



Black Lion Audio

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Black Lion Audio first made a name for themselves through their popular ‘modding’ service — the idea being that they’d apply their analogue electronics know-how to upgrade the performance of other companies’ products. Starting in 2006, they were probably most well known for ‘hot-rodding’ the old Digidesign 002 and 003 audio interfaces — this was back in the pre-Avid days when you could only use the Pro Tools software with the same company’s hardware, and these were the most affordable multitrack interfaces that were compatible. The hot-rodding typically entailed upgrading the analogue input and output stages, the power supply and the internal clocking — small individual improvements that collectively added up to a significant improvement. Black Lion still offer a series of ‘mods’ for several products (mainly audio interfaces) but they’ve also developed an impressive range of their own gear, ranging from mic preamps, compressors and channel strips to summing mixers, and 500-series racks to external master clocks. It’s their

B173 Quad Four-channel Microphone Preamplifier

Black Lion’s designers set out to bring versatility and lower noise to a classic preamp without sacrificing character — have they succeeded?

latest preamp that I’m reviewing here: the B173 Quad. As the name implies, this offers four channels of broadly 1073-style preamplification, and it’s all packed into a 2U rackmount chassis.

Now, anyone who has conducted even a little research into their preamp purchases will know that the world isn’t short of 1073s! Neve still make various products that employ the 1073 preamp and/or EQ circuits, and there are clones and homages a-plenty from

other manufacturers, to suit almost any budget. So it’s important to point out that Black Lion intend the B173 Quad as a development of the 1073 rather than a clone: the company’s website explains that they aim to “seamlessly combine vintage character with modern sensibilities, with a revamped gain stage offering a reduced noise floor with a cleaner sound and lower distortion”. So while various components, including Cinemag input and output transformers,



should ensure it delivers enough of the characteristics that make the classic British preamp design so revered (warm, smooth, full-bodied — insert your preferred audio superlative here), the circuit doesn't behave entirely like a 1073. But as we'll see, that's not necessarily a bad thing!

At A Glance

The layout of the B173 Quad is a little different from that of most preamps, since the four channels are arranged in two rows, one above and slightly offset

Black Lion Audio B173 Quad **£1750**

PROS

- Excellent sound quality.
- Well built.
- Competitively priced, especially when considered on a per-channel basis.
- DI inputs sound very good.
- Original styling.

CONS

- The staggered control layout can require some getting used to.

SUMMARY

Black Lion Audio have produced a great-sounding four-channel preamp that takes a classic design off into a more modern, versatile direction, trading a little of the 1073's gain for a slightly cleaner sound with lower noise.

from the other, rather than having all four channels side by side or arranged in a grid. It's an arrangement that has pros and cons in my view, and I feel it's worth mentioning both.

The main benefit is that it has enabled Black Lion to pack plenty of controls into a reasonably compact unit, including substantial, vintage-looking gain knobs, which feel satisfying when adjusting the input level. Fitting the channels side by side would have necessitated smaller gain controls. There's also plenty of space for the markings around them.

The downside is that the layout can feel somewhat disorientating at times. The most important controls are the same colour as the panel that hosts them, and there are no visual cues such as dividing lines or colour schemes to differentiate between the different channels. Combined with the offset layout, this meant it took a little while (a couple of sessions) to grow familiar with the layout, and though it became easier with time I could imagine myself wanting to add DIY labels for very busy recording sessions when I have to juggle lots of different channels and preamps.

Those gain knobs are stepped in 5dB increments, up to a maximum 70dB of gain. That's 10dB less than the classic 1073 design, but it's ample for almost any music recording applications and it was a deliberate design decision: Black

Lion opted to trade a little of the 1073's gain for a significantly better noise floor. Each channel also has a smaller level knob, positioned before the output transformer in the signal path. This placement is important, because it means that it doesn't just act as a simple output trim — it enables you to decide just how hard you want to hit the output stages, and thus how much output-transformer saturation is desirable.

An important thing to realise before using the B173 is that the LED-ladder metering on each channel is designed to help you make sure your output level is correct. It threw me a little when I first used the preamp (on a session, before I'd read the manual — d'oh!) because, as explained in the manual, the red LED below +4 lights up to indicate that the correct output level has been obtained. So red is not a warning as it is on many other preamps and processors; the sight of metering going into the red does not mean it is clipping. Armed with that information, though, it's easy enough to become accustomed to this behaviour.

