XSP-1000

Next-Generation 16 Channel Cinema Processor



- Designed to future-proof cinemas when using GDC Immersive Sound Media Servers
- Upmixing capability when combined with latest GDC Immersive Sound Media Servers*
- Supports 5.1 and 7.1 surround sound systems
- · Low noise digital processing
- Easy operation and integration with most theatre management systems



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Key Benefits

1

Supports Multiple Immersive Sound Formats

The XSP-1000 supports multiple object-based immersive sound formats, including the latest DTS:X format. It is also backward compatible with 5.1 and 7.1 surround sound systems.

2

Low Noise Digital Processing

The XSP-1000 features low noise digital processing, with up to 96kHz sample rate, which ensures superb audio fidelity and presentation.

3

Automatic Equalization

The XSP-1000 includes an automatic equalization feature (auto-EQ), which uses user-defined microphone calibration files and standard or user-defined equalization curves to automatically adjust the graphic equalizer on each channel.

4

User-friendly GUI Control

The XSP-1000 GUI runs on Windows operating systems, which allows for complete system configuration, monitoring and firmware upgrades over USB and Ethernet.

5

Multifunctional Control Buttons

The front panel display shows the current fader level, the format name (which is user configurable), and the measured audio level on each channel of the main audio output.



High Reliability

The XSP-1000 is integrated with bypass audio circuitry, which allows it to remain operational in the unlikely event of a system failure. It delivers a significant improvement in overall system stability.



XSP-1000 Cinema Processor Technical Specifications

Dimensions

Standard 2RU rack-mount chassis

Power Requirement

100-240VAC, 50/60Hz, 30 watts maximum (18 watts typical, 7.5 watts sleep)

Audio Inputs

- PA Microphone XLR 0.7mV sensitivity
- Calibration Microphone 3.5mm stereo jack 0.7mV sensitivity with 10V power
- · Non-Sync analog input RCA 75mV to 4.775V
- · Auxiliary analog input RCA 300mV
- · Eight-channel analog input DB25F 300mV
- · COAX1 RCA PCM decoding
- · COAX2 RCA PCM decoding
- · TOSLINK Optical PCM decoding
- AES/EBU 16 Channel 48-96KHz sample rates

16-Channel Analog Audio Output

 16-Channels Balanced 300mV adjustable. Configurable as 5.1, 7.1 broadband, bi-amp three or five screen channels, tri-amp three screen channels or 13.1

Communication Ports

- DB25F pulse automation
- · Serial control RS-232
- · USB for laptop setup
- Ethernet 10/100 RJ45

Format Selection

- Digital (COAX1, COAX2, TOSLINK, 8 or 16 Channel AES/EBU)
- · Analog (8-channel, Non-Sync, Auxiliary, Microphone)
- User 1, User 2 (Configurable in software, e.g., digital 16 channel at lower level, 7.1, 13.1, etc.)

Processing

- · 96kHz processing
- One-third octave equalization on all channels except LFE, HI, and VI-N
- · Parametric equalizers on LFE
- · Synchronization delays for all inputs
- Surround delays for all surround channels
- Crossovers support bi-amp and tri-amp of up to five screen channels plus individual parametric equalization on one to three LFE outputs. Crossover includes a speaker library and allows for user defined speaker systems

Graphical User Interface

The XSP-1000 Graphical User Interface (GUI) operates under Windows XP, Windows 7, and Windows 8. It communicates with one or more XSP-1000 systems simultaneously over USB, Ethernet, or RS232. The GUI is used for system configuration including auditorium equalization (both manual and automatic equalization)

Dynamic Range

Typically 105dB

^{*} Upmixing recommended for preshow entertainment programs and alternative content Use of this product feature requires an additional license from GDC