



PHONO STAGE

MM/MC hybrid tube phono preamp
 Made by: European Audio Team, Prague, Czech Republic
 Supplied by: Absolute Sounds Ltd
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 Web: www.europeanaudioteam.com; www.absolutesounds.com
 Price: £2698

AUDIO FILE

EAT E-Glo S

Inspired by the all-tube, two-box E-Glo phono stage launched in 2013, this more affordable 'S' version is a FET/tube hybrid with simpler PSU. A chip off the block?
 Review: **Ken Kessler** Lab: **Paul Miller**

For three years, I have used EAT's E-Glo phono stage as my reference. At circa-£6k, it's hardly entry-level, but its appeal for me was its ability to accept two turntables, both with the full complement of adjustments. But how many people use two decks and want to, or can, spend £6k? EAT has responded to demand for a single-box, single-turntable alternative with the E-Glo S, for a more digestible £2698.

Has 'cost cutting!' just popped into your head, perhaps? But EAT's CEO, Jozefina Lichtenegger, is a zero-compromise Alpha Female, so she wasn't about to undermine her company's reputation. She first appeared on the scene with VAIC valves at the turn of this century, and is as imbued in tube culture as anyone. It shows here, even with a hybrid design to complement the full-tube E-Glo.

A TOUGH ACT TO FOLLOW

Thanks to the factories, facilities and personnel available to her in Austria, Slovakia and the Czech Republic (her husband owns Pro-Ject), Jozefina was able to move from the manufacture solely of valves to turntables – and at higher price points than hubby's – and, by extension, the phono stages through which to play them. As the E-Glo [see boxout, p53] found instant acclaim, its baby sister has a tough act to follow.

Most obvious is the move from a two-box affair to a single chassis – you would be staggered at how much a metal box costs – with effectively half the facilities and accommodating only one turntable's output. When placed side-by-side, one can see the reduction in controls, the E-Glo's rotaries for capacitance and load impedance replaced by toggles that step, via logic-controlled switches, through the values. The gain settings on the back of the E-Glo, accessed by DIP switches, have also

RIGHT: Powered by an outboard 18V DC PSU, the E-Glo S combines a low-noise J-FET front-end with a two-stage ECC83 triode-based preamp. RIAA equalisation is entirely passive

been replaced in the E-Glo S by a toggle. Also reduced are the number of settings for gain, impedance and capacitance, but not to a point where the user suffers.

The E-Glo S still offers settings of 45dB, 50dB, 55dB, 65dB and 70dB gain, compared to the E-Glo's range of 46dB to 72dB with finer gradations. The input capacitance settings are 50pF, 100pF, 150pF, 200pF, 270pF, 320pF and 420pF (where the E-Glo has eight at slightly different values), while input impedances include 10, 25, 50, 75, 100ohm, 1kohm and 47kohm (compared to 16 for the E-Glo, eight each for 70dB and 76dB, MC gain). Every setting is clearly marked and illuminated by a sequence of green LEDs on the chassis 'fascia'.

As for the valve complement, it's reduced from four ECC83s and two ECC88s to two TungSol 12AX7s in the E-Glo S. This uses two parallel FETs for the input in place of the E-Glo's costly balanced transformer input, with a FET and grid-connected triode. Says Jozefina, 'Such design has very low noise and good gain.'

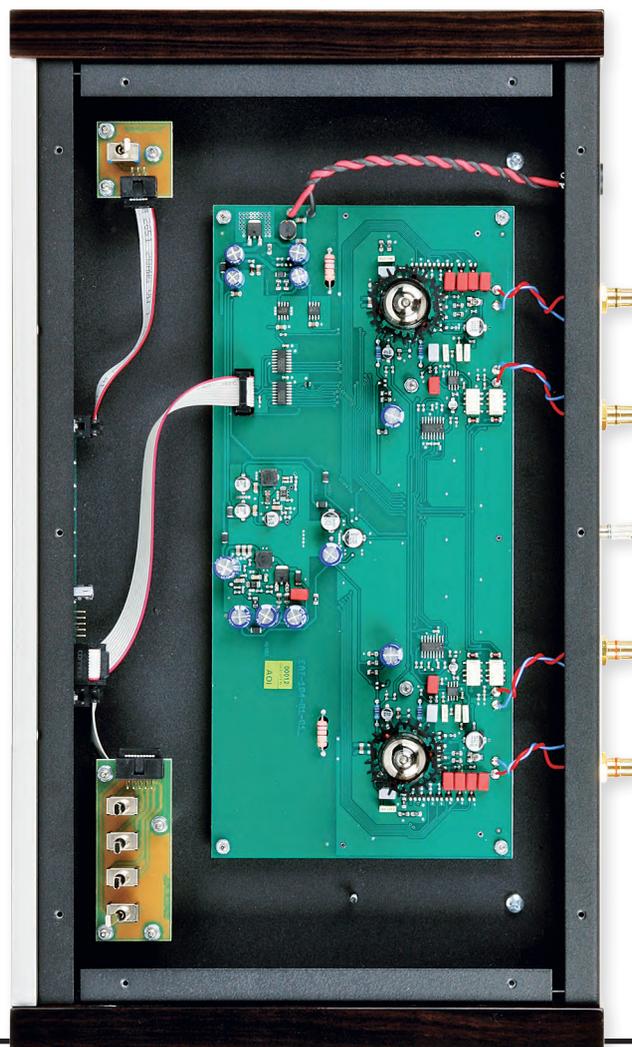
Gone is the E-Glo's massive outboard power supply, in an enclosure the same size as the phono stage itself, to be replaced here with an encapsulated 18V DC 'wall-wart'.

