GLITCHMACHINES®

USER GUIDE

QUADRANT

QUADRANT

PRODUCTION & DEVELOPMENT:

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SETUP:

⚠ *This is a **VST3** plugin. Verify that your DAW is compatible with **VST3** prior to installation.*

⚠ *Quadrant2 is **not backwards compatible** with previous versions. Back up your sessions accordingly, prior to updating the plugin.*

⚠ *Quadrant2 is a **stereo** effects plugin; be sure to instantiate it on a stereo audio track.*

1. Unpack the QUADRANT2.zip file
2. Via the QUADRANT2_INSTALLERS folder, run the installer for your system.
    a) **Windows Users**: because our plugins are in a single format on Windows (VST3) the installer does not offer destination options. The plugin files are automatically installed in the correct system subfolders and if you wish to relocate them, you may do so manually after the installation is complete.
    b) **Mac Users:** If you encounter a preset installation error, we are aware of this potential issue and we have put together comprehensive instructions on how to resolve this. Please download them here: MAC PRESET HELP
3. Launch your VST3/AU DAW and instantiate QUADRANT2 on a **stereo** audio track.
4. Load some audio onto the track and check out the factory presets to get a sense for how the plugin sounds and works.

If you require tech support, you may reach us at: glitchmachines.sales@gmail.com

QUADRANT 2 DESCRIPTION:

Quadrant 2 is a modular effects processor geared toward experimental sound design and electronic music production.

Quadrant's streamlined patching system and diverse set of modules provide a customizable processing environment capable of a broad range of creative audio effects. Version 2 builds upon this, adding 4 additional module slots, 14 new modules and numerous new features and refinements. Quadrant 2 excels at generating vivid electronic tones, textures and patterns and processing your drum loops, soft synths and external hardware.

We originally set out to create a signal processing plugin with an intuitive yet deep modular workflow that harnesses the fun factor of patching hardware modules, while giving you several advantages such as the ability to run multiple instances of the plugin/ modules and DAW integration. We then took years of customer feedback and technical experience into account in order to make version 2 even more flexible, powerful and user friendly.

QUADRANT 2 OVERVIEW:

At the left side of Quadrant's interface, you'll find the module's main Input and Output in the form of mini-modules that are permanently situated at the top-left and bottom-left of the module, respectively. These both feature a dedicated **Level** knob and **Signal Meter**.

The **Input** represents the signal coming in to the plugin via your host DAW. This implies that a signal must be present at the track where the plugin is active in order for that signal to then be patched (routed) through the desired processes by manually creating a "patch" by interconnecting a set of desired modules.

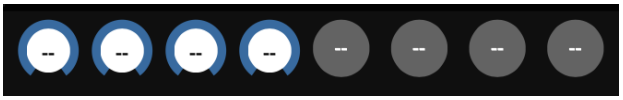
The **Output** represents the "inlet" from the plugin back to your DAW, where the processed signal can be monitored/recorded.

At default, the I/O modules are connected (shown in the image on the left), thereby bypassing the plugin and passing signal directly back to the DAW without any additional processing.

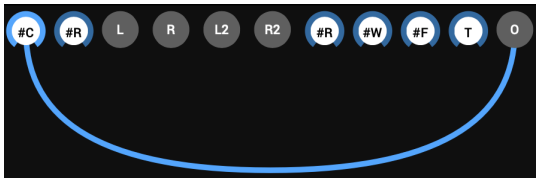
be sure to disconnect the default I/O patch cables so you don't end up with a "dry" copy of the signal merged with the processed one from your patch.

A **clipper** is situated at the output to prevent unwanted signal spikes that can occur as a result of certain patches with extreme feedback or other unwieldy attributes. You may disengage/engage it via a dedicated button at the bottom of the Output module.

Quadrant now features a total of twelve module slots. Each slot is equipped with 4 input nodes and 4 output nodes, situated at the bottom of the top row of module slots and at the top of the bottom row of module slots. **IN** nodes are always the four nodes at the left and **OUT** nodes are always the four nodes at the right:



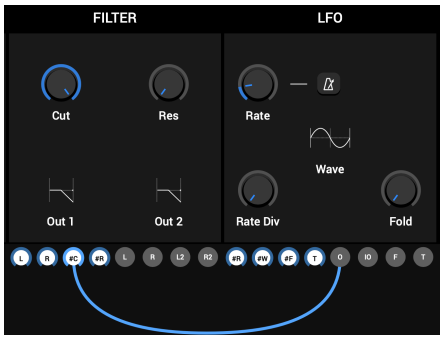
To **make a connection**, click + drag the desired output node to the input node of choice. When you let go of the mouse button, a blue cable will be drawn from the output to the input, which signifies that a connection has been established. Repeat this process to **clear a connection**.



⚠ *Right-click(Win) or control-click(Mac) on a node to disconnect all the patch cables that are connected to it.*

⚠ It's of critical importance to understand that all of the Input Nodes come equipped with integrated attenuators. They are illustrated in the form of a **Modulation Depth Dial,** which is represented as a blue outline at the outside of the node. By default, these dials are set at 100% and dimmed, which implies that they are in the "**background**".

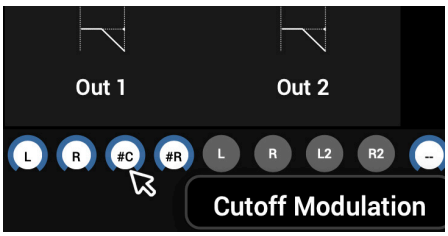
Once a patch cable is connected (for example from an LFO output node to a Filter Cutoff modulation input node, as shown below), you can Option/Alt+Click on the corresponding node to bring the depth dial to the "**foreground**", where you can then click+drag it to attenuate the incoming signal accordingly. Once complete, you may click off of the node, which will cause the dial to dim and recede to the background again.



At default, these **IN** & **OUT** nodes display a double dash when there are no modules inserted in the slots (an example is shown on the previous page of this guide). Once a module is active, all of its available patch points are represented by the parameters that are displayed on the node in the form of an abbreviated text label.

