



**SOUND
PARTICLES**



inDelay

Reference Manual

July 2024
v. 1.0.1

Welcome Note



Welcome to “inDelay”! It’s always fun to play with delays, so we wanted to create our own version of a modern delay plugin. Of course, with a lot of particles... and things moving around... and crazy filters... and full 3D panning... and Air... among many other new features. Yes, playing with a 3D delay is so much fun. But even if you use it only for stereo, there are a lot of interesting features that you can use. I hope you enjoy it. And, as always, don’t hesitate to send us your feedback – we LOVE to hear from our users!

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Introduction

The future has arrived, welcome to inDelay, the first delay plugin from Sound Particles.

This innovative plugin is designed to enhance and expand the horizons of all mixing engineers and music producers. With its 3D capabilities, inDelay opens up a range of possibilities for designing the perfect sound, placing and moving all your desires in an immersive listening environment. Whether it's stereo, 5.1 and 7.1 surround, Dolby Atmos 7.1.2, Ambisonics up to 6th order, binaural or any other format, inDelay has everything you need to elevate your mixes to another level.

We encourage you to dive into the manual and explore everything inDelay has to offer. With this innovative tool at your fingertips, your creativity is the limit!

Overview

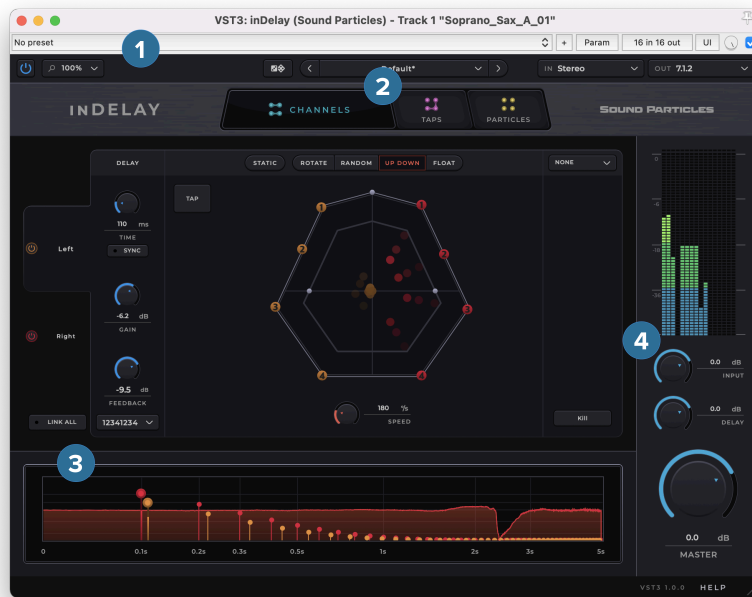


Figure 1. Image 1

Upon opening the plugin, you will notice that, like other Sound Particles products, there is a Top Bar (1). Below this, you'll find the Mode selection buttons (2) that open the respective controls for each mode (Channels, Taps, and Particles). Common to all three modes, there is a Time Editor (3) located at the bottom, and an Output Section (4) on the right side of the window. Each mode has specific features and parameters that will be explained further in this manual. However, in general terms, they present the following differences:

- **Channels:** Control the delay of each channel of the input signal.
- **Taps:** Control individual taps that can have one or multiple channels as input.
- **Particles:** Create a defined number of particles, fed by all input channels, that will have time and position variations within a predefined range.

Top Bar

The inDelay top bar includes a set of features to assist you while using the plugin. These features include window scaling, parameter randomization, and preset management, all designed to enhance your experience with the plugin.

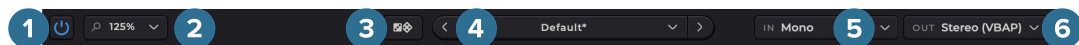


Figure 2. 4

In the top bar you will see the following options:

1. **On/Off** - Activate or deactivate the plugin.
2. **GUI Zoom** - The inDelay GUI can be resized. The pop-up available at the top left of the interface allows users to choose a scale value, from 25% to 400%. This action only affects the currently selected inDelay instance. New instances of the plugin will be opened with the default size factor (100%), but you have to choose another size factor as a default (Set as default).
3. **Randomize** - This dice button will generate random presets, allowing you to have endless possibilities. If you are looking for happy accidents, this feature is for you. Sometimes you may have mad presets, other times you may have a diamond in the rough.
4. **Preset Navigator** - This feature enables users to effortlessly navigate through the saved presets using arrows located on either side of the preset pop-up menu. By clicking these arrows, users can quickly move between previous and next presets. Clicking on the Preset Navigator opens the Presets list, providing access to the full preset list for further exploration.
5. **Input Format** - Choose the right input format for your track from the following options:

