output | movement

Owner's Manual

Table of Contents

Overview

MOVEMENT is an effects processor designed to add rhythmic, textural motion to audio. MOVEMENT can modulate up to 38 parameters at once from four independent sources, which we simply refer to as 'rhythms.' A rhythm could either be an LFO, step sequence, or external signal fed to MOVEMENT's sidechain input. MOVEMENT duplicates the input signal and routes these signals to two identical effects engines. Here, audio passes through a chain of FX, and is then summed back together with the signal from the other engine. This summed signal is then sent to MOVEMENT's stereo output.

To add rhythm to MOVEMENT, simply click on the round numbered icon and drag it to any knob that will fit the circle.


To edit the rhythm, click anywhere in the darkened circular area pictured above to open the rhythm menu.

m/\vement

Getting Started

Once you've purchased MOVEMENT, you'll receive an email with a serial code. Download the latest version of the Connect download utility to download the MOVMENT Installer. Once you've downloaded and installed Connect, open the application and paste your serial code into Connect. Click 'Download,' and when prompted choose your Desktop as the installation location. Open the installer package and follow the instructions in the installer.

The final step is to activate your copy of MOVEMENT. Open your DAW and load MOVEMENT onto an audio or software instrument track. MOVEMENT will prompt you for your serial code/product key. Paste your serial code in the given field and click 'Activate.' After doing so, you'll be all set!
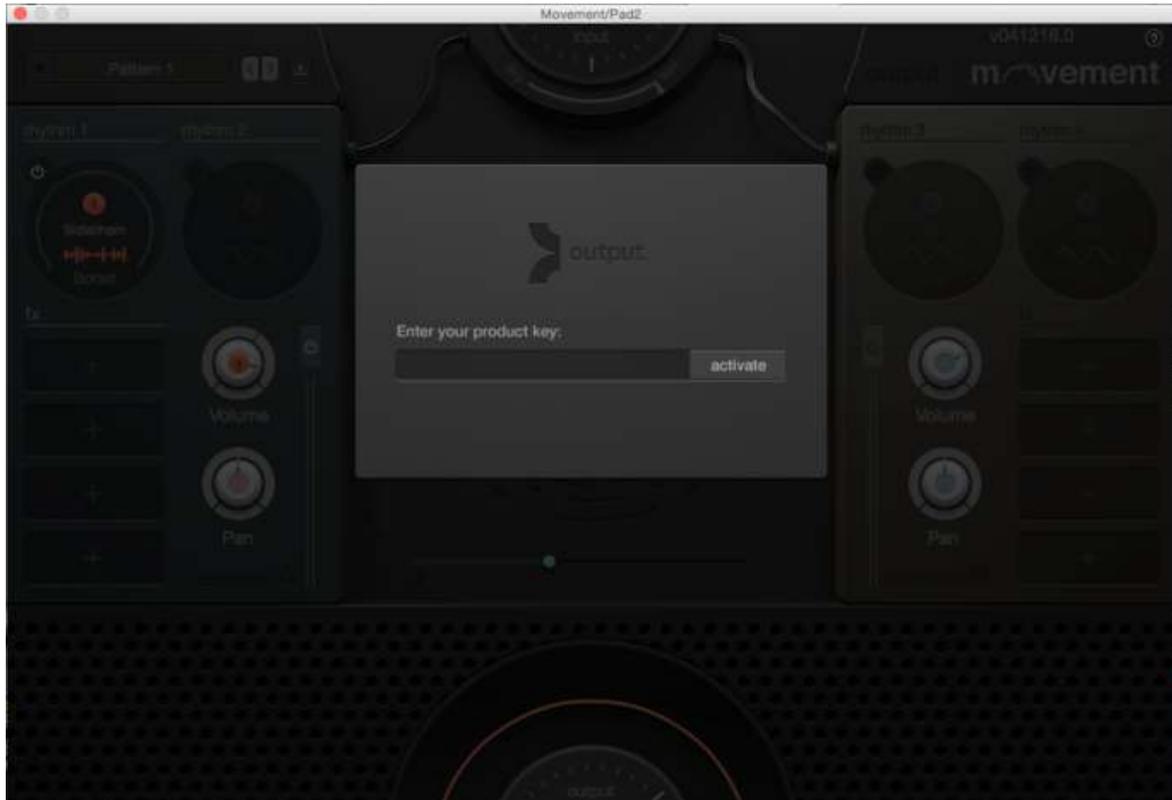
Engines Overview

When audio enters MOVEMENT it's sent to two separate rhythm/FX units for processing, which we call 'engines.' Each engine has four FX slots, two rhythm (modulation) sources, volume/pan control, a mute button, and dedicated VU meter.

