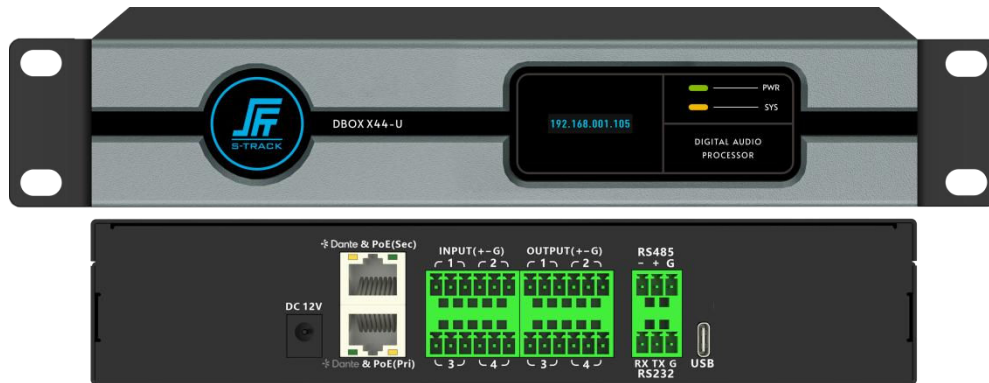


DBOX X44-U

Digital Signal Processor



Product Introduction

The Digital Signal Processor supports analog channel 4 into 4 out, USB-C Audio Class, comprehensive matrix mixing function, equipped with 24-bit high-performance A/D D/A converter and 32-bit floating-point DSP processor, support 48kHz sampling rate, restore high-quality sound, user-friendly operation software interface, easy to operate and powerful performance. Mainly used in a variety of large places, can meet the theater, concert halls, remote video conferencing, stadiums, churches, conference centers, theme parks, public sound reinforcement systems and other aspects of the application needs.

Product Features

- Highly integrated, integrating a variety of traditional Analog audio processing equipment in a Digital audio processor;
- High-performance 32-bit floating-point DSP processor, all-digital processing, fast response to feedback cancellation, echo cancellation, noise suppression and other core algorithms;
- High-performance A/D, D/A converter, 24bit/48KHz sampling frequency, high-quality Analog → Digital, Digital → Analog conversion;
- 4 Analog input channels and 4 Analog output channels, very small distortion and ultra-low background noise;
- Supports Dante network transmission, which makes audio transmission more stable and faster;

- Humanization, graphical, intuitive and easy-to-operate control software interface;
- Comprehensive matrix mixing functions;
- Scene storage is different from the Analog equipment is one of the most practical and significant features, can store 8 complete scenes, all the scenes can be exported to an external storage device for storage backup, so that the later call at any time.

Functions

- ✧ Comprehensive matrix mixing function, 48kHz sampling rate, 24-bit high performance A/D, D/A converter and 32-bit floating point DSP processor;
- ✧ Inputs per channel: Preamplifier, Invert, Signal Generator, Expander, 5-band Parametric Equalizer, Compressor, Acoustic Feedback Canceler (AFC), Acoustic Echo Canceler (AEC), Adaptive Noise Suppressor (ANS), Parametric Equalizer filter type selectable (Low Shelf, High Shelf, Low Pass Filter, High Pass Filter);
- ✧ Display shows the IP address;
- ✧ Outputs per channel: Delay, Crossover, 31-band Graphic Equalizer, Limiter, Invert,;
- ✧ Test signal generator, Sine wave, Pink Noise, White Noise, frequency and level magnitude selectable;
- ✧ Input phase button, mute button, phantom power button;
- ✧ Output mute button, phase button per channel;
- ✧ One-click display of all function components;
- ✧ Storing user manual and software with the device;
- ✧ Central control code generated in the control software; power failure automatic protection memory function; one-click reset function;
- ✧ Channel copy, paste, group control function;
- ✧ Supports setting the maximum and minimum volume range for each channel;
- ✧ The same host allows 10 users to manage;
- ✧ Device name can be modified;
- ✧ Editable preset mode, new, delete, modify, one-click reset, preset mode can be stored to computer and one-click reset;
- ✧ With camera tracking function, can independently adjust the preset position of a camera,

compatible with VISCA, PELCO-D, PELCO-P three control protocols, support for custom commands;

- ✧ Ethernet multi-purpose data transmission and control port, can support real-time management of single and multiple devices;
- ✧ Intuitive image, simple and easy to understand the graphical software control interface, for customers to bring fast, real-time operating experience;
- ✧ The device does not need a CD, comes with installation software, a device for a software version, to solve the troubles caused by the loss of the installation CD and the confusion of multiple software versions;
- ✧ Configuration of bi-directional RS232 interface, RS485 interface, standard Ethernet control interface;
- ✧ Support 100 groups of scene presets, scene new, save, delete and other functions;
- ✧ Intuitive, graphical software control interface, works on Windows XP, 7, 8, 10, 11, etc.;
- ✧ Support mobile iOS, iPadOS, Android control software.

Specification

Category	Parameter Item	Parameter Description
Peripherals	Input Interfaces	4 Analog + 4 Dante
	Output Interfaces	4 Analog + 4 Dante
	Display	Displays the device IP address
	Control Interfaces	2 RJ45 interface, 1 RS232 interface, 1 RS485 interface
Audio processing	Processor	TI 456MHz FLOPS dual-core 32-bit DSP processor; 24-bit A/D and D/A converter, 48kHz sampling rate
	Input Channel	Functional component: Preamplifier, Signal Generator, Expander, 5-band Parametric Equalizer, Compressor, Ducker, Acoustic Feedback Canceler (AFC), Acoustic Echo Canceler (AEC),

		Adaptive Noise Suppressor (ANS), Parametric Equalizer filter type selectable (Low Shelf, High Shelf, Low Pass Filter, High Pass Filter). Physical interface: Balanced Phoenix terminals.
	Output Channel	Functional component: Delay, Crossover, 31-band Graphic Equalizer, Limiter. Physical interface: Balanced Phoenix terminals.
	Phantom Power	DC 48V
	Input Impedance	Balanced: 20K Ω
	Output Impedance	Balanced: 100 Ω
	Common Mode Rejection Ratio	52dB@50Hz
	Frequency Response	20Hz~20KHz, ± 0.15 dB
	Noise Floor	-89dBu
	Signal to Noise Ratio	105dB
	THD+N	$\leq 0.003\%$ @1kHz, +4dBu
	Channel Isolation	100dB@1kHz
	Input Range	$\leq +18$ dBu (A-Weighting)
	Crossover	Three types of high and low pass filters: Butterworth, Bessel and Linkwitz-Riley
	Equalizer	Parametric Equalizer: Frequency: 20~20kHz, Gain: -15~+15dB, Bandwidth: 0.02~4 Graphic Equalizer: Frequency: 20~20kHz, Gain: -15~+15dB
	Maximum Output Level	18dBu

	Maximum Input Level	18dBu
	Analog/Digital Dynamic Range	120dB
	Digital/Analog Dynamic Range	120dB
	Equivalent Input Noise	≤-120dBu
General specification	Operating Voltage	Power adapter input: AC 100V~ 240V, 50Hz/60Hz; Output: DC 12V/2A; Or POE power supply
	Maximum Power	15W
	Operating Temperature and Humidity	-0℃~40℃, 10%~90%RH, No condensation
	Chassis	1/2U
	Product Dimensions (L×W×H)	216mm×190.5mm×44mm
	Net Weight	1.2kg
	Package Dimensions (L×W×H)	330mm × 230mm × 70mm
	Package Weight	1.6kg