

SPL Diamond Black Dac-Pretpojačalo

Šifra: 18337
Kategorija proizvoda: DAC-ovi
Proizvođač: SPL

Cena: 323.880,00 rsd

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Everything under control
The volume is adjusted with a solid, milled aluminum, rotary knob. The Alps RK27 "Big Blue" potentiometer gives a pleasant "spoon in the honey" rotary feel.

Source of joy
Up to 6 (!) digital stereo sources can be connected to Diamond.

Diamond offers each a stereo USB and AES input as well as each two optical and coaxial stereo inputs. Via USB, both PCM audio and DSD audio can be converted. PCM audio is received in S/PDIF format, both coaxial (RCA), optical (Toslink F06) and balanced (AES/EBU).

The source selection is done via the selection control on the front. The selected input is also shown in the dot matrix LED display: USB, COA1, COA2, OPT1, OPT2 or AES.

After approximately two seconds, the display shows the type of clock source and the detected sampling rate.

Always in time

Diamond can not only synchronize to the clock integrated in the digitally fed source signal. As a specialist for digital players Diamond offers a word clock input. The source of the clock signal can be selected via the CLOCK switch.

Source = Diamond synchronizes to the digital clock in the source signal.
Word = Diamond synchronizes to the digital clock present at WORD IN.

Well informed

The DAC automatically picks up the sampling rate and resolution of the digital playback source. No matter if a streamer, computer, CD player or an external word clock is connected.

The detected sampling rate and the selected clock source are shown in the dot matrix LED display. For example, U768 is an acronym for a clock signal in the USB stream with a sampling rate of 768 kHz.

All variable - or Slave Thru

Diamond provides two stereo output pairs for connecting power amplifiers or active loudspeakers. One pair of outputs with XLR, the other with RCA outputs. Both have the same output signal, which is controlled by the volume control on the front panel.

The volume control for both outputs can be individually switched out of the signal path via DIP switch on the back of the device. For example, a headphone amplifier with its own volume control can be connected to

one of the outputs.

The DAC768

The highly acclaimed AKM AK4490 Velvet Sound™ premium DAC chip is used as the converter chip in the digital-to-analogue 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 DAC 768xs, the DAC768 not only offers an AES/EBU digital input, but also the SPL DLP120 with VOLTAiR technology.

The DLP120 (Dual Low-Pass)

The analog output of the DAC chip must be filtered by a low pass filter. DLP120 has two of them: One for PCM audio and one for DSD audio, since different roll-off frequencies are required.

In contrast to all other DACs in the world, the low pass filters here are built using VOLTAiR technology, which provides a plus in dynamics and headroom and sound.

Sounds good

With all devices of the Professional Fidelity series we develop not only according to plan, but also by ear. Many important components are installed on the circuit boards using Through-hole technology. This way we can ensure that we can use the best sounding components.

The VOLTAiR 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.

By the way, the “120V” in the name of the technology has nothing to do with the local mains voltage from the mains power socket. This is about the operating voltage inside the device with which the audio signals are processed.

The mains voltage from the mains power socket is transformed to the required secondary voltage in the device's internal linear power supply with toroidal transformer. Rectifiers convert this AC voltage into DC voltage required in the audio device.

VOLTAiR is a composition of the terms Volt and Air. Volt is the unit for electrical voltage and Air stands for the unlimited space the music can breathe in.

VOLTAiR symbolizes the perceived limitless dynamics resulting from high audio voltage.

Comparison

Most audio devices work with an internal operating voltage of +/-15 volts and can thus process a maximum input level of +21.5 dBu. If a DAC, for example, has an output level of +22 dBu at 0 dBFS, level peaks of the music material would already cause overloads in the input stage of the device. All components in the audio device often operate at their limits. The result is an unsteady sound that causes stress and faster ear fatigue.

SPL devices with VOLTAiR technology can handle input levels of +32.5 dBu thanks to the higher internal operating voltage of +/- 60 volts – thus offering 12 dB more headroom. All components consequently operate continuously in the optimum operating range. The result is a very pleasant, natural and relaxed sound experience. So you can enjoy your music in every detail.

Home is where the heart is
That's why we manufacture all devices in our own production facility in Niederkrüchten on the Lower Rhine, Germany.

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|--|---------------------|
| Outputs | XLR (balanced), RCA |
| Maximum output level (0 dBFS = max. +15 dBu) | 32.5 dBu |
| Output impedance | 75 Ω |
| Frequency range (0 dBu) | 10 Hz – 100 kHz |

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| Crosstalk (0 dBu, 1 kHz) | -108 dB |
| THD & N (0 dBu, 1 kHz) | 0.001 % |
| Noise (A-weighted) | -102 dBu |
| Dynamic range (0 dBFS = +15 dBu => 117,3 dB) | 134.5 dB |

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|-------------------------------------|---|
| Input | PCM sample rates |
| AES/EBU (XLR) | 44.1/48/88.2/96/176.4/192 kHz |
| Coaxial SPDIF (RCA) | 44.1/48/88.2/96/176.4/192 kHz |
| Optical SPDIF (Toslink F 06) | 44.1/48/88.2/96/ with Glass fibre |
| USB (B) | 44.1/48/88.2/96/176.4/192/352.8/384/705.6/768 kHz |

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|--|--|
| USB (B), DSD over PCM (DoP) | 2.8 (DSD64), 5.6 (DSD128), 11.2 (DSD256) MHz |
| 0 dBFS calibrated to | 15 dBu |
| Internal Linear Power Supply with Shielded Toroidal Transformer | Yes |
| Operating voltage for analog audio | +/- 60 V |
| Operating voltage for relays and LEDs | + 12 V |
| Mains Power Supply | |
| Mains voltage (selectable, see fuse chamber) | 230 V AC / 50; 115 V AC / 60 Hz |
| Fuse for 230 V | T 0.5 A |
| Fuse for 115 V | T 1 A |
| Power consumption | max. 40 VA |

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|-----------------------------------|---------|
| Stand-by power consumption | < 0.3 W |
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| W x H x D (width x height incl. feet x depth) | 278 x 57 x 300 mm |
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|-------------------------------|--|
| 11 x 2.24 x 11.81 inch | |
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| Unit weight | 3.15 kg |
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| Shipping weight (incl. packaging) | 5.35 kg |
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