

# Headmasters

**Budget phonostages are getting better and better, thinks Channa Vithana, as he auditions Clearaudio's new Smart Phono and Trichord's latest Dino...**

**T**here are a few integrateds with decent phonostages, but not many. In truth, if you want real hi-fi sound from your black plastic, you'll have to shell out on an offboard solution. But the good news is that they're getting better, and cheaper – more markedly than you might think. So we decided to try two of the best new budget designs.

## CLEARAUDIO SMART PHONO

This little £265 box has outstanding build and finish in the classic tradition of this German hi-fi company. It features very high-quality Clearaudio phono sockets and a substantial turntable ground (earth) connection at rear. At the base of the casework are two switches for MM/MC selection, one per channel. At the front, Clearaudio's nomenclature is cleanly and attractively machined into the aluminium faceplate with a discrete blue LED in-between. The faceplate features a very fine horizontal brushed grain, while the main casework has an opposite grain direction that provides a nice design detail contrast. There is a fixed mains lead terminating within a Clearaudio black plastic moulded plug-in transformer rated at 21V DC. The Smart Phono is tiny, measuring 50x74x31mm and weighing only 200gm. Clearaudio uses surface mounting technology (SMD) inside which is more efficient (using machines) to manufacture than standard lead-in construction (done by hand) and also usually results in using less space and shorter signal paths for theoretically better sound quality.

## TRICHORD DINO

The latest version of the £329 entry level Trichord phonostage comes in a grey, gloss-metallic, acrylic case. It has separately adjustable MM/MC cartridge and gain loading settings per channel through dip switches on its undercarriage. Trichord says the circuitry is signal non-inverting and constructed using high performance, audio grade bipolar and JFET operational amplifiers, metal oxide resistors and ultra low impedance capacitors throughout. This latest Dino iteration features new capacitors, which Trichord say are superior in comparison to the previous version. The Dino comes as standard with an 820gm, ABS moulded, 40VA external power supply that uses a toroidal transformer. Trichord says, "AC current is fed to the Dino (from the power supply) where it is rectified to DC and regulated with two high performance, wide (bandwidth) Super Regulators". The Dino measures 130x58x112mm.

