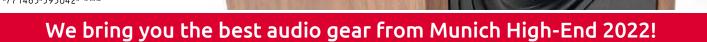




£5.99

ISSN 1465-5950



EQUIPMENT REVIEW

# Karan Acoustics Master Collection PHONOa phono stage

Alan Sircom



 n looking over the Karan Acoustics Master Collection PHONOa – the latest in the revised pinnacle-product line from electronics experts Karan Acoustics – it occurs to me that we are at something of a pinnacle of performance, one that will not be achieved again. Milan Karan's Master Collection line is an expression of his 30 years as an audio electronics designer.
That means he began at a time when CAD/CAM was in its infancy and his first designs would be more 'on paper' than the result of a program. Those skills only belong to designers from that time; most modern electronics engineers look to programs like SPICE to prototype circuits.

However, these 'stick and rudder' designers who have been making products for decades are often not so set in their ways as to ignore the importance of new technology. As a result, we get the ideal combination of expertise and modernity; producing products that build upon decades of painstaking testing, but produce sound quality that would be virtually impossible at even the turn of the century, thanks to improved circuit design tools and infinitely improved componentry. Enjoy it while it lasts! While such praise might fall into 'the cult of the designer', this unique time also allows us to experience for something that's both rare and good to find; the careful honing of a circuit over decades. When founding his business, Karan searched for what he deemed to be a fulfilling fundamental audio circuit for his preamplifiers (both line and phono) and power amplifiers (both mono, stereo and integrated). Once he found it, he carried all the positive virtues those concepts from one generation to the next, honing and perfecting it, kept improving passive and active components as they became available. Guess what? All Karan Acoustics products did get better and better with every change.

## The Ship of Theseus

Which brings us to Master Collection, and the Ship of Theseus. The Ship of Theseus is a classic thought experiment dating back to the philosophers of Ancient Greece; put simply, if every part on a ship was replaced one piece at a time, is it still the same ship? In the case of audio components, eventually, with every part being revised and replaced, is the original model still the original?

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This is a problem every manufacturer experiences at some point. There are companies that address this by changing the product name suffix (Mark XXIV, anyone?), and there are others (like Karan) that are content with continuous development. However, there comes a point where the next evolutionary step is so significant, so large that neither another suffix change or simply ignoring the issue is not enough. This is what happened with Karan, and the result is the Master Collection.

We have already looked at the two-box and onebox preamplifier and the mono amplifiers in the Master Collection series (in Issues 181, 191 and 203 respectively) and now it's the turn of the phono stage. As before, the Master Collection PHONOa is the top, two-box model with a single-chassis PHONOb waiting in the wings and, as ever, the Master Collection replaces all existing phono stages in the Karan line. This last comes with a bit of a sharp intake of breath, as it means the cost of entry into Karanland increases markedly. However, as with the previous preamp and mono power amps, so does the performance. On past form, the single-chassis Master Collection model confidently and comfortably out-performs the top two-box model from the out-going KA series, with two-chassis models like the PHONOa setting new standards. This seems right; on listening to the Master Collection PHONOa, those new performance benchmarks were reached!

So, let's have a look at what makes the Master Collection PHONOa so much more advanced and, hopefully, special than it's last 'regular' predecessor KA Phono Reference which managed to raise the bar within the solid-state phono preamplifier top division as it was.

For starters, Karan has put a lot of thinking and practical hours into the development of the new chassis for all Master Collection products. He realised that various mechanical resonances (both external and internal), as well as internal electromagnetic interferences have a huge impact on the overall sound quality. Consequently, (and this is even more crucial in phono preamplifiers due to very low voltage and high sensitivity audio signals as such), the new chassis for both the main unit and the power supply are made out of a much superior material and the method of joining panels and isolating the internal contents has been elevated by quite a margin.

Another step forward relates specifically to the preamplifier chassis and its newly-designed stand-off pillars for circuit board connection with the chassis. They have been manufactured from a special sort of clean copper thus allowing the natural transients to remain audible, rather than destroyed by wrong decoupling.

The final element of the mechanical improvement chapter are the latest Critical Mass System feet, already present on all Master Collection products, but this time

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they are of an increased height. While, to some, it may take away a bit of the inherent elegance Master Collection enclosures radiate by default (hopefully not also making the product less usable with its increased overall height), they do have their meaningful contribution to the overall sonic performance.

A new, improved, generation of Karan's printed circuit boards is also evident in the PHONOa. They have a newly conceived isolation material which separates active tracks (traces) for the audio signal, power supply and grounding much more effectively than before. Traces are made of the best OFC copper and are of a substantial 75 micron thickness. This, combined with an improved overall design of the circuit boards layout, further reduced the unwanted inter-component influences and any detrimental effects that arise as a result.

## On the circuit

Moving on to the circuits of the PHONOa themselves, the input gain stage is completely new both in design and in the choice of superior active components with considerably lower noise levels, higher transient speed and wider bandwidth. The same applies for the output section of the preamplifier and all switching required for the settings and inputs is now much quieter and even more isolated from the audio signal path.

