Edition 4 October 2010

# digital prumer

The global electronic drumming e-zine

**HYBRID HYPE** 

**Electrified acoustics** 

**NOTATION** 

Notable programmes

TWEAKING GUIDE

Virtual tuning for real results

# Pedal Power Double kicks reviewed



TRENDS: Venues ban acoustics



# **Performing to Recording**

# Sweetwater Has the Drum Gear You Need, and a Whole Lot More!

As one of the first electronic drum dealers in the industry, we're committed to staying on top of the latest music technology. Whether you're looking for a great kit to perform with, a set of high-quality triggers, or a fresh new sample library to bolster your studio sound, you'll find it here at Sweetwater. Just check us out online or give your drum-savvy Sales Engineer a call. We're here to talk gear, turn you onto new technology, and help make sure you always sound your best.



Hardware to software, we've got everything you need to rehearse, perform, and record!



(800) 222-4700 • www.sweetwater.com



# The global electronic drumming e-zine

**Edition 4** 

October 2010



# GEAR

# Hybrids heat up

Brazilian drum maker RMV is the latest of the acoustic drum companies to embrace electronics, with the launch of its first edrum offering, the full-size Eledrum.



Johnny Rabb discovers that he has a soft spot for 'vintage' instruments thanks to the discovery of a Tama Techstar.

# Silence is golden

The Jam Hub allows musicians to share the silent practice approach - and still hear their band colleagues.

# **Pedal power**

We've auditioned amps and speakers, listened to headphones and put racks through their paces. This time, the feet have it as **digitalDrummer** tries to track down the best double pedals.



# Schack attack

Michael Schack is a man on a mission - to promote e-drums at every opportunity. **digitalDrummer** caught up with the Roland demonstrator during a recent visit Down Under.

# Rocken'trepreneur

Queensryche drummer Scott Rockenfield is known as much for his merchandise as for his blasting chops and elaborate kits - and he's an e-drum fan from way back.

# PERFORMANCE

# **Electronics add dimension**

New columnist Janelle Burdell is passionate about electronic percussion which has enriched her playing and inspired her to explore new and inventive sounds.

# Getting ready

Preparation is everything, and Jon Levitt offers some tips and strategies to get ready to gig out - without the stress and angst.

# DIY

# Zones and edge guards

Our DIY experts answer reader questions about the various types of trigger circuit and ways of attaching edge guards to DIY cymbals. Send in your question and win a DIY prize.









# digital Drummer

is published by **DigitalDrummer** 

ABN: 61 833 620 984 P O Box 389 Kenmore Q 4069 AUSTRALIA Tel: 61 411 238 456

editor@digitaldrummermag.com www.digitaldrummermag.com

### **Editor & Publisher**

Allan Leibowitz

Sub-Editor

Solana da Silva

### **Contributors**

Simon Ayton

Janelle Burdell

**Grant Collins** 

Philippe Decuyper

Jon Levitt

**Shiv Naimpally** 

Johnny Rabb

Michael Render

Derek Senestraro

**Cover Photo** 

Jeremy Hoyle

**Design and layout** 

'talking business'

**Digital distribution** 

PR=SSMART

Copyright: All content is the property of digitalDrummer and should not be reproduced without the prior consent of the publisher. In this age of electronic publishing, it's obviously tempting to "borrow" other people's work, and we are happy to share our information – but ask that you work with us if you need anything from this edition. Any reproduction must be fully acknowledged and online dissemination should include a link back to our website.

This is the last edition of **digitalDrummer** for 2010 and it's just incredible how quickly the year has flown by. There's not much time to celebrate as we are already working on the January 2011 edition, with the aim of continuing to grow each magazine.

We've packed a lot into this month's magazine – especially a lot of personality, with two profiles and a new celeb columnist. The profiled artists are the energetic and innovative Michael Schack and the entrepreneurial Scott Rockenfield whose RockenWraps business is almost as well-known as his day-job employer, Queensryche. And another performer who shares her insights – yes, an e-drum woman – is the colourful Janelle Burdell, best known, perhaps, for her role in D'CüCKOO.

On the gear front, there's heaps of interesting stuff, from the rise of hybrid kits to a look at Roland's HPD-10 Handsonic. We also roadtest the JamHub, a silent practice alternative ideal for e-drummers and their bands.

Our special feature this time is double pedals, and we've assembled user reviews of the most popular models. I'm sure you'll identify with the write-ups, especially since they were done by drummers rather than writers.

The magazine also includes our regular DIY coverage, Grant Collins' lesson and a guide to module tweaking, and I'm sure you'll agree that even after a year, we're not running out of material.

As we head to the festive season, it's a good time to thank everyone who has helped make **digitalDrummer** a reality. We appreciate the contributors, reviewers, readers who have shown off their monster kits and, of course, the advertisers who have enabled us to continue providing a free magazine to enthusiasts around the world. And thank you to all the readers, especially those who spread the word through forums and their peer networks.

I hope that we have made a contribution to the e-drum community and shared some knowledge and enthusiasm. But, I'd like to see if we can share just a bit more light before the year is over.

One of our readers, 28-year-old Gerad Deuvall from Seagoville, Texas, has a dream – to perform at Winter NAMM in Anaheim next year.

What makes Gerad's dream special is that he's legally blind and 70% deaf. Gerad says he would like to perform for the industry at NAMM to show what can be achieved when you set your mind to it.

It's not often we get a chance to make someone's dream come true – especially a dream to inspire others. So, if anyone can do anything to help get Gerad a gig at NAMM, please contact me and I'll hook you up.

And, with that request, it's on with the show. One, two, three, four ...

Allan Leibowitz

editor@digitaldrummermag.com

# REAL

Isn't it time for electronic drums to look like real drums instead of a collection of practice pads?

Isn't it time for electronic drums to feel like real drums instead of like playing a tennis racquet?

Isn't it time for electronic drums to sound like real drums and offer USB connectivity

to add exciting lush kits from the world's most renowned virtual sound libraries?

It's time for EPro Live.





EPro Live features real drums, real drum hardware, 100 great sounding kits, plus 100 user defined storage locations, or load specially designed kits from one of our sound partners.





















BRAZILIAN DRUM MAKER **RMV** is the latest of the acoustic drum companies to embrace electronics. Following on from Pearl's ePro Live, which was revealed in the January edition of **digitalDrummer**, RMV has released a sneak peak of its first e-drum offering, the Eledrum.

A full-size hybrid kit, the system includes adjustable internal triggers. From a preview video on the company website, the triggers appear to be singlezone. They are shown with RMV mesh heads and with mylar heads, and are also demonstrated in some dual-triggering – an external microphone is mixed with triggered sounds through a module.

The kit, shown in six-piece configuration, is supplied without a module, with a spokesman saying this arrangement allows buyers to choose from the extensive range of modules already on the market.

There's no mention of a launch date, nor pricing.

American maker **DDrum**, meanwhile, is shipping its Hybrid kit in two configurations – a five-piece and a six-piece.

Both versions feature 20" bass drums, with the fivepiece configuration consisting of 12"x7" and 10"x 7" rack toms, a 16"x12" floor tom and a 6"x13" snare drum. The six-piece gets an extra floor tom. f two or mo, a parus ombination Particular our more different unuss; mbination or goal.H Hybrid: 11. lyb1 ieving a parti or more differ ing Hybrid: n. rhe hieving a parti artic or more different iffer Hybrid: 11. artic hieving a part or more differ iffer drum-tec) Hybrid: 11. artiq hieving a part iffer mbi Other players ri (left to right, from top): arti part DDrum, ddt, iffer Space € Muffins, **Z**O or g Drum-tec, Diamond and Jobeky.

The DDrum hybrid comes standard with Remo heads, although the company says it can do mesh heads if customers prefer.

The American hybrids have internal single-zone triggers with shell-mounted XLR jacks.

The six-piece has a recommended retail price of around \$1,300, but sells for around \$850, while the smaller kit sells for around \$800, with a \$1,200 RRP.

Of course, hybrids are nothing new, with Boom Theory supplying its **Space Muffins** for many years. The company ceased retail trade in 2005, and now specialises in custom and pro work, retro-fitting triggers into name-brand kits.

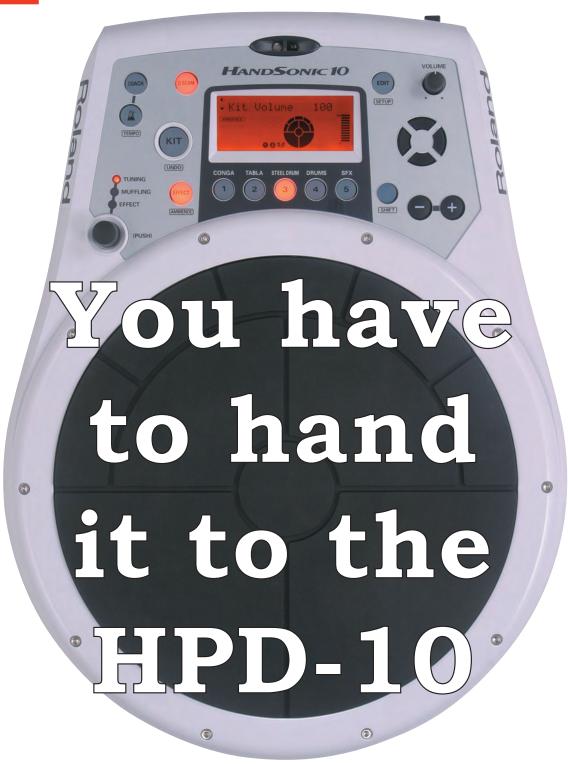
German triggermaker **ddt** has had its e-acoustic kit on the market for some time. Available in five-piece configuration, the kits feature dual-triggers all around (except the bass). At €1,099 (US\$1,400), the

ddt kits are not cheap, however. Neither are they truly hybrid, in the sense that they can't be played acoustically.

**Drum-tec** has also entered the hybrid market with its Diablo and Pro kits. The Diablo features 10"x5" and 12"x5" tom and snare shells and an 18"x12" bass, while the Pro kit has a 14" snare, 10" and 12" mounted toms and a 14"x12" floor tom, together with a 20"x16" bass drum. The Diablo is priced around the same level as the ddt kit, but the Pro kits are at the top end of the price scale, starting at €2,500 (US\$3,200).

And then, of course, there are British e-drum builders **Jobeky** and **Diamond Electronic Drums**, featured in the Best of British article in the last edition. Both of these companies build hybrid-style kits although they're not designed for acoustic use.





**Shiv Naimpally**, a tabla player who also has a MIDI-based studio, is always looking for ways to expand the sounds he can generate, preferably without having to learn a new instrument. That's where the Handsonic comes in...



LIKE MANY, I started triggering drum sounds using pads on a drum machine or using a MIDI keyboard. However, this was less than satisfactory. For many years, I used a Roland Pad 5, a five-pad MIDI controller with adjustable pad sensitivity. While the Pad 5 is a useful controller, it had numerous limitations, including only five pads and a lack of memory to store user-defined MIDI note assignments for each pad.

In 2001, I came across the Roland Handsonic HPD-15. It was designed specifically for hand percussionists and had lots of pads and built-in sounds. However, when I tried one out at a local music store, I was disappointed. The HPD-15 sounds were good but not great, and playability was lacking. Roland must have got similar comments from other percussionists because it has addressed both these issues in the later HPD-10.

## Overview

The HPD-10 is a well designed and well thought-out unit. The unit is approximately 18" by 12". There are two large pads in the front, each a quarter of a circle. There are two slightly smaller pads to round out the circle. In the middle of the circle made by the main four pads is a smaller pad. There are five rectangular pads arranged in a semicircle behind the two smaller pads, for a total of 10 pads. There is also an optical D Beam controller that can be used to trigger sounds and do other cool things which I'll discuss later. Each pad responds to velocity and pressure (aftertouch).

The HPD-10 has around 400 high-quality samples built in. Each pad and the D Beam can be assigned to trigger a particular sound. The starting pitch of each sound can be altered, up or down, and the sensitivity to pressure, D Beam, etc. can also be adjusted. The HPD-10 provides 20 effects, such as chorus, flange, reverb, distortion, delay, etc. Depending on which effect is selected, different parameters can be adjusted. In addition, there is a global ambience (basically a reverb) effect that can be added to all the sounds in addition to the effects. Once sounds have been assigned to each pad and the parameters tweaked, the resulting set-up can be stored as a user programmed kit (patch).

## **Features**

The front two pads each have two zones; a first zone near the edge of the pad and a second zone in the middle of the pad. This feature allows for two different sounds to be triggered depending on which zone is struck. For example, the conga kit provides a sharp crack when the edge zone is struck and a more rounded sound when the middle zone is struck, just like a real conga. Only a few of the 400 sounds in the HPD-10 offer this feature, but the



sounds that can be used with a dual-zone pad have been chosen specifically to emulate that aspect of the instrument. For example, the tabla kit can be altered so that striking the edge zone results in a "na" sound while striking the middle zone results in a "thin" sound, just like on a real tabla.

Another cool feature is that pressure from one pad can be used to control a parameter, such as pitch, of the sound assigned to another pad. For example, in the tabla kit, the middle pad can be struck with the tips of the fingers of the left hand to trigger a bayan (bass drum of a tabla pair) sound, while pressure applied with the heel of the left hand on the left front pad may be used to pitch bend the bayan sound, just as on a real bayan. The D Beam controller can also be used this way. For example, a user can move their hand from 12 inches above the D Beam controller to two inches above it in order to control a parameter, such as pitch, of another sound. Thus, the pitch of a talking drum sample can be varied by waving your hand above the D Beam controller. Very cool!

While exploring the built-in kits, I found that the programming of the HPD-10 to be top notch, right out of the box. It's clear that the programming has been done by someone who knew how to play the different percussion instruments sampled in the HPD-10. It is refreshing to find a product like this that is usable right out of the box, with no tweaking whatsoever.

Speaking of programming, the HPD-10 is easy to programme, enabling users to quickly customise and tweak kits. The large, multi-line, backlit LCD displays quite a bit of information, such as the kit name, real time display of which pad is being struck, etc. The menus are relatively straight-forward to navigate, although most users will likely have to consult the manual, at least initially, to get the hang of the menus. Fortunately, the manual is very well written and, unlike some, does not read like a word-for-word translation from a foreign language. It is very easy to spend hours tweaking the sounds and programming new kits. For example, I was able to



detune the tabla sounds to create a mridangam (a barrel-shaped hand drum from South India) kit. I was also able to use the pandeiro sounds to create a kanjira (small Indian frame drum) kit and use the udu sounds to create a ghatam (clay pot) kit.

