

## DACS HeadLite

*Paul White listens in on the new headphone amplifier from DACS.*

Unless you're working entirely on your own, there's a likelihood that you'll need a more sophisticated performer foldback system than the solitary headphone outlet jack your mixing console provides. In the smaller studio, the ideal solution is to use a headphone amplifier that can be driven directly from the pre-fade aux sends of the console. To provide the users with a degree of choice over what they hear, it's desirable to be able to take two or more aux sends, and then offer some way of combining them. There are numerous ways of doing this, but in the headphone amp under review here, DACS have opted for a relatively simple system based on up to four different input signals.

Housed in a 1U rack case with a rather dubious lilac front panel, the HeadLite is mains powered and has four independent stereo headphone outputs, each with its own level and source select controls. Each headphone is driven by a 500mW amplifier, which is powerful enough to drive most headphones to their limit, but if more power is necessary, for whatever reason, there is an output stage called LOUD (Line Output Upgrade Device) which is fitted to one of the output channels, and may be fitted to the rest later if required. The LOUD option also has an integral limiter to save headphones (and presumably ears!) from frying.

The four inputs would normally be taken from the console's pre-fade aux sends, though any line level source can be used, and of course you can use fewer than four inputs if you want to. The headphone amps themselves have a fixed gain of 20dB, and the signal level is controlled by attenuating the signal before it reaches the amplifier. Though there are only four headphone outputs, it's usually possible to connect two pairs in parallel to be driven by one output, but they must be the same type and impedance, otherwise the output levels may be very different. All four headphone outlets are doubled up on stereo jacks located on the rear panel as well as on the front. There's also a large ground terminal for earthing the case.

At the right of the front panel is a huge illuminated power button, and to the left are the four identical output stages. The phones output jacks and level controls are fairly self-explanatory, but the source selector deserves further explanation. This is a six-position rotary switch offering the choices AB, AA, BB, CD, CC and DD where the letters represent the four input sources. For example, AB places input A in one phone and input B in the other, while AA selects A as the source for both ears giving a mono signal. This arrangement means you can monitor the possible mono and stereo permutations of pairs AB or CD, but you can't opt to combine either A or B with either C or D. There's also no way to vary the relative volumes of the two selected signals without changing the send level on the console.

Providing the source selection system is flexible enough for your requirements, the sound quality and technical performance of the device is fine. There's no apparent added noise, the switching is clean, and the sound remains undistorted up to the point where your phones start to complain. It's possible to run out of level if the input source is low, or if the headphones have a particularly high impedance, but most studio phones give adequate volume. For those wanting more, the additional LOUD option may be an answer, though I always worry about the possibility of hearing damage when monitoring loudly over cans for any length of time. As the manual sensibly points out, if you cut down on sound leakage from the outside, using good enclosed phones, you'll be able to monitor at more sensible levels.

The input stage is sensitive enough to deal with signal levels between -10dBV and +4dBu, but I found that when plugging in a portable CD player with nominal -20dBV output, I couldn't get enough gain for studio level monitoring - although it was loud enough for more general listening. This is fair enough, as in the studio, all sound sources would probably be plugged into the mixer first and brought up to level that way.

On quality and price, this headphone amp competes on fairly even terms with some of the better existing models at the low to middling end of the price scale, though I'm not convinced the lilac front panel design does it any favours. Though there are similarly priced units with more flexible source selection systems, the HeadLite has the advantage of being simple to set up and simple to use. Being fair, most project studio requirements won't stretch its capabilities too far, and the build quality suggests a long and reliable life. I'm certainly in favour of being able to put a headphone amp where the performers can make their own adjustments, and this one fits the bill nicely. On the other hand, it will also drive long headphone cables if that's required. Because this market is so competitive, there's no clear leader - its mainly down to facilities you need and to price, but this one is certainly worth a closer look - and listen.

## pros & cons

### DACS HEADLITE

#### pros

- Good mechanical and electrical design.
- Clean sound quality with adequate power.
- Simple to set up and use.

#### cons

- Source selection could be more flexible.

#### summary

A cost-effective, sonically fine-sounding headphone monitoring system for the smaller studio.