

WOLF AUDIO DESIGN



MIDI TOOL BOX

A package with many little and bigger devices for midi processing in scope and its modular

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1.0 INSTALLATION

- Windows :** Just drag the content of the unzipped archive onto the scope / sfp folder. The devices for scope itself you'll find in a subdirectory called "ToolBox" in the midi menu of the project window (or the pendant of the LiveBar). The modules for the modular are found in the Midi and Modifier > Converter menu of modular.
- Mac OS9 :** Unzip the archive and navigate into the folder Devices > Midi. Copy the folder into the Midi folder found in your Devices folder of your scope / sfp installation. In the unzipped archive navigate again to Modular2 > Midi / Converter > Modifiers and copy the modules found there into the same folder of your scope / sfp installation.

Please take care, not to accidentally put a modular module in a patch, which you want to share.

2.0 GENERAL

Device names :

All devices feature the ability to be renamed, so the module in the routing window will show a name to your liking. This way you can organize the routing window and have a better overview, if you use similar modules.

To rename a device just click on its title on the surface. The title will turn to an editable box. After having edited it, hit return and the device name in the project window is updated.


Saving devices :

Some devices can be saved as new ones with their current configuration.

This is very useful, if you want to have a special configured device dedicated to one or more projects.

The preset list will still refer to the one of the original, so you can share your presets with all of the different copies.

The name of the device will be the same as the (changable) title, but you are free to rename it.

Any device where this button  is found on the surface, will be savable.

Parameters :

Some parameters are saved within the project only, some in the preset list as well.

Generally all midi channel settings, the position/size of surfaces, the title/name of a device and the clock settings are saved with the project only.

All parameters are midi controllable.

Preset List :

All devices, which have a preset list, show the preset name of the chosen preset on the surface.

3.0 DESCRIPTION FOR SCOPE MODULES

3.1 MultiControl

Overview for version 1 + 2 :


MultiControl lets you control up to eight knobs of every midi controllable device in scope with just one knob. This way you can e.g. connect the cutoff and resonance of two different synths and let the cutoff raise, while the resonance drops on one synth and the cutoff of the other synth drops, while the cutoff raises. This opens a new world of sound manipulation.

Supplied are two “main” knobs, of course assignable to a controller as well, with the possibility to route them to different targets.

MultiControl2 lets pass other midi events through, so you don’t need a separate midi merger.



Knob 1 + 2 : Main knobs, which control the assigned control output


Knob Row : click on it to switch between the two sources (knob 1 or 2) or to off 

Channel : selects the output midi channel for each control message


Controller : selects the controller number to be send

Intensity : adjusts the intensity of the the controller movement (log or linear depending on the type setting)

Offset : adjusts the offset to the main knob control

 ← visualisation of intensity, offset and type

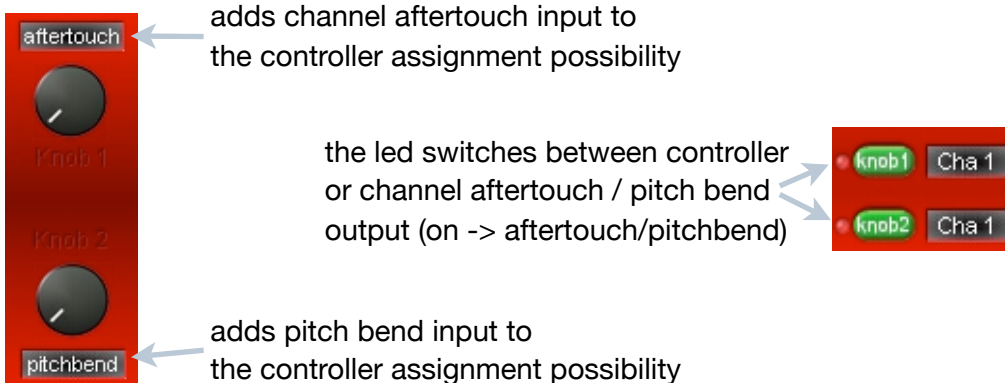
Type : sets the conversion type, ie. linear/logarythmic and invert

 ← selects the midi input channel, midi input activity

Overview for version 3 + 4 :

Additionally to the already available possibilities in version 1/2, version 3/4 is able to process channel aftertouch and pitchbend messages at the input. For sending out messages you can decide between controller and channel aftertouch messages for each send. By switching to aftertouch or pitch bend on the input the knobs become deactivated.

