



Transrotor Phono MC 8.2 Sym

Phono Preamplifier



- Superb sound
- Flexible settings
- Great looks



- German-language manual
- Poor finish on phono stage's rear panel



\$5,850

It would certainly help if the Betriebsanleitung — that's 'operating manual' for all you non-German speakers — for the Transrotor Phono MC 8.2 Sym phono preamplifier was written in English. But it's not, so if you, like me, do not speak German, you'll need to do what I did: use Google translate to work out that, for example, 'ergibt' means 'result', 'eingangswiderstand' means 'input resistance', and 'verstärkung alle aus' means 'reinforcement all off'. That said, you will need a little more than Google to understand that verstärkung alle aus actually means 'all gain switches set to off'.

Given that the Transrotor Phono MC 8.2 Sym's Betriebsanleitung contains only seven pages of text, it seems a bit poor that Transrotor has not bothered to provide an English version of it. Or a French version (...we speak more French than we do German.) The German turntable company (which is, by the way, located the city of Bergisch Gladbach, in the Cologne/Bonn region of North Rhine-Westphalia) also does not bother to provide an online version of the manual. Therefore, owners will have to make sure they don't lose it, or at the very least take photos of pages six and seven, which are needed in order to

be able to use the phono preamplifier correctly. These two last pages have spreadsheet-style tables that explain how to set the four dual in-line package (DIP) switches located inside the phono stage for the correct input sensitivity (between 0.07mV and 2mV), and input impedance (from 60 ohms to 4.7k ohms) to match whatever moving-coil phono cartridge you are using.

THE EQUIPMENT

As you can see from the photo above, the phono amplifier is provided in one chassis and the partnering power supply in a completely different one. You might be asking yourself how much power a phono amplifier needs, in which case you'd be asking yourself the wrong question.

The rationale for having a separate power supply is to enable enough storage (via capacitors) that the power supply delivers its power rather like a rechargeable battery, so you're getting DC voltage that is so stable it seems to be coming from a battery rather than a rectified and filtered AC source. Transrotor says: "The high-performance power supply supplies the Transrotor Phono MC 8.2 Sym with stabilized and absolutely constant voltage."

Given the considerable cost of building such a

high-spec power supply, you might be wondering why Transrotor doesn't just use a battery instead. That's something I wondered myself, and apparently the company's answer is that batteries suffer from too much "wear and tear" (an opinion stated on the company's website).

Interestingly, the internet also revealed to me that the internals of my sample power supply were quite unlike the internals of Transrotor Phono MC 8.2 Sym power supplies I saw in images posted online. Those images showed a device with 16 storage/smoothing capacitors, whereas the one I had only had six capacitors, as you can see in the photo on [page 34](#). It appears that the capacitors in my power supply sample are physically larger than the Transrotor power supplies fitted with 16 capacitors and therefore presumably have a higher capacitance (in μF), so perhaps the overall capacitance is the same and Transrotor has just decided to use fewer capacitors. I emailed Transrotor about this but at the time of going to press had yet to receive a reply.

The power supply's chassis is exactly the same size as the phono stage's — 17.5cm wide and 7cm high (7.5cm if you include the feet). Both are 31.2cm deep, but because of the need to

fit plugs and cables, you'd need to allow around 40cm of depth. I'm being specific about these dimensions because Transrotor's specifications for them appear to be incorrect.

The power supply has a single push-button on its front panel that activates both components, which are linked by a single six-conductor power cable with locking DIN-like connectors at either end (male at the power supply end, and female at the phono stage end). This conductor is only one metre long, which will limit your ability to keep the power supply physically distanced from the phono stage (and your other components). A longer cable would have been appreciated.

As you can see for yourself, the front panels of both boxes are identical other than for the power button on the front panel. Both front panels have a tiny hole in them through which a small blue LED attached to the PCB pokes through. I mention this because when you are re-assembling the case after setting the four DIP switches, you will need to be careful to align the LED with this hole.