- | | |
|------------------------------|-----------------------------|
| <input type="radio"/> Mono | <input type="radio"/> 5.1 |
| <input type="radio"/> Stereo | <input type="radio"/> 6.1 |
| <input type="radio"/> LRC | <input type="radio"/> 7.0 |
| <input type="radio"/> LRCS | <input type="radio"/> 7.1 |
| <input type="radio"/> 4.0 | <input type="radio"/> 9.0 |
| <input type="radio"/> Quad | <input type="radio"/> 9.1 |
| <input type="radio"/> 5.0 | <input type="radio"/> 5.0.2 |

- 5.0.4
- 5.1.2
- 5.1.4
- 7.0.2
- 7.0.4
- 7.0.6
- 7.1.2
- 7.1.4
- 7.1.6
- 9.0.4
- 9.0.6
- 9.0.8
- 9.1.2
- 9.1.4
- 9.1.6
- 9.1.8
- 11.1.8
- IMAX 12.0
- Auro 11.1
- Auro 13.1
- NHK 22.2
- Sony 360

6. Output Format - Choose the right output format for your track from the following options:

- Mono
- Stereo
- Stereo (VBAP)
- Stereo (XY)
- Stereo (MS)
- Stereo (Blumlein)
- Binaural
- LRC
- LRCS
- 4.0
- Quad
- 5.0
- 5.1
- 6.1
- 7.0
- 7.1
- 9.0
- 9.1
- 5.0.2
- 5.0.4
- 5.1.2
- 5.1.4
- 7.0.2
- 7.0.4
- 7.0.6
- 7.1.2
- 7.1.4
- 7.1.6
- 9.0.4
- 9.0.6
- 9.0.8
- 9.1.2
- 9.1.4
- 9.1.6
- 9.1.8
- 11.1.8
- IMAX 12.0
- Auro 11.1
- Auro 13.1
- NHK 22.2
- 1st order Ambisonics
- 2nd order Ambisonics
- 3rd order Ambisonics
- 4th order Ambisonics
- 5th order Ambisonics
- 6th order Ambisonics
- Sony 360

Modes and Controls

At the top of the plugin window, just below the top bar, you can switch between the three modes. This option is visible on all pages and allows the user to quickly switch between them.

Channels

We'll start by explaining the Channels mode. On the left, we have the option to enable/disable each channel or use all linked channels. Next, we have the general delay controls (time, gain, and feedback). In the center of the plugin, we have the movements that the delays can perform, and on the right, the filter section.

