It's hard to believe that if the trapKAT were a person, she'd be old enough to drive! Introduced back in 1995, this teenage percussion controller has seen both minor and major upgrades. The newest incarnation is vastly improved as just about everything has been reworked and remodeled from the original.

THE TRAPKAT CONCEPT
The original idea of the trapKAT was pretty straightforward and groundbreaking at the same time. The idea of offering a number of different playing surfaces as a drum controller was nothing new. However, giving the player 24 surfaces was something special. In addition, while other companies were producing multipads with piezo transducers to read gestures and generate signal, the trapKAT has always incorporated force-sensing resistors to totally eliminate crosstalk, and allow for controlling the duration of a note by reading pressure rather than vibration.

THE BOX
The size and footprint of the instrument hasn't changed, but the trapKAT 5 incorporates a new lighter frame that comes in at just about 14 lbs. That's more than a 60 percent weight reduction! The trapKAT still has ten large pads and fourteen smaller "rim" pads, but Alternate Mode has replaced the older rubber pads with something called "nuBounce." And, it's covered the pads with power dot material designed by Aquarian Drumheads. Alternate Mode claims the new covering protects the pads and sensors while it adds additional sensitivity and responsiveness.

The 5KS software incorporates several new and expanded programming options, and contains a built-in sound engine designed by Kurzweil built around that company's PC3 sound set. Included are more than 256 drum kits, plenty of orchestral and ethnic percussion, along with more than 1,000 other sounds. Kurzweil has long been known for outstanding sounds on its flagship synths, and the sound card in the trapKAT does not disappoint.

THE INS AND OUTS OF IT ALL
The trapKAT has pretty much everything you need to connect it to the outside world. Most important are the inputs for the bass drum and the hi-hat controller. When you add those two devices, then the trapKAT offers up 26 playing surfaces.

Four footswitch inputs are used to program the device: kit select (for progressively or instantly switching between any of the 24 available kits that can be stored in memory at any one time), note edit (for selecting the sound assigned to each pad), kit edit (for controlling features that affect the entire kit), and global edit (for features that affect the entire machine).

Just because the trapKAT 5KS includes its own sound card doesn't mean that it can't communicate with other modules or your computer. Two MIDI-Out jacks and one MIDI-In jack gives you all the MIDI connection options you need. In terms of audio, there is a front-mounted headphone jack with push-button volume and a main left and right audio output along with a main left and right audio input.

THE NEW OS
The evolution of the trapKAT has always been one of keeping the operating system as simple as possible while offering ever more features. This new trapKAT is still not as powerful as Alternate Mode's full-featured drumKAT, but it's getting closer and closer.

Programming any of Alternate Mode's controllers is not very intuitive at first. There are no knobs, faders, buttons, or switches to move with your fingers. Instead you program the machine by stepping on a footswitch and then hitting one of the pads with your sticks in order to select the parameter you want to edit. While you'll have to read through the manual to figure out the process, it's pretty logical. Play with the machine for about an hour, and you'll soon have most of the frequently used commands right under your sticks.

In order to have a controller that truly controls, you need to have a device that is capable of both minor and major adjustments. In this arena, the trapKAT shines. You can make several large-scale adjustments and edits on both the kit level and the pad level. If you want to select a parameter for all the pads in a kit, or make some minor adjustments on a pad-to-pad basis, it's not only possible, it's very easy and fast. The parameters you'll use most often include MIDI Channel, Mini-
The hi-hat parameters on the trapKAT make the device act a little more like the company’s most sophisticated controller, the DrumKAT. These additional features allow you play a second sound based on the stroke velocity with four different variations. You can also program both notes to sound simultaneously or perform a velocity crossfade or a velocity switch.

If you want to expand your choices to three or even four notes, there are options for this as well. Like the early versions of the DrumKAT, four notes can be layered to sound all at once, or programmed to shift depending on playing velocities. In terms of alternating notes, this new machine will alternate from two to sixteen different notes. Special commands can call up “alternate reset,” “alternate freeze,” and “no” (leaving a rest in the middle of an alternate set).

A new feature allows the player to send continuous controller data on a pad along with up to three additional notes — all from a single stroke. Once you define your continuous controller number, the CC’s value is determined by the strength of your stroke. So... if you wanted to, you could fire a three-note chord while you control the filter cutoff frequency or pan position through velocity. That’s pretty cool.

Alternate Mode has put more thought into the hi-hat than just about any other manufacturer. The hi-hat parameters on the trapKAT will serve as hi-hat pads (up to four). Additional hi-hat commands include the “HATNOTE” which offers an eight-note feature for distinguishing various degrees of hi-hat pedal position. Hi-hat Overlap is another feature that allows the trapKAT to sound more realistic, as sounds will overlap rather than instantly cutting each other off.

When selecting a gate time (the length of a particular note—on event), there are three additional options: Roll Mode, which helps to eliminate the machine-gun, stuttering effect that sometimes happens when triggering longer sounds like cymbals or conga tones. Using this feature, the note-off message is delayed until after six seconds has passed since the last time the pad was struck. In “infinite mode,” no note-off message is sent from the pad, and in “latch mode,” a pad will toggle between note-on and note-off messages on subsequent strikes. Interested in doing some DJ-style gigs? Latch mode is perfect for starting and stopping loops during live performance.

The SKS includes a wide range of built-in sounds. And the sounds are really good. The decays on the drum sounds are very natural and even cymbals have a long enough sample time to please the most discerning ear. There are plenty of different drum and percussion banks to choose from, and the trapKAT OS will let you pick and apply any sound to any pad, from up to four different kits at one time.

The sound card inside the KS is the same one that Alternate Mode uses for its mallet-