As for those front panels themselves, they are 1.1cm thick and so heavy that I assume they are made of steel (I could be wrong!). The finish, which I assume is chrome, is superb. If it is chrome, it's the highest-quality chromium plating I've ever seen... on anything. Ever. The remainder of the chassis is aluminium. The top and sides are a single-piece finned extrusion that slides off the chassis after you remove the front panel. The extrusion itself is generic, with Transrotor using the same one across many of its offerings.

The rear of the phono stage that had been loaned to me for this review was fitted with a pair of XLR inputs, a pair of XLR outputs and a single ground terminal. All of these XLR terminals carry a balanced audio signal, but it appears that if you would prefer to use standard unbalanced connections for input and/or output, you can optionally order a Transrotor Phono MC 8.2 in the configuration of your choosing. Compared to the luxuriousness of the front panels, the rear panels are poorly finished: the inputs and outputs are identified by ordinary stick-on paper labels.

The various electronic components used inside these two Transrotor components are state-of-the-art — the transformers, the resistors, the capacitors, the semiconductors... everything. No expense has been spared. And if

you look carefully at the printed circuit board of the phono stage (also pictured on [page 34](#)), you will see that the circuitry for the two channels is completely separate, completely balanced and totally symmetrical (which is, by the way, why the abbreviation 'Sym' is used in the product name). Interestingly, there are no surface-mounted devices (SMDs) at all, and it also appeared to me that the components had been soldered onto the PCBs by hand. This will make these products very easy to repair, should that ever be necessary (it likely won't!).

The semiconductors that do the heavy lifting in the Phono MC 8.2 are high-performance, low-noise 1512 audio preamplifier ICs that are made in the USA by THAT Corporation, which is based in Massachusetts. As you'd imagine, the 1512 is not a particularly common device, but you'll often find it used in differential low-noise preamplifiers, differential summing amplifiers, differential variable gain amplifiers and microphone preamplifiers.

You can also see on the PCB the four DIP switches used to adjust input sensitivity and impedance — two for each channel. However, although you can see them, you don't know which one does what, because Transrotor has (rather unhelpfully) failed to mark them in any way. The only way you'll be able to identify them is by referring to the image in the owners' manual — yep, another reason for not losing that manual!

Once you have identified them, you can use the two tables in the manual — one on page six, the other on page seven — to set the four toggles on each of the DIP switches in various patterns to give various input sensitivities (0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.15, 0.16, 0.19, 0.23, 0.30, 0.33, 0.50, 1.0 and 2.0 millivolts/mV) and input resistances (60, 65, 70, 75, 77, 83, 91, 100, 158, 188, 230, 300, 333, 500, 1k and 4.7k ohms).

LISTENING SESSIONS

In case you are wondering why the Transrotor Phono MC 8.2 Sym phono stage has balanced inputs, you need to know that ALL moving-coil phono cartridges have balanced outputs, so you'll get the best performance from using a phono stage with a balanced input. It's as simple as that. As for the balanced outputs, this is because you will invariably get the best performance when

you connect audio components together using a balanced signal connection, so you should connect the Phono MC 8.2 Sym to your amplifier via a balanced connection. Again, it's as simple as that. Well, I say 'simple', but actually very, very few moving-coil phono preamps have balanced inputs, and only a few have balanced outputs!

I'm of the opinion that the best new vinyl to use to test out a phono stage is Björk's 2022 album 'Fossora'. First, there's her unique and distinctive voice, beautifully recorded. Then there are the superb production values behind it. But what about the sound of the percussion and the bass clarinet (often in either one of or both channels)? These were clearly audible on opening track *Atopos*, with the Transrotor delivering them superbly, exhibiting perfect separation between the channels and a perfectly focused stereo image. This is a truly manic song, Björk at her best and back doing what she became famous for in the first place.

Sorrowful Soil, which is a tribute to Björk's late mother, the environmental activist Hildur Rúna Hauksdóttir, benefits from the massed female voices of the Hamrahlid Choir. Choral music is a challenging test for all audio components, but the Transrotor delivered the sound authentically — really, I couldn't have asked for it to sound any better. I couldn't ask a composer to bare herself more than Björk does here either. Who else would write and sing (and deliver so convincingly) a lyric such as "In a woman's lifetime she gets 400 eggs but only two or three nests?"

