

Perreaux Eloquence 255i

Still billed as 'The World's Most Powerful Integrated Amplifier', Perreaux's MOSFET flagship has been tickled-up with a new digital input module. And more power too...?
 Review: **Ken Kessler Lab: Paul Miller**

Side-by-side, you'd be forgiven for seeing no changes between the Perreaux Eloquence 255i integrated amplifier and the earlier 250i [HFN Aug '12]. Same rotary, same display, same number of buttons – even the price would leave you clueless, the six years between them inflating the £5695 of the earlier unit to £6895 in standard, line-level-only trim. Given the recent drop in the value of Sterling, that alone could account for the increase, so full marks to Perreaux.

A HOST OF INPUTS

What will up the price of the new unit, still billed as the 'world's most powerful integrated amplifier' [see PM's boxout, p59], are the two modules necessary for anyone using other than line-level only sources. The new DAC module adds £1385 to the price, while the MM/MC phono module costs £540, so the amp as reviewed comes in at £8820. It is thus, thanks to a host of digital inputs including two S/PDIF coax (RCA), two optical (Toslink) and one USB-B, and a phono stage to handle renewed interest in vinyl, a proper 21st century control unit, save for any wireless connectivity.

The MOSFET power amplifier is still rated at 250W/8ohm, and it remains a behemoth, reminding me that I wrote back in 2012 that it is one of those 'single-box amps that will never betray its non-separates status. It behaves, unapologetically, in exactly the manner you'd demand of any high-end unit with vast reserves of power – with grace and guts'. That summary proves equally applicable to the 255i.

If space-saving is part of your future plans, this becomes, effectively, three units in one: preamp, power amp and proper DAC. Make that four, as there's a headphone amp too. It's even more

RIGHT: As with the 250i, the 255i's interior is dominated by a huge toroidal mains transformer feeding MOSFET power amps on its side heatsinks. Note the thick multistranded speaker cabling and new DAC module [top]

relevant now than when the 250i was launched – headphone listening has become a primary method, especially as the sound quality of 'phones has improved beyond our wildest dreams.

If this were merely a fixed headphone socket, I wouldn't describe it as a headphone amp. Instead, the ¼in socket below the row of operation buttons is rated for 32-600ohm models, and the menu programme allows you to refine its performance for volume trim and balance. I tried a range of cans from 20ohm upwards with no problems, including old Beyers, the Audeze LCD-X [HFN Sep '14], assorted Sennheisers and Focals – all were handled with aplomb.

Next to the headphone socket, also in keeping with modern trends, is a 3.5mm stereo auxiliary input. Thus, the Perreaux owner coming home from a jog or a flight or anywhere else he or she might be using a portable can continue using that source

simply by connecting it to the 255i with an appropriate lead. Across the front, as before with the 250i, the super-clean panel contains a massive volume rotary, described by Perreaux as 'a 3rd-generation microprocessor-controlled analogue device'. To its right is the display, crucial for its menu usage, above a row of press-buttons for menu navigation and all other functions save on/off. A press button on the lower left of the fascia takes the 255i out of, or places it into, standby.

COMPLETE CUSTOMISATION

That's it for controls, though it's worth noting that *two* remotes are provided [see p61] – a small, simplified handset for the basics and another for full control, menu access, synergy with other Perreaux models and the like. The menu allows the user to change everything from the naming of inputs to balance trim to muting levels (which is particularly nice, offering levels of



attenuation in 10dB steps down to -40dB), maximum volume trim, clock configuration, all manner of display parameters and numerous other functions.

So totally customisable is this unit that one needs an evening just to set it up for total personalisation. Indeed, the menu instructions filled seven pages in the manual. If you are an inveterate fiddler, however, you will want to situate the 255i at eye level, because the small back-lit display is hard to read if you are even slightly off axis.

Only when you turn the unit around will you see what this model adds to the original. Across the top are the speaker terminals for normal or bi-wiring, on either side of an earthing post. Below, in left-right mirror image are XLRs for one balanced source and four sets of RCAs configured as line inputs, with Input 1 marked 'phono' for the module, should one be fitted. Input 4 bypasses the volume control for signal throughput, eg, as a home theatre loop. At the bottom are

trigger inputs of various types and RS232 input for configuring system integration. At the centre is an IEC mains input, the primary on/off rocker and a fuse holder. The digital inputs are placed in a row above the analogue sockets.

