



SILVER AND BLACK ATTACK >
The 8-in/8-out Audio 8 DJ is small enough to fit anywhere and packs top-flight 24-bit/96 kHz audio into a road-ready aluminum chassis

NATIVE INSTRUMENTS TRAKTOR SCRATCH

TIME-TESTED DJ SOFTWARE PLOWS INTO THE TIMECODE WORLD

BY JASON BLUM

Slinging vinyl is sexy, no doubt about it. Black wax has a certain *je ne sais quoi* that tickles those nostalgic neurons deep in our psyche, creating a visceral connection that draws us into the experience of DJing, whether it's as a spectator or a performer. Watching great DJs manipulate a disc gives you the feeling that their hands are actually on the music and you're right there in that moment with them.

In contrast, if spinning discs is sexy, then punching keys and clicking mice is the extreme opposite. Truly, there's nothing more snooze-worthy than a DJ who looks like he's checking his e-mail during a gig, so anything that gets your hands off the laptop and back on vinyl (or CDs) is a good thing when you're trying to thrill the crowd. A big part of pulling off a great gig is visual showmanship—getting into it and looking like you're actually doing something up there in that booth isn't just fun, it's a critical element in delivering a memorable performance.

This is the digital age, so DJs can reconcile the glamour and tactile feedback of vinyl with the need for convenience and flexibility of digital media with solutions such as Native Instruments (NI) Traktor Scratch, which allows hands-on control of digital-music files with turntables and CD players. It's not a new concept—Serato Scratch Live, Stanton Final Scratch and, more recently, M-Audio Torq have done it for years—but Traktor Scratch marks NI's first foray into the market without the benefit of Stanton's hardware expertise. (The partnership that packed NI Traktor software with Stanton Final Scratch recently ended.)

STRONG BOX

The centerpiece of the Traktor Scratch system is the new Audio 8 DJ, a snazzy little unit with rough-and-tumble good looks bristling with loads of knobs and connectors. The 1.8 lb. brushed-aluminum box sports a glossy, piano-black panel on its topside with plenty of LEDs to indicate a variety of signal levels and operating modes, and it bears a striking resemblance to NI's other interface, the Audio Kontrol 1. Aside from the standard I/O for decks and PC communication, the Audio 8 DJ manages to cram in an extra two pairs of I/O for effects loops and recording, an XLR mic input and a headphone jack with an independent volume knob. There's even MIDI I/O for throwing outboard controllers into the mix.

Two large guards on the front panel keep knobs out of harm's way should the box ever take an unscheduled trip to the floor, and a security hook on the backside keeps the USB cable from being accidentally yanked loose by careless fans or your own bumbling fingers. The overall impression from the Audio 8 DJ is that it can take some punishment:

**NATIVE INSTRUMENTS
TRAKTOR SCRATCH > \$669**
(\$399 CROSSGRADE FROM FINAL SCRATCH, SERATO SCRATCH LIVE OR EARLIER VERSIONS OF TRAKTOR)

Pros: Robust error handling. Familiar Traktor interface. Handy multicore cables. Small hardware footprint. Built-in recording. Effects loop to mixer via extra RCA jacks. Support for MP3, FLAC, OGG, AAC and WMA compressed media formats.

Cons: Still no video or VST plug-in support.

Contact: www.native-instruments.com

SYSTEM REQUIREMENTS

Mac: G4, G5 or Intel Core Duo/1.67 GHz; 1 GB RAM; OS 10.4.8

PC: Pentium or Athlon/1.4 GHz; 1 GB RAM; Windows XP SP2

The solid case feels rigid, and the overall fit and finish is superior to any other digital DJ product on the market.

The sole gripe I have with the unit's design is the gray-on-black lettering; it's nearly impossible to read in low-light conditions. Figuring out which inputs are which from the top panel is rough in dim lighting, but fortunately the front and rear are labeled in more legible black on silver text.

The Audio 8 DJ (also available as a stand-alone product) sounds as good as it looks. With its high-quality D/A conversion, uncompressed files sounded markedly better when played back through the Audio 8 DJ versus straight out of an old Pioneer CDJ-1000. Highs exhibited more presence and detail, while bass boomed out with a punchy authority that trumped the CDJ's less-defined feel. Granted, assessing the merits of different D/A converters is highly subjective, and my judgments were made in a controlled listening environment with studio-monitor speakers; the differences in quality may well be negligible on loud club systems where volume often trumps fidelity. But rest assured that the Audio 8 DJ will let your audio shine on any system.

