envelover user guide

version 1.0

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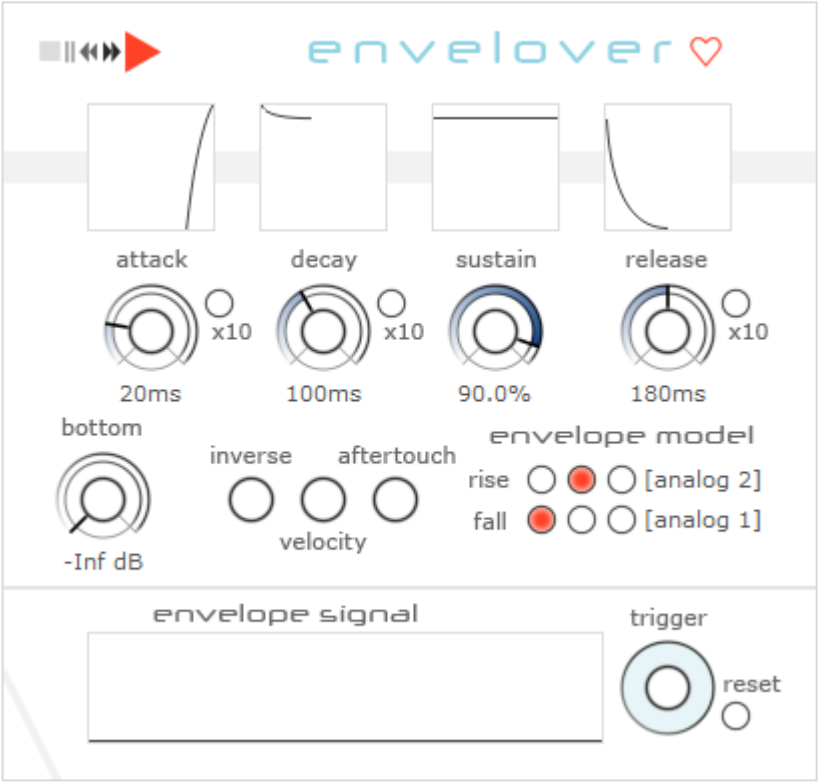
created by press play

visit the home of sound

https://pressplay-music.com



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introduction

thank you for choosing envelover, a pplug by press play. envelover is a one-of-a-kind midi-controlled audio gate effect. it will speed up your musical workflow by giving you the ability to trigger a dynamics processor with midi signals. play it with a keyboard or drum pad just like you would play any digital instrument. versatile envelope settings and visualizations allow for accurate control of the sound.

key features

- midi-controlled audio gate effect
- sample-accurate midi processing and zero latency
- analog and digital style envelope models
- fine-grained control over all important envelope settings
- support for velocity and aftertouch
- inverse mode for dynamic gain reduction (compressor mode)
- envelope signal visualization

envelover is an audio effect plug-in that applies dynamic gain to the incoming audio stream. the amount of gain is controlled by an envelope signal that is triggered by midi note-on messages. the plug-in parameters allow to adjust both the envelope curves and the applied gain, covering a wide range of audio applications. there are three different envelope models available, two analog and one digital. in addition, it is possible to modulate the gain with midi velocity and aftertouch.

envelopes are a basic building block in electronic music production that every producer should familiarize herself with. the most important characteristics of an envelope signal are abbreviated with the four letters

a-d-s-r which stand for attack, decay, sustain and release. these are the four stages of an envelope signal. you can look up the definitions under the “controls” section.