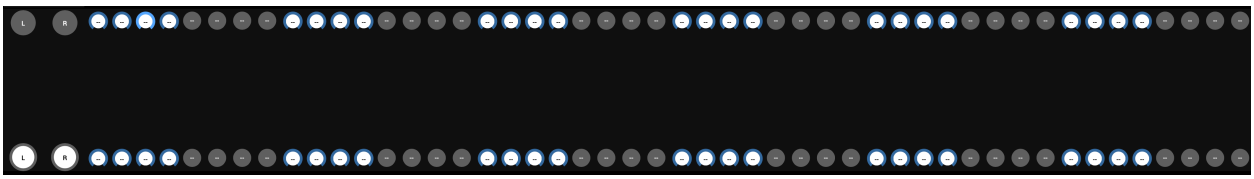
⚠ *As a general rule, inputs used for modulation purposes are prefixed by a "#" (for example "#C" for "Cutoff Modulation Input.)*

You can hover your mouse over any module's Input or Output node to reveal a floating tool tip displaying that node's function:

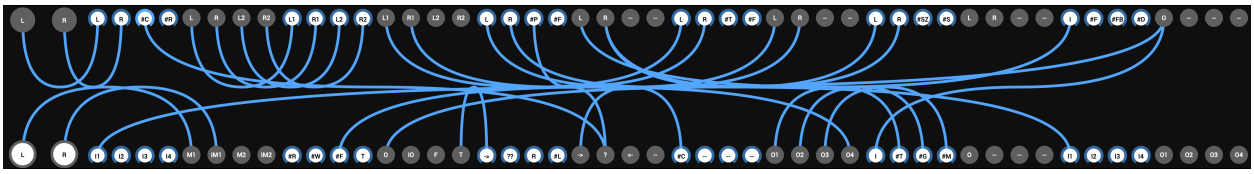


⚠ *If a node displays a double dash on an active/loaded module, this means that the module doesn't offer additional parameters at the respective node/s.*

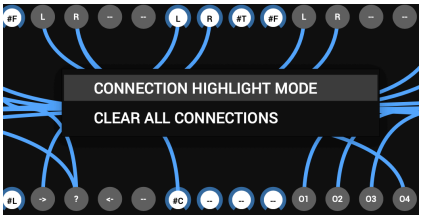
The central area in the middle of the plugin is called the **Patchbay**. This is where you can interconnect and manage all of the modules that are loaded in a patch.



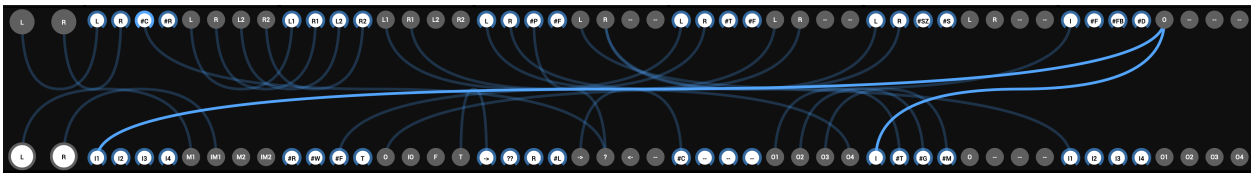
In Standard Mode, the patch cables will all be highlighted in blue, as shown below:



A **Connection Highlight Mode** is available per a small menu that is accessible by right+clicking anywhere in the patchbay area:



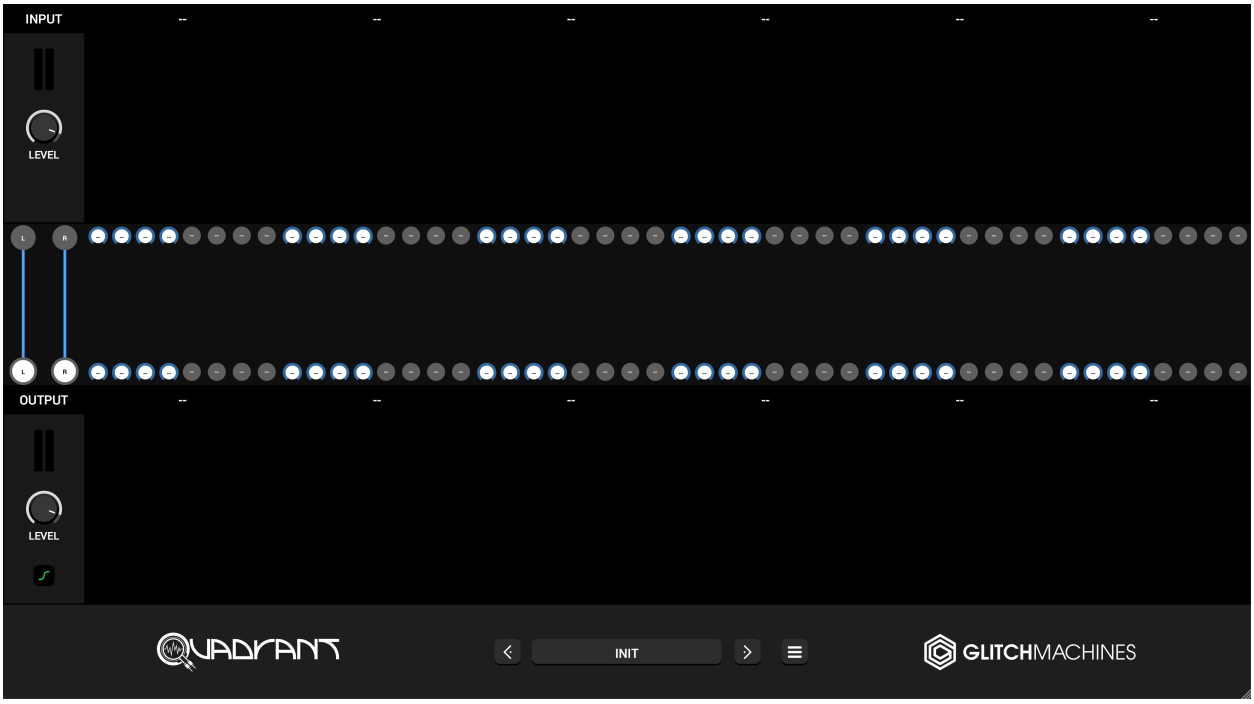
In Connection Highlight Mode, click on an output node to highlight only the patch cables connected to the selected node, making it easier to analyze how things are patched:



⚠ *The same menu also offers an option to **clear all patch connections** (this clears the patch cables themselves, but does not clear the modules from the slots; to do that, use the Configuration Menu option.)*

⚠ *All module inputs and outputs are calculated at **audio rate**, which means there is no distinction between audio and modulation signals. While this offers a lot of freedom when patching, you should be careful to avoid certain harsh-sounding connections. It is good practice to keep Quadrant's output clipper active to prevent unexpected results.*

Quadrant will launch with an “Init” patch loaded, which passes the input of the plugin directly through the output. In this state, the plugin’s 12 module slots will be empty:

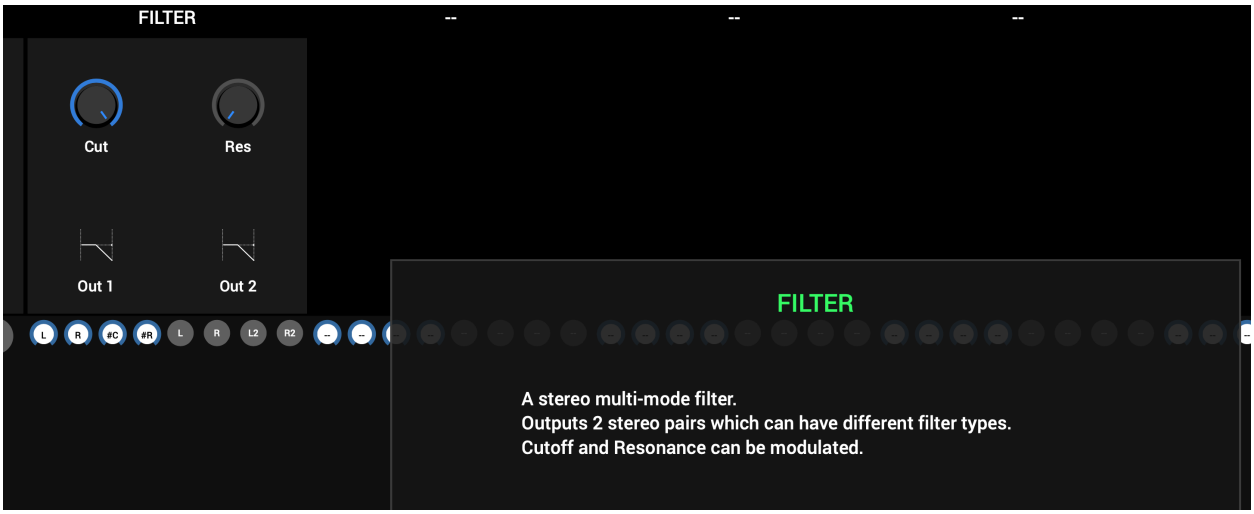


Click on the header of any slot (signified by a double dash when no module is loaded) to activate the module menu, from which you can select the desired module you would like to load into the corresponding slot:

Once a selection is made, you will be presented with the module’s interface inside the slot, and its available patch points will be activated at its Input and Output nodes.

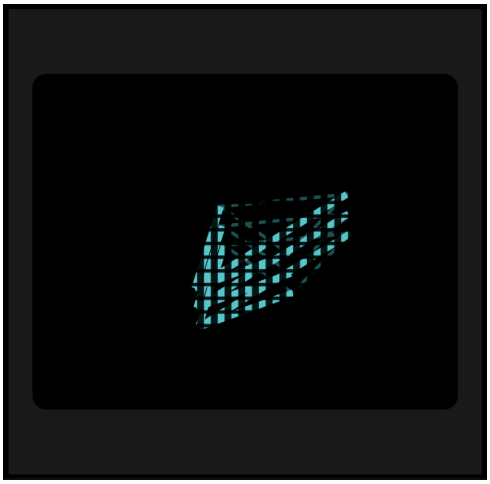
When a module is loaded, this menu is expanded with additional options. These allow you to **Copy/Paste** modules in between slots (retaining their set parameters):

Loaded modules also offer a Help menu where a short description is available for each module. To reveal a pop-up panel with this description, click the **Module Help** option:



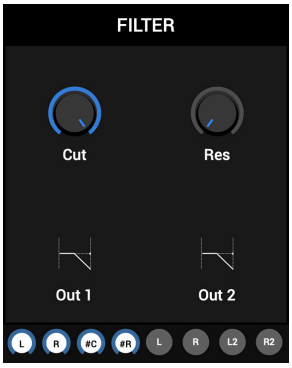
⚠ *To close the popup panel, click on the panel itself (a “dismiss” prompt will be floating)*

Some modules simply do not necessitate any panel elements such as knobs or buttons. In such cases, you will find a small visualizer on the module’s panel instead. The visualizers display abstract patterns and shapes that do not signify any changes in the signals or parameters. They serve no other purpose than to occupy empty space with some visual interest.



QUADRANT 2 MODULES:

FILTER:

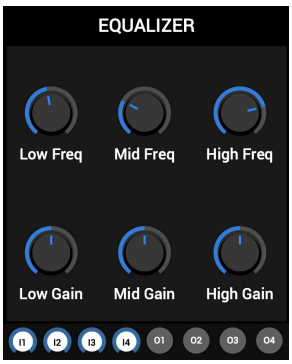


This module provides a multi mode filter that outputs two processed copies of the input signal via two separate stereo outputs.

The input signal is processed by the filter and outputs all filter types in parallel. To change the filter type, click the icon that corresponds with the desired output to cycle through the available modes; lowpass, high pass, bandpass and notch.

Cutoff frequency and resonance can be set via the “Cut” and “Res” parameters and can be modulated by routing signals to inputs #C and #R respectively.

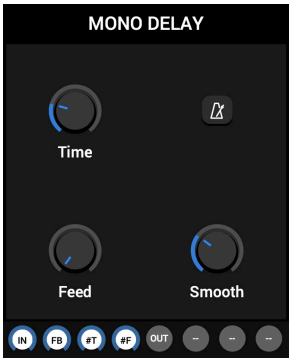
EQUALIZER:



This 3-Band Equalizer features three sweepable frequency bands (Low, Mid, High) with amplitude control (Gain) over each band.

There are 4 separate inputs and outputs available that can be combined/split as needed. For example, channels 1&2 could each carry a mono signal, while channels 3&4 could carry a stereo signal or vice versa.

MONO DELAY:



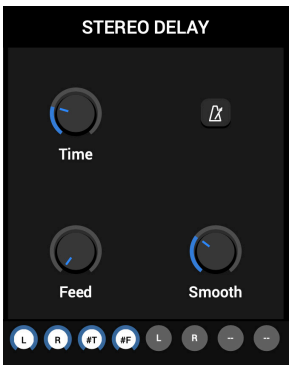
A delay line that operates on a single channel.

You can create a feedback loop by connecting the output of the delay to the feedback input (FB input node). This allows you to process the feedback path using other modules (for example a filter).

The delay time can be set via the Time parameter either in milliseconds or in divisions relative to the host tempo if the sync (metronome) toggle is engaged. The time can be modulated by patching a signal to the module's #T input. You can adjust the feedback level via the Feed parameter, which can be modulated by patching a signal to the module's #F input.

The Smooth parameter sets the time it takes for the delay time to reach its new value when changed. You should turn it up a little if you want to avoid clicks when moving the Time parameter. It is also useful to generate pitch and flanging effects in combination with other modules. If you want to make more raw changes (for example for glitch-style random delay times) you should turn it down to 0 milliseconds.

STEREO DELAY:



This module is mostly the same as the mono delay above, except that the feedback path is fixed internally and that it accepts stereo inputs and outputs a stereo signal.

