

UNIVERSAL PHONO PREAMP

'Universal' phono preamplifier
Made by: CSR, Inc., Sagami-hara-city, Kanagawa, Japan
Supplied by: Kog Audio, Coventry, UK
Telephone: 024 7722 0650
Web: <http://www.soulnote.link>; www.kogaudio.com
Price: £6800

AUDIO
FILE

hi-finews
OUTSTANDING
PRODUCT

Soulnote E-2

From Japan's Soulnote comes one of the most flexible phono preamps ever developed – RIAA, plus no fewer than 144 legacy playback curves, and support for 'optical' pick-ups! Review: **Ken Kessler Lab: Paul Miller**

In the quest for a universal phono stage, designers have to accommodate all manner of cartridges, but for most of us they fall into just two categories: moving-coil (MC) and moving-magnet (MM). Even within those types, however, there are plenty of variants such as moving-iron, moving-flux, whatever you call Deccas, both high- and low-output MCs and even low-output MMs. The list is endless, but Soulnote's E-2 phono amplifier handles all of the above configurations plus DS Audio optical cartridges via a built-in energiser and equaliser.

That's not all. Add to this package the legacy of the various equalisations needed to play 78rpm records and you have one of the closest-to-all-embracing phono stages on the market. Indeed, the only cartridge type I can think of which the E-2 cannot accommodate is the strain gauge. Throw in balanced inputs and outputs, a built-in degausser and more, and you will understand why I have no hesitation calling this 'affordable' by today's high-end standards where extreme, equally-loaded units can cost as much as £60,000. The E-2 in silver or black? It's yours for £6800.

MADE IN JAPAN

When the box arrived, I thought, 'This isn't just a phono stage. It's a heavyweight integrated amp'. I'm sure there are other phono amps on the market that weigh in at 20kg like the 430x160x410mm (whd) E-2, or maybe more, but I wasn't expecting it, having just moved my heaviest phono stage of a mere 5kg. Adding to the initial impression was its beautiful build quality, such that I was reminded of the best that Switzerland can muster. Then again, this is Japanese so I should have known better because Grand Seiko is making watches to match the finest from Geneva.

RIGHT: There's a lot going on under the hood... a large toroidal transformer, screened under a square can [top], feeds supplies for the 'optical' pick-up PSU and equaliser [bottom] in addition to the separate L/R RIAA eq PCBs with onboard user-defined, legacy playback filters [far left]

A *trompe l'oeil* occurs on the E-2's front panel, thanks to its horizontal ribs and the precision cutting and fitting of each control. Despite looking minimalist from above – the legends are most visible from straight on – and with only five knobs across the fascia, the unit is actually loaded with user-accessible, albeit extremely tiny, push buttons as well.

Blessedly, Soulnote hasn't opted for any hidden DIP switches for changing values, as painfully, inconveniently and sadistically found on some phono stages. On the left of the E-2 are the three knobs related to the 78rpm settings for roll-off, turnover and lower limit, while below them are power on/off, buttons for choosing the legacy eq section, mono and invert. All these light up appropriately, with

RIAA handily signified by the green LEDs in three rows of red.

