

# Roland V-Drums TD-20K

Brad Watts and Andy Stewart drum up a storm on the latest hi-tech offering from Roland.

Electronic percussion has come a long way since the days of the hexagonal Simmons kits and those horrid Tama Techstar pads. The stories of percussionists beating the living daylights out of hardened rubberised polymers and plastics until they're ruined with RSI are now a thing of the past. After witnessing Roland's flagship 'electronic' kit I must affirm the whole concept has improved beyond my expectations. Drum pads are no longer torturously firm and the technology responsible for the actual sounds – like every other synthetic instrument – has improved incredibly. However, some things never change and this I find somewhat perplexing, but at the same time quite endearing. Why do drummers refer to the only piece of electronics in a synthetic drum kit as 'The Brain'? Surely it's a sound module, or a drum synth with trigger inputs? I'll leave you to muse over this as we have a look at Roland's latest – the TD-20K.

Before we open the box I really ought to



declare the fact that until recently I was not, nor considered myself to be, a drummer. Anyone faced with a fresh TD-20K kit could hardly help themselves from stepping up and having a bash. I was no different. "Rubbish!" came the call from two rhythmically savvy and somewhat eager-to-have-a-go cohorts. "Our turn!" Thenceforth I was quickly and repeatedly put

to shame. But... after a couple of weeks of discrete trial, error and a large degree of embarrassment, a strangeness came upon me. I repeated the strangeness. I repeated it again... and now I can drum. I've also come to some other important conclusions. Firstly, playing a kit is an absolute hoot! Secondly, I want one. Everything makes sense while drumming – I now understand why drummers get a little vague from time to time. They're wishing they were behind a kit! I have to hereby take back all those snide drummer quips – you know the ones.

## Brain Box

Roland's latest and greatest in the TD V-Drum lineage raises the bar in electronic percussion dramatically. The TD-20 brain (good grief, it's happening!) offers some important innovations when compared to the previous flagship TD-10. The most significant is no doubt the VH-12 hi-hat – for the moment, the ultimate hi-hat controller. The VH-12 consists of two hi-hat

pads that closely resemble the real thing. The pads

are interchangeable with real hats – you use the same stand and pedal. The top hat moves up and down just like an acoustic setup. Consequently the VH-12 is a joyous playing experience. When compared to the weary method of a single stationary pad or hi-hat-shaped trigger controlled with a variable foot-pedal, the VH-12 is streets ahead. In an arena where the emphasis is entirely on feel, the VH-12 adds an enormous degree of realism. Of course, the TD-20 is the only brain to date that will read VH-12 data correctly. The soon-to-be-released TD-12 (no doubt replacing the TD-8) will utilise this method but it could be a few months before we see the scaled-down module in this country. The TD-20 can emulate the old single-pad method should you be using the module with outboard samplers or software. You see, not all software drum samplers will 'see' the TD-20 hi-hat Midi information

correctly. Drums From Hell Superior did a terrific job of translating the info but others weren't so clever. Used in these situations the TD-20 is best set to the old hi-hat format.

The next important change is the improved PD105 and PD125 drum pads. At first glance these pads may look like the beasts found perched upon the TD-10

kit – the same concept of mesh heads touching a foam compound ‘cone’ and then contacting the piezo trigger. There is, however, a marked improvement due to a couple of factors. A new black foam compound replaces the blue style found in the older pads. It lasts longer and apparently triggers a tad faster. Both size pads employ a newly designed undercarriage. Instead of a single bridge across the underside of the pad to house the rim and head triggers, a circular ‘spider’ arrangement assists in achieving an even transfer of energy from the rim to the rim trigger. The old design approach could often result in ‘hot and cold spots’ around the rim. With the new design, the rims trigger consistently over the entire V-Pad. It’s a very realistic result – dropping your sticks through the kit creates a similar clatter to losing sticks through a mic’d-up acoustic kit – it can be a little eerie to begin with. The newer design also helps the TD-20 module interpret ‘nuance’ control. Because the two triggers have much better separation, the pad produces more precise position-sensing information. Position sensing applies to only the snare, toms, ride and the four auxiliary triggers.

