

USER'S GUIDE

INTRODUCTION

If you're reading this, it is probably because you've gotten your hands on a Catalinbread Manx Loaghtan fuzz... Or because you plan to do so soon?! In either case congratulations! My goal is to write a manual to provide insight on my design philosophy and help you get the most out of the Manx for your setup!

WHAT IS THE MANX LOAGHTAN?

Simply put it is a sustaining fuzzbox that provides tons of heavy low end and a ripping high end. The Manx Loaghtan is based off one of the most sought after fuzz pedals on the planet. The fuzzbox that has delivered a range of sounds created by Gilmour to Thurston Moore to J Mascis to Adrian Belew to Black Keys to Jack White to Smashing Pumpkins to Dead Meadow. With a roster like this there is no wonder why it is a classic fuzz circuit. One that has captured my imagination for many years.

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MECHANISMS OF MUSIC

DESIGN PHILOSOPHY

When I set out to design the Manx Loaghtan I knew I didn't want to slavishly clone the topology. I especially had no interest in choosing a specific example in the lineage and simply groking that - then calling it a day. As I saw it, there were too many opportunities to push this pedal forward rather than merely limit it to dwelling in the past! The first thing I wanted to address was the tone control. The classic tone circuit is a shared bass/treble balance control that always functions as a compromise between bright & thin or dark & fat. Unfortunately, when you find that right balance of bass and treble you wind up with a midrange deficit that results in your instrument getting lost in the mix. So I asked myself, why not separate the bass and treble into two controls?! Enter the Manx Loaghtan's tone stack, a meticulously tuned Baxandall tone control! Many years ago when I first studied the behavior of the Baxandall tone controls I knew it could be tuned to replicate the useful bass/treble balance tone control sounds EXACTLY... But not only that, it also could be dialed in to provide a flat tonal response, a boosted midrange, more extreme scooped midrange and treble/bass responses independent of one another. Later in this manual I will give setting examples illustrating how the Baxandall works and the benefits & applications of each setting.

After the tone stack was squared away the next thing I tackled was the SUSTAIN knob behavior. I wanted it to have extra saturation when cranked and when dialed back I wanted it to have a great lower gain overdriven crunch sound without being hashed, spitty, and under biased sounding. I took a twofold approach to achieve this. Careful gain staging and a bit of treble/midrange bypass on the Sustain pot. I will spare you the nerdy specifics here! Basically it boils down to a Sustain knob that is extraordinarily flexible and remarkably wide ranged. In other words the Manx Loaghtan can do low gain to high gain and everything in-between without compromise! No joke!

Finally, I made sure this thing sounds GIANT, plenty of low end on tap without getting flabby regardless of what you put in front of it. Seriously, I stacked tons of other pedals into the Manx Loaghtan, and it just took the abuse and mockingly asked for more.

QUICK START GUIDE

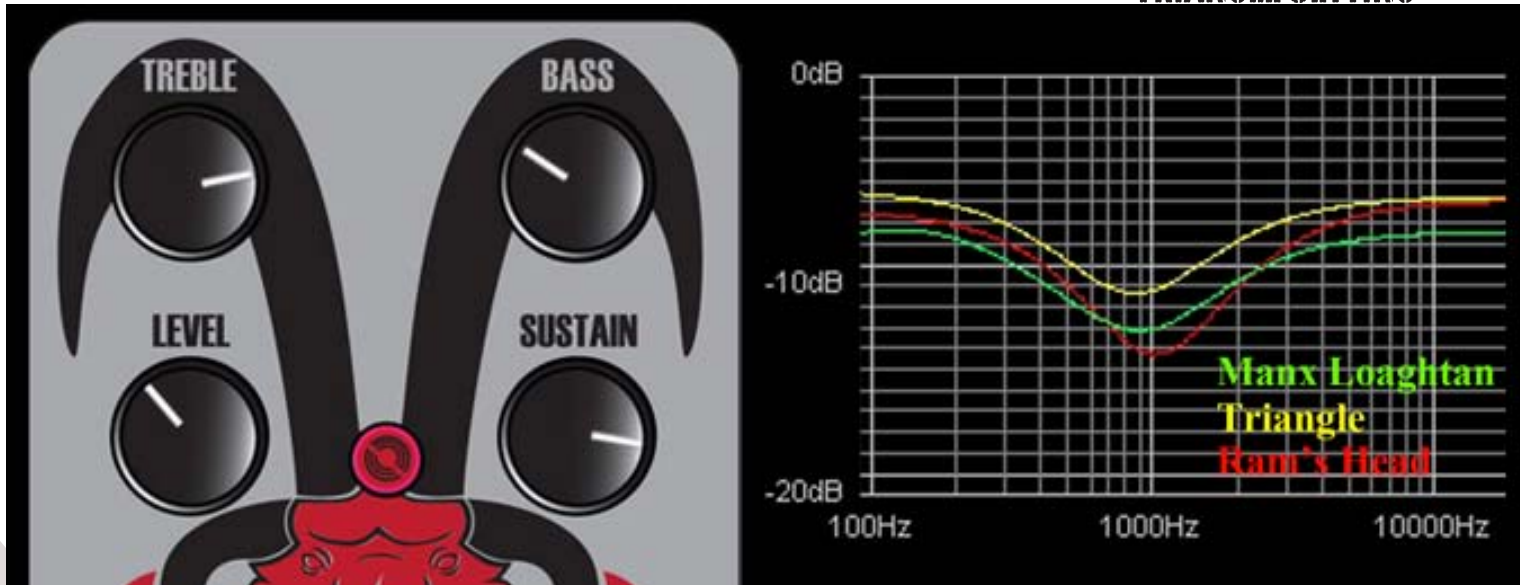
At first, I encourage you to try your Manx Loaghtan straight into your amplifier without any other pedals. This gives you the best read of the pedal itself and makes sure your instrument/amplifier system is in tip top shape. You can use the Manx into any amp, clean or cranked, solidstate or tube. Personally, I'd start out with a clean tube amp that has a reasonable amount of headroom on tap. This insures you're able to get the most out of the low frequencies that the pedal can put out. (Of course later on you may find that you appreciate the woolliness resulting from running the Manx into a cranked amp!)