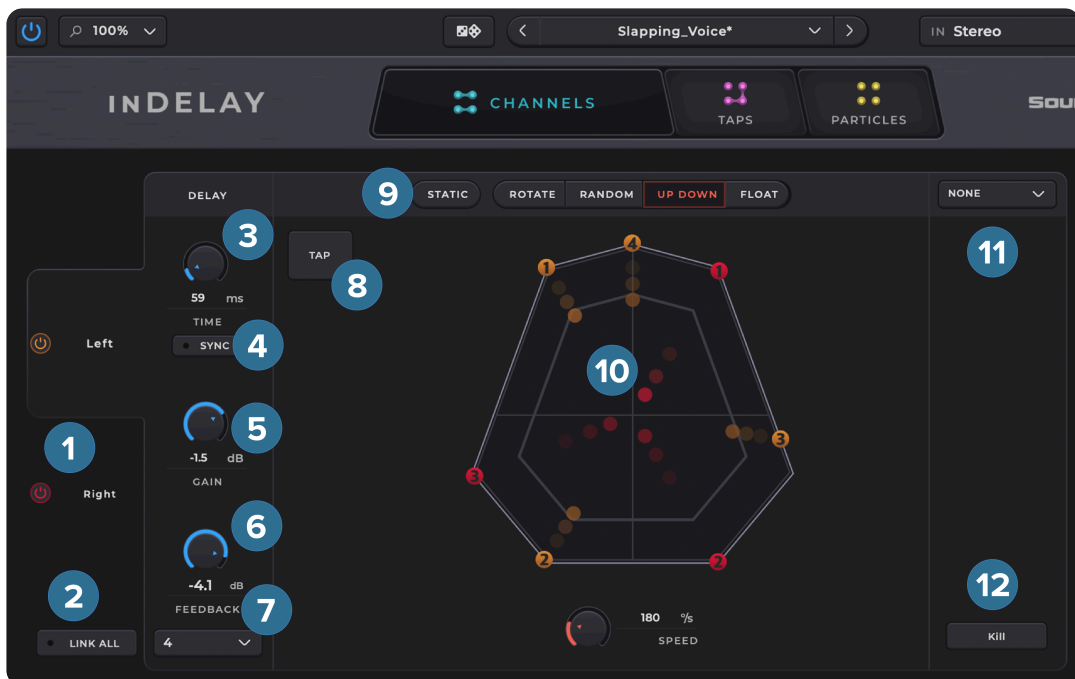


Figure 3. 5

On this mode you will have access to the following:

1. **Channels** - On/Off button for each channel.
2. **Link all** - When enable, this button allows to link all parameters together.

- 3. Time/Tempo** - Adjusts the time between the original sound and each repetition, within a range of 0 to 5000ms or 1/1 (.) to 1/128 (3), when Sync is enabled.
- 4. Sync** - If enabled, the delay time is synchronized with the bpm set in the DAW.
- 5. Gain** - Controls the level of the first repetition within a range of -inf to +12 dB.
- 6. Feedback** - Can work in Decibels or Percentage (define by right-clicking), Adjusts the amount of delayed signal feedback into the delay effect. Higher values create multiple repetitions and a more pronounced echo effect. High feedback values can quickly lead to a build-up of sound, so it is important to use this parameter with care.
- 7. Feedback Modifiers** - Allows you to choose where the feedback will be positioned.
- 8. Tap-Tempo** - Allows users to manually set the tempo of delay effects by tapping in sync with the music's rhythm.
- 9. Movements Modifiers** - Allows you to choose the initial position and movement of the delays: Static, Rotate, Random, Up Down, and Float.
- 10. 3D Pan** - Top view of the position and movements of all delays.
- 11. Filters** - Allows you to select filter and effect types: 3 Band, Parametric, Air and Craziiness.
- 12. Kill** - Instantly mutes the effect's output, allowing the dry signal to pass through unaltered.

FEEDBACK MODIFIER

One of the features this plugin offers is the delay based on predefined positions. Below the feedback knob, you have the option to manage the various types of feedback that the plugin provides. We will explain each one below.

Classic - This is the classic operation of a delay, meaning the delay always stays in the same position.

1 - The delay ends on the first repetition, regardless of the feedback level.

2 - The delay ends on the second repetition and at handler 2, regardless of the feedback level.

3 - The delay ends on the third repetition and at handler 3, regardless of the feedback level.

4 - The delay ends on the fourth repetition and at handler 4, regardless of the feedback level.

1212... - The delay moves between Handler 1 and 2 until the sound ends. The first repetition plays at the position of Handler 1 and the second delay at the position of Handler 2, repeating this pattern until the sound ends.

122... - The delay moves between Handlers 1 and 2. The first repetition plays at the position of Handler 1, the second repetition at the position of Handler 2 until the sound ends.

123123... - The delay moves between Handlers 1, 2, 3, and 4. The first repetition plays at the position of Handler 1, the second at the position of Handler 2, the third at the position of Handler , with subsequent repetitions alternating between positions 2, and 3 until the sound ends.

12323... - The delay moves between Handlers 1, 2, and 3. The first repetition plays at the position of Handler 1, the second repetition at the position of Handler 2, the third repetition at the position of Handler 3, and subsequent repetitions alternate between positions 2 and 3 until the sound ends.



Figure 4. Image 1

1233... - The delay moves between Handlers 1, 2, and 3. The first repetition plays at the position of Handler 1, the second repetition at the position of Handler 2, and the third and subsequent repetitions at the position of Handler 3 until the sound ends.

12341234... - The delay moves between Handlers 1, 2, 3, and 4 until the sound ends. The first repetition plays at the position of Handler 1, the second at the position of Handler 2, the third at the position of Handler 3, and the fourth at the position of Handler 4, repeating this pattern until the sound ends.

1234234... - The delay moves between Handlers 1, 2, 3, and 4. The first repetition plays at the position of Handler 1, the second at the position of Handler 2, the third at the position of Handler 3, and the fourth at the position of Handler 4, with subsequent repetitions alternating between positions 2, 3, and 4 until the sound ends.

