

PLUGGED

IN MY DREAMS

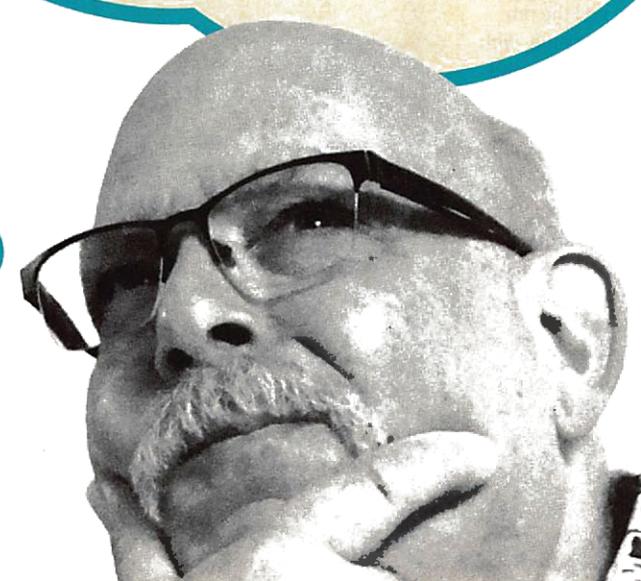


THE FIRESTICK 3000

Editor's Note: We've never begun an article with an Editor's Note, but this month's Plugged In feature requires a little explanation. We asked our MIDI guru Norm Weinberg to write a review of the e-kit of his dreams, which combines the best features currently on the market with some that still don't exist, but conceivably could one day. We wanted to peer in to the crystal ball and see what the future may hold for e-drummers, so please keep in mind that the following kit doesn't actually exist anywhere but in Norm's imagination — at least not yet!

By Norman Weinberg

My first electronic kit dates back to the Roland DDR-30, introduced back in 1985. Since then, I've played just about every kit that's come along. As a long-time reviewer for DRUM! Magazine, I've been fortunate enough to get my hands (and sticks) on everything from the lowest-priced, get-your-feet-wet electronic kits to super-sophisticated flagship machines from the world's most respected



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manufacturers. But let me tell you, nothing prepared me for this.

The FireStick 3000 is the first e-kit that seems to incorporate everything I've ever wished for. The company included all the really important stuff, got rid of the not-so-very-important stuff (at least to my way of thinking), and made the interface a natural for the novice as well as the expert. So, let's take a look at what I've been dreaming about.

THE PADS

Perhaps more than any other feature of this kit, the pads set an entirely new paradigm for electronic drums. Players have asked for wireless pads for years. Every

manufacturer said it couldn't be done. Wireless systems are just too slow and too unstable. They said the technology couldn't get the response time below 12–15 ms. To be honest, I'm not exactly sure how they pulled this off, but the FireStick 3000's wireless response time sits at about 3 ms. That's fast enough to avoid any delay issues. Hit the pad or the rim, and the sound seems instant.

And speaking of avoiding issues, this kit comes in two versions: one with mesh-heads like the Roland e-kits and one with normal Mylar heads. Both versions have embedded FSR technology (force sensing resistors) like the Alternate Mode drum controllers and the Aquarian inHEAD system. If you want to have both on hand for different situations, they are easy enough to change out. Playing on FSRs rather than piezos means: 1) no false triggering, 2) no crosstalk issues, 3) no mask time parameters, 4) no hot spots, 5) the ability to use the stick's pressure against the head to control various aspects of the sound, and 6) no more problems with tracking. None. Nada.

The FSRs and the wireless transmitter need power. And that power is supplied in a unique way: Wireless! As long as the pads are within four feet of the brain, and the brain is plugged in to the wall, enough power is supplied to each pad to keep it up and running. While I was skeptical at first, I had no problems with the system. It worked flawlessly.

Each of the drum pads is dual-zone with separate FRSs for the playing surface and the rim. Cymbal pads are three-zone, with sensors on the bell, the bow, and the edge of the cymbal. FRSs, by their very nature, read pressure rather than vibration, thus making the cymbal choke sound available by simply squeezing any place on the edge of the cymbal around its entire circumference.

And one more thing: FSR technology allows the bass drum to have two playing areas if you want to use a double pedal. The left and right pedals can be programmed to fire similar or extremely different sounds.

All full-size drum pads fit inside each other for easy transportation. The 18" kick is the largest of the drums, and the 15" and 16" floor toms, the 14" snare, and the 12" and 13" rack toms simply nest together.

