Moog Little Phatty | £899

The first synth to leave Moog HQ since last August. **Jono Buchanan** reckons dieting is for losers…

WHAT IS IT?

An analogue monosynth aimed at bringing the classic Moog sound to more studios.

CONTACT

Who: Moog
Tel: +44 (0)20 7419 9999
Web: turnkey.co.uk

HIGHLIGHTS

1 Classic Moog sound
2 More affordable price point
3 Classy styling

Today's culture of obsession with celebrity means it's easy to believe that the legacy of many of our contemporary heroes will live on. Next time you're eagerly plucking the latest issue of *Future Music* off the magazine racks, stand back and take in all those shiny happy faces staring back at you. Stars of the screen, stage, football pitch and day-time TV shows will fill your view from every angle, all vying for your attention and adoration.

Some of them doubtless deserve credit for their achievements, but it's always interesting to note how frequently genuine pioneers shun the spotlight in favour of spending more time alone with their thoughts and dreams for the future. Into the latter category we can certainly put Bob Moog, arguably the most influential forefather of analogue synthesizers (and synthesis) ever known.

The music technology industry is still mourning his loss over a year after his death – and rightly so. The influence this man had over most pieces of synth gear sitting in your studio should not be underestimated. The last project over which he presided is now with us, in the form of the Little Phatty Tribute Edition, a product designed to bring the classic Moog sound to more studios by way of a more affordable price point.

What's that sound?

So what exactly are we dealing with here? Well, the Little Phatty is an analogue monosynth in the tradition of the Minimoog. It's built around a three-octave keyboard and, behind that, a raised panel that houses all of the knobs and switches that let you at the sound. And what a sound it is…

Synthesizers, and particularly Moogs, will always be judged on the noise they make. Throw in all the arpeggiators, real-time performance controllers and effects sections you want, if the core sound doesn't cut it then you may as well forget about it.

I'm delighted to report that the Little Phatty could happily pick a fight with any of its synth contemporaries right now and be assured of bloodying its collective nose. The sound structure is now legendary. The two VCOs can draw from a pool of four waveforms, which are continuously variable from Triangle, to Sawtooth, to Square to Rectangular

waves. That means that if the rotary encoder that selects your waveform lies between two waves, you'll get a blend of both, which in turn allows for the possibility of pulse width modulation between the Square and Rectangle waves. Oscillator Two is tuned relative to Oscillator One with an offset of up to seven semitones achievable up or down. The waveforms can be sync'd for a potentially monstrous sound, while glide can also be applied with variable rate.

The filter, too, is classic Moog. It's a 24dB/octave, resonant affair with dials for Cutoff, Resonance, Keyboard amount, Envelope Generator amount and Overload. For those unfamiliar with these latter terms, a positive Keyboard amount setting forces the filter to open as you play higher up the keyboard.

The EG amount selects how the filter envelope will shape the brightness of the sound over time, while Overload sets an amount of signal clipping, adding anything from a little bite to full on speaker-busting distortion.

Envelopes and modulation

The sound is then shaped by envelope settings for the amplifier and filter sections. The envelopes are governed by traditional Attack, Decay, Sustain and Release sections and editing these is very straightforward. If you want to modify the amplifier attack time, for example, simply press the appropriate button and its value will be displayed on the rotary encoder above it. The soft blue light that exists in the centre of every button allows you to keep tabs on exactly where you are, so even though the Envelope Generator encoder can display any one of eight parameters, it's obvious which one you're looking at.

The output section is simple, with a volume control, an always-on headphone port and a switch to route sound to the physical mono line out on the side panel. This glows a satisfying pink colour when selected. The LFO Modulation section is also simplicity itself. One switch for LFO source shape (with six choices), a rate dial with rotary encoder, a switch for the destination of the LFO and an amount switch, which also uses the encoder as its graphic. One nice touch is that the LFO source LED flashes at the selected rate – rotary encoders are good for most things, but not for showing LFO speeds! The master section features octave up and down buttons, the glide on/off switch, master tune and an encoder for scrolling through the presets.

All of which brings us neatly on to the sounds themselves. These simply ooze class. As so many hard and soft synths offer factory patches with Moog references in the title, its easy to wonder what all the fuss is about. It's not until you've got a real Moog sitting in front of you that you see just how great these boxes really are. Despite the simple architecture, this unit can produce sumptuous warm bass, bouncy synth sequences, resonant drones and ear-splitting leads in equal measure, plus everything in between.

Okay, it's a monosynth, so that provides its own limitations, but if you're into techy music of any sort, there's plenty here for you. The 99 preset sounds provide a useful starting

A brief Moog history

From the mid '50s onwards, Bob Moog made Theremins, music and abstract noises. In the '60s, Herbert Deutsch asked him to create an instrument for making electronic sounds. The first modular Moog premiered in 1964, and the audio engineering world took notice. The R.A. Moog company started taking orders, but it was Wendy Carlos' *Switched-On Bach* that put Moog on the map. The Minimoog (1970) was a career highpoint, bringing portability to Moog's systems. Financial trouble beset the company, and Moog became part of Norlin Music in 1973. Moog

founded a new company, Big Briar, in 1978. During the next decade Moog was a technical creative for Kurzweil, taught at North Carolina University and designed new Theremins. In 1998, the MoogerFooger analogue effects modules arrived to critical acclaim, and, operating as MoogMusic from 2002 onwards, Bob began building new synthesizers, such as the Voyager, which was showered with awards upon its release.