123434... - The delay moves between Handlers 1, 2, 3, and 4. The first repetition plays at the position of Handler 1, the second at the position of Handler 2, the third at the position of Handler 3, and the fourth at the position of Handler 4, with subsequent repetitions alternating between positions 3 and 4 until the sound ends.

12344... - The delay moves between Handlers 1, 2, 3, and 4. The first repetition plays at the position of Handler 1, the second at the position of Handler 2, the third at the position of Handler 3, and the fourth and subsequent repetitions at the position of Handler 4 until the sound ends.

MOVEMENT MODIFIERS

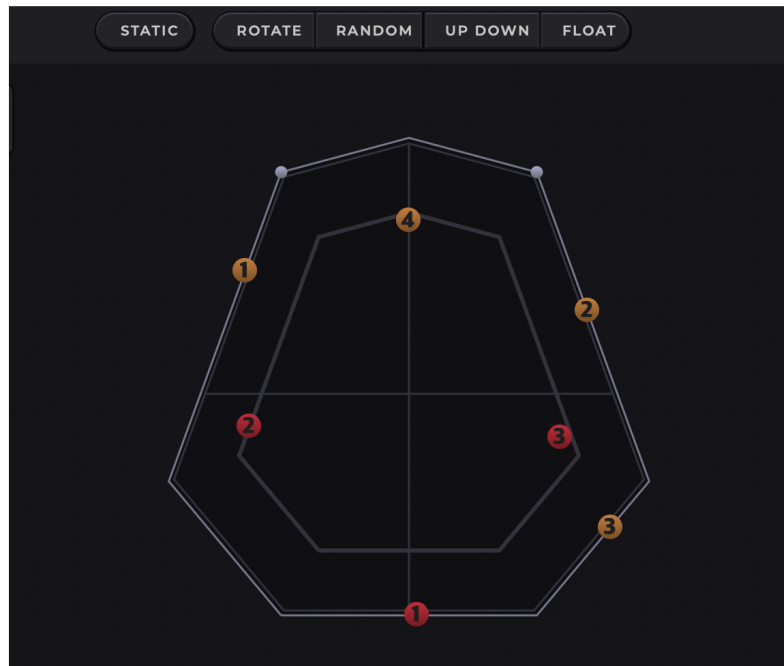


Figure 5. Movement Modifiers

In the Movement Modifiers menu, you can monitor the movement of particles and delays in the format that suits you best.

- 1. Static** - The sounds generated by the plugin stay fixed in position according to the placement of the handlers.
- 2. Rotation** - The sounds generated by the plugin can move clockwise or counterclockwise, with an adjustable speed ranging from 0 to 4000 m/s.
- 3. Random** - The delays and particles move around the sound stage randomly, with any speed between 0 and 4000m/s.
- 4. Up Down** - This movement was created for configurations with flown speakers where the sounds generated by the inDelay travel in a vertical motion.
- 5. Float** - The sounds generated by the plugin move within a certain area, which can be up to 180° from the original point, with a speed ranging from 0 to 4000m/s.

FILTERS



Figure 6. Filters

How to choose various types of filters: 3 Band, Parametric, Craziness and Air.

- 1. 3 Band** - Boost or cut three fixed frequency bands (Low, Mid, High) using the three knobs.
- 2. Parametric** - Adjust the parameters of a single frequency band using the Frequency, Q factor, and Gain controls.
- 3. Craziness** - Effect that allows you to create time diffusion delays based on the delay time, creating a reverb-like effect.
- 4. Air** - Decrease high frequencies simulating the absorption of the air.

TIME EDITOR

In the time editor, you can visualize and edit time and level settings depending on the mode you are using. For the Channels and Taps modes, you can define the Time and Gain (by clicking and dragging the first repetition of each channel/tap) or the Feedback (by clicking and dragging any other repetition of each channel/tap).

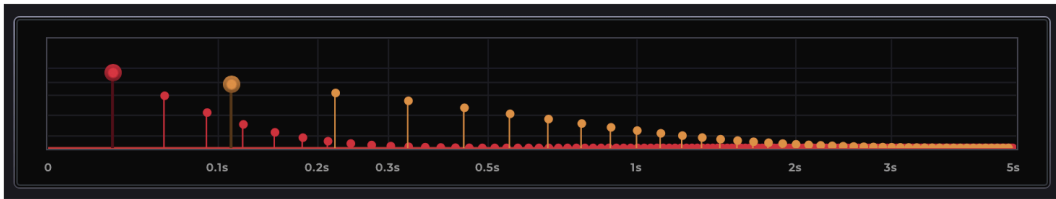


Figure 7. Filters

On the Particles mode, you can set the Delay Time (by clicking and dragging the main handler) and Time Divergence (by clicking and dragging any of the side arrows).