Cymbals fit together in a slightly different manner. Like acoustic cymbals, their profiles are similar enough to set on top of each other. Since they also use FSR technology, they are significantly thinner than most other e-cymbals. The 18" ride, 16" and 17" crashes, and 14" hi-hats fit comfortably right inside each other. The hi-hat system (top FSR cymbal and pressure-reading bottom sensor) fits on your favorite hi-hat stand. The hi-hat responds to open, closed, foot close, and foot splash. In addition, the pressure sensor affects the tonal quality of the hi-hat in a very natural manner. Without question, this hi-hat system is the most organic playing and sounding that I've ever worked with.

THE RACK

E-kits have been mounted on drum racks for more than 20 years, but the first real advance in mounting systems shows up in the FireStick 3000 system. Similar

to Pearl's Horacio Hernandez signature cowbells, the rack's drum mounts have two boltlike extensions. The drum pads' shells have two matching slots reinforced with metal inserts for strength. To mount the drums on the rack, simply slip the two slots over the two bolts, and you're golden. Solid and secure. And since the mounting bracket is built onto the rack's arms, setting up and tearing down is much faster than ever before. In fact, the entire reason the drums can nest together is that there's no mounting hardware attached to the sides of the shell.

The rack is made of a tubular aluminum alloy, and all of the mounting hardware, hinges, and supports are also aluminum, which makes the system strong, light, and sturdy. The two upper toms and one of the cymbals mount to the front bar, the two lower toms and another cymbal mount to the right-side bar, while the left-side arm holds the snare, brain, and third cymbal. Cymbal arms are included in the rack on telescoping booms. The rack's side arms are designed with hinges that extend out a bit from the front bar. This offset hinge system allows all the arms to fold together without

SPECS

MODEL: FireStick 3000

MSRP: \$999

PADS: Nine Two-Zone (Snare, Kick, Four Toms, Hi-Hat, Two Crashes); One Three-Zone (Ride)

PAD TECHNOLOGY: FSR

WIRES: None

TRIGGER INPUTS: None

RACK: Three-Sided, All Aluminum Alloy

AUDIO OUTPUTS: Main L/R, Ten Assignable, Two Headphones

AUDIO INPUTS: Two 1/8" Mini-Jack

AUDIO FX: Five Styles Each of Reverb, Delay, and Chorus

MIDI: In, Out

KITS: 100: 50 Basic Kits, 50 Advanced Kits.

CHAINS: 20: 10 Basic, 10 Advanced

SOUNDS: More than 3,000 Sounds on Internal Hard Drive, limited only by memory on USB 3.0 sticks (up to 128GB).

MEMORY: 256GB Solid State Drive, 64GB RAM

USB: Two USB 3.0 ports (one for storage, one for computer connection).

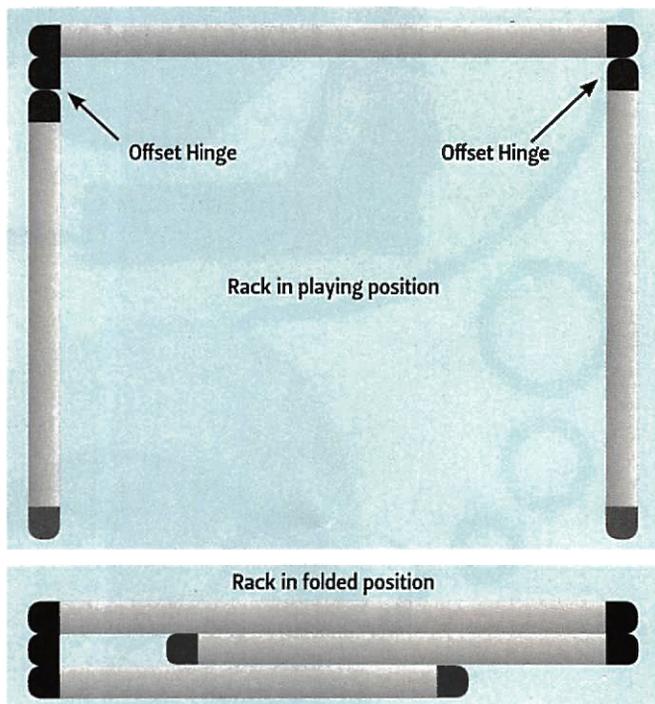


FIG. 1 The innovative aluminum rack utilizes an offset hinge system that allows it fold up to less than a foot wide.

