# CMREVIEWS

FORMAT   PC   MAC

**What is it?** *A modular software guitar studio with a dedicated hardware controller thrown in*

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**EDITOR'S CHOICE**

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## NATIVE INSTRUMENTS
# Guitar Rig

**Having beguiled hardware synth fans with their software emulations, can Native now charm guitarists into creating their tones in a computer?**

computer music
ON THE
**CD**

To hear the superior quality of Guitar Rig, take a look in the **Demos** folder on the **cm** CD

**WHENEVER NATIVE INSTRUMENTS** shine their expertise on a particular area of music technology, everyone should take notice. Think back to when they launched FM7 – prior to its release, no one had considered bringing FM synthesis into the software age. Developers at the time were pre-occupied with subtractive synthesis, but Native's realisation of Yamaha's hardware DX7 changed the soft synth landscape irrevocably and remains a firm favourite today.

Guitar Rig is NI's foray into the world of software guitar amplifier simulation. It faces some stiff competition: IK Multimedia's AmpliTube has been with us for nearly two years and remains the software of choice for the computer-using guitarist. Let's not forget Line 6's GuitarPort, either – a software amplifier that comes with its own USB audio interface and features effects algorithms taken from Line 6's POD range of outboard hardware.

So how can Guitar Rig expect to compete against these prominent software-based big-hitters? Well, for one, it ships with

its own foot controller-cum-preamplifier, which enables you to easily connect your guitar to the computer. This sports four assignable buttons and an assignable foot pedal for controlling any of Guitar Rig's parameters. Secondly, the software has a versatile modular design; everything is presented in a Reason-style virtual rack. This means you can swap and change amplifier, cabinet and effects simulators at will until you hit on

your ideal guitar tone. Guitar Rig is similar to Alien Connections' ReValver in this respect.

### Step on
Before you begin, you need to set up the Rig Kontrol foot pedal. This device serves two purposes: as well as being a preamplifier that will amplify your instrument level guitar signal up to line level for input into your computer, it gives you tactile control over any of Guitar Rig's parameters via four

switches and an expression pedal. Unlike Line 6's GuitarPort, the Rig Kontrol is not an audio interface – you'll still need a decent ASIO- or CoreAudio-capable audio interface to get the best out of Guitar Rig. This will need to have low latency, too – any more than 5ms and it's time to upgrade your system. This is because the amplified signal needs to be processed by the software before it's sent to the hardware outputs, thus introducing latency to the signal. The faster your soundcard, the less prominent the latency will be, and you're unlikely to notice anything less than 5ms.

To connect the Rig Kontrol to your computer, you'll need to plug the left and right audio outputs



► **1** LEFT VIEW SELECTOR
**This switches between Bank view (as shown), Options and the device chooser**

► **2** INPUT
**Your clean, unprocessed guitar signal enters here – this is where you can gate any unwanted noise out and set the input volume**

► **3** TAPE DECK
**Load up samples, loops or songs, or use the Deck to record your own guitar noodlings**

► **4** IN-LINE EFFECTS
**Insert effects can be placed here prior to the amp simulation. These can also be assigned to Rig Control for 'stomp box' functionality**

► **5** AMPLIFIER
**The main signal processing begins with the amplifier model, and there are three to choose from**

► **6** CABINET AND MIC
**This module allows you to define the size and type of cabinet, the mic position and the type of microphone used**

► **7** POST EFFECTS
**Effects can be inserted after the amplifier and cabinet simulation, too. There are a bunch of studio quality effects at your disposal**

► **8** OUTPUT
**Allows you to set the master output volume and balance the overall level between different patches**

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   Arbiter: 020 8970 1909

► www.
   native-instruments.com

► Alternatively…
   IK Multimedia AmpliTube **cm51** 9/10 £279
   Line 6 GuitarPort **cm48** 9/10 £149

from Rig Kontrol into a stereo input on your soundcard. The left channel carries the amplified guitar signal at line level and the right channel carries the Rig Kontrol signal – this lets Guitar Rig know which buttons you're pressing on the Rig Kontrol.

Once you've set up the Rig Kontrol, it's time to install the software. Guitar Rig operates as a standalone application and a VST, DirectX, RTAS or Audio Units plug-in. When the installer has done its stuff, you'll need to use the Guitar Rig registration tool. This registers your copy of Guitar Rig with Native Instruments. You have 30 days to register the product and obtain an activation code – you can do this online, via another computer, or via a form that can be printed and posted to NI.

## Rock on
With installation out of the way, it's time to rock. After firing up Guitar Rig and selecting the driver you intend to use, you can start playing. You'll need to turn off any direct monitoring option your soundcard might have or you'll hear the control tone from the Rig Kontrol mixed with the original guitar signal. When running, Guitar Rig isolates the control signal and only uses the left channel (the guitar tone) for processing. Although this signal enters the Rig in mono, it's processed in stereo.

Your virtual rack begins life as a simple input and output device, with the signal running from the top of the screen down to the output device at the bottom. Between the input and output you can insert any number of carefully designed modules into the signal path to shape your guitar tone.

The order and routing of each module is entirely under your control, and while you can experiment, noting established routing and effects setups will help you understand how you're processing the signal.