I have no special view about the merits, or otherwise, of subsonic filters, but I will admit to using them if encountering a warped record, or if I harbour suspicions about the rest of the system, or if I'm worried about blowing the cones in a vintage speaker. With the E-Glo S,

the user has access to a mild subsonic filter at 20Hz with a 12dB/octave slope, using half of the Texas Instruments OPA2134 output buffer [see PM's Lab Report, p55]. If the subsonic filter is switched off, the output is provided directly from this stage. RIAA equalisation is passive and there's no global feedback.

FUN TO USE

What's left after these alterations from E-Glo to E-Glo S is actually more fun to use because everything is accessible from the front, there's less to worry about, and yet it





still achieves more than most phono stages in terms of flexibility. It's almost completely self-explanatory for those who already understand setting cartridge values, while installation is perfectly straightforward, the dual-mono construction splitting the back with RCAs for Left in/out and Right in/out, with the earthing post in between, and a socket to take the connection from the aforementioned wall wart PSU.

Behind the row of toggles are the two valves, peeping out from the top plate and these are protected by 'cages' made of horizontal rings – less evocative of an open-reel deck than the E-Glo, while also more confidence-inspiring than a brace of tubes without any protection. Moreover, because it is so closely related to its big sister, the E-Glo S oozes luxury. The impeccable matte-grey finish is accented by wooden end-cheeks and chromed switch gear. The connectors at the back are gold-plated RCA cinches with Teflon insulation.

Because the valves protrude from the top and the switches are on the upper surface of the E-Glo S, this unit, like its sibling, does not allow stacking – unless it's on the top of the stack. The footprint is the same as the E-Glo's, and you need

only allow 100mm shelf height, provided you can see the toggles, as the valves don't generate sufficient heat to be of concern.

AN AUTHENTIC PRESENCE

As stated, I already own an EAT E-Glo, which is set up with an SME 30/12 deck and Clearaudio Goldfinger MC [HFN Jan '15] and Linn LP-12 with Arkiv, with an SME 30/Series V with Shure V15Vxmr alongside. While the initial listening took place through the Audio Research REF 6 [HFN May '16] and REF 75SE amplification through Wilson Alexias [HFN Mar '13], I also used the E-Glo extensively with the Quad Classic Integrated [HFN Jun '11] and Spendor 11ohm LS3/5As and KEF LS50s [HFN Jul '12], simply because of relative pricing.

Despite the original E-Glo defining my vinyl listening for the past three years, I had to give the E-Glo S a fair shake and not listen solely in comparison mode. I also had to hand an EAR 834P – a genuine classic – and a Pro-Ject tube phono amp, just to ensure perspective.

LPs used for the tests included the Mobile Fidelity 'One-Step Process' edition of Santana's *Abraxas* [Mobile Fidelity UD1S 2-001 on two 45rpm LPs], the 45rpm

'It oozed with presence – no sibilance, no sizzle, just silk'

ABOVE: Its elegance belies the versatility of the E-Glo S which offers five gain options plus seven load/capacitance settings and a subsonic filter, all addressed via four toggle switches on top

double LP of Bob Dylan's 1965 *Highway 61 Revisited* [Mobile Fidelity MFSL 2-463], The Police's *Ghost In The Machine* [Universal AHRSLP005, half-speed mastered], Johnny Winter's *The Progressive Blues Experiment* [Imperial LP12431] and the original 1961 45rpm single of Kyu Sakamoto's 'Ue O Muite Aruko' [Toshiba JP-5083] on red vinyl!