The intro to *Sorrowful Soil* is sung a capella and features many gaps — some long, such as the one after the line "our roots are dark" — which allowed me to hear that the Transrotor's circuitry is perfectly silent. All I heard during these interludes was the faintest background noise of the stylus travelling through the LP's groove, which is actually almost completely inaudible on this album, as it's a great pressing that I've only played a few times, having ripped it on its first play so that I could preserve it for product auditions like these. (*Mycelia*, the track that precedes *Sorrowful Soil*, also has silences, but the sonics are so tampered-with that it's not a good track for auditioning purposes.)

Probably my favourite track on the album is *Victimhood*, parts of which sound like they're





the soundtrack to a horror film, though I am also reminded of Vangelis. Orchestral instruments abound on this, particularly clarinets, of which there are many, including several bass clarinets, and the tonal quality is perfectly reproduced by the Transrotor. The almost machine-like percussion and the alternating channel stabs that are all-pervasive throughout highlight the ability of the Transrotor to deliver perfect pace, rhythm and timing while still retaining the sensuously fluid sound.

The Phono MC 8.2 Sym performed just as exceptionally when playing Arctic Monkeys' 'The Car'. Opener *There'd Better Be A Mirrorball* has a soundtrack to die for, not least because Turner and Ford had the good taste to use real strings rather than synthesised ones. Then, with the vocal from Turner (who I think can sometimes sound like Frank Zappa) on *I Ain't Quite Where I Think I Am*, I could hear how well — and how

smoothly — the Transrotor delivered the very highest frequencies.

The solidity and depth of the Transrotor's bass delivery were immediately obvious on *Sculptures of Anything Goes*, too, where the gothic synth sounds explore the low-frequency limits of human hearing. According to Turner, this song came about after Jamie Cook got a Moog synthesizer and put a drum machine through it, after which they wrote the song based on the sound that came out.

CONCLUSION

The Transrotor Phono MC 8.2 Sym moving-coil phono preamplifier is superbly designed and superbly built. It sounds absolutely amazing, and is able to be adjusted internally to perfectly suit — and therefore extract the best from — any moving-coil cartridge you care to use with it. Is it worth deciphering a German-language manual to

operate? Most definitely.

— **Greg Borrowman**

SPECIFICATIONS & CONTACT

Brand: Transrotor
Model: Phono MC 8.2 Sym
RRP: \$5,850
Gain adjustment: 0.07mV-2mV
Input resistance: 60-4.7k ohms
Dimensions (hwd): 7 x 17.5 x 31.2cm (per box)
Warranty: Two years
Distributor: Absolute Hi End
Address: PO Box 370
 Ormond Vic 3204
T: 0488 777 999
E: info@absolutehiend.com
W: www.absolutehiend.com

Laboratory Test Report

Readers interested in a full technical appraisal of the performance of the Transrotor Phono MC 8.2 Sym phono preamplifier should continue on and read the LABORATORY REPORT published on the following pages. Readers should note that the results mentioned in the report, tabulated in performance charts and/or displayed using graphs and/or photographs should be construed as applying only to the specific sample tested.

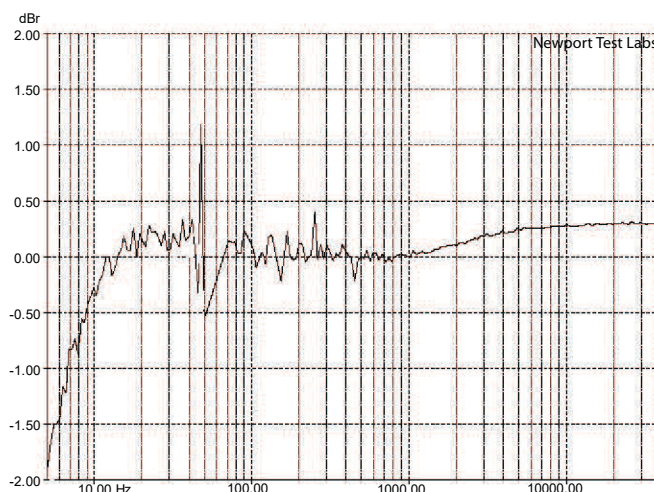
Graph 1 shows the frequency response of the Transrotor Phono MC 8.2 Sym phono preamplifier. Newport Test Labs had to use an inverse RIAA equaliser to produce this graph, and although it is a precision device, it does introduce some errors, so the errors in the response are both of it and the Transrotor Phono MC 8.2 itself. Also, because of the extremely low-level signals involved and the necessity to connect the Phono MC 8.2 to multiple items of test equipment, some mains hum inevitably creeps into the measurement. You should, therefore, ignore the 'spikes' in the response at 50Hz, 150Hz, 250Hz and 450Hz.

