

BOSS DR202



beat practice

BOSS DR202 DR GROOVE RHYTHM MACHINE

The recent welter of affordable, easy-to-use dance music-making instruments has now been joined by a rhythm box from the company that has arguably been most responsible for the current bpm-driven feeding frenzy — Roland, or more specifically in this case their *alter ego* Boss. The Boss DR202 Dr Groove is one of a continuing line of 'Groove Approved' Roland/Boss products aimed squarely at clubbing DJs, pro and semi-pro remixers, bedroom-based dance music techno-heads, and in fact anyone tempted by the broad church that is dance.

Not Just A Drum Machine

Given that the instrument arrives in a box marked 'Drum Machine' I think Roland are selling the

Dedicated rhythm machines are very much back in fashion, and the new Boss DR202 offers an impressive specification at a budget price.

Chris Carter investigates its qualifications.

DR202 a mite short: this is a drum machine, but it's a lot more besides. A quick rundown of the specification sheet reveals all — see the 'Basic Spec' box for details.

Though not quite as small as some earlier Boss 'Doctors', with a footprint of 10 x 8 inches the

DR202 is small enough to chuck into a DJ bag or holdall, and will run on batteries for up to eight hours — long enough for an all-nighter in a field. The top of the plastic case is pretty well crammed full of those nice rubbery function buttons and performance pads, and a row of eight knobs along the top deal with modifying the audio signal. Unlike the diminutive Dr Sample (reviewed back in *SOS* January '98), which has 18 flashing backlit translucent buttons, the Dr Groove has only five flashers, none of which are the drum pads. This is a shame, but probably a good thing from the point of view of battery life. Lack of velocity-sensitive instrument pads is also a big disappointment, although it does respond over MIDI.

The LCD display is a standard 'dark grey on light grey' 32-digit affair with no back light, making it almost invisible on a dimly-lit stage. Connections are basic but adequate, with a pair of phonos for the stereo output, MIDI In and Out (switchable to Thru), a headphone mini-jack and a standard quarter-inch footswitch jack socket (programmable). External power is supplied by a standard Boss 9V wall-wart PSU.

Dedicated Pads

For a budget unit, the DR202 has more dedicated controls than you would usually expect to find. This is fine by me, and even though most of the editing controls are multi-function, the editing process is still quite straightforward, once you take a few a cursory scans through the instruction manual.

When switched on, the DR202 defaults to Pattern mode, which allows you to start playing back some funky beats immediately (more on programming patterns themselves later). The pattern name and number is shown in the top half of the LCD, and selecting a new pattern using the left/right cursor keys and the data wheel is simplicity itself (using the shift button allows even faster scrolling). If you select a new pattern while another one is playing, the lower half of the LCD shows the next pattern to be played (see box for a list of preset pattern styles).

While a pattern or song is running, you can play along on drums, bass or an external MIDI source such as a sampler or synth using the 13 instrument pads. These are marked with a C to C scale and the names of a basic drum kit: Kick 1, Snare 1, Open HH, Hit 1 and so on. By default, the pads play the bass and drum voices from whichever kit is programmed into the current pattern, but you can change to other preset and custom kits while patterns are running.

The Bank Of Interaction

If that isn't enough interaction for you, there's also the option of twiddling a few knobs. The Volume and Low Boost knobs do exactly what they say, and next to these are the four unassumingly-named 'Realtime Modify' controls: Cutoff frequency, Resonance and Decay. These really spice up the sound and are what set the Dr Groove apart from most other run-of-the-mill drum machines. What we have here is a bank of 14 digital filters (13 for the percussion sounds and one for the bass) with an

Instrument selector knob to determine which VCF/voice combination is currently being modified by the control knobs: bass and drums, bass only, drums only or each individual percussion voice.

Having 14 filters at your disposal is pretty awesome, and the preset kits don't really demonstrate the extremes to which this instrument can, and probably will, be taken. Add the ability to record *any* VCF knob movements into a pattern in real time, and you begin to appreciate what a capable little monster the DR202 is. An 808 or 909 kit with each percussion voice, and the bass, modified by a sweeping resonant VCF, mmm... music to my (bleeding!) ears. However, it's not all plain sailing if you want to indulge in 'hands-on' modifying over a pattern with previously recorded knob twiddling, as you and the Dr Groove then fight over who has control of those fabulous filter sweeps.