The HPD-10 has a full complement of inputs and outputs, including stereo output jacks, stereo headphone jack, mix aux input

(to allow for practising with music), MIDI in and out, and a dual trigger/foot switch input. The latter can be used to add bass drum and high-hat pedals to create a compact drum kit.

Is the HPD-10 a replacement for any of the percussion instruments whose samples are in the HPD-10? Of course not! Despite the great samples, two-zone pads, and numerous modulation routings, any experienced percussionist can bring out more nuances from a real instrument than from the HPD-10's kits. However, the HPD-10 is an excellent way for hand percussionists and drummers to expand their sonic palette to create and control sounds that they normally would be able to create using the corresponding percussion instrument. Moreover, they can trigger the new sounds using existing skills and techniques, instead of having to learn new ones.

The only thing the HPD-10 lacks is the ability to use user-supplied samples, as you can with the Yamaha DTX-12 multipad and Roland SPD-S. I'd like to see an "HPD-10S" sampling version that can accept a memory card containing audio files that can be assigned to the pads and tweaked just like the built-in sounds of the HPD-10. This feature would allow users to further customise the instrument by triggering their own, signature sounds. The only way to do this currently is by using the HPD-10 as a MIDI controller to trigger sounds in a sampler or computer.



## The bottom line

I highly recommend the HPD-10 as a way for hand percussionists to add new sounds to their kits. It is compact and easily transported.

The HPD-10 expands on and improves many of the features of the HPD-15 at a price that is a third less than the HPD-15 (\$650 vs \$1,000). It has usable sounds right out of the box and the sounds and kits can be

easily modified to create custom sounds and custom kits.

# **Specifications**

Pad: 10 inches, 10 sections, Pressure-Sensitive

Instruments: 400
Percussion Kits: 64

Effects: Ambience (5 types), Multi-Effects (20

types)

Metronome: 70 patterns

**Tempo**: 40-200bpm

Coach Mode: quiet count, rhythm check, time

check, pad follow, auto up/down

Controls: D Beam, Modify knob, Volume knob

Display: Icon-driven backlit LCD

**Connectors:** Output Jacks (L/MONO, R), Phones Jack, Mix In Jack, Trigger Input/Foot Switch Jack (Dual), MIDI Connectors (IN, OUT)





Shiv Naimpally, a disciple of Padmabhushan Nikhil Ghosh, has accompanied many leading Indian musicians and performed with various jazz, Celtic and fusion bands.





# Play Anywhere, Anytime, with exceptional Clarity and Control



Unless you own a private Caribbean island or a large estate, every musician has the same problem: rehearsing is too loud for most locations, and studio space is limited and expensive.

Our line of patented silent rehearsal studios will allow you to play with studio-like acoustic quality in locations you've never imagined playing. Now your band can jam anywhere, anytime, quietly enough for your bedroom, apartment, dorm room, condo and in places we have not even imagined.

"JamHubs will facilitate you playing better. That just might be the difference between having bandmates and cellmates!"

> David C. Lovelace, KEYBOARD magazine

Play as much as **YOU** want to play. Parents won't stop you, neighbors won't call and cops won't shut you down. JamHubs® are portable, about the size of a laptop, and affordable **starting at just \$299**.\* With a JamHub you can play more, hear more and you will get better faster. [\* estimated "street price" in USD]

Learn more today at www.JamHub.com. Watch videos of JamHubs with acoustic drums & electric drums, read owner testimonials and try the online demonstration. Get a JamHub and start playing more this weekend.













Silent Rehearsals
Play Anywhere,
Anytime with amazing
clarity and no volume
wars.

# **School Music Programs**

Create rock music hubs in your school's lab without disturbing the peace or your budget.

# **House of Worship**

An economical in-ear mixer option.

# Jams Anytime

Let the kids play music all day long without upsetting the neighbors (or the cops).

### Recordin

Record your band in CD quality -- easily.



# Clubs ban acoustics



Some entertainment venues are forcing bands to use electronic kits in a bid to keep noise levels down and comply with city ordinances. **Allan Leibowitz's** home town appears to be a trend-setter in this thrust.

IN THE AUSTRALIAN city of Brisbane, the proliferation of live music venues, many in or near residential areas, has been accompanied by strict enforcement of noise restrictions, prompting venue managers to insist on volume control for bands.

Local drummer Rob Duggan notes that the rowdy and popular Paddo Tavern in the shadow of the city's iconic football stadium won't book bands with acoustic drums. "That's the whole reason I got my ekit back together," says the drummer who had until recently used an acoustic kit for gigs.

The near-city Chalk Hotel, another popular live music venue, has also pulled the plug on acoustics, and even the weekly open mic jam nights now feature e-drums.

Local booking agent and musician Bob McMahon has not come across any bans on acoustic drums, but observes that venues "are insisting on the bands playing at a low volume".

"I ask my bands to use electronic drum kits to control the sound more easily," he says. "If



The days of acoustic kits in small venues may be numbered.

PHOTO: DREAMSTIME

drummers use acoustic kits, I ask them to use hotrods or play more delicately.

"The fact of the matter is that bands need to be quieter on stage so that the FOH sound can be of better quality and easier to keep at lower levels," McMahon notes. "Acoustic drum kits with heavy hitters impede that process."

The bottom line for McMahon is that "if I have to decide between giving two bands a gig, the one with the electronic drum kit is more appealing".

Roland Australia's V-drums specialist and digitalDrummer columnist Simon Ayton notes that several working drummers in Brisbane are being asked not to bring acoustic drums to gigs and some even say they have seen it in a gig contract and that there are signs on the stage that say 'no acoustic drums!'.

"It seems the warmer weather means many more open-air venues putting restrictions on sound

levels," he says. Ayton points out that Melbourne is very much still "a live acoustic drums city" with venues built and fitted out specifically for live acoustic and amplified music but he says that is changing and "all cities are following Brisbane to some degree".

The trend seems to be spreading to the Gold Coast resort strip, where a number of venues have gone all-electronic.

It has not yet reached neighbouring New Zealand, according to Mount Maunganui drummer Simon Ballantyne. "Most venue owners I have met have had similar opinions about the drums, but have not yet enforced an e-kit-only policy," he says.

But it's probably only a matter of time, with many of New Zealand's churches paving the way through their choice of e-drums. "I know of many churches in New Zealand that have e-kits because of acoustic issues," says Ballantine, himself an e-kit owner.

Only <u>one company</u> has the most advanced and powerful drum and percussion controllers.

And we've been doing it since 1985.

malletKAT drumKAT



trapKAT panKAT

www.Alte#nateMode.com

**KAT Percussion Controllers and Accessories** 



Ameristar In Kansas City has a TD-20 kit in its Depot #9 lounge (above) and Brisbane's Paddo Tavern (right).

Ayton sees Roland's TD-20 and TD-12 kits as ideal for gigging, suiting both drummers and engineers alike "as they are quick to set up ... to make it easier for the live sound engineer to control individual kit sounds and levels from the front of house mix position".

Drummers are also using RT series triggers coupled with V-drums modules like the TD-9 on their acoustic kits to help reinforce their live kit sound, he says.

The move away from acoustics has not reached Europe, with a leading booking agent noting that venues have largely been designed for loud music, and the need for volume control is limited.

Meanwhile, in the United States, it seems that casinos, many of which have multiple entertainment venues under the same roof, have long favoured electronic kits. Many are equipped with high-end kits.

As a drummer on the vdrums forum explains, "our band performs regularly in the casinos in and around Reno, Nevada. More and more e-kits are in use all the time in Reno.

"Most of the bigger casinos have more than one venue. The venue that is nearest what they call the 'pit' (gaming tables instead of machines) is usually called the 'cabaret' and requires lower, more controlled volume so the dealers and gamblers can communicate," he says.

He cites two casinos in Reno, the Peppermill and the Atlantis, both of which have house Roland TD-20 kits.

Celeste Burks, public relations manager for Ameristar Casino Hotel in Kansas City, says the venue switched to electronic drums to reduce volume in two of its lounge venues, Casino Cabaret and Depot #9. E-drums are not a requirement in the main music venue, Star Pavilion.

To ensure that the e-drum requirement does not preclude any bands, Ameristar purchased two TD-20 kits for its venue as part of a band set-up that also includes the sound and lighting systems, stage monitors and microphones.

Burks says the e-drums are effective in "reducing stage volume (sound) and give a more consistent drum sound".

"There are some musicians who do not want to use the electronic drums," she notes. "If bands would like to perform in either the Depot #9 or the Casino Cabaret at Ameristar Casino Hotel Kansas City, they must use them."

Shane Zweygardt of Colorado Drum & Percussion in Fort Collins notes a significant increase in e-drum adoption among customers, but hasn't detected any change in the live music scene, where acoustics still dominate.

"Most clubs and bars here definitely still like to use acoustic drums. We haven't seen that scene really change yet, although I have noticed more drummers are supplementing their acoustic kit with either a Roland SPD-S or MIDI pad for triggering extra sounds," he notes.

"The main venue where we see most e-kits being used is in church. Sound guys love being able to easily control how loud the kit is and the drummer can still play as hard as they want!"



# The world of digital drumming: Poland

IT'S A FAMILIAR story in many markets. A drummer tries his hand at DIY. He realises that other drummers are impressed with his acoustic-look electronic drums. A hobby develops and soon turns into a business.

The protagonist in the Polish version of the story is Leżajsk-based Kazimierz Stepnik who had been "designing and assembling electronic drum sets for approximately two years as a hobby before I finally decided to set up my own manufacturing company and founded the Dig Drum company".

To date, most of Dig Drum's sales have been domestic orders in Poland, but Stepnik says he does get orders from overseas - mostly from Scandinavian countries.

Dig Drum's only marketing is via a website, and Stepnik concedes his products are "hardly known in other regions of the world - for now!"

Reminiscent of DIY acoustic conversions, Dig Drums feature full-size acoustic shells.

"My instruments are thoroughly made and look solid," he says. "Their appearance differentiates them from the standard looks of other brand products and, what is most important, they are relatively inexpensive," he explains.

"I use double-layer muffle heads that I manufacture myself, which make my drum sets a very silent practice and performing tool."

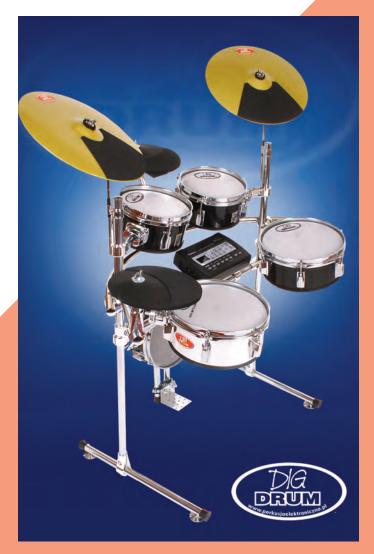
Dig Drums are sold online to keep costs down and at this stage, Stepnik works alone.

One of Dig Drum's biggest fans is Tomek Michura from Katowice in southern Poland, who has posted a number of videos on Youtube, demonstrating not only his own playing ability, but the responsiveness of the Dig Drum triggers.

The player has been adding Dig Drum triggers over the past two years after hearing about them on Polish forums. "One of the reasons for my purchase was the value for money," he tells digitalDrummer. "Another reason was the drums' looks. They look solid and are solid."

Michura says he has tried the local products side by side with his Roland PD-120 and found "no difference in feeling" between the two.

He uses his Dig Drum kit for practising as well as "smaller events such as weddings or company events (which) seem to be a perfect match for Dig Drum".



Stepnik notes that electronic kits are not widely used in Poland. "My kits are mainly purchased by professional recording studios, musicians who need a volume-friendly instrument on commercial occasions such as weddings and also those musicians whose desire for silent practice makes them take advantage of my mesh heads," he says.

He recommends pairing his drums with Roland modules like Michura's TD-8, but adds that the triggers work well with Yamaha and Alesis brains.

The Dig Drum range includes cymbals and racks and two kit configurations are on offer - the DG-1, a nine-piece kit with all-mesh dual-zone drums and four cymbals (selling for €400) and the €700 DG-2 which gets 10" toms and an extra 12" tom. Both come with a 10" kick and all the heads are two-ply.

 If there's an independent drum builder in your country, send their details to

editor@digitaldrummermag.com



# Discovering a blast



In his role as a V-drum artist, **Johnny Rabb** is mostly associated with the latest cutting-edge technology. However, he's discovering that he has a soft spot for "vintage" instruments as well.

I HAVE JUST opened my V-Studio in downtown Evanston, IL and finally get to work on my electronic music production. When I was younger, I did not like early drum machines and sounds that were thought of as cheesy or synthetic. Today, however, my fascination for early drum modules that barely made it onto the scene keeps me searching for the next addition to my studio. I cannot seem to get enough beeps, blips and clap sounds to incorporate into techno, drum 'n' bass and house music projects.

In this edition, I am going to focus on a great old module that I found at a music store in Virginia. While I was on a clinic tour for Roland, I was at a dealer and noticed something unique outside the electronic drum room - a Tama Techstar module. I was sure it was just a display piece and couldn't possibly be in working order, or for sale.

Nonetheless, I asked the question and \$75 later, it was sold, boxed up and shipped to my home.

Once I returned from the clinic tour, I was anxious to hear what this module would sound like. The main selling point for me was the word "CLAP" on one of the trigger channels. I admit that I bought it without even turning it on and trying it. This is generally not the best idea, but I lucked out on this quirky find.

I had an old Roland PD-9 pad given to me by my edrum guru and good buddy Mike Snyder and used this to test the module. The headphones were plugged in and the pad was all connected to the clap trigger. Unfortunately, the first attempt was not that impressive, but once I switched the toggle from 'memory' (pre-set sound) to 'manual', I began to find the sounds I was looking for. I was able to use the

analogue knobs to tune, and add decay, reverb, sensitivity and more to the clap. This is when I knew the module was a very good purchase. I immediately had a new piece of gear for creating original techno grooves and house bass drum patterns. My goal is to get as many musical items that other producers and people do not think of - or have in their collection.

Of course, this is nothing original. I just have always enjoyed looking at photos of home studios and seeing vintage gear collections. I have to admit that I like acoustic drums and vintage snares, but do not have a massive collection. I get

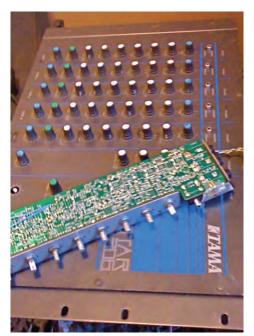
more excited if I see an old TR-909 or other out-ofproduction drum machine or module in a studio or on sale on the web. So, this is only my second addition to my module/drum machine collection. The idea is not to just get popular equipment, but perhaps overlooked technology.

