BRITISH VALVE CUSTOM USER GUIDE (Version 1.2, October 2011)

Thanks for using British Valve Custom, StudioDevil's FREE vacuum tube guitar amplifier modeling VST plug-in!
We know you're going to love the way it sounds!

TECHNOLOGY

StudioDevil's Virtual Tube Amplification is a breakthrough in vacuum-tube amplifier modeling technology. Our patented tube-modeling process is based on the dynamic characteristics of real 12AX7A vacuum tube preamplifier stages, the building blocks of the world's most coveted tube amplifiers. By accurately mimicking this preamp tube stage, virtually any tube amp can be built through unique configurations and combinations of them. British Valve Custom is just one of an infinite number of virtual amplifiers that can be built with this technology.

When you play through it, you will notice that it responds just like a real tube amp. The tone is rich, simple, and inspiring. And, the dynamic gain structure reacts to your fingers and picking style, allowing expressive playing, just like the real thing! You'll be amazed that your tone sounds so good going direct through a computer and we're sure you'll love playing through StudioDevil's virtual tube amplifiers.

Until now, digital never sounded so...analog!
So, enjoy the newly found warmth of digital...enjoy StudioDevil!

BACKGROUND

British Valve Custom is based on the gain structure of popular British Valve (Tube) Rock amplifiers (like the infamous Marshall tube heads) with some subtle modifications to give it slightly more gain. This amplifier model has considerable bite and attack making it perfect for classic rock and hard rock sounds. It also works great with neck pickups for blues, rock, and even metal guitar solos. This is a very versatile amp that satisfies most playing styles, which is why we chose it to demonstrate StudioDevil's tube modeling technology. We wanted to make sure you got something you could actually USE!

But remember, this demo is only ONE of many possible different amps and tones!
Come visit us at www.studiodevil.com for new releases and plug-ins featuring more amplifier styles and effects to come!

CONTROLS

The controls of StudioDevil's British Valve Custom are pretty easy to understand. There are only six knobs to worry about, and if you've used a guitar amplifier before, then you already know how to operate them. Here's a description of each control, what it does, and how to use it to sculpt your tone:

GAIN: This knob controls the amount of guitar signal that's fed into the amplifier. Turning this control up (to the right) means more gain, more distortion, more clipping, more compression, and more sustain. Turning the gain knob down (to the left) results in a cleaner tone, less distortion, but more dynamic responsiveness. Remember, StudioDevil acts just like a real tube head...you can also use your guitar's volume knob to achieve similar results. Experiment with both your guitar's volume knob and the gain control to see what works best with your playing style!

BASS, MIDS, TREB, PRES: These tone settings control the bass, mid, treble, and presence frequencies between the preamp and power amp stages. Although these knobs control the settings of the "tone-stack", a circuit in tube amps that sets the tone of the guitar, you can think of these controls as a simple four-band EQ.

DRIVE: You can look at this control as the 'Master Volume' of the amp. It sets the amount of power amp soft clipping that occurs at the very end of the signal processing chain. This has the effect of compressing the sound and increasing the

apparent loudness of the amp. Turn this knob to the left for a sound more like a preamp recorded direct, or turn it to the right for more of that "miked up" power amp sound.

HOW TO USE THIS PLUG-IN (and a bit about re-amping)

Sure, amp modeling plug-ins replace the time-consuming process of trying many guitar amps and speaker combination until you get the right sound. But what happens if later in the mix you find that the "right" sound isn't quite so right after all and wish that you could change the amp settings or speaker cabinet. This is called re-amping and is where the real power of amp plug-ins shines. Let see how it works...

In the old days, some guys had a pretty neat idea. Instead of plugging a guitar into an amp, they plugged it directly into the recording console. That way, the guitar's pickup was recorded directly to tape. Then, when playing back the recording, they could patch the "pickup" track into any amplifier during mixdown, and get sounds just like if the same guitar was playing through it. By doing this, the engineers had full control of the guitar sound. They could decide the type of amp and cabinet, the amount of gain and distortion, even the cabinets and mic placement DURING the mix. Before this, if you recorded a guitar with a lot of distortion, and later wanted to remove it, you had no choice but to re-record the track. But what happened if the track was a take of a lifetime and was ruined by a thin amp setting...oh well. Well, that was some of the motivation for creating re-amping, which, stated again, is simply to record the guitar's pickup directly, and then pump that direct signal into real amps during mixdown.

Well, now you can do the same thing with virtual guitar amps. Just connect your guitar's output jack (which is the pickup output) directly to your sound interface's instrument (Hi-Z) input. Then, add StudioDevil's British Valve Custom to the track's playback effects. Now you should be set to record the guitar's pickup directly to the hard drive, while listening to StudioDevil on playback...with all the freedom of changing sounds whenever you like. And, with a low-latency sound interface, you can even hear the amp model during your recording take, without committing the sound of the amp to disk!

