

# SYNTH HACKS #03 IN YOUR CASE!

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Ever since we worked at *Keyboard* 25 years ago, synth guru Mark Vail and I have met as often as possible to play and record electronic music. But we're such gear fiends that setup was taking far too long. Then I suggested meeting in a coffee shop with only battery-powered synths that would fit in our pockets. The focus and immediacy made it one of our best jams ever, so we keep refining the concept. For a recent performance at Sacramento Audio Waffle, we built briefcase systems filled with esoteric synths and effects, yet still powered by batteries. While other performers took 20 minutes to set up and tear down, we just opened our lids, plugged into the P.A., and were ready to play.

We've learned a lot of tricks about powering, layout, and cabling along the way. Mark uses a pile of USB batteries with a Koma Strom to boost the voltage to the 9–12V his gear uses. I use a MyVolts Ripcord to convert USB power to 9V for my Korg Kaossilator Pro [a great jam-



Fig. 2

Mark Vail dials in a sound on his Korg Volca Modular. Other gear includes an IK Multimedia Uno; Korg Mini-KP and Mini Kaoss Pad 2s; Bastl MicroGranny 2, SoftPop, and Thyme; and a 1010 Music Blackbox. A Koma Strom and bevy of USB battery packs provide power. He mixes through a Rolls MX41b. A RocketLife LightBox drives the lights.

ming instrument]. A Joyo JP-05 9V battery powers my effects pedals; my other gear runs directly from internal batteries or USB. I noticed that USB batteries with dual outputs induced a nasty whine, so I use a separate USB battery for each synth.

Fitting everything into a briefcase is a fascinating challenge. For my metal briefcases, I used foam and cardboard dividers to pressure-fit the gear like puzzle pieces [see Fig. 1]. Mark chose a waterproof Pelican case and Velcro, which let him mount even more synths in the lid [Fig. 2]. I paid special attention to flow, rotating instru-



Fig. 1

The Mode Machines Cerebel USB MIDI hub at the front left of my BlipCase connects the CME XKey to the MicroMonsta. The XKey is slim enough to fit inside the case's lid. A Joyo JP-05 battery powers the Cerebel, MicroMonsta, and Boss Tera Echo, mounted sideways for easy access. A Rolls MX42 mixes everything to the Korg Mini Kaoss Pad 2, which records to its microSD card.

ments and effects to put their controls at the edge of the case for easy access. Right-angle adapters keep cable runs as short as possible.

To save space and cost, we used passive Rolls mixers — four stereo channels in the size of a business card! However, I discovered that adjusting one fader changed the levels of all instruments, so I'm switching to a MyVolts MickXer. This five-input passive mixer includes transformers to remove noise, and I found it maintains the volume balance too. On my bigger briefcase system [Fig. 3], I could daisy-chain all audio through aux inputs, so I didn't need a mixer.

That's right — Mark and I had so much fun building our briefcase performance systems that we've each made several more. Whether you go plush with a Pelican or pragmatic with a thrift-store suitcase, a mobile rig is a beautiful thing.



Fig. 3

My big case features a Korg Kaossilator Pro, DigiTech Obscura delay, Neunaber Immerse reverb, SwineWAV sample player [my invention], and MIDIPlus MiniEngine GM module. A Joyo JP-05 battery powers the pedals and case lighting; USB batteries and a MyVolts Ripcord run the rest.