

Engineer RYAN FREELAND (Bonnie Raitt, Aimee Mann) **On Tracking And Mixing**

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# Slate Media Technology

## RAVEN MTi2

*Get your hands on your mixes—even if they're inside your DAW*

REVIEW BY PAUL VNUK JR.

**T**he MTi2 is the latest version of the RAVEN multitouch DAW control interface from Slate Media Technology. First came the RAVEN MTX, introduced in 2013 and now in MkII form. The MTX is the “Full Monty” RAVEN, with a 46" touchscreen housed in a metal and wood enclosure/stand with room for an optional Slate Control monitor controller (reviewed March 2017). It carries a street price of \$9999.

The MTi2 is the more affordable little brother of the RAVEN MTX. It features a 27" touchscreen in a plastic desktop or VESA mount-ready enclosure. Its cost is \$999. Yes, it's smaller and plastic, but functionally it is 100% as powerful as its big brother for a tenth of the MTX's price... and about a third of the price of the metal-cased MTi version 1.

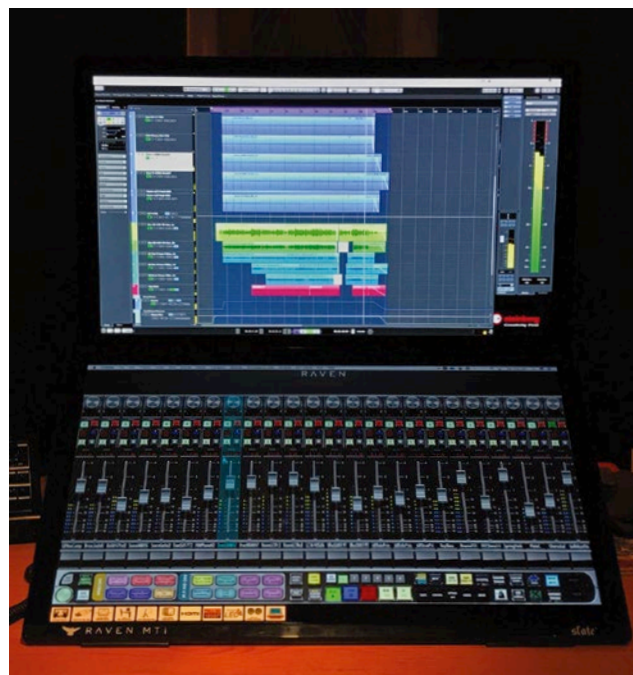
You may be thinking, “Okay, but how is a thousand bucks a bargain for what on the surface is just a 27" touchscreen computer monitor?” As we will see, it is a bargain... not only for what it does, but how well it does it.

### Fingers on glass

All RAVENs are not only touchscreens, but 10-point multitouch screens using proprietary glass, conductive materials, Slate software, and more. They let you literally reach onto your DAW and interact with it. You can grab multiple mixer faders and move them all at once, twist and turn pan knobs, and adjust effects sends in real time with as many fingers as you have available. You can also grab, tweak and adjust plug-in controls (at this time, most plug-ins are single touch only).

If the RAVEN MTi2 is to be your only computer monitor, which it is happy to be, it will also work as a traditional single-finger touchscreen for web surfing, etc., in place of your mouse. Note that multitouch only works with programs that feature this option and drivers to support the feature. You can also use multiple RAVEN units side-by-side in fully integrated multi-monitor multitouch systems.

Yes, there are other screens and even iDevices on the market with programs and apps offering multitouch capabilities. However, Steven Slate and his team spent a lot of time sourcing,



ing, testing and tweaking the glass touchscreen for the RAVENs, writing and integrating their own software, and even partnering with third-party experts in touch control—all to craft a silky-smooth and lightning-fast experience that really needs to be touched to be believed.

### DAW choices

Not only is the MTi2 an upgrade to the original, but the RAVEN Software is now in version 3.3. What was once a Pro Tools-only solution is now available (as of this writing) for Ableton Live 9, Cubase 8–9/Nuendo 7, Digital Performer 8–9, Logic Pro X, Pro Tools 10–12, and Studio One 3 on Mac, and Pro Tools 10–12 and Cubase 8–9/Nuendo 7 on Windows.