Recording new guitar tracks is not the only use for Studio Devil's British Valve Custom. You can even use it to modify existing tracks. But keep this in mind: StudioDevil British Valve Custom is an emulation of a guitar amplifier. This means it has been designed to work best with guitar tracks that have been recorded direct, meaning just the guitar plugged straight into your sound interface. This doesn't mean it won't produce good effects on other guitar tracks, especially tracks that were recorded clean, but you might be disappointed if you try to use it on tracks that have already been recorded with another tube amp (just like you'd probably be disappointed if you plugged the output of one tube amp into the input of another). We don't want to discourage experimentation, but we have a good idea of what works here...direct guitar works best. Also, few singers plug mics into Marshall half-stacks, but hey...you never know! The best part is you can always undo whatever you try with the click of the mouse!

SETUP TIPS

Here are a few tips about setting up your StudioDevil plug-in for the best sound...

HI-Z INPUT: Always use a good quality sound card/interface with a Hi-Z input. The Hi-Z input allows you to connect a guitar directly with a ¼" guitar cord without degrading the guitar's output signal. If you don't already have a sound interface with a Hi-Z (or "Instrument") input, invest in one...you'll need it!

SETTING A GOOD LEVEL: The idea here is to get the highest possible input signal without clipping your sound interface. This insures that you get all the nice tube-like distortion from the StudioDevil, and none of the nasty digital clips from your sound interface. At first, turn all the volume and tone knobs on your guitar all the way up for the strongest signal. You may even want to switch to the "Neck" pickup which typically has a higher output as well, but this isn't necessary. Then, once you're setup and plugged in, start strumming the guitar a little harder than you think you'll be playing normally. While strumming hard, adjust the input trim control on your sound interface so that you get the highest signal possible without any clips. Once it starts to clip, back off the sound interfaces input level just a touch. If you still get too many clips, turn the input level down on your interface a little bit more, but don't turn the level down too much, or you won't get the best sound out of the amp modeler. This is the same basic technique for recording any other traditional tracks, but some extra care is needed here, where the distortion and tone from StudioDevil's dynamic amp modeling shouldn't be clouded by harsh digital clips or lost by poor utilization of the dynamic range of the sound interface.

LATENCY: Try to use a sound interface that has a low-latency drivers and hardware. This way you can record though the StudioDevil British Valve Custom in real-time! StudioDevil BVC has been designed to keep the processing demand on the CPU as low as possible, to allow even slower hosts to run the amp model in real-time...but if your driver is slow, you'll still hear a lag. Try ASIO drivers, too...they're sometimes faster!

REVERB & DELAY: We decided not to throw in a couple of no-frills reverbs and delays, since your host should come with some of the best ones out there anyway...plus, we figured why re-invent the wheel when we can spend our time inventing something better: great tone with digital vacuum tubes! But, you'll find that adding a little touch of your favorite ambiance reverb or guitar solo delay is really going to fatten up your tone...try it!

There's not much else too it...except to pick up your favorite axe and start laying down the best directly recorded guitars tracks of your life! Remember, when you sound good...we all sound good!

STANDALONE - STUDIO DEVIL LIVE

Until now, if you just wanted to play around with Amp Modeler Pro, even if you weren't doing any recording, you had to launch your favorite recording host and use Studio Devil as a plug-in. Well, not anymore.

Introducing Studio Devil LIVE, an application that lets you run your Studio Devil plug-in in standalone mode...meaning all you have to do is launch it, and you are up and running. No more host. No more complicated setup.

Ready to play Studio Devil LIVE? Here's how to get started:

INSTALLING STUDIO DEVIL LIVE

Installing and running Studio Devil LIVE for your plug-in is easy. Here's what to do:

FOR WINDOWS USERS: Studio Devil LIVE is already installed when you run the Setup.exe that is included with your plug-in download. This installer installs both the Studio Devil LIVE application as well as your VST and RTAS plug-ins. The Studio Devil plug-in installer creates a Start Menu folder in Start Menu->Programs->Studio Devil that lets you launch the Studio Devil LIVE application for your plug-in. The installer also gives you an option to put a shortcut for this application on your Desktop. After installation, simply click on either of these shortcuts to launch Studio Devil LIVE.