Generally speaking, you'll start with one of the three amplifier simulations. The Gratifier Solo is a model of a tube power amp with four channels, each one presenting a slightly different amplifier model. The four channels are Clean, Modern, Vintage and Raw. This is the most versatile of the three models – it can provide a range of tones for most situations, but is particularly suited to leads and driving rhythms.

The Twang Reverb amp model simulates amplifier heads from the 60s and 70s and provides a spring reverb emulation that harks back to that golden era. Finally, the Plexi model offers more up-to-date tones that can be used in a wide range of situations, from subtle, driven rhythm guitar work to raging solo sprees.

But the amplifier is only part of the story – each model takes on a life of its own when placed through the cabinet and mic module. Here, you can select the shape and size of the speaker cabinet and set the mic position. You also have master volume, bass, treble and pan controls, as well as an air control that helps to give your tone a good stereo image.

These two primary components are used for the main tonal shaping of your guitar sound, and even simple rack configurations can yield remarkable results. What's more, the combined amplifier and cabinet options available in Guitar Rig allow you to create an amazingly wide variety of basic sounds – and that's before you begin to factor effects into the signal flow.

## Chain of tools
The provided effects can be placed at any stage in the signal chain. This allows you to use some effects as inserts prior to

## What's on the Rig Kontrol?

**THE RIG CONTROL** is fully integrated with the Guitar Rig software, and assigning its functions to the controls on the foot pedal is easy. You simply right-click your chosen control and press a button on the Rig Kontrol to assign that button to the chosen parameter. The inclusion of an incremental foot pedal allows you to take control of variable effects too.

Handily, this method of controller assignment can be applied to any other external hardware controller. For more detailed editing of the controller

assignments, Guitar Rig also has a dedicated section for assigning specific parameters to the software's functions. Using a simple drop-down system, you can drill down into Guitar Rig's

deepest functions in a manner not dissimilar to that you'd use when assigning automation within your VST host. It should be noted that, while the Rig Kontrol is ideal for getting hands-on (or should that be feet-on?) with the software, it doesn't act as a copy protection system. This means that you don't need to have it plugged in to run the software – useful for laptop owners who want to get busy with their software while on the move.

*Assigning controls to the foot pedal is a cinch*

effect are placed after the amplifier model. You can create a rack like this in seconds by selecting modules from the pane on the left and dragging them directly into the appropriate positions in the rack – simple!

By default, there are also two Tape Deck modules in the rack. These allow you to load in audio files that can play as backing tracks. Both Decks have a recording function that enables you to commit your guitar playing to hard disk (with or without effects), and you can then play it back. Sections of your sample or recording can be looped up and

out there – including the UA NIGEL amp sim that runs on the UAD-1 – and Guitar Rig more than held its own. It provides the most versatile guitar tone shaping environment we've yet seen, and one which is easily accessible. Potential Guitar Rig users certainly shouldn't fear a steep learning curve. That said, it's not a product that lacks depth – once you realise that you can split the left and right channels and process them independently in the rack, you'll start generating vast sonic landscapes that would be impossible to fashion in other, similar software.

Coupled with the Rig Kontrol interface, Guitar Rig could be seen as the perfect package for guitarists who are looking to rid themselves of huge unwieldy guitar amps. Just imagine: a laptop and your guitar is all you'll need – just plug straight into the PA and you're good to go! Alternatively, if you want the perfect guitar tone in the studio and all the benefits of software (including instant recall and full automation), Guitar Rig is perfect. It eliminates the hassle associated with traditional outboard hardware effects, and you don't even have to worry about MIDI.

NI have a fine product on their hands here – see for yourself by checking out the demo version on this month's cover CD. It will delight guitarists who already work with a Mac or PC, and should convince other axe wielders that computer-based processing is the way forward.  **cm**

## GUITAR RIG MORE THAN HOLDS ITS OWN AGAINST THE COMPETITION

the amplifier simulation, as you would with traditional stomp boxes and other in-line effects pedals. Compressors, noise gates, distortion units, filters, EQs and modulation effects are there for the taking, and they can be adjusted using the Rig Kontrol.

As you can see in the main screen grab, we've arranged a compressor to shape the volume of the raw guitar signal and followed this with a wah effect which is controlled by the Rig Kontrol's foot pedal. The distortion unit is assigned to one of the footswitches, and our amplifier/cabinet simulations and mic position are adjusted to suit.

To finish off our tone, a gentle delay unit and a studio reverb

you can use the second Tape Deck to overdub other guitar parts. These can then be returned to the first Tape Deck for further overdubbing. The first Tape Deck also allows you to speed up or slow down an audio file without affecting its pitch, or change the pitch without affecting the speed, with a twist of the dial. This is useful for learning guitar parts or tuning samples to the key you want to play in. It's very intuitive and makes the standalone version of Guitar Rig great fun to use.

## Mr Rig stuff
Guitar Rig sounds good. Very, very good. We performed A/B comparisons with some of the best software amplifier emulations

**PRICE: £349.99**

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► **Verdict**

### For
▲ **Rig Kontrol rocks**
▲ **Sounds bloody fantastic!**
▲ **Hugely versatile**
▲ **Dead easy to use**

### Against
▼ **You need a fast audio interface with good drivers**
▼ **Can start eating CPU when complex racks are built**

► **Rating**

**9**