So, what's the Tama Techstar got? The basic specs are: Tom-1, Tom-3, Tom-4, Bass Drum, Clap, Left and Right output, Individual trigger outputs and lots of knobs to twist for great sounds.

# In action

I am using left and right output into my PreSonus Firebox and recording into Ableton LIVE so when I am finished, I can cut, paste and make tiles for retriggering. My Roland TD-20KX kit is acting as the trigger pads. Even though these pads are designed to execute the finesse and accuracy of the modern Roland modules, they still work well for bringing the Techstar to life.

I take a different approach when using this type of module. I rarely play it as a full drum kit. Instead, I will track each part individually, creating my full part. For example, I will put the Ableton click to 130 bpm and record just the bass drum part and manipulate the analogue knobs in real time to capture the magic. The next is the clap part. I use the same approach and can either leave the click on or off since the kick is now the guide. One of the coolest things is the function of these analogue knobs. I now feel like a DJ, mixing and adding effects to my drum part. Lengthening or shortening the clap makes it sound like I am triggering multiple clap sounds. Another simple idea is to change the pitch or add reverb. The biggest thing for me is to make sure I



am not just setting the knobs to one position.

The same approach goes for the bass drum part. I can really make nice bass lines using the pitch and other effect knobs. It is obviously fine to experiment with a certain knob setting you like, but I really get the most out of this module by manipulating it in real-time. Once I have the kick and clap tracks together, I will add another tom track or even some hi-hat from the TD-20 module. Keeping the tracks relatively simple in rhythm really lets the analogue effects shine.

Of course, I wouldn't take this module on a gig unless I was just playing kick and clap in an electronica act. The module is pretty large and it takes up quite a bit of rack space. I think a neat setup would be a Roland KD-7 for the kick and PD-8 for the clap. Then you could have room to mount the module and manipulate it in real-time at a live gig.

I think half the fun is making a performance out of twisting knobs on the module.

Now, not everyone is a fan of minimal house or techno type music. However, I can listen to four-onthe-floor programmed machines with repeating bass and synth lines all day. I encourage anyone who is interested to use iTunes as a wonderful resource for learning more about electronic music. Simply open iTunes, click Radio and select "electronic" under Styles. Once the streaming stations appear, feel free to browse around and listen. You will get a great range of all types of electronic music genres. This is my inspiration for re-mixing songs and honing my production skills. Instead of only programming or sequencing a drum part, I am now using older modules and playing them from my V-drums. There is something about knowing that I really performed the part with my sticks that makes me feel totally satisfied.

While there's such an enormous focus on new gear, I strongly recommend exploring the world of older electronic drums. It is a total blast for me and I hope you take the chance on finding a deal on the net or at a store near you!

I have included an audio MP3 demo recorded with my new "old" gear. Just click the link. Enjoy!







A new device allows musicians to share the silent practice approach - and still hear their band colleagues. **Allan Leibowitz** put the JamHub to the test.

IT'S SUNDAY MORNING in suburbia and four ageing rockers are ripping through Proud Mary. The drums are thrashing, the lead guitar wailing and the bass pumping. You'd expect the neighbours to be up in arms, but they're oblivious to the performance. No, there's no sound-insulated studio. It's all thanks to electronics – in this case, the ingenious JamHub "silent rehearsal studio".

American company BreezSong answered the call from those amateur musicians who don't have a home studio with a range of JamHub devices which do what e-drummers do all the time: play through headphones – but take it to a new collaborative level.

# What's in the box?

digitalDrummer tested The GreenRoom, JamHub's mid-range offering, sitting between the BedRoom and the TourBus. The main differences are the number of band members who can use the hub (five in the case of the BedRoom and seven for the

GreenRoom and TourBus) and recording options, which increase up the range.

The GreenRoom, which is packed in a very large thin box, consists of a mixing hub, a power supply and a SoleMix remote unit.

## How does it work?

The GreenRoom is essentially a collection of personalised mixing desks joined together in a single unit. Each player gets a dedicated section of the hub – colour-coded and numbered; and this model can accommodate up to seven players.

Each personal hub has an instrument input where you plug in your guitar, keyboard, electronic drums and microphone. There's also a headphone socket to listen to the mix. The volume is controlled on the panel, where you can also adjust the input levels and panning. But not only can each player control their own volume, they can also control the volume of all the other players in their own personal mix. So, if you're a bass player and you want to turn up the



# **Specifications:**

- 21 audio channels for up to seven musicians
- 7 XLR and 7 TRS input jacks
- 1 SoleMix remote included, four jacks available
- · Built-in 24-bit stereo effects
- Phantom power (+48V)
- Recording via 1/4" jack (analogue) or digital USB.



# GreenRoom's siblings, the bigger TourBus (left) and the compact BedRoom (right)

drums and turn down the lead guitar, you can adjust each of those – without affecting the levels anyone else hears. And that's the real beauty of the JamHub system. It would be almost impossible using any other solution to gain that level of personal control over the mix you hear without affecting what everyone else hears.

It took us about 20 minutes to figure out what goes where and get plugged in. Then there was another 15 minutes or so while everyone found their own level and then dialled in the other three.

The direct feeds are reproduced with excellent quality and in its default setting, the sound may in fact be too clean. So the JamHub master control includes a range of effects – delays, reverbs, flangers, etc – to recreate different environments and enhance the feel. These effects only apply to the microphone inputs since most electronic instruments already have access to FX (either inbuilt or via external boxes), and again, each player can control the effects levels from their individual "panels".

Within an hour, we were up and playing and even recording, although our original efforts were not quite up to scratch.

Clearly, some instruments are perfect for the JamHub devices. E-drums are ideal and should make up a large part of the JamHub market as we convince our fellow musicians that you can practise using headphones. Electric guitars, electric bass, keyboards and synths already send out electronic signals, so they can be used straight out of the box.

Vocals, clearly, are one chink in the silent armour – and unless you play instrumentals, the solution will never be totally silent. But, from the neighbours' perspective, it's probably better to hear a few guys singing than a band blaring.

One shortcoming we found with the JamHub was the inability to adjust the balance between vocals and instruments from other players. So if you want to hear more of Peter's guitar and less of his vocals, you can't do that as his personal mix is "locked in". The way around this is to use another channel, using just the vocals from a spare player's panel, but that really limits you to four instruments and three vocals or some similar combination. It would be fine for us as only three of us need to sing at any one time – until I extend my performance range.

The same instrument/voice balance issue can be problematic when using the GreenRoom for recording. The GreenRoom works like a classic mixing desk, combining the individual inputs into a single output. The GreenRoom version of the hub has two output options - analogue via a 1/4" jack or digital via USB. The first allows you to record a stereo mix through the line-in on any recording device, while the latter allows for digital recordings direct to computer. And another great feature is that the final output mix can be different from all the individual player mixes – and is not affected by the settings chosen by each musician (with the exception of their instrument/voice balance which, clearly, has to be spot on coming out of their hub because there's no way to alter it elsewhere.

# The verdict

The JamHub GreenRoom is a convenient and powerful practice aid which helps keep the noise down without compromising on performance energy. It is versatile, allowing each player to personalise what they hear without affecting anyone else's sound experience.

The system works best with electric and electronic instruments, although microphones can be used for acoustic guitars, drums and, of course, vocals. And to get the most out of the JamHub, all players will need a decent set of headphones.

Players should love the JamHub – but probably not as much as the neighbours!



digitalDrummer
DISCOUNT!

Enter Coupon Code
"HartDD910"



Cet the
BEST
DEALS
ON Herry
Dynamics
Geor of

or Call Erik 877-222-7457 Toll-Free

# STUDIO MASTER SERIES

**Studio Master 6.4** Key features that set this drum kit apart are four TE3.2 dual trigger 10" mesh Acupad drums for toms and new super solid 10" Acupad kick. 13" Hart Pro TE3.2 dual trigger snare with stand, top-of-the-line bronze Pro Ecymbal II's, and the one of a kind Epedal II upright hi-hat stand. Pair with the module of your choice (sold separately) for a compact kit that delivers high-end performance

MAP Price\*: \$2,449

Other models available:

Studio Master 5.3 MAP Price\*: \$2,139
Studio Master MAP Price\*: \$1,789

HART PROFESSIONAL 13" Snare If you're a digital drummer, you've probably already replaced your drumheads with Hart's Kontrol Screen mesh. Now it's time to upgrade your kit with the Snare Drum that represents the superior performance of Hart's, TE3.2, state-of-the-art trigger system with KS drumheads. Built

like a tank, this 13" Hand Hammered chrome snare is a full positional sensing, dual trigger drum that will stand the test of time and take your drumming to the next

level...... MAP Price\*: \$390





# **EPEDAL II Hi-Hat Stand**

with Hi-Hat Ecymbal II ......\$449







MAP Price\*: \$79







# MAGNUM & MAXXUM

Kontrol Screen "Mesh" Drumheads Magnum and Maxxum Kontrol Screen drumheads are Hart's 5th generation of silent mesh drumhead technology. These heads are simply the quietest, most durable, best feeling, non-acoustic drumheads available. Play the new Maxxum on your snare and bass, Magnums on your toms and replicate the feel of playing a variation of double and single ply mylar. Attention to this kind of detail is how Hart continues to raise the bar for the electronic drumming experience.

Magnum KS Drumhead click here for sizes & prices
Maxxum KS Drumhead click here for sizes & prices

# Limited Edition 20TH ANNIVERSARY

# **Hart Professional Kit**

What better way for Hart to celebrate 20 years of dedication to electronic drumming than by releasing the highest quality custom built electronic drum set ever made. The drums feature a limited edition Glass Glitter finish, machined lugs, 10-ply maple shells and TE3.2 dual triggering system with Hart Kontrol Screen mesh heads. Plus, Pro Ecymbal II's with Epedal II Hi-Hat stand and custom all chrome Hart/Gibralter Road Rack. Every detail of this kit represents the best of the best. This is a Limited Edition kit, so secure yours from RMC today.

MAP Price\*: \$4,549





We've auditioned amps and speakers, listened to headphones and put racks through their paces. This time, the feet have it as digitalDrummer tries to track down the best double pedals.

GEAR-

THE DOUBLE BASS pedal, which enables drummers to use both feet and therefore significantly improve their speed, can be traced back to Australian drummer Don Sleishman whose first products hit the market in 1972.

There was not much interest initially, but almost 40 years on, double kicks are growing in popularity and are widely available. Retailer Sweetwater, for example, lists dozens of models in its range, starting from \$99 and extending all the way to \$650, while the Sleishman pedal with its unusual symmetrical design is still for sale at around \$850.

**digitalDrummer** canvassed double pedal users around the globe for their feedback on some of the more popular models. All users have owned their pedals for more than six months and use them regularly. Here are their findings:

# **Axis AL Longboard**

Reviewer: Bruce Ogletree, USA



What's good: The Axis AL pedals are fast, responsive, quiet, rugged, slop-free, and offer more adjustments than any pedal I know of. The Variable Drive Lever adjusts between power and finesse in just a few seconds (like having a hundred different cams, instantly interchangeable), and the Sonic Hammer beater allows fine stroke adjustment just as quickly. Pedal height, stroke length (beater throw), beater length, distance between beater heads, and, of course, spring tension are all adjustable. The longboards are great for heel-down playing, but work fine for heel-up as well. The direct-drive design favours accuracy over power, making them perfect for rapid playing with triggers, or with adequate amplification. I recommend them for speed metal, jazz, soloing and any situation that calls for speed, accuracy, and finesse. Also, if you like modding your gear, it's easy to do with these pedals, and they're made in the good of US of A!

What's not so good: Axis could stand to improve the out-of-the-box experience, especially for a unit this costly and complex. A multi-tool for pedal adjustment would be nice (mine came with a loose set of hex wrenches), as would a DVD delving into the finer points of pedal adjustment. A few pedal height adjustment tabs would be appreciated as well. I would prefer the beater rod hold-down lugs be more accessible, and I didn't like the slick footboards (others do), so I put some anti-slip material on them. These pedals take some getting used to, but the payoff is worth it!

# **DW9000**

Reviewer: Stuart Milton, Australia



What's good: The DW9000 is not cheap in comparison to other double pedals I have owned. It is deceiving what you can adjust with this double pedal. More surprising are slight adjustments with the 'Infinite Adjustable Cam' and 'Floating Swivel Spring' which enable you to switch from Accelerator to Turbo mode or in between. This allows you to adjust it to feel like the clutch in a racing car or it can become as light as a feather and when you've finished your last song, the beater is still swinging like a pendulum long after your guitarist has placed his ego in his case. Lastly, I love the dual adjustable toe clamp. Man, this is so easy to get to and a great design. Velcro under the pedals ensures your kick and pedals are not moving anywhere!

What's not so good: The downside for me is that this is a fantastic single pedal. I don't feel it works well as a double pedal. For me, it all goes wrong in the linking rod between the pedals. The screws are in the wrong place for me and it's cumbersome to adjust once it's set up. The rod feels cheap and it never delivers that seamless drive of the left pedal to the left beater. There are patterns I cannot play on this pedal but I can on all of the others. Real shame because visually I am in awe whenever I sit behind my kit and look down at these shining beauties.

# Gibraltar 5611-DB

Reviewer: Jeremy Hoyle, Australia

What's good: Being focused on low-end to mid-level gear, this pedal set's design appealed to me greatly. It looks more expensive than it is. On testing in the shop, I was suitably impressed with the light and fast action. There was enough cam/spring adjustability to satisfy my picky set-up requirements, and good anchor spikes to stop the dreaded pedal creep. Once home, set-up was extremely easy. I was playing in under four minutes. The hoop clamp is particularly good, accessed from the side. The left pedal includes a drum key, clipped in place under the footboard. I play barefoot and immediately noticed the 'open-blade' of the pedal. Initially a little concerned, that quickly disappeared as I was really taken by the speed and lightness of the action. With no discernible difference between left and right pedal, plenty of spring tension adjustment and three cam adjustment positions, the pedals were easy to get spot on.



What's not so good: Shortcomings are relatively insignificant, but as follows: the light wire-frame of the right pedal is not as solid as a complete metal plate; the footboard's 'open-blade' style might put some barefoot players off; the cam adjust screws are very soft and easy to strip the Philips head out (replaceable part) and the plastic beater heads are uncharacteristically poor for Gibraltar – the rear of the beater can cut into a head if not carefully aligned. Otherwise, this cheaper pedal set has clearly benefited from its more expensive siblings' R&D.

