



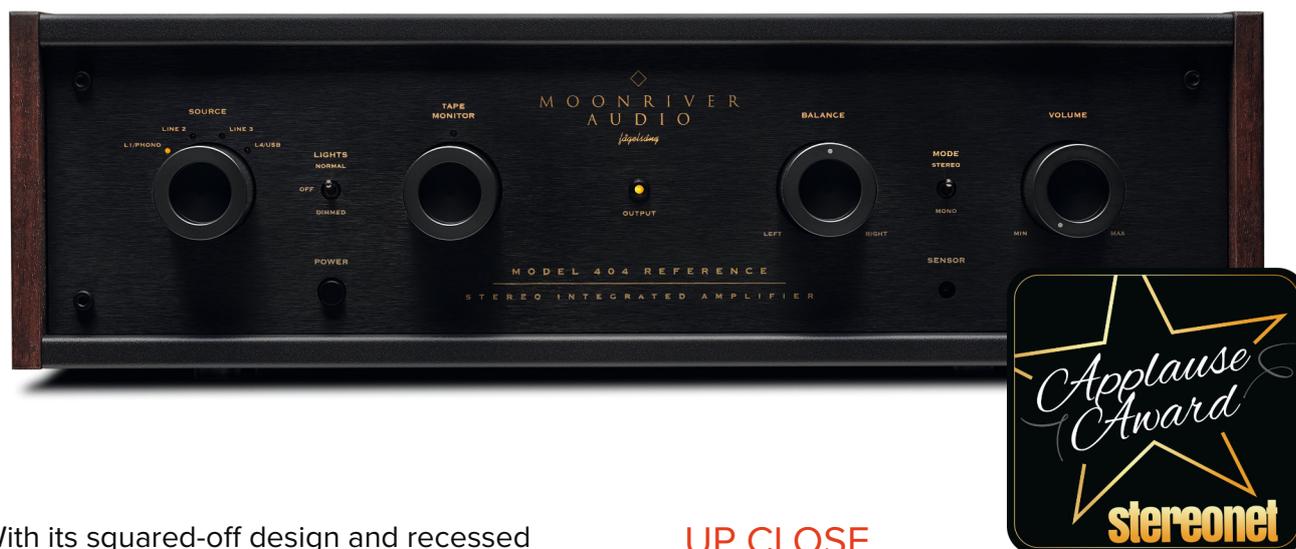
stereonet

MOONRIVER AUDIO 404 REFERENCE REVIEW

James Michael Hughes enjoys this quirky high end integrated amplifier from Sweden...

1 March 2021 | Moonriver Audio

Model 404 Reference Integrated Amplifier | £5,020 as reviewed



With its squared-off design and recessed front panel surrounded by a picture frame, Moonriver Audio's 404 Reference gives off a distinctly retro vibe. Plain, simple and functional, it even has walnut end cheeks. Still, looks can be deceiving because there's little that's antique about this integrated amplifier inside the case...

It's a bang-up-to-date design that puts out a claimed 50W RMS per channel. That's not in itself a lot of power, but more than you'd ever dream of back in the nineteen sixties. The premium-priced Reference version tested here is a supercharged version of the original Moonriver integrated and adds an extra £1,400 to the latter's price. It sports three unbalanced line inputs, plus optional MM or MM/MC phono stages (£375 and £525 respectively; the latter was fitted to my review sample). There's also a separate tape monitor and two preamp outputs.

UP CLOSE

The 404 Reference is handmade the old-fashioned way in its native Sweden. It's designed for reliability and ease of servicing, featuring old school through-hole soldering and no surface mount components. Relays are used for switching, and the motorised volume pot is the famous Alps Blue. The 'soft-start' on/off button powers up the amplifier gently to reduce stress.

This Reference version gets a beefed-up power supply, with capacitance nearly double the stock amp's 57,000uF at a massive 107,000uF – the preamp section alone has 21,000uF. Moonriver says this extra capacitance delivers additional headroom, greatly enhancing the amplifier's driving capabilities. A single toroidal mains transformer is used, with five separate power supplies for enhanced dynamic contrast. The stock 404 cannot be upgraded to the Reference version, by the way.



Although a fairly minimalist design, the 404 Reference does have a few welcome extras in the shape of a left/right stereo balance control and a stereo/mono switch. These additions are very useful, the latter being all but essential when playing mono LPs. The balance control is wired in parallel so as not to affect sound quality. You can dim/extinguish the lights, and the sound seems a tad cleaner with the lights off.

Also included is a tape monitor switch – a feature once common on amplifiers thirty or so years ago, because it let people with three-head cassette or open-reel tape decks compare the difference between the source being recorded and the actual recording being made, in real-time. Few folk use such things now – except perhaps certain StereoNET editorial staff – so why reinstate it? Well, you can also use it as a monitor loop for a digital room processor, or a tube or transformer buffer stage, and easily switch it in and out for comparison purposes. Neat!

Actually, there's also another benefit. By a whisker, the tape monitor is the 404 Reference's finest-sounding line input to my ears. Why? Because circumventing the main selector switch, tape monitor offers the

shortest and potentially cleanest signal path. Try it and see what you think!

