



Arturia MiniBrute 2 £575 & MiniBrute 2S £599

The French brand unveil two new semi-modular versions of their analogue monosynth. **Si Truss** gets jacked up...

CONTACT WHO: Arturia (Source Distribution) WEB: www.sourcedistribution.co.uk www.arturia.com **KEY FEATURES** Semi-modular analogue monosynth with two oscillators, two LFOs, two envelopes (ADSR and AD), multi-mode Steiner-Parker filter, Brute overdrive/feedback effect. Comes in two varieties. MiniBrute 2 – equipped with two octave keyboard, 64-step sequencer, arp. MiniBrute 2S – equipped with 64-step, four-channel sequencer, chromatic pads, arp.



THE PROS & CONS



Patchbay makes version 2 considerably more flexible than the original

Both versions pack decent control options – but the 2S sequencer is especially impressive

Can interface with a whole host of external gear



Single -12dB VCF lacks flexibility

Osc 2 pitch control is a little too close to the filter cutoff for our liking

When Arturia's original MiniBrute arrived in 2012, it was an unexpected first step into the realm of analogue synthesis for the French brand, who had previously dealt exclusively with analogue emulating software and digital controller hardware. On a wider level too, the MiniBrute was a welcome anomaly – a monosynth pitched at the

affordable end of the market yet touting an all analogue design and CV control inputs.

Six years later, neither of those things seem so noteworthy. Arturia's analogue Brute line has now swelled to encompass three synths – including the behemoth MatrixBrute – and a drum machine, while their Beat- and KeyStep devices are go-to controllers for many hardware synthesists. The affordable analogue market has grown remarkably rapidly too – a boom arguably kickstarted, at least in part, by the release of the MiniBrute.

Given this, it's not surprising that Arturia have significantly stepped things up for the follow up. Where the original was a fairly straightforward monosynth with a few unique touches and some CV control, the MiniBrute 2 is now semi-modular, boasting a beefed-up synth engine and a comprehensive mini-jack patchbay. The MiniBrute now comes in two varieties too: the standard keyboard version, now equipped with a Keystep-style sequencer, and the 2S, which swaps the keys for a pad-based step sequencer similar to the BeatStep.

Souped-up

Leaving the patchbay and sequencers to one side for a moment, the core synth engine is very similar to that of version 1, albeit with a few noteworthy adjustments. As before, the primary oscillator can generate saw, triangle and square waves simultaneously, the outputs of which are blended via the oscillator mixer, where they're joined by a white noise source and external audio input. Each wave type also has a modifier control, for more detailed and unusual waveshaping. The saw is accompanied by

THE ALTERNATIVES



Moog Mother-32

£590

A similarly priced semi-modular mono synth. The Mother-32 has lots of patch potential and sounds great, but lacks the sequencing and control depth of the MiniBrute 2

www.moogmusic.com



Dreadbox NYX

£599

NYX has no sequencer and a less comprehensive patchbay, but it's paraphonic and has built-in reverb.

www.dreadbox-fx.com



Korg MS-20 mini

£450

An excellent re-issue of one of the most famous semi-modular synths of all time. There's no sequencer and it doesn't integrate with Eurorack as well, but the MS-20 is a classic, if just for the filters alone.

www.korguk.com

an Ultrasaw mode, which mixes in two phase-shifted copies of the saw waveform. The triangle wave features a Metalizer function, which 'folds' the triangle waveshape for a more metallic quality. Finally, the square wave features a pulse width control.

The difference here is that these modifiers can now each be modulated with considerably more flexibility either via pre-routed connections to the LFOs/modulators or via whatever you decide to feed in through the patchbay. The Osc 1 section also gains a glide rotary, for adding up to three seconds of portamento, plus an FM rotary for modulating Osc 1's pitch, which is routed by default to the second oscillator.

This second oscillator is a new addition for the MiniBrute 2. Version one featured a square/sine sub oscillator, but here that has been upgraded to an independently tuneable oscillator with saw, square and triangle shapes. It also has a tuning range switch, with a fine tune mode for more precise melodic uses, an LFO mode, which reduces the

oscillator speed for use as a non-audible modulation source, and a broad 'all' range mode. This oscillator also now gets its own fader in the oscillator mixer.

Filter-wise, the MiniBrute 2 keeps the Steiner-Parker-style filter of its predecessor, which offers -12dB low- and high-pass modes, plus -6dB band-pass and notch filtering. There's a resonance control, which can be pushed up into aggressive grittiness and self-oscillation. Again, this section is enhanced with increased modulation options, with pre-routed and fully patchable control over the cutoff frequency and resonance level.

For extra grittiness, the Brute Factor control returns from the original

MiniBrute. This overdrives the signal chain using a controlled feedback loop. It's great for adding extra weight and inharmonic grittiness, although it can be a little unpredictable at times.