I played that first, as it's one of my fave songs of all time and the only one I memorised in Japanese should I ever need to face a karaoke microphone. Its upper frequency energy is intense, especially the vibes and brass. I've never heard it sound aggressive, but neither did I expect the extra silkiness to the strings. This was instant bliss as the whistling break oozed with presence and authenticity. There was no sibilance, no sizzle, just silk.

A CRISP START

What was curious, but neither unpleasant nor disconcerting, was bass of an unusual richness. I knew I was hearing the signature of the E-Glo S, and it was consistent from cartridge to cartridge. That first pressing single heard through EAT's E-Glo S was so sweet that my teeth shed enamel, yet there was a warm 'n' fuzzy bottom octave that exhibited control without going super-restrained on the flow.

I was in love. I needed to hear something spacious but relentless. The Police's Stewart Copeland is one of those kick-ass drummers who delivers more punch than small speakers can ever present with any sense of appropriate scale – which is hilarious when you consider that most people probably heard the hit version of 'Every Little Thing She Does Is Magic' via an old AM radio.

The track's opening cymbal flourishes were crisp, with just the right amount of splash. You were almost lulled into ballad mode. Then, at around 35 seconds in, Copeland lets loose the drums of war. ➔

THE AFTERGLOW

If the E-Glo S had preceded the E-Glo, the latter would be considered an 'S on steroids'. The E-Glo goes beyond the 'S with its massive outboard power supply in a chassis that can sit beneath the main unit or be sited a few feet away, the ability to accept two decks with full MM/MC status for both, a stand-by/warm-up mode and more complex circuitry, not least offering full valve status.

For hard-core cartridge obsessives, the E-Glo does have more steps in its gain, impedance and capacitance settings, but the abject set-up psycho would probably opt for the likes of the Audio Alchemy PPA-1 [HFN Jan '17] that demands set-up with an AVO meter. I've never been that neurotic about cartridge loading, as much as I am about, say, VTA, but I could name names and rattle off those who want the values set to the 100th of an ohm. Be my guest...

Side-by-side, the E-Glo betters the 'S in every parameter, but that is as it should be: the E-Glo S costs half the price. Keep that in mind – and it's the only factor you need consider – because both phono stages are sublime.



PHONO STAGE



ABOVE: Simplicity itself – single gold-plated RCAs for connection to the tonearm leads and out to your choice of (pre) amplifier. Note $\pm 18V$ DC PSU input socket

The attack was enough to jar my teeth. It was simply glorious via the Alexias, though it didn't trouble the small two-ways.

Beneath it was Sting's bass, as always recorded with panache. The E-Glo S demonstrated enough grip to convey sufficient impact, without veering into the sort of constipation that often affects solid-state phono amps. I was never a fan of this band – even less so now that we have to put up with Sting's virtue signalling – but this had me rapt.

No coaxing was needed to lock me in my chair when Johnny Winter was playing. The metallic twang of his National Steel on his first LP is exciting no matter what system you own, but full marks go to the E-Glo S for conveying the shimmery effect of the playing, from 'Rollin' And Tumblin' to the last notes of 'Forty-Four', and with speed and attack – already experienced with Copeland's drumming – beneath that inimitable cross between a growl and a grimacing cantor.

PRESSING MATTERS

With the two MoFi releases, the matter of pressing quality became the acid test – would this phono stage allow the listener to experience the subtleties promised by both the 'One Step' and the 45rpm monos? As I have mint original pressings of these, I had already learned that the MoFis were in many ways superior to the LPs' first incarnations. With the Santana LP, the nuances of his playing were easier to appreciate, less amorphous and more distinct.

Would the E-Glo S be able to match the E-Glo? Yes and no. Yes, in that the experience was as pleasurable and as coherent, but the costlier E-Glo delivered greater authority. When Jozefina voiced the 'S' – and I hasten to add that her music diet is almost exclusively classical – she squeezed as much as

she could out of its simpler design, but the power supply alone ensured that the two-box sister would always have the edge.

This carries through to soundstaging, which has no relevance with the Dylan albums, but certainly was evident with *Abraxas*. The E-Glo S has slightly less air and certainly creates a smaller soundstage, but equally, it illustrates the Law of Diminishing Returns with a vengeance, for you'd not be able to convince your bank manager (do they still exist?) that the E-Glo is twice as good as the 'S, as it isn't.

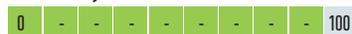
Leaving aside the obvious practical differences, including the capability to handle two turntables and the greater levels of set-up precision afforded by more settings for gain, impedance and capacitance, the E-Glo is still the more refined of the two.

