How control Korg Krome with an External Midi Controller

Before start, I want to precise 2 little things:

- I'm a French guy, so sorry for my poor English, but I want share this Tip with the maximum of people using Krome Keyboard

- I think this Tip can be used not only on Korg Krome Keyboard but also with all keyboards from all other constructors (Yamaha, Roland, Technics….), workstation, arranger, synthe….

I tried also this tip in krome Program Mode. Everything can be adjusted by this method: Osc, Filter, Amp, LFO, Arpegiattor, drum, IFX….
In sequencer Mode, Solo and Mute buttons work, but transport, Track volume and pan don't work (may be these parameters are locked in the midi file).

I tried this Tip with an old I5S Korg Arranger (mute/unmute track, change tracks volume):
I don't see any sysex data but only control change, but you can create Mapping file from controller control change to arranger control change (is more easy on an arranger because each track have its own midi chanel

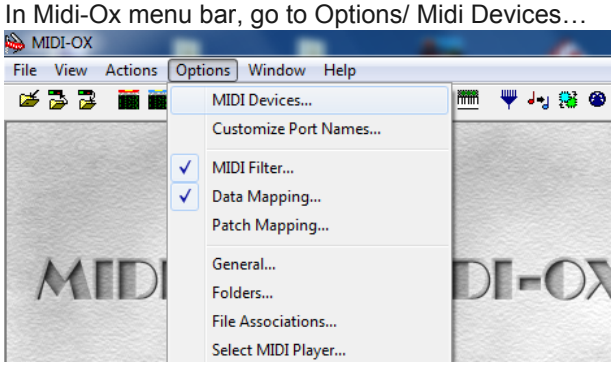
The problem is, when we used Krome internal sound in Combi mode, all Tracks are in the same midi channel, so no way to use midi control change to control one track only.
The only way to do this, is to use SYSEX data.
To do that, we need an External midi controller able to send Sysex data, or use a computer.
I do everything with my computer. I connect my korg Krome 73 and my Axiom49 MK1 to my USB ports computer. In windows 7 the two keyboard are recognized automatically.
I use a little Midi Utility named MIDI-OX (it's a freeware). You can download it here: http://www.midiox.com/. The version for WinNT, 2000 and XP run without problem on seven32 bits (I don't know about other windows version….). I think you can find other software to do the same thing, on the web

MIDI-OX Installation.

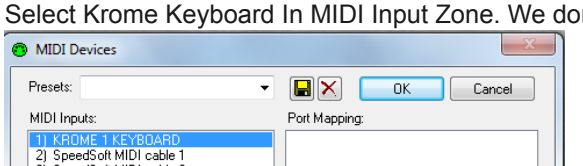
Classical installer, like all other programs (I agree, next, next ….)

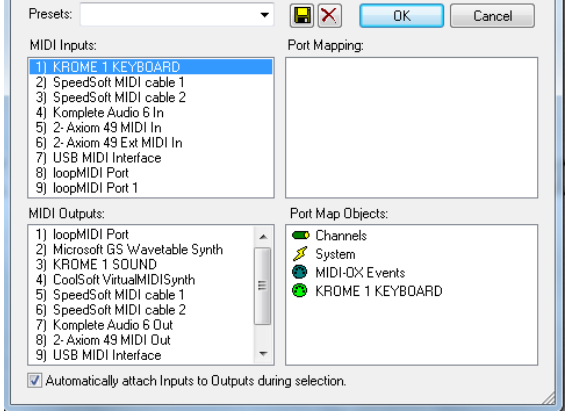
What happens on Krome when I touch its sliders, potentiometers, and buttons?

To know that, we'll going to connect the Krome keyboard in "Device Midi IN"
In Midi-Ox menu bar, go to Options/ Midi Devices…

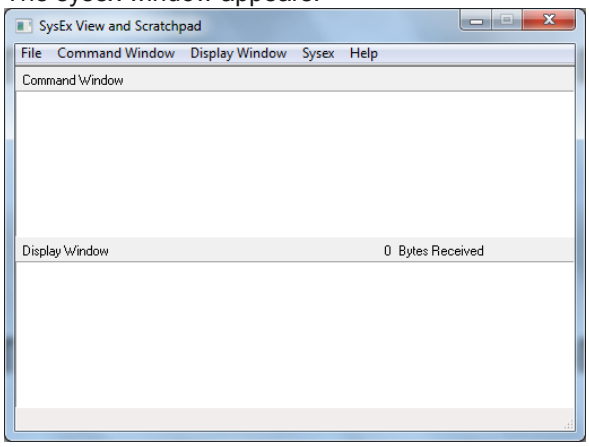


Select Krome Keyboard In MIDI Input Zone. We don't need Midi output at this time. Click OK

