

The Fine Art Of Compromise...

A user adjustable phono-stage from Keith Herron

by Roy Gregory

Not so long ago the phono-stage was an integral (albeit central) element in every single serious pre-amp. But with the advent of CD the audio landscape shifted, and as vinyl fell from favour, designers were only too happy to dispense with the tricky and expensive necessity of providing onboard phono equalization and amplification. Pretty soon the phono-stage became first an optional extra and then a standalone purchase, turning turntables into line-level sources like everything else – a step which naturally also added the cost of a dedicated power supply and casework to their price as well as adding another box and set of interconnects to your system.

But it wasn't all bad news. Truth be told, a separate box is probably pretty much a pre-requisite for serious performance, as is an independent power supply. So, although phono-stages became (in some cases, much) more expensive, they also started to deliver results that previously we'd only ever dreamed of. And as they, of necessity, became a more specialist item, they also became more specialized, with committed vinyl listeners prepared to countenance ever higher prices in pursuit of ever greater improvements in performance. But, as is so often the case, this specialization took two routes, routes with apparently conflicting goals. On the one hand,

manufacturers sought to offer increasing flexibility and user configurable parameters. On the other, the ever increasing transparency and resolution of the latest phono-stages was ruthless in revealing the subtlest of changes in circuitry or componentry, driving a move towards ever simpler and more straight-line designs, an approach which had become pretty much de rigueur by

the end of the 20th Century.

But the times they are a changing, and so is the audience for vinyl – or at least the vinyl they're listening to. Ever increasing interest in older stereo and now even mono recordings is presenting new challenges to the designers of today's phono-stages, while all that increased resolution has opened the window on turntable and cartridge performance, throwing the whole question of cartridge loading into stark relief. Suddenly, the adjustability of phono-stages and the variety of parameters those adjustments must address has become a hot topic: gain, loading (resistive and capacitive) and equalization are all back on the agenda.

So much so that the question has ceased to be whether we should switch or not, but how to switch better?

The Herron Audio VTPH-2 Vacuum Tube Phono Pre-amplifier

While tubes have a long and honourable history when it comes to amplifying the signal from moving-magnet cartridges, moving-coil stages relying on thermionic devices are altogether more rarified

and tend to be temperamental. So, given Herron Audio's

reputation for sound engineering, solid technical performance and exceptional consistency, it's no surprise to find that, whilst Keith Herron's VTPH-1 standalone phono-stage coupled passive RIAA equalization with

tubes for its moving-magnet section, the moving-coil version added a solid-state stage to provide the necessary extra gain. Otherwise, the unit was business as usual for a Herron design: thoughtful and conservative engineering (for which read "solid" as opposed to the all too frequent "flaky"), matched parts, exemplary technical performance, almost obsessive attention to detail. And like the other Herron products, the result was a performance that belied the surprisingly modest price-tag. Which was a bit of a problem. You see, the VTPH-1 was a no-holds-barred, minimalist design intended for ▶



● EQUIPMENT REVIEW

▶ a few analogue die-hards of Keith's acquaintance. Unfortunately, the word got round and demand rapidly outstripped supply, causing a rapid reappraisal of the situation – and a far less rapid evolution of the design into a more manufacturable and user friendly device. Along the way component choice and tolerances were further refined, along with some of the thinking



behind the product.

Enter then the VTPH-2, visually essentially identical to the VTPH-1 – at least from the front: the same compact and solidly constructed chassis, the same three LEDs to indicate the start-up sequence and operating status (blue now rather than green, to match the latest line-stages). But round the back things get a whole lot more adventurous, with double the socket count for starters. So, whilst the VTPH-1 was a dedicated design, either moving-magnet or moving-coil, the -2 is a switchable device, with inputs for both high and low output pick-ups. Also, where the high-gain version of the -1 required a technician to solder resistors across the inputs to fix loading, parallel sockets and loading plugs make user adjustment a doddle. And yes, hard-wired loading resistors do sound better so that option remains, once of course you've decided on the optimum value. Incidentally, Herron encourage you to at least try the moving-coil inputs as

supplied, wide open or in effect, with an infinite loading value – of which more later.

Much of the circuit topology itself remains essentially the same, the MM section and power supply arrangements being almost identical to the earlier version. There's also the sophisticated three-stage slow-start arrangement, designed to protect the performance of the valves so

critical to noise performance. But the solid-state gain-stage is all-new, employing different FETs and a new circuit. Couple this with various refinements and improved component quality and matching elsewhere and you've got sound reasons for the uplift in performance over the -1. And yes, the -2 does sound better...

Supplied as standard with a quartet of 12AX7s and a single 12AT7, offering 69dB of gain in moving-coil mode and 48dB with moving-magnets, replacing two of the 12AX7s with 12AT7s will trim the gain in both instances by 5dB, a useful option when it comes to matching cartridge output and overall system gain for optimum results. Finally, there's a mains polarity switch on the rear panel, something that should really

be obligatory on all electronics – and yet another example of Keith Herron's no-nonsense approach to engineering that matters. And you get all that for \$3650. Yes, US dollars; inexplicably the Herron products have no UK distribution at present, although they can be purchased in 230V versions from Herron direct – just remember to add shipping, duty and VAT.

