

Getting Started With Electronic Percussion Part 5—System Support

AN ELECTRONIC PERCUSSION SYSTEM IS

an exciting beast, offering a new universe of sound and creative alternatives that were totally unknown just a few years ago. But, like many creatures in the "wild kinadom," a little taming goes a long way. In addition to the hardware required to make your electronic percussion system operate (drum machines, trigger-to-MIDI interfaces, samplers, and so on), there are many little goodies that can be added to make it run smoothly, naturally, and efficiently. Some of these items cost only pennies, others will set you back a few hundred bucks. But all of them will make your electronic life easier.

Hardware. As your electronic system grows, you may find yourself climbing inside your rig to swap MIDI cables. The MIDI standard requires only one MIDI-IN and one MIDI-OUT port on each machine. Let's say that you're driving a sampler with your drum machine and recording the result into your computer's sequencer. Notice in Fig. 1 (page 49), the drum machine's MIDI-OUT is connected to the sampler's MIDI-IN. Then, the sampler's MIDI-THRU

is connected to the computer's MIDI-IN. No problem. But, how are you going to have the computer drive the sampler when you're ready to hear the playback? The only solution is to unplug the drum machine from the sampler's MIDI-IN and connect the computer (Fig. 2).

Well, not the only solution.

Enter the MIDI patch bay. Depending on the size and complexity of your system, a MIDI patch bay may save you several valuable hours of cable swapping each day. Its function is to route MIDI signals internally from any device to any other device. Patch bays come in several sizes ranging from "2-in, 4-out" (two devices serving as masters and four serving as slaves) to "8-in, 8-out," and even "16-in, 20-out." In Fig. 3, you'll see that each device has its MIDI-IN and MIDI-OUT connected to the patch bay. This way, any device can serve as master or slave, as the routing of MIDI signals is handled by the patch bay—not by changing the plugs physically.

More sophisticated MIDI patch bays will let you mem-Continued on page 49

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orize often-used patching configurations into programs that can be called up with a punch of a button, or a MIDI program change message. Others also can perform MIDI-merge functions that will blend two MIDI data streams together.

It shouldn't surprise anyone to learn that electronic instruments need to be connected to electricity. But, you might be surprised to learn that subtle changes in the electrical current supplied by your local power company

may alter your system drastically.

One solution is to use surge suppressors. These are little gizmos that plug into the wall socket and condition the line voltage before it reaches your delicate instruments. Instead of plugging your gear into the wall, you plug everything into the surge suppressor. If a spike should occur, the suppressor will try to remove it before it destroys your data.

Software. If your system includes a computer, you're likely aware of dedicated music software. But many non-music programs can be powerful partners in the electronic drummer's studio.

Database programs can be used to compile a listing of your instrument inventory, record collection, or your own compositions. Having trouble finding that supercool conga slap among your 300 conga samples? No problem, just build a database listing the names of your sounds, their location, and a description of their timbre. Search the database for the key-words that describe the sound, and the program will tell you where to find it.

Graphics programs can be called into play to create anything from cassette labels to the cover of your next CD. With a graphics program, you might design your own business cards, logo, or publicity flyer.

Cables. Electronic instruments require cables. No doubt about it, it doesn't take long before your system looks like a mutant from the spaghetti factory. Your electronic kit may have six cables leading from the pads to the brain. The kit's brain has at least two MIDI cables leading to other instruments and two to eight audio cables leading to a mixer or amp. Add a drum machine, sampler, and an external tone generator, and you can begin to see the problem. Here are a few pieces of advice for dealing with cable overload.

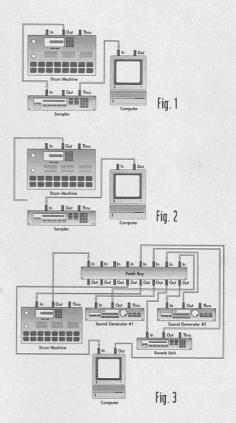
First, it's a good idea to tag the cables at both ends. I use red cloth tape at the sending end, and green tape at the receiving end. Let's say that your RX5 drum machine is using two MIDI cables and two audio cables. Mark each piece of tape with a permanent marker: RX5-In, RX5-Out, RX5-L, RX5-R, in this case. Next, make "snakes" out of your cables by using little plastic cable-ties that can be bought from any electrical parts store. Attach a cable-tie to all four cables about a foot back from the machine, taking care not to create stress on any of the plugs. Then, attach cable-ties about every foot or so, until you reach the cable's point of destination. When I need to set up my rig at a different location, it's an easy process to unroll the snake, and plug all the red tags into the drum machine and all the green tags into their proper des-

tinations. Tagging all my cables for all my instruments took only a few minutes, but it has saved me numerous hours of confusion.

Here's another suggestion for cables: Try to use cables that are only as long as you need. While you may want 20 feet of cable (or even more) between your electronic pads and their brain, you don't need a 20-footer to connect units housed inside the same rack. I've seen many electronic percussion systems that use a ten-foot cable to make a patch of ten inches.

Additional Goodies. One of the biggest enemies of your electronic percussion system is dust and dirt.

Investing in dust covers for all your instruments is a good idea. If your finances don't allow for custom-fitting covers with fancy logos, you can use an old sheet, a plastic



drop cloth (the type used by painters), or even a beach towel. Fancy or plain, the idea is to keep dust from settling on top of your instruments.

Insurance is an often-overlooked addition to your electronic system. Making backup copies of all your important data is an inexpensive insurance policy against potential catastrophes. It's a good idea to keep these backup disks in another room, or even at another location. This might be termed "software" insurance.

This concludes my 5-part series on the basics of electronics. Next month—sampling. **D**