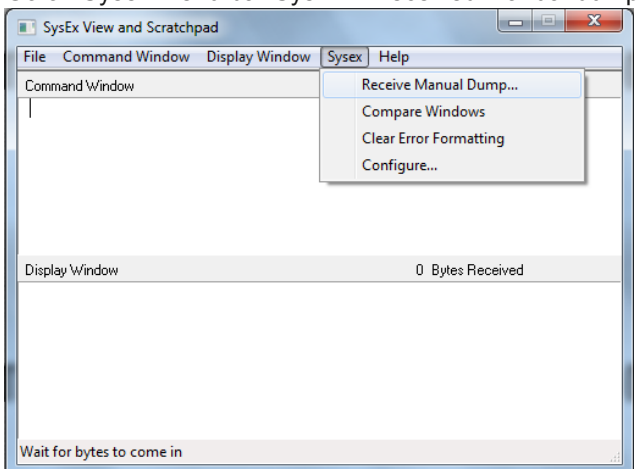




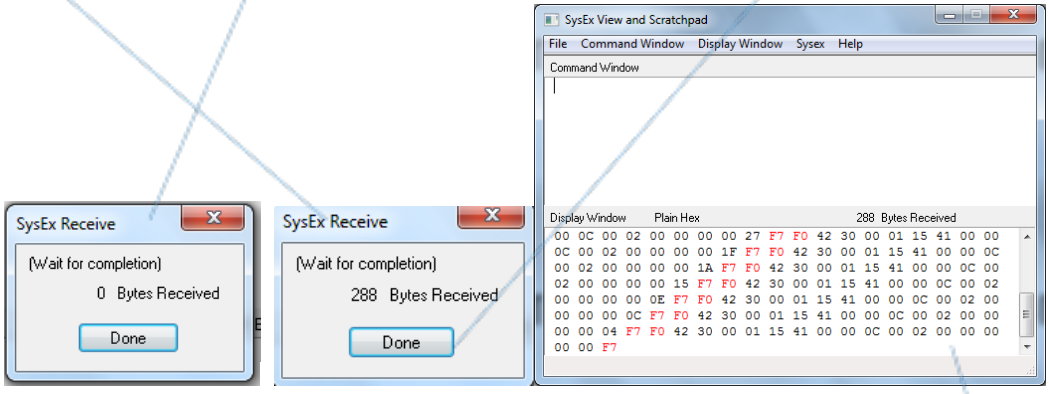
Now return in Midi-Ox menu bar and go to View / SysEx…
The sysex window appears:



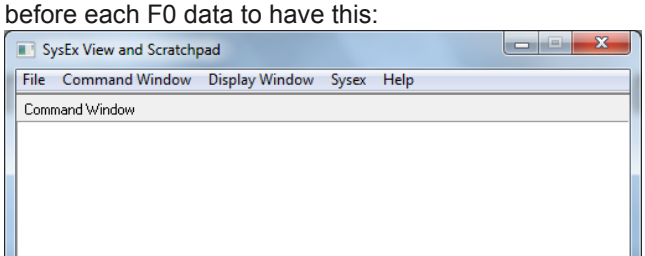
Go on Sysex menu bar SysEX / Received Manual dump

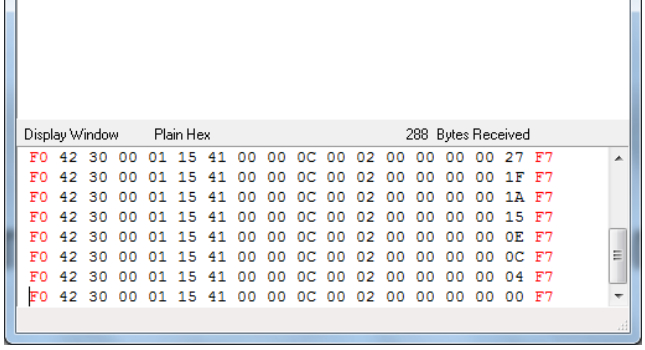


Now a popup window appears and it's time to move a slider on touch screen. The "bit received" must increase (I move Track 1 volume Slider from 120 to 0). Click on Done button after manipulation.



