



SDP-25 Surround Processor



SYNTHESIS®
by HARMAN



HIGH-PERFORMANCE AUDIO VIDEO SURROUND SOUND PREAMPLIFIER PROCESSOR

The JBL Synthesis® SDP-25 Surround Processor

The JBL® name represents a long, proud history of invention, insight, and setting one industry standard after another. For over 67 years, JBL has brought the joy of sound to people around the globe, with products demanded by those seeking only the very best.

The expertise accumulated along the way is why JBL Synthesis gives your home theater the audio sophistication sought by directors, actors, recording artists, touring musicians, and others. In a JBL Synthesis home theater, you will discover a showcase of audio perfection. Backed by decades of award-winning engineering innovation offering uncompromised, realistic sound that is revered by professionals and purists alike, JBL Synthesis systems deliver the ultimate in performance.

OVERVIEW

The SDP-25 is a high-quality surround processor that is ideally suited for moderately-priced systems while still maintaining the iconic sound quality that is inherent in every JBL Synthesis product. Offering exceptional versatility and superb ease of use, the SDP-25 sets a new standard of value for surround processors.

FEATURES

Six HDMI™ Inputs and Two HDMI Outputs

Six HDMI inputs with one on the front panel and two independent HDMI outputs with 4K Ultra HD and 3D plus on-screen HDMI view offering flexibility for video switching.

7.1-Channel Surround-Sound Audio Capability with High-Resolution Sound Format Capabilities

With dual subwoofer outputs the SDP-25 is highly-suited to bring a movie soundtrack to life. It also tackles all high-resolution audio formats including Dolby® TrueHD, DTS-HD Master Audio™, and other Dolby Digital and DTS Surround Modes. The easy-to-access USB input enables connection to a computer, and the SDP-25's 7.1 Direct and Stereo Direct Modes provide a signal path with minimal audio circuitry for listening to high-resolution analog music sources.

Multiple Inputs

The SDP-25 has a host of inputs including two composite and two component video inputs, seven analog, five optical, five coaxial digital audio inputs plus a dedicated 7.1 multichannel input, USB audio input and a front panel 3.5 mm auxiliary audio input.

Ease of Operation

The SDP-25 provides a RS-232 port, IR inputs and outputs, and trigger inputs and outputs to enable interfacing with other JBL Synthesis components, automation and control systems.

Performance

The SDP-25 provides comprehensive setup and adjustment options for optimum performance in any system either when used with our SDEC Room Equalization system or in stand-alone operation. With included bass-management for all program sources and types of speaker setups, individual level and delay adjustment for each channel, a selection of 7.1-channel and 2-channel and DSP surround-enhancement modes, and many additional features, the SDP-25 comes fully-equipped for various applications. Its black brushed-aluminum front panel complements any custom home entertainment installation.

HIGHLIGHTS

- Full suite of home theater audio formats
- Extensive connectivity options for every audio and video source
 - Six HDMI inputs, including one on the front panel
 - Two HDMI outputs, including one with ARC capability
 - Composite and component video inputs for use with legacy video sources
 - Five each optical and coaxial digital audio inputs and two each outputs
 - 7.1 Direct audio inputs
 - USB Audio input
- Flexible control options including full-featured remote control, RS-232 and IR blaster connections
- Software upgradeable via USB connection
- Removable IEC power cord



SPECIFICATIONS

GENERAL

A/D Conversion	24-bits, up to 192 KHz Delta-Sigma, 114 dB DR, -100 dB THD+N
D/A Conversion	24-bits, up to 192 KHz Delta-Sigma, 114 dB DR, -100 dB THD+N
DSP Engine	Dual TI TMS320D
Power Supply	Separate off-line standby SMPS and Main linear power supply with low stray fields R-Core

