

# DSI & Roger Linn Tempest | \$1,999



The highly anticipated drum machine is here! **Dan 'JD73' Goldman** sees if Dave Smith and Roger Linn's new collab lives up to the hype...



## WHAT IS IT?

An analogue/digital drum machine, with expanded MPC-style sequencer, designed by Dave Smith and Roger Linn

## CONTACT

Who: DSI  
Tel: +1 (0)707 963 7006  
Web: [www.davesmithinstruments.com](http://www.davesmithinstruments.com)

## HIGHLIGHTS

- 1 The hybrid sound engine sounds just right for drums and synth duties
- 2 Sequencer has classic Linn/MPC60/3000 feel
- 3 Extremely tweakable for studio and live performance

It's no surprise that the Tempest has been getting beat-centric producers salivating since the prototype BoomChik and

LinnDrum II were shown at NAMM 2007/8. With legendary electronic instrument designers Dave Smith (Sequential/DSI) and Roger Linn (Linn drum machines/Akai MPC60/3000) behind it, it was bound to cause a stir. The Tempest builds on Dave and

Roger's heritage – the Linn part is the sequencer/digital side and Smith's part is the analogue side. In essence, the Tempest is an analogue/digital synth based on tweaked Evolver/Tetra/Prophet 08 voice chips, mated to a much-improved MPC-style sequencer, all built with live performance in mind. It's not a sampling drum machine and you can't yet upload your own samples, though rumour has it user sample

upload might come soon. Those that want a new MPC-style sampling drum machine will have to wait for Linn's upcoming new machine.

The Tempest's six-voice polyphonic sound engine has two digitally-controlled analogue oscillators (DCOs) and two digital oscillators containing one-shot drum machine samples (16MB/approx 450 sounds) including useful noises/waves from FXpansion



### Filters

Low-pass and hi-pass – powerful filters to sculpt your sounds

### Envelopes

Five DAPDSR envelopes for super punchy drum and synth sounds

### Oscillators

Analogue and digital oscillators – suitable for making drums, FX and synth sounds

### Playlist

Playlist button – use this to chain beats together to form an arrangement

### FX Ribbons

Real-time FX ribbons-assignable position and touch sensitive modulation controls for on-the-fly tweaking

and Goldbaby's sample libraries. There's no removable storage media or any way to expand the Tempest's memory but the soundset is thankfully very versatile. There's a sub oscillator per voice (like the Mopho and Tetra) that adds a square wave an octave below the oscillators and several types of digital noise (white pink and green for starters) so there's plenty of scope, from analogue and digital drum hits, to noises and FX. The Tempest is also killer for bass, leads and bleeps and will be great for chords once polyphonic mode is implemented.

Until then, several monophonic bass or lead lines can be layered up and chords can be built the same way. Basslines and leads are recorded using the pads in 16 tunings mode, which maps each pad to a note from the several onboard scales. This works great, plus I successfully recorded notes into the Tempest's sequencer via my MIDI keyboard using OS 1.02. The amp, filter, pitch and two auxiliary

## Tempest as a Synth

The Tempest is a serious six-note poly synth in its own right (once polymode is switched on in an OS update) so make sure you add it to your list if you are looking for a great sounding analogue/digital synth in your studio – it has all the necessary parameters that you would look for in a keyboard laden poly synth, though keep in mind if your beat uses five voices, you can only have a monophonic synth running. There's



oscillator sync, several glide modes (perfect for emulating 303 basslines) fine tuning, key follow, sawtooth, triangle saw/tri and variable pulse waves, five envelopes, Prophet VS waves, several digital noise types, Osc 1+2 mix, wave reset for extra cutting

sounds, pre and post filter mixing, filter FM, two LFOs, audio modulation, a Curtis low-pass filter with resonance that can be switched between two- and four-pole modes and a discrete high-pass filter too – that's one filter better than the Prophet 08! Then of

course there's amp feedback, which is much like running the output back into its input (a famous Minimoog trick) a great sounding distortion (though I wish the control would be more subtle at its lowest value) and a single dial compressor that also sounds very musical when acting on any of the Tempest's sounds. In all honesty, if the Tempest was the only analogue synth you'd ever owned, you'd be happy!

envelopes (all ADSR or AD with peak and delay) are snappy- perfect for punchy one-shots, basses and bleeps/ FX and the pitch envelope is great for dive-bombing sonics, twisted FX or pitch-drooping toms. Also, the two auxiliary envelopes can be assigned to

any of the Tempest's 58 modulation destinations, reinforcing the Tempest's status as a serious synth in its own right. Sure, it's all a bit overwhelming at first but after a couple of days you'll have it down. Modulation-wise there are two LFO's with triangle, saw,



### Transport

Transport controls for recording, start/stop and tap tempo duties

### Effects

Compressor and distortion effects for pumping and destroying sounds

### Pads

Backlit pads-for sequencing sounds, changing beats, playing in synth lines

reverse saw, square and random wave shapes and the LFOs can run freely or be synced to the current beat or via external MIDI clock – the possibilities here are very deep indeed!