The rhythms on each engine can be applied to the engine's volume, pan, or any of the parameters in the FX chain. Rhythms 1 and 2 are tied exclusively to engine 'A' while rhythms 3 and 4 are tied to engine 'B.' Rhythms from one engine cannot modulate effects on the other engine's chain. For example, an LFO on Rhythm 1 cannot modulate a filter on engine B.

Notice the on/off button above the engine's VU meter. By default, both engines are on - so if there are no effects loaded on engine A, but engine B has a lowpass filter, the dry volume of engine A could mask the affected signal on engine B. For this reason, it's helpful to mute the alternate layer when dialing in a chain of FX by clicking the mute on/off button above the VU meter.

To assign a rhythm, simply click, drag and drop the rhythm's circular number icon over the desired parameter's knob. Then set the desired amount of rhythmic modulation by dragging the rhythm slider beneath the given knob.

FX Overview

Each engine contains four FX slots. To add an effect, simply click on the '+' icon. You'll then see a selection of six FX types: delay, filter, reverb, eq, distortion, and compression. Click to automatically add the effect to the selected slot in the chain. **Note: all FX module output gain knobs are unipolar, they will not modulate past the current knob setting.**
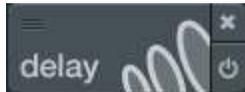
MOVEMENT's delay times can be set to straight, dotted, or triplet values from 1/256 of a bar up to one bar in length.

Type: choose between the delay feedback rhythm characteristics.
Time: set the delay time in bar divisions from 1/256 to a full bar.
Feedback: set the percentage of delay feedback.
HP/LP: set the cutoff frequency of a highpass and lowpass filter on the output.
Wet/Dry: sets the ratio of affected/unaffected output signal.
Output: adjusts the percentage of output gain of the affected signal.

A fully modulatable filter with a drag-able graphical interface. Dragging left or right will move the cutoff frequency, up or down increases or decreases the resonance.

Type: choose between 2 or 4 pole high, low, or bandpass filters.
Cutoff: set the cutoff frequency of the filter.
Resonance: set the resonance level at the cutoff frequency.
Wet/Dry: sets the ratio of affected/unaffected output signal.
Output: adjusts the percentage of output gain of the affected signal.

A room modeled reverb.

Predelay: set the delay time in ms before the reverb effect takes place.
Size: set the perceived size of the reverberant space.
HP/LP: set the cutoff frequency of a highpass and lowpass filter on the output.
Wet/Dry: sets the ratio of affected/unaffected output signal.
Output: adjusts the percentage of output gain of the affected signal.

FX Overview
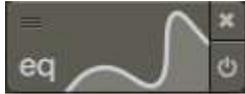
      A two band EQ with switchable parametric and shelving modes. Similar to the filter, settings of the EQ can be dialed in by dragging the graphical interface . Dragging left to right increases the center frequency band, dragging up and down boosts or cuts the level of a selected frequency band.

Width: sets the with of the boost or dip in parametric mode.
Frequency: sets the center frequency of a given band.
Level: sets the gain boost or attenuation of a given band.
Wet/Dry: sets the ratio of affected/unaffected output signal.
Output: adjusts the percentage of output gain of the affected signal.
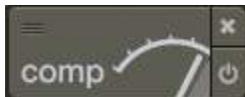
A compressor with adjustable 'Warmth' control.

Warmth: sets amount of tube distortion emulation on the compressor's input signal.
Threshold: sets the volume (in dB) at which compression begins.
Ratio: sets the ratio of input/output level.
Attack/Release: sets the time in ms for the onset and decay of compression.
Wet/Dry: sets the ratio of affected/unaffected output signal.
Output: adjusts the percentage of output gain of the affected signal.

A unique distortion unit with adjustable crunch, drive, and filter settings.

Crunch: sets the intensity of the distortion and accents high frequency content.
Drive: sets the amount of distortion of the input signal.
HP/LP: set the cutoff frequency of a highpass and lowpass filter on the output.
Wet/Dry: sets the ratio of affected/unaffected output signal.
Output: adjusts the percentage of output gain of the affected signal.

Rhythms Overview

MOVEMENT creates rhythms in three ways: step sequencers, LFOs, and an external Sidechain input signal converted into an envelope follower. Each engine has two dedicated rhythm generators that will modulate any parameter of an effect loaded in one of the four FX slots of the given engine (in addition to the engine volume and pan).

