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

MIDI Devices	
Presets:	▼ 🛃 🗙 OK Cancel
MIDI Inputs:	Port Mapping:
1) KROME 1 KEYBOARD 2) SpeedSoft MIDI cable 1	



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

ſ	🔳 Sy	vsEx View and Scratch	bad				x
	File	Command Window	Display Window	Sysex	Help		
	Comr	mand Window					
	Displ	ay Window			0	Bytes Received	
l							

Go on Sysex menu bar SysEX / Received Manual dump

SysEx View and Scratchpad	
File Command Window Display Window	Sysex Help
Command Window	Receive Manual Dump
	Compare Windows
	Clear Error Formatting
	Configure
Display Window	0 Bytes Received
1	
Wait for bytes to come in	

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.

		SysEx View and Scratchpad	
		File Command Window Display Wir	ndow Sysex Help
		Command Window	
\rightarrow			
SysEx Receive	SysEx Receive	Display Window Plain Hex	288 Bytes Received
		00 0C 00 02 00 00 00 00 2	7 F7 F0 42 30 00 01 15 41 00 00 🔺
(Wait for completion)	(Wait for completion)	0C 00 02 00 00 00 00 1F F	7 F0 42 30 00 01 15 41 00 00 0C
	(02 00 00 00 00 15 F7 F0 42	2 30 00 01 15 41 00 00 0C 00 02
0 Bytes Received	288 Bytes Received	00 00 00 00 0E F7 F0 42 30	0 00 01 15 41 00 00 0C 00 02 00 🔲
		00 00 00 0C F7 F0 42 30 00	0 01 15 41 00 00 0C 00 02 00 00 E
Done	Done	00 00 04 F7 F0 42 30 00 01 00 00 F7	1 15 41 00 00 0C 00 02 00 00 00
			ii.

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:



Die	enla	πW	indou	w	Pla	in He	~							288 1	Butes	Bec	eiver	1	
F	0.	42	30	00	01	15	41	00	00	00	00	02	00	00	00	00	27	F7	
F	ŏ	42	30	00	01	15	41	00	00	oc	00	02	00	00	00	00	1F	F7	
F	٥·	42	30	00	01	15	41	00	00	oc	00	02	00	00	00	00	1A	F7	
F	ο ·	42	30	00	01	15	41	00	00	0C	00	02	00	00	00	00	15	F7	
F	o •	42	30	00	01	15	41	00	00	0C	00	02	00	00	00	00	0E	F7	
F	o •	42	30	00	01	15	41	00	00	0C	00	02	00	00	00	00	0C	F7	Ξ
F	o •	42	30	00	01	15	41	00	00	0C	00	02	00	00	00	00	04	F7	
F	o ·	42	30	00	01	15	41	00	00	0C	00	02	00	00	00	00	00	F7	-

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) for slider 1 in combi mode

OC 00 02 00 00 00 is the sysex address 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)