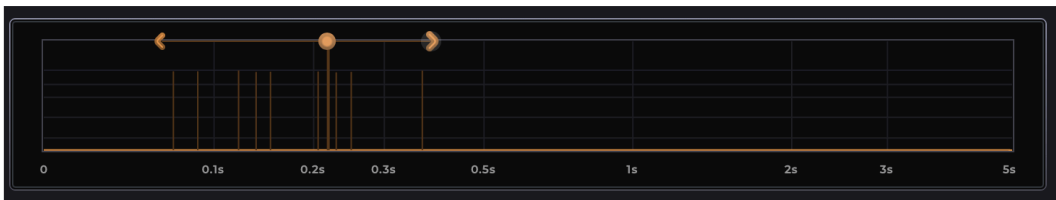


Figure 8. Filters

During the playback you also have a waveform history that helps visualizing the input signal being delayed. By right-clicking the Time Editor you have access to the following options to make it useful for your workflow:

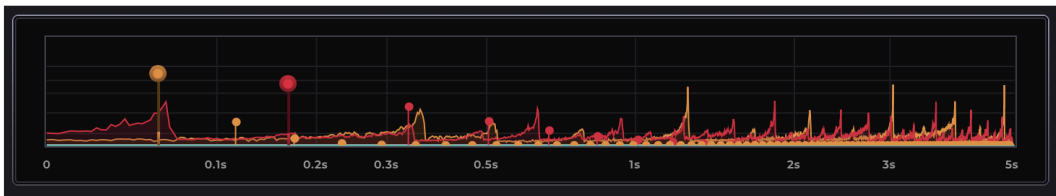


Figure 9. Filters

History - Opens a submenu with the options to show the history of all channels/tap, only the current channel/tap or hide the history of all channels/taps.

Meters - Opens a submenu with the options to show the VU meter on the first repetition for all channels/tap, only the current channel/tap or hide the VU meter for all channels/taps.

Show all channels/taps - When selected the Time Editor shows the repetitions of all channels/taps.

Show current channel/tap - When selected the Time Editor shows the repetitions of the current selected channel/tap.

Edit all channels/taps - When selected the Time Editor allows to edit the repetitions of all channels/taps.

Edit current channel/tap - When selected the Time Editor allows to edit the repetitions of the current selected channel/tap.

Linear time scale - Sets the time scale to linear where time is represented in a uniform way and each unit of time is the same. For example, on a linear timeline, the time intervals between seconds are constant. If we were visualizing sound data over time, a linear scale would present each second or millisecond equidistantly.

0s 1s 2s 3s 4s 5s |-----|-----|-----|-----|-----|

Logarithmic time scale - Sets the time scale to logarithmic where time is represented in a non-uniform way. Each unit of time increases according to a logarithmic base. This means that each time interval represents a multiplication of the previous interval, not a constant addition.

0s 1s 10s 100s 1000s |-----|-----|-----|-----|

Taps

Next, we have the Taps mode, which is similar to the Channels mode, but we have the ability to define each Tap settings that can have one or multiple channels as input. On the left, we have the option to enable/disable each Tap. Next, we have the input selection, the general delay controls (time, gain, and feedback). In the center of the plugin, we have the position settings and movements modifiers and, on the right, the filter section.



Figure 10. 6

In this section, you have the delay based on Taps, you can address every delay to which Position.

1. **Taps Channels** - Each Tap allows you to create a delay based on the input channels.
2. **Input Channels** - You can choose and turn on/off any channel, for to use the delays.
3. **Time/Tempo** - Adjusts the time between the original sound and each repetition, within a range of 0 to 5000ms or 1/1 (.) to 1/128 (3), when Sync is enabled.
4. **Sync** - If enabled, the delay time is synchronized with the time set in the DAW.
5. **Gain** - Controls the level of the first repetition within a range of -inf to +12 dB.

