

# JIMMY SMITH PLAYS THE HAMMOND® NEW B-3



Finally!  
Someone got it right!

*"The New B-3 reminds me of the old one really.  
It has the touch and feel I was looking for  
and the sound is there in a big way too.  
At my last live gig I had this New B-3 on  
stage and played it all week.  
I even used it on my live CD."*

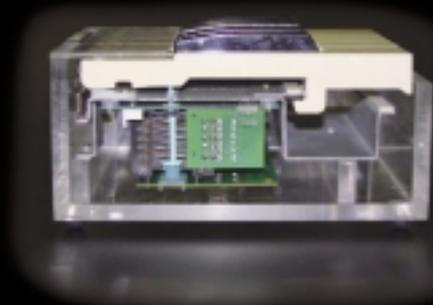
A handwritten signature in blue ink, which appears to read "Jimmy Smith". The signature is stylized and fluid.

# The Heart and Soul of the

## DIGITAL TONE WHEEL™ SOUND ENGINE AND DIRECT ANALOGUE KEYING™

Let us now consider the new digital tone generator and see how it produces the sound. The unique Hammond B-3 sound is reproduced by a revolutionary newly designed sound generator system (96 digital Tone Wheels). This new digital Tone Wheel generator perfectly generates pure tones that is tones which have no harmonic content of their own. This purity is essential in order to attain a desirable tonal cohesion between the fundamental and its harmonics when they are mixed through the use of the drawbars.

When a manual key is pressed, it closes 10 small electrical switch contacts. These contacts are connected to the digital Tone Wheel generator as well as to



the drawbars. The positions of the drawbars (which are under control of the player) determine the intensities of the individual electrical currents corresponding to the fundamental and its harmonics. After leaving the drawbars, the various electrical currents are connected together (or "mixed") to form a single complex current which flows from the console to the Leslie cabinet where it is amplified and caused to operate the speakers. The swell pedal varies the intensity (or volume) of this complex current before it reaches the speakers.

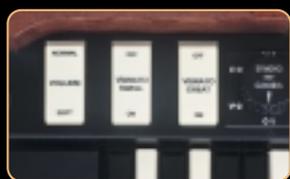
## PRE-SET COMBINATIONS



Each manual of the organ is equipped with nine pre-set combination keys. In addition, there are two sets of manually adjustable controls for each keyboard, thus making twenty-two different registrations which are instantly available, in addition, of course, to the many thousands of variations available by adjustment of the "harmonic drawbars."

## THE SELECTIVE VIBRATO STOPS

The great and swell manuals are provided with separate "ON-OFF" vibrato controls in the form of



tilting stop tablets. The rotating control "VIBRATO AND CHORUS" has six possible positions corresponding to three degrees of vibrato and three degrees of vibrato chorus. The control pre-selects the extent of vibrato or vibrato chorus which will be obtained when either of the manual vibrato "ON-OFF" stops is used.

## TOUCH RESPONSE PERCUSSION CONTROL

Percussion tones may be produced with a key-controlled "touch-response" in which desired notes of a melody may be accentuated. Now at your touch are effects like harp, chimes, orchestral bells, celeste, xylophone, marimba and a whole new world of fascinating percussion tones, which