# Pearl P902

Reviewer: Saku Lindhen, Sweden



What's good: They are robust, affordable and adjustable - in addition to spring tension, the beater angle is infinitely adjustable - unlike my previous pedal, a Premier, which had a close relationship with my shin. Additionally, the P902s have Pearl's 'Powershifter' feature, which basically allows you to shift the floorboard into three positions, slightly changing the angle in which the board pulls down the chain. For their budget price, the P902s are fast and smooth, allowing me to keep up a higher bpm rate than my old Premier. Slave and master both feel the same. They are less prone to rebound and double-triggering than my previous pedal. Most importantly, the instruction booklet contains guidelines on what to do in case of an earthquake: "Earthquake Precautions... A strong vibration such as an earthquake can cause your drums and hardware to shift and tip over. Stay well clear of falling objects to avoid injury". Important to know!

What's not so good: The only problems I have with the pedals are trivial: unlike the Eliminator series, you can't switch the cams - I would have liked to experiment with more aggressive cam shapes. Nor can you choose between belt and chain drives. Powershifting differences are subtle and more variation would've been nice. These pedals also came without a case, possibly because they were on sale. So, in summary, these are a fine purchase for intermediate drummers who want to explore double bass.

# **Pearl P-2002 Eliminator Powershifter**

Reviewer: Scott Moorhouse, Canada



What's Good: The Pearl Eliminator double pedal is a fantastic pedal and one that any drummer from beginner to advanced should definitely consider adding to their arsenal. The pedal boards have a slight rubber feel to them which makes gripping the pedals a breeze. The addition of interchangeable cams also contributes to helping every drummer find the feel that fits them best. Each cam delivers a different feel on the downbeat, from the powerful stroke of the red cam to the smooth effortless feel of the white cam - you'll never have a problem finding a setting that's perfect for your playing style. As long as you take good care of the pedal, it'll last for as long as you need it to.

What's Not So Good: Unfortunately, the pedal isn't perfect, but it's pretty darn close. The screws that hold the driveshaft to the pedals often come loose and fall out, so you have to make sure you monitor their tightness to ensure the driveshaft won't disengage while blasting away at 230 bpm. One other thing that is disappointing is that the rubber coating on the pedals wears off quite easily with normal playing, which can definitely bring down the aesthetic look of the pedal. Overall though, the good makes up for the bad when it comes to the Pearl Eliminator and it's a pedal that should be seriously considered by any drummer looking for an upgrade or just interested in switching things up.

# Tama Iron Cobra Rolling Glide

Reviewer: Kevin Mooney, Scotland

What's good: The pedals work well straight from the free hard case with no adjustments. Talking about adjustments, you can quickly and easily tweak any parameter to fine-tune the response. It is worth the time and effort to match the pedals' feel and speed to your own technique, taking it from "very good" all the way to "wow". They have a firm feel that provides total control over power, and will work from jazz through to death metal. The Rolling Glide cam feels smoother than the Power Glide cam, but you can still bury the beater if you want to. The fully adjustable Cobra Coil is a powerful tool when combined with good technique, and can boost speed with no noticeable change in feel. These really are fantastic pedals.



What's not so good: The pedal boards are short for a modern pedal, limiting foot placement when going for warp speed. The felt beaters look a little flimsy but work. Tama doesn't include wood or rubber – those cost extra. The pedals are sturdily built and not as light as, say, a DW pedal. The fixed cam shape doesn't allow the control that adjustable cams from the likes of Mapex provide. Finally, the Cobra Coil is only useful if you use good technique and first set the pedals up just right. Otherwise, it is at best a gimmick or - at worst - makes bad technique even worse. All told, however, the benefits far outweigh the drawbacks.

# Yamaha DFP-9310

Reviewer: Malcolm Sanger, Canada



**What's good:** Yamaha is kind enough to include both chain and belt drives, so you can decide which you like better. I've had a good amount of time to use the belt and chain drive, and either way the master pedal is pretty smooth to use. If set to the right settings, the master pedal is great, although the speed is pretty limited. The footboards are a good length and I can do heel-toe rather easily with a size 11 foot.

What's not so good: The slave pedal is a disaster for the most part. It's heavy, sluggish and not very speedy. The slave pedal also seems to be really noisy and clacky no matter what I do to it. I should probably grease the pedals but it doesn't feel like anything's grinding, just that the pedals are really heavy and slow. The tension never seems to stay in place, even with the drum screw lock that's on there. I also find the screws on the slave link come loose and even fly off a lot. I guess it's a good pedal for learning, but you will want to upgrade at a later date.



# Less can be more

We often marvel at skilled drummers who can play intricate and fast double bass patterns. Years of practice have given them incredible stamina and precision. **Michael Render** admits he's not in that category. No matter how hard he tries or how much he practises, he claims to remain slow and methodical

SO WHAT DO I do if I want to achieve that coveted double bass sound? I cheat – or should I say I leverage technology?

There are many pedals out there that allow you to play double bass with a single foot. Some of them connect to acoustic or electric drums, some have triggers built in. And although they all let you do with a single foot what you previously needed two feet for, they still require a learning curve.

Drummers started using the "heel/toe" technique to play doubles with one foot. This technique uses a rocking motion that allows you to stroke with your toe, then your heel. It requires quite a bit of practice to achieve a smooth, consistent rhythm. And most pedals have small footboards, making it very cramped. Then companies like Axis came out with "longboards" that gave you longer footboards that greatly improved the ability to play with the heel/toe technique.

Even with longboards, it was difficult to apply the same force with the heel, which is placed near the

fulcrum, as the toe, which is placed much farther down. Physics 101 tells us that the toe gets a mechanical advantage. So why not move the fulcrum? This is what Vruk did. The Vruk Pedal is an attachment to your regular pedal that creates a new fulcrum about midway between your toe and heel. The rocking motion of the heel/toe technique is distributed evenly, making it easier to play consistently. You still have to practise the technique, but you get better results with less effort.



Sonar decided to go one better and decouple the toe and foot. The Sonar Giant Step Twin Effect Pedal uses two beaters on a single pedal. The heel plate is raised and is connected by a lever to a second beater. You still play heel/toe, but you get more control because each beater can be adjusted separately.

The Duallist Pedal also uses two beaters, but instead of using your heel to play the second stroke, it relies on the lifting of your foot. As you lift your





foot, the springs bring the second beater into play. Two switches allow you to quickly disengage and reengage the second beater with the tap of a foot. Relying on the spring to play the second stroke makes this pedal the hardest to play consistently, but with enough practice you can play some impressive beats.

All these pedals can be used with most electronic as well as acoustic bass drums. But there are some that take full advantage of trigger technology.

The Hyper-Bass Pedal uses two triggers mounted between a spring-loaded pedal. You can run the two triggers in parallel to a single input or to individual inputs, giving you a lot of flexibility. Because it does not have to throw a heavy beater into a drum head, the footboard is light and agile and has a very small throw distance. Only a short time is needed to get the feel of the Hyper-Bass. Because of its light touch, some people complain that the Hyper-Bass doesn't feel like a regular bass pedal. And it doesn't. It takes a more subtle approach. It also has a very small footprint, so using multiple Hyper-Bass pedals is easy. And because the triggers are built in, you are not limited to just playing bass drum. Set one

Hyper-Bass Pedal

trigger to cowbell and the other to wood block and you have a small percussion section with just one foot.

The Drumagination TwinSteele, featured recently in digitalDrummer, completely redefines the bass drum pedal. This unique pedal uses two electronic drum pads and a stick. Your foot is placed in a clip and you control the forward and backward stroke directly; no chains, levers or springs. There are two models: one that comes with pads and one that has mounts for your own. This pedal feels nothing like conventional bass drum pedals. Getting used to playing a TwinSteele takes some time, but ultimately offers an extreme amount of control and nuance. Using two pads gives you flexibility in trigger routing, much like the Hyper-Bass, and the striking design is definitely a conversation starter.



This is just a brief survey of what is out there. As double bass drumming becomes more accepted in mainstream drumming, more gadgets will make their way to the market. Although these pedals have been described as cheating, they are really much more than that. As electronic drummers, we understand using technology to achieve artistic goals. They are also not just tools for slow-footed drummers to play faster. A pair of these pedals used by a skilled player can quadruple the speed. But, like every other instrument, they require you to learn and practise new techniques. Using these pedals is not cheating, it is just leveraging the technology.



Michael Render is a drummer, composer, writer and software engineer living in Akron, Ohio. He organises the FutureDrum events.

# How to choose

There are lots of great double bass drum pedals on the market today. According to Sweetwater's **Derek Senestraro**, just as with a single pedal, there are some things to look at and think through as you are deciding which is best for you.

### 1. Drive connection

There are several options, with chain drive being the most popular and common today. Chain is durable and will last quite a long time. It does have a slightly different feel - a little less "bouncy" than a strap and very different to a direct drive. Drive connection is probably the second most important parameter as to feel of the pedal.

# 2. Direct drive or chain/strap

This option significantly changes the feel of the pedal. Direct drive pedals (Pearl Demon, Axis, etc.) are directly connected from the beater to the pedal board. The advantage of this type of pedal is that everything you do is instantly translated to the beater. The downside is everything you do is instantly translated to the beater. Personally, I like a little play and bounce in my pedal. I used a strap pedal back in the day and now use a chain, but I like the pedal to have that bounce and play in it. This is really a personal preference and your style of playing impacts your decision, too. Drummers who play very fast and at high volume tend to like direct-drive pedals because the pedal gives them back exactly what they give it, and they can play very hard because the pedal takes all of that energy.

# 3. Plate on the secondary pedal

This may not seem that important, but having a plate on the second pedal really helps with stability. Many of the less expensive pedals on the market don't provide a plate and it isn't necessarily a bad thing. It's best to think through your style of playing: if you're playing hard and fast on the second pedal (blast beats, heavy metal, etc.), then I'd highly recommend sticking with a second pedal with a plate. Remember, that second pedal isn't anchored to anything, so the more weight it has, the more stable it will be.

# 4. Adjustments

Here is another area which separates the entry-level pedals from the pro ones. Most of the basic pedals have a spring adjustment and the ability to change the beater throw, and that is about it. When you get into the higher-end pedals, you can adjust everything. For example, the Pearl Demon is incredibly adjustable, as are the Tama Iron Cobra and the DW pedals.

## 5. Pedal board

The size and feel of the pedal is critical. Some, like the DW, are quite small; others are quite big, like the Tama and Pearl. Again, style of playing is a big factor in deciding which is best for you. The smaller, lighter-weight pedal boards allow for faster action and less movement. That might lead you to wonder why anyone would want a big pedal board. The answer is that the feel is more substantial, and even though they are bigger, they still respond ery well.

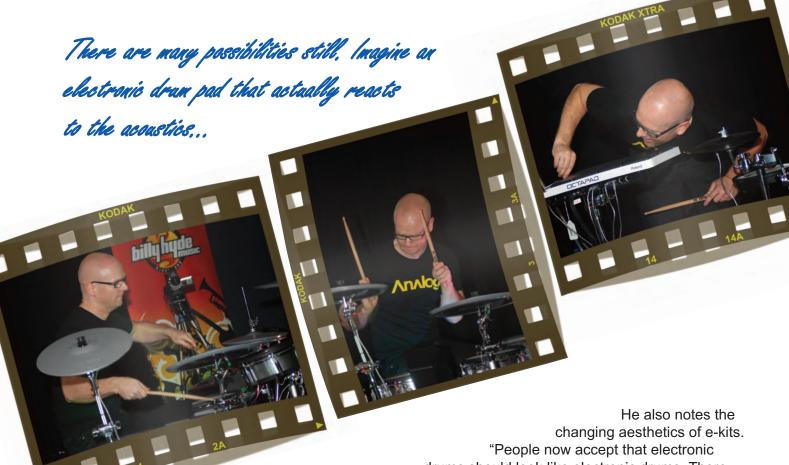
As you consider purchasing a double pedal, always think through your style of playing, what you are used to, and what is going to give you the best tool for what you want to do. All of today's major manufacturers make pretty remarkable pedals in comparison to what has been available in the past. Choice is always a good thing and helps provide drummers with the best tools to accomplish our goals musically.



• Derek Senestraro is a lifelong drummer with 20 years' industry experience. He's a drum teacher and a percussion specialist at US music retailer Sweetwater (www.sweetwater.com) in Fort Wayne, Indiana.



Michael Schack is a man on a mission – to promote e-drums at every opportunity. **Allan Leibowitz** caught up with the Roland demonstrator during a recent visit Down Under.



NOT MANY PEOPLE can recognise their own kits when they fire up a TD-20X module, but Belgian drummer Michael Schack was one of a handful of international collaborators who contributed to the patch library which was enhanced by the TDW-20 expansion card. He shares that honour with **digitalDrummer** contributor Johnny Rabb, whose trademark jungle kit sounds are easily recognised, Koji Nomura (Roland's head sound designer), Steve Fisher and Mike Snyder.

As for Schack's contribution, listen out for the "biggest bass sounds that rival a thumping Honda Civic (or even a Daihatsu) at the traffic lights" and you'll be on the right track. Specifically, you'll hear his work in kits like BluesRock, 2HH House, RawBeat and Dark Composer. He's also contributed heavily to the SPD-30 which features not only a dozen of his kits, but also a number of songs and phrases.

Schack believes electronic drums have come of age and don't have to pretend to be acoustic drums anymore.

His own work on Roland module patches demonstrates his firm belief that e-drums are so much more than emulations of acoustic kits and that technology has provided musicians with a vastly expanded sound palette, not to mention sampling, sequencing and looping capabilities.

drums should look like electronic drums. There are a couple of well-known international acts that successfully incorporate those looks into their live set-up; there are many DJ/electronic drum projects that use electronic drums on stage and audiences are used to it.

"Five years ago, people thought (electronic kits) have to look like acoustic kits, but this is changing," he says.

"I personally think this is a good thing – the electric guitar doesn't look like an acoustic guitar. Each has its unique looks and its visual power," he says. He also stresses that the electrification of the guitar opened the door to new musical genres, and he is among a growing group of artists trying to do the same with e-drums.

What's not changing, according to Schack, is the need to "feel real". "Everyone is actually going for a genuine drumming feel," he says, citing the move from rubber pads to mesh and silicon heads.

The feel, he maintains, is now so realistic that drummers no longer need a unique playing style for e-drums. Schack says he often switches between acoustic and electronic kits – sometimes working on acoustic and electronic projects on the same day. And he insists that there is absolutely no difference in his playing style, his stance, his stick action or any other part of his playing when he switches from his Ludwig VistaLites to his Roland kit.

