

GALILEO



Operations Manual

Presenting the Catalinbread Galileo!

The Galileo is a dual function overdrive and booster that gives you the sound and feel of Brian May's live rig! Brian plugs his Red Special guitar into a custom treble-booster and a bank of AC30s to get his soaring overdriven guitar sound with Queen. We took our CB30 Foundation Overdrive (which emulates the AC30 amplifier) and our Naga Viper treble-booster (which is our extension of the Dallas Rangemaster treble-booster) as a starting point, and tuned and refined the sound and response until we got the perfect Brian May sound. Just plug the Galileo into your amp set to a clean, neutral setting and it will transform it into the juicy, harmonic-laden, soaring sound that Brian May made famous!

The Galileo incorporates all the hallmarks of our Foundation Series Overdrives, such as extreme touch sensitivity, clean to scream from your guitar knob, and authentic amp-like playing response that doesn't feel like you are playing a "pedal".

The overdrive and "Top Boost" have separate footswitches that may be used independently. Basically, it's two pedals in one!

catalinbread
MECHANISMS OF MUSIC

Quick Start

Don't worry, you don't HAVE to use a Red Special guitar to get tones evocative of Brian May with the Galileo! And even if you aren't going for Brian May's sound specifically, you'll find the custom-tuned combination of cranked AC30 overdrive boosted with our Naga Viper treble-booster circuit irresistible for your own epic musical explorations.

OK, so let's plug your guitar straight into the Galileo and then into your amp set clean to get acquainted. You can hook up your delay pedals and get your Brighton Rock on later! ;-)

Amp settings. We're looking for a cleanish neutral setting. On a typical Fender amp that would be Vol - between 2 and 4, Treble - around 6, Middle - around 6, and Bass - around 3.

Starting pedal settings. The knobs from left to right are:

Volume - 2:00

Treble - 1:00

Bass - 11:00

Gain - 5:00

Top Boost - 12:00

The Top Boost control is active when the right "Top Boost" switch is engaged.

Begin by playing with just the left side channel engaged. This is the cranked AC30 sound. Try turning your guitar's volume down and notice how you can go from crunch to crystal clear!

Now engage the "Top Boost" switch and get ready for some juicy soaring harmonics! You should be having a good time right about now!

Read on for more details about the controls....

Power Supply

You can power your Galileo with any quality power supply designed for use with effects pedals. The output should be a negative tip DC from 9 to 18 volts.

If you want more volume, headroom, and percussive attack, try running an 18 volt power supply. A 9 volt power supply will have a slightly softer sound that saturates more easily.

Also, you'll find using it with a 9 volt battery will give a slightly different response as well that is slightly softer. Try using a battery that is drained slightly to get a nice sag that's perfect for late night lower volume practice sessions!



Controls

VOLUME

The Volume knob sets the output level of the left side, AC30, channel. Depending on your guitar, amp, and other effects used, you'll find unity (pedal off about the same volume as pedal on) between noon and 3:00.

TREBLE & BASS

The Treble and Bass tone controls utilize the exact same tone circuit (tone-stack) as that used in an actual AC30. They are very interactive (meaning adjusting one will affect the behavior of the other) and a key part of the AC30 sound. The Treble control allows you to dial in just the right amount of AC30 brightness and the Bass control gives you the right amount of body. But remember they are interactive - so if you adjust the Treble control, you should also sweep around with the Bass knob to find your sweet spot. As mentioned in the Quick Start section, Treble at 1:00 and Bass at 11:00 is a good starting point.

GAIN

The Galileo was voiced specifically to get the cranked AC30 tones of Brian May's live work. So go ahead and set the Gain at maximum and back it off if you feel necessary (to compensate for hot pickups). Otherwise, set the Gain to max and use your guitar's volume control to go from crunch to clean!

TOP BOOST

This controls the boost circuit's output level and is engaged from the right side footswitch. The Top Boost boosts the Galileo's AC30 channel just like plugging a Rangemaster into an AC30.

But since Top Boost is independently selectable, you can use it on it's own without the overdrive channel on! Why would you do that? If you have the luxury of being able to crank your amp to crunch levels then you could use the Top Boost to boost your amp. If you actually own an AC30 and you can crank it then you could use the Top Boost to treble-boost your AC30 into the same soaring Brian May tones. This is cool because if you are playing in a low volume situation you can use the Galileo's overdrive section, boost it with Top Boost and get juicy, sustained epic rock sound at a very reasonable volume. Then when you get to crank your amp you can use just the Top Boost to get the epic soaring sounds at epic volume levels. Quite handy!

If you use the Top Boost by itself into an amp set clean you may or may not like the sound - it is voiced specifically to boost already overdriven sounds further. Go ahead and try it and decide what you like!

Another option with using the Top Boost by itself is to use it to boost another overdrive pedal other than the Galileo.

Experiment!

Note: When the Top Boost and overdrive channel are both on you will experience a certain level of hiss. This is the nature of the beast of the basic Rangemaster treble-booster architecture and changing things to make it have less self-noise would diminish the juicy harmonics the boost provides. In fact, I read something where Brian May's tech also stated the same thing about hiss and treble-boosters. So there ya go. It's rock and rolllllll babeeeee!



Designer's Notes

When presented with the opportunity to design a pedal that did the Brian May thing, I said, "Hell yeah!" Always loved his sound. So soaring, juicy, and epic. We already had the basic building blocks with our CB30 and Naga Viper pedals. The easy thing to do would have been to just stuff those two circuits in a dual-pedal box and call it a day. But I knew I could hone and refine them and really get the Queen vibe going.

On the CB30 side, I tuned it for higher gain potential and refined it's frequency response to get what I hear Brian May gets. I primarily referenced live Queen concert recordings throughout their career. I've read that Brian May has all his AC30s modded for more gain and whatnot but I didn't have access to those schematics. But I could listen to his recorded work and that's what I based my voicing decisions on. Well, that and just playing guitar through it and tuning it until the pedal "wanted" to play Brian May style parts.

On the "Top Boost" side, I took our Naga Viper circuit which has three controls and distilled it back to a one knob treble-boost optimized to boost the Galileo into juicy Brian May territory.

With both channels on, this may be the most fun to play dirt pedal Catalinbread has offered yet! It just feels good to rock out through this thing!

If you watch Brian May play you'll notice that his booster is always on (in fact, on recent tours it's actually mounted to his guitar strap before the wireless transmitter so that the guitar "sees" the treble booster circuit first (this is important because a Rangemaster style treble-booster is designed to interact directly with the guitar's pickups and not through a buffer circuit of any kind such as that on a wireless unit). So the booster is always on and he controls his entire range of sound from clean to soaring from his volume knob. He's always riding the volume knob on his guitar!

Enough babble from me, plug in, get down, make love.....

Thanks!!!!!!!!!!

Howard Gee, Catalinbread

Circuit Designer, Guitar Hacker, Audio Janitor



JUL 82



JUL 82