IT'S AN ANIMAL!

It took only minutes to drop this into the system in place of my Audio Research pre/power combination. Sources included the Marantz CD12 and Pro-Ject CD Box transports, the Mytek Brooklyn DAC [HFN Aug '17] and the SME 30/2 turntable [HFN Nov 1990] with Series V arm and London Gold cartridge. Speakers included the Gato Audio FM-50s [see p54] and the Wilson Yvettes [HFN Feb '17]. Absolutely no snags occurred, no grazed knuckles, no gnashing of teeth. In other words, this is a dream to set up.

But, Holy Cow! This thing is an animal... Yeah, yeah – I know PM has measured challengers that can, in certain cases,

ABOVE: A CPU governs input selection and labelling, volume trim and ramp rate, balance trim and so much more – all revealed on the back-lit display that hosts Perreaux's menu

dispute the claims as most powerful-ever integrated, but that's the only area where Perreaux should be censured. By claiming such, they simply set themselves up to be bettered or contradicted, which is unnecessary, as the 255i is a powerhouse to reckon with, whether or not it's the most bad-ass unit currently available.

So I quickly moved on, because the 255i never failed to 'light up' both sets of speakers. When, for example, assaulting my ears with Crabby Appleton's 'Go Back' from their eponymous debut [Man In The Moon; MITMCD31], I was immediately able to discern a different kind of slam from that which greeted my ears via the ARC REF75SE. And I used an SPL meter to ensure that it was extra level that I was hearing!

Having received the Gato FM-50s the same week as the Perreaux 255i, and having just reviewed them as above, I repeated the test regime by dropping in the new amp and leaving all else as before. Same with the music – a boon to expediency as I was able to simply compare my listening notes.

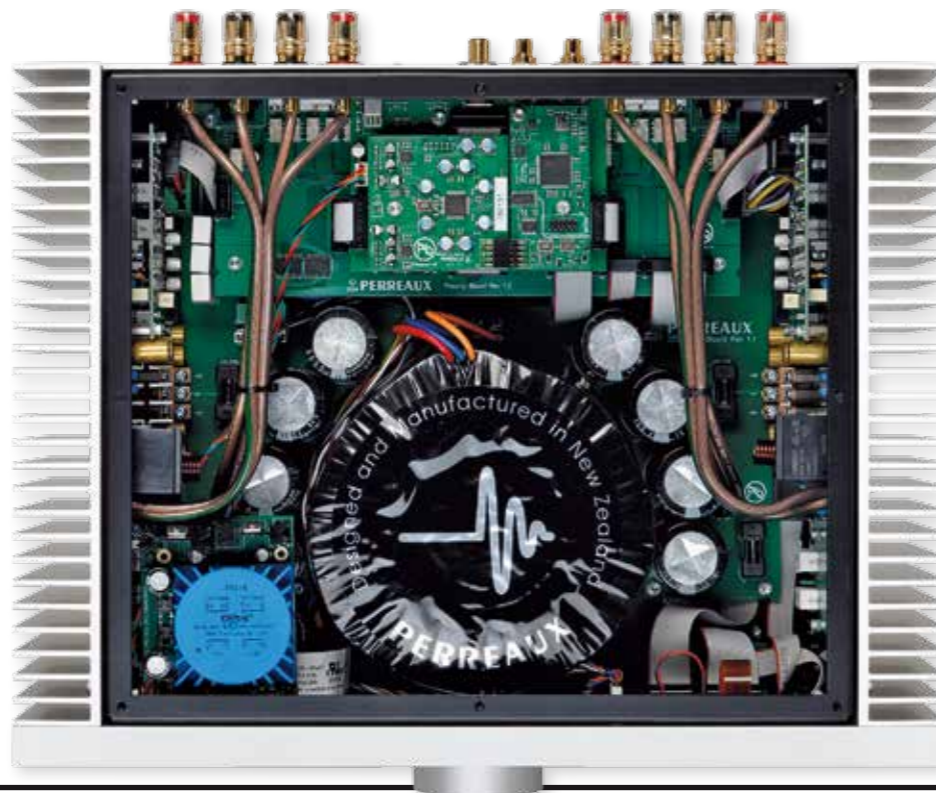
SILKY PHONO STAGE

After that quick burst of 'Go Back', just to shake the rafters, I got mono operation out of the way with Jackie Wilson With Billy Ward & The Dominoes [Varèse Sarabande 302 066 553 2]. Using it primarily to assess focus, and as an aid to playing with the menus, all was rock solid in the centre. Vocal quality was a bit less 'warm' sounding than via the all-valve Audio Research, but no more than one expects on solid-state versus tubes (a gap that has narrowed over the decades). The 255i sounded deliciously sweet with this early '50s vocal group material via CD. ☺

'I gave up in genuine fear of destroying the loudspeakers'

WORLD'S MOST POWERFUL?

