



THE NEW VB3-II REVIEW



Introduction

Genuine Soundware and Instruments (GSI) have recently released a new version of their VB3 Hammond Organ software which they are calling VB3-II. Note that this is not an update of the previous VB3-I version, but an entirely new product that has been rewritten from scratch. An older version of the product was made available on OAS instruments as an optional Wersi VST plug-in, and VB3-I has been incorporated into the OAX on Sonic instruments as a 'VB3 Wersi Edition' with a number of tonal adjustment parameters pre-configured and hidden from the user. VB3-II is available for both Windows and Mac systems either as a 64 bit VST2/VST3/AU Plug-in or as a 64 bit Standalone edition. It includes all the features of the VB3-I version but with many new playing features and a much more comprehensive set of tonal controls. In this review we will look at each of these in turn.

New Playing Features



We now have two full sets of drawbars for each manual, just like on the real instrument. The reverse coloured keys for the wired drawbar presets, located on the bottom octave of each manual of the Hammond, are now available in the VB3 display. These can also be allocated to the bottom octave of the Wersi manuals if you have the 76 note keyboards. The top two of these presets (A and B) switch between the two sets of drawbars. A Normal/Soft switch has been added which controls the overall volume of the instrument, and the Leslie speed control has been given its traditional form and location at the bottom left of the display.

In addition to the overall volume control for the percussion section, we now have individual volume controls for both the normal and soft decay settings. We also have a popular hack, the 'Percussion Paradise Mod', which keeps the percussion at a permanent level by removing the decay. There are additional settings for the keyclick release and bounce effects, and a new parameter to adjust the mix of vibrato and chorus in the chorus effect.

The number of user programmable presets has been increased to 128, and unlike the VB3-I version, these can now be selected by MIDI Program Change codes. So we can run the VB3 in standalone mode and select its presets directly from our Wersi total presets. Finally we can display or hide the VB3 manuals, so we have a visual indication of what we are playing.

