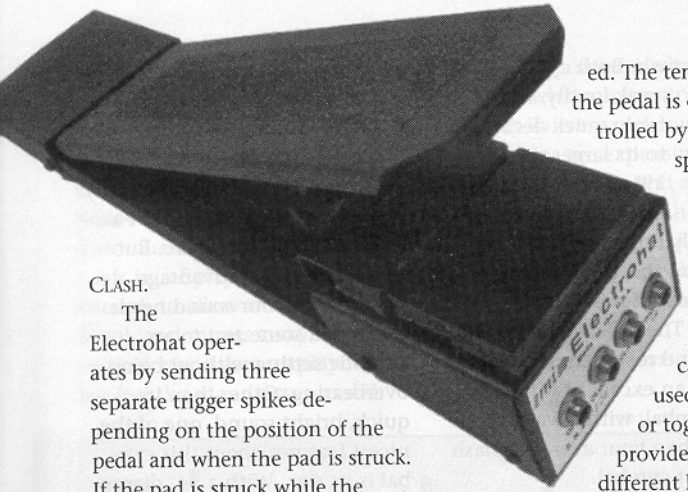
Material Innovations Electrohat

WHENEVER ANY FIELD grows as fast as electronic percussion, new ideas seem to spring up from the fountain of creativity. Material Innovations of Sugarloaf, Pennsylvania had a good idea a few years ago, and came out with the Igniters electronic pads. M.I.'s newest product is the Electrohat, designed to fill the void of electronic triggering devices that simulate the physical performance of an acoustic hi-hat.

What It Is. As you can see from the photo, the Electrohat is only the pedal. It requires an additional trigger pad and four cables to play music. There are four jacks built into the front of the Electrohat that are clearly labeled TRIGGER IN, OPEN, CLOSED, and



CLASH.

The Electrohat operates by sending three separate trigger spikes depending on the position of the pedal and when the pad is struck. If the pad is struck while the pedal is in the "up" position, a trigger is sent out the OPEN jack. If the pad is struck when the pedal is in the "down" position, a spike is routed to the CLOSED jack. And, when the pedal is pushed down without striking the pad, a spike is routed through the CLASH jack.

Many aspects of the Electrohat are well planned and well executed. The tension of the pedal is controlled by two springs, supplied with the pedal, which can be used singly or together to provide three different levels of resistance. Three large strips of Velcro are affixed to the bottom of the pedal plate, assuring that this pedal won't move around on you while you're playing.

The pedal itself is made from heavy gauge metal with a hinged heel plate (4" wide x 3" long) and foot-board (4" wide x 10" long) with a large strip of friction tape on each part. These two strips give a lot of traction, no matter what type of shoe you wear.

Pedal In Action. So, how well does this pedal do its job? For my review, Material Innovations sent the Electrohat along with one of their Igniter pads. Connecting the cables was a snap, as the diagram for setup is clear and easy to understand.

The pedal comes with both tension springs installed. For my tastes, using both springs created far too much resistance. In order to push the pedal down, I felt that I almost had to stand on the darn thing. My first step was to figure out how to change the springs. The accompanying literature states that the spring tension is adjustable, but gives no hints as to how to accomplish this feat. So it was time to grab the screwdriver and dive in.

Okay, here's the poop: The little box containing all the electrical hardware and wires is a self-contained unit which can be separated from the pedal by removing four screws. Once this box is out of the way, you easily can get to the two small nuts used to hold the springs into position. It is very easy to change the springs, but performing minor surgery on any electronic gadget is something that I'm not especially fond of. It would have been nice if M.I. had provided a few hints concerning this operation.

After playing around with the different springs, I found that the smaller one didn't provide enough pressure, as the pedal movements seemed a little mushy and indecisive. Using the medium spring by itself provided the most comfortable response, although it was just a little too stiff.

Manufacturer's Response: David Kisenwether of Material Innovations replies: We appreciate the constructive criticism of our product. We are updating our documentation to include instructions for adjusting and changing the springs, and we plan to offer a wider selection of springs to provide a broader range of tensions.

Equipment Checklist:

Manufacturer: Material Innovations, R.D. #2 Box 606, Sugarloaf, PA 18249, (717) 384-2491.

Product: Electrohat hi-hat controller.

Features: Electronic pedal capable of controlling three hi-hat sounds: open hi-hat, closed hi-hat, and clash of a hi-hat being shut; requires external trigger pad and trigger-to-MIDI interface.

Suggested Retail Price: $249.00.

Pros: Extremely responsive; easy to learn so player can create new patterns quickly; stable and solid in operation.

Cons: No adjustable spring tension.

Once I started playing around with the Electrohat, I couldn't stop. This pedal is a gas! I first set up the MIDI note numbers to trigger the standard hi-hat sounds from my E-mu SP-12 drum machine [E-mu Systems, 1600 Green Hills Rd., Scotts Valley, CA 95066]. All I can say is that the system performed flawlessly. Since using a pad and pedal in this manner is a little different from playing an acoustic hi-hat, it did take some time to get used to the feel. But, after about five minutes, everything was comfortable.

Good Ideas. Why bother getting an electronic hi-hat pedal? Well, a few good uses come to mind. How about using the pedal to trigger other types of sounds besides hi-hats? Since the pedal is really just routing trigger spikes to different outputs, you can use your trigger-to-MIDI converter and sound generator to fire three different conga sounds, three different tom sounds, or even use it as an additional bass drum trigger without a trigger pad. I tried programming the note numbers to fire a bass drum sound when the pedal was pressed closed with my foot, a snare sound when the pad was hit with the pedal down, and an open hi-hat when the pad was struck with the pedal up. It's easy to come up with some new and creative patterns in this manner. It's also a lot of fun!

If you enjoy drum machine or sequencer programming, I can't think of an easier way to get a more natural feel into drum patterns than playing the hi-hat parts on a single pad along with the Electrohat (just like the real thing). Getting the hi-hat to groove is one of the most difficult things to do on a drum machine, and the Electrohat makes it easy. Oh yes, don't forget that you also could practice on your electronic kit at 4:00 A.M. without the sound of acoustic cymbals bothering your neighbors.

The Verdict.

The list price of the Electrohat is $249.00, a fair price for an innovative piece of equipment that offers so much to your existing electronic setup. It seems solid enough for gigs on the road, and the Velcro and friction strips make for sure-footed playing. The only negative aspect would be the lack of adjustable spring tension. The actual mechanism is not as smooth as a good acoustic hi-hat, but it's not so rough that it gets in the way of a performance.

—Norman Weinberg