# Venueflex-8
Multi-Function Audio Processor

Overview

The Venueflex-8 immersive audio processor is a proprietary multifunction digital signal processor that facilitates immersive audio processing technologies: active acoustics, object-based mixing, and active bass control. These technologies are designed to address common audio challenges and provide greater artistic control. They adhere to the principles of traditional acoustics but integrate into modern system and room design.
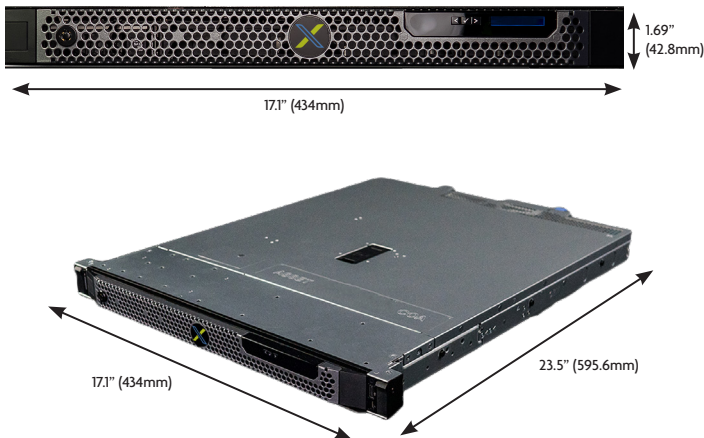
Product Features

48 x 32 I/O, system processing & OBM
8 convolution channels

Specifications

Power Supply
Internal 100V-240V, 6.5A-3.5A at 50/60Hz

Power Consumption
450W

Frequency Response
20Hz to 20kHz

Network
1000/100 Mbps ethernet for Dante™ and Control
1000/100 Mbps ethernet for optional Control

Latency
2.7ms plus Dante™ network latency (minimum Dante™ latency 1 ms)

Physical Specifications

Dimensions (W x H x D)
17.1 x 1.69 x 23.5 in (434 x 42.8 x 595.6 mm)

Weight
29.9 lb (12.2 kg), accessories and packaging not included

Venueflex™ Technologies

Active Acoustics

Active Acoustics processing creates a unique and accurate acoustical "signature" that matches the acoustical performance of the room in which it is being installed. By selectively routing signals through the processor, the natural reflective sound of the room can be lifted and controlled artistically with much greater spatial realism than conventional "reverb" processors. Reflections are rendered through an array of purpose-built loudspeakers distributed throughout the room.

Object-Based Mixing

"Dry" immersive audio inputs from a mixing console are routed, timed and distributed properly to the same loudspeakers used for adaptive acoustics. This allows "surround" type mixing, console-based effects or theatrical audio content to be distributed spatially throughout the room with no additional investment in hardware.

Active Bass Control

Reduce power alleys and coverage nulls. Our processors continually sample the subwoofer drive signals from an installed audio system, and produces complementary and adaptive signals to drive numerous low-frequency control loudspeakers distributed around the room. This creates tighter, more controlled sub-bass response for an improved audio experience.

TQ Processing

TQ™ processing implements the propriety technologies developed by Fulcrum Acoustic founder, David Gunness. TQ (temporal equalization) processing is a highly precise application of DSP, exploiting optimized Finite Impulse Response (FIR) filters to fine-tune loudspeaker performance. TQ processing results in natural-sounding spectral balance; a pleasing aesthetic balance between highly transient sources (such as percussion instruments) and less transient sources (such as human voice); uncolored vocals; and excellent intelligibility.