"The only difference is psychological. With an acoustic drum, you have sound coming out of the

shell; with an electronic drum, you have it coming from a different sound source," he notes. The psychologicial difference, he says, can be attributed to the vibrations felt through the stick, from acoustic drums or cymbals - and their absence in their electronic counterparts. "So it's not the hitting itself that is different; it's what comes after it."

Looking to the future, there's no "next big thing", he believes, but rather continuing evolution and SQUARELECTRIC growing adoption of electronic percussion.

"There won't be a new look or a huge leap of technology. Like computers, which are going from a 2Gb flash card to a 2Tb card, it's an evolution, but it's going much faster than it used to.

"There are many possibilities still. Imagine an electronic drum pad that actually reacts to the acoustics," he says. That, however, is not a clue as to what's on the Roland drawing board – on that topic. the Belgian is tight-lipped.

Schack says the major physical attributes of edrums are already fully evolved, referring to responsiveness, look and feel.

Furthermore, he credits e-drums with improving





the instrument that they play," he

Schack, an international V-drums artist/demonstrator, last year released his first solo album, SquarElectric. He also re-released his "MichaelSchack.Drums" double-CD with a playalong disc for drummers.

says.

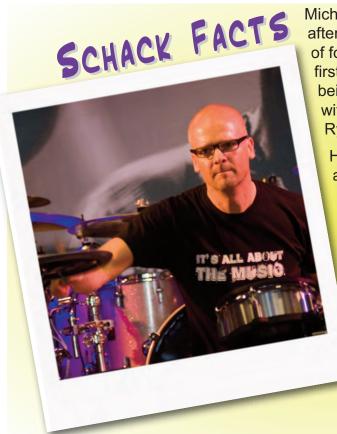
To see Schack in action, check out some of his Youtube videos – and watch this space, as the baldshaven bespectacled Belgian joins the ranks of digitalDrummer's columnists next year.

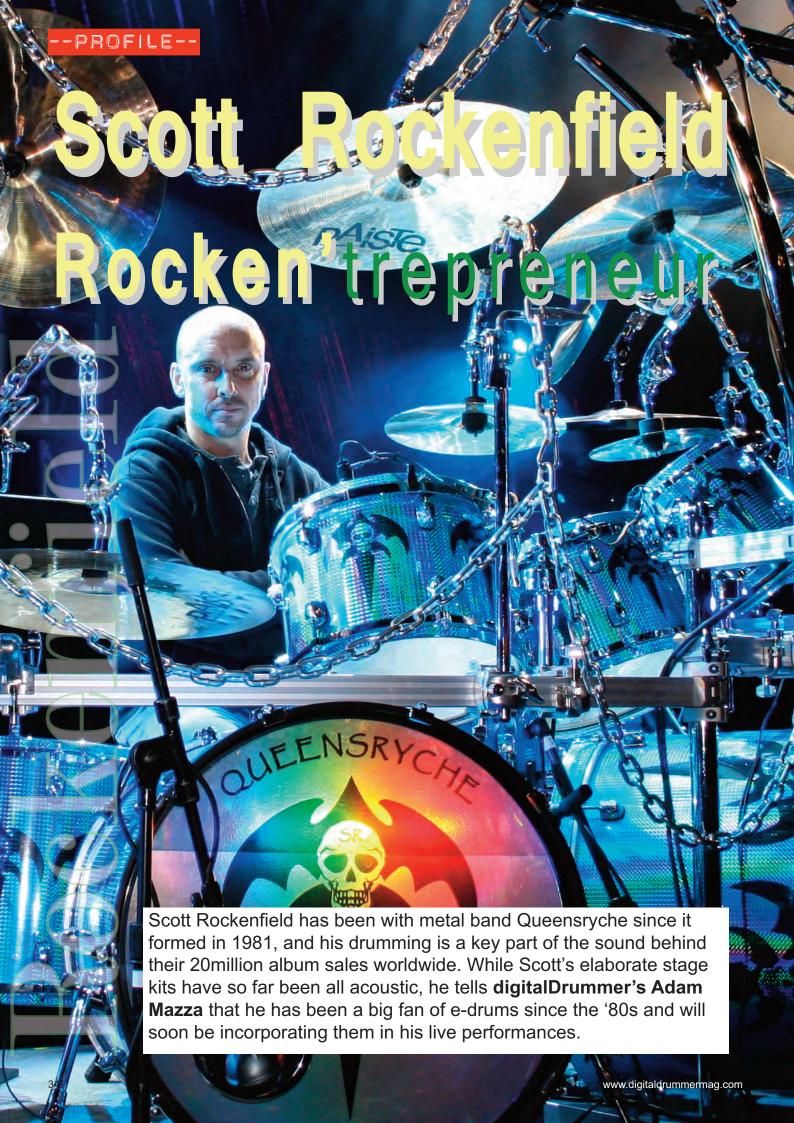
Michael Schack started playing drums at the age of 11 after experimenting with cardboard boxes from the age of four. He's been a professional drummer since 1991, first with Belgo-American band Blue Blot. Apart from being the drummer with Ozark Henry, he also plays with Belgian dance artist group Milk Inc, singer Kate Ryan and the reunited Soulsister.

He's been an international touring V-drums artist/demonstrator since 2001.

The SquarElectric album was co-written and coproduced with DJ/producer Steve Pittoors.

Steve and Michael ran into each other regularly in the early 2000s, mostly backstage at music festivals in Belgium and sometimes at an Antwerp petrol station filling up their cars. Early in 2005, they started exchanging musical ideas and their first demo track, "Sex & Death", immediately turned heads on Broadjam.com. But they weren't satisfied and continued composing, recording and tweaking until they arrived at the finished album.









digitalDrummer: Can you tell us how you make use of electronic drums and percussion in Queensryche and your current projects you are involved in?

Scott Rockenfield: I have been excited about electronic drums since the very early '80s. They have always inspired me to expand my drum kit and projects. I am currently using a hybrid of acoustic and electronic drums for our new Queensryche record. I like to utilise the dynamic of moving between electric and acoustic drums. The electronics offer me a whole new sound palette to change the delivery of my rhythms and performances. I also utilise electronic drums in my recording studio, where they are very useful during scoring sessions when I am composing my film and video game scores.

**dD:** What electronic drum equipment have you used, and what are you using these days?

**SR:** I used to own a first generation Roland V-drum Pro kit, which I sold years ago to make room for other gear at the time. I currently have a Yamaha DTXtreme III SP with the cool hexagonal curved rack. I love it. It is very expressive. I connect this kit through my ProTools system and also use the kit to trigger all sorts of plug-in synths such as Storm Drum 2 and others.

I am gearing up to add the DTX to my live set-up for touring early next year. I haven't yet worked out how it will be integrated, but it will be big!

**dD:** Besides Queensryche, you're well known in the drum community for RockenWraps and for BucketDrums. Can you tell us about your involvement with those businesses?

**SR:** RockenWraps was designed for my personal use many years ago. I just wanted to be different

and to express myself through the look of my drum kits. It started to really catch on with other drummers and so I decided to make it available worldwide. So far, all is fun and good! RockenWraps are custom drum wraps made from high-heat, high-pressure laminate plastic which incorporate high-resolution graphics that are sealed in during the laminating process. They are very durable and very easy to install, and act as great protection as well. Almost all of our sales are done directly through our website at www.rockenwraps.com.

BucketDrums was an idea I had to take the 5 gallon paint bucket and convert it into a drum. I designed a ring system for mounting real 12" drum heads that are completely tunable. They really sound amazing and are much more flexible and expressive than just an ordinary bucket.

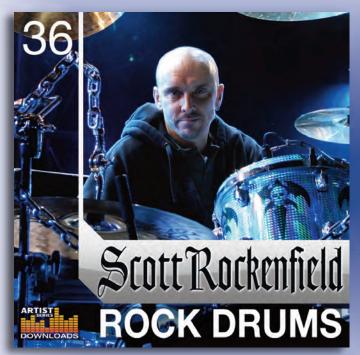
My businesses are run by myself, my brother and a sales rep for phone/email ordering. My brother, Todd Rockenfield, handles all manufacturing and shipping, and he also does all the layouts, custom design work, etc.

**dD:** How much time is spent on Queensryche projects and how much time is devoted to your other businesses?

**SR:** I have to try and balance my time where it is needed, given the time of day or week. I use my home office and my brother owns his own warehouse that he uses each day to complete the fulfilment.

**dD:** The new Roland PD-125s feature removable wraps and I see you have started making custom wraps for those. What's the interest been like for the V-drum wraps?

SR: We have done OK with V-drum wraps - and we





Rockenfield's off-stage activities range from loops to custom heads and wraps.

have more ideas coming soon. And, by the way, we have also been looking at an electronic version of the BucketDrum, but I can't say any more now...

**dD**: You are the latest featured artist in a Loopmasters collection. Can you tell us how that came about?

SR: I actually have multiple deals with companies around the world for producing samples/loops/sound FX, etc. My newest release is for rock drums and through Loopmasters. I have been a big user of loop libraries/sound FX, etc. for many, many years and I decided this year that it was time for me to start my loop library projects as well. I contacted Loopmasters and so began the relationship with them. I also just signed a deal with Big Fish Audio in the USA for distribution of more and more of my future projects. I am really excited to know that other composers, producers and musicians will be using my products to create their next masterpieces...

**dD:** Queensryche is a band known for being able to reproduce its studio sound live. Can you talk about this a bit? I've read that you control a lot of the audio and video from a few laptops behind your kit. When you first started playing the entire Mindcrime album back in 1991 on the Empire tour, laptops weren't available. What were you using then?

**SR:** Back in the early days, we used multi-track reel-to-reel machines running a time code and syncing to the film projectors we used for live performances. It was really cumbersome, but it worked. Yes, now we use multiple Mac laptops running ProTools with the film already in the actual timeline for the session. Really cool!

**dD:** On the current Queensryche Cabaret and American Soldier tours, are you using any samples and/or triggering certain parts?

**SR:** I have never triggered my acoustic drums during live performances. I have always worked with our engineers to achieve the right sound as naturally as possible.

**dD:** Back to electronic drums – and what sort of things can you achieve with e-drums that you can't do with acoustics?

**SR:** I love being able to add elements that are not possible with real drums - sound FX, grooves, etc. I really began doing this back in 1986 during the recording of our "Rage for Order" CD, where almost every song has elements of e-drums within it.

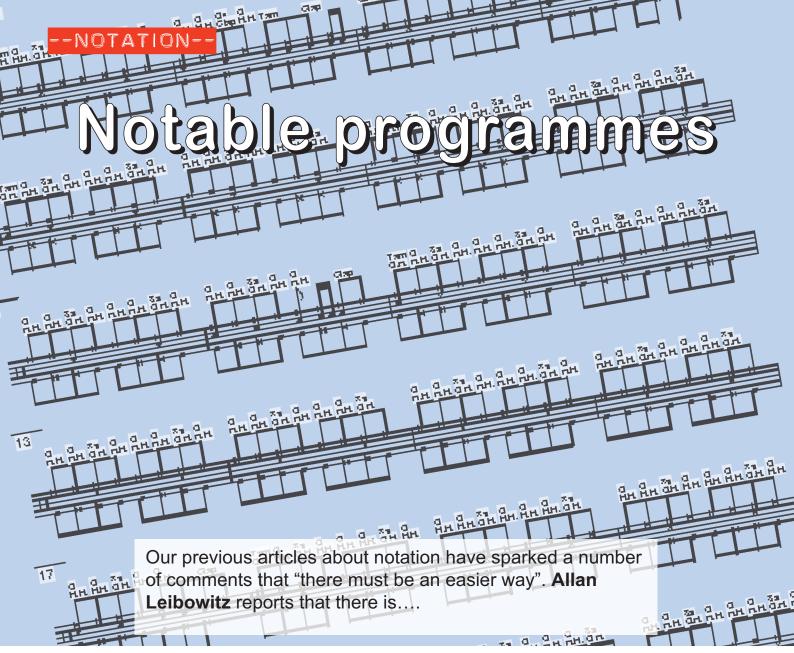
**dD:** Where do you see e-drumming headed in the future? Any e-drumming projects you'd like to see developed?

**SR:** I see e-drums as getting better and better (if that's even possible now). I would love to see them get even more interactive with maybe hooking to my brain waves so that they know what I am thinking.

**dD:** And where do you see e-drums in the big picture: will they replace a-drums, supplement them, or are they just a passing fad?

**SR:** I truly believe that e-drums are here to stay. Acoustics will always be here but the integration of the two definitely adds a whole new colour to the music world. I am excited about all the possibilities it brings to me and music and hope that the rest of the music community will embrace it as much as I have.





THE QUEST FOR quick and easy notation has uncovered a few dedicated applications, ranging from free to \$100-plus. They all do a basic job of noting drum beats on screen, but there the capability range is as big as the price gap.

But before jumping into the programmes, it's probably best to explain the difference between drum tabs and drum notation.

Drum tabs are a form of shorthand for standardised drum notation. Drum tabs are normally text-based, rather than employing music notes.



Drum notation, meanwhile, uses the five lines of music notation to denote specific instruments while crotchets, quavers and other beat symbols indicate timing.

If you're reading this online, there's a nifty little animated explanation available here.

#### **Nic's Drum-Set Writer**

This free programme runs on Java and starts with a blank score onto which the user sets the meter and beat divisions. It's then a matter of clicking to drop notes onto the score, with special tools for adding flams, rolls and accents.

Each stroke needs to be manually inserted and while you don't have to be able to read music, you do need to be able to play what you're scoring.



Once the song is complete, it can be saved in .drm format and printed.

This may be useful if you need to notate a few bars, but it doesn't help with "reverse engineering" or trying to work out the drum score from a completed piece. This programme does not allow you to open a song file in any format and score the drums, and, for most of us, that would be a serious limitation.

Drum-Set Writer is available at www.drumsetwriter.com

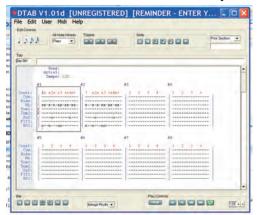
#### **DTAB**

Next up the pecking order is DTAB, a \$14.95 downloadable programme designed to import drum tabs and enable the drummer to edit them, play them back and print them. Of course, it's also possible to start with a blank slate and create tabs from scratch.

This programme has the advantage of being able to import full tabs and .txt files. You can also customise the drum kit on which the song is scored, starting with a standard five-piece kit and adding or subtracting as required. And any unused parts will automatically be deleted from the final tab. And these can be saved in either the native "DTB" format or as a standard tab file in .txt format.

Again, the major drawback of this programme is that you need tab files to learn new material. You can't simply import an audio file and reverse engineer the song.