The 404 Reference should have been available now with a USB DAC option, an asynchronous interface using the excellent AKM 4490 chip. It featured high-precision clocks for 44.1kHz and 48kHz, supporting PCM streams up to 384kHz. Unfortunately, a fire destroyed the AKM factory in Japan last October, so the 4490 chip is currently out of production. A replacement chip with better performance – and possibly handling PCM, DSD, and MQA – is currently on the drawing board, but there's no firm release date at present.

StereoNET's review sample came fitted with a phono stage, but for the reasons mentioned above, not the DAC. The former turned out to be really rather good and is definitely worth having if you spin vinyl. The MM only version has 40dB gain; the MM/MC option adds another 20dB. Considering the modest price hike, either is a worthwhile option if you are an analogue addict.

THE LISTENING

On paper, the Reference isn't very powerful, yet it sounds surprisingly dynamic and assertive. It gives the impression of having power to spare and punches well above its weight. The behaviour of the volume control aids this impression, producing quite a large change in level over the first quarter of travel. The sound – already quite loud by 9 o'clock – gets very loud by 12, although the fact that I use very efficient (99dB) loudspeakers at least partially explains this.

I found the Moonriver sounded crisp and focused at low volumes. The music did not become recessed as levels were reduced. A satisfying sense of presence and immediacy was retained. Things just sounded quieter, as if the performers were slightly further away. Playing Joni Mitchell's *The Hissing of Summer Lawns* on vinyl, for example, I was immediately impressed by the warmth and weight of the overall sound; the strong and clear bass, plus the sweet richness of Joni's voice. The dense layering of background vocals and synthesisers was amazing. I sensed the relaxed ease and fullness you get from good tube designs, but with the immediacy and detail found in the best solid-

state models. This amp is full-bodied and firm yet not too rich or euphonic – and with a clean, sweet treble.

Flamenco Sketches from *Kind of Blue* by Miles Davis was immediate and present yet smooth and natural, with fine clarity and detail. I liked the way Bill Evans' soft quiet piano chords cut through clearly, and how you could easily follow each note as it decayed. Indeed, the musical presentation was tactile and crisp; refined and smooth without being 'soft' or muddy. Trumpet and sax had a nice tonal bloom, without being lush or euphonic. Overall, it was a very attractive sound to listen to – informative and involving.

I found the 404 Reference to be revealing of changes made elsewhere in the chain, too. It sounded transparent and open, while at the same time providing a very clean focused musical delivery. This allowed all manner of subtle changes to be heard, rather than everything sounding uniform. Playing JJ Cale's *Grasshopper* on vinyl, I liked the way the 404 Reference revealed lots of variation in vocal/instrumental balance and studio acoustic, from one track to the next. Each track sounded quite distinct, as it should do with this album.



Night Train by the Oscar Peterson Trio is a miracle of subtle timing, pointed rhythms and crisp dynamics, which the Moonriver conveyed convincingly. Peterson's trill at the start of the title track was nuanced beautifully, and Ray Brown's acoustic bass sounded superbly 'woody' and present. This showed me how the amplifier can deliver a wide palette of tone colours with clearly articulated microdynamics. The combination of responsiveness, transparency, and a certain relaxed ease makes the 404 Reference musically rewarding to listen to.

This amplifier proved unerringly well behaved. I was surprised by how cool it runs at normal listening levels, where the casework doesn't even get mildly warm. Despite being left switched on for up to ten hours continuously, you can still only detect the slightest rise in temperature. At the same time, noise levels are very low, including residual noise. So it's usable with efficient loudspeakers without slight hiss or hum being audible. The phono stage was quiet too and should be hum-free given correct grounding and shielded cables.

So, what's this amplifier's secret? Moonriver's George Polychronidis cites the preamp as the catalyst. To him, good design is all about timing and dynamics. Accordingly, his preamp features discrete components throughout because he says that no integrated circuits offer the quality he seeks. For him, a good preamp sets the pace, governs the work rate, commands the power amp and pushes it to deliver its full potential. Its ability to convey wide dynamic contrasts is therefore crucial. I can see what he means, although I'd always thought of the power amp as the thing that conveys dynamics. But if the partnering preamp lacks dynamics,

then the battle is already lost, and the results will be disappointing.

I duly compared my more expensive Musical Fidelity Nu Vista 800 against the 404 Reference, and – sadly for me – the latter offered better timing and enhanced transparency. Out of interest, pairing the MF with the 404's preamp improved things, validating Polychronidis' beliefs. Alas, the 404 pre with MF power still didn't sound quite as good as the complete 404 Reference. Sure, the MF offered significantly more power (300W RMS per side, no less), but somehow it didn't seem quite as free and off-the-leash – indeed, it was noticeably less nimble and less dynamic.

THE VERDICT

I reckon Moonriver Audio's 404 Reference must be one of the best integrated amplifiers currently available. It delivers an outstandingly clear, dynamic, and full-bodied sound, with great timing, plus levels of clarity and refinement that few rival regardless of cost approach. I absolutely loved it. Its modest output power might be a deal-breaker for some but shouldn't be. All I can say is, listen carefully before making your mind up. A veritable wolf in sheep's clothing, it offers a monstrous musical performance.

UK DISTRIBUTION

Whole Note Distribution
info@wholenotedistribution.co.uk
www.wholenotedistribution.co.uk
0203 9115 549