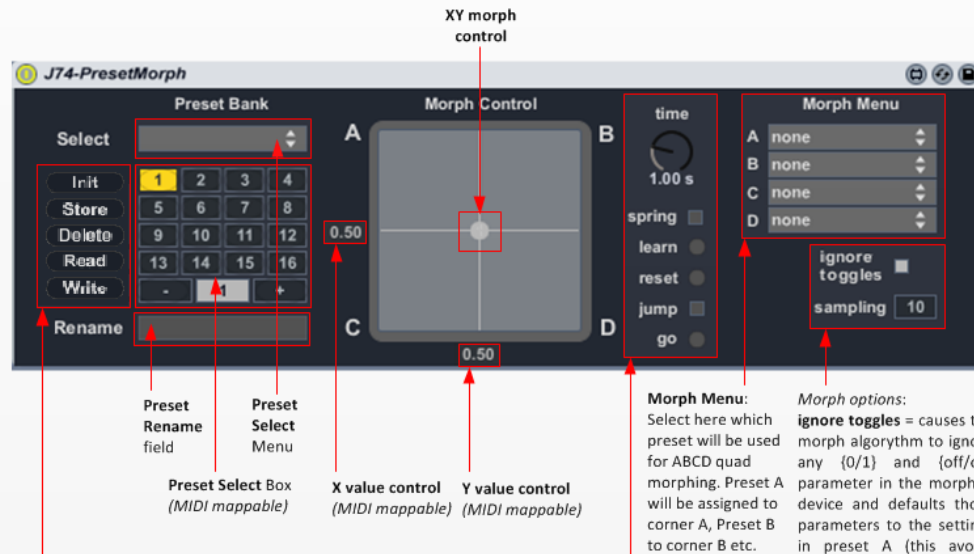# MORPH

PresetMorph

This device has several practical functionalities. It can be used to collect (store) presets and enables you to jump quickly from one preset to another (even during performance); It can act as a "synthesis aid" device, as its morphing functionality allows to create new presets (sounds) by morphing existing presets; it can be used as a pure performance tool for creating unusual multi-parameter sweeps (i.e. try using it in combination with a EQ8 device!).

It is worth noticing that the morph algorithm used by the device is intelligent enough to output only the parameters which do change their value while morphing is applied, omitting from output any parameter which remains unchanged from one state to the next. Moreover sampling Is (automatically) performed in output based on the number of parameters involved: if only a few parameters are to be sent, the output will be forwarded unsampled. If the number of parameters is consistent, sampling will avoid the overwhelming of the Live set (API). In extreme cases (i.e. hundreds of parameter changes) you can also set the operation mode to discrete control mode using the [jump] and [go] controls in the spring section, and send output only when you explicitly want to. This makes the morphing process quite *CPU friendly*.

Main operations:
Init = (re)initializes device, clears storage
Store = stores device configuration in new preset slot
Delete = deletes currently selected preset
Read = load a preset file
Write = write a preset file

Preset Rename field

Preset Select Menu

Preset Select Box *(MIDI mappable)*

X value control *(MIDI mappable)*

Y value control *(MIDI mappable)*

XY panel operation modes (MIDI mappable):
time = set spring recovery time (if spring selected)
spring = turns on/off spring mode (auto recovery)
learn = learn position as new spring recovery position
jump = toggles operation mode between continuous control mode (any change outputs XY values) and discrete control mode (changes do not output values unless the "go" button is pressed)
go = outputs XY values (in discrete control mode)

Morph Menu:
Select here which preset will be used for ABCD quad morphing. Preset A will be assigned to corner A, Preset B to corner B etc.

Morph options:
ignore toggles = causes the morph algorythm to ignore any {0/1} and {off/on} parameter in the morphed device and defaults those parameters to the settings in preset A (this avoids interpolation for these values which basically results in these values set always to {0} and {off})
sampling = the morph algorythm identifies the number of parameter to be interpolated (i.e. 26) and auto sets granularity in continuous control mode to a sampling time (i.e. limiting to 1 in 10ms). This can be overridden by setting the sampling time manually

warning: If the number of parameters exceeds your system capabilities, you may experience audio dropouts. In this case use the discrete control mode ([jump] and [go] controls)