Holding everything together is the MDS-20 rack system: a far superior and better-looking system than the MDS-10 with those strange curvy sections. The cables are hidden within the rack, plus it comes in a better range of colours – black – as opposed to red, white or purple! There’s even instruction for reversing the rack for lefties (left-handed players). The cymbals and kick remain the same with the brilliantly responsive CY-15 ride, two CY-14 crashes and the KD-120 kick pad. Personally I loved the ride – three-way positional sensing is a must for a realistic ride.

## V Good

I forget I’m here to talk to you about the actual module. Let’s look at some of the technical stuff. To start with there are 560 completely new drum sounds to pick through, plus 260 further instrument sounds for backing duties. V-Drum COSM-style pictorial editing makes easy work of sound modification – super intuitive. This includes modelled snare buzz, kick beater selection, and far greater cymbal customisation – you really should try playing a 24-inch hi-hat. The choices covered are huge. Add ‘sizzle’ rivets to a cymbal, stick a tambourine on your hi-hat, change microphone positioning, cymbal size, head tuning, drum depth and dampening. It’s a neat way to edit kits – you can literally hit the ‘sandbag-in-the-kick-drum button’. As is the case with the entire V-Drum line, edits are immediate. There’s no saving of patches – remember we’re drummers here. Kits can be copied to one of the 50 kit memories or to Compact Flash card. Thirty-two chains of kits, each with 16 steps, can also be stored. Across the top panel the unit offers more volume faders than the TD-10. With eight volume faders for kick, snare, hats, toms, individual cymbals and Aux pads you can quickly grab a fader and pull

a kit into line. A Flip button switches the faders over to individual control of four dual-trigger Aux pads, percussion, backing and click levels. The largest screen ever seen in the V-Drum line makes an entrance. Setting trigger sensitivity is aided by a dedicated LED bar graph – a huge help when ‘recalibrating’ a pad’s sensitivity. There’s far more visual feedback than seen in the lesser V-Drum brains, consequently it’s easy to make adjustments on the fly – again the emphasis is on feel and playing, rather than tweaking around menus.

## Trigger Fingers

Connectivity to the unit is very comprehensive with 15 dual-trigger inputs and eight separate assignable outputs. A coax S/PDIF digital output is a thoughtful touch but really should be a prerequisite these days. A mix input is provided with its own level control. Then there are master L+R outputs and headphones as you’d expect, and Midi in, out/soft thru. The TD-20 also supports V-Link (although I cannot think of an interesting application). Underneath there’s the “Expansion slot for future upgrades and enhancements”. We’ve yet to see what this could entail – rumours suggest the ability to load and playback samples, perhaps via CF card, more sounds, more editing and so forth. A dual footswitch input allows sequencer start/stop and kit selection. Eight analogue direct outputs offer adequate options for multi-tracking and the built-in mixing section allows kits to be mixed on a trigger-by-trigger basis – that includes pan, volume, minimum volume and overall kit level. Bear in mind that levels can be set for each trigger input’s head and rim volume separately, or the head and rim may be linked. Each trigger also sports its own compressor and EQ along with low- and high-band shelving EQ and a parametric midrange. These processors are bypassed on a global basis only. Ambience levels for each trigger pad access various room types and shapes, ranging from ‘Garage’ through to ‘Dome Gymnasium’ and ‘Beach’ – yep... sounds like a beach. Wall types can be switched between wood, plaster and glass and ‘overhead’ mic positioning can be set low or high. Another effect send accesses the multi-effect section for your typical array of reverbs, ring modulation and time delay effects. Delays will go up to two seconds. There’s even overdrive and distortion – fabulous fun on snare!

## TD-20 Editing Parameters

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*Kick:* Shell Depth, Beater Type, Head Type, Head Tuning, Muffling, Snare Buzz, Mic Position.

*Snare:* Shell Material, Shell Depth, Head Type, Head Tuning, Muffling, Strainer Adjustment, Mic Position.

*Tom:* Shell Depth, Head Type, Head Tuning, Muffling, Snare Buzz, Mic Position.

*Hi-Hat:* Cymbal Size, Add Tambourine, Mic Position, Fixed Hi-Hat.

*Cymbal:* Cymbal Size, Sizzle Type, Sustain, Mic Position.

*Edit:* Pitch, Decay.

