DIALED IN

SOUND SOLUTIONS FOR HYBRID KITS

Roland TM–2 Trigger Module

By Norman Weinberg

Today's electronic percussion catch–phrase du jour is "hybrid." As you might have already ascertained, a hybrid kit is one that combines acoustic and electronic instruments. A blend of these two worlds is often the perfect solution for playing many current musical styles. If you're interested in build–ing a hybrid kit, Roland's new TM–2 trigger module could be the answer to your prayers. The TM–2 is small enough to attach to your existing hardware such as a cymbal or hi–hat stand, and offers just the right balance of simplicity and functionality.

DETAILS

MODEL Roland TM–2

INPUTS 2 Stereo TRS (can be used as 4 mono with adapter cables)

OUTPUTS Main Left, Main Right, Headphone (1/8" jack)

MIDI MIDI–Out, MIDI–In

AUDIO EFFECTS 11

INTERNAL SOUNDS 162

EXTERNAL SOUNDS SD or SDHD Card

MAX SD CARD 32MB

MAX EXTERNAL SAMPLES 300 samples x 300 folders = 90,000

SAMPLE FORMAT .Wav, 44.1k sample rate, 16–bit, stereo or mono

POWER AC Adaptor or 4–AA Batteries

MSRP $239

STREET PRICE $199

CONTACT

Roland
rolandus.com

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INS AND OUTS

The TM-2 offers trigger inputs for two stereo pads or acoustic triggers (or four single pads or acoustic triggers when used with a Y-insert cable), two output jacks along with a dedicated headphone jack, and both MIDI-In and MIDI-Out. Okay, this may not be the most

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sophisticated collection of "goes-intos" and "goes-out-ofs," but for a great many amateur and professional players, this is often all you'd need to create that perfect hybrid kit.

SOUNDS

For such a small unit (weighing in at less than a pound), it packs a pretty heavy punch in the sound department. In addition to serving as a trigger interface, it has internal sounds for both drums, cymbals, and percussion, along with a number of what Roland calls "elements," which are designed to add additional sonic components to your acoustic drum sounds. By mixing your acoustic drum's microphones with the elements provided by the TM-2, you can create fatter kicks, crispier snares, or toms with more bite and attack. All in all, the TM-2 offers up 110 different sounds with 52 unique elements for a total of 162 sonic colors.

Overall, the quality of the sounds is very good. The samples are clean and seem more contemporary than some of those found in other electronic kits. Many of the elements sounded good on their own without the need to marry them to acoustic drum sounds — especially for technology-based musical styles. My favorite internal samples are the kick and snare drums, although I wasn't a big fan of the internal cymbal sounds — however, you may find that they're perfect for your needs.

Each trigger input has a number of editing functions to control the selected sound including the level, dynamics (linear, three "loud" choices, and maximum volume), pitch, stereo position, loop on/off, mono/poly, offset (to adjust the sample's start time), mute group (two are available), MIDI note number, and the effect send off/on.

This little brain doesn't come up short in the effects department either. There are 11 effects, including delay, flanger, tape echo, phaser, chorus, an equalizer, compressor, wah, ring modulator, distortion, and reverb. Each effect has a number of parameters that can be adjusted to your liking. For example, the reverb offers five different reverb types, and

settings for reverb time, predelay, lo-cut filter, hi-cut filter, wet/dry mix, and overall level.

Effects are applied to all the sounds in the kit so, for example, you can't use a reverb on just the snare while using a delay on only the toms. For the price point, these effects sound just fine. If you're looking for something even more sophisticated, you could add effects post-TM-2. But honestly, for all but the most critical listeners, these will certainly do the job. For specialized audio effects that might not be available on the TM-2, keep reading. We discovered a pretty impressive workaround.

THE BIG BREAKTHROUGH

If this were all the TM-2 could offer, it would still be pretty cool for the price. But what separates this unit from the competition is its ability to play stereo sounds off a flash memory card in real time. To make things even juicier, the card can be up to 32GB. This means you can load your own samples onto an SD/SDHD card and have the TM-2 play your sounds. These can be one-shots, loops, or even complete songs. With an average stereo .wav file coming in at about 10.5MB per minute, you're looking at the ability to have over 40 full CDs worth of samples and audio available for triggering. Each card can accommodate up to 300 different folders and each folder can hold up to 300 audio files. Considering that you can grab a 32GB card online for less than a double sawbuck, this offers all the audio flexibility you could possibly imagine.

It's really very easy to load your own sounds into the TM-2. Here's the process: Format the card on the TM-2, eject the card, put the card into your computer, copy .wav files to the card (adding folders if desired), eject the card from the computer, and put it back into the TM-2. Done! Keep in mind that the TM-2 won't do the sampling for you or create the .wav files from scratch.

Once the card is inserted back into the TM-2, accessing sounds from the card is exactly the same as accessing them from the internal memory. Then when you've assigned your own sounds to a pad or trigger, they can be edited in the exact same way as the internal sounds: pitch, looping, or even audio effects. For specialized audio effects that might not be available on the TM-2, you can mangle the sound however you want inside your computer software, and then blow the end result to the SD card and skip the onboard effects.

TRIGGERING

I tried the TM-2 with mono and stereo drum pads, cymbal pads, bar pads, and acoustic triggers. All the necessary adjustments are available to mold the pads/triggers to best suit your playing style and your application. While the manual suggests using Roland pads (of course), I had no trouble getting pads from various manufacturers to interface nicely with the unit.