'The World's Most Powerful Integrated Amplifier' is the bold claim made for the new 255i on Perreaux's website, with the caveat 'In reference to the 255i as a Class AB integrated amplifier'. Rated at 2x250W, or 320W, or 360W/8ohm depending on where you choose to look on the website, flyer or manual, the 255i is certainly *powerful* as it actually delivers closer to 2x435W/8ohm [see Lab Report, p61]. But is it truly the most powerful integrated, ever? That rather depends on how we define the power – into 8ohm or better reflecting its speaker load tolerance as power, or current, into 2 or 1ohm? Marantz's PM-10 offered 620W/8ohm [HFN Aug '17] but this is a Class D design, and only mustered 170W/1ohm, while Musical Fidelity's Nu-Vista 800 [HFN Nov '14] delivered a slightly lower 2x325W/8ohm but with a massive 2.2kW/1ohm (46.4A) under dynamic conditions. So too, the Krell S-550i [HFN Jul '13] offered 2x336W/8ohm with 2.4kW/1ohm (49.4A). Judged by these standards the 255i, which is protected at 1.5kW/2ohm and 610W/1ohm (26.7A), is arguably *less* powerful. However, unless you have the world's least sensitive/lowest impedance speakers in tow, you'd be hard-pressed to judge the difference! PM



PERREAUX ELOQUENCE 255I



ABOVE: No fewer than five line inputs (one balanced on XLR) are joined by MM/MC, a preamp out/main amp in and a fixed tape output (all on RCAs), plus 4mm speaker terminals. There are also four S/PDIF digital ins (two coax/optical) and a USB Type-B

But what made my day was the phono stage, which – and I have no idea why – made the London (*née* Decca) Gold sound more silky and refined than I have heard it via solid-state. My reference EAT E-Glo phono stage still has greater bloom and depth, but the Perreux 255i made the already shimmering presence of ‘Cherry Pink And Apple Blossom White’ from Perez Prado’s *Big Hits By Prado* [RCA ‘Living Stereo’ LSP-2104], just more vivid and natural.

ROCKS WITH VIGOUR

Of particular interest to inveterate cartridge changers, and those who love to compare pressings is the retrieval of detail. This is one clean-sounding phono section – and I say that as one who has been for ever spoiled by the silences offered by the DS Audio photoelectric cartridges, with their near-digital blackness in the absence of low level *shmutz*. Prado’s orchestra soared, with proper scale, but it was even easier to discern individual instruments with ease.

But back to Crabby Appleton. My reason for concentrating on this hard rock epic is to support the manufacturer’s mission statement in creating such a powerful beast. Make no mistake: this is not the world’s only integrated amp with phono stage and DAC, but the power claims may be the deal maker for many would-be purchasers.

Leaving aside the need for power if one has hungry speakers, the other is to rock *with vigour*. Yes, I’m talking maximum SPLs without

compression or clipping. And as ‘Go Back’ lends itself to ear-bleeding levels and the playing of air *drums* (as much as air guitar), there was no way I could resist cranking it up. The only way I can describe the sheer mass of air pushing at me is this: I gave up for fear of destroying the speakers long before I reached the limits of the 255i.

Like the fat Owner’s Manual, there is too much to cover when dealing with this amp. The digital stages are almost a match for the ridiculously good Mytek standalone DAC; there is unlikely to be a cartridge the phono section can’t match; and as has been emphasised, power is certainly not an issue. It boils down to something that has nothing to do with sound at all...