SYSE	X KR	OME	.txt	- Blo	c-no	tes													• •	8
Fichier	Edi	ition	Fo	ormat	t A	ffich	age	?		_	_	_		_		_	_	_	_	_
Track F0 42 F0 42 F0 42 F0 42 F0 42 F0 42 F0 42	1 30 30 30 30 30 30	00 00 00 00 00 00	01 01 01 01 01 01	15 15 15 15 15 15	41 41 41 41 41 41	00 00 00 00 00 00	00 00 00 00 00 00	0C 0C 0C 0C 0C	00 00 00 00 00 00	28 28 29 29 02 01	00 00 00 00 00 00	00 00 00 00 00 00	00 00 00 00 00 00	00 00 00 00 00	01 00 01 7B 3F	F7 F7 F7 F7 F7 F7	Mute Unmute Solo Normal Volume Pan (De	(Dern ernier	iere e Val	-
Track F0 42 F0 42 F0 42 F0 42 F0 42 F0 42 F0 42	2 30 30 30 30 30 30	00 00 00 00 00 00	01 01 01 01 01 01	15 15 15 15 15	41 41 41 41 41 41	00 00 00 00 00 00	00 00 00 00 00 00	0D 0D 0D 0D 0D 0D	00 00 00 00 00 00	28 28 29 29 02 01	00 00 00 00 00 00	00 00 00 00 00 00	00 00 00 00 00 00	00 00 00 00 00 00	01 00 01 5B 3F	F7 F7 F7 F7 F7	Mute Unmute Solo Normal Volume Pan (De	(Dern ernier	iere e Val	=
Track F0 42 F0 42 F0 42 F0 42 F0 42 F0 42 F0 42	3 30 30 30 30 30 30	00 00 00 00 00	01 01 01 01 01 01	15 15 15 15 15	41 41 41 41 41 41	00 00 00 00 00	00 00 00 00 00 00	0E 0E 0E 0E 0E	00 00 00 00 00	28 28 29 29 02 01	00 00 00 00 00 00	00 00 00 00 00 00	00 00 00 00 00 00	00 00 00 00 00 00	01 00 01 6E 3F	F7 F7 F7 F7 F7	Mute UnMute Solo Normal Volume Pan (De	(Dern ernier	iere e Val	
Track F0 42 F0 42 F0 42 F0 42 F0 42 F0 42 F0 42	4 30 30 30 30 30 30	00 00 00 00 00 00	01 01 01 01 01 01	15 15 15 15 15 15	41 41 41 41 41 41	00 00 00 00 00 00	00 00 00 00 00	OF OF OF OF OF	00 00 00 00 00 00	28 28 29 29 02 01	00 00 00 00 00 00	00 00 00 00 00	00 00 00 00 00 00	00 00 00 00 00 00	01 00 01 7E 3F	F7 F7 F7 F7 F7 F7	Mute Unmute Solo Normal Volume Pan (De	(Dern ernier	iere e Val	
Track F0 42 F0 42 F0 42 F0 42 F0 42 F0 42 F0 42	5 30 30 30 30 30 30	00 00 00 00 00 00	01 01 01 01 01 01	15 15 15 15 15 15	41 41 41 41 41 41	00 00 00 00 00	00 00 00 00 00	10 10 10 10 10	00 00 00 00 00 00	28 28 29 29 02 01	00 00 00 00 00 00	00 00 00 00 00 00	00 00 00 00 00 00	00 00 00 00 00	01 00 01 7E 3F	F7 F7 F7 F7 F7	Mute Unmute Solo Normal Volume Pan (De	(Dern ernier	iere e Val	
Track F0 42 F0 42 F0 42 F0 42 F0 42 F0 42 F0 42	6 30 30 30 30 30 30	00 00 00 00 00 00	01 01 01 01 01 01	15 15 15 15 15 15	41 41 41 41 41 41	00 00 00 00 00	00 00 00 00 00	11 11 11 11 11 11	00 00 00 00 00	28 28 29 02 01	00 00 00 00 00 00	00 00 00 00 00 00	00 00 00 00 00	00 00 00 00 00	01 00 01 7F 3F	F7 F7 F7 F7 F7 F7	Mute Unmute Solo Normal Volume Pan (De	(Dern ernier	iere e val	
Track F0 42 F0 42	7 30 30	00 00	01 01	15 15	41 41	00 00	00 00	12 12	00 00	28 28	00 00	00 00	00 00	00 00	01 00	F7 F7	Mute Unmute		+	
	-	_		_	_		_	_	_	_								_	_	

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.

-	20110.	
(MIDI Devices	×
	Presets:	- CK Cancel
	MIDLInputs:	Port Mapping:



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)

Monitor -	Inp	ut									• ×
TIMESTAMP	IN	PORT	STATUS	DATA1	DATA2	CHAN	NOTE	EVENT			
00045105	5		B1	52	24	2		Control	Change		
0004512E									Change		
00045140									Change		
00045167									Change		
0004518E									Change		
000451A0									Change		
000451C9			B1	52	19			Control	Change		
000451EE				52	18			Control	Change		
00045219			B1	52	17			Control	Change		
0004523C			B1	52	16			Control	Change		

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. Create another Text file document, and note the address of each slider, potentiometer, button you want to use on your external midi controller.