Triggering controls include the input type, the trigger type, sensitivity, threshold, velocity curve, re-trigger cancellation, rim gain, head/rim adjustment, and crosstalk cancellation. I found the most important task is to get the trigger type right. A little trial and error will get the job done correctly. During editing, a small meter shows up on the LCD display so you can better see just how adjustments are affecting the pad's/trigger's signal.

The trigger parameters seemed to work just fine, and once dialed in, they felt comfortable and the response was quick. The TM-2 tracked my playing (loud, soft, slow, or fast) as well or better than some much more expensive brains I've used in the past. There was no discernable delay, even with the biggest audio files (I tried one that was 35 minutes long!).

SO WHAT, YOU ASK?

There are a number of ways that the TM-2 could make a substantial contribution to your rig. By adding the SD card, the module's capabilities go beyond the basic promise of offering electronic sounds to your acoustic kit or giving miked drums more character. For example, some very high-end electronic kits don't let you load your own samples, but you can MIDI your current electronic kit into a TM-2 to easily fire your own custom samples and loops. You could MIDI two or more of these units together to act as a brain for a complete electronic kit. Since the TM-2 can send and respond to program-change messages, changing the kit on one brain can automatically change the kits on the others. This would have the potential of offering 64GB of sample playback.

Depending on your gig, you could use the TM-2 instead a computer to play backing tracks for a live show. If you enjoy transcribing, you can load a .wav file into the TM-2, drop the pitch (which will slow down the file), and listen to audio in "slow motion." You can do the same thing to create a play-along for practicing a complicated song. I found that dropping the pitch to even the slowest level created a pretty darn good sounding file. There were no noticeable glitches, skips, or aliasing (better than some software I've used).

You could create .wav files of a metronome at any tempo you want, set the pan to 100 percent left, and send the other sounds

panned hard right out to the mixer. While this will result in a monophonic drum feed, it means that you can play to a click all night long and the audience will never know. One fun and creative use of the TM-2 would be to put together a cool percussion pattern and set the output to "mono" so the pattern repeats from the beginning each time the pad is struck. Now you can experiment with complex rhythmic patterns and variations just by changing the rhythm and tempo of your strokes.

MORE NICE FEATURES

The TM-2 can be powered by the included AC wall wart or by four AA batteries. In fact, having battery power is pretty cool. Depending on the battery type, you should be able to get up to five hours out of a set — long enough for most gigs.

When formatting an SD card, you have to confirm the operation twice, hitting the "+" button for the first confirmation, and the "2" button for the second. This failsafe requirement ensures you won't erase your entire library by mistake.

Even though the TM-2 holds 99 kits in its internal memory, you can perform a backup and save everything off to your SD card. A full backup saves all kits, settings, and pad/trigger settings. Saving and loading saved files back into the TM-2 is quick and simple. In essence, this gives you an unlimited number of kits.

Although I couldn't find any mention of this in the manual, you can use the "–" and "+" buttons to scroll through values much more quickly with a little trick. For example, if you're trying to change the sample offset, pressing the "+" button will scroll upwards by 0.1 milliseconds. As you scroll and hold down the "+," tapping the "–" button will cause the value to jump by 1.0 millisecond, and holding down the "–" button will cause the value to scroll very quickly. This is a huge time saver when you're trying to move through large values or tons of sounds on your SD card. D!

SPEED DIAL

PRACTICAL PAD

How often can we say within just a few pages that the drum industry has fully embraced acoustic/electronic hybrid drum sets? As many times as it takes, as companies continue jumping into the game with affordable electronic percussion kit add-ons, such as the new KTMP1 Multipad sound module from KAT Percussion. Each of its 50 built-in drum, dance, and percussion sounds is fully adjustable and can be tuned, panned, or assigned to one of four highly responsive pads. KAT also packs reverb, sensitivity, and level into the compact chassis for further fine-tuning, and includes USB 2.0, MIDI, and 0.25" line outs, as well as kick trigger and hi-hat controller inputs for even more performance options. But here's where it gets crazy: MSRP? Just $199.95.
KAT Percussion
katpercussion.com
877-526-2668

CATCHALL MIKE

The MiC 96k by Apogee Electronics is a professional digital microphone for iPad, iPhone, and Mac designed to record drums, vocals, and other acoustic instruments. An upgrade of the original MiC (which has become a top choice to achieve a big-studio sound), the new mike has higher fidelity (up to 24-bit/96kHz) and includes a Lighting cable, a microphone stand adapter, a 30-pin and a USB cable, and a tabletop tripod stand. At only $229 the MiC 96k (along with an iPad and a recording app) is the perfect component for the songwriting or gigging drummer.
Apogee Electronics
apogeedigital.com
310-584-9394

DRUM ROYALTY

Engineered and performed by Timmy Rickard, Royal Drops involves 15 tracks of simple drum grooves and fills based on the Royal Studio recordings (soul music produced in Memphis during the '70s). More specifically, Royal Drops borrows from the unmistakable drum styles of Al Jackson Jr. and Howard Grimes. To achieve the right vibe, Rickard recorded in a small dry room with only four mikes and played with an especially light touch. For even more authenticity he used a vintage Gretsch kit, a low-pitched snare muted by a wallet, tea towels on the toms, and a chain on the ride to emulate the iconic sound.
Drum Drops
drumdrops.com