In the debate over separates versus integrals, long resolved are matters of interference between components, while this unit certainly has no weaknesses in the power supply debate. Convenience? The saving of three AC outlets? No question – this is an integrated amp for those who favour expedience over complication, but without compromise. The only deciding factor – how it will sound in the target system? ☺

HI-FI NEWS VERDICT

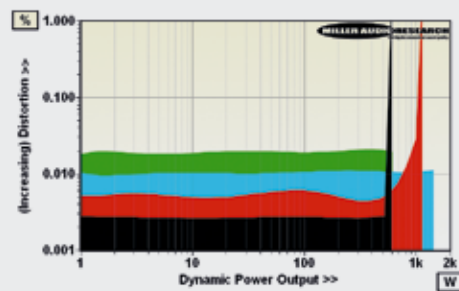
As with its predecessor, this is an example of composure applied to a take-no-prisoners attitude, for it does whatever you ask, from delicate music to rave insanity. Aside from the omission of wireless connectivity – no loss, thanks to a USB socket that welcomes all manner of devices – this does it all with grace and eloquence. While just under £9k ain’t chicken feed, it’s still a helluva lot of amp for the dosh.

Sound Quality: 85%

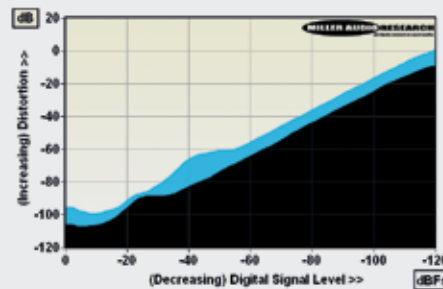


Like the 250i [HFN Aug '12], this latest ‘250W’ Eloquence 255i integrated will, in fact, deliver far closer to 2x435W/8ohm and 2x680W/4ohm with a thundering 600W and 1137W, respectively, under dynamic conditions. This is fractionally higher than that achieved by the 250i (545W/8ohm and 1010W/4ohm) although the profile of Perreux’s protection regime has also been ‘tweaked’ so that a higher 1438W is available into 2ohm but a *reduced* 610W (from 810W) is permissible into 1ohm [see Graph 1, below]. PSU noise was higher in this sample of the 255i than the 250i measured six years ago (–68dBV to –60dBV), with the A-wtd S/N now reduced to 76.5dB from 81.5dB (re. 0dBV). This PSU noise also impacted the jitter/intermodulation performance of the new DAC module, accounting for most of the 1315psec (48kHz) and 790psec (96kHz) that was measured.

That aside, the 255i has fractionally higher (but not ‘high’) distortion at ~0.0025% versus ~0.0019% through the midrange over its full 1-250W rated bandwidth, but with the same impressively consistent ~0.01% THD up to 20kHz. The low 0.013ohm output impedance, increasing to 0.06ohm at 20kHz and 0.33ohm at 100kHz is unchanged as is the response – still flat from 1Hz up to 20kHz (–0.05dB) and 100kHz (–1.3dB) with very little drop-off into low impedances (just –0.55dB/20kHz into 1ohm). The digital board, based on an ESS9038 DAC with minimum phase filter selected by Perreux, offers very low distortion of just 0.0003-0.0017% (20Hz-20kHz, 0dBFS), with a minimum of 0.0002% [see Graph 2] and with response limits of –0.02dB/20kHz, –0.2dB/45kHz and –0.6dB/90kHz with 48kHz, 96kHz and 192kHz media, respectively. PM



ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads. Max. current is 26.7A



ABOVE: Distortion versus 24-bit digital signal level over a 120dB range at 1kHz (black) and 20kHz (blue)

HI-FI NEWS SPECIFICATIONS

Continuous power (<1% THD, 8/4/2/1ohm)	435W / 680W
Dynamic power (<1% THD, 8/4/2/1ohm)	600W / 1137W / 1438W / 610W
Output impedance (20Hz-20kHz)	0.013-0.065ohm (210ohm, pre)
Freq. resp. (20Hz-20kHz/100kHz)	+0.0 to –0.1dB/–1.3dB
Digital jitter (S/PDIF at 48kHz/96kHz)	1315psec / 790psec
A-wtd S/N ratio (re. 0dBW/0dBFS)	76.5dB (Analogue) / 100.1dB (Dig)
Dist. (20Hz-20kHz: 0dBW/–20dBFS)	0.0027-0.009%/0.0003-0.0017%
Power consumption (idle/rated o/p)	84W / 1030W (1W standby)
Dimensions (WHD) / Weight	426x149x344mm / 25kg