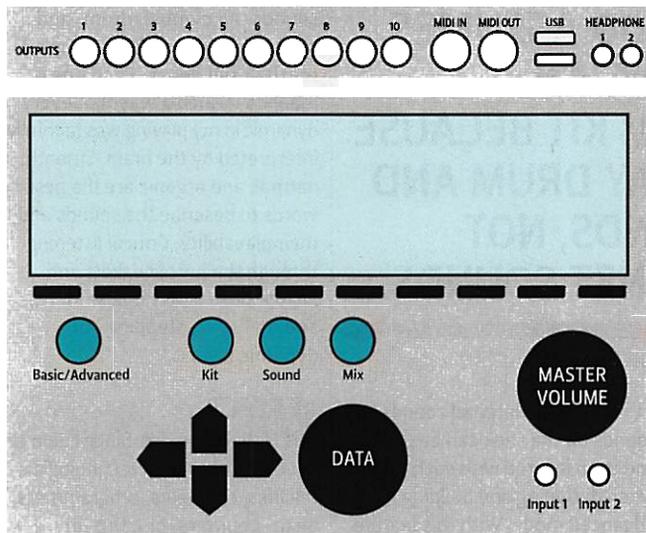


FIG. 2 The FireStick 3000 brain is simple to use with an intuitive layout. You can also control all the FireStick's functions via Bluetooth using the free App.

wasting space or having to move or adjust the drum mounts.

To pack up the rack frame, you simply lift off the pads, then fold in the side arms and lower the cymbal tubes. It really can't be much easier. The whole thing is not much more than a foot wide. Slip the rack into the padded canvas carry bag and you're out the door.

LESS IS MORE

The interface of the FS3000 is the cleanest, most logical, and easiest to use that I've ever encountered. Remember when Apple decided to take the CD/DVD burner out of its laptops? Everyone thought that was a really stupid move. But Apple was actually thinking toward the future. CD/DVD technology is pretty much now obsolete with the advent of audio/video streaming and cloud storage. While most contemporary electronic drum kits continue to rob front-panel real estate with outdated technologies, the FireStick 3000 looks forward rather than backward.

It's a bold move, but I'm glad the FS3000 doesn't include a metronome. Who needs a little metronome that offers a limited range of tempi, click sounds, subdivision, and meter? I've got a super sophisticated metronome on my smart phone. Just give me that 1/8" audio input jack and I'll take care of the rest, thank you very much.

And it was about time to lose those play-along songs with their ridiculously bad "General MIDI" instrumental sounds. Play-alongs and General MIDI might have been great ideas 20 years ago, but times have changed. I've got access to all the songs in the world with a couple of clicks, and drum charts, drum tabs, and "play along" files are all over the Internet. Again, that 1/8" input jack is all I need. I can call up the world on my phone.

You can kiss onboard sequencers goodbye, too. Garage Band is free and the FireStick 3000's USB/MIDI connection is all I need to control more power than was ever possible with an anachronistic in-the-box sequencer.

Since all playing surfaces use FSR technology, trigger adjustment settings are now obsolete. The only adjustment needed is to set the FSRs to your own touch. In Advanced mode (discussed later), you can easily calibrate the dynamic range and sensitivity for each pad. Believe it or not, that's pretty much all you have to do to adjust the pads to your own playing style.

THE BRAIN

Why didn't anyone think of this before? Two modes: Basic and advanced. One button toggles between these two front-ends. In Basic mode, players can call up new kits, assign sounds to each surface, and adjust the mix of each

sound in the kit. In Basic mode, each sound automatically defaults to its natural stereo placement position (corresponding to the player's perspective), and the entire kit is given a very organic velocity curve as a default (the harder you play, the louder the sound).

Editing sounds couldn't be easier in Basic mode. The large back-lit LCD screen shows the kit name and number, and you select kits by using the large data knob and/or the forward/backward buttons. To select a different instrument on a pad, hit the front-panel button marked Sound. From this point, the ten function buttons below the screen select the pad or cymbal, and the data knob scrolls through the options. Hitting the Sound button a second time allows instrument selection for the rims. The same process is used to adjust the mix volumes: push the "Mix" button to call up pads, and do it again to toggle up rims. Another option is to just strike the surface you want to adjust. For example, striking the rim on the second tom will cause the cursor to jump to that position. Dial in the sound or the relative volume you want on that surface, and return to playing by selecting the kit button.

In Advanced mode, the operating system works pretty much the same way, but the available tweaks are deeper and more sophisticated. Once the Basic/Advanced button is toggled to the Advanced mode, the ten function buttons under the screen call up various editing areas: pitch, pan position, envelope, layer, EQ, FX, sensitivity, velocity curve, MIDI, and special. Want to adjust the sensitivity of the pads? Tap the function button under "sensitivity" on the display and now the function buttons control dynamic range and sensitivity for each surface. You can adjust the sensitivity of each pad by simply hitting the surface twice: once at a soft dynamic and again at a loud dynamic (following the screen's prompts). The internal software makes all the necessary adjustments. Your soft strike will output a MIDI velocity of 10, and your strongest strike will generate a velocity of 120. Of course, you can fine-tune these two extremes if you wish.