GRANULATOR:

This module buffers its input like a regular delay line, but instead of playing it back as it was recorded it loops several random chunks of the delay buffer simultaneously.

Size allows you to adjust the grain duration in milliseconds (from 20 to 500 Ms). This can be modulated via input #SZ.

Speed determines the playback speed ratio of a grain (altering its perceived pitch). A value of 1 corresponds to the same frequency as the original sound. Values below 1 will lower the frequency (lower pitch) while values above 1 will increase it (higher pitch). This can be modulated via input #S.

Gain sets the amplitude of a grain in decibels.

Each of the above parameters has a dedicated Jitter control that can be adjusted using the smaller adjacent knob. The Jitter control determines the amount by which values can diverge from the parent value for each grain.

The Freeze switch on the left side of the module toggles the freeze function. When engaged, the module stops buffering its input and the contents of the delay buffer are frozen. When it is off, the buffer will be overwritten once it has reached its full capacity.

The number of grains is set using the Density knob at the bottom right of the module. This lets you select between four values : 8, 16, 32 or 64 grains.

⚠ *Note that each value corresponds with the number of grains **per channel**. The module processes in stereo so the number of grains will always be double (i.e. 8=16, 16=32, etc.) More grains = more CPU load.*

Click to cycle through the windowing options: Rectangular, Triangular, Hanning

These are amplitude envelopes that are applied to the grains for smoother playback. Each one brings out different timbral characteristics in the grains. Their behavior is context-sensitive so be sure to try them all to determine which one works best with the audio signal and settings in your patch.

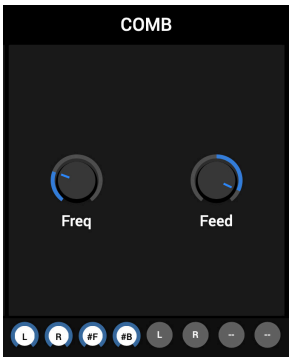
PITCH SHIFTER:

This module is a stereo pitch shifter. It allows you to tune the incoming audio in the range of -24 to +24 semitones using the Pitch control. The output can be fed back to the input using the Feed control to generate more complex sounds.

You can adjust the internal buffer size of the pitch shifter for different sonic flavors using the Size parameter. The Pitch and Feed parameters can be modulated using the #P and #F inputs respectively.

⚠ *The pitch shifter module's Size parameter is prone to producing unwanted sonic artifacts. As a result, it does not have a modulation input node*

COMB:



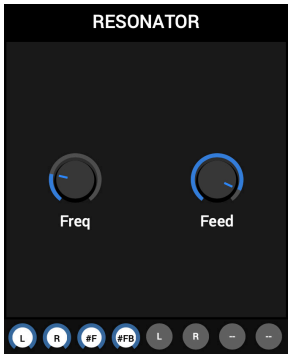
This module applies comb filtering to a set of stereo inputs.

Comb Filtering is implemented by adding a delayed version of a signal to itself, causing constructive and destructive interference. Comb filters exist in two forms; feedforward and feedback (this module does both), which refer to the direction in which signals are delayed before they are added back to the input.

The Frequency knob allows you to adjust the frequency from 20-3000Hz and the Feedback knob allows you to adjust the amount of signal that is fed back to the input.

You can modulate both parameters via the #F and #FB inputs respectively.

RESONATOR:



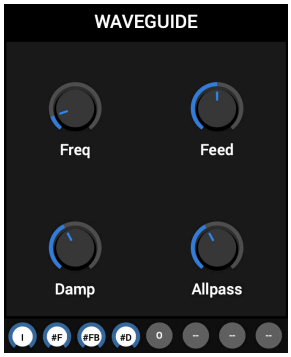
This module provides a stereo resonator effect.

The resonator module is a cascade of allpass filters more akin to a static phaser effect (a good illustration is to patch an LFO to modulate the frequency).

The Frequency knob allows you to adjust the frequency from 60-3000Hz and the Feedback knob allows you to adjust the amount of signal that is fed back to the input.

You can modulate both parameters via the #F and #FB inputs respectively.

WAVEGUIDE:

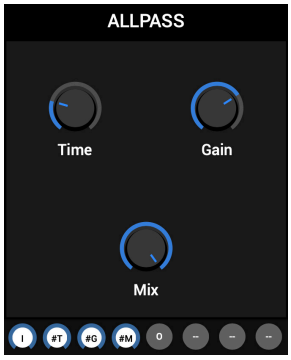


This module provides a Waveguide, which is a building block in physical modeling whose purpose is to emulate a resonant body.

The Freq knob allows you to adjust the frequency of the resonant body between 60Hz-11,000Hz. The Feed knob allows you to adjust the Feedback between -2.00 to 2.00. The Damping ranges from 60Hz to 18kHz and applies low pass filtering to the feedback signals, impacting the decay time of the resonance. The Allpass alters the color of the output.

You can modulate the Frequency, Feedback and Damping parameters via the #F, #FB and #D inputs respectively.

ALLPASS:



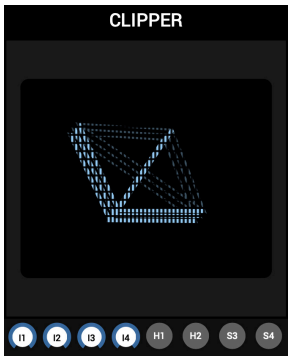
This module provides an Allpass delay line with time and gain modulation.

It delays the signal while altering the phase relationships between frequencies, resulting in a "blurry" sound. Generally speaking, this is a major building block of digital reverberations and it can give interesting results by cascading a few of these modules.

You can modulate the Time, Gain and Mix parameters via the #T, #G and #M inputs respectively.

The Time knob controls the delay time (0-500ms). The Gain knob allows you to adjust the gain of the effect. The Mix controls the balance between the dry and wet signals.

CLIPPER:

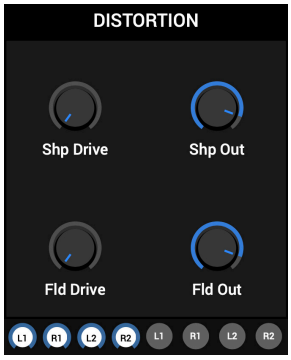


This module provides two independent signal clippers.

Inputs 1 and 2 are hard clipped and routed to outputs 1 and 2.

Inputs 3 and 4 are soft clipped and routed to outputs 3 and 4.

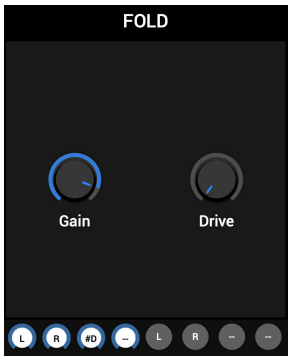
DISTORTION:



This module provides a combination of the Fold and Waveshaper modules but without modulation inputs. The Waveshaper accepts a stereo signal (inputs 1 & 2) and the drive amount and output gain can be adjusted using the “Shp Drive” and “Shp Out” parameters. The resulting signal is routed to outputs 1 and 2.