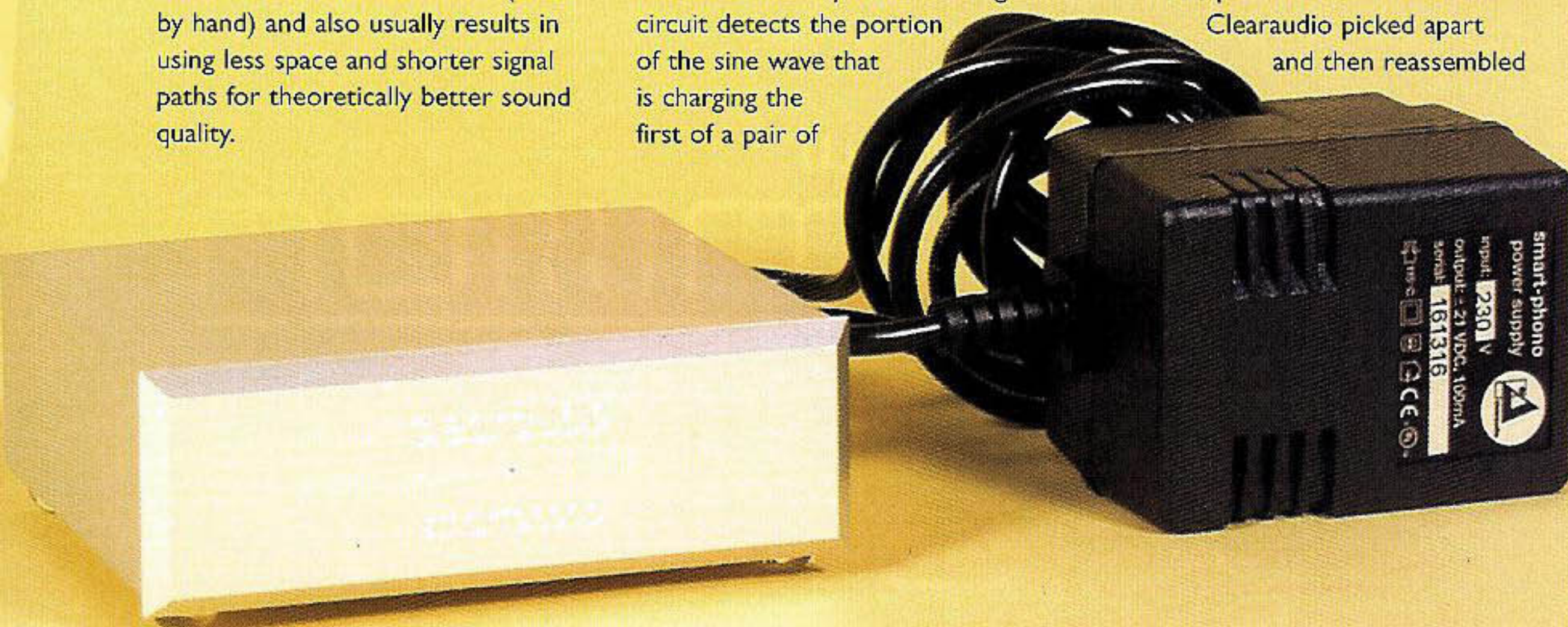
The £449 NCPSU is the top upgrade power supply for the Dino. Trichord says it sports completely different electronics to the standard 'Dino+' power supply. Instead of an oversized toroidal transformer, there is a PCB mounting variety followed by "the revolutionary noise reduction circuitry that is called 'Never Connected'". Although the regulation circuit is physically connected to the incoming mains, it is disconnected electrically. A monitoring circuit detects the portion of the sine wave that is charging the first of a pair of

electrolytic capacitors. Once this first capacitor is fully charged, the diode bridge rectifier turns off and a mosfet switching circuit transfers the charge from the first cap to the second. This cycle is repeated continuously. At no (point) in time is the regulation circuitry electrically connected to the incoming rectified mains - hence the term 'Never Connected'. The Dino and NCPSU can be bought together for £749, saving £29 on separate prices. The NCPSU can also be used with a £140 High Performance Power Interconnect, which is a more substantially constructed cable than the standard one. The cost of this interconnect, is reduced to £130 if bought with a Dino+/NCPSU power supply and a Dino. A Dino+ power supply can be upgraded to NCPSU for £224.

## SOUND QUALITY

With the £265 Clearaudio Smart Phono connected, the music was powerful and yet utterly composed on my 1977 copy of 'Beethoven: Piano Concerto No.3' LP. The violins had very fine layering, and I could exactly follow the melodies with ease. There was good weight also to the lower-frequencies, and when the piano part came in, the Clearaudio ably conveyed a deep and finely resonating timbre to the struck keys. At all times, it was truly convincing in its emotional impact. The Clearaudio had, subjectively, vanishingly low surface noise with the Beethoven LP.

The precision with which the Clearaudio picked apart and then reassembled





the wayward yet fluidly melodic '4,' by the Aphex Twin from the 1996 release of the 'Richard D. James Album' was actually quite a surprise, as this recording is multilayered in composition but also demanding and unpredictable at times with some rough frequency extremes. However, the music from '4' had impeccable speed and detail and was never less than composed. Basslines from 'Vertigo' via U2's 2004 'How To Dismantle...' release were superb, being taut yet agile and therefore tunelessly communicative. The guitar harmonics came out really well and the Clearaudio had excellent instrumental separation which enabled it to extract maximum information from this exhilarating recording.

Through the standard Trichord Dino, the leading edges of the violins were superb on the 'Beethoven: Piano Concerto No.3' LP. There was a wonderful sense of fluidity to the layering of notes from the stringed instruments for which the Dino provided a more free-flowing presentation in comparison to the Clearaudio. However, I found that it could not match the Clearaudio's low-frequency ability and especially its deeper instrumental timbre. This aspect to the timbre was a little more obvious due to the standard Dino's comparatively higher surface noise. The piano also had less timbral acuity than the Clearaudio, but like the stringed instruments before, was more fluidly expressed.