When you purchase the MTi2, you get a license for control of one DAW of your choice; additional DAWs can be added to your iLok account for \$99 each. Additionally you get the Slate Batch Command software. This is Slate's own custom set of specific batch commands for each DAW. These commands are extensive and useful for adding tracks, plug-ins, markers, and cues, or streamlining editing shortcuts and more, all at the touch of user-programmable buttons integrated into the RAVEN 3.3 interface.

### Physical

The actual MTi2, pulled out of the box, looks just like a standard 27" computer monitor, because at its core that's what it is—complete with a set of monitor on/off, color, contrast, and audio controls on the side.

Its black plastic body measures 26.6" x 16.1" and is less than 3" deep, not counting its attached stiff, springloaded stand/arm with which you can set your perfect angle. It uses a line-lump power adaptor. For computer connection you will need a USB2 connection, plus either an HDMI cable or a VGA cable and the appropriate adaptors. I used a Mini Dis-

playPort-to-HDMI cable to connect the MTi2 to my 27" iMac and it worked like a charm.

This gave me the option of dual-monitor use, so I placed my iMac on a monitor stand behind and above the MTi2. Slate Media Technology offers some great and thorough videos for setup on their website, featuring many computer configurations like iMac, laptop, and dual RAVEN setups. There are also video walkthroughs for installing the latest RAVEN 3.3 software as well as the third-party touch drivers, and then calibrating the multitouch surface. Slate MT claims you don't need to do it with the MTi2 straight out of the box, but I did it anyway.

Before getting into DAW specifics, I want to note that the super-secret RAVEN glass (the same on both the MTX and MTi2) feels and responds like no other touchscreen I have tried. Slate MT also includes a special cleaning/finger glide spray called the RAVEN Revitalizer and a microfiber cloth with instructions on how and when to apply it, to keep your fingers gliding along and the screen clean. They warn you not to use anything else!

## DAW integration

Regular readers will know that I am a Cubase user. While I will be referencing my experience with the MTi2 and Cubase, note that for the most part everything the RAVEN can do in Cubase is largely the same for all other supported DAWs.

Before you can use the RAVEN, you must set up its mixer to overlay perfectly with the faders on your DAW mixer. In Cubase, this means getting rid of and hiding any input channels and the master stereo output channel from your main mixer view (called the MixConsole in Cubase). You then need to scale your mixer to show 24 faders, no more and no less. Then you pull up the the RAVEN mixer over the DAW mixer and use red guide lines to scale and sync your DAW mixer perfectly with the RAVEN's. Once this is done, the faders in your DAW magically change to silver capped faders and the mixer is ready to go.

Note that you must always keep this

setup, including the fader scale size and with no input or output channels visible in your main mixer view. From here on out, though, you can add and subtract tracks to your heart's content—the RAVEN doesn't care if your song has two or two hundred tracks, and you can use the RAVEN bank buttons to shift your view in groups of 24.

In most DAWs, the master fader and output meters are vital to any mix. In Cubase, the solution to get both back was as easy as pulling up a second mixer window and including the master mix fader and input faders on that view. To keep it out of the way, I moved it to the iMac screen.

In addition to RAVEN taking over your DAW mixer like a cybernetic implant, there is also the option of toggling between it and Slate's own RAVEN mixer interface. It offers big, bold, round pan knobs, fat-capped virtual 100mm faders, mute, solo and automation buttons, and selectable channel icons. It's a very nice looking mixer, and I actually liked that it allowed me to treat the RAVEN as a mixing board and disassociate it from my DAW.

At the bottom of the mixer in either view is the RAVEN transport and control surface. There are up to three selectable or stackable panels that can include a standard transport, a gesture-controlled navigation pad, locator buttons, preset layout buttons, the batch command buttons, and more. It's all user-configurable to suit your needs and taste.

Of special note is the Mixer/Sends button, which flips the mixer to a set of secondary faders for controlling effects sends. This is nice, as you get full-throw faders rather than tiny sliders or pots. There is also a Fine Faders control that constrains the faders to a purposely tight and sluggish speed with a minimal throw. This allows small incremental movements of half a dB or less.

