

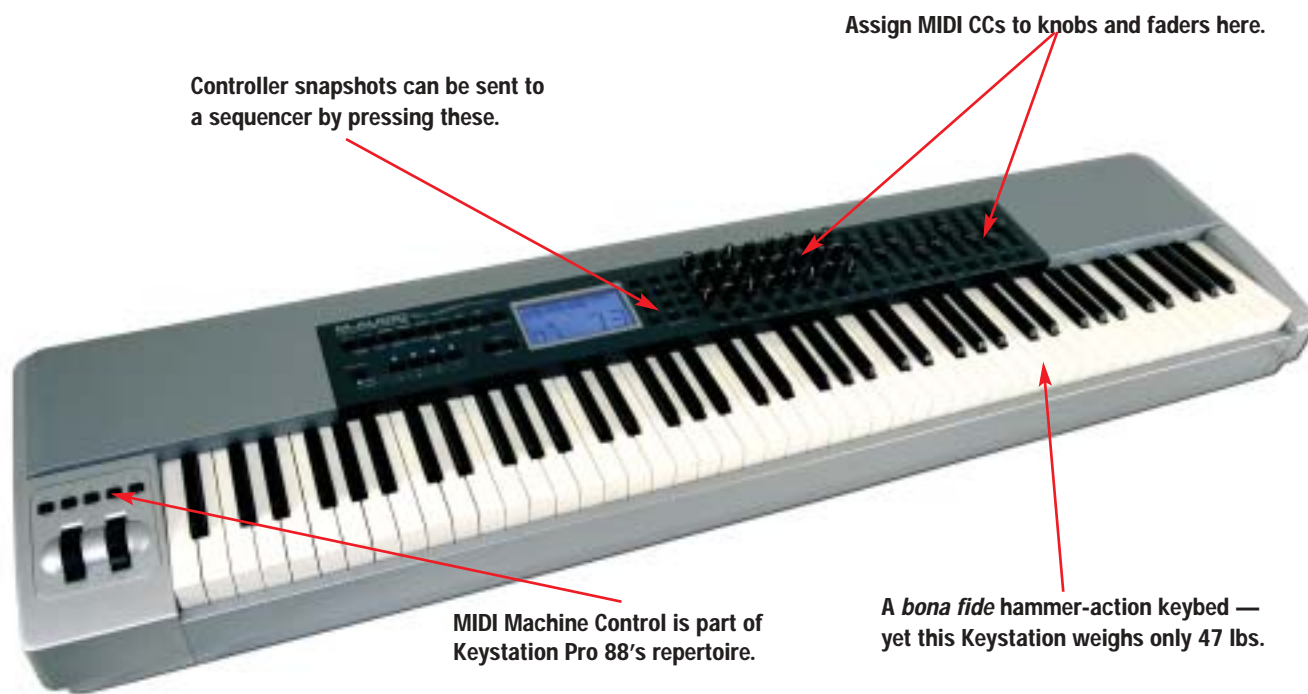
KEYBOARD

KEYBOARD Reports

M-Audio Keystation Pro 88

88 - NOTE WEIGHTED MIDI CONTROLLER

Exclusive!



Controller snapshots can be sent to a sequencer by pressing these.

Assign MIDI CCs to knobs and faders here.

MIDI Machine Control is part of Keystation Pro 88's repertoire.

A *bona fide* hammer-action keybed — yet this Keystation weighs only 47 lbs.

by John Krogh

If you're in the market for a USB MIDI controller, there are a seemingly overwhelming number of options to choose from. Some with built-in audio I/O, some with cool Kaoss-pad like controllers, and some so thin, you could almost stick them in your back pocket. But for those who prefer the feel of weighted 88s,

the pickings are slim. Seeing this as an obvious opportunity, the clever folks at M-Audio set out to build an affordable yet feature-packed keyboard that would integrate seamlessly into a computer environment. The result is their Keystation Pro 88 — a classy, capable controller with a few twists.

I was surprised to learn, for example, that

it has a hammer-action keybed, not some semi-weighted attempt at luxury. This is one fine feeling 'board. Let's get into it.

Overview

Judging from its specs (see Vital Stats), Pro 88 seems like a well-appointed MIDI controller — oh

KEYBOARD Reports

Bundled Software

Keystation Pro 88 comes with a generous helping of free software to kick-start your music-making. On the Maximum Audio Tools CD-ROM you'll find ArKaos VJ Lite, Sampletank Free, LinPlug FreeAlpha, and DSound RT Player Express.