Considering the Dino's ability, I was expecting a surging, swaggering, musical attitude to be expressed on '4' by the Aphex Twin from his 'Richard D. James Album,' but the Dino was a little flat and reticent here, which was surprising.

The dynamics of

the Clearaudio previously, were minimised and the whole sound was somewhat disappointing. However, with the U2 track 'Vertigo,' from the 'How To Dismantle...' LP, the Dino's swagger returned, with appropriate augmentation to this recording's own exhilarating vibe. There was a full-on thrust, with full-bodied dynamism to the music - the rhythm and pace was also now excellent.

With the NCPSU connected to the Dino, there was a very silent background to the music. The resolution was much higher now, banishing the variable quality of the standard Dino, with a superb high-definition consistency for all the recordings used. Interestingly, the Dino with NCPSU was more in line with the sound quality philosophy of the Clearaudio. It seemed to close in on instruments and tighten things up massively, which resulted in less of its free-flowing musical swagger, but I could discern and appreciate different instruments for their particular timbre, and this was done compellingly. The NCPSU provided clean, dynamic power and finesse too, for both vocals and instruments.

Utilising the upgrade £140 High Performance Power Interconnect between the Dino and NCPSU resulted in superior low-frequency weight and even better definition and resolution with all the music. Most importantly however, was that it improved the attack response and speed inherent in the recordings and brought back some of the free-flowing quality of the standard Dino as well.

## CONCLUSION

The £265 Clearaudio Smart Phono works to an excellent standard and did so without fuss even in a high-end £5,500 Origin Live/Linn LP source system. It has an unflappable ability and proved this by never sounding bright, rolled off in the treble or dynamically wanting. It has

very low surface noise and superb timbre and bass tunefulness. The Trichord Dino at £329 offered a wider aperture to music than the Clearaudio, which made for a more fluid and engaging stance, but it struggled with some recordings, as it ultimately sounded looser. The £449 NCPSU

upgrade utterly transformed the Dino though, by revealing its inherently good capability, and reproducing a continuously high-resolution sound quality for all the recordings. Add the £140 High Performance Power Interconnect and things get even better, with deeper, more agile bass and some of the standard Dino's spatially wide ability.

Things have never been so good in the affordable phonostage stakes, and this is surely a result of stiff competition. This is good news for us consumers, but it makes Trichord's Dino look more mortal than it did several years back, when nothing came close. Now, the likes of the Clearaudio outrun it without its NCPSU option, and even with, it has the likes of Naim's £750 Stageline/FlatCap2 (HFW April 2005 p51) to contend with, which sounds bold, structural and full-bodied. The latest Graham Slee Era V Gold at £480 is wonderfully fluid and lucid, but lacks a moving coil input. Then there's the £700 Cyrus Phono X (HFW October 2005 issue p54) that is sweeter and slightly warmer, to think about too. Still, the Dino NCPSU is unerringly high in resolution and neutral in character, and many will choose it for this reason. Happy decision making!



## VERDICT

Superbly designed and built entry-level phonostage with an extremely clean, yet surprisingly full-bodied sound.

## CLEARAUDIO

**SMART PHONO** £265  
Clearaudio Electronic GmbH  
+44 (0)1252 702 705  
www.audioreference.co.uk

## FOR

- peerless build
- superb value
- excellent sound

## AGAINST

- nothing at the price

## VERDICT

Wonderful with the NCPSU, it offers a consummately engaging musical performance - but without it competition is stiff.

**TRICHORD DINO NCPSU** £749  
TRICHORD RESEARCH LTD.  
+44 (0)1684 311 600  
www.trichordresearch.com

## FOR

- true high resolution sound
- clever upgrade path
- adjustability

## AGAINST

- fierce price competition