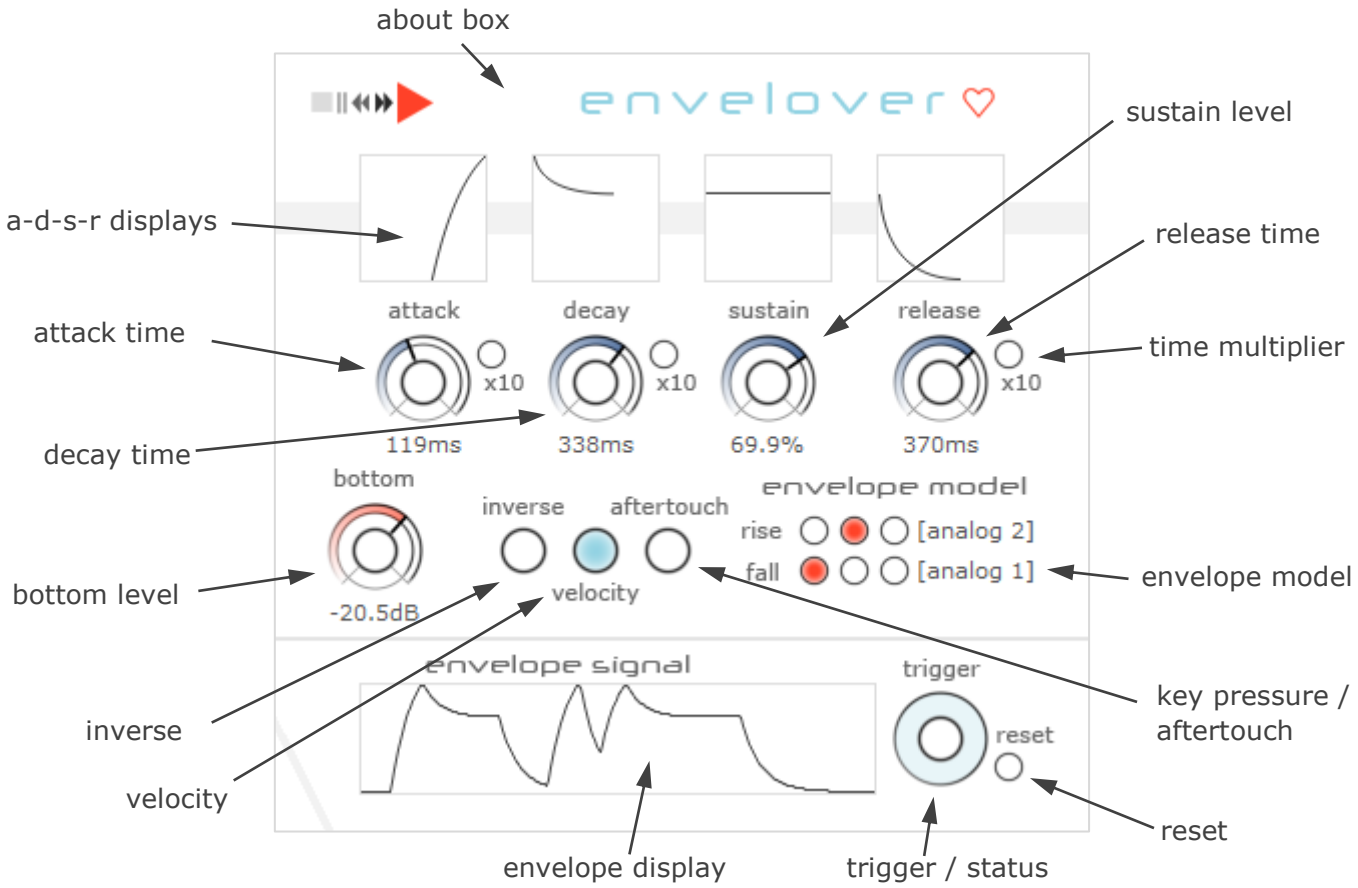
for more information on envelover’s use cases and for other audio software visit the press play website https://pressplay-music.com.

getting started

as an audio effect plug-in, envelover does not produce any sounds on its own, but you need to provide an audio signal at its input. insert it into an audio or instrument track and start experimenting by pressing the trigger button. next, to fully utilize envelover’s magic powers, you also need to provide a midi signal. setting up midi can get quite tricky depending on the host application that you are using. some daws offer flexible (complicated) routing capabilities, others are simple to use (primitive). please consult the corresponding manuals in case of doubt. after setting it up correctly, you can play envelover with a midi keyboard, a drum pad, a sequencer or any kind of programmed midi track.

controls

all knobs can be controlled by mouse or by entering the values using the keyboard. the default values can be reset with a double-click.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attack time

the attack time defines the duration it takes for the envelope signal to go from zero to one. it can be set in the range of 0 to 1000 milliseconds and can additionally be multiplied by 10 with the time multiplier. if set to zero the envelope goes directly into decay mode.

