De-Esser Model 9629

SPL AUTO DYNAMIC DE-ESSER

The SPL Auto-Dynamic De-Esser is a highly specialized yet simple-to-use audio tool for removing undesired sibilant frequencies in a musically appropriate way without compromising the timbre and natural character of the voice.

To solve this difficult problem, SPL has developed a new circuit design that combines ease of use with natural sound characteristics and the highest level of technical performance.

Conventional De-Essing

Traditional de-essers use compression techniques. In addition to the threshold parameter used to set the processing level, there is a frequency controller for setting the center frequency of the process (with bandwidths generally up to 4 kHz). Processing therefore compresses the entire selected range, notjust the sibilant or S sounds. This results in the familiar and undesired side-effects such as lisping and a nasal-sounding vocal.

SPL's De-Essing

SPL's Auto Dynamic De-Esser monitors the entire frequency spectrum and automatically detects the sibilant frequencies. The bandwidth is set so narrowly around the range of the sibilance that neighboring frequencies remain unaffected. This frequency band is mixed back into the main signal phase-inverted to cancel out the sibilance. The result is a sound-neutral, inconspicuous and extremely effective process. Even at high s-reduction values the de-essing has an egligible effect on the character and timbre of the voice.

Auto-Threshold

Rounding our this outstanding concept is an automaticthreshold-adjusting function: Differences in the input level caused by the singer moving in relation to the microphone are automatically compensated, so that the selected reduction value remains constant. In traditional de-essers, the processing intensity drops off with increasing distance, and compressors placed after the de-esser for signal correction tend to respond incorrectly to the changed values.

Male/Female

The SPL system doesn't just look for sibilance in a wide 'general sibilance' region of the spectrum. Instead, the user simply sets a front-panel switch to Male or Female to adjust for the vocal characteristics of male or female voices.

Features

Symmetrical XLR and jack plugs for the in- and outputs, internal power supply with toroidal transformer, GNDlift switch, relay hard bypass/power fail safety, voltage selector switch.

Specifications

Inputs and outputs

Instrumentation amplifier, electronically balanced (differential), transformerless

Nominal input level	+6 dB
Input impedance	=22 kOhm
Output impedance	‹ 600 Ohm
Max. input level	+24 dBu
Max. output level	+22.4 dBu
Minimum load	600 Ohm
Relay hard bypass / power fail safety	

Measured data

Frequency response (50kHz= -3dB)	20 Hz-50 kHz
Common mode rejection	› -80 dBu @1kHz
Total harmonic distortion	0.002% @ 1 kHz
Signal-to-noise ratio (CCIR 468-3)	-93 dBu
Signal-to-noise ratio (A-weighted)	-98 dBu

Power supply

Toroidal transformer	15 VA
Fuses (230/115 V)	315 mA/630 mA
GND lift switch, voltage selection switch	115 V / 230V

Dimensions

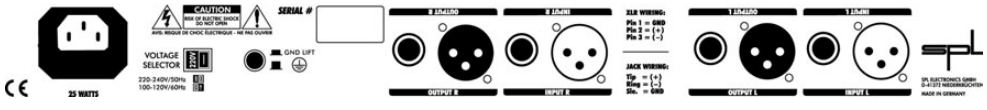
Standard EIA 19"/1U	482 x 44 x 237 mm
Weight	3.4 kg

Note: 0 dBu = 0.775 V

Ralf Kleinermanns, Keyboards (D)
"SPL's de-esser is without a doubt the best representative of its type that I have ever used."

Markus Zehner, Workshop (CH)
"The Auto Dynamic De-Esser is a cleanly built, visually attractive unit. Operation and hookup are exemplary. Sound-wise attributes like effective, sound-neutral, noise-free and subtle have to be used in order to do justice to the circuitry. The helpful assistance of the automatic circuitry is so good that I am inclined to call the SPL De-Esser the best device of its class."

Sebastian Steiner, Keys (D)
"The SPL DeEsser is an extremely effective yet highly sound-neutral instrument for defeating overpresent sibilants in speech and song recordings. Its functionality in sound terms is convincing in every respect. Recommended for anyone who regularly records singing and spoken word."



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