As with the KA Phono Reference, the Master Collection PHONOa has three inputs which are, literally, three completely separate phono stages in the same chassis! Every input has almost limitless flexibility in terms of gain, input load and capacitance adjustments, culminating with open positions where users can insert passive components of their own value choice if so desired. Additionally, every input has RIAA, EMI, Decca, Columbia and Teldec equalisation options. All EQ settings employ the very best and fastest capacitors with a super low 0.5% tolerance. They are also extremely fast and ensure the lowest possible deviations from each one of the curves.

Each gain block has been given additional capacitance for the main capacitors, as well as carefully chosen bypass capacitors to provide more energy while improving the impulse response, too. Meanwhile, each phono input also provides absolute polarity (phase) reversal choice and, for the first time, each input has its own Mute facility which can be and is crucially helpful in a phono preamplifier.

All internal wiring as well as the umbilical cable connecting the main chassis with the power supply

unit come from Cardas Audio, while input and output connectors stem from WBT (RCA) and Neutrik (XLR). Being a truly differential (balanced) design, like all Karan Acoustics products, a generous combination of RCA and XLR interfaces is available both on the input and output end of the component.

Moving to the Power Supply Unit, there's a hugely increased overall capacitance reserve of  $120,000\mu$ F (which gives it a reservoir capacitance that many power amps would find respectable), three 'generously specified' mains transformers (one for each audio channel with one more for all the switching and displays) and an Audio Ground Switching function situated on the rear panel of the power supply unit. This allows the user to compare the sound with the audio ground present or lifted in a safe and proper manner both for the phono preamplifier itself and for any other connected source components.

### It's a family affair

There is a temptation to reference this review against the predecessor; the KA Phono Reference reviewed in issue 117. Because in many ways the apple doesn't fall far from the tree and the performance that outstanding phono stage delivered has the same functionality, intention and even basic sonic signature. But, less than a minute into the listening and it was clear such an exploit was pointless. The Master Collection PHONOa is so far beyond the performance of the KA Phono Reference they bear little more than vague familial similarities. By losing yourself in those similarities, you end up failing to see just what this phono stage is capable of in sonic terms.

It's almost surprising how good the Karan Master Collection PHONOa sounds, or – perhaps more accurately – how good your records and your cartridge sound when played through the Master Collection PHONOa. That 'musically honest' performance of both the previous phono stage and its stable-mates in the Master Collection range is instantly evident here, as there is no hint of a lift or a dip or any kind of sins of commission or even omission here. This is like direct-injecting vinyl into your ears, and it's a captivating experience.

We all begin listening tests with our benchmark standards, and in many systems that's more or less where it ends, but the PHONOa is so beguiling, so musically adept and inviting that you start to reach for those pieces of music that have helped define you as a music-lover; the ones that hooked you even before audio got under your skin. For me, »

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that's Abbey Road by The Beatles. All of it, front to back. And when it played out, the temptation to just put it back on and listen again was nigh on irresistible. The PHONOa is adept enough to get past all the Ringo downplaying; his drum solo on 'The End' is sheer magic of course, but other drummers often praise him for being a drummer that 'sits in the record', and hearing him play that swampy Ringo Swing through this phono stage, I get that. Other phono stages make the music sound great, but as a non-drummer understanding not only how good Ringo was, but seeing it almost through drummers' eyes is a wonderful experience, all the more so in that I've been listening to that record since I was about 10 and I never quite understood what people really meant by that. Until now.

Similar revelations were forthcoming throughout, and as they appear, you realise the reason for their appearance is the same one that means you don't find yourself describing aspects of the phono stage's performance on your note pad. It eclipses all that, and anyway that would just be a series of superlatives, as every sonic parameter is reset to a new standard. Images are precise, stable and perfectly dimensioned. Dynamic range is in the 'jump out of your seat' level when called upon, but subtle and full of texture when playing more legato music. You are in the hall, in the studio... or sometimes inside the piano (there are some odd mixes out there). Each time you make a note about performance on the pad, it's about what the record or the artist is doing. The PHONOa transcribes that intention on vinyl perfectly and without fuss. Or noise; this is one of the quietest phono stages on record (pun intended).

There is so much more to say about the Karan Master Collection PHONOa, but it's just more of the same. This is the best phono stage I've heard, and by no small margin. Sure, there are some remarkable phono stages, and many make music sound fabulous, but none make it sound quite as 'right' as the PHONOa. Honest without brutality, detailed without edginess or etched sound, tonally perfect, dynamically unparalleled and producing a soundstage that is only constrained by the record before it and the system afterwards. This is how music should sound through the very best of the best. **+** 

## **Technical specifications**

Type Solid-state phono-stage Inputs 3× balanced XLR; 3× single-ended RCA Outputs 1pr balanced XLR; 1pr single-ended RCA Gain 48dB–71dB + one user definable setting Loading 450 $\Omega$ –47 k $\Omega$  + two user definable settings Capacitive Loading 50pF–400pF Replay EQ RIAA, EMI, Decca, Columbia, Teldec Absolute Phase Switchable 0/180 degrees Dimensions W×H×D 504 × 141 × 390mm ea. Weight (combined) 32.1kg Price £30,995

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