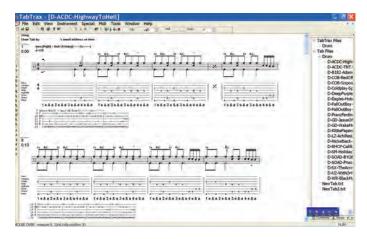
DTAB is available on a free 30-day trial.



#### **TabTrax**

For reverse engineering, TabTrax is probably the minimum requirement. This solution is available by download. There's a free trial which allows you to test the capabilities, but without the ability to save or print and also some throttling back of playback functionality. However, there's certainly enough to see how it works before deciding if it's worth \$29.95.

Unlike Drum-Set Writer and DTAB, TabTrax is able to import songs in a variety of formats – anything



from MIDI to plain text drum tab files freely available on the Internet. Text tabs can simply be copied and pasted into the application and the notation is filled in automatically. It can even sample MP3 files, although the developer admits that this is far from perfect.

This programme has extensive functionality that can be used both for the creation of a drum score from scratch or for notating existing material. It was not only effective and accurate, but easy to use for MIDI files, creating easy-to-read musical notation that can be played back or printed – both in tab format and music notes.

Additional tools include a PBM counter.

Another handy inclusion is a range of tab files for hits such as The Eagles' "Hotel California", Deep Purple's "Smoke on the Water" and some more contemporary stuff like Franz Ferdinand, Nickelback and Cold Play.

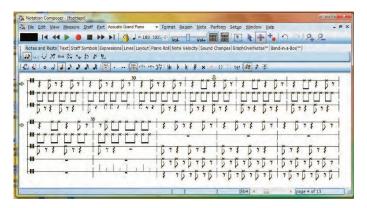
For the average drummer who needs notation from time to time and has access to either online tabs or MIDI files, TabTrax certainly does the job – and does it easily and without too much of a learning curve.

TabTrax is downloadable from www.2112design.com

#### **Notation Musician**

Notation Musician is not specifically designed for drummers, but is a more general application for turning MIDI files into sheet music. The programme allows you to open MIDIs – in fact, it even helps you locate them through an extensive online database – and view the score, instrument by instrument, in a range of views. It's possible to view the drum part by itself, but this depends to a large extent on the quality of the original MIDI. Only a few of the MIDI files I tested actually had the drum part correctly identified – in one case, it appeared under the label "acoustic piano", while in another, it showed up as part of the synth score.

The programme supports general MIDI drum staves, with multiple pseudo-MIDI drum pitches on five-line staves. There is an option to split the notation into



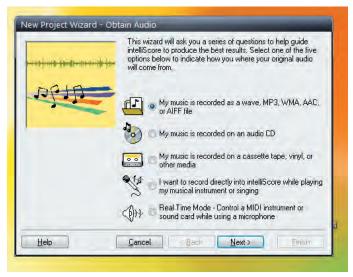
single-line staves. The developers admit that they only use a small set of drum "noteheads" such as 'X', '+', triangle, square, and diamond, but there are also symbols for things like rim shots. And if there is any demand, these symbols will be augmented and further functionality added in the more advanced Notation Composer solution. Notation Musician is the entry-level programme (\$37.99) while the Composer programme (\$89.99) is a powerful composition and arrangement tool which is probably overkill for the average drummer. Even if you're not a composer, the top-end version has some nifty tools that allow you to preview songs with different drum kits and beats, even offering swing and syncopated versions.

Both programmes are available on free trial downloads at www.notation.com

#### IntelliScore Ensemble

Towards the top end of the scale is IntelliScore Ensemble, the application which not only works with MIDI files (admittedly, not quite as easily as TabTrax), but also works with pre-recorded or even live music (in WAV, MP3, WMA, AAC, AIFF, or CD format).

This programme converts audio tracks into MIDI files, which are then editable in a companion programme such as Anvil Studio.



The conversion process is not simply done at the click of a mouse. There are a few steps to go through, and the more you know about the original audio track, the better the translation into MIDI. So along the way, you're asked what instruments are included in the track, you're able to customise the drum MIDI numbers and can even tap in the rhythm.

Ironically, IntelliScore doesn't allow you to simply import a MIDI and see what its notation looks like.

This is a powerful programme with lots of editability, but it does entail a bit of a learning curve and even then, you're not always guaranteed perfect MIDIs at the end of it. For example, my first attempt at Bad Company's "Can't Get Enough", which has lots of toms in the score, yielded some very strange MIDIs which bore little resemblance to the original. And this is quite obvious because the programme allows you to listen to the original and the MIDI versions simultaneously.

At \$159 plus shipping for the CD version or \$119 for the download, IntelliScore is a more serious investment than the other notation products reviewed here – and doesn't do everything the others do, but does some things much better than all the rest.

IntelliScore can be downloaded at www.intelliscore.net

#### What next?

While the solutions mentioned previously use tabs or notation, a new direction in drum scripting is emerging, thanks to games like Guitar Hero. Just as Roland's HD-1 training programme offers a gaming-type notation option, English enthusiast James Morgan has developed a Flash application that translates songs into Guitar Hero's format of racing coloured bars.

He shuns the horizontal representation of drum notes in favour of a more gaming-oriented vertical flow and says "scrolling horizontally bares no relation to your kit and the notes are so close together you can't tell them apart with fast-moving music".

Morgan already has a free version of his application available on the Internet and says he "wants (his) thing to be usable by any drummer using any kit arrangement".

"I will hopefully create a menu system to allow you to remap any note to any position on the board.

"The main reason this form of 'tab' is so good is that there are no note timings - what you see is what you get. You just play it when it reaches the bottom!"



## Electronics add dimension

**digitalDrummer** is committed to promoting the playing of e-drums, not just talking about them. That means highlighting performers who use e-drums as their stock-in-trade – performers like **Janelle Burdell**, who discusses her e-journey.

I WAS THROWN into the fire in my first live edrumming experience. The TD-7 Kit was damaged while being flown to Hawaii for a gig. This created a unique opportunity to begin learning the "art of troubleshooting" and taught me that being an electronic musician means "Troubleshooting" is your middle name.

Another early lesson is getting used to the directional way e-drums force us to listen. It's just

unnatural to hear drums coming from one direction in space only and this disorientation can be enough to cause any time-honoured drummer to throw in the towel.

It was my challenge too, until I joined a band of dynamic women who called themselves D'CüCKOO. Their unique approach both to performance and sonic textures were wildly ahead of their time.

My colleagues were multiinstrumentalists, inventors, engineers and extraordinary sound designers. Percussion was a second instrument to all, before I joined the band.

D'CüCKOO stretched my mind by bringing in unique performance elements of movement from many cultures, mixing it in with the latest in audio, MIDI and sample technology, and then serving it up in a roux of cutting-edge interactive

graphics - sonic poetry in motion. As the drummer, my job consisted of performing a series of graceful yet strenuous, beautifully modified Taiko moves played in a rhythmic and always groovin' manner across 16 homemade pads, mounted and arranged in an outrageous and, yes, glowing fashion that could be split or moved or played by one, two, three or four — all built out of Radio Shack supplies.

D'EÜCKOO

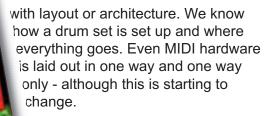
Along with this unique aspect to performing which included interacting with digital characters and interactive show toys such as the Midi Ball, a five-foot, clear beachball filled with glitter, feathers, triggers and more, the audience was also "included" in the fun. This ignited an interactive playground of some of the most joyful music I have ever heard. All were able to affect aspects of our performance. Sound design was important in this kind of atmosphere with so many added variables in the equation.

One had to constantly have the courage to relax with it all.

All was played and performed LIVE in real time. Nothing was sequenced. And yes, designing our own sample libraries of original sounds played an integral part of the magic being brewed.

Only when I left the band was notation used to document these songs. Notation included much more than music and patch changes. It also included choreography. We attracted attention across the board, including from Brian Eno to Bob Moog to Mickey Hart of the Grateful Dead and Planet Drum.

Hart later brought D'CüCKOO's fire on board by hiring one of the masterminds of the group, who brought me along to do both sound design as well as to design, build and programme his entire rig for various tours, movies and solo projects. This led to later collaborations, including my drumming for recording sessions, gigs, drum circles and more with the master explorer of sound, rhythm and spirit himself. I have performed with electronics in many different and unique ways. In most cases, it begins



Regardless, eventually you have to design sound palettes and decide how you want to use them. Then you must create them and programme them.

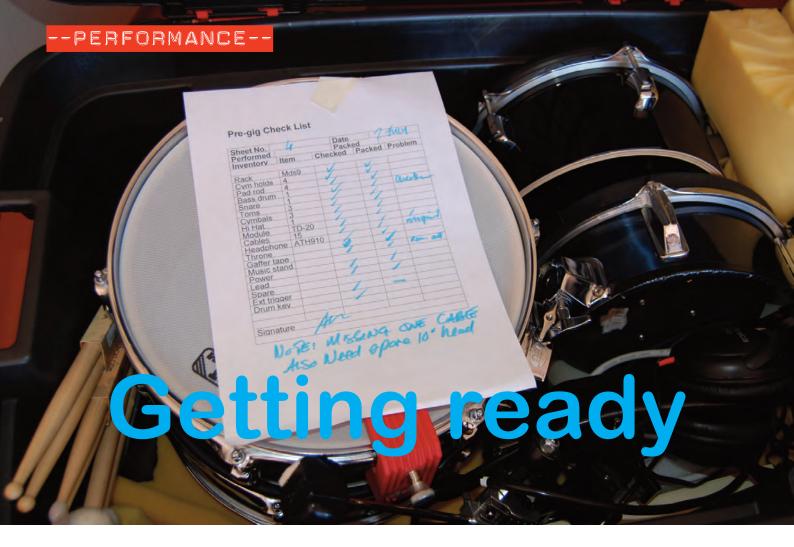
In order to raise the bar, you then must become one with your new instrument. Bringing the same level of expertise and skill through your new voice will require time and practice. Of course, you will be adjusting and modifying along the way. Your concepts will expand, bringing in different elements (controllers, technology, sounds, etc.) until you strike a match. This keeps your interest and inspires you, bringing a new rush of creative adrenaline to the forefront. I now use these concepts gained through my experiences not only in my own shows (whether solo or on tour with the latest act), but also when composing and designing percussion ensemble pieces and educational programmes. I can't NOT see and hear without use of these colours.

My solo work brings in the use of real-time controllers, giving more expression and life to the original sounds I play.

Being raised mostly through the oral tradition of jazz, I play e-drums in order to do what I can't do on the acoustic drum set. If I want acoustic drums on a track, I play acoustic drums on the track. I don't use electronics to replace people or hearts beating. I'd much rather add hearts, beating in harmony, while playing new instruments and new sounds in new ways.

In composition, I've noticed with electronics that the combinations of the sound palette available to us while using our familiar technique as drummers and percussionists and the layout and pattern unfamiliarity expand the potential for new and exciting sounds, rhythms and more. Mix in some performance elements and you can feel the dimensions multiply.

Hopefully, I've given you some new pictures and, eventually, you will find yourself transcending all the forethought and left-brain work and soaring into seas of right-brain bliss in this wildly uncharted domain. We, as e-percussionists in a multimedia age, are adding greater depth and new dimension to this exciting genre's legacy all the time. That's why I dig it all! Artists to manufacturers, we're all just out here makin' it up! That is Rock and Roll! I love it!



Taking your e-kit to a new gig can be a daunting proposition, whether it's your first time out with it, or just taking it to a situation in which you've never been before. Here's some advice from **Jon Levitt**.

OVER TIME, I'VE reduced the acclimation period down to a process that works well for me and I would like to share what I've learned. Hopefully, it will help you get over your own "First Date" jitters. I'm going to assume that people taking their e-kits out are at least somewhat seasoned giggers, so I'll skip things like set-ups and picking sounds/tuning. Those are things that every drummer does (acoustic or electronic); instead, I'd like to talk about things I feel are specific to e-drums and how to make them more manageable.

First off: Make sure you have as much as possible of your prep work done before you get to that first meeting. If you're working with a band or artist that is skeptical about electronic percussion, one thing that will definitely hurt your chances is to have you say "one second, I have to change this", or indications that something is not going according to plan.

So let's talk about that preparation: When you are preparing to take your kit out to programme sounds or move into a new venue, take a hard look at your equipment. Do you have all the pads you need? Do

you have too many? With so many small pads and controllers available to e-drummers today, it can be tempting to bring the "kitchen sink" rig (as in everything but ...) to access as many sounds, tones and colours as you can. However, let's say that you can't fit those extra two PD-125 pads on the bandstand because the bass player keeps knocking into them with his headstock. Can you remove them or relocate them? This takes on a different meaning for e-drummers because unlike (re)moving an acoustic cymbal or drum, a pad can be anything you want; have a plan "B" in place in the event you have to alter your rig, whether that means re-mapping those sounds to other pads or programmes, or simply doing without.

If you don't do this already, take some time to write two or three all-purpose patches in your module of choice. I have a few I go back to constantly: one is a general-purpose kit, one has deeper-sounding drums with a lot more reverb (for ballads or hard rock songs), and a percussion map. If something happens during a gig and your customised chains or patches aren't working out for some reason, you can

go back to these defaults and at least work with sounds you know instead of second-guessing yourself.

Since we brought up reverb and programming, electronic drum systems have a lot more control over things like reverb, decay, etc. than acoustic kits. With some of the newer Roland systems, you can even programme the amount of sympathetic snare buzz you hear when playing other elements of the kit! This is an element that should have just as much attention paid to it as which drums or cymbals you play, and you need to make sure you know how those elements react in different environments. Like an acoustic drummer who quickly grabs the wallet to throw on the snare drum and calm it down, make sure you can dial those ambient settings up or down quickly, if needed.

Once you've got your rig and sounds sussed out, then comes practice. If you're going to be working in a situation where you know you'll be switching patches, such as a band with multiple styles or a pit orchestra, be sure to practice the changes between your patches and your gear as well as practicing the music itself. Sometimes an instrument or sound may not be where you remembered it, and I can tell you from experience that reaching up to trigger that delicate wind chime and getting a cowbell ... well, it may be funny later, but does not help you out in the short run.

So you've programmed and practised; now it's time to perform. Find out as much as you can about the venue. Do they have a PA, or will you have to bring your own sound reinforcement? If it's the latter, do you have an appropriately-sized amp or PA system? The answer to that question can cut both ways: I've been in situations where the keyboard amp I usually use was not powerful enough and I've played one or two gigs where I couldn't turn it down enough not to blast the band. I've taken a page from the guitar industry and I have a small and large amp to cover more playing situations. Even if the venue has its own system, you may want to keep your small amp handy as a foldback. Bring a set of headphones and possibly a headphone amp for the same reason. If you can't hear yourself, throwing on a set of

headphones can be a gigsaving quick fix that doesn't alter the sound coming out of the mains.