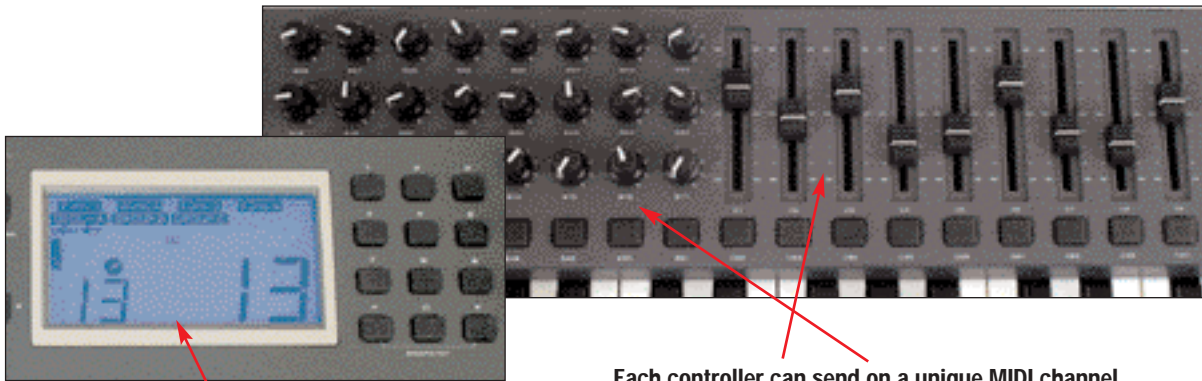
USB-powered MIDI controller with 88 weighted hammer-action keys.

Pros: Nice, responsive hammer-action feel. Nine velocity curves. Standard MIDI CCs, as well as RPNs and NRPNs can be sent from knobs/faders/buttons. USB bus-powered. Group and zone settings can be recalled individually.

Cons: Only ten memory locations. AC adapter not included.

M-Audio, 800-969-6434, www.m-audio.com

\$599.95



The bright blue display is clear and easy to read from a distance and from directly above.

Each controller can send on a unique MIDI channel, regardless of the currently selected preset.

yeah, it can use USB for MIDI communication, too. But on further inspection, there's more to it.

M-Audio isn't billing Pro 88 as a stand-alone MIDI controller *per se*, which is why no power supply is included with the keyboard — it's expected to be plugged into and draw power from a computer via USB. Fortunately, it can be powered from AC using an optional power adapter — good thing, as my experience with using multiple USB MIDI and audio devices in a system shows it can cause problems, and I'd prefer the option to remove the unit's USB communication from the mix. There's also the consideration of live use — if you're not keen on jacking into a computer onstage, no worries. Just pick up a power supply.

Moments after plugging into an OS X Mac or WinXP PC, you should be ready to play. The Pro 88 will work with OS 9, but you'll need to use OMS — setting up is more involved than

“plug-and-play.” In fact, I used the keyboard with two PCs and one Mac — in all cases it was immediately recognized. No need to install drivers. (One oddity, though: Pro 88 showed up as a generic USB audio device as a choice for MIDI input on my PCs. This could cause confusion if you're used to seeing your MIDI devices positively ID'ed.)

From there it's a matter of setting up MIDI routings so your host and/or software instrument is configured to receive input from the Pro 88. Here's where it starts to get deep. Up to four zones can be defined, each with its own transmit channel and velocity curve, along with up to three groups of realtime performance controls. Group A includes pitch bend, mod wheel, sustain pedal 1 and 2, transport controls, expression pedal, settings for all zones. Group B comprises the 24 rotary knobs, and the eight buttons below them.

Nine faders and the nine buttons below them are lumped into Group C.

To anyone with a general knowledge of MIDI controllers, the concept of zones won't be new. But the way groups are treated is interesting. Group settings can be saved and recalled individually as a kind of “mini patch.” The documentation isn't entirely clear on this, but here's how it breaks down: There is a total of ten memory locations (called presets) to which zone and group settings are written. Unlike most synths, Pro 88 doesn't require you to load and use one preset (controller assignments, zone mappings, etc.) at a time. Instead, you're free to recall any of the four zone and three group controller settings from any preset at any time. You could, for example, recall just the group B controller settings saved into preset 2 — it doesn't matter which preset is currently selected. It

isn't overwritten permanently, but group B's controller assignments will change to those of preset 2. This took me a minute to get my head around, but once I nailed things down, I began to recognize just how flexible Pro 88 really is.

Of course, ten presets isn't a lot, and because presets can't be named (only numbered), trying to remember which group or zone preset location contains which settings can be a bit of a mental challenge. That's where I'm hoping the soon-to-be-released Enigma programming utility will help. This software wasn't ready for my review, but it should be available by the time you read this. According to M-Audio, with Enigma, users will be able to drag MIDI CCs onto a graphic representation of the Pro 88's numerous performance controllers. These configurations can be named and saved to your computer, making it possible to store hundreds of presets.

Never once did I experience a hiccup.

