KARPLUS 1
EXC. EXT.EX PITCH CNTR DAMP CLR
24
PITCH
CONTOUR
DAMP
RESONATE
COLOR
MONO   LEFT   RIGHT

POLYSYNTH 1
TRIG   PITCH   S->P
33
PITCH
SAW->PULSE
DTUNE
ATTACK
HOLD
RELEASE
LEFT   RIGHT   ENV

BASIC-OSC 1
PITCH   PWM   FM
64
PITCH
P-WIDTH
PWM
FM
SINE
OUT

3WAY-XFADE 1
1   2   3   XFADE
XFADE

BWL-OSC 1
PITCH   WSHAPE   FM
64
PITCH
WSHAPE
CV
FM
SINE
OUT

20P-FM 1
CARRIER   CV1   CV2
32
CARRIER
RATIO
INDEX
CV1(RATIO)
CV2(INDEX)
0.055

KICK 1
TRIG PITCH DECAY EG2 SWEEP WFORM
PITCH
DECAY
EG2
SWEEP
WFORM

WTABLE 1
PITCH   X   Y   Z   FM
24
PITCH
X
Y
Z
FM

PROBABILITY 1
IN   CV
PROB
OUT1   OUT2

TRIGONS 1
PITCH   WAVE   HARM.   FM
24
PITCH
WAVE
HARM.
FM

GRANULAR DELAY 1
IN   PITCH   GRAIN   REVERB   D/W
1
PITCH
GRAIN
REVERB
DRY/WET

MEGA SEQUENCER 1
CLK   RANDOMIZE   LOAD(1-4)   RESET
WRITE
LOAD
RANDOM-STEP
SCALE   phrygian
XPOSE   RDM-PATTERN
0   XPOSE   RESET-TOGGLES
Q-OUT   OUT2

NOISE

PD-303 1
CLOCK   CUTOFF   ENVMOD   RANDOMIZE   LOAD(1-4)   RESET
0
TRANSPOSE
CUTOFF
RES
ENVMOD
ACCENT
DECAY
SLIDE
SCALE   SLIDE
ionian   ACCENT
WRITE
RDM!   LOAD
OUT   SQ/SAW
PITCH-CV   ENV

VOLTAGE INVERTER
IN
OUT

MEGAVERB 1
IN   SIZE   LPASS
SIZE
DAMPING
LOWPASS
DRY/WET

MANUAL-TRIGGERS
T1   T2   T3

CLOCK 1
CLK-RATE   ON/OFF
RATE
157.4   ON/OFF
OUT

MIXER 1
CH1   CH2
CH1
CH2
OUT   UNITY

MAESTRO4 1
CH1 PAN1 CH2 PAN2 CH3 PAN3 CH4 PAN4
CH1 CH2 CH3 CH4 MASTER
PAN1 PAN2 PAN3 PAN4
CH1 CH2 CH3 CH4 LEFT RIGHT

POLARIZER 1
IN
0.496
POL-/+
OFFSET
0.172

AUDIO-RECORDER
LEFT   RIGHT
0
REC/STOP   0   TAKE   RST
$0-left $0-right
LEVEL

AUTOMATONISM

MAESTRO4 2
CH1 PAN1 CH2 PAN2 CH3 PAN3 CH4 PAN4
CH1 CH2 CH3 CH4 MASTER
PAN1 PAN2 PAN3 PAN4
CH1 CH2 CH3 CH4 LEFT RIGHT

TOGGLE-MATRIX 1
1   2   3   4
1
2
3
4
A   B   C   D

PRESET MANAGER
RECALL(CV)   STEP!
STORE   0
STORE
RECALL   0
RECALL-CV
MORPH   (ms) 0   103060
STOP!

FORMANT FILTER 1
IN   VOWELS
VOWELS
Q

3WAY-XFADE 2
1   2   3   XFADE
XFADE

MIDI-IN
0
NOTE   GATE   VEL

polyFM 1
TRIG   PITCH   INDEX
12
PITCH
INDEX
RATIO
2.000
carrier-EG
ATTACK
HOLD
RELEASE
modulator-EG
ATTACK
HOLD
RELEASE
LEFT   RIGHT   ENV

MULTITRACK-RECORDER 1
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8
REC/STOP 1   TAKE   RST
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8
$0-ch1 $0-ch2 $0-ch3 $0-ch4 $0-ch5 $0-ch6 $0-ch7 $0-ch8
LEVEL

VC-COUNTER 1
IN   CV
49
COUNT
0

EXT.AUDIO 1
0
INPUT
AMP-SMOOTH
GATE-THRESH
AMPLITUDE-/+
-1
CH1   CH2   ENV   GATE   FREQ

STEREO-DELAY 1
IN   RATE-L   RATE-R   FBACK   LPASS
RATE-LEFT
RATE-RIGHT
FEEDBACK
LOWPASS
DRY/WET
LEFT   RIGHT

GRAPHIC-EQ 1
LEFT   RIGHT   LOW   MID   HIGH
100   400   1600 6400
CV(LOW)
CV(MID)
CV(HIGH)
Q
LEVEL
L   200   800   3200   R

CLOCK-IN
RANDOM-VOLTAGES 1
RANDOM
SLEW
BI-P   UNI-P

SAMPLER 1
TRIG   PITCH   FILE   LOOP
ORIGINAL
sample6
FILE
PITCH
P.CV
LOOP
LEFT   RIGHT   SOS

LOOPER 1
IN-L IN-R   SPEED   REC RESET
1.000
SPEED
RECORD   ORIGINAL
$0-loopL $0-loopR
LEFT   RIGHT

Automatonism v2.1

welcome

FOLLOW THESE SIMPLE STEPS TO GET STARTED:

1 When starting the AUTOMATONISM you'll see a list of all current available modules to the right. Click the button to the left of the module you want to load and it will appear to the left in the parent window. The module list will then disappear. To call back the module list you can click the grey link in the upper left called "MODULES(esc) or simply upress "esc" on your keyboard

2 Create a BASIC-OSC from the module list.

3 Open the module list and create the module in the lower right corner called MAESTRO4(dac~). This is the digital-to-analog-converter and is one of the modules that passes on sound to your speakers. Now you can soon make a sound.

4 Pure Data has an EDIT MODE and a PERFORMANCE MODE. To make patch connections between objects we need to be in EDIT MODE and to interact with the GUI we need to be in PERFORMANCE MODE. Toggle between the two modes with cmd+e.

5 All inputs are at the top of the modules and all outputs are at the bottom. In EDIT MODE, connect the BASIC-OSC's output CH1 on the MAESTRO4. Now, you should have sound. Switch to PERFORMANCE MODE and use the mouse to move the PITCH slider on the BASIC-OSC module.

6 Right click on any module and choose HELP to read more about a module's functions.

7 To save parameter states on each module, you have to save the pd file, like you normally would do from the FILE menu or cmd+s, and then click the grey SAVE! canvas in the left bottom corner(or simply press ENTER on your keyboard) and you'll see the canvas change color from grey to green for a brief moment. All parameter values are now written to textfiles and can be loaded to the equivalent module and instance number next time the patch is loaded.

8 You can call modules without using the module list simply by creating a new object in pd and type the module's name. For the state saving mechanism to work properly you do need to give the module a unique numerical argument. Type "basic-osc 1" for an oscillator and "basic-osc 2" if you need another one. By using the MODULES list this unique numbering is done automatically for you. Use the RESET link in the upper left corner when starting a new patch as this will reset the counter of unique numbers for modules.

9 IMPORTANT!!! In order for Automatonism to work properly, each patch needs to contain the correct folder structure. A folder--that you can name freely--must contain the folder "patch_editor_abs" and the pd-file "main.pd". Copy the entire main parent folder to start a new project. Please do not add the abstractions to your PD Search path, because the state svaing system will be writing textfiles in your external folders.

ABOUT RESET BUTTON: Only use the RESET button when your canvas is empty. If you click it in the middle of a patch, modules will start getting identical state saving numbers to already existing modules. In other words, if you click it in the middle of a patch, state saving WILL NOT WORK! The RESET button is there for when you start over, and perhaps do not want to create "BASIC-OSC 99", but start from zero for a clearer view of the patch.

WELCOME-TO-THE-AUTOMATONISM-MANUAL!

SIGNALFLOW

COLOR CODE

STATE SAVING

HELP FILES

FOLDER HIERARCHY

FEEDBACK-&-DSP-LOOPS

LICENSE

SIGNAL-FLOW

There are three types of signals in the patch editor: audio, cv and trigger/gate/pulse/clock. The latter are marked with PINK inlets and outlets. General rule in the patch editor is that all connections are possible. Or, at least, just like in any hardware modular system - all connections might not work but there's no harm in trying. ! ! The patch-editor uses color-coding to clarify the signal flow as much as possible.

Purple sliders and inlets means the slider will function as an attenuator for incoming CV.

Green sliders and inlets tells you that the parameter is bi-polar, most oftenly working as an attenueverter for incoming CV.

CLOCK-IN
And pink inlets means the input is expecting a trigger/gate signal to function properly.

All inputs and outputs in the editor are at signal rate within the range of -1 to 1 In contrast to normal pd-programming there is no distinction between control rate and signal rate messages. Everything is converted to signal rate.

How to convert a simple bang to a trigger/gate signal in the patch editor:

```
bang
1 0, 0 1 1
vline~
```

How to convert back to a control rate bang:

```
bang
1 0, 0 1 1
vline~
threshold~ 0.99 0 1 0
bang
```

How convert control numbers to the patch editor's signal flow:

```
                          0-127
/ 127
sig~
```

Purple sliders and inlets means the slider will function as an attenuator for incoming CV.

Green sliders and inlets tells you that the parameter is bi-polar, most oftenly working as an attenueverter for incoming CV.

CLOCK-IN
And pink inlets means the input is expecting a trigger/gate signal or short impulse(square-wave) to function properly.

STATE_SAVING

The state saving system works by writing parameter values to textfiles in the folder "statesave" inside the "patch_editor_abs" folder. When you load a module form the module list it is automatically being given a unique creation argument which creates a textfile unique for that instance of the module. To save your patch, simply save as you normally would from the FILE menu and the press ENTER on your keyboard or click the SAVE button in the upper left corner of the main window.

IMPORTANT!!! To start a new project, the entire folder structure needs to be copied since the abstractions and textfiles are unique to every project. Click the RESET button in the upper left corner to reset the counter that gives unique creation arguments for the modules.

HELP-FILES

Right + click on individual modules and choose "HELP" to access detailed help-files on each modules inlets, outlets and functionalities.

FEEDBACK-&-DSP-LOOPS

Feedback patching is very much possible in the AUTOMATONISM, just a little bit differently from physical modular systems. If you try to patch a module into itself or any kind of feedback routing, Pure Data will become silent and you'll get a "DSP loop detected" message in the Pd window. To avoid this you need to delay the signal a tiny tiny bit. Normal [send~) and [receive~] objects automatically does this in Pd. Send the signal to be feedbacked into a [send~ MyFeedback] and pick it up using [receive~ MyFeedback] and then patch into the input to close the feedback loop. Obviously "MyFeedback" could be anything and the abbreviation for send and receive [s~] and [r~] work equally as well.

FOLDER-HIEARCHY

Inside your project folder you'll find a file called "main.pd" and a folder called "patch_editor_abs". The "main.pd" must stay named the same for the playGROUND to function properly. Also, each of your projects/patches needs tp be in a separet folder with its own "main.pd" and "patch_editor_abs" folder. Copy & paste the project folder, which you can give any name, when you want to start a new project/patch.