If you lose these shortcuts, you can find the Studio Devil LIVE application for your plug-in here:
../Program Files (x86)/StudioDevil/StudioDevilPlug-InName/StudioDevilPlug-InName.exe

FOR MAC USERS: After opening the DMG file that comes with your Studio Devil download, you will see two files: An installer package (for installing your AudioUnits, VST, and ProTools plug-ins), and a Studio Devil LIVE application (which is for running Studio Devil LIVE). To install Studio Devil LIVE, simply drag the Studio Devil LIVE application to your Applications folder, or drag it to your Desktop, or wherever you want. Then, when you want to launch Studio Devil LIVE, simply double click on this application and you are up and rockin'!

LAUNCHING STUDIO DEVIL LIVE

Before launching Studio Devil Live LIVE, make sure your preferred sound interface is plugged in and powered on. Studio Devil LIVE will look for your audio devices on launch, and give you a list of them to choose to use as your input and outputs. Make sure the device you intend to use with your guitar and speakers or headphones is ready and has the proper drivers installed. If not, then your device will not be available for use with Studio Devil LIVE.

Now, to get started, simply click on the Studio Devil LIVE application. On PC, this will be installed in your Start Menu under Program Files->Studio Devil. On Mac, you will have probably dragged it either onto your Desktop or into your Applications folder. Either way, look for where you placed it, and double-click on it...your LIVE AMP is moments away!

When launching Studio Devil Live for the first time, the application will prompt you to select your input and output devices (see AUDIO CONFIGURATION below). Simply choose the input and outputs you want to use and click OK. If your preferred devices do not appear in the selection boxes, EXIT the application and make sure the correct device is plugged in, powered on, and has the proper device drivers installed.

Once you click OK, Studio Devil LIVE will then begin streaming your real-time, low-latency amp modeling through the devices you choose, automatically using 44100Hz sampling and the lowest available latency for the interface you select. Studio Devil LIVE remembers the settings you choose so that each time you come back to launch Studio Devil LIVE AMP, you don't have to reselect anything. After the first initial setup, rockin' with Studio Devil is then only a double-click away!

AUDIO CONFIGURATION

Studio Devil LIVE remembers your selection of audio input and output devices so that you don't always have to set them up each and every time you launch the application. But, there may be times when you want to change your selections, such as when you buy a new interface, use someone else's hardware, or maybe you just want to try a different driver type. To pull up the dialog box that permits you change your audio setup, click on the AUDIO CONFIGURATION option found under the CONFIGURATION menu. (On Windows systems, use the AUDIO CONFIGURATION option under the SETUP menu.)

Also, keep in mind that if you launch Studio Devil LIVE and it fails to find your previously selected input and output devices (such as if you forgot to plug it in, or you just don't have it anymore), or when you run Studio Devil LIVE for the first time, then you will be automatically taken to this AUDIO CONFIGURATION menu.
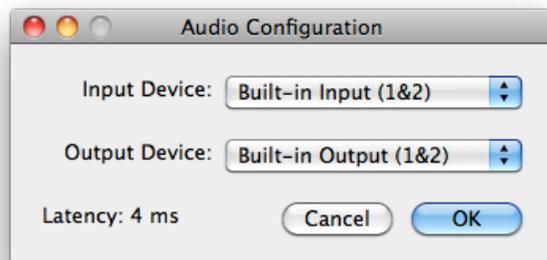
Either way, once the AUDIO CONFIGURATION dialog box appears, you will be given the options to choose your INPUT and OUTPUT devices. On Windows systems, you will also be asked to choose your DRIVER type.

Choose your devices from the pull-down select boxes. As you make changes to your selections, Studio Devil LIVE tries to determine the actual latency of your current selection. When available, it will display the latency in milliseconds. If this fails, then it will try to display the performance as "Good", "Fair", "Poor", or "Unknown" depending on the results of the internal tests. Try to choose an interface and driver combination that results in the lowest latency, or at least display's "Good" in the dialog box. On Mac systems, this is usually not a problem. On Windows systems, you will most likely want to use ASIO drivers, since they usually provide the lowest latency. If your sound interface does not have ASIO drivers, search the Internet for ASIO4ALL, a universal ASIO driver that may help.

When you have made your selections, click the OK button to save your changes. Now the next time you launch Studio Devil LIVE, it will look for these new devices by default.

Now, just plug in your favorite axe, and get playing with Studio Devil LIVE!

SPECIFICATIONS

- Compatible with PC-VST hosts.
- 4x Up-Sampling Multi-Rate Processing Engine
- 64-bit Internal Floating-Point Precision
- 44.1KHz, 48 KHz, 88.2 KHz, 96 KHz, 176.4 KHz, and 192 KHz sampling rate support.

VISIT US

Remember, no matter how great any single tube amp is, there's still a limit to how many sounds you can get from just one! Be sure to check out other StudioDevil Virtual Amps:

Available at www.studiodevil.com