

INTERFACE TABS

Switch between organ, stomptbox FX, cabinet settings and limiter, EQ and reverb FX

DRAWBARS

Push-pull faders that control the tone of each keyboard and pedals

COMBO PRESETS

A 64 built-in organ, cabinet and post FX preset combos

PRESET SWITCHES

Reverse-colour keys used to select preset drawbar settings

HALF MOON SWITCH

Controls the spin speed of the virtual Leslie speaker cab

PERCUSSION CONTROLS

Set and adjust the organ's built-in percussion effect

EXPRESSION PEDAL

Control the organ's output level for expressive performance

CONTROLS VIEW

Displays an enlarged view of drawbars and settings for live use

ADVANCED VIEW

Less common settings, eg generator leakage and key click volume

PEDALBOARD

An extra set of tonewheels dedicated to bass tones



IK Multimedia Hammond B-3X \$299

IK Multimedia's B-3X organ simulator certainly looks the part, but does it have the sound and, more importantly, the charm of the original?

> The mighty Hammond B3 organ is a true musical instrument icon whose relevance hasn't diminished in any way over the decades since its release. In fact, regardless of the genre you work in, a good Hammond emulation plugin should be prominent in every computer musician's toolbox, so essential is its sound. There are many software models to choose from, so how does the Hammond B-3X from IK Multimedia measure up in what's already a pretty crowded market?

Developed over several years in collaboration with Hammond USA and Suzuki Music Corp of Japan, which owns the Hammond brand, it soon becomes apparent that the research and development that's gone into this plugin is exhaustive. Based on various different models of B3 from different eras - you can choose tonewheel sets from a 1955 or 1956 B3, or from a 1960 or 1971 model of the later A-100 - the tiniest detail of every component in each instrument

has been scrutinised to produce as accurate a sound as possible.

Organ slinger

The Hammond B-3X's interface is arranged into four separate panels, accessible by tabs in the upper left corner. The main Organ tab displays a striking representation of a real B3, complete

"Many B3 emulations capture the sound of the organ, but very few manage to capture the feel of the real thing"

with pedalboard for generating those fulsome bass tones. If you know your way around the real thing, you'll find everything you need faithfully reproduced here. You get everything from the full range of drawbars for both manuals to peripheral controls such as Percussion, Chorus and Vibrato. You also get the blacked-out lower octave in which each of the keys calls up a different preset drawbar setting. Any parameter in the plugin can be mapped to the hardware control of your choice by assigning the relevant controller number in the Settings panel.

The second Stomps tab reveals a useful set of virtual guitar pedals, including overdrive, chorus, a ten-band graphic EQ, a wah pedal with auto-wah function and an authentic-sounding spring reverb.

The Cabs page provides the option to tailor the speaker cabinet settings with an intricate level of detail, from the traditional Leslie rotating

“The detail ensures that the character of the original is preserved with as much accuracy as possible”

cabinet to a guitar amp option (see boxout). The signals from the Leslie, the parallel guitar amp and a clean, DI'd version of the organ's output are mixed and fed into the Post FX tab as a stereo signal. This contains recreations of famous items of vintage outboard gear. There's a compressor/limiter based on the famous Urei 1176, handy for levelling out the volume if you don't have an expression pedal. There is also a sweet-sounding parametric EQ modelled on the iconic Neve 1081 and a useful digital algorithmic reverb that appears to be inspired by the Lexicon 480L.

Hammond mustered

Click the Controls view and the keyboards and pedals disappear, to be replaced with an enlarged view of the drawbars, preset buttons and switches tailored for live use. There are over 60 preset patches to choose from, or you can create and save your own from scratch.

Control options in the plugin are plentiful. You can add an expression pedal to your setup to control volume – which is great for dynamic swells – and each virtual manual can be set to respond to its own separate MIDI channel, allowing you to connect up to two MIDI external controller keyboards, one controlling each manual, for a totally authentic Hammond-playing experience. If you are lucky enough to already own a hardware Hammond keyboard, such as the SK series, XK5 or XK3, you can select its profile in the Settings menu to optimise control of the plugin from your keyboard's hardware drawbar controls.

Organised grime

So how does it sound? To our ears, it's difficult to tell the B-3X apart from the real thing. The plugin combines the warmth of a real-world B3 and Leslie setup with enough digital sheen to enable it to cut through a modern production. IK have faithfully replicated every design flaw that gave the original B3 so much of its character, but they have also made these features user-adjustable so you can tailor the sound to your taste. For



The B-3X includes five handy stomp-box effects that can be placed between the organ and the cabinet



You can tailor the sound of the virtual Leslie speaker cab with almost surgical precision

Cabinet reshuffle

The key to the traditional Hammond sound, the Leslie rotating speaker cabinet is almost as important as the organ itself. For the Leslie component of the B-3X, IK drew on their existing product range, employing the same speaker emulation technology found in the Leslie Collection for Amplitube and T-Racks. You get to choose the mic distance and orientation – 90 or 180 degrees – and adjust the balance, slow and fast speeds and acceleration and deceleration rates of the spinning horns and the rotating drum, all with surgical precision. There are seven types of amp (plus an eighth No Amp

option), three of which – the 122, 122A and 147 models – offer a high-pass filter up to 200Hz. These can be combined with five different types of modelled Leslie cabinet to produce a staggering variety of tones. There's a parallel guitar amp option that also exploits IK's proven Amplitube technology, with a choice of two different amp types. With these, you can add a healthy amount of grit and crunch that can be mixed in with the Leslie and a dry, DI'd output from the organ in the mixer section of the Cabs tab, resulting in a stunningly realistic, infinitely customisable facsimile of the real thing.

example, the volume of the key clicks – those are the small electronic noises that each key makes when pressed – can be tweaked in a separate Advanced tab, and you can even adjust the click's attack and release and tailor its tone with a dedicated Colour control.

The B-3X also allows for further under-the-bonnet tinkering of stuff like percussion volume, tonal balance and even generator leakage – that is the crosstalk between the tonewheels and the adjacent electromagnetic pickups. It's details like this that ensure that the character of the original instrument, with all its pre-war technology and associated foibles, is preserved with as much detail and accuracy as possible in the plugin.

Many B3 emulations capture the sound of the organ, but very few manage to capture the *feel* of the real thing – the way the air moves around the speaker, the rumbles and clicks of all the electromechanical components working together to create the vibe that Hammond players love so much.

Whatever your bag from gospel to jazz, hard rock or even EDM, with its full complement of tweakable options and effects, the B-3X might well be the closest plugin, compared to the real thing, that we've ever heard. **cm**

Web ikmultimedia.com

Alternatively

Acousticsamples B5
€99

A pretty comprehensive sample-based B3 organ emulation

Genuine Soundware VB3-II
€100

Described as 'a fully-featured clonewheel' organ simulator

Verdict

For An incredibly-realistic Hammond organ sound
Great interface
Four tonewheel models to select from
Intricate levels of tonal adjustment
Extra effects and amp simulations

Against Pricey compared to other competitor products

The most comprehensive Hammond emulation we've come across

9/10