MultiControl4 lets pass other midi events through, so you don't need a separate midi merger. Aftertouch and pitch bend are only passed, if not switched on.




3.2 LFOtoControl

Overview :

Basically the same like MultiControl, but here instead of knobs two LFOs are used for automatic controlling. LFOtoControl2 lets pass other midi events beside controller messages through, so you don't need a separate midi merger.

In addition to the controls explained in MultiControl, following are the controls for the LFO:



 ← switches between bpm and manual / frequency sync for the LFOs

the button to the left is to switch between internal and external sync, for external sync connect a midi clock source to the input.



to enter a new bpm in internal mode, either click+drag the number(s) or click and directly start to type the new bpm



switches between the midi note selectable below as trigger source or free triggering



the upper box chooses the LFO shape (square, triangle, saw up/down) via click+drag
 the left lower box is for adjusting the phase (-90° starts in sync with everything else), the right lower box lets you choose the division according to bpm (only)

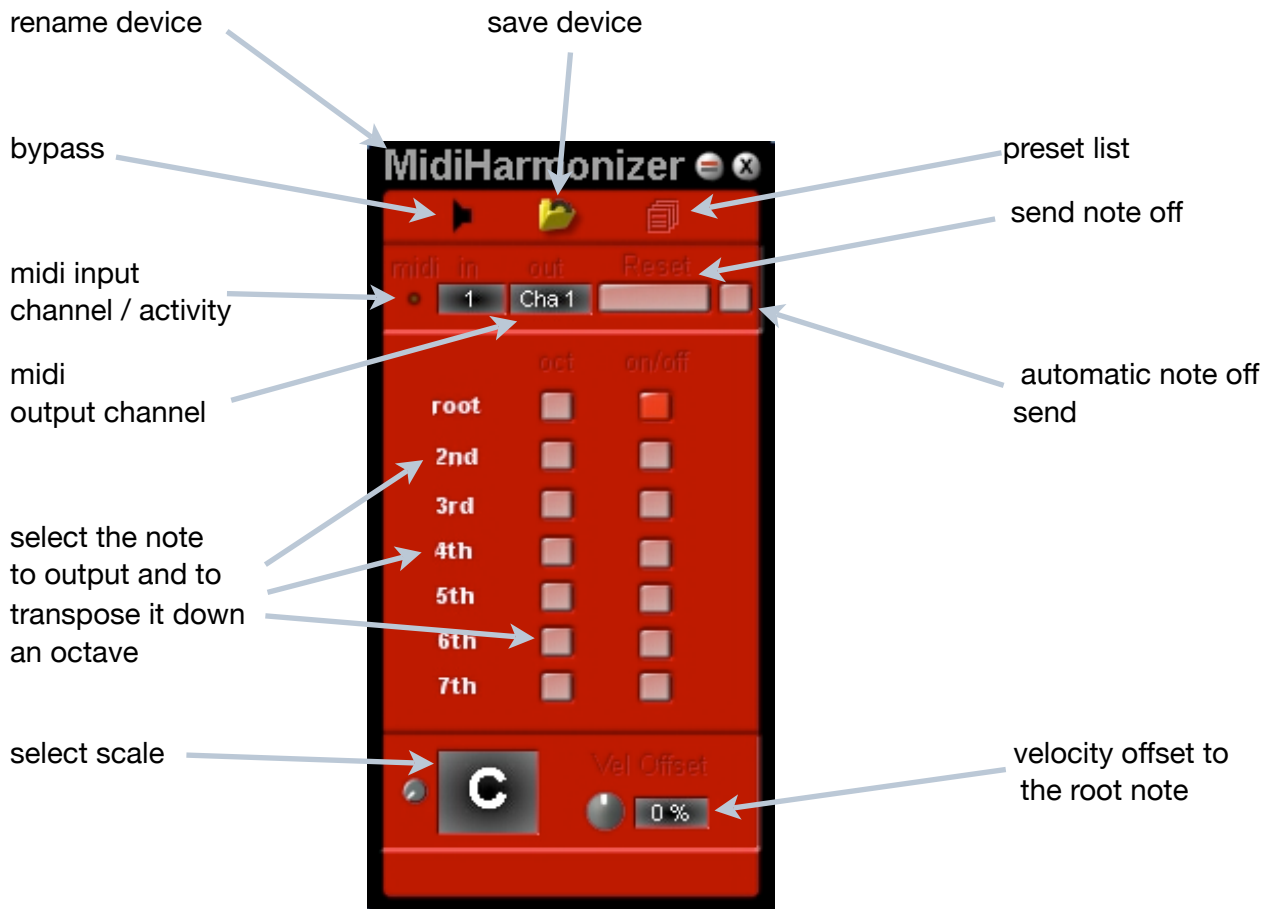
3.3 MidiHarmonizer

Overview :

Ever wanted to play heavy jazz chords in context to harmonies, but have no clue how to play piano ? Now you can !

This device creates up to seven tone chords in context to a scale. Just play one note and the produced chords will always adjust to the scale, you've set, regardless of the key you play. You can also say it transposes notes according to the scale, you've set. Depending on the scale the outputted note in question will be transposed by a half or a whole tone and not like with a simple transposer always with the same interval to the keynote.

This device is monophonic, which means it can only process one midi note at the input at a time.



The tiny knob beside the scale selector is for assigning a midi controller, to be able to change the scale via e.g. a sequencer

By activating the automatic note off there'll be automatically send note offs for all notes, as soon as the last key is released.