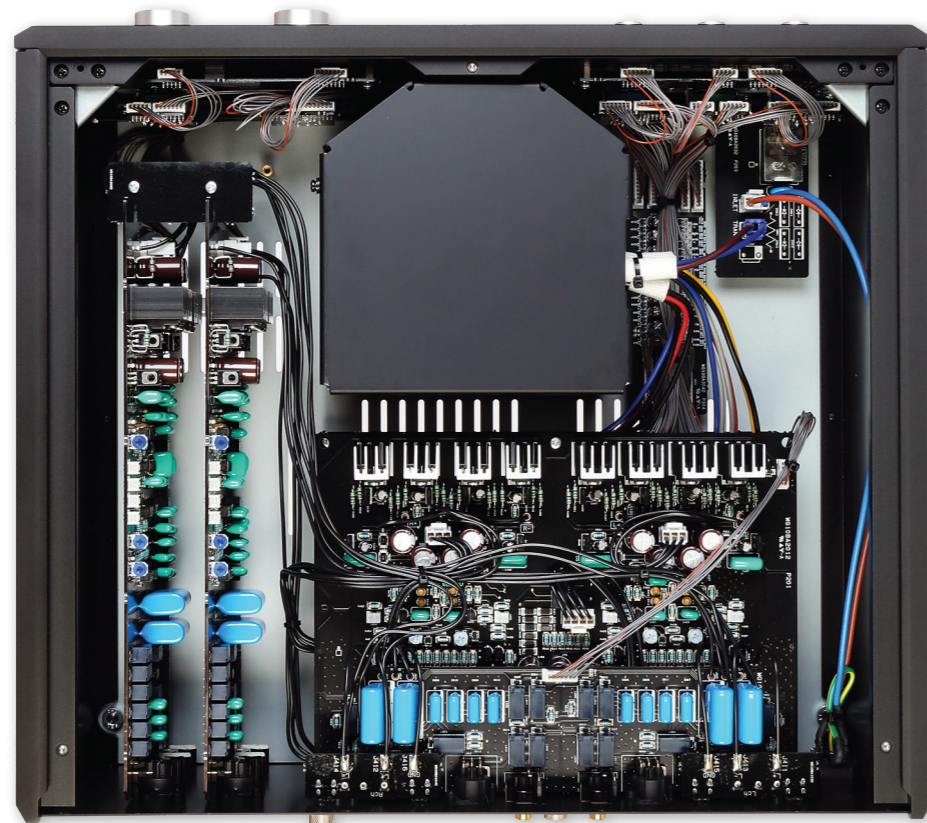
ONE FOR ALL

To the right are knobs to select the moving-coil load, and to choose between balanced (XLR), unbalanced (RCA x2) and separate DS Audio optical inputs. The buttons below them provide choices of 100, 200 or 350pF MM capacitance, low cut, high- or low-gain in both MM and MC modes, and degaussing for MM or MC cartridges

(shorting the input while the record is playing). The latter also acts as a mute.

I have one tiny complaint, though PM disagreed, finding the settings ample: while I am not entirely obsessive about impedance settings, the choices for MCs

'Lush, fat, and bla-a-a-r-ting out of the speakers'



are limited to 3, 10, 30, 100, 300ohm, and 1kohm. It didn't prove an issue with a brace of Koetsus [*HFN* Nov '13, & *HFN* Jul '13], the TechDAS TDC01 Ti [*HFN* Sep '14] or even the oddball SoundSmith Hyperion Mk II low-output moving-magnet, but I am aware of a breed of fastidious audiophile – the sort who spends six hours setting up VTA – so it bears mentioning.

YOU'VE BEEN WARNED

More versatility is revealed at the back [see p71]. This is a dream for audiophiles with multiple front-ends as the E-2 allows you to connect up to four turntables or tonearms, and switch between them, thanks to its range of MM, MC and DS Audio (optical)

inputs. The latter has its own on/off switch and is clearly marked with warnings as you really do not want to connect a conventional cartridge into the DS Audio energiser (which has a DC PSU output).

Regarding the value of the balanced input, one now finds XLR outputs even on affordable decks from Pro-Ject [*HFN* Sep '22 & Mar '23] and Thorens. It's long overdue, and I would posit audibly worthwhile, as it seems quieter with MC pick-ups. Being generous, Soulnote has also installed a third pair of RCA inputs in parallel with the XLRs. These, too, are selected by choosing 'BAL' on the front, but you must use only one set when choosing that input. In other words, don't connect both simultaneously.

ABOVE: Right-hand side of the heavyweight 'cut' fascia design caters for modern MM/MC input, loading, gain and subsonic filter while a host of legacy curves are dialed up on the left

Outputs are on both single-ended RCA and balanced XLR connections, and the instruction manual advises against using both at the same time. It also adds that even if one output is connected to a preamp, etc, that's not in use, there could still be an adverse effect on the sound due to the added load capacitance.

WARM EMBRACE

Used in three systems in place of three conventional phono amps from £500-£7000 and two DS Audio energisers, the E-2 demonstrated an instant elevation in sound quality. The importer, however, warned that it wouldn't really sing until it was suitably warmed up. And, yes, the sound sweetened over roughly an hour before settling into its optimal groove. Alas for the rest of my quotidian existence, so exhilarating was the performance that I entered one of those irresistible analogue frenzies, digging out LP after LP. I had ten-hour sessions three days in a row. Yes, it's that seductive.

It was a sequence of vinyl moments, each exposing another area not just of competence but of brilliance. Worried though I may have been about a lack of warmth as all but one of my phono amps is valve-based, the initial notes of Stevie Wonder's 'Too High' [*Innervisions*; Tamla Motown STMA8011] told me to relax. By the time the vocals emerged, I was able to dismiss any concerns about solid-state vs. tubes. This phono stage oozes warmth, caressing the music.

