



WHAT IS IT?

32-bit and 64-bit Valve guitar amplifier modelling software (plug-in and standalone modes)

CONTACT

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HIGHLIGHTS

- 1 Excellent sound quality
- 2 Unique Circuit Editing editable feature
- 3 VST host for inserting third party plug-ins



Peavey ReValver MkIII | £179

Peavey's amp-modelling software gets ever more ambitious with its virtual valves. **Robbie Stamp** gets knee-deep in triodes, pentodes and tetrodes



Peavey's ReValver virtual guitar shop gets an update, digitising their popular amplifier designs for those who want the tone without the heavy lifting. At the core are some meaty modelling algorithms for 17 major guitar amp valves, reproducing both their linear (clean) and non-linear (distorted) ranges. Using mainly impulse response (IR) convolution processing for reverbs and speaker/microphone simulations, Peavey are utilising the most thorough and modern approaches to this product. Of course, it has to sound good to live up to the hefty reputation of the 6505, Penta and ValveKing amplifier heads.

ReValver operates in a similar way to Native Instruments' Guitar Rig. The modules are stacked vertically and run in series, with splitters available for creating parallel processing chains. All the amplifier modules look like their real world counterparts, which serves as a good indicator of tone (i.e. black with shiny metal = ROCK), and the speaker simulators utilise the black cloth look. A lot of the stompboxes and effects are not that inspiring to look at, but this is no reflection of their sound quality or their usefulness.

Tweak it

The modules are well laid out and easy to use, and for those not satisfied with

the standard row of knobs, all the modules feature a 'Tweak this module' option to adjust their fundamental parameters (see the *Circuit Editing* box on the next page). Common to all these 'Module Tweak GUI' screens is a set of four analysis tools (oscilloscope, harmonic distortion, transient response and frequency analysis) the likes of which I've not seen at this level.

There is also a 'Save as IR' function for capturing the frequency response of any selected module or component for use in any other convolution based processor. This means many tube amp equalisations, amplified reverbs and speaker/mic combinations can be exported for use in third-party plug-ins, which is one damned handy feature. Though it is not essential to delve into this edit level, it offers great tone shaping for novices and boffins alike.

ReValver is very simple to use, with tool tips displaying the relevant information about any single control that isn't already obvious, and MIDI CC# assignment is just a click away. Loading and saving settings is standard, with either entire setups being stored/recalled or the settings for any individual component, which helps for building 'signature sound' libraries.

Conscious that people do have their own favourite processes and approaches to effects, Peavey have had

the great sense to include a VST host that enables the user to insert their own VST plug-in(s) anywhere into the setup. Though some native sequencer plug-ins may not load, the majority of those I tested worked perfectly well and only excited me further about the possibilities of ReValver, for both guitar/bass and re-amping usage.

Snap, crackle and crunch

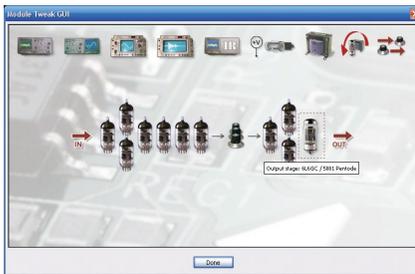
For those short on programming time there is some great news – even the presets sound good. The amps all sound and behave like the real thing, with plenty of crackle, crunch, dirt and that all important low end beef that has rarely translated into the digital realm satisfactorily. All the classic and modern Peavey amplifiers are represented, as well as some ‘non-named’ classic amps (Vox AC30, two Marshalls, Fender BassMan, Mesa Boogie Rectifier and Matchless Chieftain) along with a few ‘homebrew’ designs. Their preamp and power amp components can also be selected for mixing and matching. For speaker simulation there are two options.

The first, and most CPU intensive, is the RIR, an impulse response convolution engine that comes with a bank of supplied IRs, as well as the ability to load in your own. The RIR comes with a few extra controls to further shape the virtual speaker

Circuit Editing

‘Module Tweak GUI’ presents the user with a flow diagram of the selected module’s major components. For many modules this may only be ‘In’ and ‘Out’, so there is little to edit, but with any amplifier a host of valves, transformers and EQ blocks are up for editing, though it is with the valves that the real editing power lies.