You can see all sysex data sents by the Krome keyboard when you move slider.
You must put in form all this data to see exactly what happens. Make a "Return to new line" Just before each F0 data to have this:



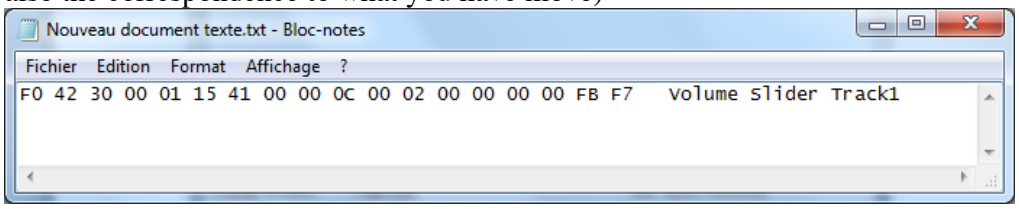


I don't know many things about sysex data. I think you could found many subject about this on the net.

What I just know, F0 is start of one line of data, F7 is the end of the line of data.

Here 42 30 00 01 15 41 (and may be 00 00 after) is the Keyboard ID. Here it's for a Krome 73 (I don't know if it is the same Id for Krome 88 or Krome 61) OC 00 02 00 00 00 is the sysex address for slider 1 in combi mode and the last pair of digit, change at each line; it's mean it's the variable data for volume track one

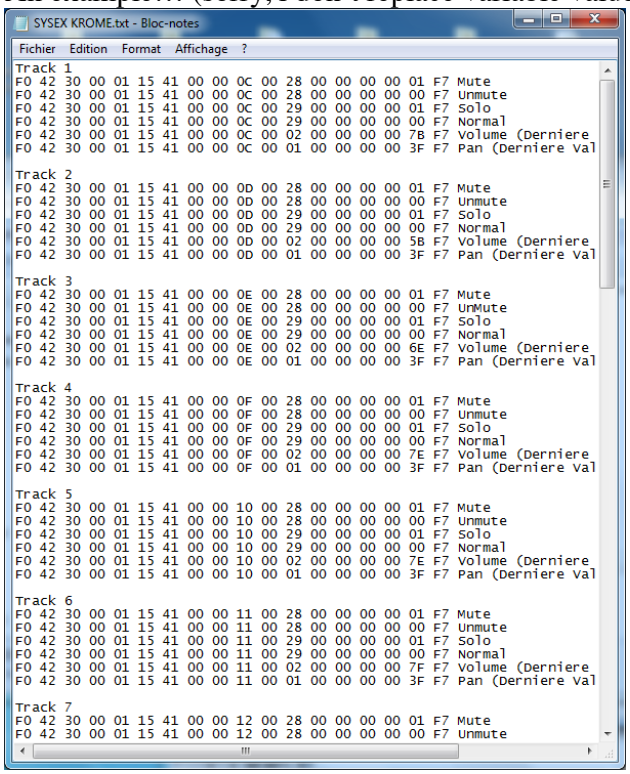
Copy one of this line and past it in a text file and replace variable data by **FB** (for sure, note also the correspondence to what you have move)



Right click on Sysex view window, select all/ Del, to empty all data received and starts a new capture on blank page.

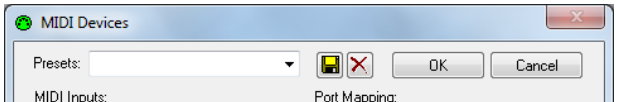
You must do this for every sliders, potentiometers, buttons that you want to control with your external midi controller, and increment in each time your text file document (don't forgot to save it…) For buttons (solo, mute, the variable data will be only 0 or 1 so push button 3 or 4 times to see really which data change)

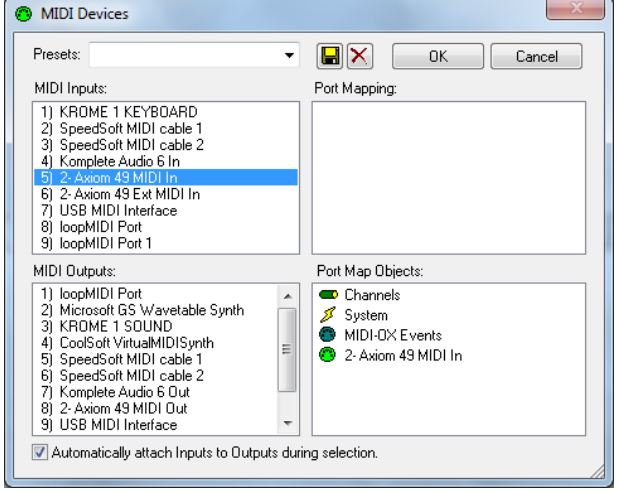
An example… (sorry, i don't replace variable value by FB, I done it later)