SPECS

Oscillator Section:

Oscillator 1: Octave: 16', 8', 4', 2'

Wave: Continuously variable (triangle/sawtooth/square/pulse)

Oscillator 2: Frequency: +/-7 semitones,

Filter Section:

Cutoff: 20Hz to 16KHz

Resonance: 0 to Self-Oscillation

Keyboard Amount: 0 to 100%

Filter Env. Amount: -100% to +100%

Overload: Variable pre and post distortion, adds +6dB signal boost

Envelope Generator section (x2):

Attack/Decay/Release Time: 0.001 to 10 seconds

Sustain Level: 0 to 100%

Modulation Section:

LFO Rate: 0.2Hz to 50Hz

Source: LFO triangle/square/sawtooth/ramp

Destination: Pitch, Oscillator 2, Filter, Wave

Keyboard:

37 keys (C-C)

Transmits polyphonic MIDI Note On/Off with velocity

Performance Controls: Pitch Wheel, Mod Wheel

LCD Display: 2 x 16 characters

Side Panel:

AC Power Inlet (universal power supply, 100-250VAC, 50-60Hz, Power consumption: 12 Watts)

Audio Out

Ext. Audio In (accepts +4dBu line level signal)

Control Voltage Inputs:

Pitch CV: -5 to +5V

Filter CV: -5 to +5V

Volume CV: 0 to +5V

Keyboard Gate: +5V trigger

MIDI In/Out

Outputs:

Monophonic Audio Out (on side panel)

Headphone jack (1/4" TRS on front panel)

Operating System: Flash upgradeable via MIDI SysEx

Dimensions:

680 x 375 x 142mm

Weight:

9.9kg

point, but selecting one of these and not immediately reaching for its dials is as easy as eating a doughnut without licking your lips… not very.

And that's not all…

Moog always designed his synths with performance in mind, and while the Little Phatty doesn't necessarily offer all the bells and whistles of some of its contemporaries, there are a number of features designed for live use apart from the physical dials themselves. The pitch-bend wheel is programmable to operate over a two-octave range, whilst the mod wheel provides vibrato for you.

The Little Phatty can also be programmed to organise presets or sounds you've saved in any order you choose, so you can switch sounds mid-song without having to keep dialing up and down.

The manual is clear and incisive, with a great tutorial, which will appeal to teachers. The accompanying DVD, contains a touching dedication to Dr Bob Moog by his wife, and audio clips, some of Bob's published papers, and an extract from the official documentary, commissioned two years ago.

> "The Little Phatty could pick a fight with its synth contemporaries and bloody its collective nose…"

Phatty boy slim

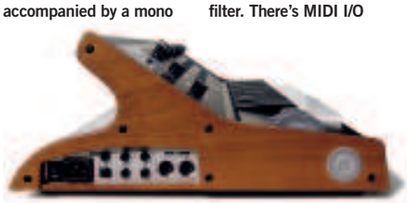
When I teach students about subtractive synthesis, it's the original Bob Moog model I turn to: oscillators, filters, amplifiers, with LFOs and envelopes as modulation and sound-shaping sources – it's a simple, endlessly varying model that's capable of such a huge spectrum of sounds, it's hard to believe they can be produced by a single instrument. And it's instruments that Moog built.

Most synthesizers, even those drowning in knobs, are still synthesizers. Moog managed to build musical tools that encouraged precise tweaks and, dare I say it, practice, in the instrument tradition. The LP is a great release for Moog Music at what must be a difficult time. It continues Bob's legacy while hinting that their products won't always be aimed at the wealthy minority from now on.

It's good to know Bob oversaw development of Little Phatty before he died. It's clearly his instrument and we're sure he'd be proud of it. How should we remember him? In a way encouraged by sound '00' in the preset bank: 'Thank You Bob'. FM

Side panel I/O

Ins and outs for the Little Phatty are housed on the left-hand side panel. Mono audio out is accompanied by a mono audio in, which allows any audio source to be mixed with the onboard VCOs before it's routed to the filter. There's MIDI I/O and a quartet of CV and Gate inputs. The Pitch CV acts as an external control of the oscillator's pitch, whereby a varying voltage varies the pitch. The filter CV and Vol CV allow the same thing for control over cutoff frequency and amplitude respectively. The KB Gate port allows either footswitch control or a +5 Volt Gate signal.



ALTERNATIVES

Bob Moog Voyager Rack Mount V3

£1,400

If you've a little more wedge burning a hole in your pocket, you should try one of these. It's a rack-mountable unit built upon the technology of 2002's Voyager, with three oscillators, a dual-mode filter and various other tasty treats. And that Electric Blue control panel has to be seen to be believed.

moogmusic.com

Access Virus TI

from £1,199

In terms of pure playing pleasure, Virus synths are also right up there. In many ways you get more for your money here. Polyphony, multi-timbrality, MIDI interface, audio interface and MIDI controller in one, the TI is an amazing box. Has a sound all of its own too, which is, perhaps, its strongest feature.

access-music.de

Clavia Nord Rack 3

£895

Nord synths, perhaps the most 'analogue' sounding of the current crop of digital synths, also have their devoted fans. Alongside the subtractive stuff, the Nord also allows you to dabble in a spot of FM synthesis too.

clavia.se

FutureMusic VERDICT

BUILD

VALUE

EASE OF USE

VERSATILITY

RESULTS

The original and still the best, this is everything you'd expect of a Moog. Simple as that…