analog input）**
Euro-block connector, balanced input

User-Friendly TFT Display

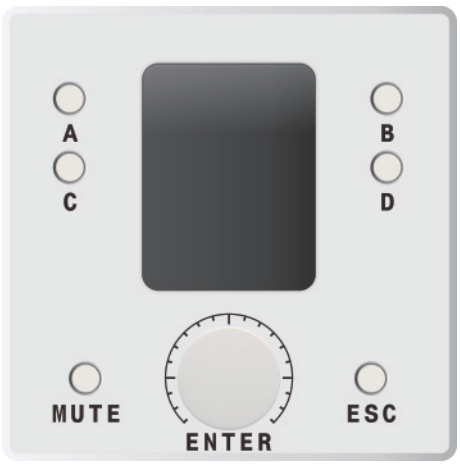
The front panel is equipped with a 2.08-inch TFT display, providing a user-friendly control interface. It can display model number, IP address, current preset, show channel input/output status, Bluetooth pairing operations, and monitor device status in real-time.

Full Platform Compatible Web User Interface, Unlimited Operation

Supports Web-based full-platform access - simply enter the IP address in a browser to access the operation interface, breaking through operating system limitations, compatible with PC/mobile/tablet and other terminals, without restrictions from Windows/iOS/macOS/Android operating systems.

All devices can be remotely managed via LAN with quick parameter configuration. Supports RS-232/RS-485 and TCP/IP protocols, enabling deep integration with third-party central control or operation and maintenance platforms; multiple devices can be networked for linked debugging with real-time remote monitoring.

AWP-3 Wall-panel Controller



New AWP-3 offers a customizable user interface that can be tailored to specific operational requirements and workflow preferences across different application scenarios.

- Fully programable, connectivity is established via TCP/IP by web-browser, with each matrix supporting up to 8 panels simultaneously.
- Power is supplied through either PoE or an external adapter.
- Rotary encoder knob and four fully programmable buttons.
- It can recall presets and control the level and mute of each and every input/output. Custom programming options with hundreds of possibilities.

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		Artist T88+	Artist T16+
Signal Processing		32bit float point dsp 1GHz	
AD/DA Converter		24bit	
Sampling Rate		48kHz	
Input Channels		8-channel electronically balanced line input USB sound card stereo input Bluetooth stereo input	16-channel electronically balanced line input USB sound card stereo input Bluetooth stereo input
Input Interface		3.81mm Euroblock(analog input) Type-C	3.81mm Euroblock(analog input) Type-C
Output Channels		8-channel electronically balanced line output USB sound card stereo output	16-channel electronically balanced line output USB sound card stereo output
Output Interface		3.81mm Euroblock（analog output）	3.81mm Euroblock（analog output）
DSP	Input	1. Volume, Mute, and Phase control 2. AFC / AEC/AI-AEC / ANC/AI-ANC / AGC / AUTO MIX / MATRIX MIX 3. Noise Gate / Compressor / Expander 4. 8-band EQ per input,14 EQ types optional,XOVER（Butterworth, Bessel, Linkwitz-Riley 6/12/18/24/36/48dB/Oct) 5. 2000ms per channel	
	Output	1. Volume, Mute, and Phase control 2. 8-band EQ per output,14 EQ types optional 3. 2000ms per channel	
	Speaker Presets	1. Volume, Mute, and Phase control 2. FIR: 512Taps per Output channel 3. 15-band EQ per Output channel,14 EQ types optional,XOVER（Butterworth, Bessel, Linkwitz-Riley 6/12/18/24/36/48dB/Oct) 4. 3-band DEQ per Output channel 5. 2000ms per Output channel 6. Compressor + Limiter	
Input Impedance		>7.5kΩ	
Output Impedance		<100Ω	
Maximum Input/Output Level		≥21dBu/line 0dBu/microphone	
Phantom power		+48VDC, 7.5mA (optional per channel)	
Frequency Response		20Hz-20kHz(±0.5dB)/line	
S/N Ratio		≥115dB(1kHz,A weighted)/line	
THD+N		≤0.003%(1kHz,A weighted)/line	
Crosstalk		≤-110dB(1kHz,A weighted)/line	
Connection		RS232/RS485/TCP/IP/GPIO	
AC Power Operating Range		100-240V/(±10%, 50-60Hz)	
Power consumption		＜20W	
Rack space		1U	
Dimension(WxHxD)		484x44x245mm	484x44x245mm
Net weight		3.0 kg	3.3 kg

		Artist T16A+	Artist T16D+
Signal Processing		32bit float point dsp 1GHz	
AD/DA Converter		24bit	
Sampling Rate		48kHz	
Input Channels		16-channel electronically balanced line input USB sound card stereo input Bluetooth stereo input 32-channel AES67 digital signal input	16-channel electronically balanced line input USB sound card stereo input Bluetooth stereo input 32-channel Dante digital signal input
Input Interface		3.81mm Euroblock(analog input) Type-C RJ-45x2	3.81mm Euroblock(analog input) Type-C RJ-45x2
Output Channels		16-channel electronically balanced line output USB sound card stereo output 32-channel AES67 digital signal output	16-channel electronically balanced line output USB sound card stereo output 32-channel Dante digital signal output
Output Interface		3.81mm Euroblock（analog output） RJ-45x2	3.81mm Euroblock（analog output） RJ-45x2
DSP	Input	1. Volume, Mute, and Phase control 2. AFC / AEC/AI-AEC / ANC/AI-ANC / AGC / AUTO MIX / MATRIX MIX 3. Noise Gate / Compressor / Expander 4. 8-band EQ per input,14 EQ types optional,XOVER（Butterworth, Bessel, Linkwitz-Riley 6/12/18/24/36/48dB/Oct) 5. 2000ms per channel	
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Power consumption		＜20W	
Rack space		1U	
Dimension(WxHxD)		484x44x245mm	484x44x245mm
Net weight		3.3 kg	3.3 kg