



PHONO PREAMPLIFICATION AT THE LIMIT

So far, the Polish manufacturer RCM Audio has distinguished itself by high-quality devices with a certain down-to-earth feel. The model name of the new phono preamplifier rightly leads us to expect a somewhat different approach

Teammates

Turntables:

- TechDAS Air Force III / Reed 1X
- Clearaudio Master Innovation / TT2

Cartridges:

- Ortofon Windfeld Ti
- Lyra Etna
- Skyanalog G1

Preamplifier:

- NEM PRA-5

Power Amplifier:

- Silvercore Collector's Edition

Loudspeakers:

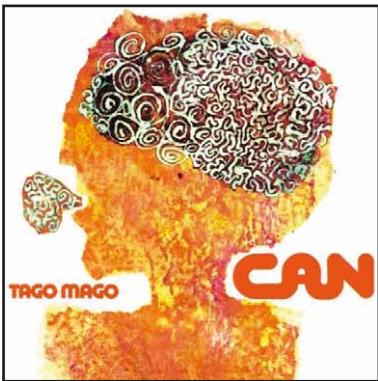
- DIY Mini Onken / Focal / JBL
- Cube Audio Nenuphar Mini

Opponents

Phono Preamplifiers:

- Malvalve preamp three phono
- Lehmann Decade Jubilee

Can - Tao Mago



Music
Can
Tao Mago
Mumford & Sons
Sigh No More
Yamamoto Tsuyoshi Trio
Misty
Countig Crows
August And Everything After



The „normal view“ of the display.
It shows the selected input, the
gain, and the input impedance



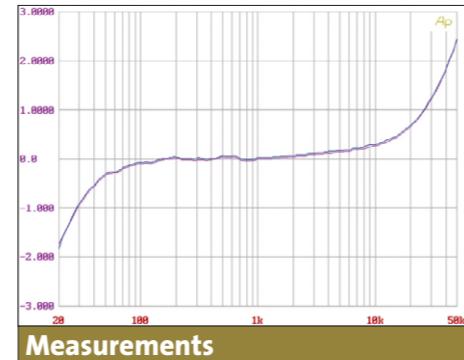
The Big Phono has two unbalanced pickup inputs

It is plainly and simply called „Big Phono.“ This is not particularly original, but it does hit the nail on the head with seldom witnessed accuracy. We are dealing with an uncompromising phono preamplifier housed in two vault-like aluminum castles, the price of which you do not want to know. That is an astonishing contrast to the two other devices from the RCM program that are also responsible for pickup signals. One of them has already been able to show itself off very successfully in our listening room.

RCM Audio is a venture of Polish hi-fi whiz Roger Adamek. He serves the Polish market as a distributor of a whole range of high-quality audio products in real life, and he does so quite successfully. This provides freedom for a company like RCM, through which Adamek realizes his ideas of high-quality hi-fi.

One of his sales products are the Danish luxury devices from Vitus Audio. Regular readers of this magazine will remember that the rather extreme constructions of Hans Ole Vitus have been our guests several times. One of the manufacturer's phono preamplifier heavyweights has taken Roger Adamek's fancy, and the „Big Phono“ is, by all accounts, his attempt to create something at least halfway adequate. The similarities between the two devices are limited to the target group; RCM went completely different ways than the Danes.

The study of the two-piece must inevitably begin with its outfit because that is truly spectacular. The two heavy cuboids, almost as deep as wide, are finished in such a matte black that they almost wholly swallow any light falling on them. There is also hardly anything for the eye to „cling“ to. The display of the amplifier section is hidden behind a likewise matte black pane, and the four buttons are also virtually invisible. There are only visible screws on the back and at the bottom. Otherwise, there