Tempo & Tapping

Patterns will always play back at the tempo in which they were programmed, whether in Song or Pattern mode, but the tempo can be changed at any time by pressing the dedicated bpm button. With either a User or an edited Preset pattern the LCD shows two values, a fixed 'recommended' bpm (the Pattern bpm) and an adjustable bpm parameter. Once in this mode, you can enter a new tempo using the data dial (to the nearest 10th of a bpm) or use the Tap button to change the bpm 'on the fly'. I found the Tap method frustrating and sometimes not too accurate: the Tap bpm rate is calculated from the first four beats you tap out, at which point the display changes to indicate 'TAP bpm'. If you get carried away and continue tapping away after the first four taps, however, the LCD tries updating the tempo for each and every tap, which can result in the tempo drifting erratically by as much as 8bpm.

Very Effective

The last two knobs control effect parameters for the Reverb/Delay and Flanger, their function changing from kit to kit depending on what type of effect is programmed. If the effect is delay, the Rev/Del knob adjusts the feedback level; if it's reverb it controls reverb level, while the Flanger knob always adjusts the flanger output level. If either control is turned clockwise beyond the Off position, the LCD changes to show the current effect parameter value, whereupon pressing the right-hand cursor button scrolls the display through the various effect parameters for the current kit, which can then be adjusted using the data wheel.

There are eight reverb types, from halls to rooms, each with adjustable decay time and level and two types of delay, panning delay and stereo delay. The delay time can be set in milliseconds (5-450ms) or in bpm-related time divisions (10 settings from half-note triplets to sixteenth note triplets).

Although the effects features are limited, they sound fine within the scope of a typical dance-based rhythm. The effect parameters can be changed in real time while a pattern or song is playing, but adjustments can't be recorded to a

BOSS DR202 £299

pros

- Affordable and easy to use.
- Hundreds of great dance patterns and styles.
- Plenty of dedicated buttons and real-time control knobs.
- Some unique features.
- Portable (and with a decent battery life).
- Very very groovy.

cons

- Pads not velocity-sensitive or backlit.
- Real-time effects control not recordable.
- Slightly frustrating MIDI spec.

summary

So chock-full of groovy goodies it hurts. 256 drum and bass samples, 3-track pattern sequencer, external MIDI control, real-time control of multiple VCFs, digital effects, groove templates and literally hundreds of authentic dance patterns and kits. Exceptional value for money and little to complain about.

SOUND ON SOUND

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▶ pattern, as with the VCFs, and any changes are lost if you select a new kit, as it's impossible to perform a save while a pattern or song is playing.

Recording A Pattern

As with most pattern-based drum machines, you can record rhythm patterns in real time or step time. You don't need to specify which track to record to as drums, bass and external MIDI are allocated automatically.

Real-time recording is the default mode, and can be activated only by first selecting a User pattern. This can be either an empty location, an existing pattern, or one of the preset patterns copied into an empty User location. Pressing the REC button puts the Dr Groove into Record Standby mode, sets the REC button flashing at the current tempo and starts the metronome ticking. At this point various options are offered: Name (eight digits), Measure (1-8), Beat (1/4 - 4/4 time), Quantise (nine resolutions from 8ths to 384ths). You can also practice tapping out rhythms along with the metronome until you are ready to go for a take, at which point you hit the REC button (or use the footswitch option). And that's basically it. Adding and overdubbing bass lines or external MIDI notes is done in exactly the same way, as track allocation is handled automatically. Step-time recording (also used for editing patterns) involves slightly more effort. For this you need to select the Step time option while in Record Standby mode and use the +/- step buttons to move backwards and forwards through a pattern, tapping the instrument pads at each step. Editing options available within Step Time mode include changing the kit or effects, deleting and inserting notes, adjusting gate time, inserting portamento values, inserting drum rolls, shifting instrument timing, muting individual instruments (without deleting them) and copying and deleting patterns. If an external source such as a MIDI keyboard is used to input drum or bass data the Dr Groove will record (in real or step time) note velocity for bass and percussion instruments and portamento data for the bass.