As it is now, it's possible to dump the keyboard's memory contents to computer as sys-ex data. It's not ideal, but at least there's a way around the ten-preset limit.

Setting up knob and fader assignments is ridiculously simple: Operate the control in question (i.e., turn a knob or slide a fader), press Control Assign, then type in the controller number. Mapping controls to specific MIDI channels is just as straightforward. On the whole, programming couldn't be easier . . . well, that's not

Vital Stats

| | |
|-----------------------------|---|
| # of simultaneous zones | 4; transmits on separate MIDI channels |
| # of assignable controllers | 24 knobs, 22 buttons, 9 faders, pitchbend, mod wheel, 2 foot pedal inputs, 1 expression pedal input |
| Controllers transmit | MIDI CCs, RPN/NRPN, program change, bank LSB/MSB, pitchbend, GM, GM2, XG, sys-ex |
| Buttons transmit | note on, MIDI CC on/off toggle, program change, bank LSB/MSB, MMC, GM, GM2, XG, sys-ex, MIDI controller increment/decrement |
| MIDI connectors | USB; in and out ports (software switchable to thru) |
| Dimensions/weight | 50-7/8" W x 11-13/16" D x 5" H, 47 lbs. |

you plan to automate) at the top of your tune, the synth will respond exactly they way you played it.

I found another application for snapshots: I spent some time programming Propellerhead Reason's Malstrom, and when I had dialed in a cool sound, I would send a snapshot into my sequencer. When I was done, I had a MIDI sequence full of patch variations that I could sort through later on. I was able to stay in a creative headspace without worrying about saving and naming patches. Nice.

If you've ever tried to work a virtual Hammond B-3's drawbars from a fader box, you know how awkward pushing faders to increase drawbar level can be. Fortunately, the polarity of Pro 88's nine faders can be switched, so when you pull them toward you, the drawbar level increases. Native Instruments B4 users of the world, rejoice!

In Use

When the Pro 88 arrived at my studio, I was immediately surprised by its weight — for a weighted-action controller, it's on the lighter

assigning Pro 88 to a track. The keybed had the feel of an expensive controller — I couldn't believe I was playing a board that retails for less than 600 bucks.

One minor gripe: Latency was acceptable, but it could have been tighter. I cranked down the sample buffers, but still there was a perceptible lag from when I pressed a key until the time the note would sound. It wasn't objectionable, just noticeable.

Using Reason's MIDI implementation chart, I created several knob mappings to work with Subtractor, Malstrom, and NN-XT. In less than 30 minutes I had tactile control — I love geeking out on this stuff.

With my maps in place, I fired up Emagic Logic and compiled several Reason synths on a separate dedicated machine. From within Logic, I was able to work synth parameters and record my knob and fader moves without a single snag. Never once did I experience a hiccup. Pro 88 performed flawlessly.

Conclusions

M-Audio has a hit on their hands. If it retailed for hundreds more, it would still be killer. As a stand-alone controller it offers the kind of control you'd expect from a high-class pro keyboard. Nice feel, multiple velocity curves, multiple transmit channels, faders, knobs, foot switch and expression inputs, and more. The USB integration takes it a step farther. There are no drivers to worry about, and with Enigma, programming could even be more fluid and intuitive than it already is. Sure, I could make a wish list: More presets and the ability to name them would be at the top. But these don't even come close to breaking the deal. This is a Key Buy.

My prediction? Keystation Pro 88 will be as popular and ubiquitous as the venerable Yamaha KX88 controller was 20 years go. Only time will tell. ■

In his spare time, editor-at-large John Krogh composes music for TV commercials. Feel free to drop him a line at johnkrogh@mac.com.



The Pro 88 can be used as a standalone MIDI controller when powered via a 9V adapter. Note that the controller jacks are labeled with their controller block and number for manual-free reference.

entirely true. Voice-recognition would be easier, but I suspect that capability would push the keyboard over its \$600 price point.

Other noteworthy aspects include the ability to send snapshots of controller settings and switch the polarity of faders. From a utilitarian perspective, snapshots are useful for several reasons, not the least of which is ensuring proper playback of knob tweaks. Say you want to work a synth's filter cutoff over the course of a sequence, but you want your knob moves to be played back exactly as you made them every time. By sending a snapshot of the cutoff value (and whatever else

side (only 47 pounds). Once in place on my writing desk, I patched the USB out into one of the Giga PCs. In less than a minute, I had virtual MIDI connections made. I also patched the MIDI out into an input on a Unitor 8 connected to my sequencing/recording Mac. That way I could use the keyboard as a "typical" MIDI controller within a larger MIDI rig, as well as the sole keyboard on a dedicated machine.

This worked extremely well. If I wanted to practice piano, I set MIDI to transmit over USB, so I could play a sampled grand from Giga without hassling with launching the sequencer and