A note about venues: don't count on them to have ANYTHING you need in case something goes wrong, be it cables, adapters, or tape. Carry everything you need and then some. If something goes wrong, simply swap out the damaged bits and go on. One of the advantages to many electronic systems is that because they're so much smaller than the acoustic counterpart, it's much easier to throw an extra pad or controller into the truck than,

Many drummers will say that sometimes they like to have someone else play their kit while they walk around the room and listen. Electronic drummers can do this too without having to conscript someone: most modules have a sequencer or some sort of recording feature built into them. Have a few bars of yourself recorded and play them while taking that same walk. If your system does not have such a feature, I would not recommend having your "test tracks" played through an MP3 player or sampler because the sources will not be the same as what you will be playing on. You don't want to give the sound tech anything different than what you'll use at the gig.

say, an extra snare drum.

One thing we haven't spoken about preparing is yourself. Bringing out your electronic kit for the first time can be a scary thing, especially for groups or directors unused to them. Be prepared to hear things like "wouldn't 'real' drums be better?" (don't you love that one?). Smile, perhaps have an amusing anecdote prepared about dropping the rack on your foot and finding out how "real" it is, and go about your business.

Even if things don't go your way and you wind up playing acoustics for that gig, you never know who's watching and who's listening. I've had plenty of gigs where someone said: "Hey, didn't you have that funky electronic kit? I'd love to use that for Project X"

In the end, good prep and confidence count for a lot. Hopefully, you now have some tools to give you more of both, so happy gigging.



The tweaking guide in the last edition dealt with the important but most 'un-rock star' elements of e-drumming. This month, **Simon Ayton** gets stuck into creating your very own custom drum sound to help convey your personality and differentiate you from the hoards.

Choosing a kit sound: While creating a kit from scratch can be a great way to learn your way around your module, it can also waste valuable playing time! A much better way is to pick a preset kit sound that's close to where you want to go and simply edit it to suit your needs. You may even want to check out your favourite drummer's set-up and try to match their kit layout and sound on your electronic kit. Playing the mix of a song with a killer drum sound you'd like through the 'mix-in' of your module can be a great way to match your sound to theirs. Most major brand modules will allow you to substitute the individual instrument elements of the kit, often labelled 'INST', but depending on how much you spend, you can go much further than that if the module features some kind of synthesis or modelling like Roland's COSM and V-Editing

functions. These are some of the common and more advanced editing features that you may be able to use to come up with completely new sounds.

**Tuning:** More than just simply varying the playback sample rate of the instrument to change pitch, a good quality module will actually allow the instrument's character to change in sympathy naturally as the tuning changes. This can add to its realism by simulating what actually happens as you tighten and loosen drum heads.

**Size:** This is very handy with cymbals to transform a crash to a splash, for example. Size is, of course, also linked by its very nature with pitch, so keep this in mind when going for a sound. Interesting things can be done with electronic drums that have multiple trigger zones. You may want the milder, lower pitch of a 15" hi-hat when playing verses but

the brightness of a 12" hi-hat in the choruses. To do this, you could simply set the top or bow of the hi-hat for 15" and the edge for 12"; the same goes with dual trigger toms. Try setting brighter, more aggressive sounds for the rims and fatter sounds for the main surfaces.

Sustain/decay or muffle: No more taping up your drums, it can be done virtually these days! Muffling down or reducing the sustain on drums can make them sound fatter and more up-front as it reduces the overtones and helps give toms a nice thump. Reducing the length of sustain on cymbals allows you to create an entirely new palette of sounds. A gong can be transformed into a china-like cymbal sound by reducing its tail. A large crash can be equally transformed into a splash in combination with adjusting its size.

Shell Material: Possible options could be wood, steel and brass. Wood affords a nice warm sound with few overtones, steel has loudness and crack, while brass is known for its overtones, brightness and snappy character. When choosing materials, it can be very useful to know about some typical drum types. The classic fat but snappy rock snare drum sound of Ludwig's 'Black Beauty' comes from its nickel-plated brass makeup. Stewart Copeland's instantly recognisable snare sound comes not only from the way he attacks his drums but also due to his 14"x5" depth steel plate over brass shell drum of "mysterious provenance". Possibly originally a Pearl snare, it's now been recreated as a signature model by Tama.

Shell Depth: Shortening the shell of a tom can create a nice short stack style of sound which will retain close to the same fundamental pitch, but reduce muddiness in the mix. You may want to experiment with the depth of the snare, too. Common snare depths range from 5" to 7", but stretching beyond that, it's possible to create some great fat snare sounds that still cut through. What about a tuned up 16"x10" snare? You could even try creating a marching snare sound by going for a coated head, adjusting the size to 14" and the depth to 12".

**Head Type:** This can sound like a subtle effect at first but you'll soon recognise the characteristic differences the choice of heads can make to an overall kit sound. Single-ply clear heads are great for getting sharp attack. Double-ply heads have less

sustain, but with more aggressive mid thump; and coated heads give a warmer, more rounded sound often suitable for jazz and funk playing.

Stick type: Found in advanced modules and increasingly also in software drum plug-ins, there are several ways this can work. Changing the stick type changes the actual samples which will be played back so that you hear the drums as recorded with mallets which will give a fat round sound. The second way is the module itself will adjust its sensitivity and response from the actual physical drum head to accommodate the use of brushes, for example. The way brushes 'sweep' the head generates very different trigger signals from

standard drum sticks, as you can imagine. It's up to the module to interpret this and respond accordingly. Roland's TD-12 and TD-20 modules are capable of both these operations.

Beater Type: This applies for bass drums usually. Harder materials will give more attack and help give more definition to the bass drum sound. While conventional felt beaters give a good round thud, plastic beaters are a good choice to cut through heavy guitars or vocals as their sounds are often competing in the same frequency range which can make bass drums hard to hear in the mix.

Snare Buzz: Some modules like the TD-20 simulate the snare buzzing in sympathy with tom hits. This is adjustable for each tom in the TD-20. As you may have experienced on an acoustic kit, 'throwing-off' or loosening the snare strainer all the way can help make the toms sound fatter and warmer as even the subtle vibrations of a snare rattling can affect the overall sound of the kit, especially from the drummer's perspective. After all, we're the closest ones to it!

Snare Strainer Tightness: A tight snare strainer causes a muting or muffling effect on the bottom 'resonant' head, causing the drum sound itself to decay faster along with the buzz effect, which can help give more definition when playing tight rolls or grooves where ghost notes are important. On the other hand, if you're playing a slow rock song, you may want to loosen it right off to help the snare drum to ring out or sustain, which can help make it sound fatter and sit better in the mix.

**Microphone position:** Just as an engineer will move the microphone during a recording session to get the ideal sound, so can you. Aiming a mic near

the rim will give more ringing and rim overtones, whereas pointing towards the centre will give a fatter, more tubby sound. This can work well and avoids you having to resort to extreme EQ which can sound artificial and often causes more harm than good.

Microphone Size: A typical use would be with bass drums where classic dynamic mics such as the AKG D112 egg mic can be used to pick up more low frequency and the smaller Sennheiser 421-style mic used to give a punchier, mid-range sound.

Kit Resonance: The TD-20 allows sympathetic resonance to occur between parts of the kit. We've all heard it on an acoustic kit. You hit the bass drum and nearby toms resonate with a sort of drone. This is generally considered a big nuisance by many engineers in the recording situation, which they go to lengths to reduce. Winding in a bit of kit resonance can also help a very dry, close micced drum sound to open up and sound more like one unified kit.

Mix Volume: Obvious, huh? Well, not so simple when you consider in what context the kit is going to be played. A kit tweaked to sound balanced on its own won't necessarily work in context with the other instruments of the band. You will find that the snare really needs to be significantly louder, as does the kick drum. An ideal way of working is to send the kick and snare out of separate outputs - often called 'Direct' outs - if available, so that the front of house mixing engineer has separate control of the levels,

which can go a long way to getting a great drum sound out the front.

**Pan:** Not only Peter's last name! Ahem.. Exactly where drums are placed in a stereo mix is obviously going to be different, depending on your listening perspective! The audience will see the ride cymbal

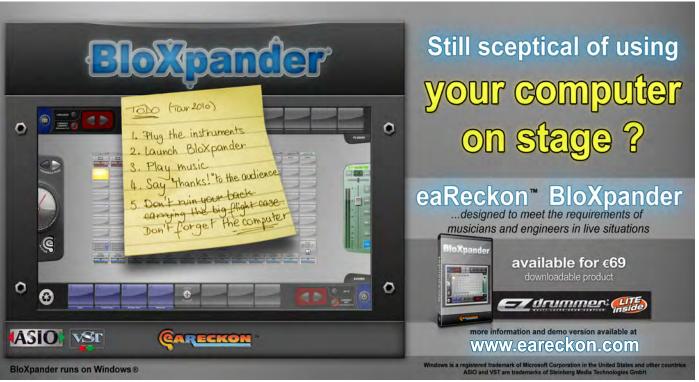
drummer's kit as being on the left and will expect sound to come from there, whereas the drummer will be experiencing the sound coming from the right of the kit. There are no rules here, but being aware of these different perspectives can help get your sound across better. In fact, the extreme panning often used in

of a typical right-handed

recordings never really accurately mirrors the real world anyway. In real life, sound is picked up by both ears; it's just the time it takes to reach us and reflections that helps us identify their location. The further away from a kit you stand, the more mono it sounds. Recording is all about illusion,

so do what effectively creates an immersive one for the listener. Pan can also be used where you need click from a backing track on, say, the left channel and the music from the right.

So that rounds up the foundation sound crafting tools you're likely to encounter. Join me next time when we explore the world of FX in a bid to unravel some classic drum sounds!





## Some more Samba

In this lesson, **Grant Collins** moves beyond the basic Samba to incorporate dynamics and further the dimensions of the rhythm. The basic hand pattern will play all of its notes on the hi-hat using the shoulder of the stick for the accented notes and the tip of the stick for the non-accented notes. This will provide not only dynamic, but also timbral differences within the pattern.

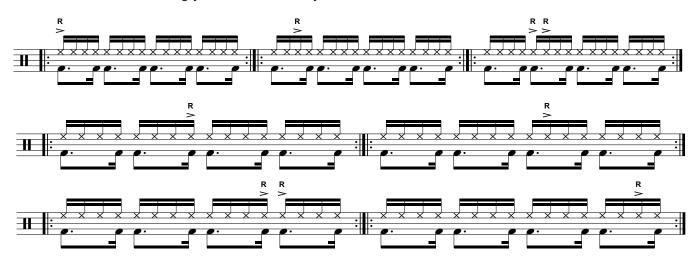
The basic Samba with all of the right-hand notes accented and accompanying foot pattern will look like this:



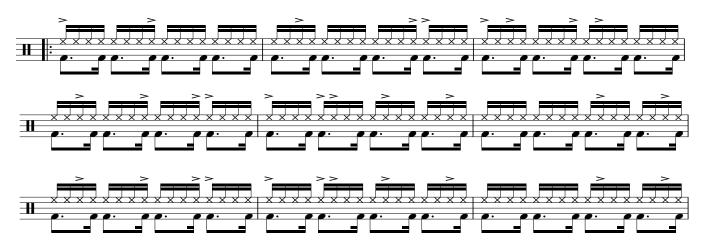
The same pattern without the accents would look like this (it will be understood that you know the correct sticking from here on):



The objective now will be to learn all of the accents individually. The following exercises will lay down the basic structure enabling you to focus on any one of the accents within the bar:

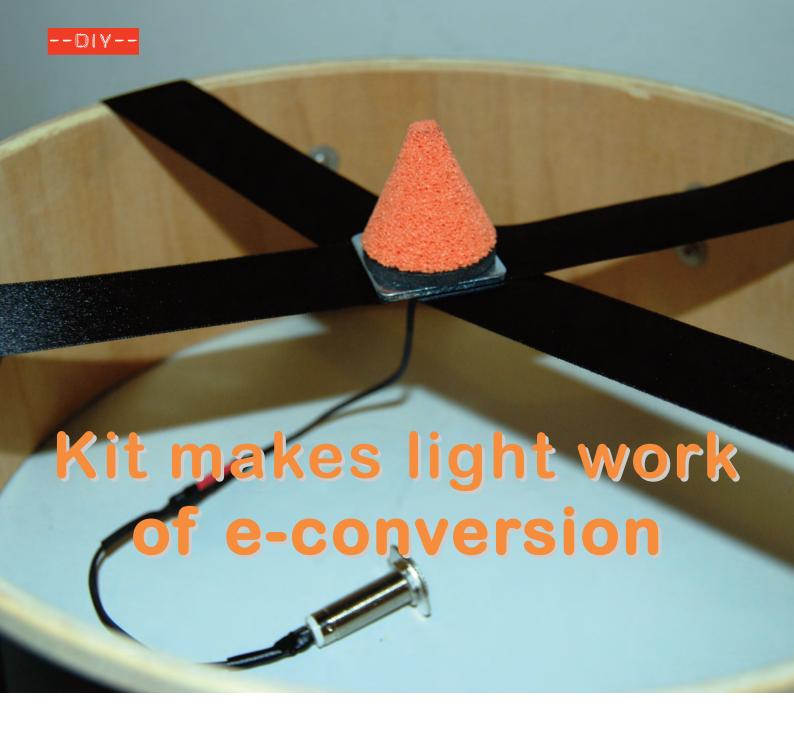


This final exercise randomly combines the various accents within the sticking pattern. Be sure to keep using the shoulder of the stick for the accents and the tip of the stick for the non-accents:



Once you're feeling comfortable with this as an exercise, it's time to start improvising phrases using this Samba sticking pattern. The next lesson will further look at how we can extend upon this concept in a creative way. Enjoy!...





Most DIY conversions involve drilling into shells, removing lugs and soldering bits and pieces. A new European kit does away with all of that, with a non-destructive, easy-to-install offering, as **Allan Leibowitz** found.

THERE'S A RELATIVELY new offering in the quest for easy, non-destructive DIY kits. European company 682Drums has come up with one of the easiest ways to mount a trigger into an acoustic shell with its DT-PRO and DT2-PRO offerings.

The kit consists of a piezo and cone (you won't miss the bright orange part) attached to a sturdy black ribbon. The ribbon is draped over the edges of the shell and held in place by the head and rim – no other form of attachment is required. The 6.5mm output jack can be mounted in the air vent hole, or simply attached at the bottom of the shell in bare-bottom drums.