Kit In A Box

The DR202 includes 128 preset rhythm kits, each containing 13 different percussion sounds and one bass voice. Kit styles include Hip Hop (27 types!), Drum & Bass, Techno, House, Jungle, Electro, Ambient, Acid Jazz and Funk, and there are even a couple of Industrial kits. Of course there are plenty of Roland TR Rhythm Composer kits and a few traditional Rock, Pop and Latin kits.

64 user kits are available, with various programmable parameters for each of the 14 voices. These include instrument type (from 256 available), level, pitch, pan, effect send and cutoff, resonance and decay for VCF control — not a bad line-up. Effect parameters for the Reverb/Delay and Flanger are also set within a kit. Kit construction basically involves tapping a pad, selecting a voice for that pad, adjusting the parameters for the voice and moving on to the next pad. Kits can also be named and copied.

I must say I sometimes found the limit of 13 percussion instruments per kit a slight hindrance for creating really adventurous custom setups, but nevertheless some pretty decent kits can be put together quickly and easily if you can't find one from the 128 presets.

Song Time

Once all your rhythm patterns are assembled, you can think about putting a song together. This is achieved in a similar manner to step-time pattern recording, but with fewer options to worry about. Press the Song button, select an empty song location from the 19 available, give it a name, hit the REC button and use the data dial to select from the available Preset or User patterns. Then it's just a matter of stepping through the song using the +/- step buttons, selecting a pattern for each step. A Song tempo figure (from 40 to 250bpm) can be programmed to override the pattern bpm, and patterns can be inserted into or deleted from an existing song.

Arsenal Of Sounds

The Dr Groove includes a full complement of 207 drum, percussion and SFX samples and 49 bass samples, including essential dance stalwarts such as the TR707, TR808 and TR909 and acoustic, electronic and distorted kick drums, snares, cymbals, blips, clicks, vinyl scratches (which the manual quaintly refers to as 'plastic scratches'), reversed percussion, and even the ancient Roland CR78. Bass samples include sawtooth, square and sine waves, electric and acoustic bass guitars, various SH101 waves and of course a selection of TB303 samples (notice the emphasis on Roland instruments anyone?).

But what does it sound like, I hear you say? Well... pretty good, actually. With the right kit, and some judicious use of the Low Boost control, the Dr Groove can really kick you in the guts. On the whole the sound is more 'budget' than 'pro' and some samples lack a little presence and 'oomph'. But it doesn't really matter that these samples don't sound like they're being produced by a top-of-the-range 16-bit sampler, especially in this price range. Dance music is more about feel and

Basic Specification

- Instruments: 256 (207 drum, 49 bass).
- Rhythm Kits: 128 Preset, 64 User.
- Rhythm Patterns: 400 Preset, 100 User).
- Songs: 20 (1 Demo, 19 User).
- Effects: Flanger, Reverb/Delay (8 Reverb, 2 Delay).
- Real-time modify VCF controls (for each instrument and bass), real-time mute and solo controls.
- Maximum polyphony: 24 voices (shared between drums and bass).
- 3-track pattern sequencer.
- Sequencer resolution: 96 ppqn.
- Tempos: 40-250 bpm.
- Programmable Roll function (68 types).
- Groove quantise templates (20 types).
- Connections: stereo output (phono), headphone (mini jack), MIDI (In and Out); foot switch (quarter-inch jack).

Pattern Book

The Preset rhythm patterns are divided into 11 styles, which in turn are subdivided into various hybrid variations and tempos. According to Roland, "every genre of groove music is represented in these Preset patterns — all with street-level authenticity thanks to their legitimate DJ and dance music programmers". Who these authentic programmers are Roland don't (or won't) say, but they sound pretty damn good nevertheless.

Preset Patterns include:

- Hip Hop
- Hip Hop East
- Hip Hop West
- Hip Hop Rock
- Hip Hop Old School
- Hip Hop Soul
- Hip Hop Jazz
- Ragga Hip Hop
- Trip Hop
- G Funk
- Funk
- New Jack Swing
- Abstract
- Jungle
- Drum & Bass
- Bass
- Techno
- Detroit Techno
- Minimal
- Electro
- Trance
- Nu-NRG
- Hardcore
- Rave
- Ambient
- Industrial
- House
- Acid House
- Latin House
- Eurobeat
- Jazz
- Acid Jazz
- R & B
- Blues
- Rock
- Country
- Latin

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► emotion than sound quality, and the arsenal of sound-shaping tools, patterns, styles and overall grooviness of the DR202 compensate for any minor failings in the sound of the raw samples.