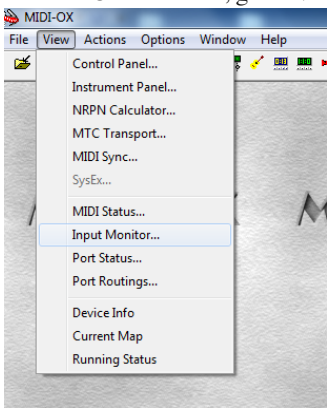
What happens when I move sliders, potentiometer, button on my External midi controller

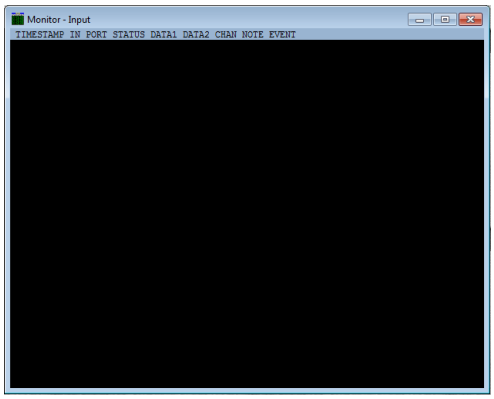
In Midi-Ox menu bar, go to Options/ Midi Devices… and select your external midi controller in the Midi Input Zone.



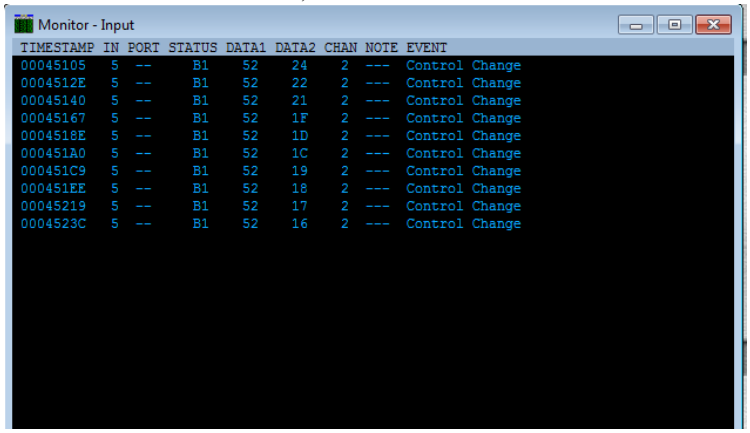


In Midi-Ox menu bar, go to View / Input Monitor

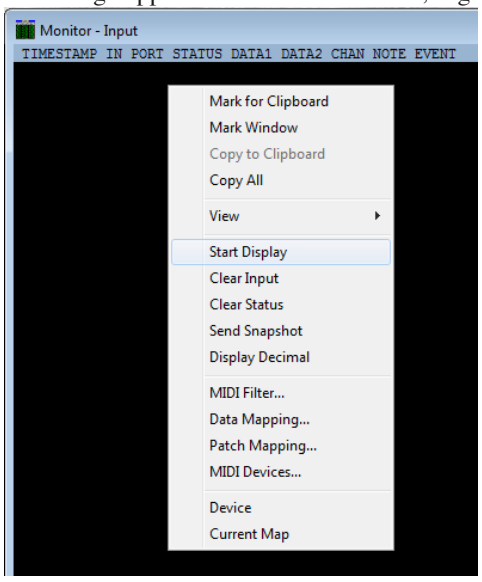




Move one Midi Controller Slider, potentiometer, button…(Here, an example with my Axiom 49 MK1,I move the first slider its adress is 52)



If nothing happens in the black windows, Right click on it and select “Start Display”



Here you must note the address note in **DATA1 (be careful it’s a Hexadecimal Value)**
Create another Text file document, and note the address of each slider, potentiometer, button you want to use on your external midi controller.