682Drums also does a dual-zone version, with a separate sensor that attaches to the shell.

I found installation relatively easy, thanks to the detailed instructions. However, I found it easier to use masking tape to hold the ribbons in place as I centred the cone. The other tricky bit was tensioning



the ribbons to get the right cone heights, and I have to admit that it required a couple of attempts to get it right. But since the installation is totally non-destructive, it was easy to just remove the head, loosen the ribbon and pop the head back on.

Once installed, the trigger was responsive and easy to dial in. In a 12" shell, it triggered perfectly in stock PD-125 settings, with a full range of dynamics and position sensing. The black ribbon also disappears under the mesh, but the brightly coloured cone is inescapable and that might be annoying to some.

The company also sells a range of sturdy twoply mesh heads in a range of sizes from 6" to 22".

With a feel similar to – but more substantial than –
Pintech's single-ply heads, the XS-Pro heads are
responsive and moderately quiet. They are noisier
than the likes of Roland and Drum-tec design, but
certainly within the acceptable range.

To complete the conversion, you can also buy a simple black rubber silencing hoop – available either in bulk lengths or pre-cut for specific drum sizes. These are easy to fit and look neat and tidy once installed.

682Drums products are only available online and direct from the manufacturer. The trigger kits start from €39 (US\$50); mesh heads are reasonably priced at €13.95 (\$17.50) for a 10" and €14.95 (\$18.50) for a 12" and the rim silencers start at €5.95 (\$7.50) for a 6". The site also sells replacement cones and piezos.

**Get DIY help** and a prize for your efforts

Jman Acoustic Evolution is offering more of its highly regarded products for the reader question selected for the next edition of **digitalDrummer**.

Next month, the winner gets a double dose - a set of Lectric Blocks and a custom input splitter cable ideal for adding a trigger to a Roland TD-9, 12 or 20. To be in the running, simply send your DIY question to editor@digitaldrummermag.com.



Your DIY connections





# Zones and edge guards

Do you have a DIY question? Philippe Decuyper, a.k.a. PFozz on the edrumforfree forum, will solve readers' problems in each edition of **digitalDrummer**. Whether repairing existing equipment or building your own, Philippe will find the answers. Just email your questions to <a href="mailto:editor@digitaldrummermag.com">editor@digitaldrummermag.com</a>. This month, we have two questions. The first is from **Ilkka Huotari** in Finland who asks about the various types of trigger circuit: "What is the difference between piezo, piezo/piezo and piezo/switch?"

AS MENTIONED IN the first issue of **digitalDrummer** magazine, the piezo transducer is an important part of most electronic drums.

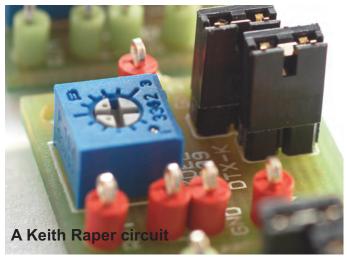
A trigger made of a single piezo is commonly called a "mono trigger". Its electronic part mainly consists of a mono piezo connected to a mono jack. A typical example is a kick drum. Let's remember that this instrument is just struck in the same area by a beater. The only useful information coming from an electronic kick drum trigger is thus velocity. A single piezo is sufficient to fulfill this mission.

However, acoustic drums provide a lot of potential subtleties, depending on the applied technique. For example, a snare can be hit on its skin, on its rim, on both of them, etc. We can play the bell of a ride cymbal, which will not sound the same as its bow or edge.

And since we have tortured our wrists and fingers to learn various techniques, it would be unfortunate to reduce the subtlety of electronic drums to what a machine would have done back in the '80s. That's why manufacturers have designed different ways to improve triggers' capabilities.

One of the first challenges was probably to trigger different sounds from the same pad, depending on the played zone. Enter the "dual trigger" which senses both velocity and location of the strike.

There are two main types of dual triggers: piezo/piezo or the piezo/switch type.



#### Piezo/piezo

Piezo/piezo tells us that a trigger is made of two piezo transducers. One of them, the main piezo (which may be the bow piezo or head piezo), will be used by your module to compute the velocity of a strike, while the second largely is used to determine which zone to trigger.

Basically, if the zone piezo signal level is above a defined threshold, the module will consider "this" zone (rim or edge, for example) was struck.

#### Piezo/switch

A piezo/switch dual trigger is made of a piezo and a switch. Often, this switch is a membrane switch. It is similar to what you can find in a cheap PC

keyboard. This switch is usually hidden on the edge of a rubber pad. When this switch is "on", the module knows it must play a specific sound. The single piezo transducer is therefore used to compute the velocity, whatever the played zone.

It is possible to combine or improve the aforementioned techniques to get a three-way trigger. Roland's three-way cymbals are partly made using two switches and only one piezo (piezo/switch/switch) to differentiate hits on the bow, edge or bell. The piezo is always used to compute velocity, while the two switches are used to identify three areas: switch 1 detects the edge, for example, while switch 2 triggers the bell. Switches 1 and 2 in the "off" mode would trigger the bow. Two stereo jacks will both receive the signal coming from the single piezo (sleeve/tip) and one of the two switches (sleeve/ring). A module equipped with a "double" ride input should then be able to cope with it.

On Yamaha three-way triggers, the system is a bit different. Only one stereo jack is required. The single piezo is connected to the jack's sleeve/tip couple. One of the two switches is directly connected to the jack's ring/sleeve and the second switch is connected to the same terminals, but with a 10kOhm resistor between one pin of the switch and the jack socket. (I call this "piezo/switch/10k".) A compatible module is then able to differentiate three zones ("off", "10kOhms" or "on").

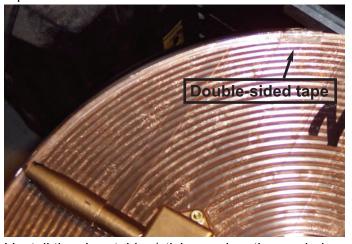
#### Homemade

In theory, we could replace a membrane switch with a classic temporary switch, but then we would have to develop a very special playing technique! Building an efficient and rock-solid membrane switch is quite difficult and homemade dual triggers are usually the piezo/piezo type. This is a problem if you want to connect such a trigger to a module which does not have enough piezo/piezo inputs. Earlier Roland modules only have piezo/piezo inputs for snares, while toms require piezo/switch triggers. Luckily, there is a work-around. British drummer and electronics expert Keith Raper (profiled in the first edition of digitalDrummer) has designed a "piezo to switch" converter which can be used to convert a piezo/piezo trigger to a piezo/switch trigger (and even a piezo/piezo/piezo three-way trigger to a piezo/switch/switch or a piezo/switch/10k). This circuit does not require any battery or AC adaptor, it's very small and very affordable and I'm not afraid to say that Keith deserves the eternal respect of the whole edrum DIY community. Thanks again, Keith!

Our second question is from **Eric Baranek** of Manistee, MI who asks about DIY cymbals: "I want to add the clear tubing to the edge of my cymbals to keep my stick from getting all chewed up. What is the best method to fasten this so that it will not fall off as it is obviously going to take a lot of hits? The answer comes from Jerry Langenfeld of **Jman Acoustic Evolution**.

The stick guard does take a lot of hits and I use PVC tubing which increases the stick life significantly, but it will need to be replaced eventually.

You're right that the stick guard needs to be held in place firmly so it does not fall off during use, but it also must be easily removed later for replacement. With heavy play, you might need to replace the guard after a few months which is not a problem since it is simple to install and inexpensive to replace.



I install the clear tubing/stick guard on the cymbal edge, then take a couple inches of double-sided KRT (Killer Red Tape) for each end of the vinyl tubing. Stick the KRT on the underside of the cymbal edge, roll it up so most of the tape tucks inside the tubing and press it all together. This holds the tubing on quite well and everything can be removed and replaced in a flash. For those heavy metal bashers or cymbal denters, another bit of tape in the centre strike zone of the tubing might be needed.

Don't forget, questions selected for this section win DIY prizes from Jman Acoustic Evolution. Get answers to your questions by emailing yours to editor@digitaldrummermag.com.



**digitalDrummer** continues its tour of music rooms in search of electronic excesses. This month's show kit is the work of **Jeremy Hoyle** from Melbourne, Australia.

#### Jeremy's story:

Music styles: Rock. Hard, heavy, fast, slow, any which way! Some Metal, Grunge, Garage. Drummers I most admire started pre-teens with Stuart Copeland (The Police) and Peter Criss (Kiss). Over time, plenty of others have become faves, especially Grunge heroes Dave Grohl (Nirvana, QOTSA, & Them Crooked Vultures), Mike Bordin (Faith No More, Ozzy), Matt Cameron (Soundgarden) and Eric Kretz (Stone Temple Pilots) - even Lars (Metallica) as I'd never heard drumming like that before! Music background: I was given some drum lessons at about the age of 10 at school. Through my teens, I managed irregular sessions on some friends' kits, but was never allowed my own, due to the wonderful inconvenience of noise - and lack of space. Any kit I came across was abused accordingly, but my own kit eluded me... until now!

#### **Drum equipment:**

#### Modules:

Roland TD-9 (with all available V Expressions expansion kits), TD-4, TMC-6

#### **Drums:**

PD-125 (snare), KD-120, VH-11 hi-hats, 5 x PDX-8s as toms and side snare (piccolo sound), 2 x PDX-6s as timbales.

#### Cymbals/Percussion Pads:

4 x CY-8s as crashes, 2 x CY-5s (one as fixed 12" hi-hat, the other as 10" splash) and CY-12R/C as ride.

#### **Hardware:**

MDS-4 rack and half an MDS-9 rack mashed up for a compact rack with just enough space for everything.

All stands are Gibraltar: 5600-series double-pedals/hi-hat /snare stand and 7 long/short hidden-boom cymbal arms. Roland DT-30 throne.

52 www.digitaldrummermag.com



Above: Jeremy and his "modest" monster.

Right: PD-125 and KD-120

Below left: That's a lot of PDX-8s!.

Bottom right: Brain power: TD-9, TD-4

and TMC-6 provide the processing 
powered by V Expressions.

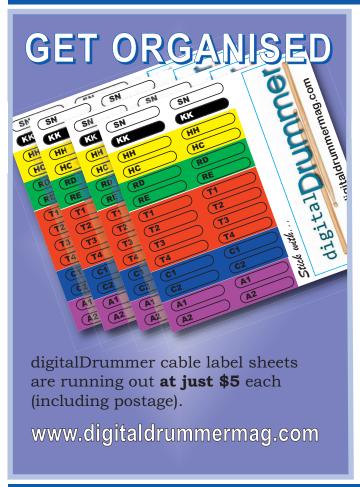


If you have a monster, email editor@digitaldrummermag.com



## **ACCESSORIES**

## **TRAINING**





## **SOFTWARE**

## **CONVERSION KITS**



VDrumLib allows you to create custom drum kit libraries for your Roland V-Drum module. The same simple user interface is employed for all of the following Roland V-Drum modules:

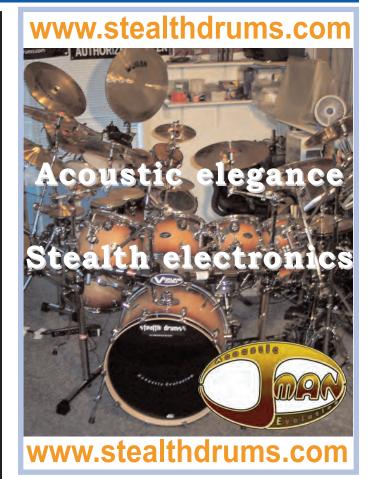
TD-3, TD-6, TD-8, TD-9, TD-10, TD-10EXP, TD-12, TD-20 and TDW-20

VDrumLib is trialware, so it is FREE for you to try. If you wish to continue using it beyond the 10-day trial period, a license can be purchased for \$19.99 USD.









#### --CONTRIBUTORS--

## Take a bow ...

**digitalDrummer** is a combined effort, bringing together the expertise and experience of electronic drummers, industry professionals and experienced writers. Here are some of the people who made this edition happen ...



#### SIMON AYTON

Simon Ayton is the V-Drums and percussion specialist for Roland Australia. He began drumming in 1983 and trained as an audio engineer. Simon's drumming can be heard on more than two dozen albums and film soundtracks, ranging from metal to electronic and folk, and he is currently working on two new solo albums. He shares his intimate knowledge of module-tweaking in this edition.



#### JANELLE BURDELL

Janelle Burdell is a drummer, percussionist, teacher and facilitator. She recently released a solo CD on Udu drum and has worked with Mickey Hart, (Grateful Dead/Planet Drum) on projects both in the studio and on stage. Janelle was a member of D'CuCKOO, the multimedia percussion ensemble, and performs regularly at music industry events.



#### **GRANT COLLINS**

Grant Collins has developed powerful and modern drum set solo performances which have captivated audiences around the world. His instrument is as unique as his creative musical attributes. His one-of-a-kind custom acoustic kit is valued at over \$75,000 and takes his team two hours to assemble. When he's not playing with this giant kit, Collins uses a Pearl ePro Live kit. Collins is our inhouse trainer, providing notation and MIDI instruction.



#### PHILIPPE DECUYPER

Philippe Decuyper, a.k.a. PFozz, is the founder of the Edrum For Free website. He has consulted to Toontrack since 2005, specialising in electronic drums, and is also the founder of eaReckon, a small independent audio software company which launched in 2009 and recently debuted its BloXpander MIDI solution. PFozz answers readers' DIY questions in each edition.



#### JON LEVITT

Jon Levitt is a freelance drummer based out of Chicago, IL. Frustrations with equipment led him to discover the Zendrum in 2005 and he has been a devoted player of the instrument ever since, using it everywhere from coffeehouses to the Chicago Theater. He has played drums for 12 years, and spent the last half of that in pursuit of bringing the benefit of electronic percussion to a wider audience. (PHOTO: Seph Victor Mercado)



#### JOHNNY RABB

Johnny Rabb is an active live and studio drummer and composer, currently part of the innovative group BioDiesel. Best known among electronic drummers for his clinics for Roland, Johnny has worked with Roland's US and Japan drum and percussion divisions, programming drum kits for the Roland TD-12 drum set and the TDW-20 expansion board. Johnny continues to design and develop new sounds and innovations for his unique concepts on the drums.

Thanking you all



As we approach the Festive Season, all of us at digital Drummer would like to thank everyone who has supported us in our first year. We look forward to meeting your needs in the year ahead and hope we can count on your support.