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112 ANDY LA ROCQUE



84 ARTURIA POLYBRUTE 12

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Austrian Audio The Composer & Full Score One

Headphones & Amplifier

Austrian Audio are courting the hi-fi audience with their high-end headphones and amp. Have they still met the needs of studio users?

SAM INGLIS

It's five years now since Austrian Audio launched their first product, the OC818 capacitor microphone. Since then, they've built up an impressive range of mics, headphones and related items. Until now, all of them have been targeted at studio applications, but with their new open-backed headphones and matching amp, they're making a pitch for the hi-fi market too. And thankfully, it's a pitch that is based in science, rather than the pseudo-science beloved of some hi-fi manufacturers.

This is particularly evident with the new Full Score One headphone amplifier. Designer Paul Weinreich has written a lengthy white paper explaining the thinking behind the circuitry, a fascinating document that covers practically every aspect of the design. The most striking takeaway from this is the focus on transient

reproduction, which in turn delivers a colossal bandwidth. When enabled, the Full Score One's True Transient Technology delivers a maximum slew rate of 300V/μs and a -3dB point of 2MHz. Disabling it using the front-panel button brings these figures down to a more normal but still impressive 5V/μs and 75kHz respectively. The same sort of attention to detail or design overkill, depending on your point of view, is apparent throughout, even when it comes to such mundane aspects as protection from short circuits.

Up to three sets of headphones can be connected at once, courtesy of two quarter-inch jacks and a four-pin XLR. This provides what is often referred to as a 'balanced' connection, and can be hidden with a little sliding door when not in use. Apart from the power and True Transient Technology buttons, the only other control is a large and nicely weighted volume pot. The rear of the Full

Score One is equally minimalist, with just an IEC mains inlet and analogue audio ins on XLR and phono.

Compose Yourself

The Full Score One has been introduced alongside a high-end pair of headphones, which are also pitched at both studio and hi-fi customers. The Composer employ the latest version of Austrian Audio's "high-excursion" driver design, which features a diaphragm coated with "diamond-like carbon". These drivers are housed in large, open-backed earcups, each of which sports a two-pin banana socket on the back. Three separate 3m cables are supplied, terminating in XLR, Pentaconn and jack connectors. Like many high-end headphone models, The Composer use a two-part frame with an outer, structural part and a cushioned inner band that rests on top of the head. The relative heights of the two can be adjusted to make the earcups sit higher or lower on the ear; and as well as rotating on two axes, the earcups also can also be clicked from their initial upright position through three increasing angles of forward tilt. Be warned, though, that it's easier to accidentally dislodge the sprung metal



clip that sets this position than it is to push it back into place (ask me how I know...).

Austrian Audio's industrial designers have done a good job of making both products look stylish enough for the hi-fi market yet sufficiently utilitarian to appeal to studio users. There would be no straightforward way to rackmount the Full Score One, but its smart black design would fit unobtrusively into most control rooms, and the construction is every bit as good as you'd expect at the price. The Composer headphones likewise exemplify a modern, high-quality yet restrained aesthetic, and with the possible exception of the aforementioned sprung clip, seem very thoughtfully put together. They come in a large wooden presentation box, which is impressive if not perhaps not quite as practical as a Peli case or similar.

The published specifications of The Composer are in many ways typical of a modern high-end design. As usual, a broad frequency range is claimed — in this case, 5Hz to 44kHz — but without any tolerances, so it's not clear how meaningful this is. With a nominal 22Ω impedance and

The Full Score One's 'balanced' XLR socket can be covered by a sliding door when not in use. The two buttons to the left of the front panel toggle power and True Transient Technology.

a sensitivity quoted at 112dB SPL per Volt, they deliver plenty of output even from a lesser headphone amp. Weighing in at 385g, they don't present too much of a burden on the head, and I found them very comfortable in their default configuration, with plenty of options for adjustment where needed. The earcups and cushions are generously proportioned, to the point where it's possible to position your ears significantly off-centre yet still fully within them — not that I noticed a huge change in the sound when I did this.

Score Draw

Austrian Audio would naturally like and recommend everyone to buy the Full Score One along with The Composer, and their respective visual aesthetics are a pleasing match, but there's no sense in which this is necessary. The amp will happily drive any passive headphones, and The Composer don't present any problems for other headphone amps. I tested them together and separately, and to take the Full Score One first, found that it's an extremely capable headphone amp that will cheerfully drive much less sensitive loads such as

planar magnetic headphones. When you feed it mastered music from a line-level source, in fact, its output is arguably a better match for those less sensitive models; with The Composer, I typically had the volume dial in the bottom 10 percent of its travel, and they'll go ridiculously loud if you wish.