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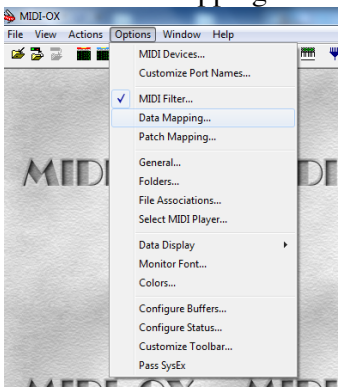
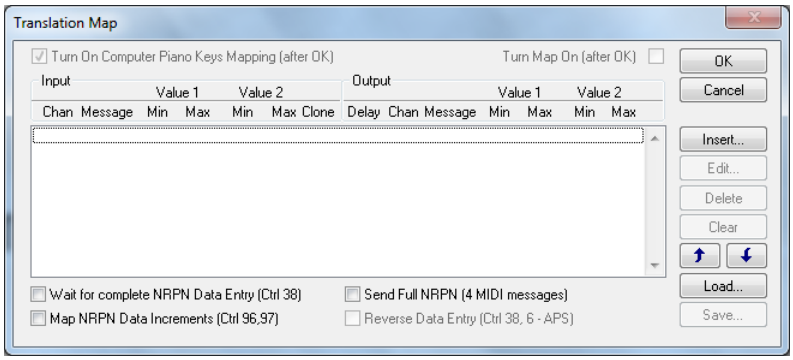
Create a mapping between input and output

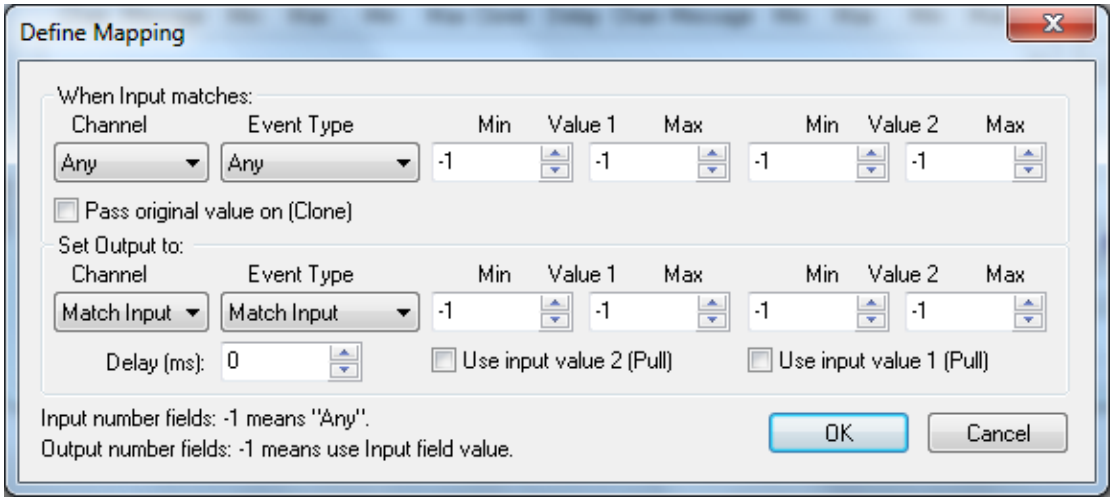
Now you have the input command coming from your external midi controller (it's control change data) and the output command to control your workstation, arranger (it's the sysex data)

To create a "mapping file" go to Midi-Ox menu bar /Options / Data Mapping





Click on Insert button



FIRST LINE "When input matches"

-In Channel: enter the midi channel from your External midi controller

-In Event type: select CTRL

-Value 1 Min and Max: it's the command address of one slider, button… of your external controller **CONVERTED IN DECIMAL VALUE**

Take the value of the Second text file and convert it in Decimal

You'll find easily hexadecimal-decimal calculator on the net (Google is your friend…)

So here 52 (hexadecimal) = 82 (decimal)

-Value2 Min= 0 Max=127 if slider, encoder, potentiometer

Max=1 if toggle button (Mute/unmute, Solo/Normal)

