

FBD1616

16x16 Digital Audio Processor



Features

- Analog input channels: 16
- Analog output channels: 16
- Processor: ADI SHARC 21489@450 MHz SIMD;
- DSP processing capability: 400 MIPS, 1.6 GFLOPS;
- Sampling rate: 48 kHz, ± 100 ppm;
- THD+N: 0.002% @+4dBu
- Input dynamic range: 110dB
- Output dynamic range: 110dB
- 1 channel RS232
- Built-in USB sound card, supports music playback, recording and soft video conferencing (such as ZOOM, Tencent Conference, DingTalk Conference, etc.)
- Bus-type AEC, tail time: 512ms, convergence rate: 60dB/S, echo cancellation amplitude: 60dB;
- Independent channel AFC (Feedback Suppression), using notch algorithm, sound transmission gain improvement: 10dB;
- Noise suppression (ANS), signal-to-noise ratio increased by 18dB
- 8-band British parametric equalizer, providing 5 filter options: Parametric, Lowshelf, Highshelf, Lowpass, Highpass;
- Provide end-user customized operation interface, supporting up to 30 devices managed by the same interface;
- It has a central control function, which can control the power supply, signal switching, environment control, audio, etc. in the system as a whole, and realize the functions required to start the system with one click.

Specifications

Processor	ADI SHARC 21489
Input dynamic range	110dB
Sampling rate/quantization bits	48K/24bit
Output dynamic range	110dB
Number of analog input and output channels	16x16
Channel isolation @1kHz	108dB
Input gain	0/6/12/18/24/30/36/42/48dB
Input impedance (balanced connection)	5.4K Ω
Phantom power	+48V/10mA max
Output impedance (balanced connection)	600 Ω
Frequency response	± 0.5 dB(20~20kHz)
System delay	<3ms
Maximum level	+18dBu
Working power supply	AC 220V, 50Hz
THD+N	0.002% @+4dBu
Dimensions (width x depth x height)	482 x 200 x 45mm
Shipping weight	3KG

FAL304BF-V



This array column speaker is designed as an aesthetically pleasing alternative to traditional, bulky wall-mounted speakers. Combining a sleek, space-saving design with high-fidelity acoustic performance, it is ideal for both voice reinforcement and background music (BGM) in modern architectural environments.

Key Features

- **Sleek Streamlined Design:** Modern, space-conscious profile that blends seamlessly into modern interiors while delivering high-performance sound.
- **Cardioid Dispersion Acoustics:** Front circular waveguide holes combined with cabinet damping ports create a unique low-frequency cardioid coverage pattern—delivering crisp highs, full bass, and natural, rich vocal performance.
- **Durable Construction:** Built with a high-strength ABS glass-fiber reinforced cabinet and a protective metal mesh grille.
- **Driver Configuration:** Powered by 4 × 3" high-performance driver units.
- **Optional Enhancements & Accessories:**
 - Weatherproofing: Optional UV-resistant waterproof dipping paint for both indoor and outdoor installations.
 - Fire Safety: Optional UL94V-0 flame-retardant grade material.
 - Mounting Accessories: Spirit level device, handle device, and anti-vibration rubber pads.

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Specifications

Audio & Performance

Parameter	Specification
Driver Unit	4 × 3" High-performance drivers
Effective Frequency Range	80 Hz – 18 kHz
Characteristic Sensitivity (1m/1W)	89 dB
Specified Frequency Band SPL	107 dB
Coverage Angle (H × V)	120° Horizontal × 20° Vertical

Electrical & Connectivity

Parameter	Specification
Input	100V / 8 Ω
Rated Power (8 Ω)	100 W
Rated Power (100V Taps)	100 W / 50 W / 25 W
Connection Type	Phoenix terminal

Physical & Mechanical Specs

Parameter	Specification
Cabinet Material	ABS mixed glass-fiber reinforced
Grille Material	Metal mesh
Color Options	Black / White
Mounting Points	10 × M6 threaded holes
Mounting System	Adjustable angle bracket / Narrow wall-spacing bracket
Dimensions (H × W × D)	530 × 98 × 153 mm
Net Weight	4.7 kg

FAL-304BF



This active array column speaker is designed to replace bulky, traditional wall-mounted speakers with a sleek, space-saving, and modern aesthetic. Equipped with integrated Dante network audio and advanced power conversion, it provides high-fidelity vocal clarity and balanced background music for contemporary architectural environments.

