

Trying too hard?

KEITH HOWARD TAKES AN IN-DEPTH LOOK – AND LISTEN - TO AN UNASHAMEDLY UPMARKET HEADPHONE AMPLIFIER FROM CHINA, COMPLETE WITH A CHOICE OF INPUT AND OUTPUT STAGES – INCLUDING VALVES!

Why would someone who has never, and will never, wear headphones in public – me – review the Cayin C9, a £1500 portable headphone amplifier from China? Two reasons: First, a reader I correspond with occasionally – a headphone enthusiast who has proven his good taste by being a fan of the Sennheiser HD 800 S – recently bought one, loves it and suggested I try it. Second, the C9 piques my interest technically. It doesn't just provide for single-ended or balanced input to single-ended or balanced output, it also offers the choice of Class A or Class AB operation of its mixed JFET/bipolar output stage and, most intriguingly of all, the option of a JFET or valve input stage.



I haven't taken leave of my senses here, but the C9 doesn't use conventional valves: instead there are two Korg 6P1 double-triode Nutubes – one per channel – derived from vacuum fluorescent display technology, require a minimum anode voltage of just 5V, and whose filament current is typically a paltry 17mA. Cayin is sufficiently proud of them that two elliptical holes in the C9's case allow you to see the 6P1s illuminate when operating, although the devices themselves are rectangular.

Why the choice between valve and solid state input stages, the latter using Toshiba 2SK209 JFETs? The answer is given by the naming of the selector switch: Timbre. The choice is offered – like the Class A/Class AB option – to allow users to adjust the C9's subjective character to their personal taste. Some will welcome this as flexibility; others will deride it as a hedging of bets. Whatever your stance, it adds to the C9's allure for a reviewer.

On the back panel is a USB C socket for charging, alongside a four-LED array which indicates the state of charge. The battery pack – a quartet of Sony VTC6 3000mAh 18650 Li-ion cells – is removable, which would allow fairly quick swapping of them if it's urgent, provided you have the supplied T6 Torx screwdriver to hand to remove the small and all-too-losable M2 screws that secure the battery tray.

Cayin specifies 5.5 hours to 15 hours battery life, depending on mode of operation, and recharging using a 5V/2A charger takes about six hours, halved with a QC 3.0 charger. No charger is included, just a short charging cable.

All audio connections are on the small front panel, where are also found the four slide switches that engage the different operating options – Mode (see below), Gain (high/low), Timbre (solid state or valve), and Class (A or AB). Unbalanced and balanced inputs, located to the left, are via TRS mini-jack and TRRS Pentacore sockets respectively, and unbalanced/balanced outputs, to the right, are via the same connector types. All are ostentatiously gold-plated. In the middle of the fascia is the volume control knob, which is a little awkward to adjust as it's recessed, with its knurled circumference accessible only at the top edge. Beneath the volume control, is a small power push switch with central white LED. This flashes when output is temporarily muted, such as for a few seconds after powering up.

Behind the volume control knob is a potentiometer – but this doesn't vary volume level in the conventional way. Instead it adjusts a MUSE572320 stepped-attenuator electronic volume control, which places no active components in the circuit path, so contributes no distortion and promises a high degree of transparency.

To the left side of the case, one other button, flush to prevent accidental operation and labelled 'Pre', allows the C9's volume control to be bypassed if used with a signal source with control of output.

Listening

Having railed against the C9's distortion behaviour in the lab report – with ample reason – I began my listening by comparing its sound quality at different input levels. Horrid as the C9's distortion may be