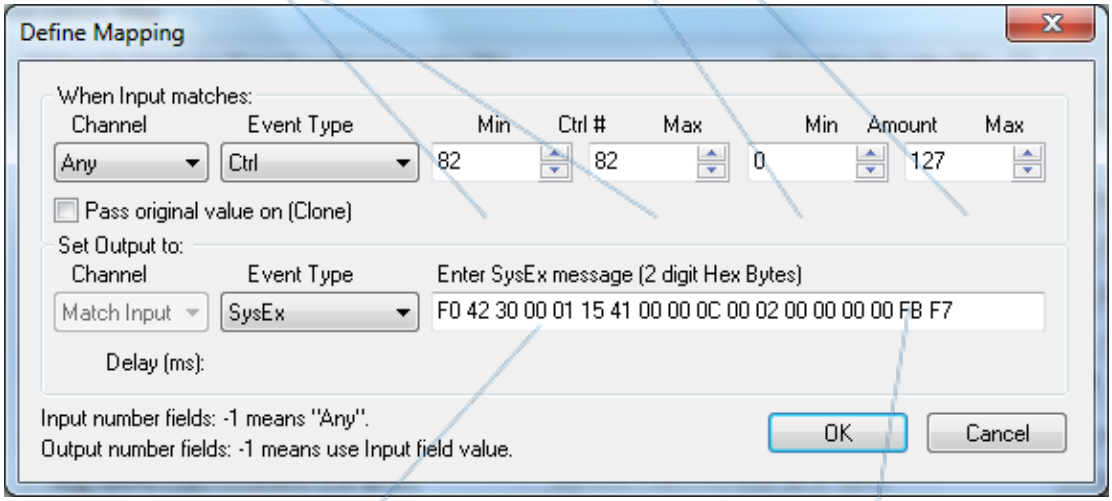
Second Line "Set output to"

- Channel: normally the krome midi channel but sysex data doesn't need midi channel adress
- Event type: select sysex
- Enter sysex message: Sysex data you want to send when you move this control(copy the line from the first text file and paste it here)

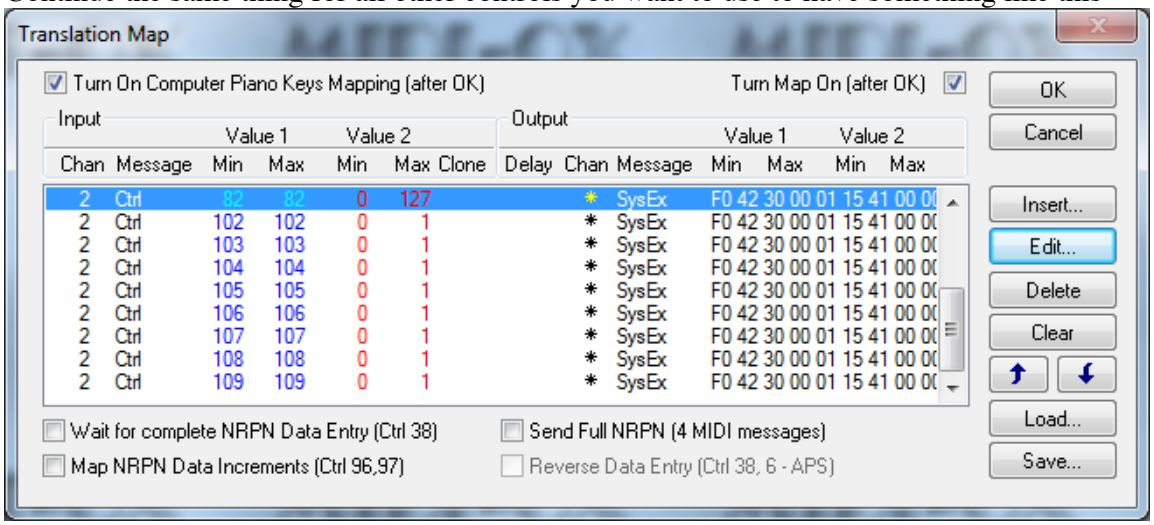
See Example

EXAMPLE

I move Slider 1 on my Axiom The value go from 0 To 127
!! Be careful!! Decimal value



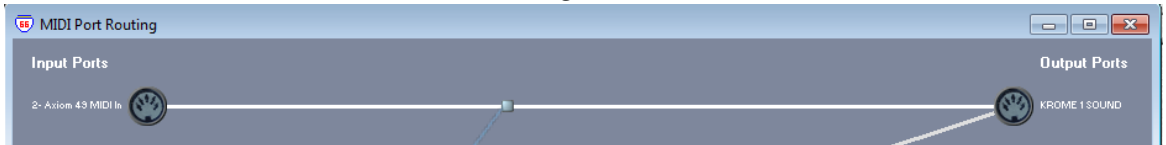
I want its move Track 1 Volume on my Krome keyboard
Click OK here, the variable data FB
Continue the same thing for all other controls you want to use to have something like this