Key Features

- **Sleek Streamlined Design:** Modern, space-conscious profile that blends seamlessly into architectural interiors while delivering premium sound quality.
- **Cardioid Dispersion Acoustics:** Front circular waveguide holes combined with cabinet damping ports create a unique low-frequency cardioid coverage pattern—delivering crisp highs, full bass, and natural, rich vocal performance.
- **High-Performance NdFeB Drivers:** Powered by 4 × 3-inch neodymium-iron-boron (NdFeB) magnet drivers for delicate timbre performance and vivid musical details.
- **Integrated Dante Network Audio:** Built-in Dante module (RJ45) supporting Dante Controller for seamless IP audio routing and distribution.
- **Advanced Power & Amplifier Architecture:** Features single-stage DC-AC conversion, soft-switching technology, bidirectional energy recovery, and precise Phase Modulation (PSM) technology.
- **Built-in System Protection:** Comprehensive protection circuitry including over-current, over-temperature, overload, and load short-circuit safeguards.
- **Durable Construction:** Built with high-strength ABS glass-fiber reinforced cabinet and protective metal mesh grille with natural convection cooling.
- **Optional Enhancements & Accessories:**
 - Weatherproofing: Optional UV-resistant waterproof dipping paint for both indoor and outdoor installations.
 - Fire Safety: Optional UL94V-0 flame-retardant grade material.
 - Mounting Accessories: Spirit level device, handle device, and anti-vibration rubber pads.

FALCON

Specifications

Audio & Performance

Parameter	Specification
Driver Unit	4 × 3" NdFeB Magnet High-Performance Drivers
Rated Power	60 W
Effective Frequency Range	80 Hz – 18 kHz
Characteristic Sensitivity (1m/1W)	87 dB
Specified Frequency Band SPL	105 dB
Coverage Angle (H × V)	120° Horizontal × 20° Vertical

Digital, Power & Connectivity

Parameter	Specification
Audio Transmission Protocol	Dante
Audio Routing Control	Dante Controller
Power Input	PoE compatible (IEEE 802.3af / 802.3at / 802.3bt)
Amplification & Conversion	Single-stage DC-AC conversion, Soft switch, Bidirectional energy recovery, Precise PSM
Protection Functions	Over-current, Over-temperature, Overload, Load Short-circuit protection
Cooling System	Natural convection cooling

Physical & Mechanical Specs

Parameter	Specification
Cabinet Material	ABS mixed glass-fiber reinforced
Grille Material	Metal mesh
Color Options	Black / White
Mounting Points	10 × M6 threaded holes
Mounting System	Adjustable angle bracket / Narrow wall-spacing bracket
Dimensions (H × W × D)	530 × 98 × 153 mm
Net Weight	4.15 kg

FAL27T-TZ



This 6.5-inch coaxial ceiling speaker is engineered for environments requiring high SPL output, wide dynamic response, and easy installation. Featuring a shallow embedding depth, front-accessible wiring terminals, and a magnetic etched grille, it is designed to fit into narrow ceiling spaces without compromising audio quality or aesthetics.

Key Features

- Coaxial Driver Design: Integrates a 6.5" woofer with a 1" dome tweeter for detailed, full-range audio dispersion.
- High Output & Dynamics: Delivers 90 dB sensitivity and up to 110 dB SPL output with 60W rated power (240W peak).
- Magnetic Etched Grille: Equipped with 8 N42 high-strength magnets for secure, seamless, and tool-less iron mesh installation.
- Shallow Space Optimization: Designed specifically for narrow ceiling spaces with an embedding depth of only 176 mm.
- Front-Accessible Wiring: Front outlet Phoenix wiring terminals simplify cable routing and speed up system installation.
- Comprehensive Triple-Safety System: Features horn-reinforced fixation, a rear barrel wire safety rope, and a dedicated iron mesh safety rope for total reliability.
- Durable Construction: Built with a sturdy iron back shell and premium zinc alloy mounting buckles.

FALCON

Specifications

Audio & Performance

Parameter	Specification
Driver Configuration	1 × 6.5" Woofer + 1 × 1" Dome Tweeter (Coaxial)
Rated Impedance	8 Ω
Rated Power	60 W (Continuous) / 240 W (PEAK)
Effective Frequency Range	85 Hz – 20 kHz
Characteristic Sensitivity (1m/1W)	90 dB
Specified Frequency Band Max SPL	110 dB