## Sequence of Events

The internal sequencer isn't your average 'record and play' add-on. Aside from sequencing, there are four backing parts and a percussion section. Trigger pads can start and stop patterns, all of which can store their own tempo and time signature information. Recording can be kicked off from a hi-hat hit and looped in one- or two-bar measures or the length of the pattern. You can replace or overdub as you record and, God forbid, quantise. Patterns can be edited, chopped and pasted by single measures – there's no means of editing notes. Good.

As far as the sound of the TD-20 is concerned, a number of people complain about them sounding a little too 'processed'. Well, I'll tell you there's a way around this. Turn the processing off. Taking the kits back to their raw state without any compression or ambience and bypassing the master effects results in a much more useful sound. It really is a case of the presets being designed for showroom demos – the kits are way too 'full' for recording purposes. Of course



there's the option to 'outsourced' your drum sounds with sample libraries and plug-ins, but having cut back on the pizzazz, I preferred using the internal kit sounds for a couple of reasons. Firstly, the triggering speed. To keep a drummer happy when you have any Midi and audio latencies problems can be a very big ask. Secondly, in situations where the talent is still finding their feet with a performance, it's much quicker to let the drummer have immediate access to the sound.

Now as I'm obviously no drummer, Andy Stewart has offered his two bob's worth. Apparently Andy is a bit of a virtuoso and I'll readily agree he's a damn sight better'n me – for now anyway. I'll hand you over to Mr. Stewart for a drummer's perspective on the TD-20K kit.

## Andy 'Sticks' Stewart Comments

So far everything that Brad has said is [probably] true, although I don't understand any of it because I'm just a drummer...

When I found myself sitting down and having a bash of a Roland TD-20K at a trade show on the Gold Coast recently, I knew I'd plumbed a new depth – a personal record low – in social retardation. There I was doing the unthinkable – playing an instrument, like so many dorks before me who've felt compelled to pick up a guitar and trot out some awful rendition of *Stairway To Heaven*. Admittedly, I hadn't quite sunk that low, after all, I had drumsticks in my hand, but certainly I was on

an elevator going down!

Anyway, on the strength of that two-minute humiliation session, I was sufficiently enamoured of the TD-20 kit to request one for a magazine review.

Now, for what it's worth, and for the benefit of this review, I'm going to 'out' myself – although Brad already has – yes, I'm a drummer, or as is probably more accurate these days, *was* a drummer. I haven't played much at all in the last couple of years for various reasons, and then only in short bursts in the recording studio. Which is in some ways what has drawn me – against my better instincts – towards the TD-20K.

Like most drummers, I've always had a healthy disrespect for synthetic drumkits of all makes and models, because frankly, they've always sucked! They've never had anything like the subtlety of a real kit, and this fact has always been brought sharply into contrast whenever I've sat at a 'plastic' and attempted even the most rudimentary rhythm. And yet every so often the 'latest and greatest' technological marvel is unveiled amid wild claims of performance and subtlety to rival that of a real kit. The claims are invariably exaggerated and I always walk away from these instruments with the same questions in my head: "Why would a company spend millions of dollars developing a simulation of a real drumkit when you can just *buy* a real drumkit? Why waste your time re-inventing the wheel when there are wheels everywhere – especially when the hi-tech one costs twice as much; is far more convoluted to set up and play; requires mains power to function (as well as a drummer who is predisposed towards buttons, switches and layered menus); and, to top it all off, amplification. All these issues seem to run contrary to what it means to play drums. All jokes aside, when you sit at a drumkit you want to get physical, not cerebral, and having to faff about with menus and Midi routing to get things working can be diabolically frustrating. Drums are real, organic, responsive and acoustic. They're not synthetic and fake. But of course, the same could be said about pianos... and these days, for every real piano there's got to be 50 fake ones. These kits aren't made to replace real kits, but rather, provide more sonic options for all concerned.

The fact is, there are myriad reasons why a synthetic drumkit makes sense. Apart from noise level issues, which include everything from complaints by neighbours (or for that matter parents, spouses, sisters and brothers), acoustic separation during tracking to industrial deafness, the 'post-performance' control over a drummer's 'recording' is these days quite staggering – pretty handy when you're a bit rusty (like me), or a beginner (like Brad). But that's all moot if the instrument you're playing possesses the musical dexterity of a barbecue hotplate. In my experience, previous incarnations of synthetic drums have been about as 'life-like' as Frankenstein's monster and as physically embarrassing to look at as a guitarist walking on stage with a tennis racquet slung around his neck.

