miniDSP

Features
- Floating point SHARC DSP
- Flexible and powerful multichannel audio processor
- Dirac Live 3.x upgrade option
- Class-leading analog I/O noise and distortion specifications
- Full suite of miniDSP processing
- Upgradeable with Dirac Live

Hardware
- ADI ADSP21489 @400MHz
- Multichannel USB audio (8ch)
- EARC/ARC HDMI input (8ch PCM)
- 8ch AD/DA with audiophile specs
- SPDIF/optical stereo inputs
- OLED front panel with IR control
- 12V trigger output

Software Control
- Real time live control
- Win & Mac compatible
- Firmware upgradeable
- 4 preset memories
- CEC control from TV

Applications
- Home theater
- PC based multichannel audio
- Low latency gaming
- Subwoofer integration

The **Flex HTx** is the bigger brother of the Flex HT, targeting the need for a multichannel processor with HDMI ARC/eARC capabilities and stellar analog and USB audio capabilities. Within a single rack unit, we packed all the possible connectivity we could fit.

Eight-channel audio input is via analog audio (RCA and TRS), eARC linear PCM over HDMI[1], or USB Audio. Additional digital stereo input is supported over SPDIF and TOSLINK optical. Internally, we've provided a full suite of miniDSP's flexible routing and audio processing features: bass management, parametric EQ, crossovers, advanced biquad programming and delay/gain adjustments. In addition, the miniDSP Flex HTx is software-upgradable with full-frequency Dirac Live®, the world's premiere room correction system.
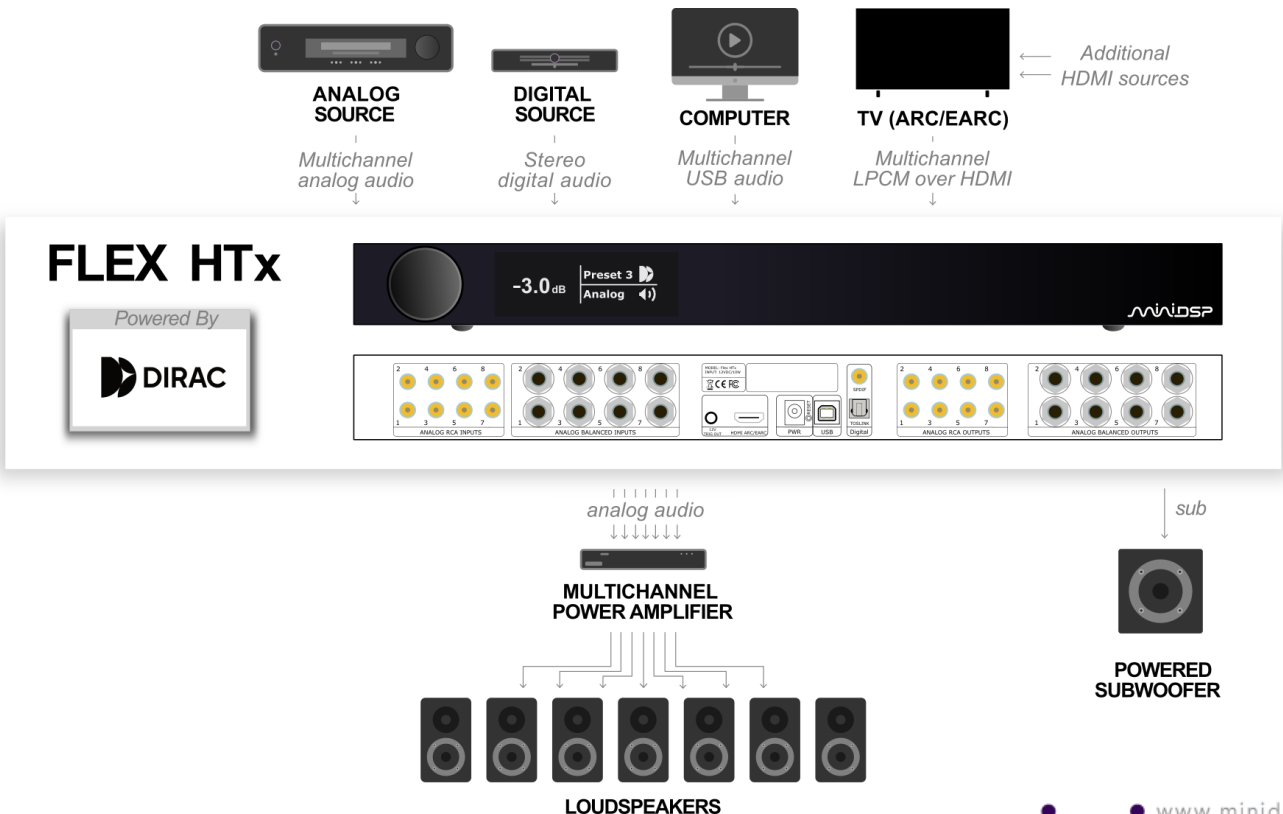
Continuing miniDSP's focus on affordable high-performance audio, the Flex HTx features class-leading low noise and distortion figures. An OLED front panel display and volume control/encoder knob provides easy control.