That's not to say it's too polite or forgiving. 'Living For The City' from the Stevie Wonder album demands snap and force, which the E-2 conveyed. The entire record also exposed another strength

HI-FI WITH SOUL

As soon as I heard that Soulnote, based in Kanagawa, Japan, was set up in 2004 by ex-Marantz Japan employees, my expectations soared. In practice, Soulnote is the in-house high-end audio brand of CSR Inc, founded in 1991 and run by Mr Norinaga Nakazawa, president and managing director. CSR's design and manufacturing footprint extends to radio comms equipment (for the Japanese fire and rescue service), wireless microphones and amplifiers (for karaoke), plus electronics for the education sector. CSR is also the Japanese distributor of UK speaker brand PMC, which it sees as a good fit for its range of hi-fi electronics.

CSR/Soulnote employs around 50 people, the Chief Sound Manager since 2016 being Hideki Kato, who has been in the hi-fi industry since the 1980s and has experience in both analogue and digital product design. This is reflected in Soulnote's three-tier range: Series 1 is the entry-level line that includes the A-1 integrated amplifier, E-1 phono equaliser, and D-1N DSD-compatible USB DAC. The costlier Series 2 comprises the A-2 integrated amplifier, E-2 phono equaliser, and D-2 outboard DAC. The flagship Series 3 range includes the Z-3 network transport, D-3 DAC and X-3 outboard clock, to partner the S-3 SACD player, P-3 preamplifier and M-3 monoblock amplifier.

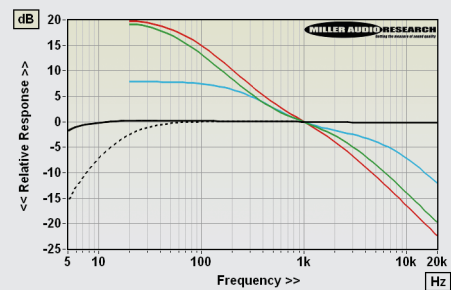
Kato-san's design philosophy is a career-long study to find 'the reason why the improvement in static performance and the sound quality in playback did not always correspond'. As a result, conventional wisdom is challenged, Soulnote believing that 'only listening dominates the determination and improvement of circuit, selection of parts and mechanical construction'. Forgive a lapse into sentiment, but I swear I detect the spirit of Ken Ishiwata, Marantz's late brand ambassador. And so it has proven: the E-2 – if it is typical of the company's output – exhibits the clarity of thought and attention to detail that defined Marantz products of the 1990s.

LAB REPORT

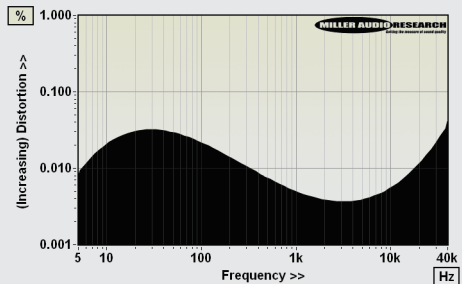
SOULNOTE E-2

While not directly compatible with strain gauge pick-ups [HFN Nov '21], the Soulnote E-2 is otherwise the closest example of a 'universal phono preamp' we have tested. As it's not practical to lab test the 'optical' eq block (the pick-up's internal LEDs are powered via the R- and L- pins while the output is returned via R+ and L+), I have focused on the MM/MC stages. The user-selectable high pass (Low Limit), the Turnover and low pass (Roll-off) are immensely flexible, offering no fewer than 144 possible eq curves. The default 50Hz, 500Hz and 2.12kHz settings, respectively, yield an accurate RIAA response [black trace, Graph 1], flat to within +0.3dB/20Hz to -0.2dB/20kHz out to -0.3dB/100kHz. The 'Low Cut' option invokes a mild subsonic filter that reaches -6dB/2Hz [dashed trace, Graph 1]. The 50Hz, 630Hz, 1.59kHz and 150Hz, 630Hz, 6.89kHz extremes of the legacy curves are illustrated by the red and blue traces, respectively, with the RIAA eq function plotted in green [Graph 1].

Soulnote rates the E-2's gain options at +52dB and +72dB for MM and MC, respectively, which turns out to be +47.1dB/56.4dB (MM, low/high gain) and +69.6dB/77.2dB (MC, low/high gain) via the balanced output. This is a very compatible spread, matched by input overload limits of 104mV, 82mV and 9.8mV, 7.7mV for MM and MC – a solid +26dB headroom if used with 5mV/500µV MM/MC pick-ups in the low gain setting. Distortion is more than low enough at 0.0045-0.060% [20Hz-20kHz, re. 0dBV; see Graph 2] while the A-wtd S/N ratios are very fine at 87dB (MM) and 70dB (MC). Finally, Soulnote specifies its balanced XLR output at 2.8V but the maximum output is actually an amp-busting 52V! PM



