

DSP / Matrix Processor

Model List

- SMS 24 | Loudspeaker Management System
- SMS 36 | Loudspeaker Management System
- SMS 48 | Loudspeaker Management System

Product Introduction

The SMS Series Loudspeaker Management System is a high-performance DSP processor supporting multi-channel analog signal routing. Easily controlled via USB or IP, the user-friendly PC interface provides intuitive control. Input channels feature 5-band DEQ, 31-band GEQ, and 15-band PEQ, while output channels include 15-band PEQ with FIR functionality, limiters, and noise gates. With 30 factory presets and customizable configurations, it caters to diverse audio systems. Powered by the ADSP-21571 DSP processor and AK5552 A/D converter, it ensures high-resolution signal processing with a 118dB SNR. The AD1955 DAC provides 24-bit, 192kHz output with a 120dB SNR, meeting the demands of mainstream audio playback.

Key Features

- Multi-channel analog signal routing with 2x4, 3x6, and 4x8 balanced I/O configurations.
- ADSP-21571 500MHz dual-core SHARC+ processor with 32/40/64-bit floating-point processing.
- AK5552 A/D converter with 768kHz sampling rate and 32-bit width.
- AD1955 DAC providing 24-bit, 192kHz output with 120dB signal-to-noise ratio.
- Input processing includes 5-band DEQ, 31-band GEQ, and 15-band PEQ.
- Output processing features 15-band PEQ with FIR functionality, limiters, and noise gates.
- 30 factory presets with customizable configurations via USB or IP network control.
- Dynamic range >116dB with total harmonic distortion under 0.003% at +4dBu.
- Adjustable input and output gain range from -80dB to +12dB.
- Standard 1U rack-mountable design with dimensions of 483 x 205 x 45 mm.



SMS 24



SMS 36



Software Included



SMS 48

Technical Specification

	SMS 24	SMS 36	SMS 48
Input Channels	2 (Balanced)	3 (Balanced)	4 (Balanced)
Output Channels	4 (Balanced)	6 (Balanced)	8 (Balanced)
Frequency Response	20Hz-20kHz@+4dBu (+0/-0.3dB)	20Hz-20kHz@+4dBu (+0/-0.3dB)	20Hz-20kHz@+4dBu (+0/-0.3dB)
Total Harmonic Distortion	<0.003%	<0.003%	<0.003%
Signal-to-Noise Ratio	110dB A-weighted	110dB A-weighted	110dB A-weighted
Dynamic Range	>116dB	>116dB	>116dB
Max Gain (Input to Output)	48dB	48dB	48dB
Max Delay (Input to Output)	750ms	750ms	750ms
Channel Separation	>80dB (Between channels @1kHz)	>80dB (Between channels @1kHz)	>80dB (Between channels @1kHz)
Common Mode Rejection Ratio	60Hz >100dB @+20dBu	60Hz >100dB @+20dBu	60Hz >100dB @+20dBu
Input Impedance	Balanced: 20K / Unbalanced: 10K	Balanced: 20K / Unbalanced: 10K	Balanced: 20K / Unbalanced: 10K
Output Impedance	Balanced: 100Ω / Unbalanced: 50Ω	Balanced: 100Ω / Unbalanced: 50Ω	Balanced: 100Ω / Unbalanced: 50Ω
Max Input Level	+20dBu	+20dBu	+20dBu
Max Output Level	+20dBu	+20dBu	+20dBu
Input Gain Range (Adjustable)	-80dB ~ +12dB	-80dB ~ +12dB	-80dB ~ +12dB
Output Gain Range (Adjustable)	-80dB ~ +12dB	-80dB ~ +12dB	-80dB ~ +12dB
A/D Chip	AK5552	AK5552	AK5552
A/D Sampling Rate	768kHz	768kHz	768kHz
A/D Converter Bit Width	32bit	32bit	32bit
D/A Chip	AD1955	AD1955	AD1955
D/A Sampling Rate	192kHz	192kHz	192kHz
D/A Converter Bit Width	24bit	24bit	24bit
DSP Chip	ADSP-21571	ADSP-21571	ADSP-21571
DSP Frequency	500MHz	500MHz	500MHz
DSP Bit Width	32/40/64-bit Floating Point, Dual-core SHARC+ ARM Cortex-A5TM	32/40/64-bit Floating Point, Dual-core SHARC+ ARM Cortex-A5TM	32/40/64-bit Floating Point, Dual-core SHARC+ ARM Cortex-A5TM
Power Consumption	220V 22W	220V 22W	220V 22W
Screen	LCD Display	LCD Display	LCD Display
Dimension (W x H x D)	483 x 205 x 45 mm	483 x 205 x 45 mm	483 x 205 x 45 mm
Weight	2.38 kg	2.4 kg	2.45 kg