

# EAT E-Glo Petit

European Audio Team's (EAT) third E-Glo phono preamplifier is half the price and size of the second – can the E-Glo Petit redefine the entry-level/high-end phono stage?

Review: **Ken Kessler** Lab: **Paul Miller**

As the most affordable of EAT's three MM/MC phono stages, the new E-Glo Petit has its work cut out, as there are plenty of killer phono stages at this £1249 price point. Nevertheless you should still prepare to revel in a transistor/tube hybrid phono stage bursting with facilities, in a package – not counting the 18V wall-wart power supply – with a footprint of only 226mm wide by 250mm deep, plus sockets and wooden cheeks.

Although it's a mere 90mm tall including the knobs, toggles and valve tops, it needs a few inches above to allow the heat to circulate, while the industrial design precludes anything being placed on top. And, at the risk of stating the obvious, the Petit's natural siting will be next to a turntable, as access to its operational facilities is, as I've hinted, on top.

## TWEAKER'S PARADISE

What you see when looking down on it are two 12AX7 triodes, with metal discs supported by two 10mm posts to protect the glass tips that peek out from the top plate. Two Allen bolts hold these discs in place, and they are easily removed when it's time to change the valves. Between the valves and the front panel are two rotaries for setting the impedance, the left knob with eight settings from 10ohm to 1kohm, notionally for MCs, and the other with eight settings from 30k-75kohm, for MM. Five toggle switches provide, left to right, power on, selection of either of the two impedance rotaries, two sequential types to scroll through gain and capacitance values, and subsonic filter on/off. The capacitance and gain settings scroll with each press, the values indicated on the front of the unit via two rows of six miniature blue LEDs. Capacitance settings are 50/150/270/370/520/620pF and gain

options are +40/45/50/55/65/70dB [see PM's Lab Report, p59].

**RIGHT:** Powered by an outboard 18V DC PSU, the E-Glo Petit combines a discrete, low-noise J-FET front-end [near left] with a two-stage 12AX7 triode-based RIAA preamp [left]. Gain and loading options are switched by logic [centre]

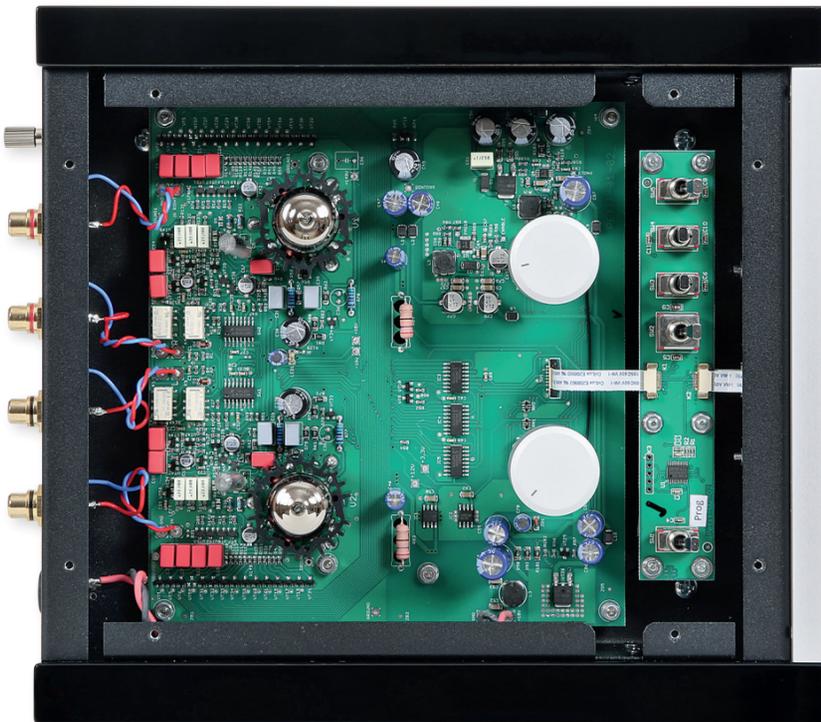
As PM gleefully pointed out in his commissioning notes, the new baby of the range actually has more gain settings than the costlier E-Glo S [HFN Mar '17], while the absence of an MM/MC selector means that you can match cartridge types according to the gain and impedance settings. I smiled upon realising that here was a *rara avis*, a phono stage that allows me to set my Deccas and Londons at near enough to the rumoured ideal of 68kohm impedance thanks to its 65kohm setting. I am not about to quibble over 3kohm, when I've had to make do with 47kohm for decades, save for a rare spell with (if I remember correctly) an early Gryphon.