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

File View Actions	Options Window Help	r								
🎽 🍃 🗟 🖬 🖬	MIDI Devices	🖞 🦞 Translati	on Map							X
	Customize Port Names		o On Computer	Disso Kau	o Manni	ing (after OK)		Turn Man	On (ster OK)	
	✓ MIDI Filter	V IU	n on computer	Fiano Key	s mahhi	ing (alter UK)		типтмар		OK
	Data Mapping	Inpu		Value 1	Valu	ue 2	Uutput	Value 1	Value 2	Cancel
	Patch Mapping	Char	Message M	in Max	Min	Max Clone	Delay Chan Message	Min Max	Min Max	
MIDI	General Folders File Associations Select MIDI Player									Edit
	Data Display Monitor Font Colors								-	
	Configure Buffers Configure Status Customize Toolbar Pass SysEx	■ Wa	t for complete f NRPN Data li	NRPN Data ncrements	a Entry ((Ctrl 96,	(Ctrl 38) 97)	Send Full NRPN (4)	MIDI message (Ctrl 38, 6 - AF	s) PS)	Load Save

Click on Insert button

When Input matc Channel	hes: Event Type	Min	Value 1	Мах	Min	Value 2	Мах
Any 🔻	Any •	• •1	-1	×.	-1	-1	×
Pass original v	alue on (Clone)						
Channel	Event Type	Min	Value 1	Max	Min	Value 2	Max
Match Input 🔻	Match Input 🔹	•] -1	-1	· · · · · · · · · · · · · · · · · · ·	-1	-1	×
Delay (ms):	0	🔲 Use inp	out value 2 (F	Pull)	🔲 Use inp	ut value 1 (F	Pull)
Input number fields: Output number field	: -1 means "Any". Is: -1 means use Inpul	t field value.					Cancel

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)

EXAMPLE

I move Slider 1 on my Axiom The !! Be careful!! Decimal value

The value go from 0 To 127

Define Mapping			11	×
When Input mate Channel Any Pass original Set Output to:	ches: Event Type Ctrl v alue on (Clone)	Min Ctrl # 82 📑 82	Max V O	Min Amount Max 127
Channel Match Input 👻	Event Type SysEx 🗸	Enter SysEx messag F0 42 30 00 01 15 4	e (2 digit Hex Bytes) 1 00 00 0C 00 02 00	0 00 00 00 FB F7
Delay (ms):				
Input number fields Output number field	: -1 means "Any". ds: -1 means use Input	field value.		OK Cancel

I want its move Track 1 Volume on my Krome keyboard Click OK here,

here, the variable data FB

Continue the same thing for all other controls you want to use to have something like this

Tra	anslatio	n Map			41	ns.	63			41	EE.	ε.	1	X
Γ	📝 Turn	On Compu	iter Pia	no Keys	: Mappi	ng (after OK)			Tu	m Map	On (afte	erOK)	1	ОК
	Input		Val	ue 1	Valu	ie 2	Output		Valu	ue 1	Valu	e2		Cancel
	Chan	Message	Min	Max	Min	Max Clone	Delay Chan	i Message	Min	Max	Min	Max		
	2 2 2 2 2 2 2 2 2 2 2 2 2	Ctrl Ctrl	82 102 103 104 105 106 107 108 109	82 102 103 104 105 106 107 108 109	0 0 0 0 0 0 0	127 1 1 1 1 1 1 1 1	* * * * *	SysEx SysEx SysEx SysEx SysEx SysEx SysEx SysEx SysEx SysEx	F0 42 F0 42 F0 42 F0 42 F0 42 F0 42 F0 42 F0 42 F0 42 F0 42	30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00	01 15 4 01 15 4	1 00 0(1 00 0(* III	Insert Edit Delete Clear
	🗖 Wait	for comple NRPN Dat	te NRF ta Incre	PN Data ements (i Entry (I Ctrl 96,9	Ctrl 38) 97)	Send Full	NRPN (4 M Data Entry	AIDI me (Ctrl 38	essage , 6 - AF	s) PS)			Load Save

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

2- Axiom 49 MIDI In

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

- - -

Output Ports



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