Other tweaks are adjustable per playing surface (pad, bell, and so on) and saved per kit. You can modify velocity curve, MIDI channel, MIDI note number, as well as MIDI gate times. Each surface can layer up to four different sounds in any combination from the internal memory. Each of these four sounds can have its own MIDI channel and note numbers for when you're working with plug-ins on a computer. EQ controls offer up a 5-band parametric,

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envelopes are five-stage ADHSR, and the FX section has a wonderful sounding selection of reverbs, decays, and choruses.

If you want to take your musical creativity to the next level, you can assign a MIDI sequence to a pad. Once assigned, each ensuing strike will move through the sequence one note at a time. The dynamic is controlled by your stroke. Do you want to play a melody with 27 different notes on a single pad? Easy! Just build the Standard MIDI file in your computer, transfer it to the USB stick, and assign it to the pad. Once assigned, the FS3000 recognizes that the data is a MIDI file rather than WAV or AIFF and automatically makes any necessary adjustments.

Each pad can be routed to any of ten individual audio outputs on

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the back panel. This is perfect for professional recordings when you might want the ability to put every sound on a separate track.

The FS3000 has 100 onboard kits (50 Basic and 50 Advanced) with ten chains in each mode. While many current drum brains offer more kits and chains, this should really be enough for just about any playing situation from amateur to professional.

SOUNDS

The FireStick 3000 assumes that you're using an electronic drum kit because you want to play drum and percussion sounds, not flute or clarinet sounds. By leaving out General MIDI voices, there's more room for great drum and percussion sounds sampled like never before. If you want to use this kit to control nonpercussion instruments (such as brass, bass guitar, synth, or even that flute), just jack into your laptop and use whatever DAW or synth plug-ins you want. Since the FS3000 can send MIDI and play internal sounds

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at the same time (selectable per Advanced kit), it's easy to layer sounds to create your own sonic signatures. After all, if you're running a Mac, Apple's MainStage is only 30 bucks and lets you trigger any sound from Logic Pro X, GarageBand, or in fact, any AU plug-in. The sounds off your laptop are likely way better than anything in the General MIDI sonic library.

If you don't want to drag along your laptop, the FS3000 accepts USB 3.0 drives in sizes up to 128GB. The FireStick 3000 loads samples off the stick into RAM whenever a

kit is called up. Internal sounds and sounds off the stick can be mixed and even layered with each other when designing and building kits in Advanced mode. With this feature, your FireStick 3000 will never sound out of date.

But the sounds in this brain are so good, you might not even think about needing additional sounds. Every sound in this brain comprises up to 24 different sample layers. The FS3000 comes with an onboard 256GB solid-state drive, and with 64 GB of onboard memory, there's no reason to be stingy with

sounds. All cymbal, drum, and percussion sounds were sampled for their full decay. Each one is mapped in such a way that every dynamic in my playing was faithfully interpreted by the brain. Smooth, natural, and organic are the best words to describe the sounds and their playability. Critical listening through the best speakers and headphones finds no false loops, and no "stair-stepping" of dynamic layers.

VERDICT

This is the kit I want. Since I didn't have to bother with technological realities, engineers, programmers, bean-counters, or truth-in-advertising, I felt free to dream up features and specifications that may or may not be possible at the current time. Maybe with luck, some of these ideas may eventually find their way into e-kit production models. And as long as we're dreaming, let's also pretend you can get all of these cool features for an MSRP of just \$999. I mean, what the heck? **D**



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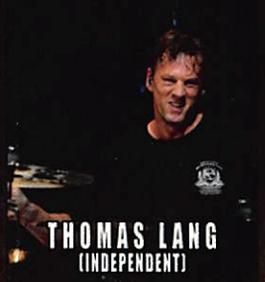
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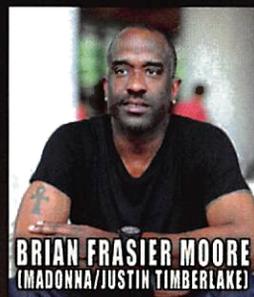
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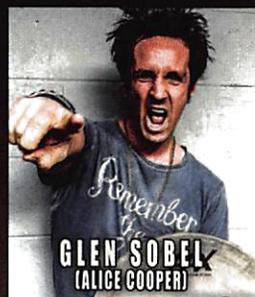
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