

Headphone Amplifiers

ProAudio





Phonitor 3 DAC



The headphone amplifier, monitoring controller and DAC with 120V technology

Phonitor 3 DAC is not only the ultimate headphone amplifier and monitoring controller with 120V technology – the integrated DAC makes it the perfect monitoring centerpiece for demanding producers as well as sound and mastering engineers working with digital sources or in the DAW.

Whether if USB, AES/EBU or S/PDIF – the integrated DAC with analog

Expansion Rack – Rackmount for Phonitor 3 DAC



SLP120 converts digital PCM audio signals with a resolution of 32 bit and a sampling rate of up to 768 kHz. It converts DSD signals with a resolution of up to DSD256.

On the analog side, the Phonitor 3 DAC, based on the SPL 120V technology, offers the same monitoring quality as the big SPL mastering consoles – on loudspeakers and headphones. The analog Phonitor Matrix allows mixing and mastering on headphones in the highest quality – with the same spatial perception of the stereo stage as on loudspeakers.



Phonitor 2



The headphone amplifier and monitoring controller with 120V technology

Phonitor 2 is the ultimate headphone amplifier and monitoring controller with 120V technology for demanding sound and mastering engineers. The Phonitor Matrix enables mixing and mastering on headphones in the highest quality – just like on loudspeakers.

Technically, in terms of dynamic range, signal-to-noise ratio and headroom. Sonically, in terms of richness of detail and an absolutely relaxed listening experience.



Expansion Rack – Rackmount for Phonitor 2

120V technology

The 120V technology is our reference technology. The 120V technology is unique in the world. It operates at a DC voltage of 120 volts. This is four times that of IC-based semiconductor op-amps.



The highest possible audio quality requires the highest possible audio operating voltage.

The 120V technology works with +/-60 V. To be able to handle such a high voltage, we have developed special proprietary operational amplifiers that can operate with a DC voltage of +/-60 V: the SPL 120V SUPRA operational amplifiers. This high voltage would destroy conventional components and operational amplifiers. The 120V technology achieves exceptional technical specifications and sonic benefits. Technically, in terms of dynamic range, signal-to-noise ratio and headroom. Sonically, in terms of richness of detail and an absolutely relaxed listening experience.

HPm

The Headphone Monitoring Amplifier for 500 Series.

500 Series double-slot module headphone monitoring amplifier with Phonitor Matrix for two headphones.



500 Series



Phonitor One

The audiophile headphone amplifier with innovative Phonitor Matrix and outstanding sound quality.



Phonitor One d

The audiophile headphone amplifier with innovative Phonitor Matrix, 32-bit DA-converter and outstanding sound quality.

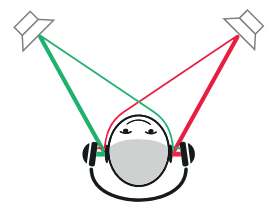
Phonitor Matrix

The Phonitor Matrix is the revolution in the headphone amplifier.

The Phonitor Matrix enables mixing and mastering engineers to create perfect mixes on headphones, which will translate perfectly to all types of stereo speaker systems. Music is normally produced and mixed for playback on stereo speakers. Listening on headphones is different from listening on loudspeakers. The biggest difference is the lack of crossing signals of the sound signal from the left speaker to the right ear and from the right speaker to the left ear. These crossing signals are missing in conventional headphone listening, because there are no signals crossing from one side of the headphones to the other. This results in an unnaturally wide stereo image and the various sound sources of the audio signal are not localized as the sound engineer intended them to. This effect is often referred to as “super stereo effect”.

The SPL Phonitor Matrix corrects this false stereo image with an analog circuitry.

The two main parameters of the Phonitor Matrix are Crossfeed and Angle: Crossfeed determines the crossing signals of the channels, the so-called interaural level difference. Angle determines the opening angle of the stereo image, the so-called interaural time difference. During conventional listening on headphones, our brain can balance the false representation of the playback to a certain extent – but this is very exhausting. The Phonitor Matrix therefore not only ensures a correct representation of the stereo image, but also a relaxed listening experience.



Comparison Chart: Headphone Amplifiers

		Phonitor 3 DAC	Phonitor 2	Phonitor One	Phonitor One d	HPm
Phonitor Matrix	Crossfeed	6 Values	6 Values	Potentiometer	Potentiometer	Potentiometer
	Angle	15°/22°/30°/40°/55°/75°	15°/22°/30°/40°/55°/75°	30°	30°	20°/30°/40°
	Center	●	●	○	○	●
Operating voltage	Headphone amplifier	+/- 60 V (120 V)	+/- 60 V (120 V)	+/- 19 V	+/- 19 V	+/- 16 V
Remotely controllable	Volume	○	●	○	○	○
Laterality	Super fine balance	●	●	○	○	○
Playback modes	Stereo/Mono	●	●	○	○	●
	Solo L/R	●	●	○	○	●
	Phase ø	●	●	○	○	●
	L/R Swap	●	○	○	○	○
Mute		●	●	○	○	●
VU-Meters	ø 36 mm illuminated VUs	●	●	○	○	○
	0 dB VU calibration (+4 dBu)	0 / 6 / 12 dB	0 / 6 / 12 dB	○	○	○
Headphone outputs	Additional output level correction	+6 / +12 dB	+6 / +12 dB	-10 dB	-10 dB	○
	Output power (1 kHz, 1 % THD, 600 Ω)	2 x 2.7 W	2 x 2.7 W	2 x 190 mW	2 x 190 mW	4 x 100 mW
	Output power (1 kHz, 1 % THD, 250 Ω)	2 x 5 W	2 x 5 W	2 x 330 mW	2 x 330 mW	4 x 300 mW
	Output power (1 kHz, 1 % THD, 32 Ω)	2 x 1 W	2 x 1 W	2 x 400 mW	2 x 400 mW	–
Line outputs	Monitoring output	●	●	○	○	○
Line inputs	XLR (balanced)	● (2x)	● (2x)	○	○	○
	1/4" Jack (balanced)	○	○	●	●	○
	RCA (unbalanced)	○	●	○	○	○
	RCA -10 dBV to 0 dBu Boost	○	●	○	○	○
DA converter	DA converter	●	○	○	●	○
	SLP120 (Lowpass-Filter with 120V technology)	●	○	○	○	○
	Bit/Max samplerate (kHz)	32/768	○	○	32/768	○
	DSD (max)	256 (11.2 MHz)	○	○	256 (11.2 MHz)	○
	USB	●	○	○	●	○
	AES	●	○	○	○	○
	Coaxial S/PDIF	●	○	○	○	○
	Optical S/PDIF (Toslink)	●	○	○	○	○
Housing	WxHxD (incl. Feet)	278 x 100 x 300mm	278 x 100 x 300mm	210 x 49.6 x 220mm	210 x 49.6 x 220mm	Double slot 500 Series
		11" x 4" x 11.81"	11" x 4" x 11.81"	8.23" x 1.95" x 8.66"	8.23" x 1.95" x 8.66"	
	Weight	4,9 kg; 10.8 lbs	4,3 kg; 9.5 lbs	1,4 kg; 3.09 lbs	1,45 kg; 3.2 lbs	0,8 kg; 1.76 lbs