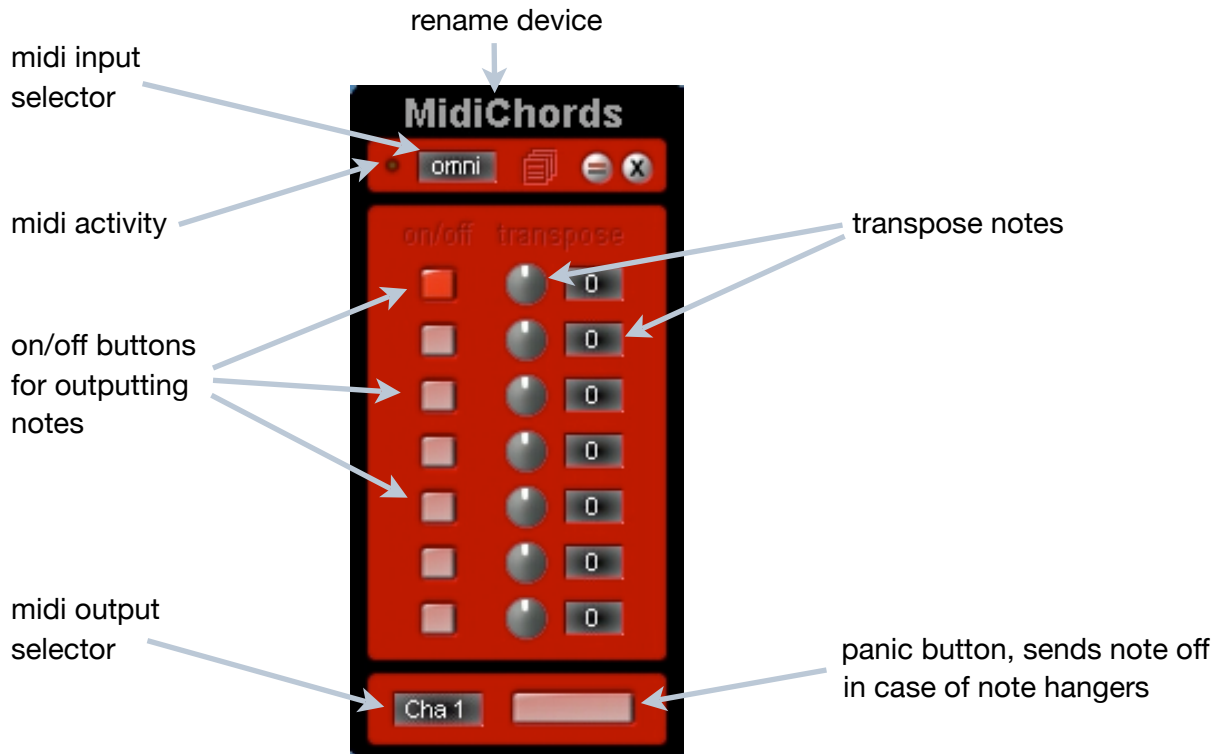


3.4 MidiChords

Overview :

Sometimes transposing in harmonic context is not wanted, so a simple transposer is supplied as well. It can output up to seven notes like it's harmonic brother.

