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Reviews

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New Product Reviews:

Phonic
Helix Board 24 FireWire MkII

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footswitch inputs are provided to control tap tempo and bypass for the internal effects. The Record Outs and 2-Track Returns are on unbalanced RCA, and there's an RCA for the S/PDIF output. There are dual FireWire ports and a standard power cord socket for the internal power supply.

The Main Outputs are available on XLR and balanced 1/4" TRS, with 1/4" TRS inserts. There's also a third output called Mono/Subwoofer, which can be fed by either the Main L/R buss or by Aux 4; it has XLR and 1/4" TRS balanced outputs, an insert, and pots for level and for the rolloff frequency (60–160 Hz) of a switchable highpass filter.

This lets the user pick either a full-range mono output or a low-frequency split for a subwoofer.

Under the mixer, hidden behind a small access plate, are 16 switches that allow the user to select whether each channel's signal is sent to FireWire before or after the eq and fader. It's a little bit of a hassle to make these changes, which involve powering down the mixer and flipping it

Phonic Helix

Sometimes you DO just need a bigger hammer

Board 24 FireWire MkII

Phonic's Helix Boards have been reviewed before in our pages; we featured the Helix Board 18 FireWire in our May 2006 issue. In that review I commented on how these boards are essentially analog consoles that allow for a seamless entry into DAW recording. The MkII versions don't so much add features as streamline their designs to something more studio-friendly than their predecessors.

What you get

The Helix Board 24 FireWire MkII is an analog console with 16 inputs, 6 Aux busses, 4 Groups, internal digital effects, and a full spread of monitoring/routing features; in the digital domain it adds a 24-bit/44.1 kHz coaxial S/PDIF output and a 24-bit/96 kHz capable 18-input/2-output FireWire connection to a Mac or PC.

Each input channel offers up to 60 dB of preamp gain; a switchable 75 Hz high-pass filter with 18 dB/octave slope; 3 bands of eq (12 kHz and 80 Hz plus a sweepable mid at 100 Hz–8 kHz, all with ±15 dB boost/cut); six Aux busses (four

active per channel); pan control; an On button (the opposite of a Mute) with status LED; a Signal-present LED; Group buttons for Groups 1/2, 3/4, and the main L/R buss; a Solo button with Solo/Peak LED; and a 60 mm fader.

The Master section has four Group faders with individually switchable Left and Right assignments for each Group; a single Main fader; one 1/4" Phones jack with level control, pre/post switch, and source select buttons; a level control for the 2-Track return; four Aux Send pots with Solo buttons; four Aux Return pots with routing options; and the 2-digit LED display and controls for the internal effects. There's no graphic equalizer as found on the previous version, as that's more of a live-venue feature.

The rear panel has 16 each of XLR inputs, 1/4" TRS balanced line inputs, 1/4" TRS unbalanced insert points, and direct outputs on Channels 1–8, to feed a multi-track recorder. The six Aux Sends and four pairs of Aux Returns are all balanced 1/4" TRS, as are the four Group outputs; the Control Room outs and DSP effect outs are unbalanced 1/4" TS jacks. Two

over to open it up, but this isn't a setting you'll change very often.

The mixer comes with a well-illustrated manual and CDs with Windows drivers and a copy of Steinberg's Cubase LE entry-level DAW software. The Helix Board 24 FireWire MkII uses an ASIO driver for Windows computers (Windows XP Service Pack 1 or 2; Vista support is forthcoming, check the Phonic website for details); it requires Mac OS X 10.3.5 or higher, and will be automatically recognized by Audio/MIDI Setup in OS X.

Installation and setup

The hardest part of my entire experience with the Helix Board 24 FireWire MkII was getting it to sit on a table properly. The unit ships in its rackable configuration, with the inputs and outputs folded back against the back of the fader surface; bolt on rack ears and it fits into a standard 19" frame. To have it sit on the desktop, the user has to unbolt the rear panel, swivel it into place, and cover the exposed wiring with a plate that's held in place by several small screws.

This is a pretty fiddly operation and on my test unit I couldn't get the plate to sit so all the screws could go into place smoothly, but once it was done the mixer sat at a nice working angle ("rake") on my desktop with the rear panel easily accessible. Then the fun began!

Drivers installed flawlessly on our Windows XP test machine, and on our Mac we simply plugged in the console and there it was, ready to use. The rest of the tests were, from that standpoint, rock-solid.

Aux routings and effects

I'd like to start with a word about the Aux setup on the Helix Board 24 FireWire MkII. That word is: *repaired*. Readers may remember that I had trouble wrapping my head around the Aux arrangement on the original Helix Board, which had poorly labeled and bizarrely laid out controls (Aux 1's fader was a *send* but Aux 2's was a *return*?). I'm happy to say that the Auxes on the new Helix Board are sensibly laid out, clearly labeled, and easy to configure and use.

