

## **Cranborne Audio**

N22H headphone amp & C.A.S.T. breakout box

No, the *N22H* reference-grade headphone amplifier from U.K.-Based Cranborne Audio doesn't come with a bonus set of steak knives, nor do you get another one free if you order now. This device is a fantastic and super affordable, excellent-sounding, stand-alone solution for home studio users with subpar DAW-based headphone monitoring situations – also ideal for those on the go doing remote or field recording. The *N22H* will just about squeeze into your back pocket, and with the option of powering it via a 9V battery (up to 10 hours in low current mode), it can be used anywhere. But wait, there's more!

This seemingly simple little standalone headphone amp/Cat 5e shielded snake/breakout box can also be integrated with Cranborne Audio's unique C.A.S.T. recording system that includes the 500R8 500 Series chassis [*Tape Op* #135], and Camden preamps. This is how Cranborne explains it: "C.A.S.T. uses a shielded Cat 5e, Cat 6, and Cat 7 cable instead of 4 XLRs to not only reduce cable spaghetti in your studio but also distribute audio around studios or stages using affordable, readily available network cabling whilst achieving the highest sonic results due to their strict design standards." You can make long runs (up to 100 meters) for mics and headphones possible with no obvious signal degradation via small breakout boxes.

The 500R8 has two awesome-sounding individual headphone/monitoring outputs onboard, but what if you are recording in a booth, the other room, down the hall, or across the street and need to get a signal to the system and a headphone mix to the artist? To solve this problem Cranborne has introduced the new N22H C.A.S.T. expander as an accessory for the 500R8 system. This handy little box is about the size of a mid-sized effects pedal and serves as a headphone monitoring solution, a standalone "referencequality" headphone amp, and a C.A.S.T expansion unit for Cranborne's 500R8. This means that when connected to the 500R8 via Ethernet cable, the N22H's inputs serve as a direct link to the 500R8 for recording. I tried this out and recorded a friend at almost the max distance away with perfect audio quality. We also plugged a mic into the N22H and ran the Cat 5e shielded cable down the hall, to the other end of the building into my mix room. He could monitor and set levels for himself at the source while I was recording and monitoring almost 300 feet away! There was no high end loss and the signal was as strong as coming straight off the front of the 500R8's monitor section. I admit, it's weird to be using an Ethernet cable for audio, but it sounded perfect.

In addition to using the *N22H* for monitoring purposes, you can feed the signal back through the C.A.S.T system via the two XLR/TRS combo jacks. There is also a pair of TRS output jacks and a single 1/4-inch headphone jack with adjacent level control. A Headphone Settings switch selects stereo or mono operation, and an input source selector is on top of the unit. The *N22H* can run off a 9V battery or the provided wall wart. While we're talking about power, the *N22H* is capable of transferring phantom power from a preamp (through the Ethernet cable) to power mics and active DI boxes – a single Cat 5e shielded can transfer up to four separate phantom power signals.

How does it sound? Whether you choose to use the unit as part of the 500R8 or as only a standalone headphone amp, it sounds fantastic. Rich, full-spectrum, clear audio with tons of

headroom. Sending a mix down a Cat 5e shielded cable over 300 feet away with no discernible loss in audio quality for \$99? Sign me up!

Although the N22H is not a full-blown artist studio monitoring mixer with separate volume controls for different sources, it is an excellent and affordable solution for mobile recording, and simple tasks or setups. Connectivity is an overlooked aspect of the studio. We have a pile of excellent boxes and toys, but are you using them to their fullest? Simple, well-built utilities are becoming some of my new favorite pieces of studio equipment, as they let me integrate and interface more easily from one piece of gear to another and maximize each tool's potential. Whether you're looking to expand your 500R8 system's capabilities, or want an affordable, high-quality headphone amp, the N22H will get the job done. (\$99 street; cranborneaudio.com) -GS

## Black Lion Audio Revolution 2x2 audio interface

Long considered the "titans of audio mods," Black Lion Audio has finally created its own interface. Behold, the *Revolution 2x2*! Touted as not simply "...another run-of-the-mill interface..." I owned a Black Lion Audio-modified Digidesign 003 years ago, and was happy with it, so when offered the opportunity to review the *Revolution 2x2*, I jumped at the chance.

You might be thinking, "Great, just what we need: Another entry-level priced interface," but the *Revolution 2x2* sets itself apart from most of the pack. I've owned several interfaces in this category, so I have an ear for a unit that might be considered exceptional and have come to the conclusion that the *Revolution 2x2* is a badass little box!

I'll highlight a few technical details here, but will focus more on my user experience. The Revolution 2x2 is a 24 bit, 192 kHz USB-C bus-powered interface. Housed in a sturdy black chassis, the 2x2 is a single rack space high and a 1/2 rack space width. It has two mic/line inputs, a S/PDIF coaxial input, one headphone output, two line outputs, and ships with the Revolution Software Suite: Presonus Studio One Artist, iZotope Elements Suite, BrainWorx bx digital, and Lindell 6X-500. Though not covered in this review, this is an awesome software package right out of the box that will get you on your way to professional sounding recordings! The Revolution 2x2 is Mac (class compliant) and PC (via software driver install) compatible, but check system requirements. Lastly, the box this interface ships in is guite sturdy and fully usable for storage or transport - a nice nod to sustainability and product care. For a deeper look at specs, visit Black Lion Audio's website.