LICENSE

modules

OSCILLATORS:

- <--BASIC-OSC
- <--BWL-OSC
- <--WTABLE
- <--KARPLUS
- <--2OPFM
- <--TRIGONS
- <--TRIAD
- <--PD-303
- <--POLYSYNTH
- <--POLYFM
- <--KICK
- <--SNARE
- <--NOISE
- <--LOOPER
- <--SAMPLER

MODULATION:

- <--BASIC-LFO
- <--SINEBANK
- <--ATTACK-HOLD-RELEASE(ahr)
- <--DECAY
- <--SLOPE(function-generator)
- <--ADSR
- <--RANDOM-GATES
- <--RANDOM-VOLTAGES
- <--S&H(sample&hold)

SEQUENCERS:

- <--8STEPS
- <--MEGA-SEQUENCER!
- <--TRIGGER-SEQ
- <--GATE-SEQ

SOUND-PROCESSORS:

- <--LP-FILTER
- <--HP-FILTER
- <--BP-FILTER
- <--LADDER-FILTER
- <--ANALOG-FILTER
- <--FORMANT
- <--BITCRUSH
- <--WAVEFOLD
- <--PHASOR
- <--COMBFILTER
- <--GRANULAR-DELAY
- <--MILLERVERB
- <--STEREO-DELAY
- <--CHORUS
- <--OVERDRIVE
- <--GRAPHIC-EQ
- <--MEGAVERB
- <--PITCHSHIFTER

VCA/MIXERS:

- <--VCA
- <--LPG(lopass-gate)
- <--XFADE
- <--3WAY-XFADE
- <--POLARIZER
- <--MIXER2(2-channel)
- <--MIXER4(4-channel)
- <--TOGGLE-MATRIX
- <--MAESTRO4(dac~)

UTILITY&LOGIC:

- <--CLOCK
- <--CLOCK-MULTIPLY
- <--CLOCK-DIVIDER-EVEN
- <--CLOCK-DIVIDER-ODD
- <--VC-COUNTER
- <--TRIGGER-DELAY
- <--TRIGGER-TRAIN
- <--INVERTER
- <--SCOPE
- <--SLEW
- <--PROBABILITY
- <--QUANTIZER
- <--4TO1-SWITCH
- <--1TO4-SWITCH
- <--ENV-FOLLOWER
- <--PRESET-MANAGER
- <--PARAM-NUDGE
- <--AUDIO-RECORDER
- <--MULTITRACK-RECORDER
- <--EXTERNAL-AUDIO
- <--MANUAL-TRIGGERS

MIDI:

- <--MIDI-IN
- <--MIDI-OUT

ORGANELLE:

- <--ORGANELLE-KNOBS
- <--ORGANELLE-KEYBOARD!
- <--ORGANELLE-AUX
- <--ORGANELLE-OUTPUT

BASIC-OSCILLATOR

The "BASIC-OSC" module is a simple oscillator providing sine, triangle, saw and pulsewave with adjustable pulsewidth. The Basic Oscillator is crude and digital--it sounds best in lower resgisters but is low on the CPU. For less aliasing and digital artefacts use "BWL-OSC".

CONTROLS:

PITCH - controls the pitch of the oscillator within the range of 8.175Hz -12543Hz (midi notes 0-127)

P-WIDTH - controls the width of the pulsewave

PWM - attenuator for incoming cv at the PWM input

FM - attenuator for incoming CV at the FM input.

WAVESELECTOR - switch bewteen sine, triangle, saw and pulsewave

INPUTS:

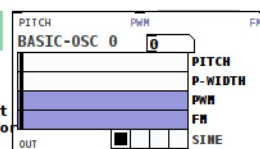PITCH - input for controlling the pitch with CV

PWM - input for controlling the pulsewidth of the pulsewave with CV

FM- frequency modulation input with onboard attenuator

OUTPUTS:

OUT - output

PITCH   PWM   FM
BASIC-OSC 0   [0]
                            PITCH
                            P-WIDTH
                            PWM
                            FM
OUT   ■   SINE

bandwidth_limited_oscillator

BANDWIDTH-LIMITED-OSCILLATOR

The "BWL-OSC" module is a bandwidth-limited oscillator providing sine, triangle, saw and pulsewave. A waveshaper circuit adds harmonics to the sine and triangle, produces a detuned supersaw and pulsewidth modulation.

CONTROLS:

PITCH - controls the pitch of the oscillator within the range of 8.175Hz -12543Hz (midi notes 0-127)

WSHAPE - controls sine & triangle harmonics, saw detuning and pulsewidth.

CV - attenuator for incoming CV at WSHAPE input.

FM - attenuator for incoming CV at the FM input.

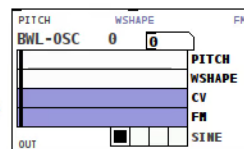WAVESELECTOR - switch bewteen sine, triangle, saw and pulsewave

INPUTS:

PITCH - input for controlling the pitch with CV

WSHAPE - input for controlling the WSHAPE parameter with CV

FM- frequency modulation input with onboard attenuator

OUTPUTS:

OUT - output

wavetable_oscillator

WAVETABLE-OSCILLATOR:

The "wtable" module is a three dimensional wavetable oscillator. Scan, morph and crossfade 18 wavetables with X, Y & Z.

CONTROLS:

PITCH - controls the pitch of the oscillator within the range of 8.175Hz -12543Hz (midi notes 0-127)

X - morph between three tables

Y - moprh between banks of tables

Z - moprh between

FM - attenuator for incoming CV at the FM input.

INPUTS:

PITCH - input for controlling the pitch with CV
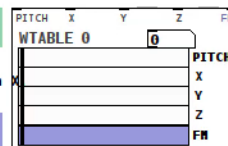
X - input for cv-control over the X-axis

Y - input for cv-control over the Y-axis

Z - input for cv-control over the Z-axis

FM- frequency modulation input with onboard attenuator

OUTPUTS:

OUT - output

PITCH	X	Y	Z	FM

WTABLE 0   0

PITCH
X
Y
Z
FM

karplus_strong_resonator

KARPLUS-STRONG-RESONATOR:

The "karplus" module is an adaptation of the karplus strong algorithm that models the sound of resonating strings. The module does not produce constant sound like other oscillators but needs a trigger/gate/pulse signal at the EXC. input to trigger an internal envelope and make a sound. White noise is used to trigger a short impulse/burst to trigger the resonator. You can remove the white noise by patching any sound/signal into the EXT.EX input and use that as the exiter sound source instead. KARPLUS is actually four independent resonators, which are distributed to left and right outputs to produce a stereo polyphonic feel.

CONTROLS:

PITCH - controls the pitch of the resonating strings.

CONTOUR - control the envelope shape of the noise exciter

DAMP - damp the strings

RESONATE - controls the decay length of the resonator.

COLOR - a simple lowpass filter on the output

INPUTS:

EXC. - trigger/gate input to trigger the resonator

EXT.EX - remove the normalization of white noise and use this external source for exitation instead.

PITCH - input for controlling the pitch with CV

CNTR - input for controlling the CONTOUR parameter with CV.

DAMP - input for controlling the DAMP parameter with CV.

CLR - input for controlling the COLOR parameter with CV.

OUTPUTS:

MONO - output

LEFT - left output

RIGHT - right output
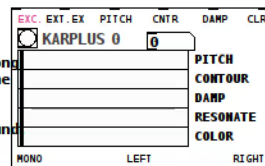
2-OPERATOR-FM:

The 2OP-FM module is a 2 operator phase modulation oscillator. Manual + voltage control over ratio and index.

CONTROLS:

CARRIER - controls the pitch of carrier

RATIO - controls the phase modulation ratio.

INDEX - controls the phase modulation index.

CV1(RATIO) - attenuator for incoming CV at the CV1 input

CV2(INDEX) - attenueverter for incoming CV at the CV2 input

INPUTS:

CARRIER - input for controlling the carrier pitch

CV1 - cv input for the RATIO control

CV2 - cv input for the INDEX control

OUTPUTS:

OUT - output

CARRIER	CV1	CV2
2OP-FM 0	0	
		CARRIER
		RATIO
		INDEX
		CV1(RATIO)
		CV2(INDEX)
-1		
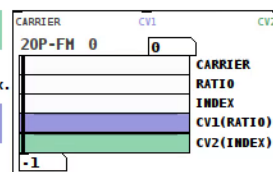
trigons

TRIGONS:

The "TRIGONS" module is an oscillator with rough edges and sharp triangular spikes. Croosfade bewteen triangular and sawtooth and use an aggressive waveshaper to add harmonics.

CONTROLS:

PITCH - controls the pitch of the oscillator

WAVE - crossfade between triangle wave and sawtooth

HARM. - add harmonics and waveshaping

FM - attenuator for incoming CV at the FM input.

INPUTS:

PITCH - input for controlling the pitch with CV

WAVE - input for cv-control over the WAVE control

HARM. - input for cv-control over the HARM. control

FM- frequency modulation input with onboard attenuator

OUTPUTS:

OUT - output

PITCH   WAVE   HARM.   FM
TRIGONS 0   0

PITCH
WAVE
HARM.
FM

TRIAD-OSCILLATOR:

The TRIAD oscillator is a duphonic chord module. A trigger/gate at the TRIG input will trigger an internal attack-release envelope and produce a three-note-chord at the output. The core of the module is dual, meaning that the first chord will keep ringing when the next is fired. The chord can be adjusted with the ROOT, INT1 and INT2 sliders. Quantization scale and transpositions are selectable at the bottom of the module.

CONTROLS:

ROOT - select the pitch of the root

INT1 - select the pitch interval 1

INT2 - select the pitch the interval 2

DTUNE - control for slight detuning of the chord

ATTACK - attack time of the internal envelope

RELEASE - release time of the internal envelope

SCALE - select scale

XPOSE - transpose the chord -12 to +12 semitones

WAVESELECTOR- select sawtooth, squarewave or alternate between saw and square

INPUTS:

TRIG - trigger the envelope and the chord

ROOT - cv input for the ROOT

INT1 - cv input for INT1

INT2 - cv input for INT2

XPOSE - cv input for the XPOSE control

OUTPUTS:

TRIGGERED - outputs the chord shaped by the internal envelope

CONSTANT - outputs the chord constantly bypassing the envelope

EG - outputs the envelope to use as a modulation source elsewhere in the system

---

TRIG   ROOT   INT1   INT2 XPOSE

TRIAD OSCILLATOR 0

ROOT
INT1
INT2
DTUNE

ATTACK
RELEASE

ionian

SCALE
XPOSE

-12   SAW

TRIGGERED   CONSTANT   EG

pd_303

PD-303

The PD-303 is an acid synthesizer in the style of the TB-303. It has a 16 step sequencer with SLIDE and ACCENT for each step. In addition to producing either a squarewave or a sawtooth, it outputs the pitch CV and envelope shape so that you can sequence anything else in the system. The PD-303 can store and recall 4 sequences. Click any of the four WRITE slots to store in slot 1-4 and click any of the LOAD slots to recall a stored sequence. Storing sequences with different SCALE and TRANSPOSE sequences can create some quite complex variations. You can step through the stored patterns with a trigger/gate signal at the LOAD(1-4) input.