This device is monophonic, which means it can only process one midi note at a time on the input.



3.5 MidiTransformer

Overview for version one :

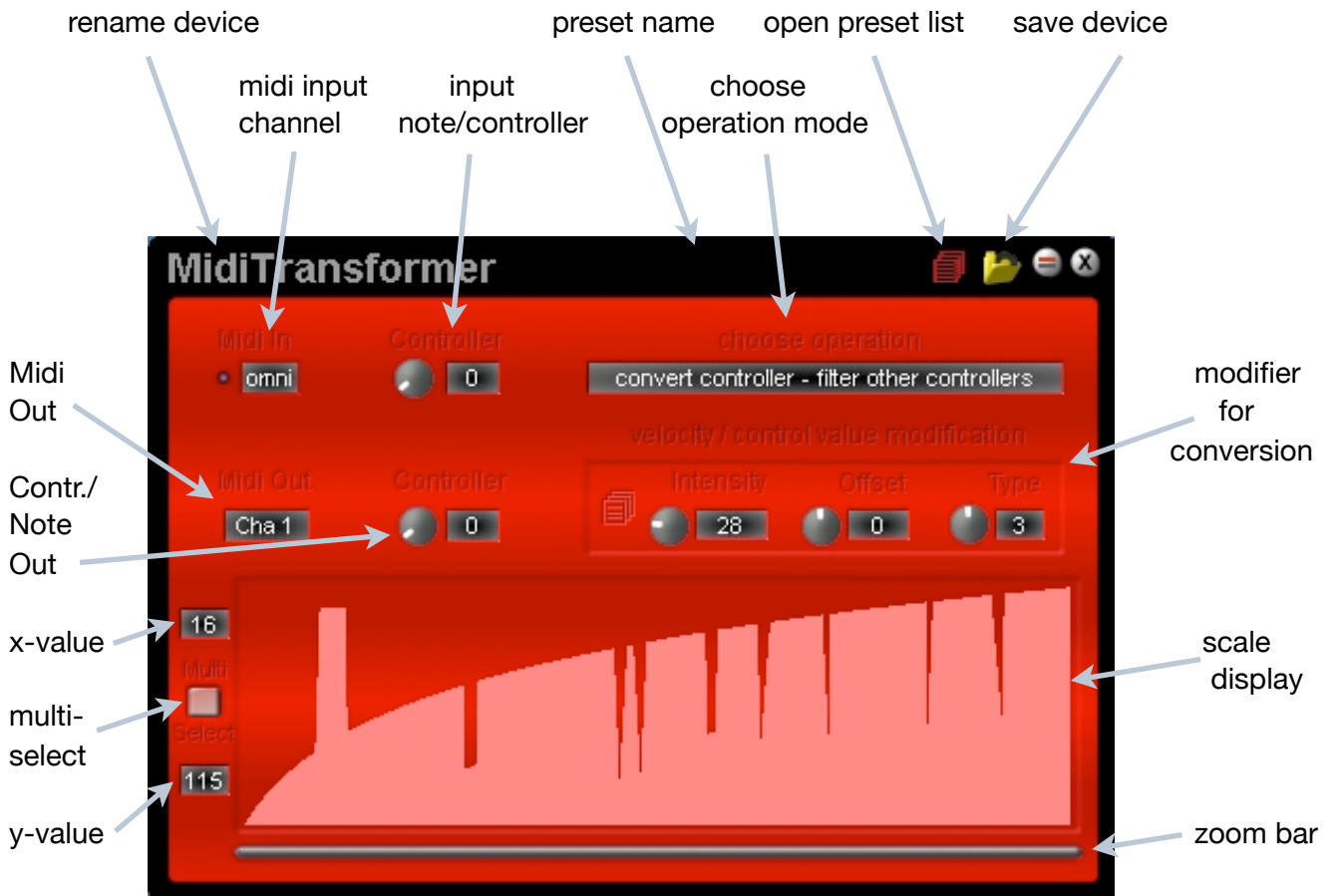
Transforms and filters incoming midi events, e.g. notes/velocity to controller messages