- 6. Feedback** - Can work in Decibels or Percentage (define by right-clicking), Adjusts the amount of delayed signal feedback into the delay effect. Higher values create multiple repetitions and a more pronounced echo effect. High feedback values can quickly lead to a build-up of sound, so it is important to use this parameter with care.
- 7. Feedback Modifiers** - Allows you to choose various sound types based on the positions of the handlers
- 8. Tap Record** - Allows for manual entry of an echo pattern using the mouse or console buttons (if available). The first click initiates the recording process, which lasts for 5 seconds, and represents the dry signal. Each next click sets the delay time for the next tap. Therefore, if you click 3 times, you set 2 delay taps.
- 9. Movements Modifiers** - Choose paths for delay movements: Static, Rotate, Random, Up Down, and Float.
- 10. 3D Pan** - View the position of all sound elements positions.
- 11. Filters** - Select filter types: 3 Band, Parametric, Air and Craziness.
- 12. Kill** - Instantly mutes the effect's output, allowing the dry signal to pass through unaltered.

FEEDBACK MODIFIER

One of the features this plugin offers is the delay based on predefined positions.

Below the feedback knob, you have the option to manage the various types of feedback that the plugin provides. We will explain each one below.

Classic - This is the classic operation of a delay, meaning the delay always stays in the same place.

1 - The delay ends on the first repetition, regardless of the feedback level.

2 - The delay ends on the second repetition and at handler 2, regardless of the feedback level.

3 - The delay ends on the third repetition and at handler 3, regardless of the feedback level.

4 - The delay ends on the fourth repetition and at handler 4, regardless of the feedback level.

1212... - The delay moves between Handler 1 and 2 until the sound ends. The first repetition plays at the position of Handler 1 and the second delay at the position of Handler 2, repeating this pattern until the sound ends.

122... - The delay moves between Handlers 1 and 2. The first repetition plays at the position of Handler 1, the second repetition at the position of Handler 2 until the sound ends.

123123... - The delay moves between Handlers 1, 2, 3, and 4. The first repetition plays at the position of Handler 1, the second at the position of Handler 2, the third at the position of Handler 3, with subsequent repetitions alternating between positions 2, and 3 until the sound ends.



Figure 11. Image 1

12323... - The delay moves between Handlers 1, 2, and 3. The first repetition plays at the position of Handler 1, the second repetition at the position of Handler 2, the third repetition at the position of Handler 3, and subsequent repetitions alternate between positions 2 and 3 until the sound ends.

1233... - The delay moves between Handlers 1, 2, and 3. The first repetition plays at the position of Handler 1, the second repetition at the position of Handler 2, and the third and subsequent repetitions at the position of Handler 3 until the sound ends.

12341234... - The delay moves between Handlers 1, 2, 3, and 4 until the sound ends. The first repetition plays at the position of Handler 1, the second at the position of Handler 2, the third at the position of Handler 3, and the fourth at the position of Handler 4, repeating this pattern until the sound ends.

1234234... - The delay moves between Handlers 1, 2, 3, and 4. The first repetition plays at the position of Handler 1, the second at the position of Handler 2, the third at the position of Handler 3, and the fourth at the position of Handler 4, with subsequent repetitions alternating between positions 2, 3, and 4 until the sound ends.

123434... - The delay moves between Handlers 1, 2, 3, and 4. The first repetition plays at the position of Handler 1, the second at the position of Handler 2, the third at the position of Handler 3, and the fourth at the position of Handler 4, with subsequent repetitions alternating between positions 3 and 4 until the sound ends.

12344... - The delay moves between Handlers 1, 2, 3, and 4. The first repetition plays at the position of Handler 1, the second at the position of Handler 2, the third at the position of Handler 3, and the fourth and subsequent repetitions at the position of Handler 4 until the sound ends.