Quite where the economies come in, vis-à-vis the E-Glo S, I'm not sure beyond the half-sized enclosure and one less

toggle. Like the S but unlike the original E-Glo, the Petit accepts only one turntable, hardly a sacrifice for the vast majority of analogue lovers. This also means a minimum of clutter around the back. The Petit is fitted with two pairs of gilded RCA phonos for signals in-and-out, an earthing post and the socket for power from the wall-wart. Because of the simplicity and the near-intuitive nature of the controls, as well as the caveat that all phono stages should be set by ear rather than hard-and-fast rules according to pick-up manufacturer specs, you will have this up-and-running in two minutes. Or less.

## A REALITY CHECK

While I dream of owning something like EMT's legendary JPA66 for ultimate cartridge matching, its price is way beyond my means. That's why I welcomed the



E-Glo and the later E-Glo S for getting me part of the way there. But I must confess that I long ago gave up anally-retentive levels of obsessiveness, so the need for infinite settings is less important to me than, say, ample supplies of Colchicine for my gout. The E-Glo Petit certainly proved to be up to the task of matching a Kiseki Blue NS [HFN Jul '18], Koetsu Urushi [HFN Nov '17], its sibling, the jade-green Jo N°5 [HFN Dec '18], a slew of Deccas/Londons, and anything else I threw at it.

There were no deal-breaking, cautionary moments to relate to you, beyond a wee tingle if earthing wasn't addressed properly throughout the system and the need to ensure adequate ventilation, as with all tube equipment. Warm-up was a swift 10-15 minutes, the unit was deliciously quiet and hum-free,

and it even looks and feels luxurious. But it was the sound that made my jaw drop, price notwithstanding.

## PETIT IN NAME ONLY

From the instant I lowered the stylus and it delivered the first notes of The Beatles' remastered, eponymous LP known as the *White Album* [Apple 02567 57201], I knew I was about to enjoy one of those rare moments when fidelity and finance were not commensurate. The Petit belied its price in every way, elevating it to the ranks of other fine phono stages in the £1000-£2000 sector, such as Moon's NEO 310LP, Trilogy's 906, a couple of gems from Graham Slee and EAR's sublime 834P. Resolving the sound of a passenger jet flying across one's soundstage, however,

*The E-Glo Petit is surely going to cause a bit of bother for the 'S'*

## ENGINE OF CHANGE

Hi-fi is unique among what our US cousins call 'specialty consumer electronics' for no other sector is seemingly as diverse, as flexible or as innovative in seizing the opportunity to reach into new or expanding markets. You'll never get the photo business interested in a range of USB cables that improve the quality of pictures passing between cameras and computers, for example! But the audio biz is different, so just as the fashion for donning full-sized headphones outside of the living room became a 'thing', so the hi-fi brands jumped on board and offered us far higher quality cans for music on the move. And this, in turn, was the engine that kick-started the burgeoning market in headphone amplifiers and, in particular, the USB DAC/headphone amplifiers that we regularly review in HFN. The fashion for vinyl also gifted hi-fi's artisans with a new lease of life, so we now enjoy a greater variety of turntables than at any time in the past. But not just decks, for we are also seeing a real, if less explosive, uptick in the release of new phono cartridges alongside partnering MM/MC phono preamps, most recently from Parasound [HFN Feb '18], Exposure [HFN May '17], YBA [HFN Oct '18], Bel Canto [HFN Jun '18] and, quite naturally from vinyl's most successful machine shop, Pro-Ject, and its partner brand, EAT [HFN Mar '17]. PM

**ABOVE:** Elegant and versatile, the E-Glo Petit offers six gain and capacitance options, plus 16 load settings and a subsonic filter, all addressed via four toggle switches on the top

isn't anyone's idea of a definitive test unless one happens to be a pilot, so I moved swiftly to the 'Esher Tapes' and the gorgeous, acoustic version of 'Dear Prudence'. Just guitars and voice, with a glorious sense of space, it oozed 'analogue-ness' if such a notion can be defined. It was velvety, open, free of any nasties. Nothing about it sounded cheap, let alone economical. This was serious, high-end-worthy playback, so close in impact and coherence to its two-box big sister that it renewed my faith in the concept of trickle-down technology.