operation / conversion modes :

- filter matching note
- let matching note pass through
- convert note - filter other events
- convert note - let pass other events
- convert controller - filter other controllers
- convert note to control - filter other events
- convert note to control - let pass other events

Use the curve display to create own value modifier tables. To change a value, click+drag on the line. The selected value will be shown in both number fields at the left, the upper box shows the velocity / controller value to modify, the lower box the outgoing value.

With Multiselect active selected values will be changed together. To select them, click on the top / bottom of the peak. To deselect them, click on a free area of the curve display.



conversion modifiers:

Intensity : multiplies / divides incoming value depending if the the type is set to linear or logarithmic

Offset : adds / subtracts to the incoming value

Type : sets the type of the conversion, i.e. logarithmic/exponential/linear/invert

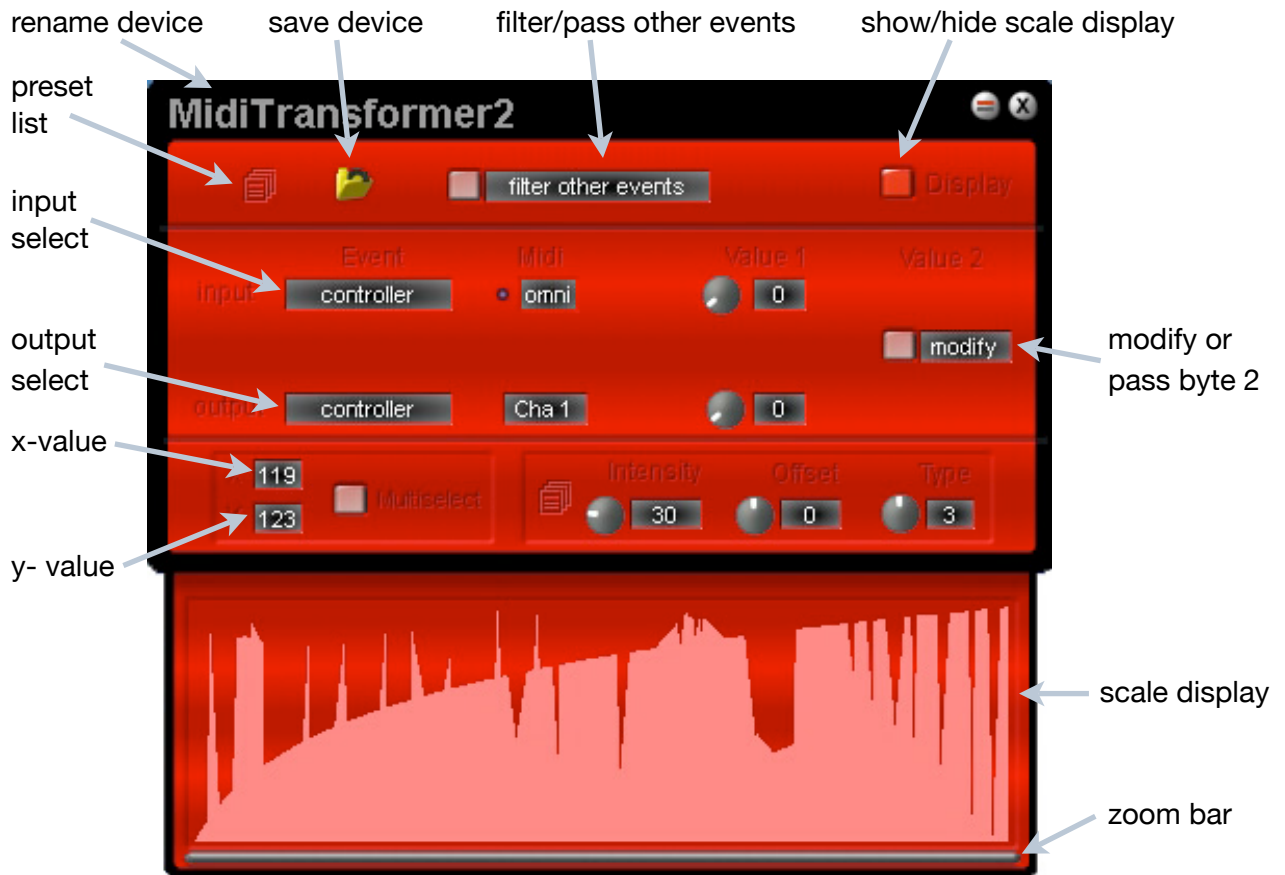
On the left of the Intensity knob is a separate preset list for the conversion table available.

