

whestTHREE Signature – 2990 €



AN ASSURED SENSE OF STYLE

Great cartoonists can tell an entire story with just a few deft strokes. Great high-end developers can conjure up absolutely sensational sounds using just a handful of components.

By Roland Kraft. Images: Ingo Schulz

If the number of screws used to fasten the cover of this phonostage is anything to go by, then this UK-made product really means business. In terms of concealment, I mean. But it really doesn't need to. A glass cover would be appropriate, as it features, after all, one of the

most visually attractive, cleanest, and thoroughly precision-styled printed circuit boards that I have ever seen. But that's not the point: Where microvolt signals are involved, then shielding is vital. And you certainly don't have to explain that to James Henriot, because the man simply makes nothing else but phonostages upon phonostages upon phonostages. In Stereo, Dual-Mono, Dual-PSU-Mono, Dual-PSU-Stereo and Dual-Du-

al-whatever. And people who do that must have a passion for phonostages and certainly know everything there is to know about them.

With his brand new model,



Wharfedale
dual mono phonostage



A change of thinking

No thought controls as regards the terminal resistance of MC pickup units

The "correct" terminal resistance of moving-coil pickup units is rightly the subject of frequent debate. And I have placed that little word "correct" in quotation marks, because we will soon see, to what extent certain much-loved rules of thumb and the good old 100 ohms rule can be jettisoned.

The long-held (for what seems like an eternity) standard assumption (to which there is basically no objection) is that to connect moving-coil pickup units to conventional MC amplifier stages requires a so-called impedance bridge (the features of MC transformers, which are different, are not the subject of discussion here). The impedance bridge involves setting the load resistance – in our case the MC terminal impedance, "on" which the system's electric generator works – some five to ten times higher than the generator's internal or output resistance. The former results from the resistance of the generator coil's copper coil and usually has a low resistance value. Since nothing has ever been standardized as far as pickup units are concerned, in practical terms we are talking output resistances of between 3 ("low-ohm") and roughly 50 ohms ("high-ohm"). There are however pickup units, which feature almost 100 Ohms internal resistance! It's as clear as day, that sound-pickup manufacturers know what internal resistance their products have and of course should state those numbers.

Thus a pickup unit with, for example 40 ohms of internal resistance (for instance a Denon DL-103) would feature 210- to 470-ohm terminators – and therefore not the broadly standard 100 ohms. This termination configuration guarantees, that almost maximum generator voltage is in contact with the amplifier's input point, meaning the signal is only slightly attenuated. We are talking here about "insertion attenuation", which is determined by the generator's internal resistance and is a measure thereof, to what extent generator voltage is decreased in relation to infinitely high load resistance. In practice the fact is, that the pickup unit's voltage does not increase further from

a finite load impedance value onwards. If there is any perceptible insertion attenuation, the amplifier of course needs to compensate for this loss of voltage, which is (also) associated with a higher level of noise. But per se you don't want to be "giving away" amplification unnecessarily, especially if the noise level increases (of course one amplification factor is constant, but where the useful signal is greater, the unweighted signal-to-noise ratio increases).

Thanks to better components and plenty of brainpower, noise is not the tricky issue it was 20 or 30 years ago. The higher the input resistance, that was the rule, the greater the risk of locking in interference voltage and noise, which would amount to inherent noise in the amplifier. So there was a trend towards low termination resistances, and at the same time a kind of "norm" of 100 ohms for MC input points started to gain currency. From a modern-day perspective neither is correct. Given the high internal resistance of many MC pickup heads, 100 ohms as a "standard" was actually always a bit of a nonsense. Depending on impedance circumstances, small load resistances can also cause higher generator self-induction, because a portion of the voltage is shorted out via the resistance. Since we are basically dealing with a "reverb system" here, you would expect (electric) attenuation to increase, which de facto must impact on sound. Since ideally we want little to no insertion loss, we need to regard five to ten times the generator impedance as a sensible bottom line (which still features electrical damping) and with the aid of audio tests work our way "up" from there – for instance using a Denon DL-103 with 1000 or even 2000 ohms terminal resistance, in order to achieve the maximum level and maximum dynamics. A sound pickup unit with three ohms internal resistance should therefore be trialled with 25 ohms, but it may be worth experimenting by upping to 50- or 100-ohm terminal resistance. From experience many pickup units sound remarkably more lively if termination impedance is significantly increased. Admittedly the prerequisite for this is properly earthed and well-shielded phono platforms with low-noise phonostages.

» the whestTHREE Signature, Henriot is presenting what he regards as the lower half of his product range, namely a small transformer box plus a 25 x 25 cm box, the underside of which features an unscrewable cov-

er. Beneath that cover there are DIP switches to adjust impedance and amplification, although the THREE Signature per se provides sufficient options. However if you require less than 100 ohms, the manual says



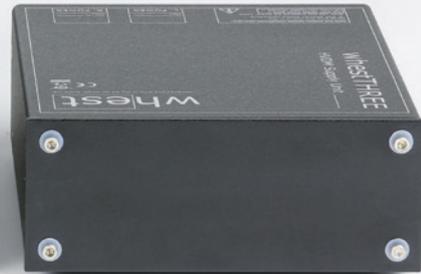
you should seek the advice of the manufacturer, since the load resistances in the device can be shunted to achieve practically whatever results you like.