The ‘Tube Tweak GUI’ window is stocked with sliders, drop down menus and an explanatory circuit diagram for the valve in question. The user can choose from 10 classic preamp/midstage valves and eight valves for the power amp section, with a ‘character’ list for their distortion tonalities (‘mellow’, ‘round’, ‘lively’,



etc). Beneath this things get physical with sliders for VPP (supply voltage), plate load, cathode resistor values, a switchable cathode capacitor and value, bias voltage and overall topology for power amp circuits (push-pull or single ended). A set of ‘Non-physical tweaks’ for digital-only adjustment completes the tonal manipulations on offer.

Tweaking the valves into their non-linear ranges (where unpredictable distortions, phase and transient response occur) is the basis for those beautiful tones that are actually quite hard to find in fully functioning amps. The Tube Tweak GUI allows the user to create beaten-up amps, the real-world versions of which would become sought-after treasures.

as well as the ability to load in your own (there’s loads online).

Bit for bit

Even though the sound quality is excellent in the real-time 32-bit mode, switching to 64-bit really adds an extra

get your hands dirty there’s just no stopping, and your best tweaks can be saved and used again later. The use of IR algorithms as well as the VST host plug-in takes the flexibility of the ReValver way beyond both its competitors and its price range making

it a great audio processing tool for guitar and bass, as well as almost anything else. This kind of solution has the right combination of options and

quality to allow those with a unique voice space to explore and refine their sound, while providing those in search of a ‘sound’ a great set of flexible tools to find it. **FM**

The use of IR algorithms takes ReValver beyond both its competitors and its price range

cabinet, producing some excellent, visceral tones: high/low shelving EQ, ‘Dist’ and ‘Crunch’ for speaker distortion. The SCS speaker simulator is less CPU intensive and is based on more standard modelling techniques, with a fine selection of speaker types, cabinet sizes and microphone types.

Among the stompboxes there are some standouts (the Greener diode clipping distortion and the Sher’ff distortion) as well as a few that seem a little flat (the Phaser and Flanger). The non-stompbox effects all sound good, especially the tube compressor which adds a lovely edge to any amp/speaker setup (and you can edit its valves to great effect). The C-Verb is yet another use of convolution processing with an admirable set of room and reverb IRs,

bit of depth to the mix and loses the odd bit of aliasing noise on the tail of decays. The 64-bit mode (with 4x oversampling) is too intensive for real-time usage and is meant only for final ‘in-the-box’ mixing or bouncing before a final analogue/real-time mixdown. This mode switch does require reloading the plug-in(s), but the results are well worth it.

Rockin’ or floppin’?

The ReValver not only passes with flying colours on its main objective, that being to provide a wide range of realistic, high-quality guitar amplifier tones, but it also manages to steal the crown for the most pleasingly tweakable plug-in. At first glance the Circuit Editing seems excessive, but once you

FutureMusic VERDICT

STABILITY	████████████████████
VALUE	████████████████████
EASE OF USE	██████████████████
VERSATILITY	██████████████████
RESULTS	██████████████████

A high-quality virtual guitar solution as deep as it is fat that could easily become indispensable.

SPECS

- PC:** Win2000/XP or later, 1 GHz CPU, 512 MB RAM, 1024x768 screen resolution, VST host or ASIO/WDM sound card
- Mac:** OS X 10.4.0 or later, 1 GHz CPU, 512 MB RAM, 1024x768 screen resolution, VST/AU host or sound card
- Processing:** 32-bit ‘Real Time’ mode and 64-bit, 4x oversampling ‘Mix-Down’ mode
- Amp Models:** 15
- PreAmp Models:** 12
- Power Amp Models:** 9
- Speaker Simulations:** Over 150 (IR based convolution and ‘membrane modelling’)
- Stomp Box Models:** 19
- Effect Models:** 11
- Valve/Tube Models:** 17
- Other functions:** 7 (tuners, analysers, splitters, etc.)

ALTERNATIVES



NI Guitar Rig 3 Software Edition
£220

Guitar Rig lacks the in-depth valve tones of the Peavey product. More expensive, especially with the Kontrol footboard (add £100), but it’s not necessarily better.

native-instruments.com



StudioDevil VGA
\$79 (online only)

A simpler and cheaper approach to valve amp modelling without the effects, in-depth editing. Sounds every bit as good as ReValver though and well worth the smaller investment.

studiodevil.com



AmpliTube 2
£270

The priciest of the bunch and with a similar number of base module to ReValver, but again less overtly valve focussed. Also significantly more expensive.

ikmultimedia.com