Overview for version two :

MidiTransformer2 is significantly different to version one and offers more conversion modes. These are freely adjustable via the input and output selector.

The input can process notes, note range, controller messages, channel and key aftertouch messages, pitch bend messages and program changes. These can be transformed to notes (off), controller messages, channel and key aftertouch messages, pitch bend messages or program changes.

“filter other events” filters all events. If set to “let pass other events“, all events of the other midi channels are passed through with one exception: when the input selector is set to “note” or “note range”, the unmatched notes are passed as well (unprocessed of course).

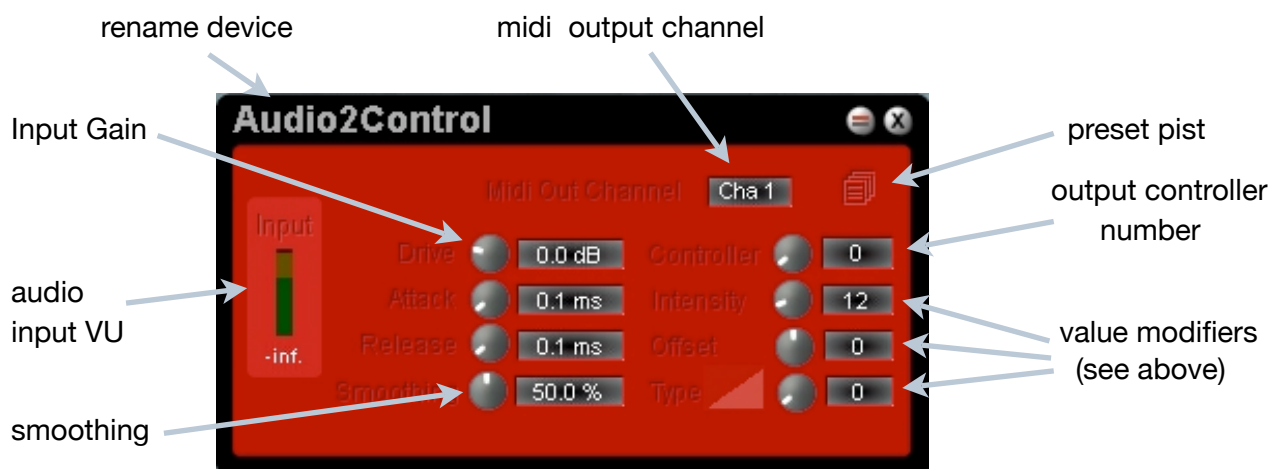


In case you have set another input than note (range) and as output notes, there will be send note off messages only.