Admittedly, the unplugged, lean nature of The Beatles' working sessions – while vivid and untainted by processing – do not tax a system in the manner of the more complex tracks on the album. Resolving the manic, proto-thrash of 'Helter Skelter' was as far off the chart in the other direction away from the acoustic stuff as could exist in the same box set, and the way the Petit managed the layers of bass and fuzz guitar revealed its command of a completely different set of requirements.

## CHAOS UNRAVELLED

This is one berserker of a track, with massed vocals at the back, descending guitars of various flavours, vicious stabbing sounds and machine-gun drumming. I'm not about to declare an understanding of how it led Charles Manson to order a massacre, but the Petit peeled away any vestiges of confusion which might be caused by the chaotic barrage around a minute from the end, before it fades back in... I could, perhaps, imagine how a



**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

drug-addled brain might read more into it than The Beatles intended, for this phono stage delights in conveying power *and* meaning.

Breathless, I returned to something more genteel, The Band's *Music From Big Pink* [Capitol 06025674805325] on two 45rpm LPs. What stood out with this album was the massive, airy, echo-y sound of the organ that opens the majestic 'Chest Fever' – an exercise in scale and depth that can rattle a room. In comes piano, crisp percussion, rich bass, everything spread across the stage: the Petit filled the room with ease, belying any dynamic or spatial constraints one might wish to attribute to a wall-wart PSU.

No, it did not possess all of the mass that was available via the E-Glo two-box flagship or the 'S, but the x2 or x4 price increase needed to acquire the extra makes one stop and think. Skip to 'We Can Talk About It Now', listen to the interplay between organ and piano, the back-and-forth vocals, the snap of the drumming, and try to resist its funkiness – this sucker swings.

### DREAM PARTNER

Even mono couldn't baffle it. Little Willie John's classic set, *Fever* [Sundazed MH-8055], exhibited texture, richness and power, the title track oozing with sinister, menacing intent – despite it being a song of seduction. Juggling those emotions was John's skill; reproducing them is the Petit's. This unit embraces the nuances of vocals with the kind of finesse worthy of the best MCs. Yes, it's a dream partner for the Jo N°5, but the Kiseki and Koetsu MCs proved it could handle even more.

With 'Need Your Love So Bad', the Petit again handled the emotional component of a song with aplomb, complementing the raw bluesiness of the composition and the late-night vibe of the backing. One can hear how the sax/piano/guitar

interplay must have captivated a young Peter Green, who commandeered this masterpiece and put a new spin on it with Fleetwood Mac.

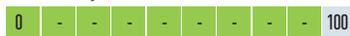
By treating everything with the equanimity, consistency and proficiency of units at twice the price, the Petit is going to cause a bit of bother for the 'S, while not exactly obviating its existence. That unit is richer, livelier, in many ways bigger-sounding, but the Petit behaves like a precocious kid sister. The conflict, 'S versus Petit, reminded me in reverse of a Lovin' Spoonful lyric that the #MeToo police have certainly outlawed: 'Did You Ever Have To Make Up Your Mind?'

As dilemmas go, there are tougher choices to have to make, so I'll not take the cowardly way out and revert to the price issue, arguing that one should choose what one can afford. Instead, I will at some point have to face distributor and manufacturer, both possibly furious that I'm raving about the less-expensive of two models in the same family. Then again, decades ago, a legendary reviewer postulated that many mid-power amps were better than the kilowatt beasts at the top of the range. ☺

### HI-FI NEWS VERDICT

EAT might have done too good a job: this baby all but obviates the need for the E-Glo S, which I reckon now deserves a Mk II update, because it does offer greater slam. That said, the Petit strikes me as more accurate, it's a joy to use, it affords exceptional cartridge matching and its price *begs* the use of the 'B' word. Yes, this is a bargain and a natural mate for that other Outstanding buy, the EAT Jo N°5 MC cartridge.

