DOD 250 Overdrive

The DOD 250 Overdrive is a semi-vintage circuit in that its been around since the mid-70s. It uses a single opamp to amplify the signal and then uses a pair of diode clippers in an asymmetric arrangement to generate an overdriven sound. Take a look at the MXR Distortion+ project—you’ll see that is almost identical to this one.

Mods!
- Diode clipping mods: try different values for D1, D2, and D3. Try different diode types and LEDs.
- The standard LM741 single opamp is a low-performance part: it is noisy and not audiophile-grade. Which makes it just about perfect for an overdrive. Try other single opamp parts. You can also use half of a dual opamp to play around with different values.
- The original circuit uses a B500K reverse log pot. If you want to adhere 100% to the original, buy that value. But it won’t make a huge difference in tone.
- The 22pf capacitor tames a bit of high-end in the feedback loop of the opamp (the loop between pins 6 and 2). It also helps keep the circuit from oscillating. Try different values here to see if you can make it sound better.