Auxes 1 and 2 are switchable pre/post fader; Auxes 3 through 6 are post-fader only. Each input channel has a switch to change the send level pots from Auxes 3/4 to 5/6, so each channel can send on up to four Auxes at a time. Auxes 5 and 6 have no global Send level control or Solo capability; the other four have those controls neatly grouped in the Master section. Aux 3 feeds both the Aux 3 output jack and the internal effects processor; Aux 4 can feed the Mono/Subwoofer output in addition to its own jack.

The four stereo Aux Returns have individual level pots; Aux Return 3 controls the level of the wet signal from the internal effects unless something's plugged into the rear-panel jacks, in which case the internal DSP is bypassed. Aux Returns 1 and 2 have separate level pots for feeding their signals to Aux Sends 1 and 2, respectively. While this can cause a feedback loop if

the returns are only being used for post-fader effects, it allows effects returns to feed a tracking room mix, perhaps giving the lead vocalist some reverb or sending a click to the drummer. Aux 3 can be routed to Aux Send 1 and/or to either stereo pair of Groups, and Aux 4 can feed only the Control Room/Headphones buss rather than the Mains. This flexibility is great for custom headphone mixes, handling lots of rack effects, and providing specialized signals for anything from timing reference to confidence monitoring.

The internal effects on the Helix Board 24 FireWire MkII are an improvement over the ones in the previous model, offering over 100 presets rather than 16, plus a pink noise source and test tones at 100/1000/10,000 Hz. You can use the parameter select knob to tap tempo for some of the delays. The quality is more than sufficient for a tracking-room reverb or to add special effects to a percussion or keyboard track.

The rest of the mixer offers very few surprises. The eq is musical rather than surgical, allowing quick sculpting of tone, and the preamps are clean.

Computer hookup

The FireWire interface provides 18 channels of input to your DAW: one for each of the 16 channels plus a front-panel-selectable 2-channel signal (usually seen in software as "Channel 17/18") that can be the Main L/R signal, the Group 1/2 buss, or Aux 3/4. A stereo signal can be returned to the mixer from the DAW, which can be routed to the Mains or Aux 1/2.

I used the Helix Board 24 FireWire MkII with Ableton Live, Steinberg Cubase SX 3, Apple GarageBand, Rogue Amoeba's Nicecast Internet streaming software, and a variety of other programs on the Mac and Windows machines, and never had an issue with signal quality or reliability.

Getting down to business

I've reviewed other FireWire mixers in recent months, and while they've all done what they were asked to do (some with more panache than others), they all shared one common problem: they were too small to replace the console in my review studio. I've been looking for a mixer where there's a sweet spot of I/O, features, size, and value for money that lets me do what I need to do, and the Helix Board 24 FireWire MkII pretty much hit it dead on.

With this console I was able to hook up 16 mics at a time, or an entire room full of keyboards, along with multiple rack effects, and get good-quality tracks directly into my DAW without the kludges often involved with a large audio mixer feeding tracks into a small interface. No more submixing, premixing, tracking one at a time: if you could put a mic on it, it could be recorded straight to the computer with no fuss. That level of simplification is huge for the engineer in a hurry.

Gripes?

I have a few. There's only one headphone jack, and no separate volume controls for the Control Room speakers and the Headphone signal. Phantom power is global for all 16 inputs. The Direct Outs are post-fader, which some multitrack users won't like. Choosing a monitor source can be a little weird, as more than one source at a time can be active; when you listen to the Main Mix and FireWire at the same time you can hear flanging due to the latency of the computer signal being mixed with the one inside the console.

The main meters are marked for setting levels and soloing but can't replace a real meter bridge, and two LEDs for Signal



Present and Clip, while better than nothing, are not ideal for channel metering. And while this is more a matter of choice and taste than a fault per se, engineers who are used to Mute buttons that light up when a channel is silent will have to get used to the idea of On buttons that light up when a channel is active.

So?

So I've got an entire studio wired into a nice-sized, full-featured desk that feeds my DAW for multitrack recording or live streaming to the Internet, and turns my previously all-analog studio into an integrated recording system that's seamless and easy to set up and use. I've recorded more music in the three months I've had this mixer than in the previous three years. I consider that pretty darn significant, thank you.

When a product does something no one else does, or at least that no one else does for a particular price, and you need that one thing, then it becomes a no-brainer. If your DAW wants to see sixteen mics at a time and not mix them down to stereo before you record them, and you want to have a full effects rack and some outboard dynamics or eq on inserts with the option to put them on any channel without fancy repatching, the Helix Board 24 FireWire MkII gets you there cleanly and simply. Thumbs up to Phonic. ☺

Price: \$1099.99 (street around \$749)

More from: Phonic America Corp., 6103 Johns Rd. #7, Tampa, FL 33634. 813/890-8872, www.phonic.com.