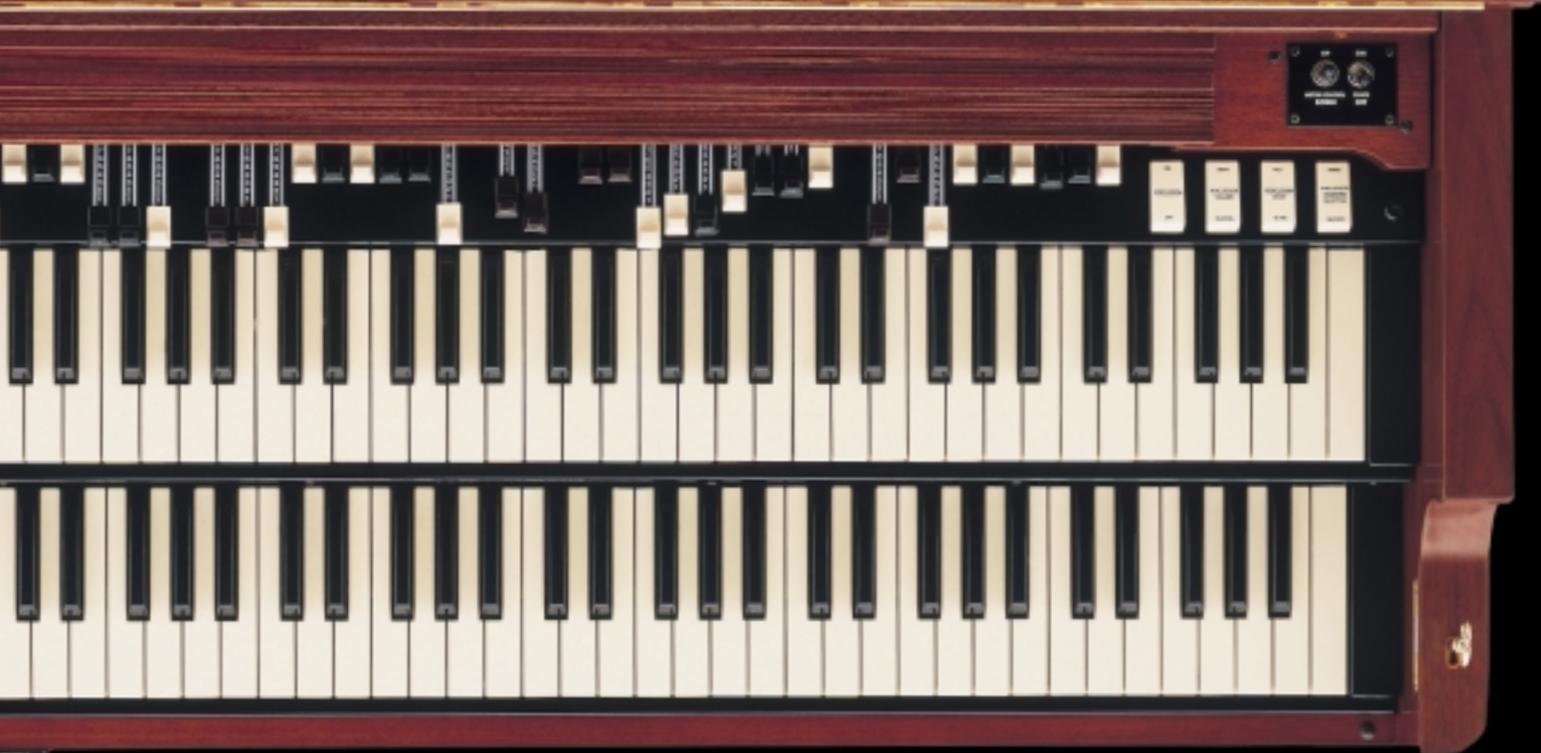
may be expressively introduced in a manner not found on any other organ.

## INFORMATION CENTER



The drawbars, control tablets and rotary controls affect the operations necessary for performance on the organ. Advanced features such as drawbar voice mode, pedal sustain length etc., are accessed using the Information Center. This allows the player to see and make changes. The Information Center Display and touch buttons are located on a drawer unit positioned under the right side of the lower manual.

# e New B-3



## ROTARY CONTROL PANEL



The new Hammond B-3 has a Rotary Control Panel which is located underneath the manuals on the extreme left side. The organist can use these controls to adjust the sound of the instrument such as: master volume, bass, treble, reverb, overdrive etc.

## MIDI



The New Hammond B-3 has a MIDI OUT jack which is located underneath the organ on the left side. To control another MIDI instrument (synthesizer,

sound module, etc.) from the organ, connect the MIDI OUT from the organ to the MIDI IN of the instrument you want to control.

Due to the unique tone-generation system of the New Hammond B-3, it does not implement MIDI IN or MIDI THRU.

## THE REGISTRATION PRINCIPLE OF THE HAMMOND ORGAN

This is the original, unique feature of the Hammond Organ which makes it completely different from any other organ. In the Hammond Organ, the basic elements of all musical tones (the fundamental and its harmonic overtones) are made separately available to the organist. Furthermore, their relative strengths may be adjusted at the will by the organist. The drawbars of the Hammond Organ are provided

for this purpose. Flute-like tones, for instance, may be produced by a certain combination of these drawbars; string-like effects by another combination; or the effects of both strings and flutes by still a different combination of the same drawbars. Thus, the drawbars provide the tonal ingredients from which the various registrations may be compounded.



# Leslie®

Any 11-pin Leslie tone-cabinet can be used with the New B-3. Two Leslie connectors are provided to allow Main/Echo switching between two or more Leslie's. For optimum performance, we recommend the Leslie model 122 XB.

## MULTIPLE **Leslie®** SPEAKER CONNECTION

The New B-3 Hammond Organ has two 11-pin Leslie connectors, one marked MAIN and the other marked ECHO, making it easy to connect multiple Leslie Speakers to the organ.

## **Leslie®** SPEED SWITCH

A Leslie Speed Switch is provided with the New B-3 Hammond Organ to allow control of the Leslie Speaker rotors from the organ console.

## **Leslie®** MAIN/ECHO SWITCH

When two Leslie Speakers are connected to the organ, the optional Main/Echo switch will allow the sound to come from only the Main cabinet, only the Echo cabinet, or both cabinets simultaneously.



# The B-3 is reborn

Since its introduction in 1955, the Hammond B-3 has become the essential performance tool for the world's great keyboard players. The instantly recognizable b-3 sound is essential in the world of popular music, while no concert stage would seem complete without a B-3's imposing wooden cabinet.

Now, for the first time, Hammond has exactly replicated the original B-3 design specification with the introduction of the New B-3.

The unique B-3 sound is reproduced by a revolutionary new sound generator system which recreates all of the idiosyncrasies of the tone-wheel generator.