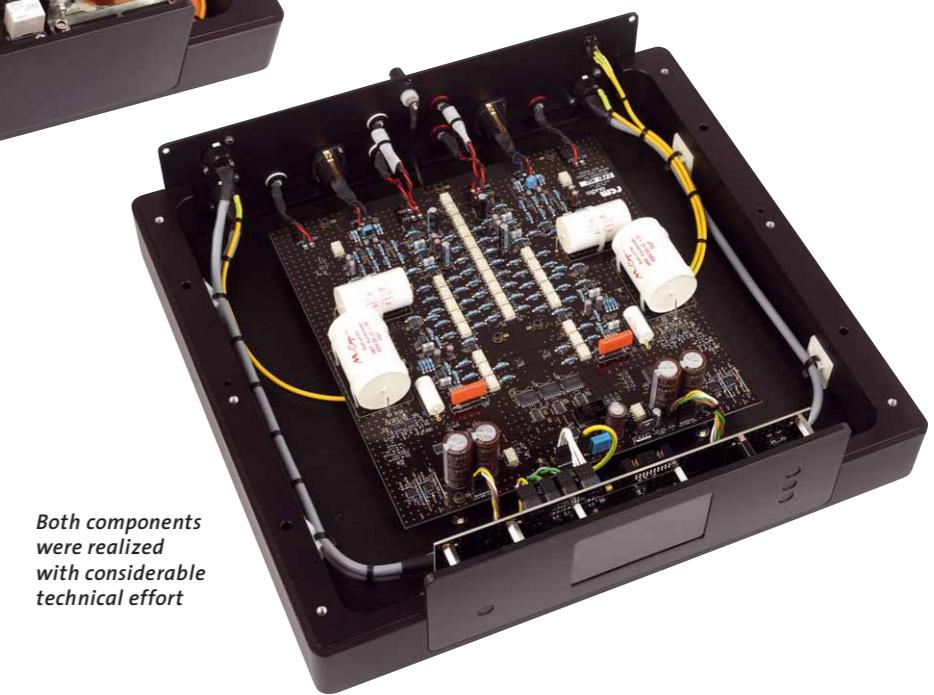


Measurements

Measurement commentary
The frequency response measurement reveals the two specialties of the device: a subtle rumble filter, whose minus-three decibel point should be in the area of ten Hertz, and the Neumann constant, which provides for a rise at the very top. Otherwise, exemplary linearity prevails. The unit amplifies between 41 and 61 decibels, which is practical. The external voltage spacing at maximum gain and 0.5 millivolts at the input is 63 decibels(A), channel separation is 57 decibels, and distortion is 0.08 percent. The device constantly consumes just under 95 VA.

is strict self-denial. Ultimately, the metal surfaces belong to solid aluminum blocks, in which a CNC machine has created the necessary free spaces and turned them into two tightly fitting case shells. This is a unique cabinet design. Roger Adamek commissioned one of the most capable minds the industry offers for such jobs: the Bulgarian Ruman Artaski, founder and director of Thrax Audio. Hardly anyone in the hi-fi industry has such exquisite possibilities and skills for metalworking, as the Thrax products prove.

This is definitely where a noteworthy part of the budget for the Big Phono goes. On the back of the amplifier compartment, there are three sockets for connection to the power supply. The different-pole connectors are protected against polarity reversal. There are two pairs of RCA



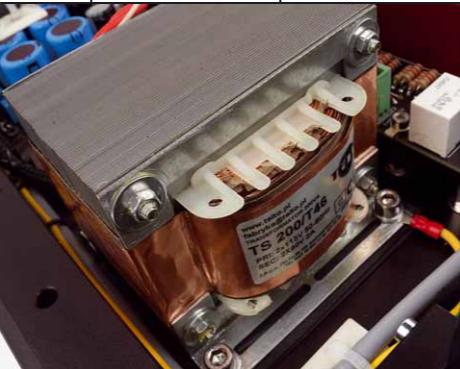
inputs for signal connection; on the output side, there's one RCA and one XLR option. The RCA connectors are brightly polished rhodium-plated specimens from specialist Furutech. In addition, there is a pole terminal as a ground connection and a ground lift toggle switch. Things are even more straightforward for the power supply, which has the same format. Nothing is exciting on the front, and only the three sockets connecting the amplifier and a power input socket are on the back. The power switch will probably be pressed once when the device is put into operation for the first time and then never again.

To round things off with the connections: The cables connecting the power and amplifier sections are two meters long, which is sufficient.

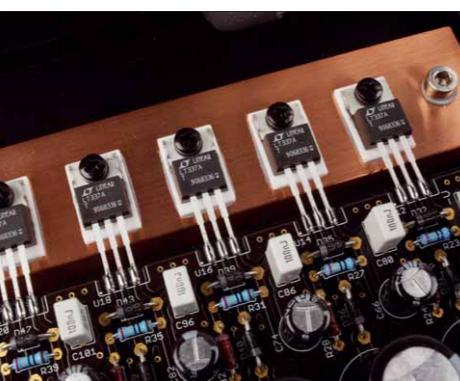
After loosening four solid bolts on the bottom of the device and a few smaller ones on the back, the aluminum mountain allows a view into the inner sanctum. And the manufacturer did not stint here either but rather splurged a lot. The large-format multi-layer motherboard houses a complex construction dominated by integrated operational amplifiers and tons of relays. The latter is needed because the Big Phono's gain and pickup termination can be changed comfortably from an armchair. This requires a lot of components to be switched, hence the many „white blocks.“ The Big Phono has a fixed rumble filter and a fourth time constant in the equalization. The latter is also known as the „Neumann