Moving onto the hardware, the eye-catching metal and wood design feels solid throughout and is well laid out for live tweaking. There are 24 dials, 49 switches, a superb bright

turquoise OLED screen, plus two pressure and position sensitive ribbon strips placed like pitch and mod wheels, each of which can send to two mod destinations. If you hold down shift and press the 'latch on' buttons you effectively get two more of these sliders, with another two lots of destinations, so that's eight real-time live FX destinations for starters! These

sliders are a unique and indispensable addition to the Tempest's performance tools and are much quicker to use than dials or wheels, enabling super-slick beat twists and filter/mod changes on the fly. The roll and reverse functions are killer too. Roll is like note repeat on an MPC but it can also be set to roll the entire beat, as well as sounds within a beat (great for stuttering effects and real-time fills) and it also has its own independent quantise and settings for which part of the beat it affects. Reverse can be applied in the same way – to the whole beat or a sound within a beat! Genius!

The 16 blue-backlit pads feel great and more responsive than those on an MPC. The blue lights look stunning and give a clear visual indication as to what's going on in the main modes: 16 beats, 16 sounds, 16 mutes, 16 time steps, 16 tunings and 16 levels.

### À la mode

In 16 beats mode, each pad triggers a different beat, making it easy to arrange a tune on the go and tweaking any front panel parameter in real-time affects the whole beat. Filtering or stuttering the beat using roll or reverse, or using the envelope decay to shorten all the transients adds significant drama to your performance.

In 16 sounds mode, each pad represents a different sound within a beat/kit and each pad can be processed independently. 16-time steps mode includes a 16-step sequencer where each of the 16 pads represents a step in the sequence. In this mode (and the 16 sounds mode) there's also another 16 sounds accessed via the Sound Bank B button

## The Good and Great

Here's what we like and love about the DSI & Roger Linn Tempest



> The Tempest is a fully self-contained drum/synth box and is great if you don't want to be tied to a computer, plus it's a good alternative to Maschine, Motu BPM, or an MPC (though no sampling remember).



> Imagine the sound of a Dave Smith Instruments Mopho/Prophet 08/Evolver wired to an MPC3000 with loads of real-time control and modulation options. That's pretty much the essence of this machine.



> The DSI team are committed to upgrading and refining the Tempest's OS. We can therefore confidently predict that the Tempest is only going to get even better.



(total 32) though it's not yet active in OS1.02 and the maximum number of bars currently available within a beat is restricted to four, though this is soon to be upgraded to eight.

Workflow-wise the Tempest is very conducive to live tweaking and beat recording though needs streamlining in places. There's a long list of current bugs and missing features that Chris

enough as it is so don't put off purchasing to wait for the new OS.

### Tempting sound

So how does the Tempest sound and feel? Well, imagine a pimped up MPC3000 or 60 sequencer attached to a DSI Mopho/Evolver with real-time control/effects and you get the idea. It has that sought after human-yet-tight

onboard compression, distortion, MIDI delay and filtering really add a lot of scope. In our alternatives we've referenced NI's Maschine and Elektron's Machinedrum but really, no digital DAW can come close to the Tempest's sound/feel when really pushed. The Tempest filters don't break up, they drive and saturate and no digital system will sound as smooth.

The bottom line is the analogue engine and the way it interacts with the sequencer is unique and it's far easier to use than the Machinedrum

– its street price won't be that much more (around £1,400) – and it's more flexible than the Jomox or a real 808, 909 etc. Though the Tempest is marketed as a drum machine, it's really a six-voice DSI analogue poly with a sequencer.

There's also a useful onboard mixer with panning, level, delay sends and mutes/solos. Importantly, most

### SPECS

Blue backlit 64x256 OLED screen

6-voice polyphonic analogue/digital sound engine with 4 oscillators per voice

2 analogue oscillators and 2 digital oscillators with sub osc and variable wave shape

Digital waves include Prophet VS waves and Goldbaby and FXpansion one-shots

24 dials, 49 switches 2 real-time FX ribbons with latch, playback mode

90 controls total

Approx 16MB samples at 16bit 44.1kHz quality (mono) approx 450 sounds

Mixer section with panning, mutes, solos, delay sends

16 backlit velocity sensitive pads with velocity curves, x2 soundbanks

16 beats, 16 time steps, 16 sounds, 16 mutes, 16 tunings and 16 level (velocity) modes

5 DAPDSR envelopes (pitch, filter, amp, aux1, aux2 with short APD mode

Dual mode Curtis low-pass filter with resonance and discrete high-pass filter

Audio modulation and amp feedback

2 LFO's with variable waveshapes, 8 mod paths and 58 destinations

Stereo analogue distortion and compression with MIDI delay

Swing quantise from 50% to 75%

96 PPQN sequencer resolution

Roll and reverse features

Click on/off, count in, undo record, erase and copy

Load/save project/beat/sounds/kits

16 beats per project

Playlist mode for beat chaining

Tap tempo

Event edit mode (like DAW piano roll)