3.6 Audio2Control

Overview :

Uses the level of an audio signal to generate controller messages

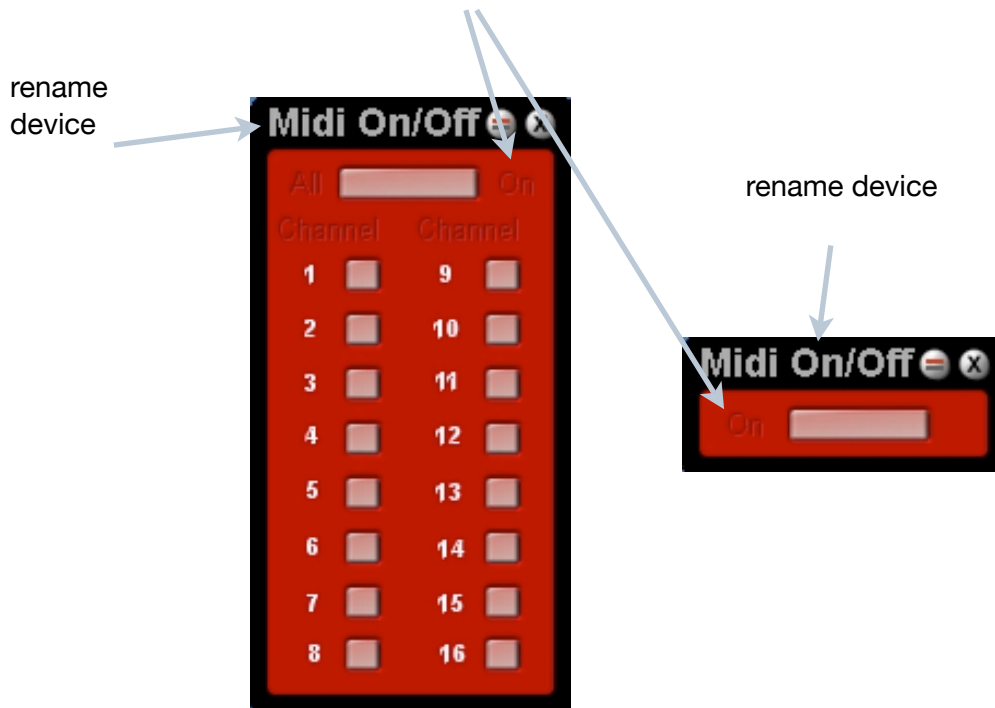


3.7 Midi On/Off

Overview :

A simple switch to switch off all midi channels or a single one.

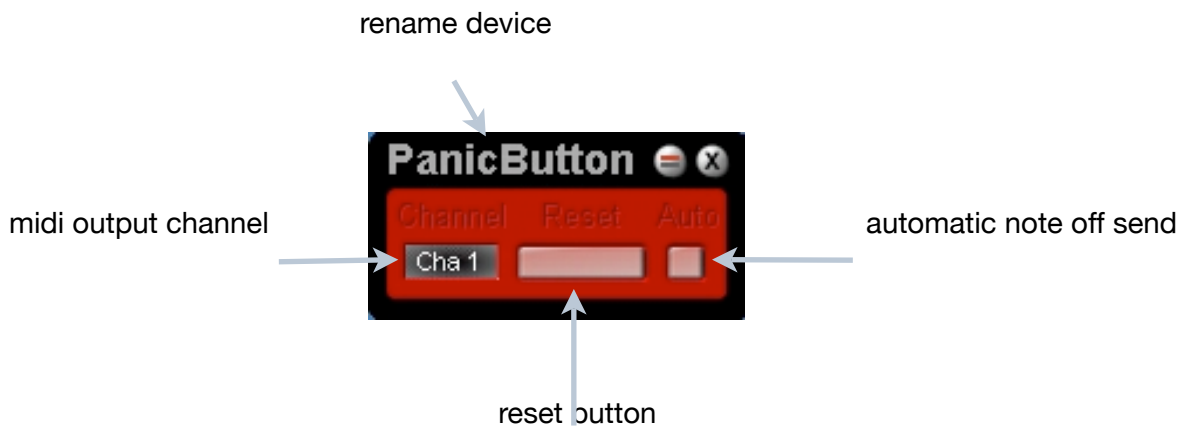
It comes in two flavours, a bigger one to switch off separate channels or all together and a tiny one to use very few space. The text indicates, wether it passes midi through or not.



