

BLANC

Quality Needs No Name

DSP48

Loudspeaker Processor

4x8 ANALOG

40-BIT DSP / 96KHZ

896-TAP FIR FILTERING

31-BAND GEQ + 12-BAND PEQ

MULTI-PLATFORM NETWORK CONTROL

50 SCENE PRESETS



The BLANC DSP48 is the next-generation solution for professional speaker control. Featuring analog audio networking, 40-bit floating-point DSP, and 96kHz processing, it delivers powerful, precise system management in a modern, streamlined design.

Equipped with 896-tap linear-phase FIR filters, advanced crossover and protection processing, up to 1500ms delay, and multi-device control with 50 scene presets, it provides a complete end-to-end loudspeaker management platform. A high-resolution RGB LCD enables full standalone operation, while Ethernet and high-speed USB ensure fast, reliable connectivity for live sound, theaters, nightclubs, concert halls, and installed installations.

FEATURES

- Input 4 analog signals and output 8 analog signals; enabling signal distribution management for multi-speaker scenarios.
- Built-in high-performance 40-bit floating-point DSP processing chip with 32-bit/96kHz processing capability, featuring high-performance A/D and D/A converters;
- 800 × 268 resolution high-definition RGB LCD screen with a user-friendly, innovative GUI interface;
- Stable, linear-phase 896-tap custom FIR filters; supports importing third-party software-generated FIR parameters with graphical interface display;
- Input channel components: Mute, Expander, Gain, Delay (0-1500ms), 31-band Graphic Equalizer, 12-band Parametric Equalizer, 3-band Dynamic Equalizer, Compressor;
- Output Channel Components: Delay (0-1500ms), Crossover (Butterworth, Bessel, Linkwitz-Riley filter types, 896 taps FIR filter), 12-band Parametric Equalizer, Gain, RMS Limiter, Peak Limiter;
- Professional control software for Windows, macOS, Linux, iPad and Android, connecting via USB or RJ45 cable for device software configuration;
- Software supports adding and routing management of multiple online devices;
- Input and output channel duplication functionality supported;
- Input and output channel cross-binding functionality supported;
- Supports multi-device grouping with 50 scene presets for saving, recalling, importing, and exporting;
- Features RS485 interface and standard Ethernet control interface with open protocol documentation.

SPECIFICATIONS

PERIPHERALS

Input Interface	4 Analog
Output Interfaces	8 Analog
Display	Embedded GUI interface, quick adjustment of parameters
Control Interfaces	1 RJ45 interface, 1 USB-B interface, 1 RS485 interface, 2 GPIO control interface

AUDIO PROCESSING

Processor	ADI SHARC ADSP-21489 450 MHz high performance 40-bit floating-point DSP processor; 32-bit A/D and D/A converter, 96kHz sampling rate
Input Channel	Functional components: Mute, Expander, Gain, Delay (0-1500ms), 31-band Graphic Equalizer, 12-band Parametric Equalizer, 3-band Dynamic Equalizer, Compressor. Physical interface: Balanced XLR female connectors.
Output Channel	Functional components: Delay (0-1500ms), Crossover (Butterworth, Bessel, Linkwitz-Riley filter types, 896 taps FIR filter), 12-band Parametric Equalizer, Gain, RMS Limiter, Peak Limiter. Physical interface: Balanced XLR male connectors.
Input Impedance	Balanced: 20K Ω
Output Impedance	Balanced: 100 Ω
Common Mode Rejection Ratio	>60dB@50Hz
Input to Output Dynamic Range	\geq 110dB
Frequency Response	20Hz~20KHz, \pm 0.2dB
Noise Floor	-92dBu
Signal to Noise Ratio	110dB
THD+N	\leq 0.0015% @1kHz, +4dBu
Channel Isolation	105dB@1kHz
Input Level Range	\leq +22dBu (A-Weighting)
Crossover	Three types of high and low pass filters: Butterworth, Bessel and Linkwitz-Riley
Equalizer	Parametric Equalizer: Frequency: 20~20kHz, Gain: -20~+15dB, Bandwidth: 0.4~128 Graphic Equalizer: Frequency: 20~ 20kHz, Gain: -15~+15dB
Maximum Output Level	22dBu

Maximum Input Level	22dBu
Analog/Digital Dynamic Range	123dB
Digital/Analog Dynamic Range	123dB

GENERAL SPECIFICATION

Operating Voltage	AC 100V~240V, 50Hz/60Hz
Maximum Power	30W
Operating Temperature and Humidity	0°C~40°C, 10%~90%RH, No condensation
Chassis	1U
Product Dimensions (L×W×H)	482.4mm×210.5mm×44mm
Net weight	2.8kg
Package Dimensions (L×W×H)	590mm×430mm×110mm
Package Weight	3.3kg

APPLICATION SCENARIOS