Grooves On A Plate

If you've had any experience of constructing rhythms using a software sequencer, you've probably come across groove templates before. The DR202 has 20 on offer, and they do the same thing, essentially quantising the timing and accents of a pattern to a preset rhythmic template. This is done so that it's not the actual content of the pattern that changes, just its rhythmic feel, and the pattern can be returned to its original state at any time. In the Dr Groove, templates can be used only on User patterns or Preset patterns copied to a User location, and are applied using the dedicated Groove button. Depending on the complexity of the rhythm, the process can be a little slow, as the groove template is applied to all three tracks in a pattern. Also, the DR202 insists on applying a groove template each time you select a new one from the list — no fast scrolling to the end or middle of the list, you have to step through each template and wait for it to be processed before you can move on to the next.

These foibles aside, however, groove templates are an invaluable tool for breathing new life into plodding or uninspired rhythms, and although the 20 templates here are uneditable there are enough to accommodate most dance styles.

Flam Rolls

The Dr Groove roll function is a little special, and unusual. It offers 68 pre-programmed drum roll patterns, including regular fill-ins and flams and also complete rhythmic phrases and dynamically filtered rolls. This latter bunch are the type you regularly hear in drum & bass tracks, which consist of ultra-fast rising or falling (in velocity and/or pitch) rolls, some of which use the VCF bank for even greater effect. Only two parameters are used: Type and Speed (from 00 — a slow tick-tick-tick — to 127 — blindingly fast warp speed), and these are programmed as part of a Kit. The Roll button can also be latched to allow individual percussion sounds to keep repeating *ad infinitum* while you play other non-rolling pads.

MIDI

The Dr Groove has a full, if slightly frustrating MIDI implementation. SysEx loading and dumping of all the internal

kits, patterns and setups is catered for, as is setting MIDI channels for bass, drums and external MIDI In and Out. It also responds to and transmits MIDI Volume, Pan and Control Change data for each track, Program Change for selecting Kits, Portamento data for the bass, all the VCF real-time controllers, effects levels, and internal or external MIDI sequencer control of Start, Stop and Continue. The bass and external sequencer tracks will also respond to MIDI modulation and pitchbend, which is great for expressive bass lines, though it's disappointing that the sequencer tracks will not record either modulation or pitchbend. The instruction manual doesn't give any specification for sequencer memory other than the maximum number of measures per pattern — eight — and the maximum number of patterns per song, 999. I tested it by recording a busy eight-bar rhythm pattern containing drums, bass and some MIDI sequences and chords, copying 100 patterns into a song, and copying the song 19 times, and the available memory still read 60 percent, so whatever the memory allowance is, it appears to be more than adequate.

The Doctor Of Groove

There aren't many rhythm machines around in this price bracket with quite the same unique features as the Dr Groove. If you add the feature-bursting but similarly priced Dr Sample to the equation you have, in effect, a mini workstation complete with stereo sampler, synth, drum machine, multi-effects and a MIDI sequencer for approximately £599, and I'll bet good money that dealers will start offering special bundle deals on the two as a 'dance workstation on a budget' package. Roland see this as the ideal combination, and supply details of how to link the two Doctors together and run the built-in (and sync'able) demos in tandem, to great effect I might add.

Combinations aside, at its very reasonable asking price of £299, the Dr Groove would be ideal for gigging dance musicians working out ideas on the road, DJs wanting near-state-of-the-art grooviness *and* portability, or someone starting out with a bedroom-based dance rig. With so many instantly accessible and usable bass and drum patterns and styles available at the touch of a few buttons, even pros wanting to bang out top-notch dance rhythms quickly and easily while those creative juices are flowing need look no further than the Boss Dr Groove. The bottom line is that it can be highly recommended for anyone producing dance music. **SOS**