The TD-20 is, to that end, the first synthetic kit I've ever played that makes sense – to my hands as well as my head. What's interesting is that Roland has finally acquiesced to the notion that a drumkit must feel and look and behave like the real thing. In the past, technology hasn't been capable of achieving anything even approaching realism, nor has fashion demanded it, but suddenly, simulators of all kinds are starting to feel organic – so now, finally, cymbals are looking (vaguely) like cymbals, toms like toms and so on. I've never understood in the past how companies have tried to pass off what has looked like a cheap Frisbee as a hi-tech hi-hat. Not only have these awful renditions of crucial drum components usually borne no resemblance to a drummer's experience of real hi-hats – and *felt* like a plastic toy – they've usually sounded that way as well.

### V Le Difference

So how is the TD-20K any different? Well, I won't go so far as to say it feels like a *real* kit, but certainly it goes a long way towards it. The toms in particular are extremely close to the feel of real skins, albeit a touch more elastic than normal drum heads. The skins can be tightened and loosened with a standard drum key like conventional drums to attain the correct rebound response you desire, but oddly, this doesn't affect the pitch of the drum. Nevertheless the result is a feel more in keeping with a real drumkit than any I've played in the past. As Brad has already pointed out, the evenness across the skin is good, and the response varies depending on where you hit it, as per a real kit.

One thing I will say though is that the cymbals, being rubberised pads, don't offer the same stick response that a metal cymbal affords, and this is where the artificial nature of the kit still leaves a bit to be desired. Real ride cymbals and hi-hats, it must be said, are extremely complex physical instruments. They're effectively chaos theory in action, which makes simulating the effects of a stick connecting with a resonant metal cymbal an almost impossible task. A ride, for instance, isn't just about the 'ping' of the body and the 'chang' of the bell; it's often a complex build up and dissipation of numerous beats that get the cymbal moving, and this is only adequately represented synthetically by the sounds in the TD-20 sound module. It was probably the only time I wished I'd had my kit handy – so I could replace the ride cymbal. Everything else felt fine, and became more familiar as days went by, but I never really got used to the ride.

### Kit & Kaboodle

I feel like there is so much more to write about here – so many relevant tangents; from how the continued development of drum software and simulators will affect recording studios in the future (i.e., close them down), to how the technology may give rise to a million 'so-called' drummers – but I'll try and stick to

the topic. Before I hand this back to Brad, I will say that I've always been a bit of a 'traps' Nazi (stands etc) and I loved the fact that, with the TD-20K, I could retain my own hi-hat stand and kick pedal (although I haven't seen



hide nor hair of them since I loaned them to Brad). However, I found the wraparound stand and the connecting hardware of the TD-20K a little toy-ish and not very reassuring. No matter how much I tried to tighten certain components, they always seemed inclined to sag. Perhaps it was my reluctance to over-tighten things for fear of damaging the demo kit, but ultimately, the rack module felt a little lightweight and fiddly... and if it were a live gig, I would have needed an extra day to set up for the sound-check!

In terms of drum realism, the TD-20K is a light-year ahead of any of Roland's previous offerings, and the proverbial intergalactic space flight away from my first recording session with a Simmons kit in 1985! To think, even back then, everyone was saying how 'life-like' that kit was. Twenty years later these claims are finally beginning to hold some semblance of truth. My approach would be to mix and match the TD-20K with some real kit components for a truly powerful and versatile setup. Is this the beginning of the end for the studio drum room?

### BW20K (Brad Watts) Concludes...

I admit I find the whole V-Drum thing an exciting prospect. Having lived in the world of synthesis, sequencers and computers for the last 15 years, 'drums' constituted either loops, heavy ReCycle sessions or painful Midi editing. With a V-Kit I can drag people like Andy in (along with the countless other drummers that seem to pop out of the woodwork when you have a V-Kit) and have a drum track actually performed and recorded in my control room – without waking up the missus; without a cupboard full of microphones and a well versed engineer; and *sans* the expensive room hire. Some may balk at the price of a V-Kit, but compared to the recording costs of acoustic kits, a TD-20 system would pay for itself quite quickly.



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