The Fold distortion processor accepts a stereo signal (inputs 3 & 4) and the drive amount and output gain can be adjusted using the “Fld Drive” and “Fld Out” parameters. The resulting signal is routed to outputs 3 and 4.

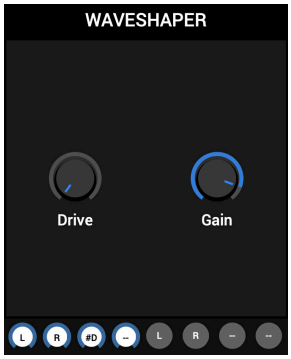
FOLD:



This is the separated out Fold processor from the Distortion module. The parameters are the same but they accept “Drive” modulation at the 3rd input.

The best way to understand the difference between these modules is to listen to their output. The Waveshaper can result in a more traditional overdrive effect while the Fold can result in more complex tones and has a more “digital” timbre.

WAVESHAPER:



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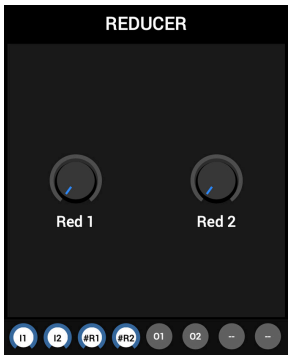
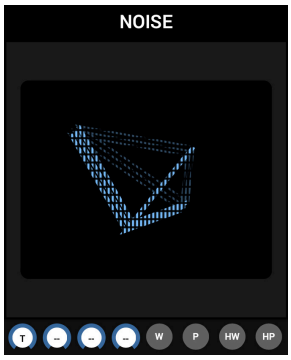
REDUCER:



This module offers two mono sample rate reduction units.

Each has a dedicated reduction amount parameter (Red1 & Red2) and accepts modulation signals to control this parameter (using input 3 for the first unit, and input 4 for the second unit).

NOISE:

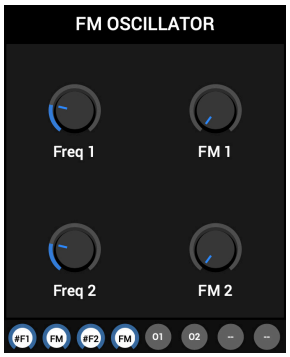


A pink and white noise generator with optional sample and hold control. Output 1 is the white noise signal and Output 2 the pink noise signal.

You can route a signal to input 1 to act as a sample and hold control : the noise is sampled every time the input signal sign flips. The resulting signal is passed to output 3 for white noise and 4 for pink noise.

⚠ *The Noise module is an example of a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with some visual interest.*

FM OSCILLATOR:



Two sinusoidal oscillators operating at audio range with Frequency Modulation inputs.

Each oscillator has a parameter labelled “Freq” to control its carrier frequency (with modulation at inputs 1 and 3), and an input (inputs 3 and 4) for a modulator signal whose level can be adjusted using the corresponding “FM” control.

ENV FOLLOWER:

This module consists of 2 signal followers. Each one has Sensitivity, Attack and Release controls. The first signal follower operates on inputs 1&2 as a stereo pair, and outputs a separate envelope derived from these L and R channels to outputs 1&2.

The second signal follower operates on the stereo sum of inputs 3&4 and outputs a mono envelope to output 3, as well as an inverted version of this envelope to output 4.

LFO:

A Low Frequency Oscillator with optional tempo Sync (metronome button). Each LFO features the following waveforms, which you can click on to cycle through:

	SINE		RAMP		TRIANGLE		SQUARE		STEP RND
	SMOOTH RND		STAIR 4		STAIR 8		SINE 8 ATTACK		SINE 8 DECAY

The LFO rate can be adjusted either in Hertz or beat divisions if Sync is engaged.

Modulation inputs for the Rate, Waveform and Fold parameters are at inputs #R, #W and #F respectively. You can re-trigger the LFO via the T input and you can divide the frequency rate (slow it down) from /1-/16 via the Rate Divide knob.

There is a standard signal output, an output carrying the inverted copy of that signal, a separate output carrying the folded wave shape (controlled via the Fold parameter) and a Trigger output that outputs a trigger corresponding with the start of each LFO cycle.

FUNCTION:

This module generates an envelope to be used as a control signal for other modules.

The module expects a trigger at input 1. A new cycle begins at each trigger. You can modulate the Attack and Decay times of the envelope via inputs 2&3. Additionally, you can fine tune the slope shape of the A & D curves via their dedicated knobs.

Regular & Inverted outputs at 1&2 while out 3 carries an “end of decay” trigger that can be patched back to the trigger input to loop the envelope or trigger another module.

SEQUENCER:

This module outputs a value corresponding to its current position in a 16 step sequence.

Forward (in1/out1) : a trigger at the input makes the sequence jump to the next step in order (left to right).

Random (in1/out3) : a trigger at the input makes the sequence jump to a random step.

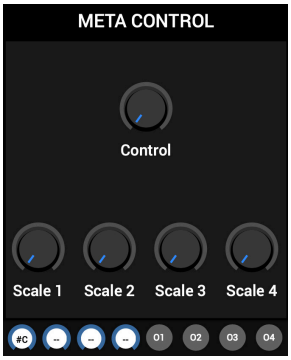
Backward (in1/out2): the output is based on the incoming trigger input but it outputs the steps in reverse order from last to first and is available via a dedicated output 3.

You can randomize the sequence using the RND (?) button.

The sequence can be reset via input 3. Incoming triggers force the sequences to restart.

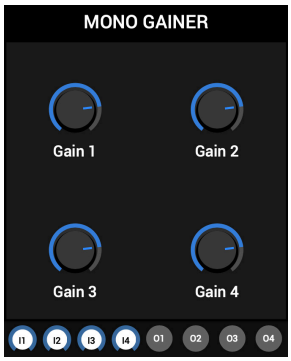
You can set the sequence length between 2-16 steps by click & dragging in the numeric field at the top-left of the module. The length can also be modulated via input 4.

META:



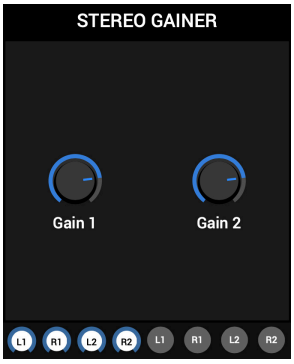
A meta controller that can send a control signal to the 4 outputs with different scaling for each output. The Control parameter can be modulated by routing a signal to input 1.

