

AVONE-0402

8x8 Digital Audio Processor



AEC

ANS

AMC

AGC

AFC

Features

- The audio and video all-in-one machine is a 4x2 matrix switcher with HDMI input and output, 4K image scaling, audio DSP with AEC, scalable power amplifier and built-in central control processor and sequential power supply;
- Compatible with HDMI 2.0, HDCP 2.2, HDCP 1.4 and DVI 1.0;
- 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;
- A customized user interface needs to be provided;
- Requires built-in USB sound card to support recording and remote conferencing;
- The processor chip adopts ADI architecture and is no less than a 40bit DSP floating point operation engine;
- The number of analog input and output channels is not less than 8*8;
- Input and output quantization is no less than 48KHz/24bit;
- No less than 8-band PEQ, and no less than five filter types available;
- Gain sharing automatic mixing (AMC);
- Automatic gain (AGC);
- Each channel should have no less than 8 points of adaptive feedback suppression (AFC);

Specifications

Processor	ADI SHARC 21489	THD+N	<-100dB @4dBu
Sampling rate/quantization bits	48K/24bit	Input dynamic range	110dB
Number of analog input and output channels	8x8	Output dynamic range	112dB
		Channel isolation @1kHz	108dB
Sampling rate	48 kHz, ± 100 ppm	Input impedance (balanced connection)	5.4KΩ
		Output impedance (balanced connection)	600Ω
Input gain	0/3/6/9/12/15/18/21/24/27/30/33/36/39/42/45/48 dBu	System delay	<3ms
Phantom power	+48V/10mA max	Maximum level	+18dBu
Frequency response(20~20kHz)	±0.5dB		