CONTROLS:

STEPS1-16 - individual sliders to set the voltage level of each step

TRANSPOSE - transposes the sequnce down 2octaves or up two octaves

CUTOFF - controls the cutoff frequency of the filter

RES - controls the resonance of the filter

ENVMOD - controls the amount of envelope sent to modulate the filter

ACCENT - controls the accent level

DECAY - controls the decay time of the accent envelope and the filter envelope

SLIDE - controls the overall portamento time for the SLIDE

SCALE - choose scale for quantization

RDM! - button to instantly create a random pattern

WRITE - four slots of pattern storage

LOAD - four slots of pattern recall

SQ/SAW - select waveform (square or saw)
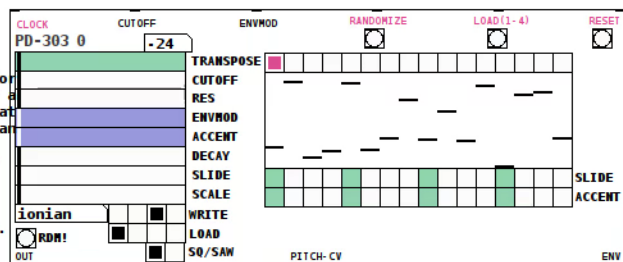
INPUTS:

CLK - trigger/gate/clock input

CUTOFF - cv input to modulate the CUTOFF

ENVMOD- cv input to modulate the ENVMOD amount

RANDOMIZE - trigger/gate input to randomize the entire pattern

LOAD(1-4) - trigger/gate input to step through stored pattern1-4 sequentially

RESET - trigger/gate input to reset the sequencer

OUTPUTS:

OUT - synthesiszer output

PITCH-CV - outputs the pitch CV of the sequencer (including SLIDES)

ENV - outputs the envelopes, including ACCENT

polysynth

POLYSYNTH:

The POLYSYNTH module is a 4 voice polyphonic synth voice. It
needs a trigger/gate signal at the TRIG input to set off the
internal envelope. Pitch CV is received at the PITCH. To
have it play chords instead of single overlapping notes, use
the TRIGGER-TRAIN module. (check the TRIGGER-TRAIN
help-file for example)

CONTROLS:

PITCH - select the pitch offset of the synth

SAW->PULSE - crossfade from sawtooth to pulsewave

DTUNE - detunes the 4 voices slighlty

ATTACK - attack time of the internal envelope

HOLD - hold time of the internal envelope, before entering
release phase

RELEASE - release time of the internal envelope, before
entering release phase

INPUTS:

TRIG - trigger the envelope

PITCH - cv input for the PITCH

S->P - cv input for the SAW->PULSE control

OUTPUTS:

LEFT - outputs the left audio

RIGHT - outputs the right audio

ENV - outputs the envelope to use as a modulation source
elsewhere in the system. For example, to modulate the cutoff
of a filter placed after the POLYSYNTH.

TRIG   PITCH   S->P

POLYSYNTH 0   0
                        PITCH
                        SAW->PULSE
                        DTUNE

                        ATTACK
                        HOLD
                        RELEASE

LEFT   RIGHT   ENV
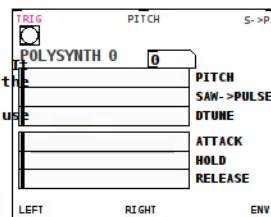
polyfm

POLYFM:

The POLYFM module is a 4 voice polyphonic phase modulation synth voice. It needs a trigger/gate signal at the TRIG input to set off the internal envelope. There are two envelopes, one for the Carrier wave and one for the Modulator. Pitch CV is received at the PITCH. To have it play chords instead of single overlapping notes, use the TRIGGER-TRAIN module. (check the TRIGGER-TRAIN help-file for example)

CONTROLS:

PITCH - select the pitch offset of the synth

INDEX - control modulation index

RATIO - set the frequency ratio of the modulato

ATTACK - attack time of the internal envelope

HOLD - hold time of the internal envelope, before entering release phase

RELEASE - release time of the internal envelope, before entering release phase

INPUTS:

TRIG - trigger the envelope

PITCH - cv input for the PITCH

INDEX - cv input for index control

OUTPUTS:

LEFT - outputs the left audio

RIGHT - outputs the right audio

ENV - outputs the envelope (carrier-EG) to use as a modulation source elsewhere in the system. For example, to modulate the cutoff of a filter placed after the POLYSYNTH.

TRIG   PITCH   INDEX
polyFM 0   0
                         PITCH
                         INDEX
                         RATIO
1
carrier-EG
                         ATTACK
                         HOLD
                         RELEASE
modulator-EG
                         ATTACK
                         HOLD
                         RELEASE
LEFT   RIGHT   ENV
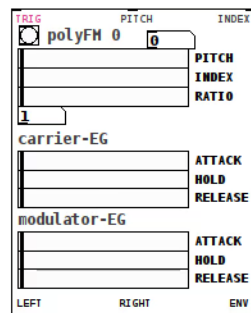
kick_drum_synthesizer

KICK-DRUM-SYNTHESISZER:

The "KICK" module is a synthesized kick drum.

CONTROLS:

PITCH - controls the pitch of kick drum

DECAY -controls the decay length of the envelope

EG2 - controls the decay length for the pitch envelope

SWEEP - controls the amount of EG2 sent to modulate pitch

WFORM - controls a three-way-crossfader between sine, saw and square

INPUTS:

TRIG - trigger/gate input to trigger the sound

PITCH - input for cv-control over pitch

DECAY - input for cv-control over decay

EG2- input for cv-control over eg2

SWEEP- input for cv-control over sweep

WFORM- input for cv-control over WFORM

OUTPUTS:

OUT - output

TRIG PITCH DECAY   EG2   SWEEP WFORM
KICK 0

	PITCH
	DECAY
	EG2
	SWEEP
	WFORM
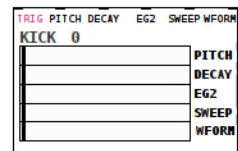
snare_drum_synthesizer

SNARE-DRUM-SYNTHESIZER:

The "snare" module is a simple synthesized snare drum
module. It produces snare drum sounds in the vein of TR-808

CONTROLS:

PITCH - controls the pitch of snare drum

DECAY -controls the decay length of the pitch

NOISE - controls the decay length of the noise

COLOR - filtering of the noise for different colors

INPUTS:

TRIG - trigger/gate input to trigger the sound

PITCH - input for cv-control over pitch

DECAY - input for cv-control over decay

NOISE - input for cv-control over noise

COLOR - input for cv-control over color

OUTPUTS:

OUT - output

TRIG PITCH DECAY NOISE COLOR
SNARE 0

PITCH
DECAY
NOISE
COLOR

noise

NOISE-SOURCE	NOISE

The NOISE module produces a constant white noise at the output.

OUTPUTS:

OUT - output

looper

LOOPER:

The "LOOPER" module can record signals from your patch and
loop them. It works like a live sampler. Press the RECORD
toggle to record and stop recording. The recording can be
automated by trigger signals at the REC input. The LOOPER
can record CV signals as well as audio. It keeps the last
recorded loop in memory when you quit PD, however when you
launch the patch again it needs 5-7 seconds to load the
recording.

IN-L IN-R	SPEED	REC RESET
LOOPER 0	.1	
		SPEED
RECORD	ORIGINAL	
$0-loopL	$0-loopR	
LEFT		RIGHT

CONTROLS:

SPEED - control the playback speed of the recorded loop

RECODS - toggle recoring on/off

ORIGINAL - press the button to get back to the orginal speed
of the recording

INPUTS:

IN-L - left input

IN-R - right input

SPEED - cv input for modulating the SPEED parameter

REC - trigger input to start/stop recording

RESET - trigger input to start the recording from the
beginning

OUTPUTS:

LEFT - sample left channel output

RIGHT - sample right output
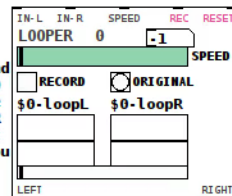
sampler

SAMPLER:

The "SAMPLER" module can load 8 different .wav tracks. The files are located in ../samples/ and are named sample1.wav, sample2.wav, sample3.wav etc. To change the samples you have to replace those files with your own files, while keeping the same name structure. This might seem counter-intuitive but the advantage of this system is that your files will alwyays be pointed to the right location and you can move your project main folder anywhere and to different platforms without losing your samples. If you want a sampler that can load files from anywhere on your harddrive I suggest you try the excellent sampler module made by Claude Barker. More info about that at:
https://github.com/megalon/pd-AUTOMATONISM-sampler
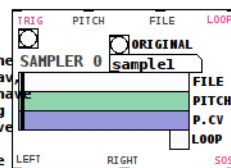
CONTROLS:

FILE - select between sample 1-8

PITCH - change the pitch of the sample

P.CV - attenuator for cv at the PICTH input

LOOP/1SHOT - toggle between looping mode and 1shot mode. In 1shot mode the sampler needs a trigger signal at the TRIG input to fire the sample.

INPUTS:

TRIG - trigger input to play sample in 1SHOT mode

PITCH - cv input for PITCH

FILE - cv input for modulating what sample is active

LOOP - trigger input to switch between LOOP and 1SHOT mode

OUTPUTS:

LEFT - sample left channel output

RIGHT - sample right output

SOS - trigger output at the start of each sample

BASIC-LFO:

The "BASIC-LFO" module is low frequency oscillator. Select between sine, triangle or sawtooth wave and a separate pulsewave output. There is control over frequency and depth. The BASIC-LFO is an excellent clock/trigger module and as long as DEPTH is set to maximum it will trigger any pink input in the system with the BI-P, UNI-P or PULSE output. The TRIG output is independent of DEPTH and will always trigger at the start of each cycle. An additional sample and hold unit gives a random stepped voltage each cycle.
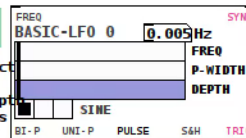
CONTROLS:

FREQ - controls the pitch of the lfo

WAVEFORM SELECTOR - choose between sine, triange or sawtooth

P-WIDTH - controls the pulsewidth of the PULSE output.

DEPTH - control over lfo depth

INPUTS:

FREQ - input for controlling the lfo-frequency with CV

SYNC - trigger/gate input for lfo-sync

OUTPUTS:

BI-POLAR - outputs a bi-polar sine, saw or triangle

UNI-POLAR - outputs a uni-polar sine, saw or triangle

PULSE - outputs a uni-polar pulsewave

S&H - outputs an held random voltage each cycle

TRIG - outputs short trigger each cycle--independently of the DEPTH control

---

FREQ   SYNC
BASIC-LFO 0   0.005 Hz
                              FREQ
                              P-WIDTH
                              DEPTH
                   SINE
BI-P   UNI-P   PULSE   S&H   TRIG

sinebank

SINEBANK:

The "SINEBANK" consists of four sinewave oscillators. By toggling the LFO toggle the range can be switched between audiorate or low frequency rate. Individual outputs as well as a SUM out is provided.

CONTROLS:

1 - controls the pitch of sinewave 1

2 - controls the pitch of sinewave 2

3 - controls the pitch of sinewave 3

4 - controls the pitch of sinewave 4

LFO - toggle between audiotrate and LFO

INPUTS:

CV1 - input for controlling sinewave 1

CV2 - input for controlling sinewave 2

CV3 - input for controlling sinewave 3

CV4 - input for controlling sinewave 4

OUTPUTS:

S1 - sinewave 1 output

S2 - sinewave 2 output

S3 - sinewave 3 output

S4 - sinewave 4 output

SUM - mix of all four sinewaves

CV1 CV2 CV3 CV4
SINEBANK 0
1 2 3 4

LFO
S1 S2 S3 S4 SUM

AHR(ATTACK-HOLD-RELEASE/LFO)GENERATOR:

The "AHR" module is an attack-hold-release envelope generator. It has three selectable envelope time: slow, medium and fast. It can function in self-triggering mode and cycle like an lfo, and the curve can be set to linear or exponential.

CONTROLS:

A - controls the attack time.

H - controls the hold time

R - controls the release time.

FAST/MEDIUM/SLOW - select between three different envelope durations

CURVE - switch between linerar or exponential curve

CYCLE - switch between normal mode or cycling mode

INPUTS:

TRIG - trigger/gate input for triggering the envelope
A - input for controlling the A parameter with CV.
H - input for controlling the H parameter with CV.