MOVEMENT MODIFIERS

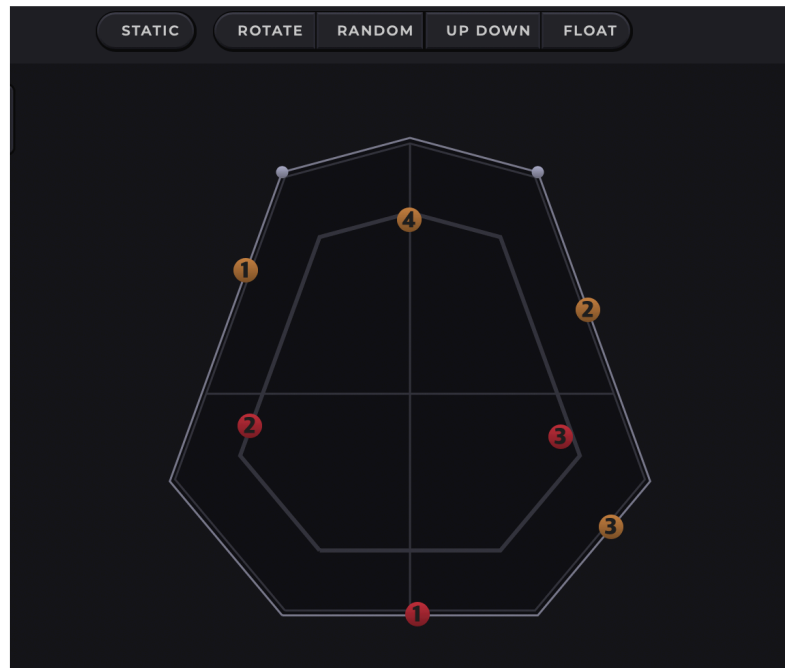


Figure 12. Movement Modifiers

In the Movement Modifiers menu, you can monitor the movement of particles and delays in the format that suits you best.

- a) **Static** - The sounds generated by the plugin stay fixed in position according to the placement of the handlers.
- b) **Rotation** - The sounds generated by the plugin can move clockwise or counterclockwise, with an adjustable speed ranging from 0 to 4000 m/s.
- c) **Random** - The delays and particles move around the sound stage randomly, with any speed between 0 and 4000m/s.
- d) **Up Down** - This movement was created for configurations with flown speakers where the sounds generated by the inDelay travel in a vertical motion.
- e) **Float** - The sounds generated by the plugin move within a certain area, this area can be up to 180° from the original point, with a speed ranging from 0 to 4000m/s.

FILTERS



Figure 13. Filters

- a) How to choose various types of filters: 3 Band, Parametric, Craziness and Air.
- a.1. **3 Band** - Boost or cut three fixed frequency bands (Low, Mid, High) using the three knobs.
 - a.2. **Parametric** - Adjust the parameters of a single frequency band using the Frequency, Q factor, and Gain controls.
 - a.3. **Craziness** - Effect that allows you to create time diffusion delays based on the delay time, creating a reverb-like effect.
 - a.4. **Air** - Decrease high frequencies simulating the absorption of the air.

TIME EDITOR

In the time editor, you can visualize and edit time and level settings depending on the mode you are using. For the Channels and Taps modes, you can define the Time and Gain (by clicking and dragging the first repetition of each channel/tap) or the Feedback (by clicking and dragging any other repetition of each channel/tap).

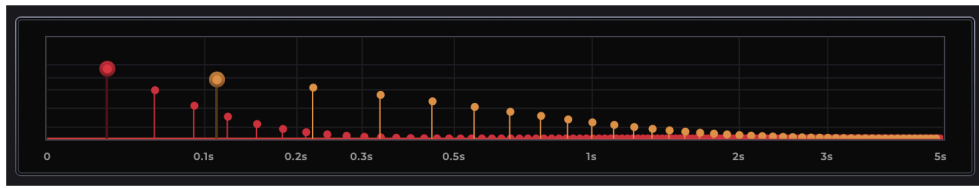


Figure 14. Filters

On the Particles mode, you can set the Delay Time (by clicking and dragging the main handler) and Time Divergence (by clicking and dragging any of the side arrows).

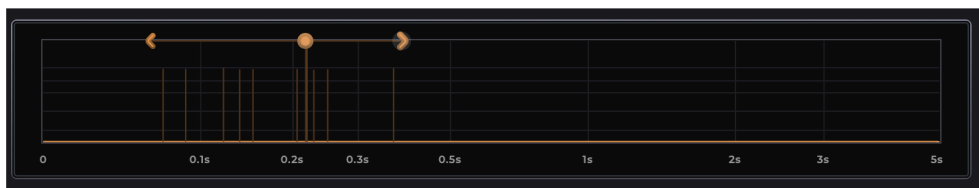


Figure 15. Filters

During the playback you also have a waveform history that helps visualizing the input signal being delayed. By right-clicking the Time Editor you have access to the following options to make it useful for your workflow:

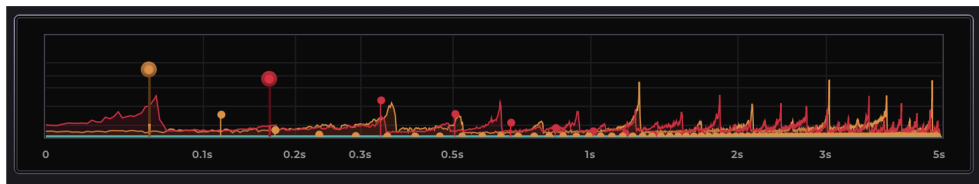


Figure 16. Filters

History - Opens a submenu with the options to show the history of all channels/tap, only the current channel/tap or hide the history of all channels/taps.