Even leaving aside the increased versatility of the VTPH-2 it is still a clearly superior unit to the original version. Side by side comparison with both phono-stages loaded at 47K, the -2 immediately displays superior transparency, separation, a broader tonal palette and more harmonic texture. Voices and instruments are more easily differentiated, the way they fit together much more obvious. Remove the input loading plugs and run the unit wide open and there's a further gain in tonal purity and immediacy, an easy, breathy quality and delicacy that makes this mode a really worthwhile alternative to those who prefer not to load their coils down. However, personally speaking I've never followed that path. Load the input down (interestingly the Titan i preferred a 200 Ohm load on the Herron as opposed to 100 Ohms elsewhere*) and the sense of focus, spatial separation and control all increase significantly.

Your first listen to the Herron's MC inputs will likely be a fascinating example of audio expectation. The large, coherent acoustic it creates, the fabulous texture it reveals in instruments, especially at low frequencies, will have you nodding sagely and muttering, "Ahhh... tubes" under your breath. Yet listen a little longer and you'll discover some distinctly un-tubelike qualities too. For a start, noise levels are extremely low and what noise you hear with your ear to the speaker is extremely stable, a low hiss with not a trace of whisper or distracting modulation. Then there's the bass which isn't just deep and powerful, but transparent and solidly ▶

Perhaps Keith Herron knows something I don't (actually, I'm sure he does) but it's uncanny that he chose to supply a second set of loading plugs for 200 Ohms, but this time using metal oxide resistors as opposed to the metal film ones generally employed. It's certainly a salutary demonstration as to just how critical components at this point in the signal path can be! The metal oxide resistors shrink the soundstage, diminish dynamic resolution and range, killing the communicative qualities of the system.

► propulsive as well, with air and space around the notes that lets you hear underneath them. There's plenty of weight and wallop here. Finally, there's the tonality, warm and natural but without any hint of bloom, roundness or cloying sweetness to congest or slow the midrange. The end result is a sound that's neutral and inviting, insightful and musically generous. The Herron lets you hear what's happening as well as filling you with anticipation for what's about to arrive.

Pick up an acoustic instrument and the better it is, the greater the sense of life, of energy just waiting to burst forth. This is exactly the quality that the Herron phono-stage captures. All that texture it brings to instruments is built on micro-dynamic definition and the ability to capture the harmonic envelope, the pattern of energy that extends from instruments.

So, playing the measured, slowly building opening movement of the Sibelius Second Symphony (Berglund and the Bournemouth on EMI) the sense of constrained power, the players holding back under the conductor's baton is almost palpable, lending even greater scale and emotional power to the giant sweep of the eventual release. Berglund's bold use of the brass brings colour and impact, yet never swamps the supporting strings, while the pizzicato bass notes that punctuate the first movement are always pregnant with energy, a pluck and release with poise and purpose, rather than the leaden thuds you so often hear from systems playing this disc.

Now translate those qualities to the start of the second movement. The drum roll that opens proceedings is beautifully present, deep in the soundstage, the skin a vibrant and complex thing that sets up the extending, solo bass introduction. Again, the instrument is held within the soundstage, the subtle variations and development of its extended melody secure in pitch and pace, drawing you into the burgeoning layers to come. And boy do they come. The colour and

ability to reveal each step in the growing intensity of a crescendo mark out the beautiful balance that the VTPH-2 strikes between the instrumental detail that gives music its beauty and the body and presence that gives it its drama and so much of its passion.

Its musicality is built on the ability to give instrumental character full reign whilst retaining the coherent sense of space, separation, presence and dynamic range that translates individuals into a performance. As I wrote above, there's no clogging of the midrange or slowing of dynamic response, no rounding of what should be sharp edges, no allowances made to warmth or a comfortable, rosy glow. So, play Nanci's 'Listen To The Radio' and you get all the insistent, infectious urgency of the driven tempo, while the fearful, angry snarl of Attila The Stockbroker



delivering his nihilistic masterpiece 'A Bang And A

Wimpey', constantly on the verge of corpsing, has just the right sense of desolation and that added hint of hysteria.

This phono-stage is a musical chameleon, shifting both shape and colour to catch the mood of a recording. But what makes it special is that it has sufficient resolution, detail and transparency to satisfy all but the definition uber alles brigade; or if you will, all the benefits of tubes with few if any of the costs – sonically speaking at least. The VTPH-2 is colourful, dynamic and spacious, yet still offers the sort of noise levels, linearity, separation and precision that we more often associate with solid-state designs. The best of

both worlds? For many a listener who wants the clarity that comes from silicon without the edgy bleaching that all too often accompanies it, or to release the beauty and emotion from records played on a dry and over-damped turntable, I suspect it will come as mana from musical heaven.

Conclusions

For once the conclusions here are simple. Yes, adjustability matters if you want to get the best out of your phono replay. The Herron VTPH-2 gives listeners all the benefits of a tube unit with few of the failings and a textbook technical performance to boot.

It offers a level of vacuum-tube engineering (carefully combined with solid-state circuitry) that's rare at any price, unheard of at this one. ➤+

TECHNICAL SPECIFICATIONS

The Herron Audio VTPH-2 Vacuum Tube Phono Pre-amplifier

Type:	Standalone phono-stage
Gain:	64 or 69dB (MC) 43 or 48dB (MM)
Loading:	User defined, up to an infinite load (MC) 47 kOhms (MM)
Replay EQ:	RIAA
Output Impedance:	500 Ohms
Dimensions(WxHxD):	444 x 100 x 240mm
Price:	\$3650 US

Manufacturer:

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