MAIN ZONE AUDIO PERFORMANCE

Frequency Response	20 Hz to 20 KHz \pm 0.25 dB
Low Frequency Cutoff	<10 Hz (All speaker channels in Bypass mode)
High Frequency Cutoff	>200 KHz (All speakers in Bypass mode, -3 dB point)
THD + Noise	<0.007 Digital in - DSP Mode; <0.015% Analog in - Bypass and DSP modes 1 KHz at 1.0 Vrms
Signal-to-Noise Ratio	90 dB in DSP Modes; 100 dB in 2CH Bypass mode; 22 KHz bandwidth, Reference 1 KHz at 2 Vrms
Crosstalk	<72 dB
Input Level	2 Vrms in DSP Mode; 4 Vrms in Bypass mode
Input Impedance	47 K Ohms
Output Level	4 Vrms
Output Impedance	480 Ohms
Bass Management	2nd order HP filter (x7), 4th Order LP Filter 40 - 200 Hz Crossover Frequency

HDMI INPUT AND OUTPUT CONNECTORS AND PERFORMANCE

HDMI Inputs	6 HDMI Type A (19-pin) connectors
HDMI Outputs	2 HDMI Type A (19-pin) connectors
Video Resolution	HDMI v2.0 300 MHz supporting 4K x 2K, 1080p60 and 1080p60 3D resolutions 4K resolution at 30 fps, 8 Bit YCbCr 4:2:0
Audio Resolution	Up to 7.1 Channels and 192 KHz sample rate 24 bits depth ARC Supported on HDMI output 1 Internal decoding of HDMI 2.0 audio formats, including: Dolby True HD, DTS-HD Master audio, DVD Audio
Control	Consumer Electronics Control (CEC) ^b

AUDIO INPUT AND OUTPUT CONNECTORS

Analog Audio Inputs	5x stereo single ended/pairs 7.1 Inputs single ended (Left, Center, Right, Left Surround, Right Surround, Left Back, Right Back, Sub) 1x 3.5mm stereo (Front input)
Digital Audio Inputs	6x HDMI 5x Coaxial (RCA) 75 Ohms (SPDIF) 5x Optical (TOSLINK) 1x USB 2.0 Type B
Analog Outputs	2x Stereo single ended/pairs (Audio 1 and 2) 9x Outputs single ended (Left, Center, Right, Left Surround, Right Surround, Left Back, Right Back, Sub1, Sub2)
Digital Outputs	1x HDMI 2x Coaxial (RCA) 75 Ohms (SPDIF) 2x Optical (TOSLINK)

VIDEO INPUT CONNECTORS (LEVELS AND IMPEDANCE)	
Composite	2x (RCA) 1Vp-p / 75 Ohms
Component	2x (RCA) Component video sets of inputs (Y, Cb, Cr) Y 1Vp-p / 75 Ohms Cb/Cr 0.75Vp-p / 75 Ohms Pb/Pr 0.75Vp-p / 75 Ohms

DATA AND CONTROL PORTS	
Trigger Outputs	2x, Trigger A & B (Trigger B – programmable)
IR Remote Control	Front panel IR sensor 1x Slide switch (Front panel IR sensor On/Off) 5x 3.5mm Jacks (1 Receiver in, 1 Flasher In, 3 Outputs)
USB	1x USB Type A, for upgrade purposes only
RS-232	1x 9-pin DB9 Male, for control and system feedback

ELECTRICAL SPECIFICATIONS	
Power	120 VAC and 230 VAC
Maximum Power Consumption	20 Watts
Standby Power Consumption	<0.5 Watts

PHYSICAL SPECIFICATIONS	
Dimensions	17-5/16" x 15"D (Not including knobs & connectors or rack ears) 5.25"H (Not including rubber feet) 19"W x 16-9/32"D (Including knobs & Connectors)
Rack Mount	19"W Standard Rack Mount width 3RU High without rubber feet
Weight	Approx. 19.5 lbs (8.86 kg)
Environmental	50 degree Celsius maximum Relative Humidity: 95% maximum without condensation



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