minidsp

miniDSP 4x10 Hd

Hardware
- 172MHz - 28/56bit DSP path
- 24bit ADC / DAC
- 114dB SNR ADC IC & DAC IC
- Balanced/Unbalanced analog Inputs and Outputs
- SPDIF/AES-EBU/Toslink Input with Sample Rate Converter (ASRC)
- SPDIF + AES-EBU + Toslink output

External control
- Front panel volume control through rotary encoder
- I.R. remote control for Master volume control and preset recall

Software Control
- USB 2.0 interface
- Plug&Play - No driver required
- WinXP/Vista/7 & Mac compatible
- Firmware upgradeable for future expansion

Power
- Single external universal 12VDC power supply

Applications
- Multi-way speaker processing
- Audio processor for Home/ProAV
- Mobile Audio

miniDSP 4x10 Hd is a versatile multi-channel Digital Signal Processor (DSP) for analog and digital audio sources. Combining high quality audio algorithms along with a flexible software configuration, this platform follows the footsteps of our successful line of processors. With its balanced & un-balanced analog & digital audio I/O, the platform easily fits in the audio chain of most systems. Engineered for durability, the platform is packaged in a sturdy powder coated steel enclosure. The removable rack ears and thick brushed aluminum front panel match the needs of consumer (Home AV) or commercial (ProAV) installs.

Finally, miniDSP 4x10 ranks high on versatility thanks to our unique product concept of audio plug-ins: 'a single hardware platform for many applications'. From a multi-way speaker crossover unit to multi-channel equalizer, the unit is easily configured real time from the Mac/Windows control interface. Once the unit configured, no computer is required anymore and the control of presets, master volume and digital source selection is available from the front panel encoder or Infrared (I.R) receiver.

miniDSP: innovative Digital Audio Processors

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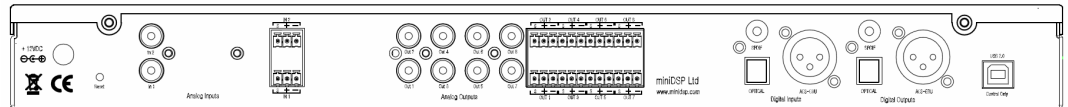
miniDSP 4x10 System Diagram
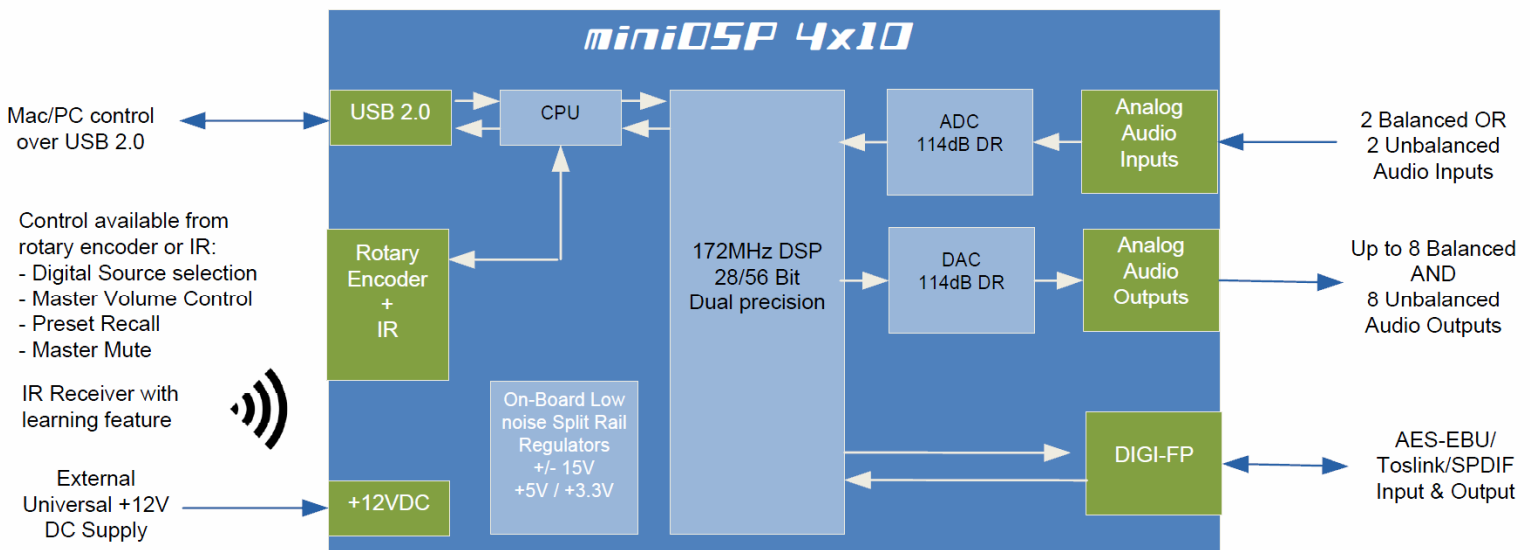
HARDWARE TECHNICAL SPECIFICATIONS

Item	Description
Digital Signal Processor	172MHz, 28/56bit Digital Signal Processor
Control	Driverless USB 2.0 control interface for Windows/Mac OS x environments
Audio inputs	2 x Balanced (Terminal Block) or 2 x Unbalanced (RCA) inputs 114dB ADC IC
Audio outputs	8 x Balanced (Terminal Block) and 8 Unbalanced (RCA) outputs 114dB DAC IC
ADC/DAC Resolution	24bits - Available in 48kHz or 96kHz version depending on plug-in
Maximum Input signal	Unbalanced Input (RCA): 2Vrms (+8 dBu) Balanced Input (Terminal block): 4Vrms (+14 dBu) or 8Vrms (+20dBu) based on input jumper configuration. See user manual.
Maximum Output signal	Dip switch on motherboard attenuates outputs by 6dB (RCA & Terminal blocks) Unbalanced outputs (RCA): 2Vrms (+8 dBu) or 0.9Vrms Balanced outputs (Terminal block): 4Vrms (+14 dBu) or 8Vrms (20dBu)
Digital Audio inputs	1 x SPDIF on RCA connector, transformer isolated 1 x Optical input on Toslink connector 1 x AES-EBU on balanced XLR Neutrik connector, transformer isolated
Digital Audio outputs (all active)	1 x SPDIF on RCA connector, transformer isolated 1x Optical outputs on Toslink connector 1x AES-EBU on balanced XLR Neutrik connector, transformer isolated
Sample rate converter	Up/Down sample digital audio input signal to the correct plug-in sample rate (48/96kHz) based on the loaded plug-in. Up to 216kHz sample rate.
Rotary Encoder	Front Panel rotary encoder for Master volume control (all output channels)
Infrared Red (I.R) receiver	Front panel I.R. receiver controls volume, mute, source selection and preset recall
USB Control	USB type B connector
Rack mounting	Removable rack mount ears pre-installed
Power supply	External 12VDC universal power supply (25W)
Dimensions (H x W x D) mm	41.5 x 429 x 252 mm - 1RU height

Front & Rear Panel diagram