

VERA C48

4-Input / 8-Output Professional Loudspeaker Management Processor



4 × 8 ANALOG I/O	96 kHz SAMPLE RATE	24-bit A/D-D/A	32-bit FLOATING DSP	1U RACK FORMAT
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Professional System Control

The VERA C48 combines high-resolution signal processing, flexible source management, advanced FIR correction, loudspeaker protection and centralized control in a compact 1U chassis. It is designed for professional live sound and fixed installations that require precise tuning, repeatable deployment and locked system presets.

Core Features

HIGH-CAPACITY FIR

Four 1,280-tap input filters plus eight 2,048-tap speaker-output filters, with integrated FIR Designer workflow.

DEEP CHANNEL PROCESSING

Input gate, compressor, expander, 15-band PEQ and 3-band dynamic EQ; 10-band output PEQ plus protected speaker processing.

FLEXIBLE CONTROL

Front-panel operation, MConsole 3.0 for Windows, integrated WebCon browser control, USB, Ethernet and serial connectivity.

SOURCE CONTINUITY

One primary and two backup sources per input channel with automatic priority switching.

LOUDSPEAKER PROTECTION

Crossover, FIR, 15-band PEQ, dynamic EQ, delay, compressor and limiter with amplifier gain matching on each speaker output.

SECURE PRESET WORKFLOW

79 device presets and a protected speaker library for up to 1,024 model-specific presets, with import, export and locking.

Processing Architecture

INPUT	FIR	ROUTING	OUTPUT	SPEAKER
Source priority + dynamics + EQ + delay	1,280 taps per input	Dual matrix architecture	Gain + 10-band PEQ + delay	FIR + crossover + protection

SOFTWARE ROADMAP

Auto EQ is in software development and currently being integrated into the VERA control platform. This functionality is not yet released.

TYPICAL APPLICATIONS

Touring systems, performance venues, houses of worship, theaters, auditoriums, clubs and fixed installations.

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SYSTEM ARCHITECTURE	
Processor type	4-input / 8-output professional loudspeaker management processor
Processing	ADI SHARC 21569 platform; 32-bit floating point; 96 kHz; 24-bit A/D and D/A
System latency	Approximately 2.0 ms, analog input to analog output, excluding user delay and FIR latency
FIR capacity	Inputs: 4 × 1,280 taps; speaker outputs: 8 × 2,048 taps
AUDIO INPUTS AND OUTPUTS	
Analog inputs	4 balanced female-XLR line inputs; 20 kΩ impedance; +20 dBu maximum
Analog outputs	8 balanced male-XLR line outputs; 50 Ω impedance; +20 dBu maximum
Digital input	4-channel AES/EBU input, selectable on input XLR connectors
AUDIO PERFORMANCE	
Frequency response	20 Hz–20 kHz, ±0.5 dB
Signal-to-noise ratio	113 dB at +20 dBu, 1 kHz, A-weighted
Noise / distortion / separation	Residual noise –93 dBu; THD+N –92 dB; channel separation –100 dB
SIGNAL PROCESSING	
Input processing	Source priority, gate, compressor, expander, 15-band PEQ, HPF/LPF, 3-band dynamic EQ, delay and FIR
Routing and output	4 × 4 plus 4 × 8 matrices; gain, polarity, mute, 10-band PEQ and delay
Speaker processing	FIR, 15-band PEQ, HPF/LPF, 3-band dynamic EQ, delay, compressor and limiter
Filters and delay	Butterworth, Bessel, Linkwitz–Riley and specialty filters; up to 48 dB/octave; 2,000 ms per delay stage at 0.01 ms resolution
PRESETS, CONTROL AND CONNECTIVITY	
Preset capacity	79 device presets plus protected speaker library for up to 1,024 presets
User interface	Dual color IPS displays; encoder; input/output meters; edit and mute controls
Software and connections	MConsole 3.0 and WebCon; USB Type B, Ethernet/TCP-IP control, RS-232, RS-485 and GPIO
Protection	Password-protected panel lock, preset lock and speaker-preset lock
ELECTRICAL AND PHYSICAL	
Power supply	AC 100–240 V, 50/60 Hz
Operating temperature	–20 °C to +60 °C (–4 °F to 140 °F)
Dimensions (W × D × H)	483 × 276 × 44.5 mm (19.0 × 10.9 × 1.75 in); 1U
Net weight	3.6 kg (7.9 lb)

Specifications are subject to change without notice. Final released software functionality may vary by version.

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