

SAP-F1616H

16-Channel Digital Audio Processor



The SPON SAP-F1616H audio processor uses the leading ADI DSP SHARC 21489 processor, a 40-bit DSP floating-point engine with a max frequency of 450MHz. It includes core modules like AFC, AGC, AEC, ANC, AM, ANS, meeting audio needs in various spaces like conference rooms, halls, auditoriums, and administrative centers.

Ducker

AFC

16*16

AEC

ANC

MAIN FEATURES

▲ Analog Connectivity And Channels

- Analog I/O: Equipped with 16 analog input channels and 16 analog output channels.
- Configurability: The processing module is configurable; 16 devices can operate online simultaneously.

▲ Digital Audio Features And Processing

- USB Sound Card: Built-in one-in and one-out USB sound card supporting music playback, recording, and soft video conferencing.
- Advanced Audio Processing: Equipped with bus-type AEC, independent channel AFC, noise suppression, ducker, noise gain compensator, gain sharing automatic mixing, and threshold automatic mixing.
- Parametric Equalization: 12-band British parametric equalization with 5 filter options: Parametric, Lowshelf, Highshelf, Lowpass, Highpass.

▲ System Control And Customization

- User Interface: Provides end-user customized operation interface, supporting up to 30 devices managed by the same interface.
- Central Control: Features a central control function to manage power supply, signal switching, environment control, and audio system functions, enabling one-click system startup.

SPECIFICATION

CORE PARAMETERS

Processor:	ADI SHARC 21489@450 MHz SIMD
Audio Algorithm:	Full-Duplex Adaptive Echo Cancellation (AEC) Active Noise Cancellation (ANS) Gain Sharing Auto Mixer Control (AMC) Automatic Gain Control (AGC). Audio Ducking (Ducker) Ambient Noise Compensator (ANC) Acoustic Feedback Canceler(AFC)
Analog Channel Number:	16*16
Sampling Rate:	48K/24bit

ACCESSORIES

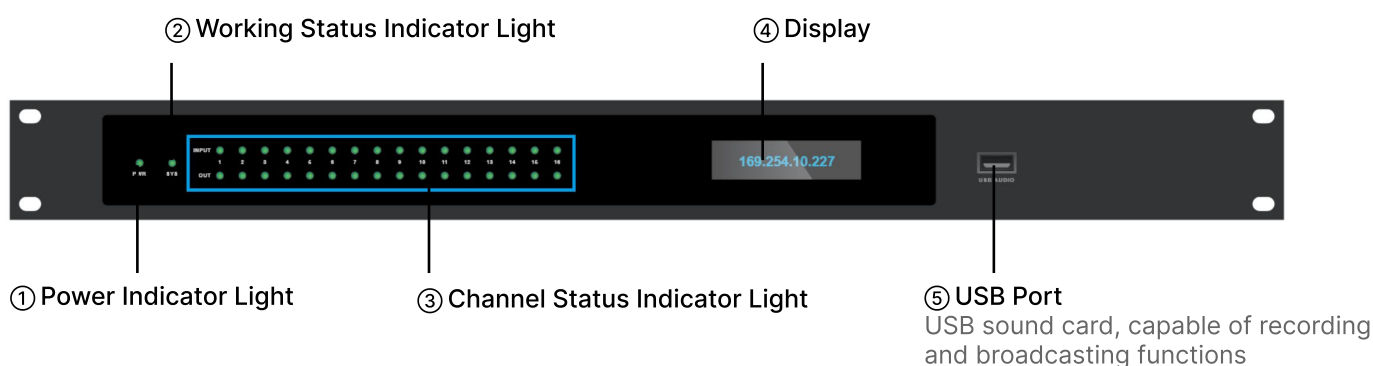
1×Digital Audio Processor
1×Power Cable (Optional)
1×USB Cable
10×12P Phoenix Terminal
1×6P Phoenix Terminal
1×Small Screwdriver
4×Foot Pads
1×Quick Installation Guide
1×Warranty & Certification Card

GENERAL PARAMETERS

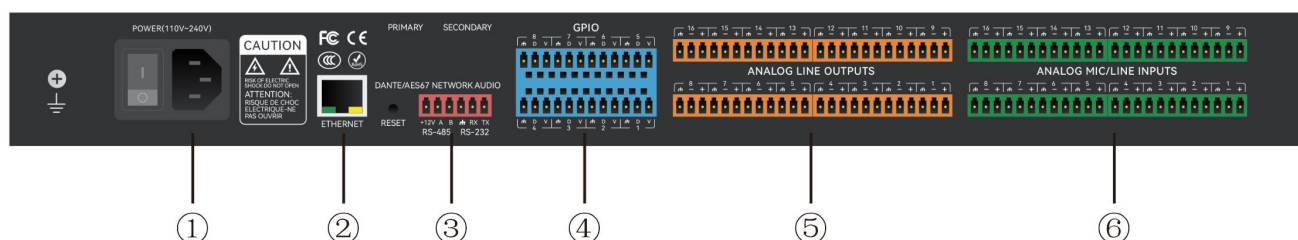
Power Supply:	110-240V AC 50/60Hz
Input Gain:	0/3/6/9/12/15/18/21/24/27/30/ 33/ 36/39/42/45/48 dBu
Phantom Power:	+48V/10mA Max
Frequency Response:	20Hz-20kHz±0.5dB
Maximum Level:	+18dBu
THD+N:	<-95dB @17dBu
Dynamic Input Range:	113 dB
Dynamic Output Range:	115 dB
Channel Isolation @1kHz:	108 dB
Input Impedance (Balanced Connection):	5.4KΩ
Output Impedance (Balanced Connection):	600Ω
Operating Temperature:	0-40°C
System Latency:	<3ms
Product Dimensions:	482*260*45mm
Product Weight:	4kg
Warranty:	2 Years

PORTS DESCRIPTION

[Front Panel]



[Rear Panel]



① Power Input

② Network Port

③ RS232+RS485 interface:
connect to the control terminal or central control equipment.

④ GPIO Interface:
8 logic outputs with 4 pairs of universal ground pins.

⑤ Output Analog Signal Output Interface:
Can be connected to equipment such as power amplifiers and active speakers.

⑥ Input Analog Signal Input Interface:
Can connect microphones, DVDs and other devices.

CONNECTION DRAWING