3.8 PanicButton

Overview :

Generates note off messages in case of note hangers. It features an automatic mode as well, which sends note off messages after releasing the last key.

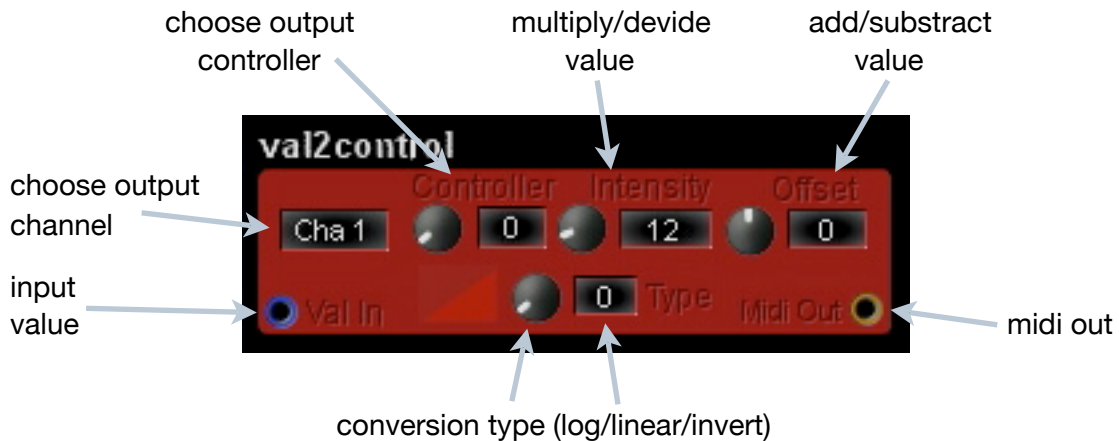


4.0 DESCRIPTION FOR MODULAR MODULES

4.1 Val2Control

Overview :

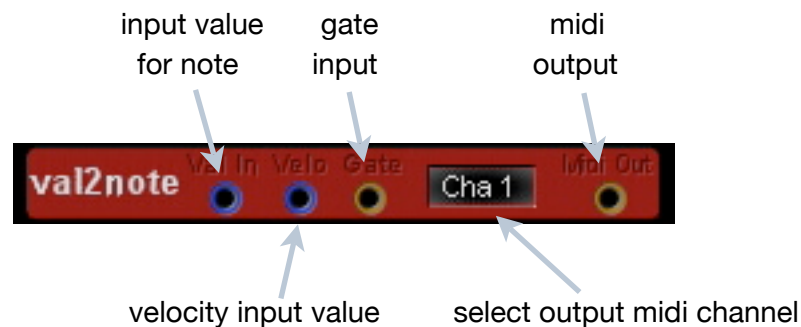
converts unipolar async values of modular to control midi messages to send them out of modulars midi output. This is far easier and offers more possibilities than the method of assigning a controller to e.g. a value module.



4.2 Val2Note

Overview :

converts unipolar async values of modular to midi note messages to send them out of modulars midi output.



If you encounter note hangers, change the division of the clock forth and back.

Please see the attached screenshot of a modular circuit and/or load the modular example, to see how to connect it and how it works.

Don't use bipolar (value -127 to +127) sources on the note inputs. This can lead to unwanted results and you may want to use a bipolar2unipolar converter inbetween.

The note input range is unipolar only (value 0 up to +127). For using signals with value range of 0 to + 2147483647 you can put the "max val 2 max noteval" found in the modifier > converter menu in between to convert the values into the rang of 0 up to +127.

The velocity input has a range from 0 to + 2147483647.



4.3 Audio2Val

Overview :

outputs values depending on the audio volume of the input.

See 3.6 Audio2Control for description of the controls.



4.4 Sync2Async

Overview:

When you get the “Cannot connect converter pads” alert by trying to e.g. connect an LFO to the val2control module, use this module inbetween the both to be connected modules.



4.5 Modular Screenshot

