



# ZVEX EFFECTS

TYPE: Vexter Series [V] | MODEL: SUPER HARD ON™

**Congratulations!** You're the proud owner of a Vexter Series Z.Vex Effects Super Hard On!™

## OVERVIEW:

This is the perfect preamp pedal. The "Crackle Okay" volume knob is a negative-feedback control styled after classic 60's recording console inputs. (They crackled when adjusted too).

Most vintage guitars suffer from steadily deteriorating magnets in their pickups, since permanent magnets aren't really forever. The Super Hard-On's input impedance is so high (>5 Meg) that it refuses any current flow from your pickup... maintaining the most magnetic field around each string, so you can hear exactly what your pickup sounded like the day it came off the winder.

The output level can exceed 8 volts peak, and when it finally distorts, the wave is shaped like triode overload, not fuzz. It's so transparent no one will be able to tell you're using a pedal. Perfect for making the most of a classic amp and guitar, because it simply makes your guitar bigger and pushes the amp harder, causing natural overload. This sound can be the solution to the 'disappearing guitar' effect you get sometimes on stage when you stomp on your distortion and sound weaker. When cranked, it sounds much louder than a fuzz or distortion under stage conditions.

## OPERATION:

The Super Hard On™ circuit uses a very sensitive transistor, with some early versions mounted in a socket. During 2000 I installed a protection circuit to prolong the life of these transistors and I've seen no failures since. If you have a problem with an older unit, feel free to contact me, or you may purchase transistors inexpensively from 1-800-DIGIKEY where they are sold as part number BS107P-ND. You must follow proper static handling procedures to install the part... write to me for instructions at [zack@zvex.com](mailto:zack@zvex.com) and I'll set you up.

On all new LED models, the SHO's input jack contains the battery switch. Please unplug from this jack to preserve battery life. NOTE: After plugging in your pedal turn it on and off a few times to equalize the voltages between your guitar, other pedals, your amp, and the SHO. Otherwise you may hear a "POP!" when you turn on your SHO during a gig. If you adjust the boost level, you may hear a "POP!" when switching too. It goes away after a few switches.

Like all Z. Vex designs, this pedal is true-bypass, with current flow very low in this circuit (about 2mA), enhancing battery life.

The box is hand-drilled using no petro lubricants. Knobs are Harry Davies, made with the same molds they've used since the fifties.

## BATTERY CHANGE & POWER SUPPLY:

The Super Hard On™ uses less than 20mA and can be powered with a 9V battery (remove the four screws on the bottom for replacement) or any standard filtered/regulated musical 9VDC power supply with a Boss-style connector (negative-tip barrel connector). We recommend using an alkaline 9V battery but a carbon-zinc battery (shipped with the unit) will work.

## WARNING:

The very high input impedance of this pedal can cause strange reactions (sometimes mildly pleasant and/or arousing) when used with a vintage 'junk' (read 'cool') guitar. The solution is to simply lower the 'crackle okay' gain knob a little or leave the guitar volume wide open. Any problems will only occur at the highest gain settings with an unusual guitar.

## WARRANTY:

Your Vexter Super Hard On™ is warranted for 1 year from date of purchase, or 2 years if you send in your warranty card. For hand-painted Z.Vex Effects warranty info and for any repair questions, consult <http://zvex.com/website/repairs.htm> for more information.

Enjoy!



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