Physical, Mechanical & Installation

Parameter	Specification
Grille Material & Process	Etched metal mesh
Grille Attachment	Magnetic adsorption (≥ 8 × N42 high-strength magnets)
Back Shell Material	Iron
Mounting Buckles	Zinc alloy buckles
Terminals	Over-current, Over-temperature, Overload, Load Short-circuit protection
Safety Features	Horn reinforced fixation, rear barrel safety rope, iron mesh safety rope
Outer Diameter	316 mm
Cutout Diameter	270 – 280 mm
Embedding Depth	176 mm
Total Height	197 mm
Ceiling Thickness Range	10 – 50 mm
Net Weight	3.4 kg

FAL-BS27T-TZ



This active 6.5-inch coaxial ceiling speaker integrates PoE power and Dante audio networking into a streamlined, space-saving design. Featuring an onboard DSP engine, front-accessible RJ-45 connection, and a magnetic etched grille, it offers high SPL output and precise digital control for narrow ceiling environments without compromising sound quality or installation convenience.

Key Features

- Integrated Dante & PoE Architecture: Built-in Dante module (RJ-45) and PoE power module compatible with IEEE 802.3af/at/bt for clean, single-cable audio signal transmission and powering.
- Onboard DSP Processing: Full digital signal control via Dante Controller, including volume adjustment, mute, limiter, EQ equalization, and channel routing selection.
- Coaxial High-SPL Output: Combines a 6.5" woofer and a 1" dome tweeter to deliver 89 dB sensitivity, 109 dB SPL, and a wide 120° conical coverage angle.
- Advanced Power Conversion: Powered by single-stage DC-AC power conversion, soft-switching technology, bidirectional energy recovery, and precise PSM (Phase Modulation).
- Magnetic Etched Grille: Secured by 8 × N42 high-strength magnets for quick, tool-less attachment and a flush, rimless appearance.
- Shallow Plenum Optimization: Designed for narrow ceiling spaces with a 176 mm embedding depth and front-facing RJ-45 wiring terminals for simplified maintenance.
- Triple Safety System: Horn-reinforced fixation, rear barrel safety wire, and dedicated iron mesh safety rope for max structural reliability.

FALCON

Specifications

Audio & Performance

Parameter	Specification
Driver Configuration	1 × 6.5" Woofer + 1 × 1" Dome Tweeter (Coaxial)
Rated Impedance	8 Ω
Rated Power	50 W (Continuous) / 200 W (PEAK)
Effective Frequency Range	85 Hz – 20 kHz
Characteristic Sensitivity (1m/1W)	89 dB
Specified Frequency Band Max SPL	109 dB
Coverage Angle	Conical 120°

Physical, Mechanical & Installation

Parameter	Specification
Panel Material	ABS
Back Shell Material	Iron
Grille Material & Process	Etched metal mesh
Grille Attachment	Magnetic adsorption
Mounting Buckles	Zinc alloy buckles
Wiring Connection	Front-accessible RJ-45 terminal
Safety Devices	Horn-reinforced fixation, rear barrel wire safety rope, iron mesh safety rope
Outer Diameter	316 mm
Cutout Diameter	270 mm
Embedding Depth	176 mm
Total Height	197 mm
Ceiling Thickness Range	10 – 50 mm
Net Weight	3.75 kg



This Dante 2CH USB Audio Encoder/Decoder serves as a Dante sound card adapter utilizing the Dante Ultimo solution. It facilitates USB audio transmission. Featuring a built-in USB sound card chip, it transmits audio signals over a network using Dante technology. It also supports USB power supply and POE functionality. The product is compact and portable, with a plug-and-play design, making it ideal for recording studios, art festivals, concerts, and various other applications.

Key Features

- Compliant with USB 2.0 Full Speed Operation
- Compliant with USB Audio Device Class Specification V1.0
- Analog sound card, supporting MIC input and SPK Output
- Audio sampling rate supports 44.1kHz, 48kHz and 96kHz (24bit)
- Dante solution supports AES67 RTP audio transmission
- Support USB 5V power supply and POE function (IEEE802.3af Class 0)

Specifications

Technical

Parameter	Specification
Video Network Bandwidth	100M
Audio Formats	PCM 2.0 44.1kHz/48kHz/96kHz up to 24bit
Transmission Distance	100m (CAT6/6A)
Frequency Response	20Hz to 20kHz
Control Method	Dante Controller

Connections

Port Type	Details
Input and output	1x USB-B 1x DANTE [RJ45 connector, POE]

Mechanical

Parameter	Specification
Housing	Metal Enclosure
Color	Black
Dimensions	120mm [W] x 47mm [D] x 26mm [H]
Weight	188g
Power Supply	USB input: 5V-500mA POE input: IEEE802.3af Class 0
Power Consumption	1W
Operation Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)