R - input for controlling the R parameter with CV.

OUTPUTS:

OUT - output

EOC - trgger/gate signal at the end of the envelope cycle in cycling mode

TRIG   A   H   R

AHR/LFO 0

A   H   R

FAST
MEDIUM
SLOW
CURVE

CYCLE

OUT   EOC

decay_envelope_generator

DECAY-ENVELOPE-GENERATOR:

The "DECAY" module is a simpe decay only envelope. The decay time is under cv-control with an onboard attenuator.

CONTROLS:

D - controls the decay time.

CV - attenuator for incoming cv at the CV input

INPUTS:

TRIG - trigger/gate input for triggering the envelope

CV- input for controlling the D parameter with CV.

OUTPUTS:

OUT - output

TRIG   CV

DECAY 0

D CV

OUT

slope_generator

SLOPE-GENERATOR:

The "SLOPE" module is a complex envelope and modulation source. A slope generator in the tradition of Serge Modular. Both RISE and FALL time has CV inputs with onboard attenuators and there's bi-polar a DEPTH-/+ control to shape the output. It can be set to self-triggering cycle mode and it has three selectable envelopes lentghs; FAST/MEDIUM/SLOW The CURVE is linear or exponential.

CONTROLS:

RISE - controls the rise time.

RISE CV - attenuator for incoming cv at the RISE input

FALL - controls the fall time.

FALL CV - attenuator for incoming cv at the FALL input

DEPTH-/+ - bi-polar control of the envelope output

FAST/MEDIUM/SLOW - select between three different envelope durations

CURVE - switch between linerar or exponential curve

CYCLE - switch between normal mode or cycling mode

INPUTS:

TRIG - trigger/gate input for triggering the envelope

RISE - input for controlling the RISE parameter with CV.

FALL - input for controlling the FALL parameter with CV.

OUTPUTS:

OUT - output

EOR - trgger/gate signal at the end of RISE in cycling mode

EOC - trgger/gate signal at the end of the envelope cycle in cycling mode

---

TRIG   RISE   FALL

SLOPE GENERATOR 0

RISE	FAST
RISE(CV)	MEDIUM
FALL	SLOW
FALL(CV)	CURVE
DEPTH-/+	CYCLE

-1

UNI-P   BI-P   EOR   EOC

IN   OSCILLOSCOPE
$0-scope

adsr

ADSR:

The "adsr" module is an attack-decay-sustain-release
envelope best used with gate signals. AUTOMATONISM is mainly
built around trigger signals. However, the GATE-SEQ, or
variable pulsewave lfos are valid companions to the ADSR.
Also, use of external controllers or keyboards could be used
with the module.

CONTROLS:

ATTACK - controls the attack time.

DECAY - controls the decay time

SUSTAIN - controls the sustain level

RELEASE - controls the release time

CURVE - croosfade bewteen linear and exponential curve

INPUTS:

GATE - gate input for triggering the ADRS

OUTPUTS:

OUT - output

GATE
ADSR 0

ATTACK
DECAY
SUSTAIN
RELEASE
CURVE

random_gates

RANDOM-GATES:

The "RANDOM-GATES" module generates random trigger/gate signals by feeding random tempi to a metronome. You have control over the rhythmic intensity as well as the probability of a trigger/gate happening.

CONTROLS:

INTENSITY - controls the intensity of random gates

PROB. - controls the probability of a gate happening

OUTPUTS:

OUT - output

RANDOM GATES 0

INTENSITY
PROB.

OUT

random_voltages

RANDOM-VOLTAGES

The "RANDOM-VOLTAGES" module is a random voltages generator.
When a trigger/gate signal is received at the CLOCK-IN input
it will produce a random voltage. Range can be set with the
RANDOM slider. In addition you can add a slew to the voltage
with the SLEW slider. The module outputs both a BI-POLAR
voltage and a UNI-POLAR voltage.

CONTROLS:

RANDOM - attenuates the range of randomness

SLEW - applies a slew to the output

INPUTS:

CLOCK-IN - trigger/gate input

OUTPUTS:

BI-P - bi-polar random voltage
UNI-P - uni-polar random voltage

CLOCK-IN
RANDOM-VOLTAGES   0
RANDOM
SLEW
BI-P   UNI-P

sample_&_hold

SAMPLE&HOLD:

SAMPLE   TRIG

S&H

OUT

The "S&H" module is a simple sample and hold unit. Apply a
signal at the SAMPLE input and a trigger/gate signal at the
TRIG input will sample the signal and hold the voltage at
the output until receiving the TRIG.

CONTROLS:

INPUTS:

SAMPLE - signal in

TRIG - trigger/gate input that will sample the signal at the
SAMPLE input

OUTPUTS:
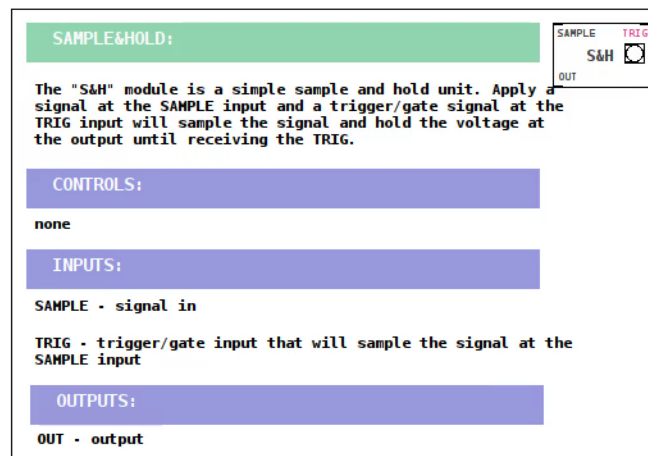
OUT - output

8_steps_sequencer

8STEPS

The "8STEPS" module is a simple eight step sequencer with onboard quantization. 8steps requires a trigger/gate/clock signal at the CLOCK-IN input to step forward. THere are two cv inputs. CV(PRE-Q) modulates the sequencer before the quantizer so the sequencer will still be in tune when applying modulation here. CV(POST-Q) adds the CV after the quantizer so any CV at the input will transpose the sequence

CONTROLS:

STEPS1-8 - individual sliders to set the voltage level of each step

SCALE - choose scale for quantization

INPUTS:

CLOCK-IN- trigger/gate/clock input

CV(PRE-Q) - modulation input. CV added to the sequence before quantization.

CV(POST-Q) - modulation input. CV added to the sequence after quantization.

RESET - trigger/gate input to force reset the sequencer to step 1

OUTPUTS:

Q-OUT - quantized output

OUT2 - un-quantized output that outputs the full voltage range. This output is often more useful if you're using the sequencer to modulate other parameters than pitch of an oscillator.

S1 - trigger/gate signal at start of sequence loop

CLOCK-IN CV(PRE-Q)   CV(POST-Q)   RESET

8STEPS 0

1 2 3 4 5 6 7 8

ionian

SCALE

Q- OUT   MAX   S1
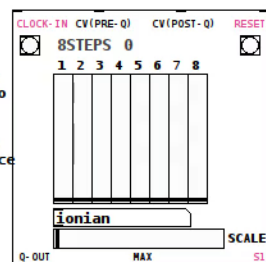
mega_sequencer

MEGA-SEQUENCER

The "MEGA-SEQUENCER" is an advanced sequencer tool. It has 16 steps and a randomization function per step. Ticking the toggle box beneath each step will randomize the value for that step. There are controls for choosing scale (SCALE) and transposing the sequence -24 semitones to +24 semitones (XPOSE). THere is a bang button called RDM-PATTERN that will supply new values randomly to all the steps. The button RESET-TOGGLES resets all random-step toggles to zero. The MEGA-SEQUENCER can store and recall 4 sequences. Click any of the four WRITE slots to store in slot 1-4 and click any of the LOAD slots to recall a stored sequence. Storing sequences with different SCALE and XPOSE sequences can create some quite complex variations. You can step through the stored patterns with a trigger/gate signal at the LOAD(1-4) input.

CLK   **RANDOMIZE**   **LOAD(1-4)**   **RESET**

MEGA
SEQUENCER 0

WRITE

LOAD

RANDOM-STEP

SCALE   ionian
XPOSE   ○ RDM-PATTERN
-24   XPOSE   ○ RESET-TOGGLES

Q-OUT   OUT2

CONTROLS:

STEPS1-16 - individual sliders to set the voltage level of each step

SCALE - choose scale for quantization

XPOSE - transpose the sequence -24 semitones to +24 semitones.

RANDOM-STEP - 16 toggleboxex underneath each step which when activated will force a random voltage on that particular step.

RDM-PATTERN - button to instantly create a random pattern

RESET-TOGGLES - button toreset all RANDOM-STEP toggles to zero.

WRITE - four slots of pattern storage

LOAD - four slots of pattern recall

INPUTS:

CLK - trigger/gate/clock input

RANDOMIZE - trigger/gate input to randomize the entire pattern

LOAD(1-4) - trigger/gate input to step through stored pattern1-4 sequentially

OUTPUTS:

Q-OUT - quantized output

OUT2 - un-quantized output that outputs the full voltage range. This output is often more useful if you're using the sequencer to modulate other parameters than pitch of an oscillator.

TRIGGER-SEQ:

The "TRIGGER-SEQ" is a trigger/gate sequencer. It has a maximum of 16 steps but can be set to any number of steps. The TRIGGER-SEQ can store and recall 4 sequences. Click any of the four WRITE slots to store in slot 1-4 and click any of the LOAD slots to recall a stored sequence. You can step through the stored patterns with a trigger/gate signal at the LOAD(1-4) input.

CONTROLS:

STEPS1-16 - individual toggle boxes to set the step on or off.

WRITE - four slots of pattern storage

LOAD - four slots of pattern recall

INPUTS:

CLOCK-IN - trigger/gate/clock input

LOAD(1-4) - trigger/gate input to step through stored pattern1-4 sequentially

RESET - trigger/gate input to reset the sequencer

OUTPUTS:

OUT - output

CLOCK-IN LOAD(1-4) RESET

TRIGGER SEQ 0

GATE-ON/OFF STORE LOAD

gate_sequencer

GATE-SEQ:

The "GATE-SEQ" is an eight-step gate sequencer with adjustable gate-length and on/off per step. All parameters can randomized by clicking the RDM! button manually or by CV.

CONTROLS:

STEPS1-8 - individual toggle boxes to set the step on or off.

GATE-LENGTH SLIDERS: - set the gate length per step

INPUTS:

CLOCK - trigger/gate/clock input

RESET - trigger/gate input to reset the sequencer

RDM! - trigger/gate input to randomize all parameters

OUTPUTS:

OUT - output

lowpass_filter

LOWPASS-FILTER

The "LP-FILTER" module is a resonant lowpass filter with control over cutoff frequency and resonance.

CONTROLS:

CUTOFF - controls the cutoff frequency of the filter.

Q - controls the resonance

FM-/+ - bi-polar attenuator for incoming CV at the CUTOFF input

INPUTS:

IN - signal input

CUTOFF - input for cv-control over the CUTOFF with onboard bi-polar attenuator

Q - input for cv-control over the Q.

OUTPUTS:

OUT - output

IN   CUTOFF   Q

LP-FILTER 1

	CUTOFF
	Q
	FM-/+

0.433

highpass_filter

HIGHPASS-FILTER:

The "hp-filter" module is a 1-pole non-resonant highpass filter with control over cutoff frequency.

CONTROLS:

FREQ - controls the cutoff frequency of the filter.