THE HOOKUP

To me, the most irritating thing about DJing with digital rigs is cable management. A standard two-decks-and-a-mixer setup means dealing with no less than six pairs of RCA cables. Making sense of this cable spaghetti at home is hard enough, but in a dark and smoky club with a few drinks in you, it's nearly impossible.

Traktor Scratch hasn't completely done away with the need to crawl behind the booth with a flashlight in your mouth, but the process is now a bit smoother thanks to NI's innovative multicore cables. These two-part cables have a fan of RCA connections on one end and a male or female XLR on the other. The RCA connectors are clearly labeled with descriptive indicators such as Mixer Line In and Audio 8 DJ Output, and each plug is also color-coded with its matching receptacle to make sure left and right channels are properly connected. The RCAs on each side are aggregated to a single XLR on the other end of the cable, which snaps into its mate and creates a seamless connection between decks, mixer and audio interface.

The folks at Native Instruments claim they'll be sending their patented cable rigs out to clubs around the world, hoping to turn booths everywhere into laptop-friendly zones where DJs can jack in simply by connecting their multicore output cable to the club's multicore input. I'd be overjoyed to see that happen, but knowing how sound techs are notoriously protective of their territory, I'm skeptical that there will be any kind of rapid uptake on that. Nonetheless, I hold out hope that it will happen sooner than later.

BACKUP SYSTEMS

The multicore cables are a great way to avoid connection errors, and the Audio 8 DJ interface has that handy safety hook to do away with most USB cable mishaps, but if there's one thing I've learned over the years, it's that the most important cable will eventually come unplugged at the most inopportune time. It may be an honest mistake or it may be the product of nefarious scheming—either way, the system's ability to handle itself with grace under pressure will eventually be tested.



SOCKET TO ME > Patented, color-coded multicore cables with clear labeling bring a semblance of order to cable chaos.

Armed with the hard-earned knowledge that Murphy's Law goes double for performers, I subjected Traktor Scratch to the most dismal failures I could imagine occurring in a club situation (short of dousing it with vodka and Red Bull). I unplugged individual RCA cables, I pulled USB connections from both ends, I poked and prodded all the knobs and buttons I could find on the Audio 8 DJ and prayed for the best.

The results were quite encouraging. Traktor Scratch's error handling is robust, and it's a vast improvement over earlier Traktor versions that used the Final Scratch timecode system. Disturbing incoming timecode by unplugging one CD or turntable input during playback didn't cause Traktor to skip a beat. Scratching was slightly disrupted—spinning the platter backward curiously caused the track to move forward—but once the timecode was allowed to play forward at a normal speed, Traktor picked up the proper index and kept playing from the right position. Pulling the USB cable stopped things cold, but a few seconds after reconnection, playback resumed flawlessly, and I was back in the mix as if nothing had happened.

Vinyl users will be pleased to hear that Traktor Scratch has an enhanced rumble- and feedback-rejection filter that enables the use of vinyl under seriously adverse conditions. Anyone who's tried to use a timecode vinyl system with decks that are poorly placed or improperly isolated knows how quickly feedback and rumble can stop things dead in their tracks, so the addition of a robust handling system for situations like these is a godsend for DJs who never know where their next gig will take them.

UNDER CONTROL

Traktor Scratch ships with one pair of both timecoded CDs and vinyl. I typically used CDs for control because vinyl tends to be more susceptible to external factors such as rumble and feedback, but I did give the wax a spin with Traktor Scratch to get a feel for the system's overall responsiveness with turntables. As expected, Traktor Scratch performed admirably—the software picks up new locations in the timecode accurately and without any tangible delay, which adds up to lightning-fast needle drops and robust handling of scratching and backspins. Earlier versions of Traktor with Final Scratch would occasionally skip when picking up timecode after seeking or scratching; Traktor Scratch seems to have solved this problem.

In addition to developing a more fault-tolerant timecode system, NI has taken a cue from Serato and added a "scroll track" to the inside cut of the vinyl (and the last track of each CD). It's a handy feature that lets you select songs without touching the keyboard: Simply drop the needle in the scroll zone and move the record back and forth to control the selection bar in Traktor's song browser. Lifting the needle loads the highlighted song into the deck. It's a simple but effective system, and it's entirely conceivable that with a well-planned playlist, you could play an entire set without touching the computer. I loved this innovative feature when I reviewed Serato's system a couple of years ago, and it's good to see that NI has finally included it in Traktor Scratch.

