

# Waves H-EQ & Bass Rider

GEORGE SHILLING looks at two plugs that represent a compendium of EQ and an extra hand for the bass channel.



You would have thought that Waves had got EQ plug-ins pretty much covered by now, with emulations of API, SSL, Pultec and others plus its own individual takes like the Renaissance and Q10. The new H-EQ is again different, coming as part of the Hybrid line which thus far also includes a Delay and Compressor. All three model the sound of (multiple) vintage processors, while adding some precision and flexibility only achievable with plug-ins.

The H-EQ is at heart a conventional five-band parametric EQ with its highest and lowest bands selectable as bell curve or shelf. There are also High and Low Pass Filters that both cover the audio spectrum from 16Hz to 21kHz. The display graph includes a real-time analyser and a novel piano keyboard along the bottom to select frequencies. There's an MS Matrix too. The interesting thing here is that settings emulating British and American consoles are selectable on each band individually. There are (mostly, depending on the particular band) seven settings available via drop-down or just by clicking on the name button to scroll through. These are named Vintage and Modern in UK and US flavours with a choice of two Vintage UK settings and additionally two Digital settings. Apart from this last pair these settings are also assisted by an 'Analog' emulation section, where noise, hum and distortion can be dialled in as required. For some reason, the UK Vintage settings are rather noisier than the US ... (*Sounds like a PSU issue... Ed*) However, I always preferred the noise turned off.

Noise and Distortion levels are adjusted as percentage settings. Default is 100 percent for both, presumably representing typical real-world measurements, and noise Level goes from 0 to 200, while THD ranges from 0 to 1000 where things get rather fuzzy; this can be fun! Digital 1 includes an asymmetrical bell filter where adjusting the Q tilts the curve in either direction to give a steeper rise to the peak on one side of the bell curve. The other various emulations' curves are immediately apparent on the graph (and audible). These provide plenty of variety for all manner of situations, from surgical notching to broad tone shaping.

Mono and Stereo versions of the plug-in are provided. The Stereo version includes buttons to select between the Left and Right channels and to use them linked or unlinked. Additionally there is an MS mode to enable EQing and balancing the Mid and Sides signals differently from each other. In this situation the Input faders are relabelled appropriately and the stereo link button becomes a Listen button to hear the M or S signal alone, depending on which is selected. MS mode is certainly useful and I have to wonder why it is not more commonly implemented.

The graphical display gives a clear indication of the different shaped curves and you can click the colour-coded dots to manipulate each band's frequency and gain; holding Alt enables Q adjustment. Directly below the graph, the piano keyboard enables you to easily select a particular note frequency for any of the bands and notes change colour to show roughly the selected frequency as frequencies are adjusted with the dot or knob. A useful real-time Analyser can be overlaid onto the graph, separately or simultaneously showing input and output signals in different colours, and there are Freeze and Peak hold functions.

The different EQ styles cover more than enough choices in most situations, it's easy to flip to an alternative curve and compare, and the asymmetrical Q is novel and genuinely useful for achieving punchy and smooth sounds. With +/-18dB in each band there's not much you can't do with the H-EQ.

Following on from Waves' Vocal Rider comes the Bass Rider plug-in. Using a similar idea to the previous plug-in this one is optimised to work with bass parts and features a large fader that automatically moves around to even out the level of the bass when inserted on the track. The Vocal Rider has had a mixed reception, but it seems the principle here is slightly different. For a start, there is no possibility (nor need) to bus other mix elements to a sidechain. And rather than continuously varying the level, the plug-in is designed to recognise each note separately and set the level for the duration of that note based on its transient attack. There are two versions of the plug-in with the main version adding about 42ms latency. The Live version adds only 5ms if you don't mind a bit of punch

added to the start of each note. Both are provided in mono and stereo versions.

At the top is a sideways Target Energy Meter showing input level, with a superimposed fader. This is called the Target Slider and here you calibrate the zero level of the main fader by roughly matching the level of the input signal shown on the meter.

Below this is the Detect section with a Sensitivity knob to adjust the number of transients that are detected as notes, and a Slow/Fast Response switch that determines how fast the detector resets for the next note. Alongside this is an Ignore section that includes an Ignore Spill knob, which seemingly introduces a sidechain gate, and an Artefacts knob, which adjusts sensitivity to such things as string buzz. The default range of automatic adjustment of the main fader is 24dB but upper and lower Range values can be pulled in to reduce this to anywhere down to 1dB. Next to the main fader is a setting Idle Arrow to determine where it rests when there is no signal (defaulting to zero) and on the right is an Output fader to trim the gain post-auto riding.

To see the fader wagging about is a little disconcerting at first but mixing a song where the plectrum bass guitar part had been recorded without compression, it was impressive to see how instantly and effectively the Bass Rider was able to even things out. Setting the controls is simple. It sounds like compression's foreign cousin — everything is evened up nicely, yet there is little change to the attack characteristics of the notes unless you're using the Live version. That made this plectrum-played part rather too clicky, and resembled compression rather more closely. Even the main version of the plug-in seems to occasionally emphasise the start of the note, with it reacting after that and moving the fader audibly. This fairly fast-paced part needed the Response to be set to Fast, otherwise some notes were missed, especially by the Live version. As the player ventured up the neck, Bass Rider seemed to set the higher pitched notes a little too loud. Perhaps an update might feature an EQ sidechain to make this seem less skewed. But Bass Rider is impressive and a useful adjunct to compression. ■

## H-EQ

**PROS** EQ with mix-and-match available separately for each band; comprehensive metering, analyser, display, trims, etc.; piano keyboard frequency selection.

**CONS** Frequency control a hidden sideways slider; some presets' overall gain settings inexplicably wayward.

## BASS RIDER

**PROS** Great method of smoothing uneven playing; especially good on plectrum-played bass guitar.

**CONS** Can tend to emphasise high notes on bass parts that venture upwards in pitch; no way to record and edit Rider Fader automation.

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