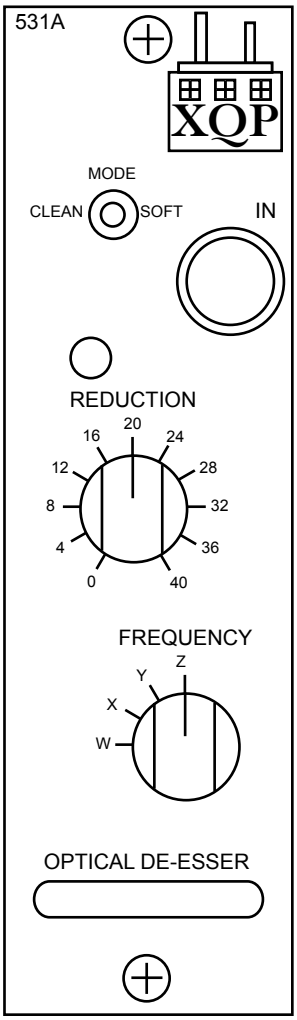
XQP 531A Optical De-esser
User Guide



Introduction

The XQP 531A Optical De-esser represents the second generation design of the original 531. It is a 500-series modular device conforming to the standards set by API® and the VPR Alliance. It is designed to work in any API 500-series rack or console or similar device made by other manufacturers. The 531A has received VPR Alliance approval.

Features and Use

The 531A, as compared to the original 531, includes an extra position on the frequency switch, has improved side chain filters, and offers the user a choice of two different opto-coupler pairs. Additional changes have been made to improve construction and reliability.

The new frequency position, W, represents a lower point. The essence of the 531A, like the 531, is the use of high-pass filters in the side chain rather than narrow band-pass types. This allows any sibilant over the selected filter to be processed. You are not required to find the offending sibilant with surgical precision. Simply set the frequency position high enough that vowel sounds are not affected by the gain reduction. W is in the 1.5kHz region, while Z is in the 7kHz region.

The original opto-coupler used in the 531 was a VACTROL VTL5C1. Actually a pair were used in parallel. In this application, the VACTROL produces distortion resulting in a softening of the sibilant as it is being reduced. It can be a desirable effect in many cases, and the 531A retains this in the SOFT mode. In the CLEAN mode, a pair of Silonex NSL-32SR3 opto-couplers takes over. These are noticably cleaner (they are used in our 541 compressor), but they have a slower release time than the VACTROL. So you have a choice of sounds, and you may find that on some voices, the SOFT mode is better and on others the CLEAN mode is better.

The 531A is intended to be used on individual voice tracks, as the gain reduction that occurs during sibilance will affect the entire audio path going through it. However, some users of the original 531 have found it to be useful on hi-hat and other instruments. We don't like to think of the recording process as one of rules, so feel free to experiment to your heart's content.

Poke the IN button, turn up the REDUCTION knob, and de-essing will occur, provided there is sibilance present. In the event that sibilance is not louder than other high-frequency content, such as prominent harmonics, the 531A may not appear to do anything more than compression. In this case, we would advice that you do not need a de-esser. When sibilance is noticable though, it generally stands out in volume from the rest of the material in the high-frequency range.

Using a combination of the FREQUENCY switch and the REDUCTION knob, you should be able to reduce sibilance to a comfortable level without inducing wacky artifacts into the track. Our approach has always been to be musical rather than surgical.

Warranty

The ridiculous XQP ten-year warranty applies to the 531A, as it does to all our products. We'd love to receive your warranty registration card, or you can send us an email with the pertinent information. However, we are not sticklers for this. We like for our products to work well, and we really do try our best to take care of things if there is ever a problem.

500-Series Edge Connector

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

Specs

Frequency response:	-3dB at 3.5Hz & 140kHz
Input impedance:	43kΩ balanced
Output impedance:	50Ω balanced
Maximum output level:	22dBu
THD:	0.002% @ 1kHz
Noise:	-80dBm, unweighted
Power consumption:	120mA at +/- 16VDC

Specifications subject to change without our knowledge.

www.xqpaudio.com
Nice guys. Yes we are.

v. 1.3