The software component of Traktor Scratch looks a lot like a stripped-down and streamlined version of NI's flagship DJ application, Traktor 3. There are a few additions targeted at vinyl/CD performance in Traktor Scratch, as well as some omissions that narrow the program's scope. The overall layout of Traktor Scratch is spartan when compared with Traktor 3. Traktor Scratch supports only two decks versus Studio's four, and an external mixer is required, so there's no large Mixer section between both decks eating up real estate onscreen. The browser section is unchanged, with an Internet Explorer-style browser in the left



LOOKS FAMILIAR > Traktor Scratch lifts its good looks from Traktor Studio and strips away irrelevant features to offer a lean, purpose-driven interface.

REVIEW » TRAKTOR SCRATCH

pane and detailed track information and tag display to the right. The same quick-search box lets you zero-in on specific tracks or genres using keywords, and an infinite number of custom playlists can be created to organize tracks.

Like Traktor 3, Traktor Scratch includes wonderful support for on-the-fly looping and creates seamless cycles of as many as 32 beats in length. Scratching across loop boundaries works flawlessly, and growing or shrinking loops is as easy as picking a new length from the deck's Context menu.

Keep in mind that Traktor Scratch is targeted at live performance with CDs or turntables. It isn't a stand-alone program like Traktor 3 (although Traktor 3.3 will add Traktor Scratch integration), so performing sans timecoded CD/vinyl is a no-go. It's also keyed to work only with the Audio 8 DJ or a limited amount of "Traktor Scratch Certified" digital DJ mixers, so don't think you can patch in just any third-party audio interface. But you can use your computer's audio card to audition individual tracks and set up beat markers, cue points and so on without the Audio 8 attached. That is ideal for prepping tracks and setting up playlists on the way to a gig; just be aware that you'll need the Audio 8 DJ once you get there.

If you're taking a laptop with an audio interface to a gig, it seems like a no-brainer that you should have the ability to record your set through the same gear. However, with many systems—including early versions of Traktor and Final Scratch—there isn't any way to take

the output of an external DJ mixer and route it back into the software for recording.

Traktor Scratch does away with this limitation by providing a basic recording facility, enabling the use of any input channel on the Audio 8 DJ interface as a recording source. Simply patch the mixer's output to an unused input on the interface, hit Record, and you're set to go. The recorder offers a gain knob for boosting weak signals or attenuating hot ones, and there's a multi-segment level meter to help you find a good level.

REAPING THE REWARDS

As a longtime user of Traktor with Final Scratch hardware, once I fired up Traktor and really put it through its paces, the practical differences between the two were subtle, yet certainly noticeable. The interface tweaks mentioned earlier contribute to a more streamlined experience that feels less cluttered, and while the extra features in Traktor 3 are nice, more often than not they went unused at most gigs, doing little more than cluttering up the screen. As I worked with Traktor Scratch more, I felt that the system was transparent, as if there was no layer of technology between me and the decks. It is truly a top-notch system for analog control of digital files.

Running Traktor at acceptable latencies was no problem for my 2-year-old 1.7 GHz Pentium M laptop. Initially, I encountered a few problems with pops and clicks, but after heeding the manual's advice and moving the Audio 8 DJ to a different USB port, that cleared up and I was enjoying 4 ms latencies with no audible glitches. No mat-

ter what I did—engaging effects, looping, recording back to Traktor, time-stretching and so on—I wasn't able to get the slightest hiccup out of Traktor Scratch. Playback stayed rock-solid and never skipped a beat.

Traktor Scratch marks Native Instruments' clean break with Stanton and the venerable Final Scratch system, clearing the slate and offering an improved system with superior hardware, error handling, feedback rejection and effects routing. It's an impressive system that offers a streamlined interface with solid performance, and both scratch and mix DJs should find their needs easily satisfied by Traktor Scratch's broad feature set.

I was hoping to see video playback and support for third-party VST plug-ins in Traktor Scratch. Competing products have yet to add video, but M-Audio Torq supports VST plug-ins and is considerably less expensive than Traktor Scratch. It seems like it would be trivial for a company that built its reputation on plug-ins like NI to add third-party VST support. However, NI consciously decided not to in order to avoid compatibility and stability problems.

Again, this system is a lean, mean machine that's focused solely for DJs looking to control digital files with vinyl or CD; if you're looking for a stand-alone system with multiple decks and broad support for various audio interfaces, then Traktor Scratch probably isn't for you, unless you upgrade to Traktor 3.3 (at a discounted price) to integrate the programs. Either way, Traktor Scratch is a fabulous tool. 