

PETER FRAMPTON & CHUCK AINLAY on recording *Frampton Forgets the Words*

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Flock Audio PATCH

Analog Audio Routing System

Patch cables? Where we're going, we don't need patch cables!

REVIEW BY PAUL VNUK JR.

While 'game changer' and 'cutting edge' get thrown about regularly, the Flock Audio PATCH digitally controlled analog patchbay exemplifies both, offering a simple to use, elegant replacement for the traditional studio patch panel. Based in Kelowna, British Columbia, Flock currently offers three models: the 32-point PATCH LT (16x16), 64-point PATCH (32x32) and the 192-point PATCH XT (96x96).

Patch in, patch out

The earliest patchbays were integral to telephone systems, with operators manually connecting callers in real time. Similarly, a patchbay allows you to route microphones to preamps to compressors to an interface or recording device with great flexibility in a recording studio.

A patchbay is typically a 19" rack mount space filled with 1/4" TT Bantam (TT stands for tiny telephone), or XLR sockets that you populate with the appropriate cables and 'patch' selected items into one another. Your audio devices are connected to the rear of the bay, most typically with DB25, punch-down or soldered cables and connections.

Beyond flexible and straightforward gear chaining, most patchbays offer additional tricks such as parallel routing (often called a *mult*) and more.

Patchbays do take a bit of planning and layout. Whenever a new piece of gear is added, questions to ask yourself include, "Where will it live in my patchbay scheme? What other equipment will it regularly interface with? Does it need to be in a full-normal or half-normal setup? What about phantom power and

microphone preamps?" Patchbays eat up copious amounts of rack real estate, and cables and jacks are the number one source of noise, crackle, and cutouts.

In effect, PATCH renders all of the above moot—PATCH doesn't give a flock!

PATCH

Flock sent me a 64-point PATCH unit for this review—a simple, elegant black box occupying a single rack space. On the front panel, along with the power switch and corresponding LED, three LED lights are labeled: Host Signal (lets you know that PATCH is connected to your computer), 48v Phantom Power (more on this below) and External 48v Warning. Finally, a pair of XLR I/O (alternate Inputs 31-32) offer instant front-side access to connect an extra piece of gear or even a microphone.

Audio connections on the rear are via eight DB25 connectors. Finally, a standard USB socket connects to your computer. Power is supplied with an external 24v power supply.

All analog audio

PATCH is a 100% analog device. The ins and outs are on modern low noise IC chips

(see sidebar). While all routing is controlled digitally, there is no digital conversion.

An app for that...

Any and all patching happens in the included PATCH App (Mac and Windows OS). Step one is to configure and virtually label what ins and outs connect to your external gear. Channels can be mono or linked in stereo as well as in locked, self-contained I/O blocks (converter, interface and mixing desk I/O must be in separate blocks).

On the grid

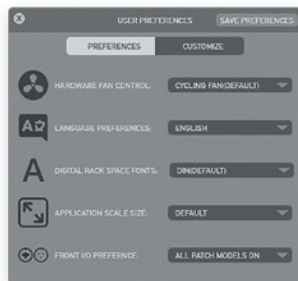
Once configured, you are presented with a sequential left-to-right grid that you populate vertically with your selected device chain. Each chain offers solo, mute and clear options and convenient parallel routing/multing to the adjacent chain. You then store your favorite routing schemes for tracking, mixing and mastering for quick and painless recall that, while not instantaneous, takes but mere seconds. Note that no settings are stored in the hardware—they are 100% in the app.

Phantom power

Phantom power has long been problematic with patchbays. If they are not configured and grounded correctly, you run the risk of harming delicate connected devices. PATCH not only embraces phantom power, it supplies its own, along with handy safety precautions and warnings.

In use

PATCH is fast and straightforward to install in any DB25-equipped studio. Making the setup and routing decisions in the App is simply joyous, and that is not hyperbole—no more squinting at tiny patch point labels, double-checking that they line up, and etc. No more hours spent configuring what gear goes where, and no more patch cable spaghetti. PATCH indeed does work that simply and smoothly.



The only downside at this point is, my studio currently has 240 patch points. I had to decide what gear would be best served by the flexible, seamless routing offered by PATCH, and almost a month on, I am still playing with options. As a gear reviewer who constantly swaps items in and out, the extra front side I/O is a huge plus.

Conclusions

If you are at the point of pondering patch panels, the Flock Audio PATCH is well worth serious consideration. The standard PATCH is \$2,599. For perspective, a 64-point analog D-Sub patchbay and 32 quality TT cables can run close to \$1800. In my opinion, patchbays are the past. The Flock Audio PATCH is the future. ➔

Price: \$1,650 PATCH LT, \$2,599 PATCH, \$9,999 PATCH XT
More from: Flockaudio.com



Interview with Darren Nakonechny of Flock Audio

Tell us about the birth of the PATCH system.

A few years ago, I decided to leave my previous profession and become a full-time audio engineer and studio owner. As the gear started to accumulate, I decided I didn't want to add yet another patchbay. I figured there's gotta be something better out there, and it just didn't exist. I started sketching out ideas on my iPad. I don't have an engineering background; I went to a patent attorney who, by a fluke, happened to be an audio guy, and he hooked me up with a team of engineers who helped make the PATCH possible.

How were you able to fit that many analog inputs and outputs into such a compact footprint?

We tried a bunch of different options. The most obvious one was passive relays, but the more you group together, the more crosstalk and noise you get. So, we started to look at integrated circuits. There's always been a weird stigma in pro audio around ICs because early ones weren't specked for audio use, but newer ones offer a dramatic improvement. We found a specific, incredibly high-quality chip used in air traffic control that is now part of our patent.

I couldn't hear any difference between my traditional patchbay and PATCH. Plus, I did not have to deal with dodgy cables and dirty sockets.

That's a great point. You don't get the oxidation, wear and sonic degradation that can happen on a traditional bay.

Tell us about the integrated phantom power.

Even on patchbays designed to accommodate phantom power, it's amazing how many volts you lose. We tested some that were only getting 42v to the mic, which is quite underpowered. PATCH offers a full 48v. Plus, we implemented safety protocols like the warning lights, 48v lock-out [Now I might get that ribbon mic after all! -Copy Ed.] and always powering up with phantom power off.

Why no front panel controls?

As a company, we decided to keep PATCH free from controls and onboard memory. The routings and everything are all stored on your computer. If anything ever happens to your hardware unit, the replacement is a plug 'n' play swap.

Have you considered a smartphone/tablet app?

I can't speak too much about it yet, but it's coming soon, and it is super cool.

Thanks, Darren. I can't wait to see how the system evolves.

Thank you, Paul.