

Minitest

Do you use headphones? Then **Richard Black's** invaluable guide to the best head amps is for you

Creek OBH-21SE

PRICE: £280 CONTACT: 01442 260146
WEBSITE: CREEKAUDIO.COM

CREEK TAKES HEADPHONE-driving seriously, with two dedicated headphone amps in its lineup – three, if you regard the OBH-21 and -21SE as different models. Although both employ the same circuit, they use different components at key points, including the op-amps that do the actual amplifying. The SE uses a fast and relatively high-current part that is well suited to the task, giving a maximum output of about 100mW into headphones between 30 and 200 ohms impedance – that's most of them. Both higher and lower impedances can be driven, with slightly reduced output in both cases. There are two output sockets and Creek mentions that these have slightly different output values which could, in some cases, give subtly different sound into low-impedance headphones. A line output at the rear is permanently connected to the line input, easing connection to systems.

Irrespective of the output used, this amp has the highest output impedance of any in this group (if not by a vast margin) and it's perhaps not surprising that its sound seems a little more characterful with low-impedance headphones, including in-ear models. It is by no means unpleasant and, given the vagaries of headphone frequency response, it's not necessarily a bad thing in any sense. We were very taken with the way the bass of the Bowers and Wilkins P5 acquired just a little more roundness, which didn't seem to have a downside. High-impedance cans are driven very cleanly, with excellent detail and no listener fatigue after long spells.

VERDICT

★★★★★

A VERY FINE AMP that offers good detail and insight. It's tonally more individual than most amps with low-impedance headphones



Firestone Cute Beyond

PRICE: £199 CONTACT: 0845 345 1550
WEBSITE: FIRESTONE-AUDIO.EU

FIRESTONE SPECIALISES in miniature hi-fi, so the diminutive Cute (at 80mm wide the smallest of these four) is very much part of the overall range. Its features are very simple, though it does include a gain switch mounted at the rear, which gives 15dB extra boost – this could be of use when driving high-impedance headphones. Inside the unit is a further feature and a most unusual one at that: a pair of switches which allow one to configure the volume control for series or shunt operation, thus giving a slightly different slope to its attenuation. Interesting to try, though it doesn't seem to have any effect on sound quality as such. Amplification is by op-amps and Class A pairs of discrete transistors, which help maintain the unit's exceptionally low output impedance of well under one-ohm. Current is limited, though, and maximum output into low impedances is well below the others in the group (e.g. 15mW into 30 ohms) – if arguably still enough to endanger hearing!

The tonal character of this unit is noticeable mostly by its absence, with a very consistent sound into various headphone models. It is ruthlessly revealing, perhaps more than some folks will want to live with even, but if you don't mind being told the bad news as well as the good about your treasured recordings this is a good way to learn it. Detail is good and imaging is precise, though not always the most extended out to the sides. There's a real sense of grip on the headphone drivers and rhythm and dynamics are lively and captivating.

VERDICT

★★★★★

A VERY INFORMATIVE amp that may lack a little output into the lowest impedances, but shows no sign of running out of grunt or energy in real life

Lehmann audio Rhineland

PRICE: £425 CONTACT: 01235 511166
WEBSITE: LEHMANNAUDIO.COM

LEHMANN'S PRODUCTS always seem to be highly individual, and this amp is no exception. OK, it's basically the same as all the other units here in essential operation, but it can be reconfigured (by means of internal jumpers) to serve as a single-input preamp. If the jumpers are set to 'in' you have, instead, the option of selecting between two inputs, which for many users could remove the need for a separate preamp. Gain is also adjustable via internal jumpers. Maximum output is impressive into low impedances, with the ability to drive nearly half a watt into 15 ohms. The distortion rises, but that hardly matters because your ears will have overloaded long ago! Under more sensible conditions, distortion is as low as any. Output impedance is quite low at 6 ohms, which should ensure consistent operation into any normal headphone load.

Although the basic component count doesn't immediately look like twice the value of the others in this test, sound quality does seem to justify the outlay as this is clearly an exceptionally capable device. The basics are all there, with detail, imaging, rhythm and so on clearly in very good order, but above and beyond that there is a magnificent sweep and assurance to the sound that's as effective with a Schubert song as it is with glam rock or a big band. Perhaps, more than with any affordable headphone amp we can recall, the sound just keeps you there listening after bedtime and you'll find yourself enjoying familiar recordings as never before.

VERDICT AN UNUSUALLY CLASSY little box which drives any headphones with the greatest panache, but also has the subtlety to bring out fine details

★★★★★



Musical Fidelity V-Can/V-PSU

PRICE: £100/£152 CONTACT: 01279 501111
WEBSITE: MUSICALFIDELITY.COM

A TON ISN'T A LOT TO ASK for a headphone amp and one might expect a few corners to have been cut internally. The circuit board material is not the fanciest, but in fact the circuit mounted on it is not a million miles short of that used for the other amps here, featuring as it does a pair of medium-power transistors per channel in classic power amp configuration, driven by decent-grade op-amps. The rest of the components are nothing fancy, but are perfectly respectable.

There are no additional features or options, but you do still get a line output connected directly to the input. V Series distributor Armour was keen for us to try the V-Can with the optional V-PSU, which is basically a large mains transformer and some rectifiers in a box, intended to replace the simple wall-wart supplied as standard with the V-Can: the V-PSU can power three V Series units at once.

With either power supply there's plenty of output drive and head-rattling levels can be achieved with low-impedance headphones: high-impedance ones are driven to about the same maximum as the other amps in the group. And one can easily be tempted to play this amp pretty loud, because it has a lively get-up-and-go to it that just encourages unrestrained rock'n'roll listening. It's good at other musical styles too, but less convincing with really subtle stuff than with big musical landscapes. Detail is good, maybe not quite up to the standards of the Lehmann, say, but certainly enjoyable. The V-PSU adds some finesse, though unless you own at least a couple of V Series units it is, perhaps, hard to justify in value terms. ●

VERDICT EXCELLENT VALUE, with detail and tonal discrimination only just short of the best. Sound really comes to life with lively, big-scale tracks

★★★★★



A dedicated headphone amp is an easily justifiable purchase along with any fine headphone. Built-in headphone outputs on CD players, amps etc. can often end up sounding quite muted and lifeless.

As you can see, all the amps tested here are badge-winners and will give an obvious lift in performance. In fact, if you listen more than very occasionally to headphones you'll enjoy the results.

Do go easy on listening levels, though: with good headphones and amps it's easy to get carried away and end up listening at potentially dangerous loudness. Remember, quality over quantity!