

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

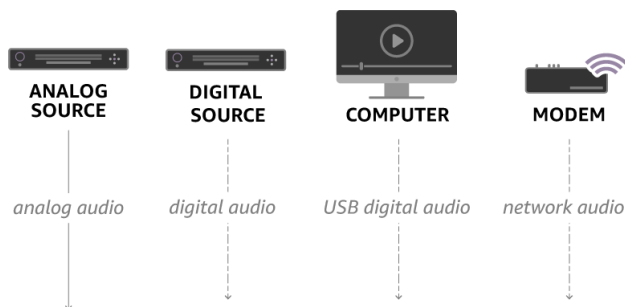
- Stereo room correction
- Subwoofer integration
- Active speakers
- Studio tuning

miniDSP proudly presents the SHD (“Streaming High Definition”), a next-generation digital audio processor built around Dirac Live®, the industry’s leading room-correction technology. Drawing on years of experience integrating Dirac Live across our platforms, the SHD represents a major step forward in powerful, accessible DSP-based network streaming.

As a certified Room Ready device, the SHD delivers seamless integration with Roon’s streaming ecosystem — offering an exceptional user experience, effortless setup, rock-solid reliability, and uncompromised audio performance. Its quad-core streaming engine also runs Volumio, giving you intuitive, web-based access to local music libraries, USB storage, Internet Radio, and streaming services such as Spotify, Tidal, and Qobuz.

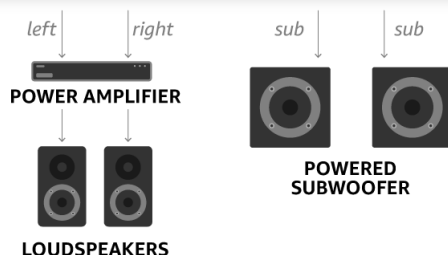
Connectivity is extensive: three digital inputs, two analog inputs, and USB Audio ensure the SHD fits naturally into any modern audio system. Four DSP-controlled output channels are available on both single-ended (RCA) and balanced (XLR) analog connections, as well as SPDIF digital output.

Beyond Dirac Live, the SHD includes the full suite of miniDSP’s powerful yet user-friendly DSP tools — ten-band parametric EQ per channel, crossovers up to 48 dB/octave, compressor/limiter, and a flexible 2x4 matrix mixer — enabling precise system tuning for everything from subwoofer integration to advanced active loudspeaker setups.

**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 Roon 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 - ASIO drivers for Windows - Driverless for Mac OS X - Bidirectional audio / 2ch playback (PC to SHD), 4ch recording post processing (SHD to PC)
Digital Audio Inputs	Digital audio source selectable from IR remote or Front panel, up to 216 kHz sample rate: - AES/EBU on Neutrik 3pin female XLR / Isolated with digital audio transformer - SPDIF on RCA connector / Isolated with digital audio transformer - TOSLINK on Optical connector
Digital Audio Outputs	Four channels of digital output. 2 x SPDIF on RCA connector / Isolated with digital audio transformer.
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 AKM AK4490EQ 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

