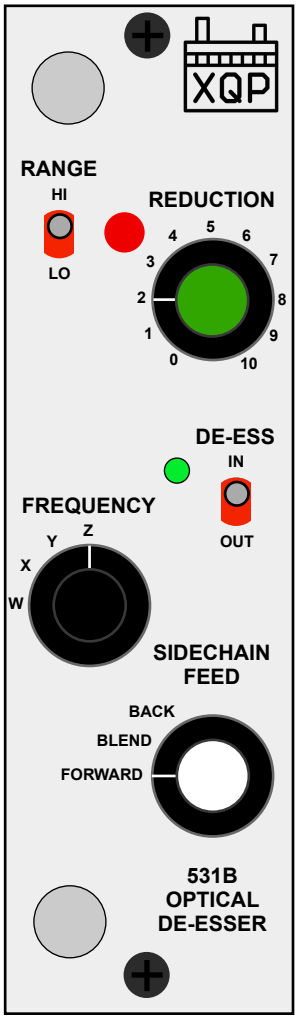
XQP 531B Optical De-esser

USER GUIDE

531B-0401



PINOUT	
1	Chassis
2	+ Output
3	
4	- Output
5	Audio Common
6	
7	
8	- Input
9	
10	+ Input
11	
12	+ 16VDC
13	Power ground
14	- 16VDC
15	

A Few Specifications

Frequency response	-3dB @ 4Hz & 85kHz
Input impedance	16kΩ
Output impedance	100Ω
Sidechain filters:	W: 1.1kHz
	X: 1.7kHz
	Y: 2.5kHz
	Z: 3.6kHz
Current consumption:	80mA @ +/- 16VDC

INTRODUCTION

Thank you for purchasing the XQP 531B Optical De-esser. This device is the fourth iteration of the XQP 500-series optical de-essers since their inception in 2009 and traces its lineage back to the Dane #31 introduced in 1997. The 531B is a 500-series module, designed to fit into API's VPR-related products as well as those made by other companies.

Like all its predecessors, the 531B features a high-pass filter in the sidechain, selectable by a 4-position rotary switch. The action is soft-knee, and there is no rectifier in the sidechain which, during gain reduction, causes the top half of the waveform to slope asemmetrically. This results in a softening of the sibilant in addition to gain reduction, and this is a hallmark of the design of the XQP optical de-essers.

Like the 2531 25-anniversary model, the SIDECHAIN FEED switch has been retained, allowing for feed forward, feed back, and blend modes. The rotary switch REDUCTION control and RANGE toggle switch have also been retained.

The input and output amplifiers have changed on the 531B. Throughput, apart from any de-essing action, is unity gain in balanced mode, set at the factory. If you wish to feed an unbalanced input, such as an unbalanced console insert), a DIP switch on the main PCB labeled "UNBALANCED OUTPUT" can be switched so that unity gain is preserved.

OPERATION

Two thumbscrews on the front panel are provided for convenient insertion/extraction from a 500-series enclosure. They align with the circuit board and thus with the edge connector at the back of the parent device.

The DE-ESS switch will engage the de-esser by enabling the sidechain, and the green LED will illuminate. The audio circuit is always in effect (there is no hardwire bypass).

Set the FREQUENCY switch to the highest position (Z), and bring it down as needed to catch sibilance in the track.

The RANGE switch divides the operation of the REDUCTION control in half, so the entire range is from LO-0 to HI-10, with LO-10 and HI-1 being in the middle.

You might begin with the FORWARD mode on the SIDECHAIN FEED switch, as that allows for the historic sound. Then, if you feel like the de-essing effect is too noticable, try the BLEND and BACK modes for more subtle action.

The red LED will glow corresponding to gain reduction.

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