Synth Controller manual addendum for edition 'K4' for Kawai K4/K4R

Before you can start ...

... **<u>two</u>** important things must be set right:

a) are the receive midichannel of the K4 and the learnt channel in the Synth Controller identical?
b) the parameter „SYSTEM/MIDI=RCV“ „RCV EXCL“ must be set to ON?

Midichannel learning

To teach the Synth Controller the midichannel it should work on please hold the upper 2 buttons for 2 seconds. The LEDs will start to flash. Now send a note on the desired channel into the Midi In jack. The learnt channel keeps stored even when removing power.

Selecting the K4 Sources

A typical K4/K4r patch offers up to 4 sources. These sources can be selected and tweaked individually on the Synth Controller. MUTE and UNMUTE has to be accomplished on the K4 itself though.

To select S1 press the upper button. All the white parameters on the faceplate will be sent to S1 now. To select S2 simply press the middle button. As all K4-fans know, S1 and S2 share one DCF. The white paras in the DCF section can not be tweaked individually for S1 and S2, they always change the common VCF.

To jump to S3 hold the 1st and the 3rd button. The controller jumps into an S3/S4 mode allowing to easily swap between S3 and S4 just with the 2 upper buttons. The 3rd LED keeps lighted. There is no need to hold the 3rd button when moving between S3 and S4 now. The blue common layer can be selected as well of course.

And how to get back to S1/S2? Hold the 3rd button for 2 seconds. The upper LEDs shortly flash to indicate it jumped back to S1/S2 mode.

Important note: parameter changes on S3 and S4 only make sense if the K4/K4r is in TWIN or DBL mode. And DCF2 is only active in TWIN mode. In DBL mode, all 4 sources run through DCF1 only.

Common Layer

The blue layer contains the COMMON parameters. They take effects on all 4 sources together.

Shift Parameter

Now you want to kow what's about the pink parameters? These are 'Shift'-parameters. If you keep holding a lighted button these shift-paras get active. They take effect on the currently active source, just as the white parameters.

Example for waveform: to change waveform between 1-127 for the selected source, you dial the appropriate pot. If you keep pressing the already lighted button, the pink para gets active and you can select the waveforms between 128-255.

Drum Edit Mode

Now we come to the special-feature of the K4 edition: the Drum Edit Mode! It allows you to tweak the drumsounds in a very comfortable way. Hold all 3 buttons to enter and we can start.

Play a drumsound of the K4/K4r with an external keyboard on midichannel 10. Now you can change that sound with the green parameters. Play another sound and the dials take effect on this sound. Whatever sound you play, the last played is the one which will be changed. Even if you got the K4 with keys, it's necessary to send the notes through the Synth Controller, most probably with another keyboard. The notenumber will be needed by the Synth Controller to know, which sound should be changed.

The middle parameter row changes S1 of the drumsound, the lower row takes effect on S2.

The 3 pots to the left set the waveform

- dial 1 sets wave 1-127
- dial 2 sets wave 128-256
- dial 3 is optimized for easy selection of drumsounds only between wave 97-139

Drum Edit – Sound Lock

Now you got a midi-sequence causing the K4 to play a drumloop and you just want to tweak ONE unique sound while the loop is playing? That's what the 'Sound Lock' parameter is for. It defaults to OFF on startup which leads to the scenario described above: the dials of the Synth Controller always take effect on the last played note.

Stop your loop, play the drumsound you wish to tweak and turn Sound Lock into the right half setting it to ON. Now the controller is locked on this last played note. You can safely start your midiloop and realtime-tweak your formerly locked drumsound. All other sounds stay unchanged.

Control Change numbers

The Synth Controller allows to alter many parameters by ordinary CC# now. Not all of them work that perfect in realtime, the K4's main brain is not the biggest. But it can be fun anyway.

CC#		
11	AB Time	**Common**
12	AB Depth	
13	Vib Speed	
14	Vib Depth	
15	Lfo Speed	
16	Lfo Depth	
17	Cutoff 1+2	**Source 1&2**
18	Reso 1+2	
19	Env Depth 1+2	
20	A	
21	D	
22	S	
23	R	
24	Cutoff 1+2	**Source 3&4**
25	Reso 1+2	
26	Env Depth 1+2	
27	A	
28	D	
29	S	
30	R	
31	Volume	**Source 1**
32	Coarse	
33	Fine	
34	Wave (0-127)	
35	A	
36	D	
37	S	
38	R	
39	Volume	**Source 2**
40	Coarse	
41	Fine	
42	Wave (0-127)	
43	A	
44	D	
45	S	
46	R	
47	Volume	**Source 3**
48	Coarse	
49	Fine	
50	Wave (0-127)	
51	D	
52	S	
53	R	
54	Volume	**Source 4**
55	Coarse	
56	Fine	
57	Wave (0-127)	
58	D	
59	S	
60	R	