FM-/+ - bi-polar attenuator for incoming CV at the FREQ input

INPUTS:

IN - signal input

FREQ - input for cv-control over the FREQ with onboard bi-polar attenuator

OUTPUTS:

OUT - output

IN   FREQ
HIGHPASS FILTER 0

                            FREQ
                            FM-/+
-1

BANDPASS-FILTER

The "bp-filter" module is a 4-pole resonant bandpass filter with control over cutoff frequency, resonance and drive(output gain)

CONTROLS:

CUTOFF - controls the cutoff frequency of the filter.

RES - controls the resonance

DRIVE - controls the output gain

FM-/+ - bi-polar attenuator for incoming CV at the FREQ input

INPUTS:

IN - signal input

FREQ - input for cv-control over the CUTOFF with onboard bi-polar attenuator

OUTPUTS:

OUT - output

IN BANDPASS FILTER 0 FREQ

CUTOFF
RES.
DRIVE
FM-/+

-1

ladder_filter

LADDER-FILTER

The "LADDER-FILTER" module is a resonant lowpass filter with cv-control over cutoff frequency. It has slightly more character than LP-FILTER with more warmth and a steeper slope.

CONTROLS:

FREQ - controls the cutoff frequency of the filter.

Q - controls the resonance

FM-/+ - bi-polar attenuator for incoming CV at the CUTOFF input
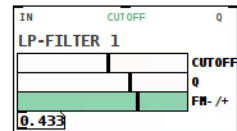
INPUTS:

IN - signal input

FREQ - input for cv-control over the CUTOFF with onboard bi-polar attenuator

OUTPUTS:

OUT - output

ANALOG-FILTER

The "ANALOG-FILTER" module is obviously not real analog, but a digital filter with a very dirty character that behaves irratically at high resonances.

CONTROLS:

CUTOFF - controls the cutoff frequency of the filter.

Q - controls the resonance

FM-/+ - bi-polar attenuator for incoming CV at the CUTOFF input

INPUTS:

IN - signal input

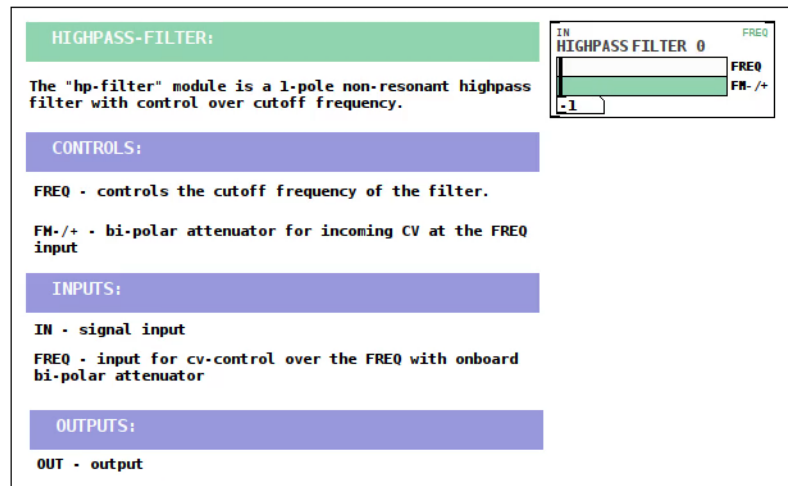CUTOFF - input for cv-control over the CUTOFF with onboard bi-polar attenuator
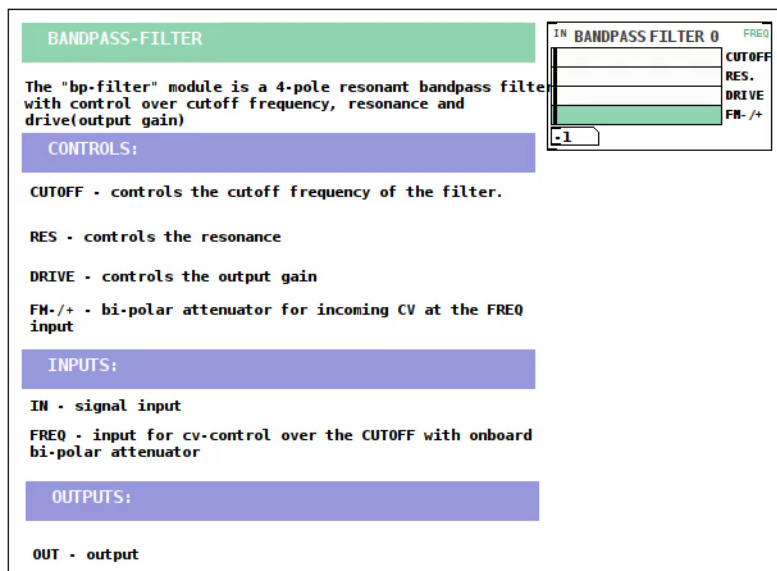
Q - input for cv-control over the Q.

OUTPUTS:

OUT - output

IN   CUTOFF   Q
ANALOG FILTER 0

CUTOFF
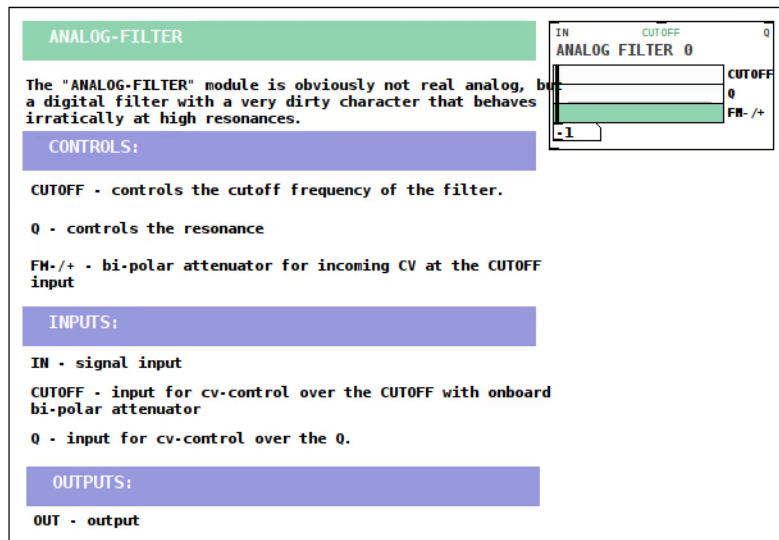Q
FM-/+

-1

formant_filter

FORMANT-FILTER:

The "FORMANT" module consists of multiple bandpass filters set to frequencies that mimics human vowel sounds. FORMANT works best with signals high in harmonic content.

CONTROLS:

VOWELS - scan through different vowels.

Q - control over Q (resonance)

INPUTS:

IN - signal input

VOWELS - input for cv-control over the FORMANTS.

OUTPUTS:

OUT - output

IN   VOWELS

FORMANT FILTER 0

                            VOWELS
                            Q

bitcrush

BITCRUSH		
IN	CRUSH	DRY

BITCRUSH 0

DRY
CRUSH

BITCRUSH

The "BITCRUSH" module is a crude digital distortion unit.

CONTROLS:

DRY - controls amount of unaffected dry signal at the output

CRUSH - controls the amount of bitcrush to the signal

INPUTS:

IN - signal input

CRUSH - input for cv-control over the CRUSH parameter.

DRY - input for cv-control over the DRY parameter.

OUTPUTS:

OUT - output

wavefold

WAVEFOLD

The "WAVEFOLD" module is a wavefolder with three selectable stages (fold amount) and cv-control over FOLD.

CONTROLS:

FOLD - controls amount of wavefolding to the signal

CV - attenuator for incoming CV at the FOLD cv-input

STAGES - three selectable stages to control amount of wavefolding

INPUTS:

IN - signal input

FOLD - input for cv-control over the FOLD parameter.

OUTPUTS:

OUT - output

IN   FOLD
WAVEFOLD 0

FOLD
CV

STAGES

stereo_phasor

STEREO-PHASOR:

The "PHASOR" module is a stereo phasor effect.

CONTROLS:

PHASOR - controls amount of phasor effect.

CV - attenuator for incoming cv at the PHASOR input

INPUTS:

IN - signal input

PHASOR - input for cv-control over the PHASOR parameter.

OUTPUTS:

LEFT - left output

RIGHT - right output

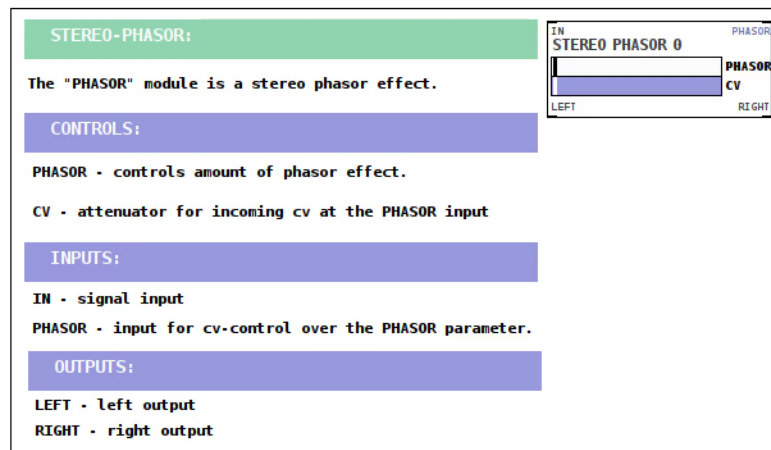| IN	PHASOR
STEREO PHASOR 0	
	PHASOR
	CV
LEFT	RIGHT

combfilter

COMBFILTER:

The "COMBFILTER" module is delay fx unit. Delay times range
from 1ms - 100ms.

CONTROLS:

DELAY - controls delay time from 1ms - 100ms

FEEDBACK - controls amount of feedback

LOWPASS - set lowpass filter frequency cutoff at the output

HIGHPASS - set highpass filter frequency cutoff at the the
output

DRIVE - set drive (gain) at the output

DRY/WET - control the balance between dry and wet signal

INPUTS:

IN - signal in

DELAY -input for cv-control over the DELAY parameter

OUTPUTS:

OUT - output

IN   DELAY
COMBFILTER 0   DELAY
                                      DELAY
                                      FEEDBACK
                                      LOWPASS
                                      HIGHPASS
                                      DRIVE
                                      DRY/WET

granular_delay

GRANULAR-DELAY:

The "GRANULAR-DELAY" module is an experimental granular delay fx unit.

CONTROLS:

PITCH - change the pitch of the signal

GRAINSIZE - controls the size of the grains/delay

REVERB - sets reverb level

DRY/WET - control the balance between dry and wet signal

INPUTS:

IN - signal in

PITCH -input for cv-control over the PITCH parameter

GRAINSIZE -input for cv-control over the GRAINSIZE parameter

REVERB -input for cv-control over the FBACK parameter

D/W -input for cv-control over the DRY/WET parameter

OUTPUTS:

OUT - output

IN	PITCH	GRAIN	REVERB	D/W
GRANULAR DELAY 0				-1
				PITCH
				GRAIN
				REVERB
				DRY/WET

millerverb

MILLERVERB:

The "MILLERVERB" module is a stereo reverb unit based on the reverberation example code from Miller Puckette's book.

CONTROLS:

REVERB - controls amount of reverb/size of the room

LOWPASS - controls the cutoff frequency of a non resonant lowpass filter

DRY/WET - controls the balance between dry and wet signal

GAIN - controls the output gain

INPUTS:

IN - signal in

REVERB -input for cv-control over the REVERB parameter

LPASS -input for cv-control over the LOWPASS parameter

OUTPUTS:

LEFT - left output

RIGHT - right output

IN	REVERB	LPASS
MILLERVERB 0		REVERB
		LOWPASS
		DRY/WET
		GAIN
LEFT		RIGHT

stereo_delay

The "STEREO-DELAY" module is a mono input - stereo output delay with control over delay rate, feedback and amount of lowpass filtering.

