

#### INTRODUCTION

Welcome to the Catalinbread Naga Viper Boost!

The Naga Viper is a booster in the grand old tradition of the Dallas Rangemaster "Treble-Booster". The Rangemaster has been used by many influential British guitarists including Tony Iommi, Brian May, Marc Bolan, and KK Downing and Glen Tipton of Judas Priest. These guitarists, while completely unique in their styles, share the Rangemaster secret of boosting their cranked tube amps into a juicy, harmonic-laden rock tone that always cuts through the mix.

The Naga Viper is our version of this famous circuit and it enhances the classic circuit with the addition of two extra controls - Range and Heat. The original Rangemaster had just one control - Boost. The Range knob is a continuous control allows you to go from classic treble-boost to a full-range boost and anywhere in-between. The original could only function as a "treble-booster". The Heat knob gives you control over the gain level, unlike the original which was fixed at maximum gain.



Why a "treble-booster"? Well, it is not like merely turning up the treble control on an EQ pedal. Besides enhancing treble response, it adds its own subtle harmonic distortion and gives you a lot of "push" to really saturate the front-end of your tube amp. But remember, the Naga Viper has a Range control that allows you to dial in exactly what frequencies get boosted.

The traditional way to use a treble-booster is to plug it straight into an already cranked and overdriven tube amp like the Marshalls, Laneys, and Voxes the British guitarists used. Since the amps were already cranked up, a full-range boost would result in a muddy sound with no definition. That is why we want to boost "treble"!

But in this modern era of electric guitar, many guitarists use overdrive pedals that emulate the sounds of cranked big amps into their smaller combos. The Naga Viper is carefully voiced to allow you to boost your "amp-in-the-box" pedals too to get those famous juicy, saturated sounds at "reasonable" volume levels! In particular, the Naga Viper was made to go with our Dirty Little Secret MkII and CB30 overdrives.

## QUICK START GUIDE

#### Boosting a tube amp

Set up your amp so that it is already overdriven a bit on its own. With non-master volume amps, this is usually with the volume turned up to at least noon. With master volume amps, set the pre-amp gain to have a moderate crunch overdrive sound.

Set up the Naga Viper in classic treble-boost mode:

Range - full CW Heat - full CW Boost - full or almost full CW

Go ahead and play. You should be greeted with some awesome overdriven tone that makes you want to riff out! Now go ahead and experiment with the controls to get a feel for what they do. We'll cover them in more detail in the next section.

#### Boosting an overdrive pedal

This is really just the same as boosting an amp except that you are plugging the Naga Viper into the overdrive pedal. You'll find that the Range and Heat knobs will allow you to hone in on the boost tone you are looking for.

## CONTROLS

**BOOST** This control sets the output level of the Naga Viper. For overdriving amps or overdrive pedals, you'll normally want to set this control fairly high. You'll notice that as you turn this control you'll hear a slight whooshing or crackle type sound - this is normal and is due to the traditional Rangemaster circuit used for the Boost control.

**HEAT** This control sets the gain level of the Naga Viper. At full CCW, you will get a clean boost. At full CW, you will get the traditional Rangemaster response which is a slightly dirty boosted sound that doesn't sound that great into a clean amp but into an overdriven amp it is like magic! For dirty boosting, start with the Heat control turned all the way up and then back it off slightly if necessary to get the overdrive sound you are looking for. At full CCW, you will get a clean boost which works great as a "MORE" pedal, making your sound louder with a nice presence into either a clean or dirty amp.

**RANGE** This control sets the frequency response of the Naga Viper. For the classic treble-booster response, turn this control full CW. If you are playing into a cranked British style tube amp, you'll get those famous sounds! If you find you could use some more fullness, turn the Range knob back until you get what you're after. This knob is particularly useful for dialing in a thinner sounding single coil guitar or if you are boosting a Fender style amp or an overdrive pedal such as the DLS MkII or CB30.



With the Range set around noon, you'll find that the frequency response is fairly "flat" with a slight enhancement to the treble frequencies. As you turn the Range control CCW from noon, bass frequencies will start to get boosted as well.

The way the Range control works is it sets the lowest bass frequency that gets through. The "treble" frequencies are always being boosted.

**FOOTSWITCH** This is just your basic true-bypass switch. You may notice it might pop a bit especially the first time you press it after plugging in. There is circuitry that will make the pop completely go away but it compromises the sound of this circuit which is a very raw circuit that relies on the interaction between it and your guitar and amp to do its magic.

**YOUR GUITAR'S CONTROLS** Use them! You'll find that your guitar's volume control works to clean up the sound when plugged into the Naga Viper. If you are using the Naga Viper into a DLS MkII or CB30, you'll find that even with high gain settings, you can still get a clean tone just by backing down your guitar's volume control! You could leave them both on all night and go from clean, sparkly sounds all the way to full juicy overdrive!

# **CLEAN BOOST MODE**

If you turn the Heat control down and set the Range control to have more of a full range sound, you can also use your Naga Viper as a clean boost into a clean amp! Traditionally, treble-boosters did NOT sound good in this application but the Naga Viper can and does!

#### **POWERING UP THE NAGA VIPER**

You can use a variety of power sources to power your Naga Viper. It supports standard DC power supplies from 9 to 18 volts and of course, batteries. We encourage you to experiment with different powering options as they affect the tone and response in subtle ways. Our favorite is to use and old school carbon 9volt battery for the sweetest tone.

## WHERE TO PUT IT ON YOUR PEDALBOARD

While the best thing to do is experiment to find your own signal chain, you'll find that it usually works the best after wah pedals and before fuzz and overdrives. ESPECIALLY before your overdrives! Also, don't place any buffered pedals before the Naga Viper as they will negatively impact the sound. Ideally, the Naga Viper should "see" your guitar pickups directly for the best response.

# **DESIGNER'S NOTES**

I am in love with the classic British heavy guitar sounds of guitarists like Tony lommi and Brian May. I used to wonder how they could get a sound so alive and juicy and exciting. I certainly couldn't get that sound from my Marshall using a tube screamer. Finally, I found out they all used a thing called a "treble booster". So I bought a couple rangemaster-based pedals and eventually got to building some of my own using rare unobtanium mojo parts. They sounded great!

But I wanted more control over the boost so I came up with an extended version of the classic circuit that allowed fine-tuning the frequency response and the gain. Plus, I wanted something that was temperature stable but still sounded warm and juicy like the ones built with rare germanium transistors.

So, I ended up with what we call the Naga Viper. Oh, btw, the Naga Viper is the current world record holder for the hottest pepper! Seemed like a good thing to call the world's hottest boost! ;-)

- Howard Gee, Catalinbread



