

# Inertia v3 Envelope sequencer

**AAX** + **AU** + **VST** effect plugin for Mac/Windows/Linux Designed and developed by **Sinevibes** ©2012-2025



## INTRODUCTION

Inertia is an envelope sequencer. At its core is a multi-step envelope generator with four separate envelope parameters per each step, with more than 50 possible shape variations. This generator is driven by an elastic step sequencer that has both polymetric and polyrhythmic abilities, and also offers a very wide range of timing settings. A single Inertia preset holds up to 8 sequencer patterns which can be switched on the fly. The final envelope signal is shaped using an ultra-smooth, analog-style low-pass filter, and is then used to modulate the level of the plugin's input audio. Thanks to its incredible ease of use, Inertia is a universal, highly flexible tool for quickly creating expressive level accents, sidechain-style pumping, elaborate tremolo effects, sophisticated gating and strobing patterns – and much beyond.

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**Inertia** has a fully open, "hackable" preset format: it uses pure XML to clearly present the plugin's main parameters as well as all the sequencer patterns. This means anyone has the ability to view and modify this data in a text editor, and also generate custom sequencer patterns via any programming language.

## **SPECIFICATIONS**

#### **SOUND ENGINE**

- Multi-envelope generator with up to 32 steps,
   each with independently variable envelope
   type, divisions, polarity, and level
- Up to 8 separate sequences per preset
- Step sequencer with rhythmically correct swing, polymetric and polyrhythmic abilities
- Two-pole analog-style lag filter for variable envelope shape smoothing
- One-pole lag filters on all continuous parameters for smooth, click-free adjustment
- Supports mono > mono, mono > stereo, and stereo > stereo channel configurations

#### **USER INTERFACE**

- Color-coded control elements
- Consistent name, mapping, value, and unit implemented for all parameters in both graphic user interface and host control/automation
- Sequencer pattern macro editing functions:
   copy, paste, reset, trim, invert, reverse, evolve,
   randomize, shift left or right, loop
- Built-in preset management functions
- Supports window size scaling up to 200%

#### **SUPPORTED FORMATS**

Mac AU/VST3/AAX for macOS 10.13 or newer

(64-bit Apple Silicon and Intel)

**Windows** VST3/AAX for Windows 8.1 or newer

(64-bit Intel and AMD)

**Linux** VST3 for Linux 2020 or newer

(64-bit Intel and AMD)

## **INTERFACE**

**Inertia** features a fully vector-based interface, with color-coded elements for effective visual grouping. The plugin allows you to change its window size from 0.8x to 2x in 10% increments. The last size you set is stored in a preference file and is recalled the next time **Inertia** is loaded.



- You can use the mouse wheel (and vertical swipe on the trackpad) on most control elements.
- You can hold shift and drag a slider to adjust it with increased resolution.
- Use option-click (Mac), alt-click (Windows, Linux), or double-click on any control to recall its default setting.
- To fully initialize the sequence and all settings, load the *Default* preset from the *Factory* or the *User* bank.

## PRESET FUNCTIONS

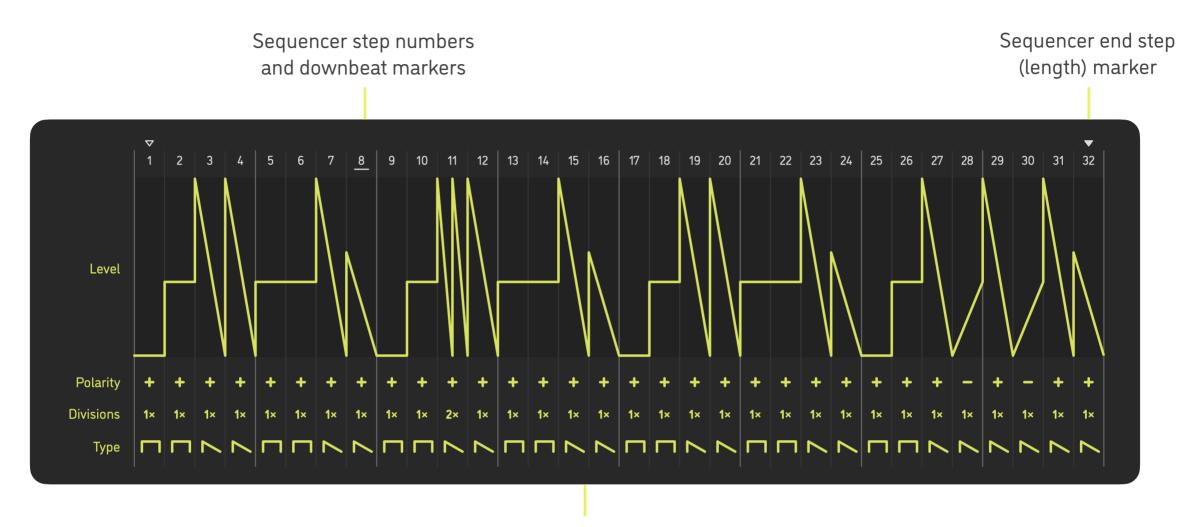
**Inertia** features simple built-in functions for saving and loading presets, as well as for quickly switching between presets within the same bank. All these functions are accessed via the top toolbar.