Knob Settings

Let's start with dialing in comparable classic settings. First is the "Triangle Setting" noted for a moderately high gain and shallow midrange scoop. The Manx Loaghtan can deliver this EQ curve and sustain characteristic easily. Single notes, played up high with the neck pickup have a nice fluted singing sustain, chords stay full and relatively present in the mix.

TRIANGLE SETTING



Next let's dial in a "Ram's Head" sound. This setting has a much deeper midrange scoop and a touch less gain. Even though it has less gain it still sustains nicely, but the EQ curve makes for cutting through the mix a bit more tricky... It feels really awesome to play through though! Great for musical passages where the guitar is more or less the only instrument, and/or for layering guitar parts.

RAM'S HEAD SETTING



Now I want to take you to an "Extreme Scoop Setting". When you crank the BASS/TREBLE you get a midrange scoop way beyond any classic circuit that I am aware of. Cranking the SUSTAIN you get more saturation and gain than any historical unit as well... This setting is insanely fun to play, it sings and sustains forever. It has ridiculous amounts of low end... As a matter of fact it does attenuate low end until way below the human hearing/feeling range (not too many amplifiers can reproduce these frequencies anyway).

CRANKED SETTING



ABOUT THE BAXANDALL.

As I said earlier, the Manx Loaghtan features a "meticulously tuned Baxandall tone control". So far you've seen in the examples how to dial the Baxandall to deliver classic scooped sounds, and that is pretty neat! I really like how when you roll the BASS back below noon you maintain a bump around 200Hz, while progressively cutting frequencies below that. Whats the benefit to this you may ask? 200Hz in a band mix is the frequency that you'd bump up to keep an instrument sounding thick without interfering with the kick drum and bass guitar and other low register instruments.

The TREBLE knob gives you complete control over your presence frequencies, dial it in for the perfect amount of cut. Roll it back a bit for a flat (relative to your midrange) response, roll it even further and it will cut out progressively more and more high end making your sound seem more and more distant. Again this control is independent of the BASS knob.

Hopefully you are now wondering what happens when you roll both the BASS and TREBLE counter clockwise!? GIANT midrange boost! This can be really useful for amplifiers that naturally lack midrange. Turn up the VOLUME knob to make up for the perceived drop in volume as a result of cutting frequencies.

To summarize, crank the BASS and TREBLE for more traditional scooped tones. Roll either or both back to taste for special effect!

POWER SUPPLY

The Manx Loaghtan runs off of 9V-18V DC "negative center" power adapter. For a slightly more responsive and softer feel, try a battery! The unit draws 4mA, so a battery will last a good long time!

IN CLOSING

The Catalinbread crew and I spend a lot of time and creative energy to deliver the best pedals in the universe! The Manx Loaghtan is no exception to this. I'd love to hear what you think! So feel free to email me about your experiences with it!

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Create something!

Nicholas Harris

Circuit Designer, Founder and President Catalinbread LLC.



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