## In use

Setting up the RAVEN MTi2 and 3.3 software with Cubase 9 was surprisingly easy, as long as I carefully followed the instructions, which are available in an online video or the downloadable

manual. For some DAWs, including Cubase 8, there is even an auto-setup process; I cannot comment on it, as it is not currently functional in Cubase 9. That is one of the few things to be aware of with the RAVEN software. With multiple DAWs being supported, there will always be some growing pains caused not by Slate, nor by the DAW company, but due to the marriage of the two. As each DAW gets updated, Slate has to adjust, alter, and program accordingly.

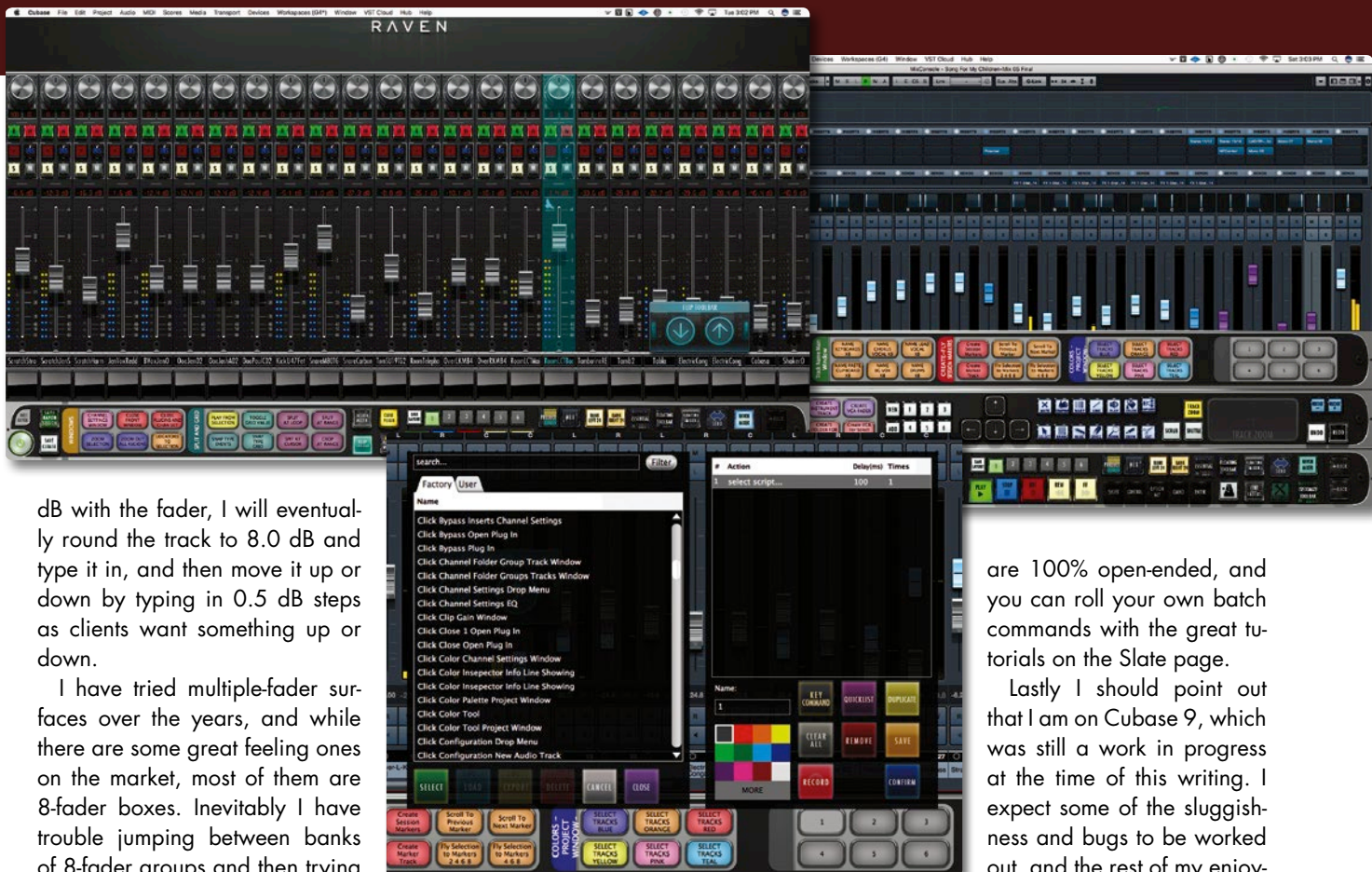
Speed bumps for me included some batch commands not working perfectly (although this could be due to my learning curve), minor setup squabbles and even how the RAVEN software affected my DAW. Some functions in Cubase now take a few extra seconds to execute, like the Save As function or Render In Place, or even pulling up occasional Edit windows. Most annoying was that clicking in track name windows to rename tracks often took multiple tries.