Despite the technical constraints of the measurement, you can see that the Transrotor Phono MC 8.2's frequency response is very linear. Note that the vertical scaling is extreme, so the top of the entire graph represents a signal level of +2dB, and the bottom of the graph -2dB. So if we ignore those mains hum components, the frequency response of the Transrotor is from 10Hz to 40kHz ± 0.3 dB. Across the 20Hz to 20kHz audio bandwidth, it's ± 0.15 dB. This is a superb result and means that the Transrotor's response is not only audibly flat, but also superbly flat from a technical perspective. Had the lab used a more typical vertical graph scale, it would literally be 'ruler-flat.'

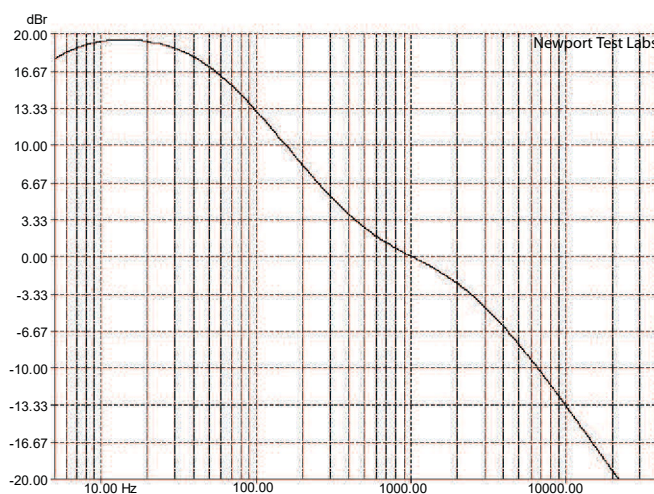
Graph 2 shows the equalisation curve the Transrotor Phono MC 8.2 applies to incoming signals to correct for the RIAA equalisation applied when mastering vinyl records. This graph shows that Transrotor is not using the original 1954 equalisation specified by the Record Industry Association of America (so you can see where RIAA comes from!) but the modified version of it that was introduced by the International Electrotechnical Committee in 1976.

This modified version (detailed in the IEC 60098 Technical Standard) added a fourth time

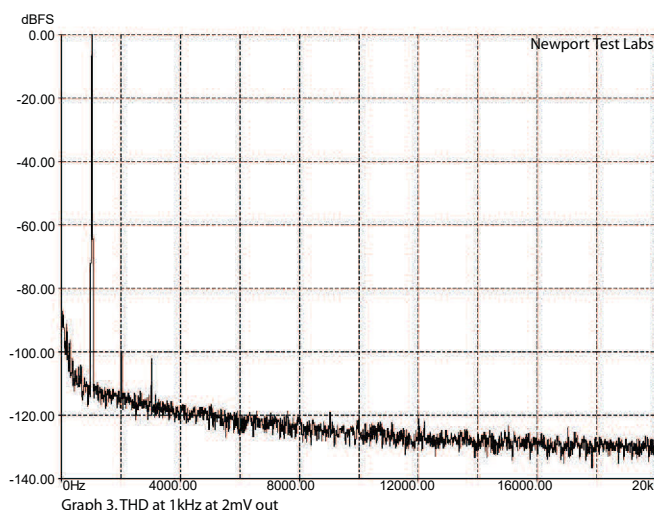
Graph 1. Frequency Response at 2.0mV out