What the 'S has, though, is a cheery personality, a forgiving nature and an easiness that will seduce the listener. It joins a growing band of utterly delightful, affordable components that includes the Quad VA-One integrated amp, the MartinLogan Motion15 speaker and the EISA Award-winning Pro-Ject Classic turntable [*HFN* Aug '16].

HI-FI NEWS VERDICT

As the outside world considers high-end audio ever more odd, many brands still need to grapple better with context. So this is not a budget phono stage by any means, but it is a *great one*, blessed with styling and ergonomics showing cognisance of needs beyond absolute sound quality – such as usability. I fell in love with it within 15 seconds, but it was still the sound that grabbed me above all else.

Sound Quality: 88%



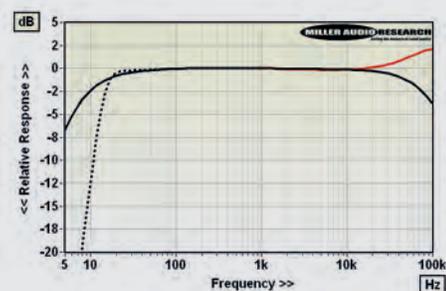
LAB REPORT

EAT E-GLO S

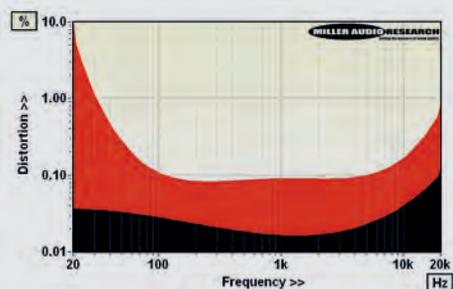
Bearing in mind that the E-Glo S's hybrid J-FET/triode gain stages are powered from an 18V wall-wart DC supply there is a limit to both the equalised output level and available input headroom. Fortunately, the E-Glo S offers the graceful clipping of an audiophile valve amp so distortion increases linearly with output, from 0.14% at 1V to 1% THD at 5.8V and 3% at 9.2V (200Hz-5kHz). Distortion increases more swiftly at the frequency extremes, however, and especially through the bass where THD jumps from 0.035% at 20Hz/100mV to a whopping ~10% at just 500mV (0.5V) output [see Graph 2, below]. This reflects the input overload margins through bass frequencies.

Nevertheless, the E-Glo S is very versatile. The specified +45dB, +50dB, +55dB, +65dB and +70dB gain options are all uniformly +0.8dB higher in practice and cater for pick-up outputs from 292 μ V (low o/p MC) to 5.25mV (high output MM). The generous gain, and passive RIAA, almost guarantees that input headroom is limited, in this case to just 42mV, 27mV, 17mV, 6mV and 3.2mV (for 1% THD), respectively. The figure of 42mV represents +18.5dB (re. IEC standard 5mV) which is equivalent to the peak groove excursion(s) carried by the most dynamic of LP recordings. As headroom is significantly lower at LF with the E-Glo S, and the A-wtd S/N is very wide at 87.8dB (re. 5mV in/1V out), I'd advise sticking with the +45dB gain setting for all MMs, and avoid very high output models.

The last three gain settings offer a uniformly lower 67.8dB A-wtd S/N (re. 500 μ V in/1V out) when treated as MC inputs. The RIAA response is very flat and extended from -0.9dB/20Hz to -0.3dB/20kHz (though note ultrasonic boost on right channel here) and with the option of a 795 μ s subsonic pole yielding -0.4dB/20Hz to -11dB/10Hz [see Graph 1, below]. PM



ABOVE: RIAA-corrected, extended frequency response, -20dBV out (left, black; right, red; subsonic, dashed)



ABOVE: Distortion vs. frequency (20Hz-20kHz, 45dB gain) at 100mV out (black) and 500mV out (red)

HI-FI NEWS SPECIFICATIONS

Input loading	10ohm-47kohm/10pF-740pF
Input sensitivity (re. 0dBV)	292 μ V-5.25mV
Input overload (re. 3% THD)	3.4mV-53mV
Max. output (re. 1%/3% THD) / Imp.	5.7V/9.2V / 55-95ohm
A-wtd S/N ratio (MM/MC, re. 0dBV)	87.8dB / 67.8dB
Frequency response (20Hz-20kHz)	-0.85dB to -0.30dB
Distortion (20Hz-20kHz, re. -20dBV)	0.016-0.12%
Power consumption	8W
Dimensions (WHD) / Weight	435x90x270mm / 2kg