Hammond-Suzuki XM-1 Module and XM-c1 Drawbars with Native Instruments B4 Organ

Hi,

For those of you who have a XM-1 Hammond module and the XMc-1 controller, the B4 (Native Instruments) may prove to provide a much better Hammond-sound!

Although the B4 has a controller (much like the XMc-1, but with midi-out), it is expensive and hard to get (discontinued).

I don't know why Native Instruments discontinued the B4, but I think it is still better than all the plugins/sounds from East/west (kontact), Logic or Goliath sounds, so I'll keep using it on stage!

The B4-interface from Native Instruments is bigger (higher) and expensive. So a waste of money if you still have the old Hammond module!

GETTING READY:

This template is for those of you who want to use the old XMc-1 for controlling the B4.

1. Connect your XMc-1 to the XM-1 (because the MXc-1 doen not have a midi-out itself)
2. Connect the midi-out of the XM-1 to your computer (midi-interface)
3. On the XM-1 you'll need to set NRPN-ON! (press GLOBAL, PAGE-^ 2x, CURSOR-> 3x, VALUE and make sure NRPN is on).
   This makes that the midi information of the controls is sent to the midi-out of your XM-1
4. Open your Bome's Miditranslator program ant import this B4 template
5. Make sure that your midi-input is set to active within Bome's Midi Translator
6. Start your B4-program and make sure it uses the Bome's virtual output (=translated commands)
7. Be sure that in your B4-set-up (VIEWS, SETUP), the controlls are set to:
   - DRIVE Controller 90
   - Rotator Speed Controller 1
   - Rotator Run Controller 2
   - Percuss 3rd,2nd Controller 43

HAPPY PLAYING!

EXTRA INFO:

As the XMc-1 does not always send simple midi-info on all the controllers, not all translations are possible (until the translator program is able to catch and transform batches, some functions are even impossible to transform because commands cross-interfere)
For me that's no problem because I still have all I might need life anyway!

This 'XMc-1 to B4' template (transformers) is handling the:

- drawbars (upper, lower, pedals incl. the um,lm,pk selector),
- overdrive-knob (distortion),
- percussion 2nd and 3rd buttons (on and off),
- rotary slow/fast button
- the three preset-buttons (1,2,3).

So it does NOT include the volume-knob (because it does not send midi to the midi-output of the XM-1) and NOT include the Vibrato/chorus-buttons (complex and interfering data).
The leslie-on buttons controls the vibrato/percussion-off function in the B4.

FOR THOSE WHO WANT TO GET INTO PROGRAMMNG EXTRA TRANSLATORS FOR THE B4:

- each midi-control (button on the XMc-1) creates a batch of hex data and I selected unique codes for the translator-function.
  If you see other unique codes on buttons I did not create a translator for, you might think "why didn't he program this one as well?".
  I did not because it would interfere with other functions as well.
  If it would be able to catch a batch of Hex commands in Bome's Midi Translator, it would be very easy to make a translator for each function.
- I disabled some of the Overdrive translators to be able to make translators for the percussion-knows.
  That should not be a problem because the overdrive function does not need all the translators to be functional!

Please feel free to contact me if you have improved the B4-translator!!!!

Regards,

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Info from the original creator of the preset:

Hammond-Suzuki XM-1 Module and XM-c1 Drawbars with Native Instruments B4 Organ
---Preset by John Gregory, 24 Sept. 2003

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The Hammond-Suzuki XM-1 organ module comes with a drawbar controller unit (XM-c1). The goal here was to use these drawbars to manually control the onscreen drawbars in Native Instrument's excellent software "B4 Organ". No sound is used from the Hammond-Suzuki module itself, but the drawbars must be attached to the module in order to send out their controllers via the module's Midi Out. A typical setup would be to have a keyboard playing into one of the computer's Midi In ports, while the drawbar/module sends in its controllers via another Midi In port.

In this Preset, the XM-1's one physical set of drawbars controls alternately Upper, Lower & Pedal drawbars on the B4 Organ, depending on which manual is selected on the XM-c1 drawbar unit. (The buttons on the unit are labeled "UM", "LM", and "PK" respectively.)

For Pedal drawbars, the XM-1 uses only two drawbars (16' and 8'), as do most Hammond organs. So in this Preset, only those two drawbars will interact with the B4 Organ. If it was important to control all of the six B4 Pedal drawbars in realtime, a separate preset could be programmed for that, and utilized on a different pass or take in the recording.

The XM-1 has a rear Pedal Switch input. This Preset is setup for a sustain pedal to be inserted there. Pushing down on the pedal ("sustaining") causes the Leslie Rotor to go to & remain at Fast Speed. Releasing the sustain pedal will cause the Rotor to go to the Slow mode.

Possibly a true Pedal Switch could be used instead, and a translation created to toggle the Leslie speed in a Punch In/Out manner.

A helpful function on the XM-c1 is that if you momentarily hold down its UM, LM, or PK buttons (upper, lower, & pedal manuals), upon release, it will "dump" the drawbar values. I.e., it will send out the current controller values of that manual's drawbars. So the initial setting of a manual's drawbars (or a sudden change of many drawbars) could be recorded in the beginning of a sequence, or at any time in a song where it's helpful.

In summary, the XM-c1 can (only) control the B4 drawbars & Leslie speed, which are probably the most vital elements for any organist. The XM-c1 could also select five B4 Organ presets.

But those possessing another Midi controller surface may find they'd like to add on to this current Preset, since the B4 Organ has a multitude of other useful parameters that could be accessed with remote switches & knobs.

For those who are interested, the XM-1's drawbars send out CC's (continuous controllers) as follows (*the XM-1's Global Midi parameter "Drawbar Change" must be ON):

Upper Manual = CC 80
Lower Manual = CC 81
Pedals = CC 82

Within each manual, each Drawbar is alloted 9 Values, corresponding to the "0 - 8" racheted settings of the drawbar.
Drawbar 16' = Values 0 - 8
Drawbar 5 1/3' = Values 9 - 17 --->(These are also the Values of the Pedal 8' Drawbar.)
Drawbar 8' = Values 18 - 26
Drawbar 4' = Values 27 - 35
Drawbar 2 2/3' = Values 36 - 44
Drawbar 2' = Values 45 - 53
Drawbar 1 3/5' = Values 54 - 62
Drawbar 1 1/3' = Values 63 - 71
Drawbar 1' = Values 72 - 80

The Drawbars on the software B4 Organ, however, use quite a different Midi system, with each of the 24 drawbars being alloted its own Controller number (Controllers 12 - 29, 33- 38), and the 9 racheted values being 0,16,32,48,64,80,96,112,and 127.

Therefore "Midi Translator" is a great choice of utility for making this awkward conversion.

Names of Translations: U = Upper. L = Lower. P = Pedal. Following the letter in each name are two numbers. The first number is the Drawbar (16', 4', etc.). The second number is the Value that the drawbar is "pulled out" to. Note that for the Drawbar names, instead of using fractions, a rough decimal approximation was used. Thus, "5 1/3" became "5.3", etc.