MONO GAINER:



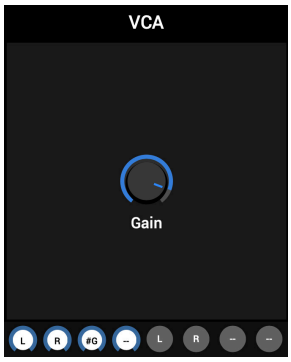
4 mono gain controls (input 1 goes to output 1 through gain 1, etc…)

STEREO GAINER:



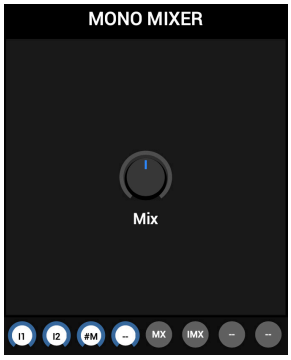
2 stereo gainers : each gain control acts on a stereo pair (in 1-2 and 3-4).

VCA:



This module scales the amplitude of two input signals. It does the same thing as the Stereo Gainer module but only for two channels. It provides a gain modulation input.

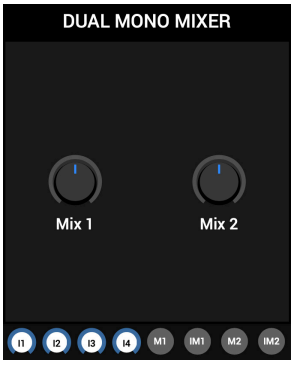
MONO MIXER:



A mono mixer with mix modulation. When the “Mix” control is at 0%, output 1 will be the input 1 at full level, and when set to 100%, output 1 will be input 2 at full level.

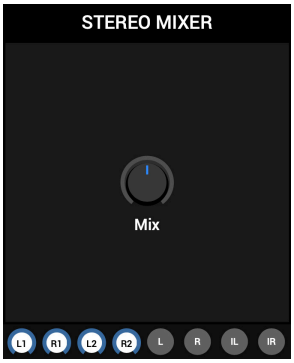
Output 2 will mirror output 1 with inverted values : it acts as if inputs 1 and 2 were swapped. You can modulate the “Mix” parameter via input 3.

DUAL MONO MIXER:



Acts the same as the Mono Mixer module but in this case you get two of them inside but without the mix modulation input.

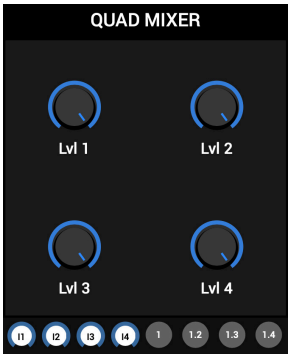
STEREO MIXER:



Works the same way as the mono mixer modules but it operates on 2 stereo pairs.

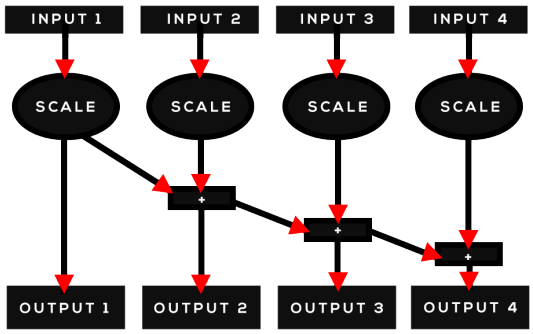
It takes two stereo signals (inputs 1&2 and 3&4) as inputs and then allows you to blend them with the Mix knob. It then outputs a combined stereo signal (as well as a mirrored version, in the same way the mono version works). There is no mix modulation input.

QUAD MIXER:

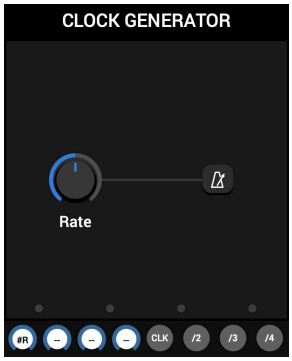


This module takes 4 input signals, scales them and mixes them down.

Each of the 4 outputs acts as a breakpoint in the mix.



CLOCK GEN:



Some modules can receive special signals consisting of very short impulses and use these to trigger actions/processing. The clock module generates the appropriate signals to facilitate this.

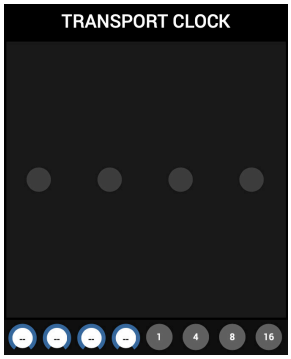
The clock rate can be set either in Milliseconds, or in Time divisions related to the host tempo by toggling the Sync button (Metronome).

This module has a rate modulation input at its first input node.

It also outputs 4 versions of the clock signal : the first output passes the clock at normal rate, the second output passes it at half, the third 3 times slower, and the fourth output a quarter of the speed. LEDs at the bottom indicate the pulse present at each output.

⚠ *In case your patch doesn't sound as expected, make sure you are not passing this type of signal where you would expect an audio signal.*

TRANSPORT CLOCK:



This module outputs four clock signals that map to the host transport position.

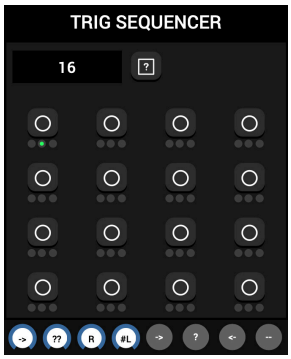
The difference between this and the standard clock generator is that this one stays precisely locked to the transport position at all times, whereas the clock generator's rate can be modulated but lacks the same accuracy.

CLOCK DIVIDER:

This module receives two clock signals at inputs 1&2 and then removes some incoming triggers based on the division parameters, which can be modulated via inputs 3&4.

Output 3 is binary AND of outputs 1&2 and Output 4 is binary OR of outputs 1&2.

TRIG SEQUENCER:



The module outputs a trigger corresponding to its current position in a 16 step sequence.

Forward (in1/out1) : a trigger at the input makes the sequence jump to the next step in order (left to right).

Random (in1/out3) : a trigger at the input makes the sequence jump to a random step.

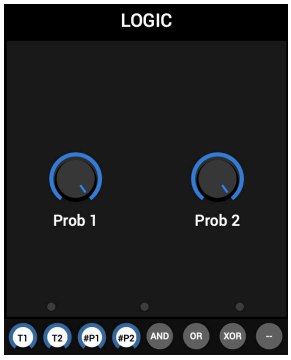
Backward (in1/out2): the output is based on the incoming trigger input but it outputs the steps in reverse order from last to first and is available via a dedicated output 3.

