

# nano head™

# Z.Vex Effects™



Model: NANO HEAD™

**Congratulations!** You're the proud owner of the Z.Vex Effects Nano Head™.

## Overview

Bravo! You are the owner of the world's smallest production tube amp, the Nano Head by Z.Vex Amps. This little marvel is a one-half watt (distorted) powerhouse that will surprise you with its apparent volume. Plug it into a 4X12 (or any 8 to 16 ohm speaker) and listen to it roar! This amp is voiced to deliver classic rock tone, with a very high level of crunch available if it's wanted. Just crank the volume knob around to the level of distortion you desire, from a very quiet (one tenth watt) clean mode to a micro-Marshall (TM) blast when cranked up. I am making myself a little ill (gag!) trying to describe the tone of my Nano, using the same tired old phrases that all the amp and distortion box makers use, but I think it's true... it does a great job of emulating big amps at very reasonable volumes, which makes it exceptionally nice for recording.

In a recording situation, you stick microphones in front of guitar amps and hope for the best, but often the sheer sound pressure level necessary to get what sounds like a really cool tone is so ungodly high that it causes mic distortion that wrecks the sound. You might try putting a nice Coles ribbon or a Beyer M160 in front of the amp, but at 140 dB it could easily cause weird sounds as the ribbon rattles around in the magnetic field, stretching and possibly striking the magnet as it goes past the boundaries of its gap. A classic condenser microphone under that kind of crushing pressure can end up with a stretched diaphragm that can touch from front to back, suddenly shutting down, or overloaded preamp circuitry, adding unwanted harshness. Even a dynamic mic like a Shure 57 or 58 can have problems as the severe magnetic field developed by high-wattage amps couples through the air into the mic's own windings, causing a blistering crispness that seems very unnatural when it shows up in your recording. You can spend hours trying to find a safe spot to put your mics when trying to accurately capture the sound of a roaring high-wattage amp, and in the end, find that the best sound is miced so far from the cab that you begin to hear the room and everything else that's bleeding in. By the time you've got a sound you like, someone has called the cops and you have to shut down for the night.

The Nano Head eliminates many of these microphone problems instantly because it is at least 20 dB quieter than a 50 watt head, so that the volume levels coming from your speaker cabinet are very close to the levels that a loud singer can produce. The amp is capable of going into total saturation, struggling like crazy and sweating up a storm at this moderate volume, so no matter where you put the microphone it's safe signal level that won't overload your preamps or strain the microphone's element. The result is a crystal-clear reproduction of the speaker's sound. The other high-volume factors that can mess up your ears (there's something called the Fletcher-Munson curves that change the way your ears hear things at high volumes) are much reduced, too, so the characteristic of the sound you hear in the room will be much closer to the recorded sound. The first time I put a mic in front of my Orange 4X12 with greenbacks while it was connected to a Nano Head, I was stunned at how accurately the recording matched the tone of the cabinet on playback, and was delighted that I could set the mic position while wearing headphones in the same room and find the exact spot I wanted to capture. After 10 years working full-time as a recording engineer (my former job), this is one of the first times I've been able to get a great guitar tone on the first try. I have such painful memories of trying to capture huge tones and just failing miserably... gahh!

## SPECIFICATIONS

Power Supply: 12VDC 1.5 A wall wart, included.  
Output Power: .5 W dirty, .1 W clean.  
Output Impedance: 8-16 ohms.  
Input Impedance: 1,000,000 ohms.  
Internal Speaker: .4 Watts.

**WARNING:** DO NOT CONNECT OUTPUT OF NANO TO ANOTHER AMP'S INPUT. THE NANO IS AN AMP, NOT AN EFFECT, AND MUST BE CONNECTED ONLY TO A SPEAKER CABINET UNLESS AN ATTENUATOR SUCH AS THE THD HOTPLATE IS USED TO PROCESS THE SIGNAL AND PROVIDE A LOAD. CAREFUL, YOU COULD DAMAGE OR DESTROY BOTH AMPLIFIERS!

## BATTERY CHANGE:

If the performance of your pedal seems diminished or the LED becomes very dim, it's time to change your battery. Remove the four screws on the bottom of the pedal and carefully remove and replace the old battery, putting it back exactly in the center of the pedal on edge so that it is gripped tightly by the lid when it is screwed back in place.

## SPECIFICATIONS:

Uses one 9V battery (preferably alkaline, but the unit is shipped with a carbon-zinc battery.) The low current operation of this pedal's circuit will give you extraordinarily long battery life. Current draw is approximately 2mA. A DC power jack (standard Boss configuration with center negative) is provided on the side of the pedal. Use a high-quality 9V adaptor for all high-gain effects!

## WARRANTY & SERVICE

Your Nano Head™ has a 1 year limited warranty which can be extended to 2 years by contacting Z.Vex amps within one month of purchase by fax (612)871-4804 or by email to [repairs@zvex.com](mailto:repairs@zvex.com). For any repair questions, consult <http://zvex.com/website/repairs.htm> for information.

## ZVEX EFFECTS

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Enjoy!

Last Updated: October 2013