

# Malcolm Toft Punishr **500-series Distortion & EQ** NEIL ROGERS

ue in no small part to his having developed the sought-after Trident consoles in the '60s and early '70s, Malcolm Toft is rightly seen as a legendary figure in the pro audio industry, but he's also been the man behind various other console and outboard brands over the years. Most recently he's begun developing designs under his own name.

During the Covid lockdowns, Malcolm was approached by London-based Engineer Nick Mitchell about an idea for an 'analogue distortion box'. conceived as a high-quality alternative to the many saturation and distortion plug-ins out there. Enthused by the idea, Malcolm worked up the design and, after a period of experimentation and beta testing, the fruits of their collaboration were released in the form of the Punishr Analogue Harmonic Distortion Module. It's an all-analogue affair that manages to pack not only three different types of distortion but also a fully fledged EQ



Controllable carnage is the name of the game, but the Punishr can do warmth and subtlety too!

section into the confines of a single-width 500-series module. I was sent a pair of these modules for review, to enable me to use them on busses and other stereo material, and was very keen to discover what analogue punishment they could dish out in my studio!

# **Dishing The Dirt**

The Punishr's distortion section offers three different stages for 'attacking' your audio, and each has both a bypass button and a knob to drive that stage harder. The first is described as Symmetrical distortion and introduces clipping to both sides of the waveform. This results in a fairly conventional (but not unappealing) sort of distortion effect, and I generally found this to be a great place to start experimenting with most material if I didn't already have specific plans for it. Things get a bit more wild with the Asymmetrical stage, which introduces clipping to only one side of the waveform — this is definitely the unruly sibling of the trio! Lastly, we have Iron, which as the name suggests employs a small custom transformer. It was chosen for no operational reasons other than how it sounds when it distorts, and how nicely its effect combines with the other two distortion types

By default, in what will be the normal mode of operation for this section, the audio signal passes through each of these three distortion sections in series, but in the EQ section below (of which more later) there's also a Sum button. Press this and the input signal is fed in parallel to all three distortion sections, and the output is then summed before going on to feed the next stage in the module. It's also worth mentioning that each distortion section has an automatic gain compensation facility to ensure the signal doesn't increase in volume significantly as more

character is added. The idea. of course, it to make it easier to make judgements about the tonality, without level changes skewing your perception. It's a hugely useful feature and while we may be used to seeing it in plug-ins, it isn't commonly found in hardware.

Beneath the distortion section is the EQ. Malcolm Toft obviously knows a thing or two about designing EQ circuits, and while this is a compact EQ it's been well thought out and adds a huge dollop of flexibility and value. First, there's a fixed-frequency shelving EQ (±15dB of gain at either 100Hz or 8kHz) that allows you to make broad changes to the tonal balance. Below this a 12dB/ oct variable high-pass filter that can be set from 35Hz to 350Hz, and a low-cut filter that can be swept from 1.5kHz up to 20kHz. The filter and shelving stages can be bypassed separately.

With all the distortion stages bypassed you could, if you wished, use this simply as an FQ which is handy. But the real reason it's here is to shape your distortion. If you're a regular user of saturation/distortion style effects, you'll know just how much difference it makes if you place an EQ before or after the distortion stage, and Punishr gives you the ability to toggle the EQ section pre and post distortion.



The last feature of note, which comes at the end of the signal path, is a dry/wet blend control — it's a welcome addition to any analogue processing device, but hugely significant here, as it makes it much easier to coax usable results from the more full-on options available in this device.

## In Use

There are many positives to the 500-series format but one of the downsides is that the small front panels mean controls can often feel very crowded. I talked to Nick Mitchell to check a few facts as I was finalising this review, and he explained that a lot of thought had gone into the layout and the choice of pots used, the main idea being to ensure that the Punishr felt like using an intuitive console-style channel strip. This care seems to have paid off, since while the Punishr does pack a lot of controls into the available panel space, I was pleasantly surprised by just how quickly I was able to get my bearings — it felt like a matter of minutes before I was playing with sounds and not even thinking about what control was where.

The bread and butter of my recording and mixing work involves 'real' instruments played live, which usually demand more subtle saturation treatments. The Punishr can certainly deliver the sort of warmth or edge required for that but, to cut a long story short. I found it to be most effective when used with loops and more programmed material like electronic drums, synths and Moog bass lines. Putting a drum loop through this thing is straight-up fun, and from crunchy distortion through to full-on glitchy annihilation it felt both inspiring and refreshing to be indulging in this kind of tomfoolery outside of the box. Fuzzed-out bass sounds were another favourite subject for abuse, as was anything that suited a dose of fizzing, upper-midrange excitement.

For more conventional mixing duties the Punishr also has lots to offer, and one effective use for distortion in a mix is to inject a sense of 'definition' or 'forwardness' into vocals or certain other parts. The EQ section really comes into its own here, and is the key to your ability to go beyond 'creating cool sounds' and on to actually getting things to work in a mix. The combination of the two filters and the high and low shelving EQs was perfect in this regard, and I loved the hands-on immediacy of being able to tame a more 'out there' distortion effect with a nice analogue EQ. The regular EQ can mellow



Traditional through-hole components are used throughout this all-analogue design.

things out if needed, then, but the Sum option also tends to have the effect of calming things down and creating more mix-friendly effects — I suspect this is due in large part to how the transformer reacts to the two waveform clipping options. In practice, I tended to find that I engaged the module on a source and had fun taking things a bit too far, before using a combination of the wet/dry control and EQ to shape it to suit the mix.

#### Summing Up

The first thing I had to learn about the Punishr was what it wasn't trying to be. I came into this review off the back of assessing some very high-end valve-based outboard gear that imparted a richly colourful saturation to any audio passing through it. This isn't at all what the Punishr is about! While you can coax subtle, vintage-style effects from it using a combination of the Symmetrical and Iron controls in parallel, this just isn't the unit's reason for being. Rather, it's an analogue tool for creating bitey, nasty, fizzy distortion that transforms a sound, and then offers you the tools to caress and cajole into working in a mix.

When I first read the Punishr marketing material, my initial thought was that it was explaining the functionality you'd expect from a well-designed plug-in — Malcolm Toft really has done a superb job of executing all of this in the analogue domain. The ability to bypass each section and the gain levelling circuitry make it so easy and enjoyable to audition different sounds, and for many DAW-based mixers trying this out, it's going to feel like a novelty getting your hands dirty when playing with this style of hardware.

It's not just about the functionality, however. To my ears, the Punishr sounds different in style and flavour from most of the well-known distortion plug-ins, which so many of us now tend to use. The quality of the EQ section is a bonus too — while it's a crucial tool for shaping the distortion effects, it can hold its head high as a standalone EQ.

I had a lot of fun punishing my audio with this well thought out 500-series module. It can be used for anything from subtle to crazy effects — it's an excellent tool for shaping and creating sounds at the writing stage, or for adding personality when mixing — but it should appeal particularly to those working with synths, drum loops, and programmed material in general.

### summary

The Punishr offers a creative and creditable hardware option for distortion effects, whether you're writing, producing or mixing music. With three distortion flavours and a great-sounding EQ section, the Punishr is both fun and good value.

- £ £649 including VAT.
- T KMR Audio +44 (0)20 8445 2446
- E sales@kmraudio.com
- W www.kmraudio.com
- W www.malcolmtoft.com