

**Features**

- Dirac Live® 3 Room Correction
- Room Ready network player
- 32bit/96 kHz processing
- Floating point DSP

**Hardware**

- 450MHz SHARC DSP
- Multicore XMOS Controller
- Quad Core ARM
- Stereo digital inputs and outputs (AES-EBU/SPDIF/Optical)
- Balanced and unbalanced analog I/O (two in, four out)
- Front panel volume control and OLED display
- IR control with learning feature

**Software Control**

- miniDSP DSP control toolbox
- Volumio Network Audio player
- Firmware upgradeable
- 4 onboard preset memories

**Applications**

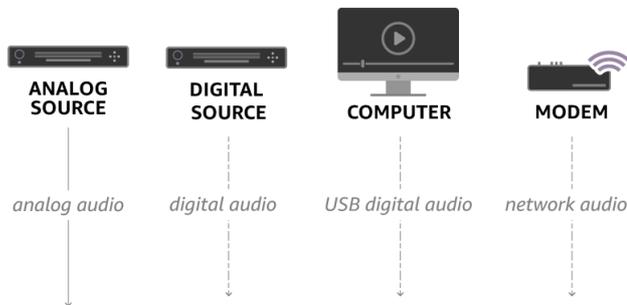
- Stereo room correction
- Subwoofer integration
- Active speakers
- Studio tuning

miniDSP is proud to introduce the SHD (“Streaming High Definition”) digital audio processor incorporating Dirac Live®, the world’s premier room correction solution. A natural evolution and extension of our considerable experience with Dirac Live implementation, the miniDSP SHD heralds a new era in affordable yet powerful DSP-based network streamers.

The miniDSP SHD is a certified Room Ready network player. Being Room Ready means that miniDSP uses Room streaming technology, for an incredible user interface, simple setup, rock-solid daily reliability, and the highest levels of audio performance, without compromise. The quad-core streaming processor in the SHD also runs Volumio, a popular open-source network streamer, providing web-based access to music files from sources as diverse as a USB stick to Internet Radio and Spotify.

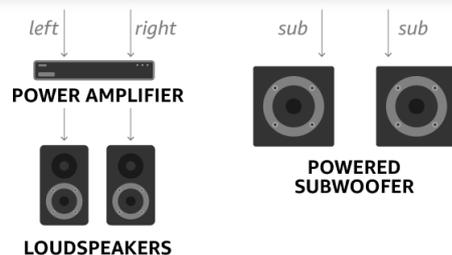
The SHD has extensive connectivity options. Three digital inputs, two analog inputs and USB Audio enable the SHD to fit right into any modern audio system. The four-channel DSP-controlled outputs are available as single-ended (RCA) and balanced (XLR) analog as well as SPDIF digital.

In addition to Dirac Live, the miniDSP SHD includes a full suite of our powerful but user-friendly DSP audio tuning software - ten-band parametric EQ per channel, crossovers up to 48 dB/octave, compressor/limiter, and a flexible 2x4 matrix mixer — for powerful audio system tuning in applications ranging from subwoofer integration to a two-way active speaker.

**TYPICAL APPLICATION****SHD**

Powered by

**DIRAC Live**  
ROOM READY  
VOLUMIO



## HARDWARE SPECIFICATIONS

Item	Description
Digital Signal Processor	32-bit Floating point Analog Devices SHARC ADSP21489 / 450MHz Internal sample rate: 96kHz
Control	Driverless USB 2.0 control interface for Windows environments A computer is only required for the initial configuration and for USB audio streaming
Network Audio Streamer	Certified Room Ready network player, Volumio Audiophile player, Quad Core ARM processor, Gb Ethernet, USB 2.0 for external Hard drive
Bidirectional USB Audio	XMOS asynchronous USB audio up to 192 kHz, USB Audio Class 2 compliant <ul style="list-style-type: none"> <li>ASIO drivers for Windows</li> <li>Driverless for Mac OS X</li> <li>Bidirectional audio / 2ch playback (PC to SHD), 4ch recording post processing (SHD to PC)</li> </ul>
Digital Audio Inputs	Digital audio source selectable from IR remote or Front panel, up to 216 kHz sample rate: <ul style="list-style-type: none"> <li>AES/EBU on Neutrik 3pin female XLR / Isolated with digital audio transformer</li> <li>SPDIF on RCA connector / Isolated with digital audio transformer</li> <li>TOSLINK on Optical connector</li> </ul>
Digital Audio Outputs	Four channels of digital output. <ul style="list-style-type: none"> <li>2 x SPDIF on RCA connector / Isolated with digital audio transformer.</li> </ul>
Analog Audio inputs	2-channel audio input, balanced XLR Neutrik connector, unbalanced on RCA 32bit AKM AK5574 ADC / 120dB SNR measured / 0.0003% THD+N (Balanced Analog to Digital) Max input level: 2V RMS unbalanced, 4V RMS balanced Input impedance: 47k Ohms (RCA) / 48k Ohms (XLR)
Analog Audio outputs	4-channel audio output, balanced XLR Neutrik connector, unbalanced on RCA 32bit ESS9028 DAC / 120dB SNR measured / 0.0003% THD+N (Digital to balanced analog) Max output level: 2V RMS unbalanced, 4V RMS balanced Output impedance: 100 Ohms (RCA) / 200 Ohms (XLR)
miniDSP DSP Processing	Volume, Parametric Equalizer banks, Crossovers, Matrix mixer, Compressor/Limiter, Mute
Dirac Live 3 room correction	Plug&Play control and configuration from Dirac Live application, full-range stereo processing
Filter storage	Four onboard presets, selectable by remote control
USB port	USB port type B for audio streaming, real time control and firmware upgrade
Power supply	110-240V AC
Dimensions (H x W x D) mm	41.5 x 429 x 236 mm

## MECHANICAL SPECIFICATIONS

