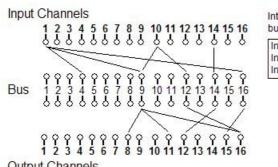
# MIDI Mapper Usage Manual



MIDI-Box MIDI-Mapper is based on the MIDIBox Hardware Platform (MBHP) and MIDIBox Operating System (MIOS).

http://ucapps.de/

The MIDI-Channel-Mapper device is able to route input channels of a single hardware input to output channels of a single hardware output in any way you want. The device's user interface is designed to allow switching the routing of some channels while performing, leaving other routings untouched.



Internally, this routing map will be builded to forward the messages:

In 1 -> Out 8,11,15,16 In 10 -> Out 8,11,16 In 14 -> Out 12

**Output Channels** 

The routing is oranized with buses. To each of the 16 buses, input and output channels can be assigned. The events from the input channels of a bus will be routed to it's output channels. There will be no redundant routing, this means if you route channel  $10 \rightarrow 16$  on more than one bus, a incoming event on channel 10 will just be sent once to the output 16. The goal of all this is to have some routings fixed, while you can play arround on the currently selected bus without affecting the routings on the other buses. You can route the select bus to the disired target instrument/synth while performing on your masterkeyboard, by just hitting one button on the output screen.

## The User-Interface



The User-Interface panel consists of 20 buttons. There are 4 "screen-buttons" and 16 "value-buttons".

Each button has a associated LED. If you push a screen button, the device will switch to this screen, the value LED's will show the selected value(s) for this screen. If you push a value-button, this value will be selected or deselected.

Screen	Function	
Patch [P]	Load and save to/from one of 16 patches stored on the Bankstick.	
Bus [B]	Select the current bus.	
Input [I]	Add / remove input channels from the current bus.	
Output [O]	Add / remove output channels from the current bus.	

On the input/output screens, you can select multiple values by holding the [I] / [O] button while pushing a value. When you push a value without holding the screen-button again, this will switch back to a single value selected. To reset the device to "factory preset" (clear all patches), hold the [P] button for at least 3 seconds. After the reset, the first patch will be in "1-1" state (in 1 - > out 1, in 2 -> out 2, ...), all other patches will be empty (no routing). To clear just the current patch, hold the [B] button for at least 3 seconds.

Basic Screen-Button Functions:

Action	Function	
Push [P]	Switch to patch screen.	
Hold [P] > 3 sec.	Clear all patches(factory reset).	
Push [B]	Switch to bus screen.	
Hold [B] > 3 sec.	Clear current patch.	
Push [I]	Switch to onput screen.	
Push [O]	Switch to output screen.	

#### Screens

On the screens [P] and [B], always one value will be selected (current patch/current bus). On [I]/[O] screen, one, multiple or none values can be selected. A save action on the patch screen will be indicated by a short flashing of the [P]-LED. Patch clears will be indicated by several flashes of all value LEDs.

Basic functions on the screens:

Screen	Action	Function
[P]	Push [Value X]	Load the patch X.
	[P]+[Value X]	Save current settings to patch X.
[B]	Push [Value X]	Select the bus X to be the current bus.
[I]	Push [Value X]	Add / remove a single input channel to the current bus.
	[I]+[Value X]	Add / remove multiple input channels to the current bus.
[0]	Push [Value X]	Add / remove a single output channel to the current bus.
	[O]+[Value X]	Add / remove multiple output channels to the current bus.

Which bus is currently selected, is not relevant for the routing itself. It just affects to/from which bus channels will be added/removed on the screens [i] and [O]. The currently selected patch/bus/screen is automatically stored on the internal EEPROM each time you switch them. If you turn on the device, the last selected patch will be loaded, the last selected bus set, and the device will automatically switch to the last screen you worked on.

## Advanced lookup functions

There are some additional functions, that only show some information about the current setup. This can help if you get lost in all the buses and it's channels. The information will be shown by the value LED's, and will last until you release the hold' screen-buttons.

### Advanced lookup functions:

About	Action	Information
Bus	[B]+[I]	Which buses have (any) assigned input channels.
	[B]+[I]+[Value X]	Which buses have input channel X assigned.
	[B]+[O]	Which buses have (any) assigned output channels.
	[B]+[O]+[Value X]	Which buses have output channel X assigned.
Input	[I]+[B]	Which inputs are assigned to (any) bus.
	[I]+[B]+[Value X]	Which inputs are assigned to bus X.
	[I]+[O]	Which inputs are assigned to (any) output.
	[I]+[O]+[Value X]	Which outputs are assigned to output X.
Output	[O]+[B]	Which outputs are assigned to (any) bus.
	[O]+[B]+[Value X]	Which outputs are assigned to bus X.
	[0]+[1]	Which outputs are assigned to (any) input.
	[O]+[I]+[Value X]	Which outputs are assigned to input X

To simplify it, you can use any double-combination of [B]/[I]/[O] + (optional [value X]). The first button is always the type you want information about, the second is the "relation partner". The value makes the information specific.

You only need to hit the value buttons, not to hold them. The info will be shown until you release the screen-buttons. You can hit a series of values without releasing the screen buttons, to quickly get an overview of your setup.

Happy mapping!