CONTROLS:

RATE-LEFT - controls delay rate of the left channel. Delay times from 10ms - 500ms

RATE-RIGHT - controls delay rate of the right channel. Delay times from 10ms - 500ms

FEEDBACK - controls amount of feedback

LOWPASS - set lowpass filter frequency cutoff at the output

DRY/WET - control the balance between dry and wet signal

INPUTS:

IN - signal in

RATE-L - input for cv-control of the RATE-LEFT parameter

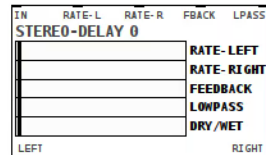RATE-R - input for cv-control of the RATE-RIGHT parameter

FBACK - input for cv-control of the FEEDBACK parameter

LPASS - input for cv-control of the LOWPASS parameter

OUTPUTS:

LEFT - left output

RIGHT - right output

IN   RATE-L   RATE-R   FBACK   LPASS
STEREO-DELAY 0

RATE-LEFT
RATE-RIGHT
FEEDBACK
LOWPASS
DRY/WET

LEFT   RIGHT

chorus

CHORUS:

The "chorus" module is a mono input to stereo output chorus effect.

CONTROLS:

RATE - controls the chorus rate

DEPTH - controls the depth of chorus effect

INPUTS:

IN - signal in

RATE - input for cv-control of the RATE parameter

DEPTH - input for cv-control of the DEPTH parameter

OUTPUTS:

LEFT - left output

RIGHT - right output

```
IN          RATE        DEPTH
CHORUS 0
                        RATE
                        DEPTH
LEFT                    RIGHT
```

overdrive

The "overdrive" module is distortion/overdrive/fuzz effect.

CONTROLS:

DRIVE - controls the distortion/overdrive/fuzz amount

TONE - controls the EQ of the fuzz

INPUTS:

IN - signal in

DRIVE - input for cv-control of the DRIVE parameter

TONE - input for cv-control of the TONE parameter

OUTPUTS:

OUT - output

IN   DRIVE   TONE
OVERDRIVE 0
                          DRIVE
                          TONE

graphic_eq

GRAPHIC-EQ:

The "GRAPHIC-EQ"module is stereo 7-band equalizer. Use it to shape the tone of your soundsoruces.

CONTROLS:

100 - set the level of the 100Hz bandpass filter

200 - set the level of the 200Hz bandpass filter

400 - set the level of the 400Hz bandpass filter

800 - set the level of the 800Hz bandpass filter

1600 - set the level of the 1600Hz bandpass filter

3200 - set the level of the 3200Hz bandpass filter

6400 - set the level of the 6400Hz bandpass filter

CV(LOW) - attenuator for CV at the LOW input

CV(MID) - attenuator for CV at the MID input

CV(HIGH) - attenuator for CV at the HIGH input

Q - global control for the Q of all bandpass filters

LEVEL - adjust output level of the GRAPHIC-EQ

INPUTS:

LEFT - left audio input

RIGHT - right audio input
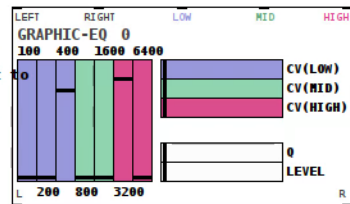
LOW - cv input for the purple bandpass filters

MID - cv input for the green bandpass filters

HIGH - cv input for the pink bandpass filters

OUTPUTS:

L - left channel output

R - right channel output

0170_megaverb

MILLERVERB:

The "MEGAVERB" module is a reverb unit with larger spaces than the MILLERVERBm module. The code is an adaptation of the [rev2~] object into Automatonism signal flow.

CONTROLS:

SIZE - controls size of the room

DAMPING - controls the dampening of the room

LOWPASS - controls the cutoff frequency of a non resonant lowpass filter at the output

DRY/WET - controls the balance between dry and wet signal
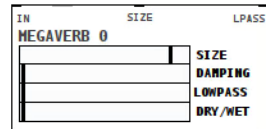
INPUTS:

IN - signal in

SIZE -input for cv-control over the SIZE parameter

LPASS -input for cv-control over the LOWPASS parameter

OUTPUTS:

LEFT - left output

RIGHT - right output

```
IN            SIZE           LPASS
MEGAVERB 0
                               SIZE
                               DAMPING
                               LOWPASS
                               DRY/WET
```

pitchshifter

PITCHSHIFTER:

The PITCHSHIFTER module is an adaptation of the code in the
Pure Data examples (G09.pitchshift.pd) for the Automatonism
signal flow. It takes a signal and shifts the pitch with a
range of down two octaves to up two octaves.

CONTROLS:

PITCH-/+ - shift the pitch of the input signal

CV - attenuator for incoming CV at the PITCH-/+ cv-input

DTY/WET - dry/wet control

INPUTS:

IN - signal input

CV - input for cv-control over the PITCH-/+ parameter.

OUTPUTS:

OUT - output

IN   CV
PITCHSHIFTER 0 -24
                                  PITCH-/+
                                  CV
                                  DRY/WET

vca

VCA:

The "VCA" module is a voltage controlled amplifier/attenuator. It is one of the most useful modules in any modular system. Typically a vca is most commonly used to dynamically change a signal's amplitude over time in tandem with an envelope generator. But the same could be applied to any signal that you want to change dynamically over time in a patch. Basic example: instead of patching an LFO directly to the filter cutoff, go through a vca and control that vca with another LFO. This is called "modulate the modulator" and can really give some life to your patches.

CONTROLS:

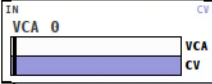VCA - controls the level of the signal present at the IN input.

CV - attenuator for incoming cv at the CV input

INPUTS:

IN - signal in

INPUTS:

OUT - output

lpg_lowpass_gate

LPG(LOWPASS-GATE):

The "LPG" module is a lowpass gate;
a combination of vca and lowpass filter. A short
trigger/gate signal at the CV input is enough to open the
gate and you can set the response with the RING/DAMP
control. A lowpass gate is especially good for percussive
"bongo" type sounds but can be used just like you would use
a vca or a lowpass filter as well.

CONTROLS:

LEVEL - controls the level of the signal input. The response
of the slider is determined by the RING/DAMP control.

RING/DAMP - controls how long you want the lpg to ring after
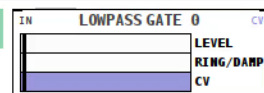exitation.

CV - attenuator for incoming CV at the CV input

INPUTS:

IN - signal in

CV - input for cv-control of the LEVEL parameter

OUTPUTS:

OUT - output

IN LOWPASS GATE 0 CV

LEVEL
RING/DAMP
CV

xfade

XFADE:

The "xfade module is a simple crossfader. Two signal input
can be crossfaded with a slider manually or with cv.

CONTROLS:

XFADE - crossfades between signal-in-1 and signal-in-2

INPUTS:

IN-1 - signal in 1

IN-2 - signal in 2

XFADE - input for cv-control of the XFADE parameter

OUTPUTS:

OUT - output

IN-1	IN-2	XFADE
XFADE 0		
		XFADE
OUT		INV.OUT

3way_xfade

3WAY-XFADE:

The "3WAY-XFADE" module is a three-way crossfader. Three signal inputs can be crossfaded with a slider manually or with cv.

CONTROLS:

XFADE - crossfades between signal 1, 2 and 3

INPUTS:

IN-1 - signal in 1

IN-2 - signal in 2

XFADE - input for cv-control of the XFADE parameter

OUTPUTS:

OUT - output

```
1        2        3      XFADE
3WAY-XFADE  0
[                        ]  XFADE
     [■   ][  ]
```

polarizer

POLARIZER:

The "polarizer" module is a simple polarizer/attenueverter/offset control for finetuning CV sources. Any signal can be scaled down, inverted into the negative or offsetted.
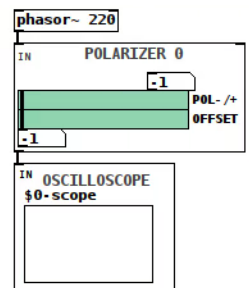
CONTROLS:

POL-/+ - attenuevert the signal

OFFSET - offset the signal with DC

INPUTS:

IN - signal in

OUTPUTS:

OUT - output

---

phasor~ 220

IN   POLARIZER 0
                    -1
                        POL-/+
                        OFFSET
-1

IN   OSCILLOSCOPE
     $0-scope

EXAMPLE: move the POL-/+ or OFFSET slider and watch the scope

mixer2

MIXER2:

The "MIXER2" module is a dual channel summing mixer. It can be used with any signal source;
audio, cv or trigger/gate.

CONTROLS:

CHANNEL1 - controls the level of channel 1

CHANNEL2 - controls the level of channel 2

INPUTS:

CH1 - signal in

CH2 - signal in

OUTPUTS:

OUT - output

```
CH1          MIXER 0          CH2
                              CH1
                              CH2
OUT                          UNITY
```

mixer4

The "mixer4" module is a four-channel summing mixer. It can
be used with any signal source;
audio, cv or trigger/gate.

CONTROLS:

CHANNEL1 - controls the level of channel 1

CHANNEL2 - controls the level of channel 2

CHANNEL3 - controls the level of channel 3

CHANNEL4 - controls the level of channel 4

INPUTS:

CH1 - signal in

CH2 - signal in

CH3 - signal in

CH4 - signal in

OUTPUTS:

OUT - output

CH1	CH2	CH3	CH4

MIXER 0

CH1
CH2
CH3
CH4

OUT   UNITY

toggle_matrix

The "TOGGLE-MATRIX" module is a classic matrix mixer with toggle switches instead of potentiometers. Four signal inputs can be turned on/off in four different ways at the A-D outputs.

CONTROLS:

TOGGLES - 1A-4A

TOGGLES - 1B-4B

TOGGLES - 1C-4C
TOGGLES - 1D-4D

INPUTS:

1 - input one

2 - input two

3 - input three

4 - input four

OUTPUTS:

A - output A

B - output B

C - output C

D - output D

TOGGLE-MATRIX 0

maestro4

MAESTRO04:

The "MAESTRO04" module is a digital-to-analog converter and
four channel panning mixer. It is a module that will pass
on sound to your speakers. It has manual and cv-control over
panning.

CONTROLS:

CH1, CH2, CH3 & CH4 - controls gain of equivalent channel

PAN - control panning of equivalent channel

MASTER - controls the volume of the sum of channels 1-4

INPUTS:

CH1-4 - channel inputs
PAN1-4 - cv input for panning

OUTPUTS:

none/

clock

CLOCK:

The "CLOCK" module is a simple clock/trigger/gate generator.
Control the clock-rate or turn the clock on/off. Notice that
there are other ways to generate clocks in the patch editor.
For example using BASIC-LFO or the EOC of a cycling
envelope.

CONTROLS:

CLK_RATE - controls the clock-rate

ON/OFF - turn the clock on/off

INPUTS:

CLK_RATE - input for cv-control of the clock rate

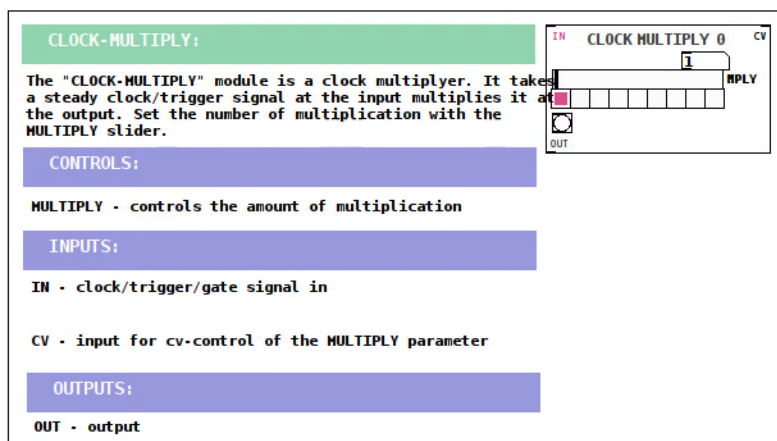ON/OFF - trigger/gate input for turning the clock on/off

OUTPUTS:

OUT - output

CLK-RATE   CLOCK 0   ON/OFF

1970   RATE

OUT   ON/OFF

clock_multiply

CLOCK-MULTIPLY:

The "CLOCK-MULTIPLY" module is a clock multiplyer. It takes
a steady clock/trigger signal at the input multiplies it at
the output. Set the number of multiplication with the
MULTIPLY slider.

