



Solid State Logic SubGen £64



Need to beef up your bottom end? This could be just the processor you need to make things phat. **Jon Musgrave** gets low, low low low...

> Processing bass frequencies typically involves EQ and compression. However, sometimes these simply aren't able to deliver, and we need some kind of bass enhancement processor. These tend to fall into two camps – those that generate higher harmonics to give the impression of more bass and those that synthesise additional lower frequency content.

SSL's new SubGen plugin falls primarily into the latter category, but there is some harmonic enhancement available too. It features four sub harmonic generators, and these along with the accompanying display dominate the plugin

interface. Each band includes fully adjustable centre frequency (20Hz to 160Hz), bandwidth (0.1 to 1.0) and amount (-60dB to +12dB), and bands can overlap. Settings are made using either the regular controls or within the display, and the display also includes a background frequency analyser showing both the original and generated signals for each band. If you want to hone in on just one band, each also includes a solo Listen button.

As mentioned, SubGen can add harmonics too and the Drive control is in the bottom panel. The drive comes in three flavours – Bass, Kick

and Pre. Further options include a one-knob compressor, global wet/dry mix, input and output levels, and below this the preset browser.

The final processors in the signal flow chain are high- and low-pass filters. These are at the top of the plugin and include their own background frequency analyser. If you need just one filter or want to deactivate them completely, each adjustable flag has a bypass button.

Bass in the place

SubGen utilises a natural-sounding bass synthesis algorithm. This inspects the octave

Adding multiple fattening layers to lacklustre sounds for a hyped blockbuster feel is quick and satisfying

above your chosen centre frequency for each band, using the input audio to generate a sine shape signal that is then filtered to help it blend with the input. For simple fixed pitch sounds such as beats, this is incredibly easy to set up, and with up to four bands to play with and frequency settings right up to 160Hz it's very flexible. We found the graph display excellent for this as we could quickly sweep the frequency, adjusting gain and bandwidth at the same time to precisely focus the processing. The same technique works well for effects such as booms and impacts, and adding multiple fattening layers to lacklustre sounds for that hyped blockbuster feel is quick and satisfying.

With more melodic pitched sounds such as bass, a broader bandwidth approach is better, and once again sweeping the frequency helps find a centre frequency that works. For a really broad note range you can combine two or more bands. That said, processing multiple pitches does require a bit more tweaking than beats and hits.

Shut up and drive

SubGen's drive and compressor only process the synthesised component. The compressor seems to be tuned to work with low frequencies and although attack and release are fixed (5ms and 20ms), the Compress control influences both the threshold and ratio, so you can achieve quite gentle compression at lower settings, but push things much harder at higher settings.

In use we spent a lot of time soloing and bypassing bands, or simply using the global wet/dry control to evaluate what we were doing. Add in the visual feedback and SubGen clearly has plenty of ways to assess things, which is

particularly important when enhancing bass frequencies. Couple this with the ease of use, the multiple bands and graphic interface, and SubGen is one of the most robust sub bass plugins we've worked with. **cm**

Web www.solidstatellogic.com



SubGen is ideal for beefing up kicks, snares and impacts



Choose from three drive flavours to process the newly generated sub harmonics

Drive on

SubGen's Drive is a gain compensated, single knob effect with a choice of three flavours, and in terms of signal flow, it sits between the sub synthesis and the compressor. Harmonics can add presence to low frequencies, but it's important to understand that here it's only processing the synthesised sound and not the source signal itself.

Each mode has a different harmonic profile. Pre is based on an overdriven '50s style valve preamp. This generates a smooth mix of odd and even harmonics. Kick and Bass are both

based on transistor-style overdrives and produce primarily odd harmonics. In isolation, and listening just to the effected signal, the difference between modes is quite obvious with Pre sounding quite mid range, and Bass and Kick sounding a bit more lively. Of the three, the Bass option is the most aggressive. Once you blend the synthesised sound in with the original, these subtle differences are quickly masked. Even so, the process itself definitely adds a bit of presence, and is a welcome inclusion.

Alternatively

Brainworx bx_subsynth
\$149

Bx_subsynth combines three separate subharmonic generators with saturation for a dbx-inspired sub bass experience

reFuse Lowender
\$69

Lowender is a classic dual-band analogue-modelled subharmonic processor with overdrive and low-pass filter

Verdict

For Up to four sub harmonic bands
Powerful frequency adjustment
Excellent interactive graphic display

Against Stacking bands at the same frequency point unpredictable

SubGen is a very flexible and powerful sub harmonic generator, that's easy to use and sounds great

9/10