Essentially these are annoyances rather than showstoppers. I say this because the main feature of the RAVEN, i.e. being a multitouch mixer, works so wonderfully that it makes these little growth pains seem minor.

My only other observation is that the RAVEN I was sent had a very faint modulated hum, like the sound you hear when a TV is on but the sound is muted. It was heard in the room, but was not present in any recorded audio. [Editor's Note: We reported this issue to Slate, who responded that this behavior has not been reported before and is likely isolated to our review unit. A new RAVEN is on its way to us as of press time, and we will report on our results with the replacement unit in our next issue. —MM]

## Two-fisted mixing

I live in two worlds. As a live sound engineer, I use a console with 32 faders, and when I do live sound I mix with all hands on deck in real time. Oddly, when I get into the studio, I usually use a single-fader control surface and use that one fader to set volumes or perform automated rides on individual tracks. Then I default to numeric mouse mixing. In other words, if I set a track to 8.4



dB with the fader, I will eventually round the track to 8.0 dB and type it in, and then move it up or down by typing in 0.5 dB steps as clients want something up or down.

I have tried multiple-fader surfaces over the years, and while there are some great feeling ones on the market, most of them are 8-fader boxes. Inevitably I have trouble jumping between banks of 8-fader groups and then trying to figure out which tracks I'm controlling, since LED scribble strips aren't always provided and many of those are too small to read easily.

I initially assumed that I might find the RAVEN a novelty and default to my single fader-numeric-mouse mixing style. After all, the RAVEN doesn't really have faders, it's just fingers on glass. I will totally admit how wrong I was—mixing on the RAVEN was an almost instant joy! By the end of my first real mix session with the RAVEN MTi2, I reverted back to the days of mixing a song in real time, just like when I mix live, and it was by feel rather than by the numbers. Not to get too poetic, but I felt like I was connecting with the music again.

It was similar when a fellow engineer came over a few days later; we could both grab faders on the RAVEN at the same time and mix in tandem with no issues. Also, being able to reach out, grab and tweak a plug-in like it's really there is nothing short of a religious experience.

Having said that, was the RAVEN user experience perfect? No, but most of that comes down to the learning

curve and being willing to adjust my workflow in my DAW. For instance, I had to constantly remember not to scroll through tracks with my mouse, as it would throw fader tracking off. Instead I had to remember to use the left and right bank buttons. I also had to get used to reordering my window layout, mixers, and minor workflow steps. I am not going to lie: this part is a bit frustrating, after using my DAW my way for over a decade. Getting the most out of the RAVEN MTi2 means using it the way it needs to be set up.

## 99 problems and a batch ain't one

I won't get too much into batch commands, other than to note that these are combinations of common DAW functions, key command groups, and more, all laid out on user-assignable buttons on the RAVEN console. Some are amazing timesavers, some fall into the "how have I lived without this" category... and some make absolutely zero sense, based on my needs and workflow. The good news is that they

are 100% open-ended, and you can roll your own batch commands with the great tutorials on the Slate page.

Lastly I should point out that I am on Cubase 9, which was still a work in progress at the time of this writing. I expect some of the sluggishness and bugs to be worked out, and the rest of my enjoyment of the Slate RAVEN will

come down to time and experience. Once you get past the initial joy of mixing on faders again, it's just practice, practice, practice... getting used to the layout, paradigm and batch commands you'll need.

## Conclusions

If it sounds like I am being a bit over-the-top and fanboyish about the MTi2, I am just giving praise where praise is due. Slate MT has a true masterpiece on its hands with the RAVEN family. This device delivers on every level and is one of the rare high-tech futuristic devices that does exactly what it sets out to do. It's a flat piece of glass that manages to be snappy, tactile, responsive, and ultimately instrumental in bridging the disparate worlds of digital DAW mixing and old-school consoles. ➤

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