Sound Quality: 88%

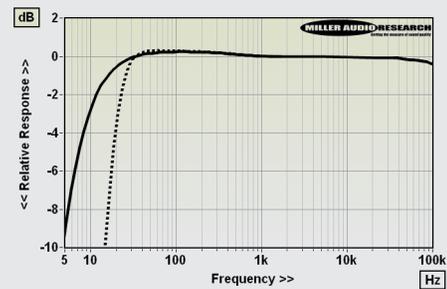


## LAB REPORT

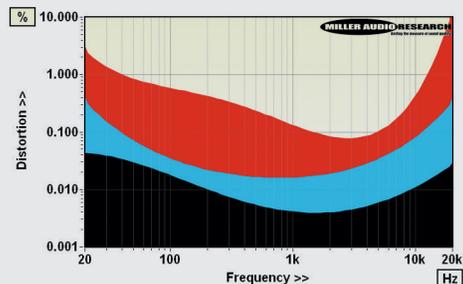
### EAT E-GLO PETIT

The E-Glo Petit is clearly a 'midi-sized' version of EAT's E-Glo S phono preamp [HFN Mar '17], so technical comparisons are very revealing. Both employ hybrid J-FET/triode gain and RIAA stages powered from an 18V wall-wart DC supply so there is a limit to both the equalised output level and available input headroom. Fortunately, both E-Glos offer the graceful clipping of an audiophile valve amp so distortion increases smoothly with output rather than clipping abruptly – from 0.025% at 1V to 1% THD at 5.5V and 3% at 6.5V (200Hz-5kHz). Distortion increases at the frequency extremes, however, though the Petit has an improved LF performance with THD rising from 0.042% at 20Hz/100mV to 0.4% at 500mV and just 3% at 1V output [see Graph 2, below]. The response [Graph 1, below] remains sensibly tailored at very low frequencies in the Petit (-0.75dB/20Hz and -3.0dB/20Hz with subsonic filter) but extends right out to 100kHz (-0.4dB), although the Petit's output impedance rises at LF from 95ohm/1kHz to 2.06kohm/20Hz.

The specified +40dB, +45dB, +50dB, +55dB and +65dB gain options are accurate to  $\pm 0.2$ dB (the final +70dB gain setting is closer to +68.2dB in practice), catering for pick-ups from 398 $\mu$ V (low o/p MC) to 5.62mV (high output MM). Input headroom is improved over the E-Glo S, in this case to 60mV, 55mV, 33mV, 16mV, 5.5mV and 3.9mV (for 1% THD), respectively. A 60mV input at the +40dB gain setting represents a headroom of +21.6dB (re. 5mV) which will *just* encompass the most dynamic of LP recordings. Noise is also reduced in the Petit over the S, with the first four gain settings offering an A-wtd S/N of 88.5dB and, treated as MC inputs, the +65dB/+70dB modes delivering a uniformly wider 69dB A-wtd S/N (re. 500 $\mu$ V in/1V out). PM



**ABOVE:** RIAA-corrected, extended frequency response, +40dB gain setting, 0dBV out (subsonic, dashed)



**ABOVE:** Distortion vs. frequency (20Hz-20kHz) at 100mV out (black), 500mV (blue) and 1V out (red)

### HI-FI NEWS SPECIFICATIONS

Input loading (MM/MC)	30-75kohm / 10-1200ohm
Input sensitivity (re. 0dBV)	398 $\mu$ V-5.62mV
Input overload (re. 3% THD)	4.2mV-75mV
Maximum output (re. 1%/3% THD) / Imp.	5.5V/6.5V / 95ohm-2.06kohm
A-wtd S/N ratio (MM/MC, re. 0dBV)	88.5dB / 69.0dB
Freq. resp. (20Hz-20kHz/100kHz)	-0.75dB to +0.20dB / -0.40dB
Distortion (20Hz-20kHz, re. -20dBV)	0.0038-0.042%
Power consumption	9W
Dimensions (WHD) / Weight	226x78x262mm / 2.3kg