Of course this Brit uses a separately housed mains transformer, in order not to induce any AC voltage interference fields into the circuitry. This is said to be a special model, which has been especially designed to provide as clean a power supply as possible; such transformers normally (also) feature

better shielding between the primary and secondary coils. Two cables connect with the amplifier, which features a fully discrete circuit configuration and plenty of power input. A glut of filter capacitors



- 1** Just two tiny LEDs on the bottom right of the front face panel indicate that the Whest is switched on.



» plus a whole phalanx of voltage controllers. That apparently is as far as Henriot goes in terms of integrated circuitry. To a large extent he relies on single semiconductors to do the amplification work, which is demonstrated by a chip at the whestTHREE Signature's input point, which could be either a fine double-FET or indeed an op-amp – one can't be certain because this particular phonomaker literally hides his light beneath a paint-layer bushel.

At any rate Henriot does not appear to be a fan of highly complex circuitry, since his RIAA-equalization system is otherwise based on, believe it or not, eight transistors, of which two are powerful specimens, which operate as symmetric output drivers and therefore also make coupling capacitors to the following device superfluous. The RIAA appears to me to be of the passive type and the components used are de fac-

to not from the spare parts box, as you might expect on such a piece of kit. What I also didn't expect was an amplifier circuit as featured here. For it is anything but "trendy" and dispenses entirely with the excessive complexity that is so common nowadays. Previously the rule of thumb amongst high-end electronics specialists with plenty of audio experience was that simple structures basically sound better. Nowadays to get 20dB amplification you need roundabout 50 (SMD) transistors or a dozen op-amps, which in total cost the same as what you would have paid for one decent low-noise double-FET. But sorry, I am going off at a tangent, exaggerating cynically and am certainly not entirely up to speed with current doctrines...

In combination with an EMT JSD6 and a 470-ohm terminal, the Whest then demonstrates in sound terms that Mr. Henriot is not one of those people, who cre-

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ates stacks of rather pedestrian chips, with the aid of application manuals and router software. In terms of dynamics this was all a very emotional experience, whilst in terms of auditory spaciousness I have seldom heard anything to top this and in relation to balanced yet vivid tonality, there is absolutely no need to lower your sights. But enough of the usual descriptive truisms, that is only half the battle, since various top-of-the-range phono amps are just as good at what they are required to do. In other words the whestTHREE Signature – which is pretty astounding anyhow – can be classed somewhere amongst greats of the caliber of an Einstein The Turntable's Choice or an EAT E-Glo. Thus it makes the grade in its price category.

But the truth is that I sat for a week in front of the damned thing and tried frantically to get my jaws to close again. Let's try to smuggle a few fairly drastic

PHONO PRE-AMP



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words past Eddy the Editor, shall we. So, my friends: This is the best goddamn phonostage that I ever have listened to. By a country mile, incidentally. And you can't really claim that I just had cheap junk at



- 2 Symmetric output points are preferable in theory, yet the cinch-contacts are no less fun.
- 3 Circuitry-wise this phonostage can be regarded as having a structure that is straightforward, but certainly not simplistic.
- 4 Only the transformer has been migrated to a separate housing, whilst the rectifier diodes are located right behind the connecting sleeves.



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» home to compare it with and would fall for any old impostor.

If we measure the credibility of the presentation in terms of spatial perspective, the way in which virtual sound bodies are filled with vibrating energy and the ability to pack a sense of compelling excitement into every single sound, then this phonostage

5 Input and output only: four cable connections within the housing. The circuit board is spring-mounted on the front face



reveals a set of highly fascinating characteristics, which you only get to listen to in this combination – totally irrespective of the price, mark you – once in a blue moon. I therefore have absolutely nothing to criticize, very much on the contrary. And I strongly doubt that this unprepossessing little box of tricks is going to leave my audio sanctuary any time soon. Yet Mr. Henriot has got some even "grander" models up his sleeve, unreal! Make no mistake, I want to and will concern myself with these too.

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whestTHREE Signature

Phono Pre-Amp

Input: 1 x Phono MM/MC reversible

Output: 1 x Main Out symmetric (XLR), 1 x Main Out non-symmetric (cinch)

Special features: Separately housed transformer, DIP switch adjustment of MC impedance and amplification settings on the underside of the device, eight impedance settings from 100 Ω to 47 k Ω , MM Gain 42–46 dB, MC Gain 50–72 dB

Dimensions (W/H/D): 24/5/22 cm

Weight: 3,5 kg

Warranty period: 2 years

Price: 2990 €

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