



**Product announcement** Dulliken, 15 July 2015



We are pleased to announce the 746+ SACD-Player.

The 746+ unites a top quality optical drive, a super-precise master clock generator, an intelligent digital signal processor with over-sampling, analogue output stages of the utmost quality and a new, highly precise and ultra-powerful power supply. Together they ensure nothing in the music is lost on its way from disc to output connection.

## soulution 746 player unit:

Apart from the top class Esoteric CD/SACD drive the 746+ provides versatile connectivity through four digital inputs (AES/EBU, SPDIF-RCA, SPDIF-BNC and Optical,). All digital sources get synchronised to the ultra-precise, internal master clock which ensures optimal read-out of discs as well as perfect reception of all digital music formats (incl. high resolution)

- PCM (16bit/ 32kHz to 24Bit/192kHz),
- DSD (1bit/2.82 MHz through DoP)

The polynom based upsampling algorithm - which converts all digital formats to DXD, digital filters with apodizing characteristics combined with our innovative Zero-Phase-Technology ensure perfect treatment of the digital data for best audiophile results.





**Product announcement** Dulliken, 15 July 2015

## zero $\phi$ tech

soulution's innovative Zero-Phase-Technology resolves one of the fundamental problems of the digital-to-analogue conversion. The introduction of the (over)upsampling technology allowed using aliasing filters with a wider transition band than required for a sampling frequency of 44.1kHz. However, the cut-off frequency of these filters is still way too low for not having any influence on the phase response in the audio band. Zero-Phase-Technology overcomes this shortcoming! Smallest timing errors provoked by the analog low pass filter get eliminated. The 746+'s anti-aliasing filter (passive 3rd order bessel filter), with a cut-off frequency of 120kHz, does show a phase shift of up to 15° in the audio band. Due to the Zero-Phase-Technology the phase error of the analog music signal remains below 1°, 20Hz - 100kHz! The Zero-Phase-Technology brings you even closer to the beauty of the source material! The music gets even more realistic and 3-dimensional with a lot of "air" around instruments and voices. As close to the source as possible! No detail gets lost.

SACD-Players are as much digital components as they are analogue component. Amplification of the sensible analogue output signals of the D/A converter chips is of the same importance than the perfect treatment of the digital data. This fact gets often neglected. The 746+ is equipped with four extremely fast current-to-voltage (I/V) converter stages with a bandwidth of 80MHz. The analog output stages are based on the same circuits as used for the 725 preamplifier.

## soulution 746PSU power supply unit:

The external power supply unit consists of five power supply circuits which are arranged in three separate and electrically isolated sections for powering the CD/SCAD drive, the digital sections and the analog circuits. They are all complemented by a multi-state filter network which keeps mutual inter-ference across the three to a minimum.

Key to any good sounding audio source component is a stable, noise-free power supply for its analog stages. We use an innovative, amplifier-like circuit design, providing an extremely stable supply voltage (achieving ripple levels below  $0.01\mu$ V). With more than 500'000 µFarad of storage capacitance it provides almost unlimited impulse current for the analog circuits. Bus bars supply this power throughout the 746+ SACD-Player without any losses. A unique concept in the audio world!





**Product announcement** Dulliken, 15 July 2015



Power supplies for the digital and drive sections of the player are similarly highly specified and optimized for their respective functions, including accommodating any high current demands from the drive and its electronics.

## get more info...

Production start:	July 2015
Retail price (Switzerland)	70'000 CHF
Limited edition:	20 units
Upgrade path	745 & 746 SACD-Players can be upgraded to 746+