To assign a rhythm to a parameter, simply click on the round numbered icon and drag it to any knob that will fit the circle. The colored rhythm amount slider beneath the knob sets the overall amount of rhythmic modulation happening on the selected parameter.

LFO

MOVEMENT's LFO will modulate the value of a parameter above and below the set knob position depending on the selected LFO shape, rate (speed), chaos, and flux. FX Module output knobs will not modulate past the current knob position. To select an LFO shape, open the LFO wave shape menu by clicking on the 'Shape' button. Either double click a shape, or single click and select 'OK.'

LFO Wave Shapes
- **Sine** - Simple sinusodial wave.
- **Trapezoid** - Linear movement across the zero point with a brief hold at either end.
- **Triangle** - Linear ramp up and down to a momentary peak.
- **Quad Stepped Sawtooth** - A downwards sawtooth with four 'stepped' notches.
- **Sawtooth Up** - Quick burst down and linear slope upwards.
- **Pulse** - Simple square wave.
- **Notch** - a momentary dip or notch, then return to zero value.
- **Wide Pulse** - Similar to 'Quick Dip' but without a slope.
- **Sawtooth Down** - Quick burst up and linear slope downwards.
- **Tri Stepped Sawtooth** - A downwards sawtooth with three 'stepped' notches.
- **Random** - waveform randomly switches between tirangle, saw, wide pulse, narrow pulse, and square waves.
- **Narrow Pulse** - A quick jump up to 1 and back to zero.

The phase offset of the LFO can be adjusted freely by the 'phase' knob. The Chaos knob applies a random amplitude value onto each cycle of the LFO.

Rhythms Overview

LFO cont'd

Set the rate (speed) of the LFO by choosing a musical division of your host's tempo.

Step Sequencer

　　MOVEMENT's step sequencer spans from 1 to 32 steps. Set the time duration of each step (the sequencer's rate) by choosing a value in the rate menu. Like the LFO, sequencer rates are displayed as divisions of your host's tempo. Sequencer rates range from 8 bars to 1/64 triplet duration. Adjust the 'Swing' knob for a more human groove.

Step Sequencer cont'd

      MOVEMENT's step sequencer features four different step shapes which provide different envelope characteristics. Think of each step having it's own Attack and Release envelope characteristic. This means that on each step the modulation value goes from zero to the set value, then back to zero. The square shape does not necessarily follow this behavior, it jumps from step value to step value without returning to zero (thus behaving like a traditional step sequencer).

      Open the sequence pattern menu to choose from 36 different preset sequences by clicking on the 'pattern' button. Click the 'random' button to have MOVEMENT generate a random sequence. You can also clear a sequence by clicking the 'clear' button.

Sidechain

Sidechain creates a modulation curve by following an external signal coming from your DAW. MOVEMENT listens to the sidechain audio input and creates a corresponding attack/release envelope curve that is used as a modulation source. The sidechain modulation signal can either 'boost' or 'duck' a given parameter. Think of a Boost as a right knob turn and Duck as a left knob turn.

The extent of this knob turn is determined by the 'full range' button. With 'full range' enabled, the duck/boost modulation is bipolar. This means that after a value is ducked or boosted, it's possible for the value to momentarily exceed its original setting on the way back depending on the strength of the input signal. Full Range is particularly useful when a Sidechain rhythm is assigned to something like panning. With 'full range' disabled, the duck/boost is unipolar - respectively moving below or above the knob position, but never crossing the original knob position on the way back.

Note: Sidechain works best with transient input sources with a medium-quick decay (like a kick drum). Input sources that take a long time to return to silence (such as a full mix) might not result in interesting modulation signals.

Additional options to customize the sidechain modulation include:

- **Gain**: adds volume to the sidechain input signal. Increase to intensify the boost/ducking.
- **Attack**: time in ms for the modulation to begin.
- **Release**: time in ms for the modulation signal to return to zero.
- **Offset**: delay in ms of the sidechain input. Increase to syncopate the sidechain input signal with the resulting modulation curve.

Routing audio to MOVEMENT's Sidechain input varies for each DAW. Click the link below 'Full Range' to see how Sidechain works in your DAW.

Flux

Flux is the method of modulating the rate of one rhythm with the rate of the other rhythm on the same engine. To activate, simply click the 'on' status of the Flux button located on the rhythm menu. Alternatively you can drag the rhythm circle 1 into the rate knob of Rhythm 2 and vice versa. This way you can create fluctuating rhythm rates that go from 8 bars to 1/64th and anything in between.