decay time

in the decay phase, the envelope signal falls from one to sustain level. the decay time defines the duration this process would take if sustain was set to zero. for a sustain level greater than zero the effective decay time will be shorter. the value can be set in the range of 0 to 1000 milliseconds and can additionally be multiplied by 10 with the time multiplier. if set to zero the envelope goes directly into sustain mode.

sustain level

this is the level of the envelope signal that is hold if at least one midi note is on or the trigger button is pressed down (forever if you like).

release time

in the release phase, the envelope signal falls from sustain level to zero. the release time defines the duration this process would take if sustain was set to one. for a sustain level less than one the effective release time will be shorter. the value can be set in the range of 0 to 1000 milliseconds and can additionally be multiplied by 10 with the time multiplier. if set to zero the envelope goes directly into off state.

trigger / status

envelover can be triggered by incoming midi note-on messages or manually by pressing the trigger button. it then opens the gate so that audio signals can pass through. press and hold the left mouse button to activate the envelope and go via attack and decay straight into sustain mode. release the mouse button to go into release mode. midi triggers and manual activations are accumulated in a legato manner, so there is no re-triggering of an already activated envelope. the outer ring of the button indicates whether the envelope is currently in an active state, i.e. one of the four adsr stages.

reset

the envelope can be set to off state at any time by pressing the reset button. this can be useful to abort long release times. It may also come in handy in case of midi issues, e.g. if for whatever reasons a note-off event has not been detected and the envelope unintentionally remains in sustain mode.

time multipliers

for extra-long transitions you can multiply the attack, decay or release time by 10. the maximum range is then extended to 0…10 seconds.

envelope model

choose between different envelope models for the attack phase (rise) and for the decay and release phases (fall) to set the shape of the envelope curves. two analog models emulate the typical capacitor charging and discharging of voltage-controlled envelope generators found in classic analog synthesizers. the analog 1 versions are steeper than the analog 2 versions. the default configuration (rise: analog 2, fall: analog 1) resembles the behavior of the famous Curtis CEM 3310 chip.

in addition, there is a digital model with linear transitions between the envelope stages. linear envelopes can sometimes sound less natural but can still be interesting, especially for long transition times. try different combinations and select the models that best fit your audio material.

bottom level

the bottom level is a gain offset. it defines the amount of amplification in times when the envelope equals zero (off state). the default value is zero (or minus infinite dB). this is the most extreme setting where you get pure silence at the output ports until the envelope is triggered. turn the bottom level up if you want audio to always pass through, even if the envelope is not triggered. at the other extreme (-0.1 dB) you will hardly notice any difference between active and off states.

a higher bottom level is especially useful for the inverse mode where you can achieve a subtle (midi-controlled) compression effect.

velocity

with the velocity option turned on you can control the amplitude of the envelope signal with the midi key velocity. this is useful for a more detailed control over the output signal level, especially if you play envelover with a velocity sensitive keyboard or drum pad.

key pressure / aftertouch

for midi keyboards which support aftertouch this setting enables an additional modulation option. the key pressure is evaluated, and the envelope level is increased if you press your keys harder. the modulation is only active during the decay and sustain stages, so it does not interfere with the attack.

inverse

forget everything that you have just learned. press the inverse button and realize that everything is now upside down. in off state, audio passes through unaffected. a trigger signal causes the gate to close and reduces the signal gain down to bottom level. attack goes from one to zero, and release goes back to one. confusing… luckily, the a-d-s-r displays and the envelope display show you the inverted results, and you will quickly get used to it.

in the inverse mode, incoming midi notes reduce the signal level instead of increasing it. the bottom level parameter is useful to adjust the amount of gain reduction. with a high bottom level, you can achieve a subtle midi-controlled compression effect. with a low bottom level, you can produce a pumping effect or even mute the audio signal completely.

envelope display

the envelope display displays the envelope. would you have guessed? it can visually assist you in adjusting all parameters, but as a great musician you should remember to mainly trust your ears.

a-d-s-r displays

if you have read this far, you already know what the four magic letters stand for. these displays are for visualization of the parameters.

about box

click anywhere in the upper area to display the about box. click again to hide.

credits

dsp algorithms and design by Piotr Palka (Press Play).

developed using the WDL / IPlug framework, Oli Larkin edition (https://github.com/olilarkin/wdl-ol).