Some headphone amps in this price bracket use relay-controlled or switched attenuators to ensure perfect level matching between the left and right channels at all volume levels. This also has the benefit of allowing volume settings to be recalled precisely. The Full Score One's volume dial has a continuous action, and seems to adjust a conventional stereo

Austrian Audio The Composer & Full Score One £2249/£1299

PROS

- Both the headphones and the amp sound great.
- Stylish yet practical design and construction.
- Full Score One offers 'balanced' output and unique True Transient Technology.

CONS

- No digital I/O on Full Score One.
- When used together, the output is so loud as to make much of the volume control's travel redundant.

SUMMARY

At this price level you expect first-rate quality, and both headphones and amp deliver exactly that.



The Full Score One is an all-analogue device, with inputs on XLR or phono.

» ganged potentiometer. At the very lowest settings the sound on the review sample skewed noticeably left, but only at the threshold of audibility; at all real-world listening levels the tracking was perfect.

If, as Elton John tells us, sorry seems to be the hardest word, then the hardest sentence for a product reviewer has to be “I couldn’t hear any difference.” It is with some reluctance, then, that I confess I couldn’t discern any change to the sound when True Transient Technology was switched in and out. If there is a real-world benefit, I suspect that you would need both young ears and an unusually hi-res recording and playback chain in order to really hear it. Assuming playback is from a digital source, the maximum slew rate will effectively be limited by the sample rate of the digital recording, and digital audio at base sample rates won’t generate anything near what the Full Score One is capable of even with True Transient Technology disabled. I tried generating 192kHz test signals containing impulses and other fast transients, but even then, I can’t honestly claim that I could repeatably tell when it was on or off.

The benefits of ‘balanced’ operation are harder to assess in an A/B comparison, because it takes a few seconds to swap the cables over at the headphone end, by which time one’s impression of the ‘before’ sound is less reliable. I felt as though it might have made a slight difference to the stereo imaging, but not one I’d describe as ‘night and day’. Nevertheless, it’s nice to have the option, and whether or not they make an audible difference, ‘balanced’ operation and True Transient Technology certainly don’t have any sort of negative impact on the sound.

Head First

It’s often the case that different headphones from one manufacturer offer variations on a common sound signature, and the Austrian Audio models I’ve tested in the past have all delivered a characteristically bright, present character. The Composer



broadly share this family sound, but they offer a considerably more refined version of it. Auditioned alongside the Hi-X 65 open-backed phones, for example, there’s a much greater sense of openness, with everything sounding relaxed and organic in comparison. Next to The Composer, the high end on the Hi-X 65 sounds processed, almost as though you’re listening through an EQ.

It’s only when you switch to a different set of cans from another manufacturer that you become aware of The Composer’s high-frequency lift, which otherwise sounds perfectly natural. Compared with cans that I consider tonally neutral, such as the Shure SRH1840, they display a broad but restrained emphasis in the 5kHz region, which brings up detail but doesn’t unduly exaggerate sibilance and other problems. In fact, they present essences, tees, tambourines, hi-hats and so on with impressive clarity. There’s no hint of the distortion, splashiness, spittiness or unwanted resonances that such things can provoke in cheaper headphones. At the other end of the spectrum, meanwhile, Austrian Audio have thankfully resisted the temptation to hype the bass and low midrange, which come across as balanced and smooth.

Although I’m not usually a great fan of bright headphones, then, I liked The Composer a lot. They’re enjoyable to listen to, revealing of mix issues and, once you get accustomed to the slight treble emphasis, reliable in their presentation of tone and timbre. At this price you’d expect something a bit special, and that’s exactly what you get. Of course, this means they also face some very good competition. I suspect personal taste will determine whether you favour this sort of sound over the meatier, more impactful midrange of a good planar

magnetic or AMT headphone like the Audeze and HEDD Audio models; if it does, then The Composer should certainly be auditioned alongside AKG’s flagship K812s, which likewise fall into the “bright but seriously good” camp.

It’s less obvious what sort of products the Full Score One amp faces off against, at least in a studio context. Most headphone amps nowadays incorporate digital I/O, but Austrian Audio’s design is a purist all-analogue affair. It also lacks features such as crossfeed, mute and mono fold-down that are commonly found on high-end studio headphone amps. Functionally speaking, Lake People’s impressive G108 is perhaps the most direct rival; it’s a lot more affordable, but lacks the Full Score One’s second jack output and True Transient Technology. However, Lake People’s proprietary ‘pre-gain’ function would actually be rather useful with The Composer headphones, allowing the level to be attenuated by a fixed amount to bring the full travel of the volume control into play. However, assuming you don’t need bells and whistles, the Full Score One sounds superb, can comfortably drive three sets of headphones at once, and adds a touch of class to any studio. ■■■

£ The Composer £2249;
Full Score One £1299. Prices include VAT.
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