#### Preset Name

Click the preset name at the top to show the list of presets in the current bank. Use *command-click* (Mac) or *control-click* (Windows, Linux) to reveal the actual preset file in the system file browser.

- Switch to the previous preset in the current bank. The current bank is automatically set to wherever the last preset was loaded from.
- > Switch to the next preset in the current bank.
- Show open file dialog with the list of preset banks. By default, the plugin includes two banks: *Factory* and *User*. However, you can freely create additional banks simply by creating new subfolders.
- Save current preset. Please note: due to the limitations of the typeface, you can only use latin letters when naming your presets

## **SEQUENCER MATRIX**



Envelope sequencer matrix with individual level, polarity, divisions, and type lanes

The sequencer matrix has four lanes which set the following envelope parameters individually per each step:

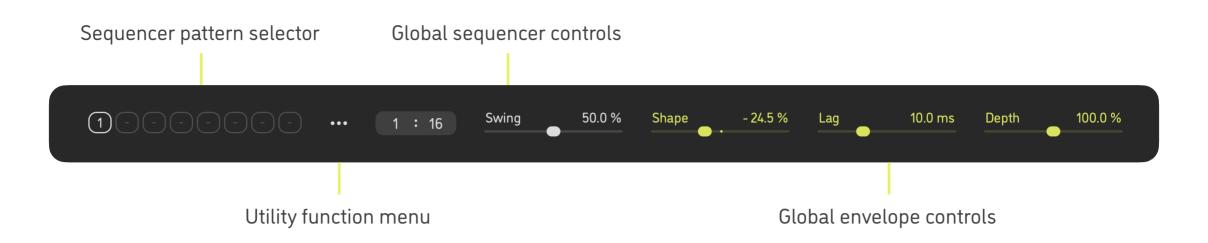
- Envelope level: continuous value from 0.0 to 1.0
- Envelope polarity: positive or negative \*
- Envelope divisions: up to 4 repetitions of the envelope shape within a single step \*
- Envelope type: linear, exponential, logarithmic, triangle, square, flat

A number of additional editing functions is also available:

- The mouse wheel or trackpad scrolling can be used for precise value adjustment on any step/lane
- · Hold the Control key to adjust all steps on a lane at the same time
- Hold Option (Mac) or Alt (Windows, Linux) and click any lane to randomize all steps (only on that lane)
- Hold Shift and click or click/drag on the level lane to quantize the adjustments to 11 values

<sup>\*</sup> The polarity and divisions parameters do not affect the "flat" envelope type.

## **GLOBAL CONTROLS**



The sequence pattern selector provides access to up to 8 separate sequencer matrix patterns per each preset, and the current pattern number can be automated by the plugin host. For those patterns that have not been edited yet, the pattern number is replaced by a dash sign. The currently active pattern can be manipulated in various ways using many different <u>utility functions</u>: pressing the "three dots" button opens the utility menu.

The sequencer runs in sync with the host, at a rate defined by the host tempo and the step length ratio that's set by separate **numerator** and **denominator** parameters in the ratio selector. The step length can be set to any value from 1/32 to 16 bars – combined with the variable sequencer length, it makes it possible to create a wide variety of polymetric and polyrhythmic patterns. The **swing** parameter allows to adjust the relative duration between odd and even sequencer steps. At 50% setting, the duration of the steps in the odd/even pair is the same. Above this value, odd steps become longer while even steps become shorter. Below 50%, it works the opposite way.

The envelope **shape** parameter allows to further adjust the final envelope curvature: for linear, exponential, logarithmic, and triangle types it makes it more concave at negative values and more convex at positive values; for the square type it makes the duty cycle shorter at negative values and longer at positive values; the flat envelope type remains unchanged. The envelope **lag** parameter applies an analog-style two-pole lag filter to make the envelope either more snappy and fast, or more smooth and slow. The **depth** parameter adjusts the amount of the envelope signal applied onto the dry input signal; beyond 100% this parameter also allows to apply extra gain to the modulated output signal.

#### **UTILITY FUNCTIONS**

**Inertia** includes a number of handy pattern utility functions, available in an overlay menu that shows up when you click the menu button. All of these functions only affect the currently active pattern.

**Copy** Copy the pattern into the temporary buffer

**Paste** Paste into the pattern from the temporary buffer

**Reset** Set all pattern steps to default values

**Trim** Mute all pattern steps beyond the end step marker

**Invert** Invert polarity on all pattern steps

**Reverse** Flip the pattern horizontally (left to right)

**Evolve** Randomize values on select steps in all lanes; steps are selected with 10% probability

Randomize Randomize values on all steps in all lanes

Left Shift all steps to the left or the right of the sequence, with the sequence itself wrapped within the currently active pattern region (that's defined by the end step marker)

Repeat the steps within the active pattern region (until the end step marker) multiple times until the maximum step count (32) is reached + set the pattern length to an integer multiple of that region; e.g. 7

steps will be looped 4 times and pattern length will become 28, 9 steps will be looped 3 times and

pattern length will become 27 - and so on



## **DOWNLOADABLE SUPERPOWERS**