UHNEVER ANY FIELD grows as fast as electronic percussion, new ideas seem to spring up from the fountain of creativity.

Material Innovations of Saginaw, Pennsylvania, had a great idea a few years ago, and came out with the Ignition electronic pads. M.I.'s latest product is the Electrohat, designed to fill the void of electronic triggering devices that simulate the physical performance of an acoustic 20-hat.

What it is: As you can see from the photo, the Electrohat is only the pad. 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 densely labeled Treble 1, 2, 3, 4, and Bass 1, 2, 3, 4; and...
ed. The tension of the pedal is controlled by two spring-loaded trigger spikes, depending on the position of the pedal and when the pedal is pushed or pulled. If the pedal is pushed, the trigger is sent to the “up” position; if the pedal is pulled, the trigger is sent to the “down” position. The pedal is anchored in the “down” position by a spring-loaded mechanism and the “up” position by a similar mechanism.

Many aspects of the Electrobot are well planned and well executed. The design of the pedal, which can be used singly or together to provide three different levels of resistance, is simple and efficient. The tension on the pedal is adjustable through the control jack. The pedal itself is made from heavy-gauge metal with a friction drive belt plate (4" wide x 18" long) and a footboard (12" 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 Electrobot along with one of their trigger pads. Connecting the cables was a snap, and the diagram for setup is clear and easy to understand.

The pedal comes with both tension springs installed. For my tests, 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 damn 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 the 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 inline 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, while the pedal movements seemed a little mushy and indeterminate. Using the medium spring by itself provided the most comfortable response, although it was just a little too stiff.
Once I started playing around with the Electrohat, I couldn't stop. This pedal is a godsend, and I found it easy to adjust the MIDI note numbers to trigger the standard hi-hat sounds on my Roland TD-3 drum machine (75 note range, 1600 Green Hills Rd, Scotts Valley, CA 95066). AB I can say is that the pedal performed flawlessly. Once 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 signals to different outputs, you can use your trigger-to-MIDI converter and sound generator to fire three different cymbal sounds, three different snare 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 down 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 AM, without the sound of acoustic cymbals bothering your neighbors.

The Verdict.
The list price of the Electrohat is $49.00, 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 yogos and tension 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 is so much easier than the old-style resonant mechanism.