



Spectralizer

The Spectralizer is a fully digital harmonics processor that generates odd and even harmonics separately to manipulate the "colours" of sound. In SPL's range of digital processors, the Spectralizer performs the very important task of top end and harmonics processing in the digital domain.

In contrast to conventional Exciters, the Spectralizer does not produce any side effects, even all details of the stereo image remain unchanged. Without tonal disadvantages, the Spectralizer ensures "crisp" and transparent sounding recordings.

The comfortable power of two Motorola 56002/66 MHz DSPs ensures real time processing in unlimited quality and stability.

Digital Perfection

Particularly digital productions require smooth sounding top ends without having to take time-consuming detours via analog equipment.

The Spectralizer offers a comfortable way to applicate subtle, precisely controllable effects to improve details and emphasize the harmonic structures. Complete mixes benefit from improved self-assertion as well as single instruments. Very interesting for mixing applications is increasing the subjectively perceived loudness without change in levels.

Considered in total, the Spectralizer improves clarity, transparency, detail and depth of the sound pattern. The processing results are free of phase deteriorations, intermodulation and noise, attacks and dimensions remain unchanged.

Features

- Internal 56-bit resolution
- Re-synthesizes second and third harmonics separately
- No phase deteriorations
- No side effects at all
- Stores up to 99 presets (change with MIDI command)
- "Kick" button for intensified processing
- Two PPM displays
- I/Os: AES/EBU (hard bypass relay) and S/P-DIF
- Synchronisation: Wordclock In and Wordclock Through BNC connectors with switchable 75 Ohms termination
- PC and MAC ports for software updates
- All encoders with "analog" control feeling and alpha-dial-logic.
- Operates with 24 bit word width and accepts any word width from 16 to 24 bit (output resolution corresponds to input resolution)
- Especially valuable effects for sound restoration and classical music production

Applications

- Enhancing the frequency spectrum
- Improving clarity
- Improving transparency
- Increasing details
- Increasing intelligibility

Specifications

Input/Output

Sample rate frequency: 32-48 kHz, automatic
 AES/EBU, twisted pair (1), AES 3
 AES/EBU in- & output impedance: 110 Ohms
 S/P-DIF, co-axial (2), SPDIF-2
 S/P-DIF input impedance: 75 Ohms
 Wordclock In/Through, co-axial, BNC
 Wordclock in- & output impedance: 75 Ohms
 MIDI In/Through
 RS 232: software update PC
 RS 422: (max +/- 14 V), software update MAC
 Signal and Clip indicators
 Input transformer: AES
 Output transformer: AES
 Relay Hard Bypass: AES

Measurements

AES/EBU: Jitter 1 ns
 S/P-DIF: Jitter 3 ns
 Wordclock In: Jitter 1.5 ns
 Signal delay: 5 ms

Power supply

Toroidal transformer 60 VA
 Fuse 1A/slow blow
 GND-Lift switch, voltage selector 115 V/230 V

Dimensions

19"/1U; 44.45 x 482 x 350 mm
 Weight: 4.9 kg

(1) AES/EBU is defined for levels from 2 V to 7 V.

Measurements AES/EBU: 4.4 V with load.

(2) S/P-DIF is defined for levels from 200 mV to 700 mV.

Measurements S/P-DIF: 500 mV with load.

Spectralizer Rear View