I recently used the *Revolution 2x2* for remote vocal tracking and mixing. I really dig this interface! As expected, it is easy to use, simple to set up and intuitive. It has a tight, clear sound – no doubt due to the Macro MMC Clocking technology that Black Lion Audio has refined over years of modifications and borrowed from their own clocking products such as the Sparrow [*Tape Op #113*] and Micro Clock [#109]. Black Lion Audio utilizes their years of experience modifying other manufacturer's gear by including high end components in the *Revolution 2x2*'s design that you won't find in most stock interfaces: High grade capacitors and ICs, optimized internal gain staging, and a fully decoupled and balanced analog I/O.

The *Revolution 2x2's* Direct Monitoring feature was easy and satisfying to balance between input and playback. This is often a struggle with interfaces in this category and can be frustrating for self-recording artists. However, Black Lion Audio has nailed it here, and slight adjustments in either





direction were enough to satisfy both artist and engineer. The Mono playback button is also super useful. While tracking remote vocals (and monitoring with a single speaker), I was able to plug into a single monitor for control room playback. As part of this setup, I used a Universal Audio 2-610S pre [Tape Op #27] for my vocal chain. The Revolution 2x2 took the line level clean from the preamp with no overdrive or gain issues. The built-in preamps are clear, clean, and have a nice vibe, not dull or uninteresting like many of the cheaper pres you'll find in most small interfaces. You can push the gain pretty far without picking up any noise. Most pres in interfaces similar to this one are noisy past unity. This allows you to get a clean tone, even with your mics that require extra gain.

One of the most awesome features of this interface is its front panel 8-segment LED stereo output meter – something you usually don't get from interfaces in this category. It is so nice to have a visual representation. I'd like to see a switch to toggle input levels to the main meter, but that's not a deal-breaker at this price point, and there are mic/line level indicator LEDs for each pre that turn red when you are overdriving the signal. All in all, the Revolution 2x2 is a sweet little studio in a box that packs a professional-sounding punch! (\$399 MSRP; blacklionaudio.com) -Ben Bernstein <br/>
-benbernsteinmusic.com>

## **Space Lab Systems**

LĪFT motorized speaker stands

I like to bounce around the room quite a bit when mixing records. I obviously sit centered when I launch into the proceedings, but once the mix is in a good place, I tend to move around my studio. How does the energy of the track feel throughout the room? Does it translate close to my desk as it does to the loveseat in the back of my room? Whenever I leave the center station, I switch over to my midfields, which are Bowers & Wilkins DM602s driven by a Bryston 8B power amp. This simple (and affordable) chain sounds ferocious, letting me understand what my mix sounds like on a living-room hi-fi. But my B&Ws always sat on random speaker stands I inherited from who knows where. It did the trick for several years, but they were in a fixed position and the tweeters sat well below my ear level when standing. So, when I heard about Space Lab System's LIFT, I knew I had to give this a try.

LIFT is a "motorized speaker stand with high-performance vibration damping," created by Brooklyn-based studio designers, Tim Crossley and Matt Schaefer, in collaboration with the owner of Manhattan's Precision Sound, Alex Sterling. The story goes that Alex approached Tim and Matt to help him design a speaker stand that simply goes up and down, but with high-quality isolation and vibration control. LIFT's isolation properties are a result of years of R&D for Precision Sound's flush-mounted speaker decoupling system. The platforms are made with neoprene friction pads and Sylomer isolators, "a space-aged material" that helps "separate" the speaker from the stand and floor. Space Lab claims that LIFT's platform can have a "natural frequency as low as 8.8 Hz!" The three of them quickly realized that a product with real decoupling technology and height motorization simply didn't exist on the market, hence LIFT was born!

Full disclosure, I've known Tim and Matt for some years. Their studio design firm, Crossley Acoustics, has designed several studios for me, including my home studio. So, when I saw them post about *LIFT*, it not only got me excited because it served a missing need for my studio, but I knew from past experience that if they put the same amount of care and love as they do into studio design into a physical product, then this would be something well worth checking out.

When my LIFT arrived, it was understandably on the heavy side, nevertheless easy to assemble. A simple up-down remote control connects to a single power supply. I quickly placed my B&Ws, positioned them to my liking, and LIFT-OFF! My midfield system never sounded better. Not only was it fun to play mixes and reference tracks while moving the speakers to great heights (when standing and dancing around the studio) and low-level position (for rectining on my loveseat) with incredible stability, but stereo image, depth-of-field, and transients never sounded better in my room. I went right into a live concert recording I needed to deliver by end-of-day, and I mixed it in no time, mostly monitoring on my midfields and getting the artist's approval immediately. Not only do I have a fun (and sleek) new addition to my studio, but it drastically improved my workflow. It should also be noted that LIFT works for any free-standing speaker, nearfield or midfield, with a larger model that is suited for substantial midfields. At a starting price point of \$749 per stand for the smaller model, the LIFT is a no-brainer for any commercial or home facility. We should all look forward to what the future holds for Space Lab. Pricing based on size and isolation level. (spacelab.systems) -Jesse Lauter < jesselauter.com>