The **miniDSP Flex HTx** is the perfect solution for a modern compact processor for home theater and multichannel sound.

1. The Flex HT does not support bitstream (e.g. Dolby/DTS) decoding. The audio source must be able to output linear PCM (LPCM) for multichannel support over HDMI.

TYPICAL APPLICATION

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TECHNICAL SPECIFICATIONS

	Description	
Digital Signal Processing Engine	Analog Devices Floating point SHARC DSP: ADSP21489 @ 400MHZ	
Processing resolution / Sample rate	32 bit/48 kHz	
USB Audio support	UAC2 Audio - ASIO driver provided (Windows) - Plug&Play (Mac/Linux) Multichannel USB Audio interface (8ch) for up to 7.1 configurations / 32bit / 44.1~96kHz	
Input/Output DSP structure	8ch IN (USB/HDMI/Analog) or 2ch IN (Toslink/SPDIF) => DSP => 8 channels OUT (Analog)	
Digital Stereo Audio Input Connectivity	1 x SPDIF (stereo) on RCA connector, 1 x OPTICAL (stereo) on Toslink connector Supported sample rates: 20 – 216 kHz / Stereo source will be automatically assigned to Input 1&2	
HDMI connectivity	ARC/EARC compliant for up to 8ch of LPCM audio streaming Supported sample rates: 32 – 96 kHz / Supported sample sizes: 16-24bits **WARNING**: No onboard Dolby/DTS decoding. Use your source (E.g. TV) to output in PCM mode.	
	Balanced 6.35mm TRS	**Unbalanced RCA**
Analog Audio Input Connectivity	8 x Balanced TRS	8 x Unbalanced RCA
Analog Audio Input Impedance	200 kΩ	100 kΩ
Analog Audio Output Impedance	300 Ω	150 Ω
Analog Input/Output Max Level	4 Vrms/4 Vrms	2 Vrms/2 Vrms
Frequency Response	20 Hz – 20 kHz ± 0.1 dB	20 Hz – 20 kHz ± 0.1 dB
Digital to Analog (input 1 kHz, 0 dBFS) / AES17 20kHz LPF		
SNR	127 dB(A)	124 dB(A)
THD+N / SINAD	-120 dB (0.0001 %) / 120dB SINAD	-117 dB (0.00014 %) / 117dB SINAD
Crosstalk	-132 dB	-120dB
TRS Analog to Analog (input 1 kHz, 4 V RMS) / AES17 20kHz LPF		
SNR	120 dB(A)	118 dB(A)
THD+N / SINAD	-114 dB (0.0002 %) / 114dB SINAD	-112 dB (0.00025 %) / 112dB SINAD
Crosstalk	-130 dB	-120 dB
Filtering Technology	miniDSP DSP toolbox (routing, bass management, parametric EQ, crossover, gain/delay). Optional software upgrade to multichannel Dirac Live® 3.x Full Range correction (20 Hz – 20 kHz)	
DSP Presets	Up to 4 presets	
Dimensions (HxWxD)	41.5 x 429 x 236 mm	
Accessories	IR Remote	
Power Supply	Included external switching Power Supply 12V/1.6A (US/UK/EU/AU plugs)	
Trigger out	12V trigger out controls external ON/OFF powering of amplifiers, 3.5mm jack	
CEC control	HDMI CEC command for Mute/Volume/Standby	
Power Consumption	16.5 W (idle) 3.7 W (standby)	