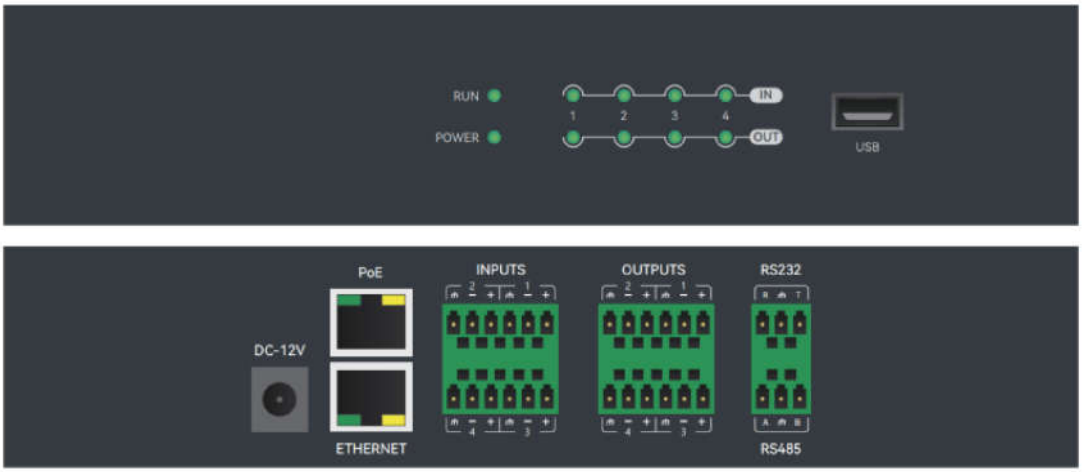


Introduction

The DSP44U adopts the ADI SHARC 21489 processing chip, which is based on a 64-bit floating-point DSP engine and a powerful digital audio signal processing platform. This series of products provides a wide range of digital processing tools for audio system design, configuration, and optimization. The DSP Controller software can fully control and manage the entire series of DSPs and all their processing functions, including AFC, AEC, ANS, ANC, AM, AGC, Ducker, PEQ, GEQ , delay, crossover and other functions.

The intuitive graphical user interface is the main component of the DSP Controller software. It allows users to quickly and conveniently view all signal channels in a single window. In this user-friendly environment, audio system designers or installers can clearly view and adjust all input levels, audio DSP processing parameters,mixingrelationships,and output levels.

Features

- ADI SHARC platform with semi-open architecture.
- Integrated management of multiple devices offers open user
- interface and supports good sound quality (at 24bit/48kHz.)
- Each channel has its own independent adaptive feedback suppression which can find and suppress audio feedback automatically.
- Full-duplex Adaptive Echo Cancellation (AEC) and Active Noise
- Cancellation (ANS).
- Gain sharing Auto Mixer Control (AMC).
- Automatic Gain Control (AGC).
- Full-featured audio mixing matrix supports adjustable input level.
- Provides up to 8 presets, each can work independently.
- Supports audio channel duplicating, linking, and grouping.
- Supports RS-232 and UDP central control.
- Provides the flexibility to assign UDP port number, with the control
- commands available through the contral software.
- Works with 2 types of our wall panel products, both software

- programmable.
- Built-in dual channel USB sound card can be used for audio
- recording, audio broadcasting, and video conference.
- Supports both PoE power supply and DC 12V power adapter.·
- Supports iOS and Windows operating system.

Specification

Working power	DC 12V or PoE 48V
Sampling rate/quantization bits	48K/24bit
Number of analog input and output channels	4x4
Input gain	0/6/12/18/24/30/36/42/48 dBu
Phantom power	+48V/10mA max
Frequency response	20Hz–20kHz±0.5dB
Maximum level	+18dBu
THD+N	<–100dB @17dBu
Dynamic input range	110 dB
Dynamic output range	112 dB
Channel isolation @1kHz	108 dB
Input impedance (balanced connection)	5.4KΩ
Output impedance (balanced connection)	600Ω
System latency	<3ms
Dimensions (W x DxH)	215x162x44mm
Shipping weight	2KG