Graph 2. RIAA Equalisation Curve



Graph 3. THD at 1kHz at 2mV out



constant to the original three that introduced a 6dB/octave roll-off in the frequency response below 20Hz, the idea being to reduce the levels of infrasonic frequencies generated by record warps and ripples and to prevent tonearm/cartridge resonances from affecting both the amplifier and the loudspeakers. Although it's good to see that Transrotor is using the newest version of the RIAA 'standard', it might have been nice if the company had offered the original RIAA standard as well, in the manner of some other manufacturers of phono preamplifiers.

Graph 3 shows the THD of the Transrotor when reproducing a 1kHz sinusoidal test signal. You can see the test signal at the extreme left of the graph, referenced to 0dB. There are only two harmonics visible above the noise floor. The second harmonic, at 2kHz, is 100dB below reference (0.001%) while the third harmonic is a little lower down again, at around 103dB down (0.0007%). These harmonics are so low in level that they would not be audible, but even if they were, they'd make the sound of the 1kHz signal appear richer, fuller-sounding and more musical.

because the second harmonic is the octave of the fundamental, and the third harmonic is the fifth above. Because of the musical relationships between the three signals, they would not be perceived as distortion *per se* — just good sound.

You can see on Graph 2 that the noise floor is spectacularly low. There is some mains-related noise (50Hz hum and harmonics) visible at the left edge of the graph, but the noise floor drops quickly to -110dB at around 400Hz, then to around -120dB at 6kHz, then down to around -130dB above 10kHz. This is the kind of noise performance we'd expect to see from an integrated amplifier. Note that this noise floor is calculated for each individual frequency — it is not the overall noise across the entire bandwidth. This noise level is reported as the signal-to-noise ratio in the tabulated results, and you can see that *Newport Test Labs* measured it as 74dB unweighted and 80dB A-weighted, with this last measurement matching Transrotor's specification exactly — at least for the 40dB gain setting. It would be somewhat lower using the 65dB gain setting.

Newport Test Labs measured THD+N as being 0.01%, a result that is considerably better than Transrotor's own specification of 0.03%, and it measured channel separation as 70dB, which is again far better than Transrotor's specification

Transrotor Phono MC 8.2 Sym Phono Preamp - Laboratory Test Results

Test	Measured Result	Units/Comment
Frequency Response @ 1 volt o/p	5Hz – 40kHz	+/- 0.3dB
Frequency Response @ 1 volt o/p	20Hz – 20kHz	+/- 0.15dB
Channel Separation (dB)	71dB	@ 1kHz
Channel Balance	0.026	dB @ 1kHz
Interchannel Phase	0.18	degrees @ 1kHz
THD+N	0.01%	@ 1 volt output
Signal-to-Noise Ratio (unweighted)	74dB	dB referred to 1 volt output
Signal-to-Noise Ratio (A-weighted)	80dB	dB referred to 1 volt output
Input Sensitivity (1)	485uV	for 1 volt output
Input Sensitivity (2)	0.965mV	for 2 volts output
Gain	40dB	@1kHz
Power Consumption	9.13	watts
Power Factor	+0.709	
Mains Voltage Variation during Test	242 – 246	Minimum – Maximum

of 62dB (though note that Transrotor refers to this specification as 'crosstalk', which is an old-fashioned word for the same thing).

The tabulated results show that *Newport Test Labs* reported the input sensitivity of the Transrotor as being 485uV for a one volt output or, if you'd prefer to work solely with millivolts, 0.965mV for 2000mV (2V) out. Either way, there's more than sufficient gain for the Phono MC 8.2 Sym to accommodate even the lowest of

low-output moving-coil phono cartridges, while at the same time also accommodating high-output moving-coil cartridges.

It's rare that we see a phono preamplifier that delivers better performance on our tests than the specifications for it claim. Indeed this could be the very first time, and that tells you a lot about the quality of the Transrotor Phono MC 8.2 Sym.

 **Steve Holding**



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