CONTROLS:

MULTIPLY - controls the amount of multiplication

INPUTS:

IN - clock/trigger/gate signal in

CV - input for cv-control of the MULTIPLY parameter

OUTPUTS:

OUT - output

IN   CLOCK MULTIPLY 0   CV
1
MPLY
OUT

clock_divider_even

CLOCK-DIVIDER-EVEN

The "clock-divider-even" module is a simple clock divider with even subdivisions of the clock. Available divisions are /2, /4, /8 and /16.

CONTROLS:

none/

INPUTS:

IN - trigger/gate input to be divided

OUTPUTS:

/2 - input divided by 2

/4 - input divided by 4

/8 - input divided by 8

/16 - input divided by 16

IN

CLOCK DIVIDER

/2   /4   /8   /16

CLOCK-DIVIDER-ODD:

The "CLOCK-DIVIDER-ODD" module is a simple clock divider
with odd subdivisions of the clock. Available divisions are
/2, /5, /7 and /9.

CONTROLS:

none/

INPUTS:

IN - trigger/gate input to be divided

OUTPUTS:

/3 - input divided by 3

/5 - input divided by 5

/7 - input divided by 7

/9 - input divided by 9

IN
CLOCK DIVIDER

/3   /5   /7   /9

vc_counter

VC-COUNTER:

The "VC-COUNTER" module is voltage controlled counter/clock divider. Incoming trigger/gate/clock can be subdivided between 1-64. Useful module for setting a very specific clock divisions not available immediately from the other clock-divider modules. You could also feed it CV to dynamically control the subdivisions.
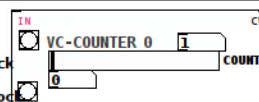
CONTROLS:

COUNT - set number of subdivisions

INPUTS:

IN - trigger/gate input to be divided

OUTPUTS:

OUT - divided output

IN   CV
VC-COUNTER 0   1
                        COUNT
0

trigger_delay

TRIGGER-DELAY:

The "trigger-delay" module is a simple trigger delay.
Trigger/gate signal at the input goes to the output after a
delay time in milliseconds set by the DELAY slider.

CONTROLS:

DELAY - controls delay time in ms

INPUTS:

IN - trigger/gate input

OUTPUTS:

OUT - delayed trigger/gate output

IN
TRIGGER DELAY 0
10
DELAY
OUT

trigger_train

TRIGGER-TRAIN:

The TRIGGER-TRAIN module takes one trigger/gate signal and outputs four in series. The time between the four triggers are set with the DELAY slider. It is particularly useful to make the POLYSYNTH and POLYFM play chords. See example to the right.

CONTROLS:

DELAY - controls delay time in between triggers

INPUTS:

IN - signal in

CV - input for cv-control of the DELAY parameter

OUTPUTS:

OUT - output

CLK-RATE **CLOCK 0** ON/OFF
RATE
1970 ON/OFF
OUT

IN CV
TRIGGER-TRAIN 0
DELAY
20

CLOCK-IN CV(PRE-Q) CV(POST-Q) RESET
8STEPS 0
1 2 3 4 5 6 7 8

ionian
SCALE
Q-OUT MAX S1

TRIG PITCH S->P
POLYSYNTH 0 0
PITCH
SAW->PULSE
DTUNE
ATTACK
HOLD
RELEASE
LEFT RIGHT ENV

voltage_inverter

VOLTAGE-INVERTER:

The "INVERTER" module is a voltage inverter. Invert the polarity of any signal. Mainly used for CV manipulation

CONTROLS:

none/

INPUTS:

IN - signal in

OUTPUTS:

OUT - output

IN

VOLTAGE

INVERTER

OUT

oscilloscope

OSCILLOSCOPE:

The "SCOPE" module is a simple oscilloscope. Use it
frequently to gain a deeper understanding of signals!
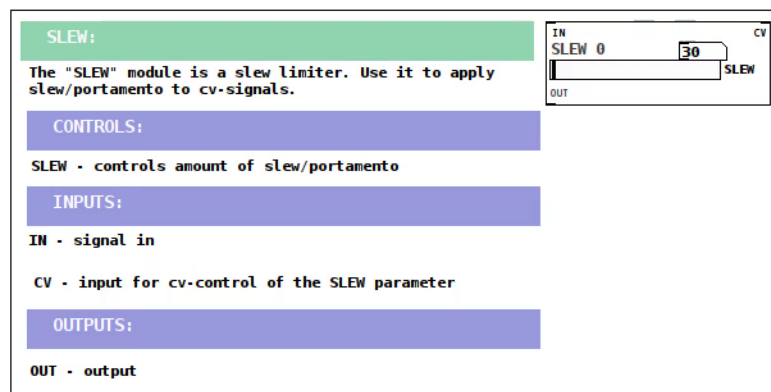
CONTROLS:

none/

INPUTS:

IN - signal in

OUTPUTS:

OUT - output

IN OSCILLOSCOPE
$0-scope

slew

SLEW:

The "SLEW" module is a slew limiter. Use it to apply slew/portamento to cv-signals.

CONTROLS:

SLEW - controls amount of slew/portamento

INPUTS:

IN - signal in

CV - input for cv-control of the SLEW parameter

OUTPUTS:

OUT - output

IN		CV
SLEW 0	30	
		SLEW
OUT		

probability

PROBABILITY:

The "PROBABILITY" module is probability logic module for trigger/gate signals. It takes a signal at the input and passes it forward either to the OUT1 or OUT2 output. The PROB slider set the probability of which route the signal goes.

CONTROLS:

PROB - sets the probability of either signal passing through OUT1 or OUT2

INPUTS:

IN - signal in

CV - input for cv-control of the PROB paramater

OUTPUTS:

OUT1 - output1

OUT2 - output2

IN   PROBABILITY 0   CV

                       PROB

OUT1   OUT2

quantizer

QUANTIZER:

The "QUANTIZER" module is a simple quantizer. It takes any cv signal and quantizes the range into intervalic scales. Patch any signal to the IN input and get the quantized voltage at the output. Available scales: ionian, dorian, phrygian, lydian, aeolian, whole, chromatic, harmonic-major, lydian-minor, ancient, tetra, indian, pelog, slendro
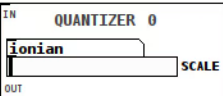
CONTROLS:

SCALE - choose scale

INPUTS:

IN - signal in

TRIG - trigger/gate input to sample the CV at the IN input and force quantization.

OUTPUTS:

OUT- output

```
IN      QUANTIZER 0
ionian
                        SCALE
OUT
```

4to1_switch

4to1-SWITCH:

The "4to1-SWITCH" is a sequential switch that takes 4 inputs and sequentially steps through the inputs at the output whenever a trigger/gate signal is received at te TRIG input.

CONTROLS:

/none

INPUTS:

1 - input 1

2 - input 2

3 - input 3

4 - input 4

TRIG - trigger/gate that triggers the sequential switch
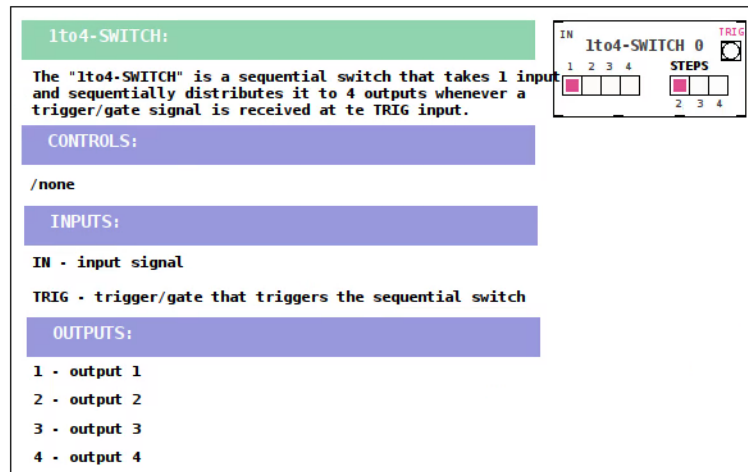
OUTPUTS:

OUT - output

```
      1      2      3      4    TRIG
      4to1-SWITCH 0    ⬜
    1 2 3 4          STEPS
    ▮  ▯  ▯  ▯      ▮  ▯  ▯  ▯
                      2  3  4
```

1to4_switch

1to4-SWITCH:

The "1to4-SWITCH" is a sequential switch that takes 1 input and sequentially distributes it to 4 outputs whenever a trigger/gate signal is received at te TRIG input.

CONTROLS:

/none

INPUTS:

IN - input signal

TRIG - trigger/gate that triggers the sequential switch

OUTPUTS:

1 - output 1

2 - output 2

3 - output 3

4 - output 4

IN   1to4-SWITCH 0   TRIG

1 2 3 4   STEPS

2 3 4

env_follower

ENV-FOLLOWER:

The "ENV-FOLLOWER" is a simple envelope-follower. Use it to
extract amplitude envelop shapes, gate signals and for
frequency detection.

CONTROLS:

INPUT - Boost the input signal from 0 - *4

AMP-SMOOTH - smooth the amplitude shape

GATE-THRESH - select threshold needed to extract gate signal

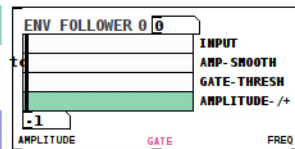AMPLITUDE-/+ - attenueverter to shape the AMPLITUDe output

INPUTS:

IN - signal in

OUTPUTS:

AMPLITUDE - envelope output

GATE - gate output

FREQ - frequency detection output

ENV FOLLOWER 0 | 0
INPUT
AMP-SMOOTH
GATE-THRESH
AMPLITUDE-/+
-1
AMPLITUDE   GATE   FREQ

preset_manager

PRESET-MANAGER:

The "PRESET-MANAGER" module can store all parameters in a
patch into 8 different slots. You can recall the saved slots
manually, adress them with with CV or step through them
seuqentially with a trigger/gate signal. An additional MORPH
control is available to set the time in milliseconds that it
will take to reach the next parameter state. The
preset-manager is a complex composition tool which allows
you to experiment with different knob and parameter settings
in a patch while being able to revert to a previous state.
It is best used when a patch is finished and make sure to
make a backup so you don't loose precious settings while
experimenting.

CONTROLS:

STORE - First choose which slot to save to STORE(1-8)-- and
then click the STORE button to save all current parameter
values in a patch into the slot chosen by the STORE radio.

RECALL - immediately recall saved slots 1-8 by clicking the
radio.

RECALL-CV - attenuator for incoming CV at the RECALL(CV)
input.

MORPH - slider sets the morph time in milliseconds to glide
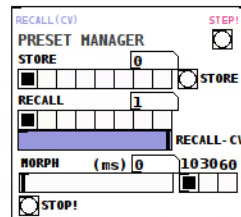to next value. Times from 0 seconds up to one minute.

10 30 60 - determines maximum value of the MORPH slider. Set
times between 0-10 seconds, 0-30 seconds, 0-60 seconds.