As with any other assignable parameter in MOVEMENT, the amount of Flux modulation can be scaled up or down by adjusting the rhythm slider beneath the knob.

XY Pad

MOVEMENT's XY Pad is a powerful macro controller and performance tool that can be used to quickly and creatively dial in and modify your sound. First set the effect knobs and rhythm slider to your liking. Then, assign the parameter to a macro with a right click and you're all set!

Use the XY Pad to simultaneously alter multiple effects parameters and the modulation amount of those parameters on both engines. Advancements of the XY position in the Y (vertical/orange) axis correspond to Engine A, settings along the X (horizontal/blue) axis correspond to Engine B.

Note: the term 'advancements of the XY' means increasing the position either upwards from the bottom (Y) and/or right from left (X).

Assigning a Macro

For example, assign rhythm 1 to modulate filter cutoff (on engine A).

The knob, as pictured above, is set around three o'clock. The grey slider beneath the knob is the rhythm slider - it's set to about 50%. At this point, you'll hear some modulation of the filter cutoff frequency. If you move the rhythm slider to the right - you'll hear more intense modulation. If you move the rhythm slider to the left, you'll hear less modulation.

Right click on the Cutoff knob and select 'Assign to XY Control.' You've now assigned filter cutoff to be controlled by the XY Macro controller.
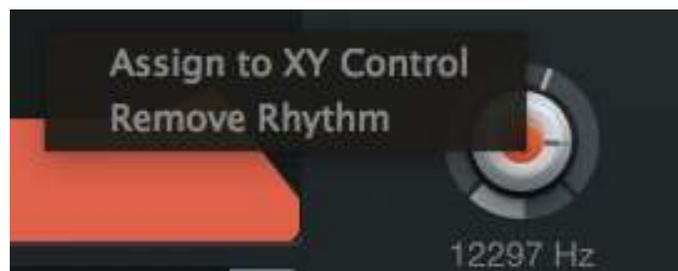
XY Pad cont'd

You'll then be presented with the following macro edit menu.

     Adjustments to the vertical 'knob range' slider will determine the range and direction that the knob 'turns' with advancements of the XY. Settings above the midpoint will turn the knob to the right when the XY position increases, settings below midpoint will turn the knob left as the XY position increases.

     Adjustments to the horizontal 'rhythm amount range' slider will impact the extent in which rhythmic modulation increase or decreases when the XY position advances. Settings to the left will result in decreased modulation with advancement of the XY while settings to the right will result in increased modulation.

     It's important to note that the 'rhythm amount range' is directly correlated to the rhythm slider beneath the knob. If you set the rhythm slider to zero and the rhythm amount range fully right, advancements of the XY will result in more rhythm modulation. If the rhythm slider and rhythm amount range are set to max, you won't hear any increase in modulation when the XY advances because you had previously set modulation amount to max.

Click on the small 'power' buttons to turn on/off the respective macro controls.

     The small circular XY icon that appears to the left of the knob indicates that a knob is macro assigned.

     You can also click on this icon to return to the Macro Edit menu and edit your Macro settings. Alternatively you can right click on the knob and select 'Edit XY Control.'

Presets

MOVEMENT's User presets are saved as XML files in the following directories:

Mac: /Users/Shared/Output/Movement/Presets
PC: OS (C:)/Users/Public/Documents/Output/Movement/Presets

Note: You can also right click on a preset in the browser and select 'Show File in Folder' to navigate directly to the folder location containing your Movement presets.

To save a preset, click on the save icon in the top left corner of MOVEMENT's interface. Type the preset name, choose some applicable tags and click save.
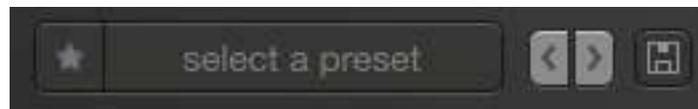
To access your presets, open the preset menu by clicking on the name of the current preset in the top left corner. You'll then be able to sort by tags or search directly using the search bar. When you select a tag in the preset menu, click the previous/next buttons to sort through presets containing the selected tag. You can also click on the star icon to move all of your favorite presets at the top of the list. If you'd rather not open the preset menu, you can simply scroll one preset to the left or right using the left/right buttons next to the save icon.

Low CPU Mode

Click the low CPU mode button to bypass MOVEMENT's motion graphics and cut down on CPU usage. Though the animation in MOVEMENT's GUI will freeze, there is no change happening to the audio processing.

On Screen Help Menu

Click on the '?' icon to view the on-screen help menu which expains the general functions of any and all items in MOVEMENT.

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