On the modulation front, the MiniBrute 2 features a pair of multi-shape LFOs (in addition to Osc 2, which can act as a third). The two ADSR envelopes of the original have been swapped for a single ADSR generator – routed to the filter, but patchable – and an AD envelope, which controls the amp by default but is also fully patchable. The AD envelope comes equipped with a variety of trigger modes, including a looping function, and patchable control over each stage, which makes

This second oscillator is a new addition for the MiniBrute 2

PATCHBAY

Most controls on the MiniBrute's front panel get a patchbay input and each oscillator type and modulation source has an output, along with outs for the keyboard/sequencer. There are a few functions that can only be accessed via the patchbay too, including linear FM (the front panel version is exponential FM) and oscillator sync. All mod sources output at full scale, so a pair of attenuators are included for controlling signal level with rotaries on the front panel. There's a signal inverter too. The external input moves to the patchbay



here, so we now get a front panel mini-jack in instead of the full-sized input on the rear of the original. There are inputs and outputs for syncing the sequencer to external analogue gear too. You can control the type of clock the MiniBrute responds to using Arturia's MIDI Control Center software. In terms of modular flexibility, it might not be a totally exhaustive selection of patching options, but it's well equipped for a synth at this level.

it an interesting tool for sound design. Each env features a trigger input too.

Taking control

The 2 and 2S can both be played and sequenced, although naturally there's considerably more depth to the 2S's sequencing capabilities. Both pack multi-pattern arpeggiators and 64-step sequencers, capable of saving and recalling patterns, albeit just eight for the keyboard version but 64 for the 2S. The 2S also allows for patterns to be chained to create full songs, and features copy and paste functionality. Arturia's MIDI Control Center software allows for storage of an unlimited number of patterns on a host computer too.

Both also offer control over things like tempo, swing and sequencer gate length, along with tap tempo and a variety of sync options. Both can be manually played too, with velocity and aftertouch for controlling various synth parameters. The 2S features a chromatic grid laid out across its pressure-sensitive pads (here aftertouch is labelled Pressure, but it functions exactly the same).

As you'd expect, the 2S goes deeper. Where the keyboard version requires sequences to be input step-by-step and edited via a convoluted process of deleting and re-entering the notes, the pads on the 2S can be used to punch in steps in more of an xOx-style. The highlight here, however, is the flexibility of the sequencer's four channels. The first two of these are fixed to Pitch and Gate, while the second two can act as multiple type of modulation source. By default they offer Velocity and Pressure, but both can also be set to output stepped voltage messages, trigger an AD envelope on each step, trigger various type of LFO or act as an additional gate source. These second and third channels can be 'unshackled' from the primary sequencer too, allowing them to run in a different timing division or

direction. The Pitch channel can make use of a scale mode too. This allows patterns to be easily transposed into other keys.

On the whole, both versions of the MiniBrute 2 are a real success. They take everything we liked about the original – the analogue grit, interesting oscillator shaping, Brute factor – and expand on it considerably. The addition of the patchbay really does massively expand the flexibility and potential. Where the original was a great tool for gritty leads and basses, this follow-up is equally well-equipped for evolving drones, inharmonic FM sounds and out-there SFX.

The MiniBrute 2's closest competitor is probably Moog's Mother-32 and much like that synth, which is housed in a Eurorack friendly chassis, Arturia clearly want the MiniBrute to act as a base for your modular system – they've even launched the RackBrute synth-top case to accommodate this. On this front the MiniBrute probably has the edge over the Moog, thanks to the excellent keyboard/sequencers onboard, along with the flexible MIDI, USB and patchbay connections. Particularly in the case of the 2S, with its flexible modulation tracks.

There are a couple of slight design quirks and minor omissions. On the layout front, Arturia have placed Osc 2's pitch rotary right next to the – identically sized – filter cutoff control. Personally I find it a little too easy to grab the wrong rotary. In terms of capabilities too, while the supplied SP-style filter can be characterful and gritty, its maximum -12dB slope means it isn't the most flexible of VCF designs. The MatrixBrute pairs its Steiner-Parker filter with an additional ladder-design VCF. Clearly it's a little unfair to compare the MiniBrute to its £1600+ sibling, but having used that synth, it's hard not to feel that the addition of that second filter here would have pushed the MiniBrute 2 to the next level. Failing that, a



OSC 1 Enhanced modifier modulation and patching makes it much easier to add movement to sounds.

OSC 2 The MiniBrute's second oscillator is now tuneable, and can double up as a third LFO.

ENVELOPES ADSR and loop-able AD envelope generators offer plenty of modulation possibilities.

-24dB mode for the existing filter would be nice.

This is kind of nitpicking though, and not really a major problem. In either configuration the MiniBrute 2 is an impressive analogue synth and a real step up from its predecessor. The patchbay

adds flexibility and character that make this a very serious competitor in the now crowded analogue monosynth market. **FM**

FM VERDICT

9.2

An expanded synth engine, semi-modular architecture and flexible control options make this a seriously competitive monosynth

