

Headphone Amplifiers

Professional Fidelity



Phonitor xe

Headphone Amplifier
Optional: DAC768 (USB, AES/EBU, S/PDIF coaxial & optical)

The Phonitor xe is the nonplusultra standalone headphone amplifier without any compromises. Phonitor Matrix, remote volume control, retro-look VU meter, the optional premium DA converter and the all-superior VOLTAiR technology make the Phonitor xe one of the best headphone amplifiers of our time.



Phonitor x

Headphone Amplifier and Preamplifier
Optional: DAC768xs (USB, S/PDIF coaxial & optical)

The Phonitor x is both an outstanding headphone amplifier and an excellent preamplifier that can be used to directly drive power amplifiers or active speakers. With the optional DA converter, it not only plays from analog sources, but also directly from digital sources. The Phonitor Matrix allows speaker-like listening via headphones. Thanks to VOLTAiR technology, it offers all this in the highest possible sound quality.

Phonitor se

Headphone Amplifier
Optional: DAC768xs (USB, S/PDIF coaxial & optical)

Our entry model into the world of VOLTAiR headphone amplifiers. The Phonitor se is focused on the essentials – without compromising on quality. It has the same audio signal amplification as its bigger brothers Phonitor x and Phonitor xe. With the optional DA converter, it can also play from digital sources. The Phonitor Matrix provides two of the most common Phonitor Matrix settings as switchable presets. It lets you experience music on headphones as being played back through speakers.



VOLTAiR (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. In our Professional Fidelity series, we refer to this unsurpassed technology as VOLTAiR technology.



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.

DAC768 & DAC768xs



The highly acclaimed AKM AK4490 Velvet Sound™ premium DAC chip is used as the converter chip in the digital-to-analog converter, which thanks to its architecture reproduces the finest sound details. It converts PCM audio with a resolution of 32 bits and a sampling rate of up to 768 kHz, which is equivalent to 16 times CD resolution. Direct Stream Digital is also supported up to a resolution of DSD4 or DSD256. In contrast to the DAC768xs, the DAC768 is equipped with the DLP120.

DLP120 (Dual Low-Pass)

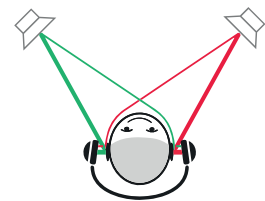


Every signal that is routed from a DAC chip into the analog world must be filtered by a low-pass filter. In the DLP120, two of them are installed: one for PCM and one for DSD audio signals, since different roll-off frequencies are required. Unlike all other DACs in the world, our analog low-pass filters use the SPL VOLTAiR technology, which brings a plus in dynamics, headroom and sound.

Phonitor Matrix

The Phonitor Matrix is the revolution in the headphone amplifier.

Thanks to the Phonitor Matrix, music can be experienced on headphones as if it was played on speakers. 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



		<i>Phonitor xe</i>	<i>Phonitor x</i>	<i>Phonitor se</i>
Phonitor Matrix	Crossfeed values	6	6	2
	Speaker angles	4	4	1
Remotely controllable	Volume	●	●	○
Laterality control	Super fine balance	●	●	○
Stereo/Mono	Playback mode	●	●	○
VU meters	ø 36 mm illumin. VUs	●	●	○
	0 dBVU calibrated (+ 4 dBu)	0 / 6 / 12 dB	0 / 10 dB	○
Headphone outputs	4-pin XLR (balanced)	●	●	○
	1/4" Jack	●	●	●
	Front & rear outputs	●	○	○
	Additional output boost	+22 dB	+12 / +22 dB	+12 dB
Line outputs	XLR (balanced)	○	●	○
	RCA (unbalanced)	○	●	○
	Speaker output	○	●	○
Line inputs	XLR (balanced)	●	●	○
	RCA (unbalanced)	●	●	●
	RCA -10 dBV to 0 dBu boost	●	○	○
DA Converter (optional)	Model	DAC768	DAC768xs	DAC768xs
	DLP120	●	○	○
	USB	●	●	●
	AES	●	○	○
	Coaxial	●	●	●
	Optical	●	●	●