As you'd expect, each of the four channels has its own switch for 48V power and polarity. Channels 1 and 2 also have switches that access the high-impedance jack inputs on the front, to enable direct input of instruments such as electric guitars, bass and keyboards. A quick look around the back of the device reveals that >>



» there are XLR inputs for each channel, and both XLR and TRS jack output sockets, which are wired in parallel and will make it easy to plumb this into any home or professional setup. Power is delivered to the B173 Quad via an external line-lump power supply.

In Use

As I hinted earlier, when the unit arrived at my studio I wasted little time putting these preamps to work, and I was suitably encouraged by my first impressions on using two channels for an acoustic guitar recording session. When it comes to acoustic guitar recording, I'm not generally a fan of Neve preamps, because I find they can sound that little bit too thick and dark (which is obviously just the ticket on some other sources), but it was immediately clear that the B173 preamps had a rather brighter, cleaner sound — it worked really well on some delicate, yet sometimes dynamic, acoustic guitar parts.

Next up I deployed them on drums, and again I found them impressive, especially when used with a pair of AKG C414 drum overheads, which had a nice sense of depth and needed less EQ than usual to clear the little hint of boxiness sometimes captured in my live room.

Close kick and snare mics sounded good too — full, but with plenty of clarity. But it was on these louder, transient-heavy sources that I had to really listen and fine-tune the balance between the input and output level controls, to avoid overdoing the transformer saturation.

With some transformer-laden preamps, it can seem hard to make anything sound

bad, but as with my own Neve preamps I found that things can sound a bit 'crispy' if you overdo the saturation. It's less of an issue with things like drums and electric guitars, which can usually take such processing well, but it can all but ruin a vocal take if you're not attentive.

You'll recall that I mentioned the output transformer being post the output control, and this is obviously intended to give the user more control over this characteristic. In practice, though, I often found myself playing things fairly safe, and the basic LED metering wasn't that helpful in giving a sense of when I might be close to overcooking things like this. It's always best to use your ears to judge such things, of course, but the unfamiliar layout didn't help me in that I often found myself pausing for a second to work out which control corresponded to which channel. It's something you'd grow used to if using this preamp every day, I'm sure, but my view was shared by a couple of other engineers who use my studio.

Despite the few operational niggles I've discussed, it's important to stress that I was more than happy with the B173 Quad's sound. Truly, it sounded excellent on everything I used it with. I wouldn't say it sounded strikingly like any of the Neve preamps that I own or have used, despite such circuits being the designers' starting point. But that's not a bad thing — who wants more of the same?

So what *did* it sound like? Well, the cleaner character of the B173 Quad meant its sound seemed reminiscent to me more of a high-quality valve preamp than a 1073; something that offers real definition but without ever sounding sterile or harsh. When I was judging the output transformer saturation right, guitars, vocals and drums always sounded full but nicely balanced, and that was true with a variety of different mics being used over the review period.

The DI inputs are also worthy of mention. They were noticeably

The balanced audio I/O are via XLRs on the rear panel, where there's also a five-pin connector for the external line-lump power supply.

fuller and more present-sounding on bass guitar than some of my other preamps — despite the other preamps being rather pricier!

Sound Judgement

If you're in the market for some Neve 1073-style preamps you're not exactly short on options, ranging from the real deal, through painstakingly accurate clones, to a number of passable imitations as you move towards the budget end of the market. Judging the B173 Quad against this competition on a cost-per-channel basis, I'd say that it's very competitive indeed.

But it seems a shame to me that so many companies feel they have to align themselves to a small handful of classic designs to make a successful product — the B173 Quad offers something different and Black Lion deserve respect for producing their own, unique take on this theme.

The result is a preamp which I think is probably a more versatile option in the modern studio than its inspiration, so let's set aside the 1073 comparisons and judge this thing on its own merits. The B173 Quad has a very well balanced sound. It captures the low-frequencies well, feels nicely refined in the low mid-range, and is rounded off with a nicely flattering top end. In terms of driving things a bit harder into saturation and ease of use in a busy session there's something of a learning curve to grapple with, but those aren't insurmountable issues — and judged purely on how it sounds, it represents excellent value for money. ■■■

Alternatives

I could list any number of 1073-inspired preamps here, ranging from the **Golden Age Project Pre-73** to expensive clones of vintage Neve units — but as I've said in the main text, the Black Lion B173 Quad is no mere clone, and by design sounds a little more 'defined' than these.

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