

Primare R35 solid-state, MM/MC phono stage

by Jason Kennedy



Load settings on a phono stage are rather like filter settings on DACs; not everyone bothers to try them out, yet their effects can be pretty dramatic. The degree of effect is often more apparent with phono stages than it is with DACs, but in both cases, it's always worth trying the available options. The new Primare R35 has more loading options than most for both main cartridge types, and the differences encountered were fairly obvious, but I'm getting ahead of myself.

The R35 replaces the R32 at the top of Primare's small selection of standalone phono stages, and there is just one other model, the R15. The R35 has both XLR and RCA output connections, but limits input to RCAs alone as this is what 99.9% of tonearms have on their output cables. It's slightly ironic that a cartridge device that has an intrinsically balanced output, rarely has XLR connections but that does make life a little easier for phono stage makers. I think I've only seen one or two with balanced inputs in several decades of reviewing.

Primare designed the R35 for use with 'virtually any' MM or MC cartridge and has a wide range of loading options to cater for both types. It also has three levels of gain, one of which is 70dB, higher than that typically encountered even

in dedicated MC stages. Interestingly it's higher still via the XLR output at 76dB. There are no fewer than 21 options for resistance loading as well, probably the most comprehensive range I've seen, these start at 10 ohm for MC and rise to the 47 kohm generally used for MM. Unusually there is another option for MM at 2.5 kohm, which I believe can work well with some high output moving coils.

Terry Medalen at Primare was in charge of 'voicing' the R35, which is a posh word for tweaking the design so that it sounds just so. There are numerous components inside a piece of electronics like this. A capacitor, say from one brand, will sound different to one from another company, even if the construction type and values are the same. Therefore Terry is in effect the final stage of a design process that began with engineer Bent Nielsen creating the four-layer circuit board topology and MM circuitry of the R35 and sourcing the power supply and MC stage from specialists. The power supply is a linear, discrete type based around a toroidal transformer in a mu-metal case. Many phono stages separate the power supply in a second box to stop noise polluting the very low-level signal being amplified, so this degree of shielding is necessary. More shielding is provided for the power supply ▶

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- ▶ and processor boards on the R35 because noise is the enemy of sound quality in a phono stage to a greater extent than any other audio component.

For me the most excellent thing about the design of the R35 is its power switch: it’s so discrete that I had to find it in the manual, which reveals that the centre block of the front panel logo is not just there for looks. You can use the power switch to defeat the auto-off feature as well: press it in for two flashes of the triangular white LED and the R35 will stay on until you press the button again. The back panel has the gain switches for the two cartridge types, as well as a subsonic filter for warped or noisy vinyl and even trigger connections for a fully synced system. If you want to change the resistance for MM or MC, it’s necessary to remove thumbscrews that hold metal covers over a line of dip switches, which is an unusual move but saves having to get inside the box as has been the case with other brands in the past. Supplied with the R35 is a polarity checking device and batteries to suit. You can use this to ensure that the mains is in the correct polarity, but only in a country where it’s possible to turn the mains plug around in the wall, e.g. Europe and the US. In the UK you would have to rewire the 13A plug to do that (not recommended). However, if your mains power is wired correctly it will be in phase when it gets to the IEC plug, at least that was the case for me.

The first cartridge I connected to the R35 was Rega’s Aphelion 2 moving coil installed in a Rega P10 turntable. The spec for this states that it needs a 100 ohm input impedance

and in the past I’ve found that it needs as much gain as the phono stage can offer. So listening commenced with the Primare set at maximum gain. However, while the results with this setting were very good in many respects - the low noise of the stage being evident from the start which meant that plenty of detail came through - it was somewhat hard-edged with an undue emphasis on leading notes. This was good for the solidity of bass but not so appealing higher up the band where the sound lacked the finesse that I know this turntable and cartridge are capable of. Even my digital source had better musical flow: it was more relaxed. So I reduced the gain, and this helped a bit, making a live recording of Sarathy Korwar’s band sound particularly good in its quieter moments (My East is Your West, Gearbox). But there seemed to be something missing still, so I contrasted the Primare with a Tom Evans Microgroove, a dedicated MC stage with fixed gain. This produced a much bigger sonic picture in width and depth where there was more space for all the instruments in the mix. I checked its settings and found the resistance to be at 189 ohms.

Going back to the R35 and changing its resistance to 200 ohms really opened things up, greatly enhancing timing and making the sound a lot more relaxed and easy to enjoy. Jeff Beck’s version of ‘Cause we’ve Ended as Lovers’ (Blow by Blow, Epic) being particularly sublime. Out of interest, I tried the 150 ohm setting. This shrank the soundstage to the point where it was mainly between the speakers but it did enhance ▶

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► the attack of the snare drum, so I went for 180 ohms and found the sweet spot resistance for the Aphelion 2. Now it delivered depth of image, excellent timing and a good midpoint between focus and scale. At this stage the pure funk of Beck's rendition of Stevie Wonder's tune became palpable. Thiago Nassif's *Mente* (Gearbox, see review in the back of this issue), has a tight and punchy sound and that remained - the kick drum still whacks you - but there was so much reverb around the voice and huge dynamic contrast. You get the muscularity without it threatening to bludgeon your ears.

I tried a different MC cartridge in the Van den Hul Colibri XGP. This specifies a resistance setting between 500 ohm and 1 kohm so I set the Primare up at the lower figure and gave it a spin. The Colibri is a much smoother and sweeter cartridge with juicy bass and higher output than the Rega: if you want the full vinyl warmth vibe, then it will be right up your alley. After my early resistance setting experience, I tried upping the setting to 600 ohm. I discovered that the sound could be more physical with outstanding vocals on *Raindogs* (Tom Waits, Island) and lovely tone across the board, underpinned by a weighty double bass. In for a penny, I pushed resistance up to the 1 kohm mark and found that the vocal now had a spooky realism that felt like Waits was in the room. The song '9th and

TECHNICAL SPECIFICATIONS

Type: Solid-state, MM/MC phono stage
Phono inputs: One pair single-ended (via RCA jacks)
Analogue outputs: One pair single-ended (via RCA jacks), one pair balanced (via XLR connectors)
Gain: 36 to 76dB (adjustable)
Input resistance: 10 Ohm–47kOhm (adjustable)
Input capacitance: 100pF to 1nF (adjustable)
Output impedance: 100 Ohms (via RCA jacks), 200 Ohms (via XLR connectors)
Output level: 2Vrms (nominal), 9Vrms (maximum)
RIAA linearity: +/- 0.2dB
Distortion: THD + Noise MM <0.02% 20Hz–20kHz, MC <0.03% 20Hz–20kHz
Signal to Noise Ratio: MM 85dB, MC 76dB 1KHz A-weighted 0.5mV input Gain
Dimensions (HxWxD): 92 x 430 x 384mm
Weight: 9.5kg
Price: £1350

Manufacturer: Primare AB
URL: primare.net

UK Distributor: Karma Audio Visual
URL: karma-av.co.uk
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Hennepin' had an ethereal presence from another time and place. Who needs poetry when you've got: "I've seen it all through the yellow windows of the evening train"?

The Primare R35 is that rare thing: an audio component with a lot of features that also sounds exceptionally revealing. Usually, it's one or the other, so getting both in a professionally executed package with some superior styling touches at a sensible price is quite an achievement. Even more so for a product that's designed, QC'd and shipped in Sweden, it's hard to see how they do it. I take my hat off to Primare. The R35 is a stonking phono stage that probably does work with any MM or MC cartridge. +