Two 61 note manuals with deluxe square-front keys allow for the essential performance characteristics of the Hammond masters. Four complete sets of Harmonic Drawbars and latching programmable Preset Keys allow total ease of set up.

The Drawbar Foldback feature subtly affects the overall sound, while the all-new Direct Analog Keying mechanism creates the famous "Key Click" an essential component of the B-3 character. Sound dynamics are controlled by an exact copy of the original B-3 expression curve incorporated in the new instrument's Expression Pedal.

Only Hammond has the qualifications and knowledge to accurately reproduce the look, sound and feel of the legendary B-3. Now the B-3 is reborn.

## The B-3 is also available as model C-3

An instrument of enormous power and beauty. Widely used in churches and in the homes of discriminating organists. Its vibrant, majestic tone coupled with its simple straight lines and closed cabinetry are perfectly matched for a dignified presentation of the complete range of organ music as well as a magnificent variety of true liturgical tones.



# The New B-3

	<b>NEW B-3</b>	<b>ORIGINAL B-3</b>
<b>KEYBOARDS</b>	61-61-25	61-61-25
<b>PRESET KEY</b>	12keys	12keys
	Mechanical Latch	Mechanical Latch
<b>DRAWBARS</b>		
<b>SWELL (UPPER)</b>	9 pitches 2 sets	9 pitches 2 sets
<b>GREAT (LOWER)</b>	9 pitches 2 sets	9 pitches 2 sets
<b>PEDAL</b>	2 pitches	2 pitches
<b>PRESET MEMORY</b>	Compact Flash card	Change by Preset Panel
<b>KEYING METHOD</b>	Direct Analog Keying	Direct Analog Keying
<b>CONTACT</b>	10-Mechanical contacts +Rubber contacts w/velocity	9-Mechanical contacts
<b>POLYPHONY</b>	Full Polyphony	Full Polyphony
<b>GENERATOR (Manual)</b>	96-Digital Tone Wheels	91-Tone Wheels
<b>GEN. WAVEFORM</b>	Changeable by CFcard (Flash ROM)	Fixed
<b>GENERATOR (Pedal)</b>	VASE II	Tone Wheels
<b>VIBRATO/CHORUS</b>	V1, V2, V3, C1, C2 ,C3	V1, V2, V3, C1, C2 ,C3
	SWELL ON, GREAT ON	SWELL ON, GREAT ON
<b>LESLIE</b>	SLOW, STOP, FAST	SLOW, FAST
<b>CONTROL</b>	OVERDRIVE	
	REVERB	
<b>TONE CONTROL</b>	BASS , TREBLE	
<b>TERMINAL</b>	LINE IN ,LINE OUT	PHONO INPUT
	11P LESLIE SOCKET	6P LESLIE SOCKET
	HEADPHONE	
	MIDI OUT	
<b>EXT MEMORY SLOT</b>	COMPACT FLASH CARD	
<b>DISPLAY</b>	20x2 digits LCD	
<b>WEIGHT</b>	132 kg	190 kg
<b>DIMENSIONS</b>	Closed, without pedal keyboard 123 cm wide, 73 cm deep, 97 cm high; Open and with pedal keyboard and bench 123 cm wide, 126 cm deep, 117 cm high	

## MUSIC POWER OUTPUT Optional, Separate Tone Cabinet: **Leslie** model 122 XB

<b>Jack</b>	11-pin interface
<b>Speaker</b>	Horn Rotor w/Treble Driver, Bass Rotor w/15" (38 cm) Bass Speaker
<b>Control</b>	Speed Control: Fast/Slow/Off
<b>Output</b>	40W Tube Amplifier.
<b>Dimensions</b>	72 x 40 x 102 cm
<b>Weight</b>	70 kgs

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SUZUKI MUSICAL INST.  
MFG. CO., LTD  
Hamamatsu, Japan



HAMMOND

# The New B-3

● ● ● The birth of the New B-3... PURE HAMMOND® The birth of the New B-3... PURE Hammond The



birth of the New B-3... PURE Hammond The birth of the New B-3... PURE Hammond The birth of the New B-3... PURE Ham



# *Prestige Performance Quality*

These are the terms that best describe the Hammond New B-3 Organ. This brochure is dedicated to all performers and lovers of organ music who demand nothing less than the finest in tonal reproduction whether their appreciation is for the classic masterpieces of Bach or the sparkling modern arrangements of contemporary composers and artists. The Hammond New B-3 Organ offers conservative styling that lends gracious dignity to any décor. Notice the variety of timeless finishes carefully executed on choice hand selected woods. Observe the superb craftsmanship that represents the epitome of the cabinetmaker's art.

You can literally "feel" the built-in quality that characterizes all of the craftsmanship that is represented in the Hammond New B-3 Organ- from the finish on the superb cabinet to the precious metal palladium contacts in the heart of this truly magnificent instrument.

*We proudly present the  
**HAMMOND®** New B-3 Organ*