Both components
were realized
with considerable
technical effort

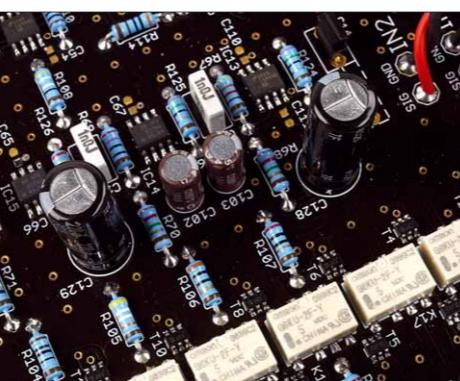
time constant.“ This is a moderate increase in frequency response in the high frequencies, intended to compensate for the drop in frequency response due to cutting during record cutting. We saw this more often for a while, but in recent years, this option has somewhat fallen out of fashion again. Roughly speaking, I count a whopping 19 operational amplifiers for each channel of the Big Phono. Despite the fairly complex topology of the unit, that's still an almost obscene amount of silicon. The trick is that the gain on this unit is spread over a total of five stages. Roger Adamek told me that running the individual stages at low gain, but connecting multiple units in series for this purpose, has proven to be sonically and measurement-wise advantageous. Equalization according to the RIAA curve is done passively, with each „filter pole“ isolated from its neighbors by a dedicated amplifier stage. This is indeed unusual at this level of consistency.



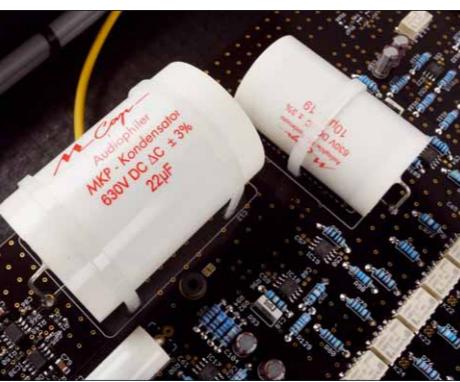
Two of these transformers provide channel-separated power supplies.



No less than 20 voltage regulators ensure well-defined conditions at every point of the circuit



The amplification is in the hands of numerous operational amplifiers in SMD design



The coupling capacitors in the Big Phono are from Mundorf

The circuit's topology is largely unbalanced, but a balanced signal is available at the XLR outputs. A glance at the power supply reminds more of a Class A amplifier than the power supply of a phono preamp. This is partly due to the two large sheet metal package transformers, which provide the supply voltages separately for each channel. Transformer number three is of a less expansive design and is responsible for supplying the control logic. On massive copper rails, 20 – no, not final transistors, but integrated voltage regulators – cavort. They provide all amplifier stages in the other compartment with separately stabilized DC power. Hence the three multipole connection cables between both devices. Admittedly, this is a lot of technology that RCM brings up here. But with an announced retail price of 35,000 Euros, that's also the minimum of what I expect. The pleasantly simple yellow display comes to life when the device is put into operation. The Big Phono comes with an Apple Remote as a remote control, which can be used to access all of the device's functions. The gain is displayed as the nominal cartridge output voltage. There are seven values between 5 and 0.3 millivolts to choose from, with 5 and 2.5 millivolts aimed at MM and high-output MC cartridge operators. The same applies to the input impedances. Here you can select eight values between 20 ohms and 47 kilohms. Once again, no expressis verbis distinction is made between MM and MC operation.

In keeping with the festive occasion, I connected the Big Phono to the stunning Lyra Etna, which has felt right at home under a Clearaudio tonearm for some time. Finding the appropriate impedance is pleasantly easy from an armchair, and the sound locks in at 400 ohms: The Etna lives up to its explosive character on the RCM. I've seldom heard Jacky Liebezeit drum as hard as iron as on the magnum opus „Tago Mago“ by Can. The whole album sounds like pure adrenaline: everything is dynamic to the max, every note rocks, everything is in motion. The great MalValve tube preamp three phono doesn't manage that with this fervor. Exuberant emotionality also helps the first Mumford & Sons album, „Sigh No More“ – here, a rumbling, powerful bass joins the action. I like the sustained beginning of most of the album's tracks, which build up to a wild staccato. RCM and Lyra deliver the fire it needs for this performance with ease. Numerous samplers and records later, one thing is sure: the RCM may be expensive as hell, but it's also excellent. It sounds mercilessly powerful, transparent, and crisp. It's not a show-off, and it's not an atmospheric whim. It shows what it's all about, and with rarely experienced fervor.

Holger Barske



RCM Big Phono

- Price: approx. 35000 Euro
- Distribution: Audio Offensive, Falkensee
- Telephone: 03322 2131655
- Internet: audio-offensive.de
- Guarantee: 2 years
- Dimensions: each 430 x 145 x 410 mm (WxD)
- Weight: approx. 25 / 33 kg