ABOVE: Freq. resp. from 5Hz-100kHz (subsonic filter, dashed trace) vs. eq curves (RIAA, green; Low 50Hz/Turnover 630Hz/Roll-off 1.59kHz, red; Low 150Hz/Turnover 630Hz/Roll-off 6.89kHz, blue)



ABOVE: Distortion versus frequency re. 0dBV from 20Hz-20kHz (MM standard gain setting)

HI-FI NEWS SPECIFICATIONS

Input loading (MM/MC)	47kohm/100-350pF / 3ohm-1kohm
Input sensitivity (re. 0dBV)	4.4mV/1.5mV / 423µV/138µV
Input overload (re. 1% THD)	104mV/82mV / 9.8mV/7.7mV
Max. output (re. 1% THD) / Imp.	52V / 14-91ohm (balanced)
A-wtd S/N ratio (re. 0dBV)	87.0dB / 70.0dB (MM/MC)
Freq. resp. (20Hz-20kHz/100kHz)	+0.25dB to -0.18dB / -0.28dB
Distortion (20Hz-20kHz, re. 0dBV)	0.0045-0.060%
Power consumption	45W
Dimensions (WHD) / Weight	430x160x410mm / 20kg



ABOVE: Up to three MM/MC pick-ups may be connected via RCA inputs (one on either XLR or RCA) with a DS Audio 'optical' cartridge hooked-up on adjacent RCAs (facilitating PSU out / signal return). Outputs are on RCAs and balanced XLRs

which will endear the E-2 to headbangers, funk fetishists, lovers of acoustic jazz and more: the bottom end is so rich, so ripe, and so fulsome that even LS3/5As were rendered bass-biased.

It sounded huge, and this applies to the soundstage too. While fundamentally unplugged, *Leon Redbone Live* [Green/Stone Records GSR3-851] is one of the most natural-sounding concert LPs I can name. Obviously, recreating a sense of space would be a priority with any live album, but in this case, it's reproducing a voice so resonant that one is reminded of aged blues singers heard only via 78s. It's as if those unused eq values on the phono amp's fascia were begging me to dig out something vintage. Redbone's voice was a throwback to an earlier time, and the E-2 placed it right in the middle of the room.

SHOCK AND AWE

What made me do a double-take was the arrival of a tuba – either that or a Sousaphone – causing a jolt, like the moment when Bernadette Peters pulls out a trumpet in the scene from *The Jerk* when Steve Martin is playing the ukulele on the beach. Lush, fat, bla-a-r-r-ting out of the speakers – it was a moment of near epiphany. The first thought it inspired was: What must I do to find £6800? Two LPs into the session, and I was in love.

That feeling reappeared again and again. I turned to *Keely Smith Sings The John Lennon-Paul McCartney Songbook* [Reprise R6142] to test the mono button, its use focusing the central image while somehow adding a sense of depth. It was then that it occurred to me I had some circa 1950-4 LPs which might make use of the legacy eqs.

Soulnote's user manual lists a staggering 100+ eqs for both 78s and early pre-RIAA LPs. Sure enough, Mickey Katz's "*Borscht*" [RCA

EPB3193] and *Mickey Katz* [Capitol H298] responded to the settings advised in the list. Was it wishful thinking? That's hard to say. Slightly tweaked eq – especially roll-off and turnover – made audible changes from flat RIAA but they were so slight as to be no more radical than a tiny change in VTA or tracking force. But wow! I hadn't heard these '50s mono gems sound so vivid.

FREE TO CHOOSE

Lastly, on the E-2's DS Audio optical compatibility – it begs a question as to why Soulnote and five other companies have addressed it. The answer must be that DS Audio is selling enough cartridges to justify it. More to the point is that for the target audiophile, including those apocryphal Japanese enthusiasts who allegedly use a different cartridge for each record label, it represents more freedom to choose.

So here's a KK tip. As the E-2's sound closely matches that of the DS Audio DS 003 energiser [HFN Oct '21] at £3147, the E-2 affords cartridge fetishists a cheap way to try out an optical cartridge. How so? DS Audio's most affordable model, the DS-E1 [HFN May '19], is £1162 on its own. You do the maths. ☺

HI-FI NEWS VERDICT

Despite little need for 78rpm EQ, I found the Soulnote E-2 to be everything one could want in a phono amp, whether or not one owns a DS Audio cartridge. So clean, detailed and open is the sound that I can see users swapping cartridges just for the fun of it, to challenge the E-2's prowess. I fed it seven entirely different cartridges and it made each of them sing. This phono stage is utterly magnificent.

Sound Quality: 89%