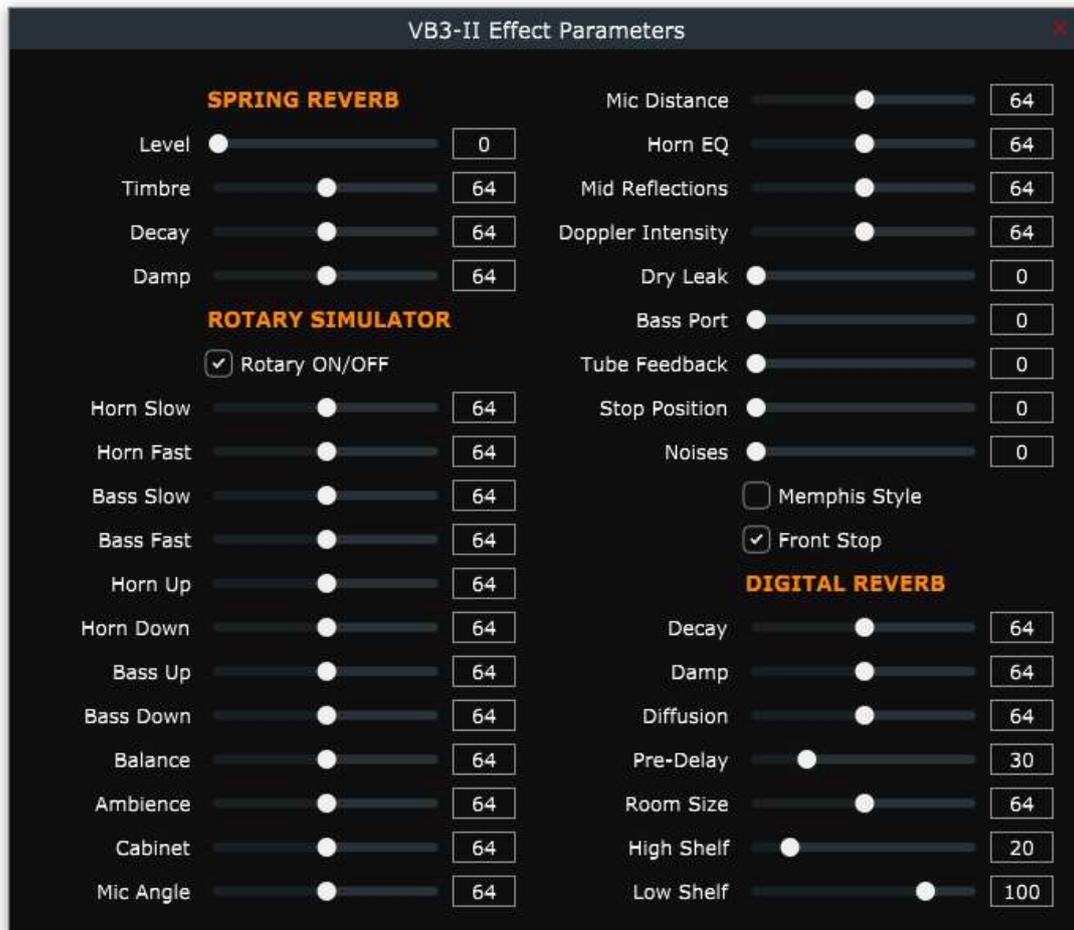
Additional Tonal Controls



The most significant addition here is the inclusion of 22 tonewheel generators. The VB3-I version had just three. These emulate a selection of B3, C3, A100, A101, A102 and A105 instruments dating from 1956 to 1973. They all sound distinctly different, ranging from something warm and mellow to something bright and more aggressive. This is largely due to the difference in amplitude of their respective drawbar harmonics, as was the case on the actual instruments. We also now have a drawbar trim section which enables us to apply further amplitude adjustment to any of the drawbar harmonics. So for any selected tonewheel generator and drawbar setting, if this doesn't sound the way you think it should we can use the drawbar trims to adjust the sound to make it right. A Generator Shape parameter allows further adjustment to the drawbar amplitudes by providing a fixed degree of attenuation or boost starting at three different points on the keyboard.

We also have the option of using Complex Wheels for the pedal sounds. These replace the normal sine waves with more complex waveforms to produce a more pronounced bass sound. Two types of resistor wires are available. These are the small wires that connect the keyboard contacts to the tonewheel generators. 'Old' values give a more pronounced low end whilst 'New' values align more with the original B3 specification. If you're into the various crosstalk noises produced by the analogue circuitry in the original instruments, an additional Crosstalk Shape parameter enables the mix of bass and treble in the crosstalk to be varied from a rumble at one end to something more brilliant at the other.

The single tone control of the VB3-I has now been replaced by separate Bass and Treble controls. This is very useful not only in getting your preferred sound but also in compensating for any user modified settings in the Wersi Input / Output Mixers should you wish to play the VB3 with the other sounds and accompaniments of the organ. There are also separate Bass and Treble controls for the VB3 preamplifier which allows for further fine adjustment of the overall tone. A digital reverberation unit has been added with adjustable parameters for Decay, Damping, Diffusion, Pre-Delay, Room Size, High Frequency Filter and Low Frequency Filter. The digital unit can be used in addition to, or instead of, the existing spring reverberation unit of the original instrument, which now has additional parameters for Timbre, Decay and Damping.



The Leslie Speaker system has been completely redesigned. The VB3-I version provided a number of different Leslie Speaker models whereas in this version there is one basic model with a comprehensive set of associated tonal adjustments. In addition to all the parameters provided by the VB3-I model, we now have adjustments for the horn and bass rotor acceleration and deceleration, Mid Reflections (reflections in the middle of the stereo field), Horn Eq (adjusts the treble response of the horn), Doppler Intensity (reflections from the walls around the amplifier), Dry Leak (the amount of dry sound not reaching the rotors), Bass Port (the amount of sub-bass emanating from the port at the back of the cabinet), Tube Feedback (crosstalk between the organ amplifier and Leslie Speaker amplifier), Stop Position (position where the horn and bass rotors stop when the brake is applied) and Front Stop (stops the rotors in the best position). We also have available a popular hack to the Leslie Speaker, the 'Memphis Style' which disconnects the bass rotor.