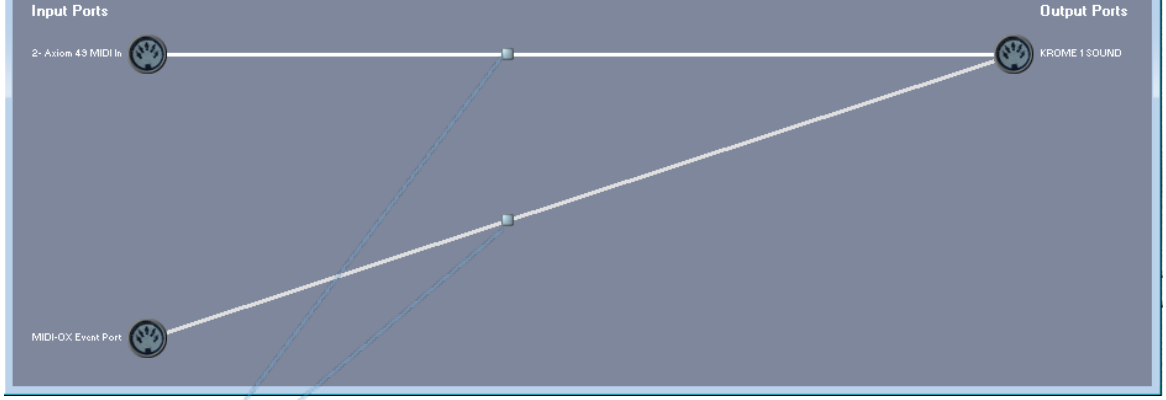


I had a little problem with the Axiom button. I want its buttons to command Mute/unmute track
But when I push on it, it was program to change LSB and MSB. So I reprogram all this buttons on control change 102, 103, 104, …., 109 (normally not used on control change list)
After you done all your controls you can Click on Save and give a name to your Mapping file.
!! BE Careful!! Keep the default path; don't change the path because you cannot choose it in the next step ….
Click ok to close Data mapping window

Last STEP Create your Midi setup with Midi-Ox

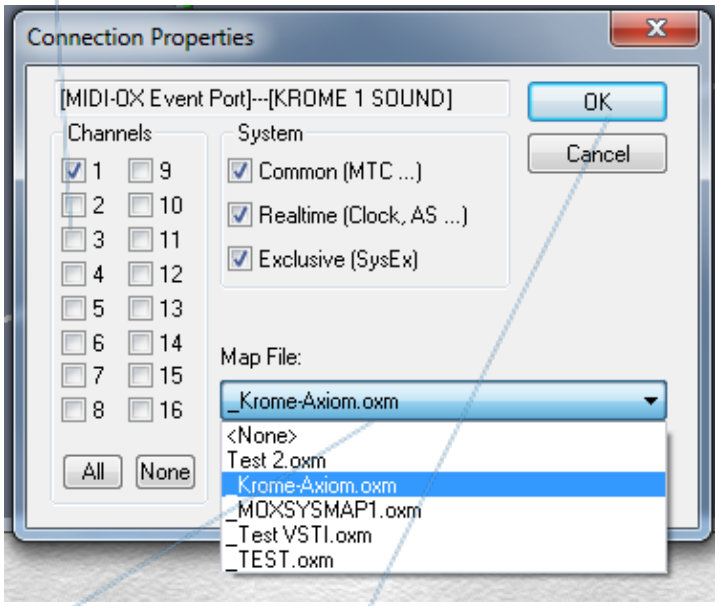
Close all the windows Return on Midi-Ox menu bar / options / Midi Devices
Select you external controller in the Midi Inputs list
Select your Workstation in the Midi outputs List
Click ok
Go on Midi-Ox menu bar / View / Port routings





Click on this 2 squares

1 Workstation midi channel (global channel)



2 Select your Mapping file
3 Click OK

Now when you move slider, potentiometer, or button on your Midi controller
The corresponding slider, pot, button must move on your workstation
You can go on Midi-Ox menu bar / File / Save Profile to save the configuration (just in case…)
When you quit Midi-Ox, the software save automatically the configuration, and reload it automatically when you lunch Midi-Ox.
ENJOY