You can randomize the sequence using the RND (?) button.

The sequence can be reset via input 3. Incoming triggers force the sequences to restart.

You can set the sequence length between 2-16 steps by click & dragging in the numeric field at the top-left of the module. The length can also be modulated via input 4.

LOGIC:



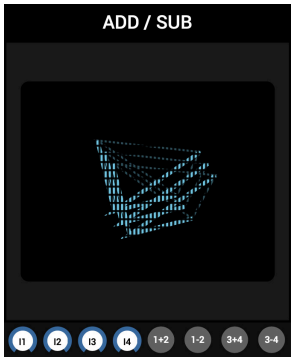
This module applies logic operations on two trigger inputs.

Each input can be filtered by a probability parameter. Both probability knobs can be modulated via inputs 3&4.

There are dedicated AND, OR and XOR outputs at outputs 1, 2 and 3 respectively.

⚠ *Be sure to use this module after the ones that generate the triggers to operate on.*

ADD / SUBTRACT:

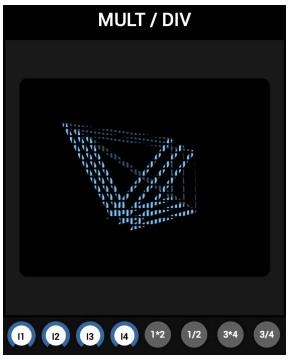


This module provides the following basic mathematical operations on signals :

- Out 1 = (In 1 + In 2) / 2
- Out 2 = In 1 - In 2
- Out 3 = (In 3 + In 4) / 2
- Out 4 = In 3 - In 4

⚠ *This is a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with visual interest.*

MULT / DIVIDE:



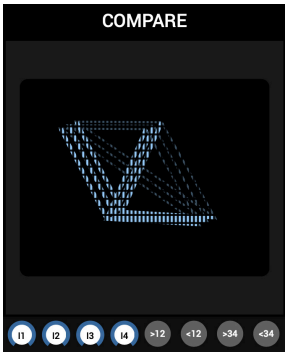
This module provides the following basic mathematical operations on signals :

- Out 1 = In 1 * In 2
- Out 2 = In 1 / In 2
- Out 3 = In 3 * In 4
- Out 4 = In 3 / In 4

TIP: This module can be used to set up a Ring Modulation effect.

⚠ *This is a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with visual interest.*

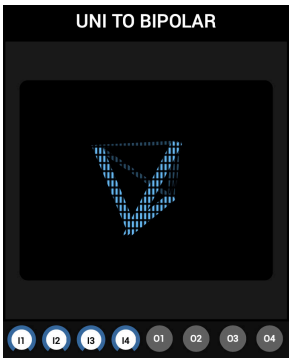
COMPARE:



This module compares pairs of signals. It can process two pairs of inputs simultaneously (1/2, 3/4). For each pair, one output will return the maximum of the two signals, while the other will return the minimum of the two signals.

⚠ *This is a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with visual interest.*

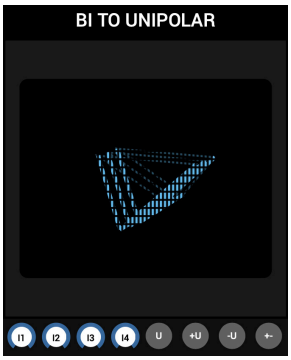
UNI to BIPOLAR:



This module converts unipolar signals to bipolar signals. You can use it to turn positive signals like the output of the Function module into bipolar signals. Four inputs/output are available.

⚠ *This is a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with visual interest.*

BI to UNIPOLAR:

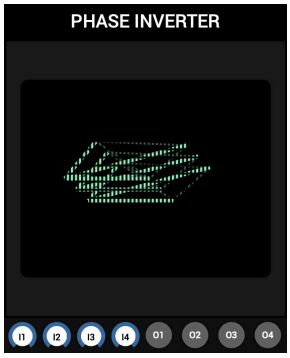


This module sums its 4 inputs and converts the resulting bipolar signal to a unipolar signal.

Out 1 : the signal scaled and offset to become unipolar.
Out 2 : the positive part of the input signal.
Out 3 : the negative part of the input signal, mirrored as a positive signal.
Out 4 : the absolute value of the input signal.

⚠ *This is a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with visual interest.*

PHASE INVERTER:

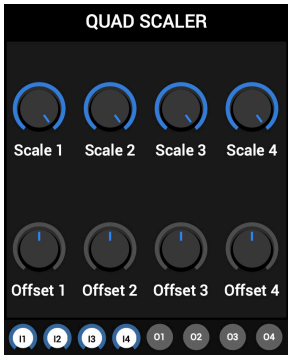


This module inverts the phase of the signals patched into its inputs.

Outputs 1-4 are phase inverted copies of the signals arriving at inputs 1-4.

⚠ *This is a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with visual interest.*

QUAD SCALER:



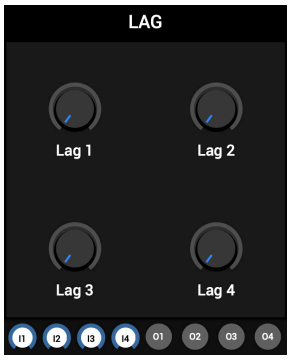
The main use for this module is to adjust the depth of modulation signals like the one generated by the LFO module before passing them to a modulation input.

There are 4 separate inputs available, each with a corresponding output and Scale and Offset parameter.

For each of the 4 signals you can adjust its amplitude using the “Scale” parameter and the modulation floor value using the “Offset” parameter.

⚠ *This module is intended to be used with modulation signals as it will not be very useful on audio signals.*

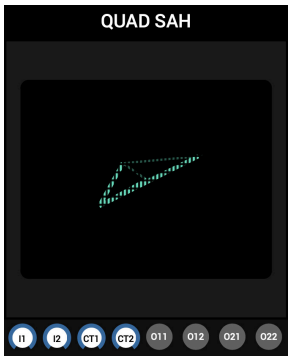
LAG:



This module consists of four “lag” generators : each one outputs a smoothed version of its input according to the corresponding lag coefficient.

This module is useful on modulation signals.

QUAD S&H:

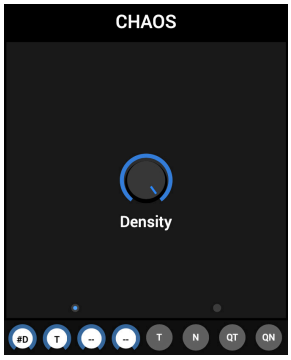


This modules samples the signals it receives at inputs 1 and 2 when it receives a clock message at inputs 3 and/or 4 and it keeps outputting the sampled value until it receives a new clock impulse. It outputs 4 combinations of signal and control inputs.

