

Review of the PC-2A Photo-optical Tube Compressor by Ovnilabs



Effectrode PC-2A: This is an optical comp pedal with a tube gain stage. It uses a 6021 military subminiature tube instead of the usual 12A*7 used by most similar pedals. This tube offers greater resistance to vibration and impact, and a slightly different tone and feel.

The optical element has a fast attack, and its release characteristics depend on the intensity of the signal--so it will release more quickly with smaller spikes, and more slowly after

compressing taller spikes. It also releases in two stages, a short steep rise followed by a long slow rise. This is meant to emulate the action of the optical device in the famed Urei LA-2A. The pedal has a toggle switch on the back for selecting between low and high ratios. The low ratio setting is good for more "natural", unobtrusive action and general smoothing. It can be set for anything from an invisible touch to a more noticeable squashing. The high-ratio "limit" setting is a very heavy squash with a dip-and-swell action, suitable for chicken-pickin' or funk. It's not great as a clean/invisible peak limiter, because the effect is so prominent. But if you like the funky dip-and-swell effect, then it does limit big peaks just fine. Because the release time is so variable and dependent on the signal passing through, the amount each new note's first peak will be compressed can change dramatically. So you'll get the smoothest, most consistent action by playing smoothly and consistently, with few long rests.

Aside from the ratio switch, it has only two controls: threshold (labeled "peak reduction") and output gain. There is no light to indicate when you've crossed the threshold. While the controls are very limited, the good news is that the range of the peak reduction control is quite wide, and capable of a wide range of flavors and effects. It just takes some time and experimentation to find the flavor that will work best for you. It does seem to get into a heavier-squashing range fairly quickly: playing a bass with "average" output levels, it seemed to cross the threshold quite often, with the peak reduction knob at around 9:00. So if you want more range of light/subtle action, you may need to reduce the level of the signal you feed into this pedal.

There is no loss of highs or lows, although both high and low end can sound a bit congested or attenuated during moments of heavy squeezing. Most of the time it's not an issue, plenty of highs and lows.

In fact at light settings the lows seem to not get compressed as much the mids and highs; this can be a pro or a con depending on your expectations: at a low ratio and high threshold, the low frequencies are simply massive, which sounds fantastic but may result in clipping of your amp or mixer. The tone is very natural and musical; it approaches transparent, but it's just colored enough to "have a tone", and to sweeten but not harm your sound. The noise level is very low, even at stronger comp settings.

It's in the same "medium" size as the Barber, Diamond, and BBE pedals. The construction is clean and solid, and the footswitch is a relay-based true bypass (my favorite kind of bypass). It runs on a 12VDC, 1.5A wall wart power supply; it will not be powered by any daisy chain or brick-type supply.

Comparing it against some other tube comps:

The Markbass is much more controllable, and less expensive, but it's much larger. The Markbass can squash as heavily, but it doesn't have the funky dip/swell; otherwise, their tone is equivalent.

The Retrospec is more versatile (DI, EQ, preamp), but it's a lot larger, and also harder to find. The Retrospec colors the tone more.

The Vox is much cheaper, and it can do the same sort of extra squashy effect, but is not capable of the "unobtrusive" or nearly-transparent tone or action the *Effectrode* can achieve. It's much larger, but on the other hand it doesn't require a special power supply.

The most direct comparison would be to the CAE V-Comp, but it's been a very long time since I've used that one, so my comment here may not be accurate. I intend to get another V-Comp sometime soon. My recollection, however, was that the V-Comp wasn't quite as versatile, and was a bit noisier.

All in all, if you are in the market for a "high end" tube comp in pedal format, the *Effectrode* is one of the best choices currently available.

Check out the *Ovnilabs* website for more independent compressor pedal reviews: www.ovnilab.com