



REVIEW

BY PAUL VNUK JR.

Chameleon Labs 7802 Optical Tube Compressor



This rack compressor claims tube quality on a budget—does it deliver?

The 7802 from Chameleon Labs is a new stereo opto-tube compressor built to evoke the classic optical units of the past, but at a price tag that almost any studio can afford. In fact, it appears that Chameleon's goal is to provide classic high-quality sound in an affordable box.

The unit

The 7802 features two independent channels of feedback-style Vactrol-based optocompression. Each channel has transformer-based outputs and VU metering, and can be linked for stereo operation. The 7802 uses a 12AX7 tube circuit to add harmonic content and drive, and unlike previous Chameleon units' external power supplies, the 7802 has a beefy high-voltage internal power supply.

The 7802 is sturdy—thick metal chassis, aluminum knobs and solid switches with nice resistance. Along with the gain-reduction VU meters, each channel has: Signal and clip LEDs, function knobs for compression, attack/release, drive and output, and toggle switches for ratio, highpass filter and bypass. There is also a front-mounted power switch, a true bypass switch and a stereo link switch. All inputs and outputs are balanced XLR.

Function

Traditionally, vintage optical compressors are simple affairs, with merely an input which drives into the compression circuit and an output for makeup gain. Sure, some units may have a simple ratio control disguised as a compression/limit switch, or perhaps a rudimentary attack or release control, but they are a far cry from our modern parameter-happy world of hard and soft knees, variable ratios, sidechaining, and so on. The 7802 falls comfortably in between these extremes, perhaps leaning toward the simple.

The compression knob controls the input threshold; next there is a choice of a 2:1 or 4:1 ratio. There is a choice of five preset attack times (10, 22, 32, 47, and 70 msec) with program-dependent release times. The

highpass filter is sort of a simple sidechain at 90 Hz (6 dB/octave rolloff). The drive circuit controls the level of tube saturation, and the output controls your final signal gain.

The stereo link switch engages both units so that when an input signal in one channel triggers the threshold, it will simultaneously engage the other channel's threshold equally. However, all controls need to be manually set the same for accurate stereo use.

In use

I hooked up the 7802 to my patchbay and proceeded to run it as an outboard plug-in in Steinberg Nuendo on a variety of source material. My first observation was that it takes very little input to drive the 7802 and get it to dig in, and I had to be careful not to overload my converters from its hot outputs.

The 7802 is not a true optical tube compressor in the strict sense. Unlike many vintage tube compressors—the Universal Audio LA-2A, Sta-Level and their reissues—the 7802 has a Drive control that pushes signal into the tube and adds harmonic content, so in that sense it is a bit more like a gritty LA-3A or 4A. This is also one of the unit's strengths, as—unlike these vintage units which each have their own signature tones—the 7802's drive control allows you to tailor the grit and thickness to your needs. Little tweaks can yield big results and broad changes.

Compared to my two opto-tube compressors (a Retro-Sta-Level and a Millennia Media TCL-2) I found that while the 7802 did exhibit similar opto-characteristics, it could also get faster, more pumpy and grabby than the aforementioned units, while it was nowhere near as clean or opulent.

For starters I tried the 7802 on the master stereo outs of an indie-rock mix. Like most 2-buss comps, it sounded best when just "tickled" into gain reduction, and it was easy to boost the overall mix. Here the Drive circuit is a matter of taste; even with no compression at all you can thicken up a brittle digital mix with ease.

On the drum buss it is versatile enough for heavy throbbing rock drums, as well as slow non-pumping blues tracks. While I enjoyed it on the drum buss, where I would have no qualms about having it live permanently, I found it not as suited to individual kick and snare tracks, where it wasn't as aggressive as a VCA or FET compressor would be.

It was also really useful on acoustic guitar, bass, electric guitar, and even strings. With the combination of attack/release settings and the character inflicting Drive control you can dial in pleasing and interesting results with ease.

My biggest surprise was how this unit excels on vocals. Here is where the 7802 does its best LA-2A impression. While it is not a clone or replacement for the real thing, it gets so characteristically close it is worth considering if the price difference is worth it. It definitely gives the plethora of opto-tube plug-ins a run for the money, with big, smooth and even vocals every time.

Character and wrap

I consider the 7802 a character piece that does not do clean or hi-fi. If you want an invisible compressor, look elsewhere. This baby has grit, punch and vibe, and while it is not as versatile as a dbx unit or an Empirical Labs EL8 Distressor, it has way more flexibility than your average vintage style box. I confess I went into this review wondering, "Another import wannabe, two channels for \$800—how good can it be?" Well, the Chameleon 7802 was more than a pleasant surprise!

The 7802 moves beyond the level of a LA-2A wannabe and stands on its own as a good, vibey leveling box; seeing as most other compressors in this price bracket are more of the utilitarian variety, the 7802 is a nice change of pace and could be a nice addition to any setup. ☺

Price: \$799

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