For example, if you route some white noise to the input 1, and a clock signal to the input 3, the value of input 1 on each clock trigger at input 3 will be output continuously until a new clock trigger is received at input 3.

⚠ *This is a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with visual interest.*

CHAOS:

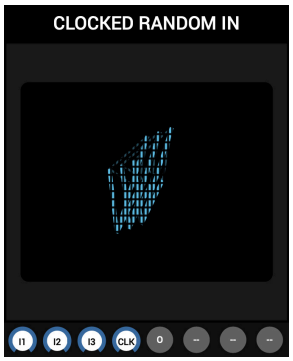


This module randomly generates triggers and noise based on a density parameter, which has a dedicated modulation input.

Quantized versions controlled by a clock signal (input T) are output on QT and QN.

The LEDs reflect the triggers present tat the T and QT outputs.

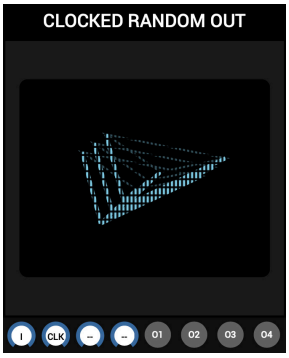
CLOCKED RND IN:



This module randomly outputs one of its 3 inputs to output 1. Every time it receives a clock trigger at input 4, an input signal is randomly chosen to arrive at the output.

⚠ *This is a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with visual interest.*

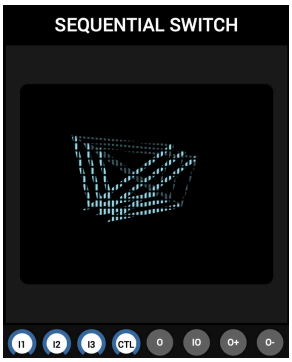
CLOCKED RND OUT:



This module randomly sends one input to one of four outputs. Every time it receives a clock trigger at input 2, an output that the signal appears at is randomly chosen.

⚠ *This is a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with visual interest.*

SEQ. SWITCH:



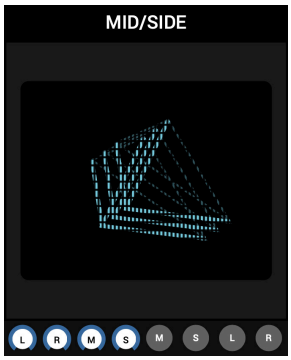
This module alternates between inputs 1, 2 and 3 when it receives a positive impulse (clock) at input 4.

The normal output at Output 1 corresponds to the currently selected input in sequential order. The inverted output mirrors this order.

Output 3 will carry the “next” input signal whereas output 4 will carry the “previous” input signal.

⚠ *This is a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with visual interest.*

MID / SIDE:

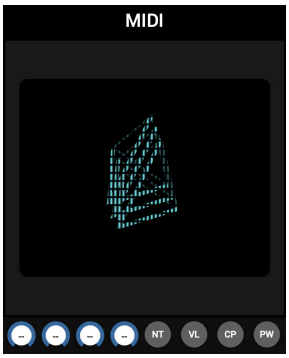


This module encodes a stereo signal (inputs 1/2) to mid and side signals (outputs 1/2) and decodes a mid side signal pair (in 3/4) to a stereo pair (out 3/4).

Using the same module for both operations will induce a 1 sample delay. For sample accurate processing, use another instance of this module as the decoder at the end of your chain.

⚠ *This is a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with visual interest.*

MIDI:

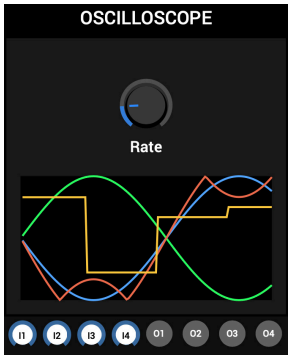


The MIDI module converts MIDI data it receives to signals suitable to use inside the patch area. Output 1 sends the MIDI note value, output 2 the velocity, output 3 the channel pressure and output 4 the pitch wheel value.

⚠ *This module will only work if you have properly configured MIDI in your DAW to be routed to the Quadrant plugin (please refer to your DAW documentation for additional information on this subject).*

⚠ *This is a module with an internal visualizer and no parameter knobs or buttons. The visualizers serve no other purpose than to occupy empty space with visual interest.*

OSCILLOSCOPE:



This module provides an oscilloscope that allows you to visualize the input signals.

This module is an extremely useful tool we recommend in any cases where a visualization of a signal can aid in the modulation and/or construction of a patch.

There are four inputs available with corresponding outputs. Patching several related signals into the scope can often offer an eye opening insight into the interactions between modules and should be utilized in any case where a patch can benefit from fine-tuning. You can also patch more than one signal into a single input.

⚠ *You can "patch through" the scope just like you would with hardware - i.e. whatever signal is present at an input will also be present at the corresponding output, however, this does not offer a useful advantage in the digital domain.*

The Rate parameter controls the refresh rate (i.e. the frequency) at which it buffers the input signal of the oscilloscope. You can decrease this parameter whenever you want to "zoom out" to see a wider perspective of the traces.

FOOTER:

The Footer section gives you access to the **Presets** and **Configuration Menu**:

You may scale the Quadrant interface by clicking & dragging the bottom-right corner of the window until you reach the desired proportions. This setting is automatically saved in the prefs file and the plugin will launch with those dimensions until they are altered:

PRESETS:

You can navigate through the 100+ factory patches either by accessing the drop-down menu, or by using the navigational arrows to increment/decrement though the list.

Clicking on the **Save Preset** option at the top of the presets menu will open a dialog box where you can save the current preset on your hard drive, using the extension ".qdp".

⚠ *Only the presets saved in the default preset folder (where the dialog box opens by default) will appear in the menu.*

Presets are organized in the following subfolder categories (banks):

BASIC: Various basic patches showing a wide variety of patch examples

GENERATIVE: Patches that generate sound on their own

EFFECTS: Patches that are intended to process an incoming signal

⚠ *Quadrant supports preset folders (one level deep), allowing you to add your own if you wish to organize or isolate your personal presets from the factory content, for example.*

CONFIGURATION MENU:

The configuration menu gives you access to the following plugin options:

- Clear Patch: Clears all patch cables and modules
- Open Preset Folder: A shortcut to the location of the presets on your hard drive
- Show Preference File: A shortcut to the plugin preferences file on your hard drive

⚠ *The current plugin version is printed at the bottom of this menu*

Thanks for purchasing QUADRANT 2!

Please check out the rest of our products at our website: https://glitchmachines.com