Fully multitimbral

1 stereo out (L/R) and 6 voice outputs

USB for MIDI in/out

MIDI in/out

MIDI clock send and receive with slave thru mode

2 pedal/switch inputs

Headphone jack

**Dimensions:**

**391 x 228 x 63mm**

**Weight:**

**3kg**

## The Tempest filters don't break up, they drive and saturate and no digital system will sound as smooth

Hector at DSI is fully aware of and working hard to address with upcoming OS updates. Issues include not being able to see the second lot of 16 steps in a beat, undo record not working, Sound Bank B not working, roll not working in mutes mode, playlist (beat chaining) is still not active, the screen doesn't scroll to the pad/sound you are hitting/editing in the events screen, no quick way to instantly revert back to the saved version of the beat while playing (though you can quickly unmute everything you've muted in 16 mutes mode and revert single sound changes quickly) plus it's not yet possible to sequence external gear.

Finally, one of the most needed missing/upcoming features (along with the aforementioned sampled upload) is automatic pop-up menus so that when you hit a button or turn a dial you know where you are, as it's easy to get lost in the deep OS. Strangely enough though, even bearing these small bugs in mind, the Tempest still feels complete

groove that Linn does brilliantly, though you can't currently switch off quantise. Sound-wise it punches hard with a clear yet not super-clean high end, a nice mid range presence and a tight yet extended low end. The filters sound excellent – raw yet controlled – and the net result is that you can slot the Tempest straight into a mix without the need for much processing, plus the

### Connectivity

The Tempest is quite well specified with a stereo output and six individual voice outputs to which sounds can be assigned, a USB port which can send and receive MIDI, a headphone output, MIDI in and out and two pedal controls that can be assigned to a variety of mod destinations.

The functionality of the MIDI CC implementation is not yet clear but hopefully that will soon be fixed. MIDI clock in sync works well, though be aware external clocking subtly changes the sequencer's swing feel. It's also a shame there's no filter in, digital out, monitor out or mouse

input (as shown on the Linndrum II prototype) but obviously the end price didn't allow these to be implemented.

Also, a DAW librarian/editor would be nice and power is supplied by a wall-wart. Not the end of the world but how about a hook to stop the wire getting pulled out?

### Outputs

Stereo out and six individual voice outs to send to a mixer



## ALTERNATIVES



## Jomox XBASE 999

**1,399 Euros**

Another analogue/digital beatbox/step sequencer for drums, with analogue and digital one shots built in.

[www.iomox.de](http://www.iomox.de)



NI Maschine

**£489**

Maschine combines a controller with a DAW-based plug-in sequencer, with advanced FX, editing and 5GB of samples onboard.

[www.native-instruments.com](http://www.native-instruments.com)



Elektron  
Machinedrum  
SPS-1UW+MK2

**£1,250**

Well-respected digital drum synth, with 16-track step sequencer, eight real-time knobs, powerful effects and real-time recording of most parameters.

[www.elektron.se](http://www.elektron.se)

functions happily work without having to stop the sequencer too, which is great. My only wish here is that there was a reverb and EQ onboard as on the prototype Linndrum II.

Recording beats is easy – simply press record while the sequencer is playing, the beat will loop and you overdub/erase sounds as you want (like an MPC) or enter each sound manually

getting it out to the public and in the main it works great. Yes it's pricey but it's quite unique too and there's a lot onboard. Put it this way, if you're a beat maker starting a setup from scratch that doesn't do much sampling and just wanted great analogue drums, a real analogue poly synth, an analogue distortion box and analogue compressor with an MPC3000-style

clock that is far more solid than the one on Logic.

Nothing else drum machine-related on the market is this powerful in terms of hands on synthesis. Yes Maschine is a lot cheaper, can sample and has a limitless number of sounds but the Tempest is a long-term investment and is about quality not quantity. Plus I'm sure the Tempest, like all hardware,

will hold its value.

The Tempest sounds, feels and looks the part and that's the bottom line. OS improvements aside, DSI and Roger Linn have created

something special. The Tempest is a future classic. **FM**

This could seriously revolutionise your approach to beat making with its plethora of real-time controls

using the 16 steps in event mode.

A big plus is you can record the real-time effect ribbon data into the sequencer and edit it in event mode. Event edit is very close to using a DAW's piano roll editor and enables you to refine each step in a beat for pitch, volume, time shift, velocity, tuning and the FX ribbon data. Anyone switching from a DAW to hardware will thus feel very at home in this mode.

sequencer, step sequencer plus digital samples, there's no way you could do it for the same price as the Tempest.

The Tempest could seriously revolutionise your approach to beat, bass and effect making largely due to its plethora of real time controls and expanding feature list, not forgetting it's a totally self contained solution that could allow you to ditch cumbersome computer setups onstage.

In the studio, the Tempest could easily be used for all your drums and could replace aging old poly and mono synths. It's all there in one box, plus soon it will be able to sequence external gear too with its super tight

## Tempting sound

As you've probably worked out, this is a supremely deep machine and I can't cover every aspect here. Though the OS is still incomplete I admire DSI for