STOP! - click the STOP! button to stop a current morph
between parameter values. It is useful to be able to cancel
a morph if you need further editing and it can also be used
creatively if the morph function reveals a new interesting
parameter combination. If so, click STOP! and STORE.

INPUTS:

RECALL(CV) - input for CV-control over the RECALL paramater

STEP! -trigger/gate input that will step through presets
sequentially 1-8

PRESET MANAGER

STORE   0
               STORE
RECALL   1

               RECALL-CV

MORPH   (ms) 0   103060

STOP!

param_nudge

PARAM-NUDGE:

The "PARAM-NUDGE" module is an experimental tool made for mapping out interesting musical spaces. It allows you to nudge all parameters in a patch to search for new intersting sounds. Set how mucg you want the parametrs to be moved with the -/+ RANGE slider and click the NUDGE! button to nudge all parameters. PARAM-NUDGE is a good partner to the preset-manager module when trying to make interesting presets. (For practical reasons, the MAESTRO4 module is not affected by the PARAM-NUDGE module)

CONTROLS:

NUDGE - click button o nudge all parameters.

INPUTS:

NUDGE - trigger/gate input to nudge parameters

OUTPUTS:

/none

NUDGE
PARAM-NUDGE!   119   NUDGE!
                      -/+RANGE

audio_recorder

AUDIO-RECORDER:

The AUDIO-RECORDER module takes a stereo input and records a
24bit .wav file to the folder called "recorded_wavs" in the
project's main folder. It starts recording when you press
the REC toggle and automatically labels your files as
recording_1, recording_2, etc. Press the RST button to reset
the counter, but previous recordings will be overdubbed. You
can use the LEFT and RIGHT master outputs from the MAESTRO4
and patch them into the AUDIO-RECORDER. It is NOT
recommended to use more than one AUDIO-RECORDER, it will
liekly cause PD and Automatonism to crash. Instead, use the
MULTI-TRACK RECORDER MODULE to record several stems.

CONTROLS:

REC/STOP - Start and stop recording

RST - reset the recording number

LEVEL - set the overall gain of the incoming signals

INPUTS:

LEFT - left signal in

RIGHT - right signal in

OUTPUTS:

/none/

LEFT   RIGHT
AUDIO-RECORDER   ■   [0]
 REC/STOP [0]   TAKE RST
 $0-left $0-right

                              LEVEL

multitrack_recorder

MULTITRACK-RECORDER:

The MULTITRACK-RECORDER module takes maximum of 8 inputs and records 24bit .wav files to the folder ../recorder_wavs/multitrack/

You can toggle channels on or off if you for example only want to record 4 stems. There is a LEVEL slider for the global recording volume. It starts recording when you press the REC toggle and automatically labels your files as "multitracker1_CH1_take$1.wav". Press the RST button to reset the counter, but previous recordings will be overdubbed.

CONTROLS:

REC/STOP - Start and stop recording

RST - reset the recording number

LEVEL - set the overall gain of the incoming signals

CH1-8 ON/OFF TOGGLES - turn recording on or off for each channel

INPUTS:

CH1-CH8 - 8 channel inputs

OUTPUTS:

/none/

CH1   CH2   CH3   CH4   CH5   CH6   CH7   CH8

MULTITRACK-RECORDER 0 ▮

REC/STOP 1   TAKE RST

☒ CH1 ☒ CH2 ☒ CH3 ☒ CH4 ☒ CH5 ☒ CH6 ☒ CH7 ☒ CH8

$0-ch1 $0-ch2 $0-ch3 $0-ch4 $0-ch5 $0-ch6 $0-ch7 $0-ch8

LEVEL

external_audio

EXTERNAL-AUDIO:

The "EXTERNAL-AUDIO" module is similar to the envelope follower moduler. It takes the audio input from your soundcard input channels 1 and 2, and outputs the audio, extracts amplitude envelop shapes and gate signals and performs frequency detection. To change the input channels, you need to open the module and change the object [adc~ 1 2]. Change the numbers 1 & 2 to the channel numbers you want to use.

EXT.AUDIO 0 0	
	INPUT
	AMP-SMOOTH
	GATE-THRESH
	AMPLITUDE- /+
-1	

CH1   CH2   ENV   GATE   FREQ

CONTROLS:

INPUT - Boost the input signal from 0 - *4

AMP-SMOOTH - smooth the amplitude shape

GATE-THRESH - select threshold needed to extract gate signal

AMPLITUDE-/+ - attenueverter to shape the AMPLITUDE output
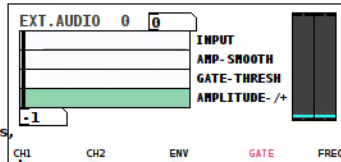
INPUTS:

/none

OUTPUTS:
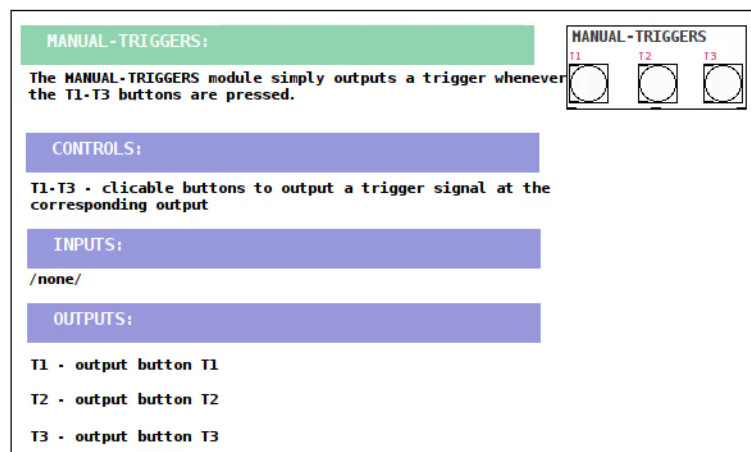
CH1 - left audio out

CH2 - right audio out

ENV - envelope output

GATE - gate output

FREQ - frequency detection output

manual_triggers

MANUAL-TRIGGERS:

The MANUAL-TRIGGERS module simply outputs a trigger whenever
the T1-T3 buttons are pressed.

CONTROLS:

T1-T3 - clicable buttons to output a trigger signal at the
corresponding output

INPUTS:

/none/

OUTPUTS:

T1 - output button T1

T2 - output button T2

T3 - output button T3

MANUAL-TRIGGERS

T1   T2   T3

midi_in

MIDI-IN:

The "MIDI-IN" module receives MIDI note, gate and velocity signals from MIDI channel 1 and outputs them as Automatonism signals. Remember that all external MIDI gear must be connected before launching PD and selected in the PD MIDI Settings. If you want to read from another MIDI channel than channel 1, open the module and change the object [notein 1] to [notein yournumber].

CONTROLS:

/none/

INPUTS:

/none/

OUTPUTS:

NOTE - MIDI note output

GATE - MIDI gate output

VEL - MIDI velocity output

midi_out

MIDI-OUT:

The MIDI-OUT module has been updated and improved for Automatonism v2.0 by Laurent Houdard.

The "MIDI-OUT" module takes a note input and a gate input to send Automatonism signals to external MIDI gear. Remember that all external MIDI gear must be connected before launching PD and selected in the PD MIDI Settings.

CONTROLS:

PITCH-OFFSET - offset the midi notes from the NOTE input

CHANNEL - select MIDI CHANNEL 1-16

INPUTS:

NOTE - midi pitch information input

GATE - midi gate information

OUTPUTS:

/none

NOTE   GATE

0   MIDI-OUT 0

PITCH-OFFSET   -64

                        CHANNEL

1

organelle_knobs

ORGANELLE-KNOBS:

The "organelle-knobs" module is a module that allows you to connect any of the four parameter knobs on the Critter & Guitari Organelle to cv inputs in the system. Rememebr that sliders on modules becomes offsets when cv is applied so make sure the parameter slider is set to zero to access the entire range.

ORGANELLE KNOBS

KNOB1	KNOB2	KNOB3
0	0	0

CONTROLS:

none/

INPUTS:

none/

OUTPUTS:

KNOB1 - output for Organelle knob1

KNOB2 - output for Organelle knob2

KNOB3 - output for Organelle knob3
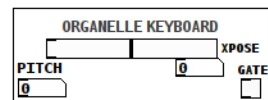
KNOB4 - output for Organelle knob4

organelle_keyboard

ORGANELLE-KEYBOARD:

The "organelle-keyboard" module allows you to use the Critter & Guitari Organelle keyboard to cv inputs in the system. Rememebr that sliders on modules becomes offsets when cv is applied so make sure the parameter slider is set to zero to access the entire range.

CONTROLS:

XPOSE - transposes the octave of the Organelle keys

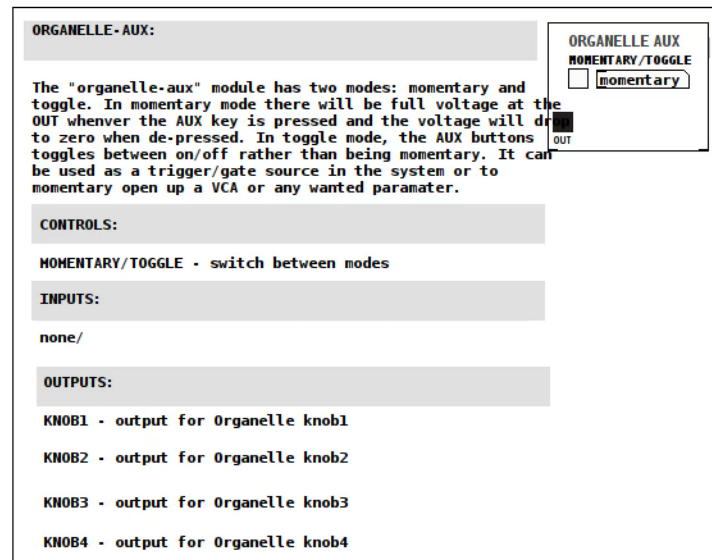**INPUTS:**

none/

OUTPUTS:

PITCH - outputs the pitch from the keyboard

GATE - outputs a trigger/gate signal when a key is pressed on the Organelle.

ORGANELLE KEYBOARD

PITCH   XPOSE

0   0   GATE

organelle_aux

ORGANELLE-AUX:

The "organelle-aux" module has two modes: momentary and
toggle. In momentary mode there will be full voltage at the
OUT whenver the AUX key is pressed and the voltage will drop
to zero when de-pressed. In toggle mode, the AUX buttons
toggles between on/off rather than being momentary. It can
be used as a trigger/gate source in the system or to
momentary open up a VCA or any wanted paramater.

CONTROLS:

MOMENTARY/TOGGLE - switch between modes

INPUTS:

none/

OUTPUTS:

KNOB1 - output for Organelle knob1

KNOB2 - output for Organelle knob2

KNOB3 - output for Organelle knob3

KNOB4 - output for Organelle knob4

ORGANELLE AUX
MOMENTARY/TOGGLE
momentary
OUT

ORGANELLE-OUTPUT:

The "ORGANELLE-OUTPUT" is used instead of the MAESTRO4 if you are exporting your patch to the Critter & Guitari Organelle.

CONTROLS:

CH1, CH2, CH3 & CH4 - controls gain of equivalent channel

PAN - control panning of equivalent channel

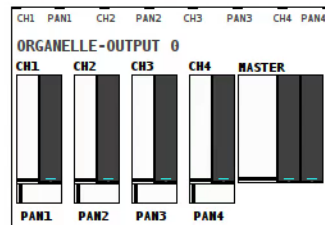MASTER - controls the volume of the sum of channels 1-4

INPUTS:

CH1-4 - channel inputs
PAN1-4 - cv input for panning

OUTPUTS:

none/

Automatonism v2.1