

# JBL Synthesis SDP-58

HDMI 2.1 Immersive Surround Sound Processor



SYNTHESIS®



## JBL Synthesis – Your turnkey solution to the ultimate private cinema experience and beyond

JBL has a legacy of excellence in sound reproduction that goes back 75 years. The leading choice for music and movie industry professionals and connoisseurs alike, JBL loudspeakers and technology are featured in more than 50 percent of all movie theaters, and are used in concert venues worldwide.

The JBL Synthesis SDP-58 is designed to ensure exceptional performance without compromise. With best-in-class audio and video signal integrity, 16 channels of native processing, Dolby ATMOS®, DTS:X®, Auro 3D®, IMAX® Enhanced, Dirac Live®, Logic16™, Network Streaming and DANTE®, the JBL Synthesis SDP-58 delivers a powerful, sensory-rich experience with unrivaled flexibility.

The very latest HDMI standard is included in the SDP-58, with all inputs and outputs meeting HDMI 2.1 standard. All signal paths have a bandwidth of 40Gbps, with resolutions up to 8K at 60fps, and frame rates up to 120fps supported for the latest high-resolution gaming platforms at 4K. At the same time the SDP-58 is backwards compatible with earlier HDMI generations.

Play your favorite music over Ethernet or Wi-Fi with Chromecast® built-in, Apple® AirPlay 2™, Roon®, the Harman MusicLife app, or via Bluetooth with aptX®HD.

An internal configuration page, integrated DANTE, IP, IR, and RS232 control and an independent Zone 2 make the SDP-58 an outstanding choice for a broad range of applications.

# JBL Synthesis SDP-58

HDMI 2.1 Immersive Surround Sound AV Processor

JBL

SYNTHESIS®



## Features

### Latest HDMI 2.1 specification

Supports ultra high video resolutions of up to 8K@60fps and 4K@120fps. High Dynamic Range including Dolby Vision, HDR10+, HDR10, HLG, as well as 3D video are supported. All HDCP versions up to & inc HDCP 2.3. HDMI eARC and CEC supported.

### Immersive High Resolution Sound

16 channels of discrete high resolution processing with 4 user configurable channels enable a plethora of set up options for Dolby Atmos, DTS:X and Auro 3D immersive surround sound applications.

### Dirac Live with Bass Control

The interaction between your sound system and the physical layout of your room has a huge impact on sound quality. Dirac Live Room Correction applies state-of-the-art, patented algorithms to analyze and digitally reduce room impact and enhance speaker performance.

### Balanced XLR Outputs

The SDP-58 includes a transformerless balanced output with max 10V RMS for each of the 16 output channels to ensure ample gain with common mode noise rejection.

### DANTE Network Audio

Bridge the gap between residential and commercial applications. All 16 channels of processed audio can be routed on a single CAT5e or CAT6 cable over a standard IP network. DANTE is easy to set up and compatible with DANTE enabled JBL Synthesis amplifiers.

### Network and Bluetooth Streaming

Play your favorite music over Ethernet or Wi-Fi with Chromecast built-in, Apple AirPlay 2, Roon, the Harman MusicLife app, or via Bluetooth with aptX HD.

### Designed for the Integrator

With a rack mount kit (sold separately), DANTE, eARC and an internal configuration page, Dirac Live with Multi-sub Bass Control, IP and RS232 control, the install, set up, and calibration has never been easier.

### Logic 16

Logic 16 will up-mix any input source from mono up to 15.1, including all Dolby formats with natural astonishing 3D sound. In addition, Dolby, DTS Neural:X, and Auro-3D upmixers are on board.

## Specifications

### Stereo line inputs

- ▶ Maximum input: 4.5Vrms
- ▶ Nominal sensitivity: 1V, 2V, 4V (user adjustable)
- ▶ Input impedance: 47k $\Omega$
- ▶ Signal/noise ratio (A-wtd ref 100W) normal/ stereo direct: 100dB/110dB
- ▶ Frequency response: 20Hz–20kHz  $\pm$  0.1dB

### Preamplifier outputs

- ▶ Single-Ended nominal output level: 1V RMS (max. 5V RMS)
- ▶ Balanced nominal output level: 2V RMS (max. 10V RMS)
- ▶ THD+N (20Hz–20kHz): -100dB

### Headphone output

- ▶ Maximum output level into 32 $\Omega$ : 5Vrms
- ▶ Recommended headphone impedance: 16 $\Omega$ –64 $\Omega$

### General

- ▶ Mains voltage: 110–120V or 220–240V, 50–60Hz
- ▶ Power consumption (maximum): 50kW (Thermal dissipation approx. 170 BTU/hour)
- ▶ Power consumption (idle, typical): 40W (Thermal dissipation approx. 170 BTU/hour)
- ▶ Power consumption (standby): <0.5W
- ▶ Dimensions: W x D (including speaker terminals) x H (including feet): 17 x 16.7 x 6.7" (433 x 425 x 171mm)
- ▶ Weight (net): 23.4lbs (10.7kg)
- ▶ Weight (packed): 30.6lbs (14.0kg)