Performance

For the review the standalone version of VB3-II was used running on an external processor via the external MIDI system of a Wersi Scala. Installation was easy and straightforward, the software was downloaded from the GSI website, the installer was run and a licence code provided by GSI entered to activate the software. Setup involves simply setting the MIDI channels for the upper and lower manuals and pedals, the sample rate (GSI recommends 44.1KHz) and enabling the 'Receive MIDI Program' option if you wish to select the VB3 presets by MIDI Program Change Codes.

Two points to mention in relation to performance, the choice of tonewheel generator and the operation of the Leslie Speaker. I auditioned all 22 different tonewheel generators and eventually selected the '1965 C3' model. This is because I had a late 1960s tonewheel Hammond at one time and was overjoyed to find that I could re-create that sound. Choosing a particular generator is very much a matter of personal choice depending on the sound you prefer and the type of music you like to play. Unlike the VB3-I version with only 3 tonewheel generators where I had to make a number of tonal adjustments to obtain the required sound, none of this was necessary with the VB3-II. I tried adjusting all of the relevant parameters but concluded that the default values provided the optimum settings. The Leslie Speaker is much improved on the VB3-I version. It sounds very authentic and has a beautiful tone to it.

All the relevant external MIDI Continuous Controllers worked a treat, Octave Shift, Transposer, Expression Pedal, Volume (set to a Wersi volume drawbar of your choice) and rotor speed switch (activated by one of the Wersi footswitches set to the 'Sustain' option). I discovered that this was also set by default to be operated by the Wersi's Modulation Wheel. I set up and stored a number of VB3 presets and successfully selected them using the Program Change codes of the Wersi external MIDI system.

Other Goodies

GSI are making available a VST / AU/ Standalone version of their Leslie Speaker model. This cannot be purchased separately but is bundled in with the VB3-II licence.



It provides all the features and functions of the standard VB3-II model and will be very useful for those who wish to use a Leslie Speaker with other Hammond Organ emulation software.

Running VB3-II on a Wersi

Unfortunately this software cannot be run on a standard OAS instrument. All the versions offered are 64 bit and are not compatible with the old version of the instrument's VST host. However, for those who are going down the route of running this new generation software on an external second processor, it will operate flawlessly on this setup. Unless you have other software running in a VST/AU host, I would recommend using the standalone version as this is simpler to install and operate.

There are two options for running this software on OAX instruments. It can be run as a VST plug-in using the instrument's built-in VST host, or on an external processor using the instrument's external MIDI system. Since I don't have an OAX instrument I'm not able to verify either of these two options. In this situation I would recommend downloading the free demo version of the software for evaluation. It has all the essential features of the licenced version but the sound will cut out for a second or two at regular intervals.

There are however two issues related to the VST option. The first is poor sound quality since the Sonic amplification system is being employed, and the second is the inability to use the instrument's drawbars to control those on the VB3. Running the software externally gives us the option to completely bypass the Sonic's sound processing system and use separate amplification equipment, either high performance active speakers or a good quality Hi-Fi system. If there are already external speakers being used on the instrument, then these can be utilised by simply feeding the audio outputs from the Wersi and the external processor through a suitable mixer. Wersi do not bring out the MIDI codes for the drawbars on the external MIDI system, but GSI are now making available a standalone hardware drawbar unit that is compatible with this software. This can be installed on the Wersi and connected to the external processor. Details of this unit are given on the GSI web site shown below.

Verdict

A totally different offering to the previous VB3-I version. The sound is absolutely gorgeous and extremely authentic. I particularly like the extensive choice of tonewheel generators, the new Leslie Speaker model and the ability to select the VB3 presets directly from Wersi total presets. Installation and setup is easy and straightforward and the software runs reliably. VB3 products have had something of a reputation as the go to software for Hammond emulation, and this edition sets a new standard that others will find difficult to match.

<https://www.genuinesoundware.com/?a=showproduct&b=44>

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