

ub frequency enhancer plugins are nothing new but it's an area that has become a lot more interesting and competitive recently as technology and processing power have advanced. RootOne, from Leapwing Audio, is one of the newest challengers, and makes a solid case for being the most advanced sub-enhancer we've seen yet.

RootOne is designed to add extra low-end presence to sounds by both shaping the existing frequencies and adding extra bass content below the incoming audio. Traditionally, plugins like this use a combination of pitchshifting, EQ boosting and filtering to add additional bass heft. RootOne's USP lies in its more contemporary approach that. according to its developers, uses a process of pitch following and phase alignment in order to create cleaner bass frequencies.

The plugin splits low frequencies into three adjustable frequency bands, and offers users controls to manipulate and shape each. Each of these bands creates new bass frequencies by looking for, and tracking, any audio content an octave above. For each band the UI presents users with a fader and meter, for cutting or boosting levels, along with controls for Drive, Dynamics and Attack/Decay. Drive is essentially a send effect, which can route a certain amount of the relevant frequency band to a harmonic saturation effect, which is given its own channel and range of controls in the UI.

Dynamics can be used to compress the newly created bass frequencies. At 100% the bass band follows the dynamic range of the incoming audio it's tracking, but as this parameter is decreased the new bass frequencies become more compressed. As its labelling suggests, Attack/Decay applies a volume envelope to the new frequencies, boosting or cutting the transient or decay tail. Each frequency also has its own mute and solo options, which help when fine-tuning frequencies, along with a link control for editing multiple bands together.

The final saturation channel has its own level fader and controls for Drive, setting how much distortion is applied, Color, which adjusts the harmonic qualities of the effect.



## RootOne really excels on drums and percussion

and a low pass for rolling off higher frequencies.

As with any plugin of this kind, results will vary depending on the source material, but in general RootOne sounds excellent. I used it to thicken out low-quality guitars recorded on an iPhone, and to add complete a thin synth lead, and it worked very well, creating convincing and melodically accurate frequencies below the original audio.

The plugin really excels on drums and percussion though; it's great for tailoring subby kicks and adding extra weight to snares and claps. I tried it across a full techno drum machine beat too, using a filter to completely cut the low-end then recreating it with RootOne - if anything the new faux-bass sounded better than the original! The saturation is a real bonus too, and works great for getting subs to cut through the mix on smaller speakers.

RootOne isn't cheap but I'm very impressed by the results. For producers working in sub-heavy club genres, we could see this becoming something of a secret weapon. FM

**FM** VERDICT

RootOne offers a fresh take on sub-enhancement, creating some of the most impressive results of any plugin we've tried

## THE PROS & CONS



Creates clean and realistic-sounding bass frequencies

## Plenty of customisation of each frequency band

Saturation is great for helping subs cut through



Fairly expensive