Meters - Opens a submenu with the options to show the VU meter on the first repetition for all channels/tap, only the current channel/tap or hide the VU meter for all channels/taps.

Show all channels/taps - When selected the Time Editor shows the repetitions of all channels/taps.

Show current channel/tap - When selected the Time Editor shows the repetitions of the current selected channel/tap.

Edit all channels/taps - When selected, the Time Editor allows to edit the repetitions of all channels/taps.

Edit current channel/tap - When selected, the Time Editor allows to edit the repetitions of the current selected channel/tap.

Linear time scale - Sets the time scale to linear where time is represented in a uniform way and each unit of time is the same. For example, on a linear timeline, the time intervals between seconds are constant. If we were visualizing sound data over time, a linear scale would present each second or millisecond equidistantly.

0s 1s 2s 3s 4s 5s |-----|-----|-----|-----|-----|

Logarithmic time scale - Sets the time scale to logarithmic where time is represented in a non-uniform way. Each unit of time increases according to a logarithmic base. This means that each time interval represents a multiplication of the previous interval, not a constant addition.

0s 1s 10s 100s 1000s |-----|-----|-----|-----|

Particles

Finally, we have the Particles mode, where we can create delays using the seeds of the original sound. On the left side, we have the general controls for this mode (number of particles generated and how they are distributed). Then we have the delay time and divergence controls for the particles. In the center of the plugin, we have the control for the position and movement modifiers, and on the right, the filter section.



Figure 17. 7

1. **Number of Particles** - Number of particles generated based on the input signal. This number of particles generated varies between 0 and 100 particles. Each particle will be fed by one input channel, following the channel order. e.g. particle one fed by channel one, particle 2 fed by channel 2, etc...
2. **Space Pattern** - This option allows the user to choose various spatial patterns in which to distribute the created particles: regular, horizontal, vertical, soundscape and soundscape 3D. All options are explained in more detail in the space pattern section below.
3. **Space Distribution** - The distribution of the generated particles can be done in a Linear or Gaussian way. All options are explained in more detail in the space distribution section below.
4. **Time/Tempo** - Adjusts the time between the original sound and each repetition, within a range of 0 to 2500ms or 1/1 (.) to 1/128 (3), when Sync is enabled.
5. **Sync** - If enabled, the delay time is synchronized with the time set in the DAW

- 6. Distance Attenuation** - This parameter creates the feeling of attenuation based on distance, within a range of 0dB to 18dB.
- 7. Time Divergence** - Defines how much the particles delay will diverge from the original time, within a range of 0 to 5000ms.
- 8. Gain Divergence** - Defines how much the particles gain will diverge from the original time, within a range of 0dB to 12dB.
- 9. Pan Divergence** - Controls the particles position divergence in percentage.
- 10. Movements Modifiers** - In this parameter you can choose the path that the delays can follow. These movements are Static, Rotate, Random, Up Down and Float.
- 11. 3D Pan** - View the position of all sound elements.
- 12. Filters** - Choose various types of filters, 3 Band, Parametrics, Air and Crazyness.

SPACE PATTERN

Enables you to choose various types of distribution.

- 1. Regular** - All particles are distributed randomly on full sphere.
- 2. Horizontal** - All particles are distributed on horizontal plane with 0° elevation.
- 3. Vertical** - All particles are distributed on vertical plane oriented by the handler position.
- 4. Soundscape** - All particles are distributed in a square plane, higher delay times distribute the particles over a larger square area, smaller delay times make the opposite.
- 5. Soundscape 3D** - All particles are distributed in a cube shape, higher delay times distribute the particles over a larger area, smaller delay times make the opposite.

SPACE DISTRIBUTION

Enables you to choose various types of distribution.

- 1. Linear** - A statistical distribution in which the sounds generated are uniformly distributed along a straight line, with the same frequency or probability of occurrence for each value within the interval.
- 2. Gauss** - Characterized by its bell shape when plotted on a graph, describing a symmetrical distribution around a mean, with most of the data concentrated close to that mean.

MOVEMENT MODIFIERS

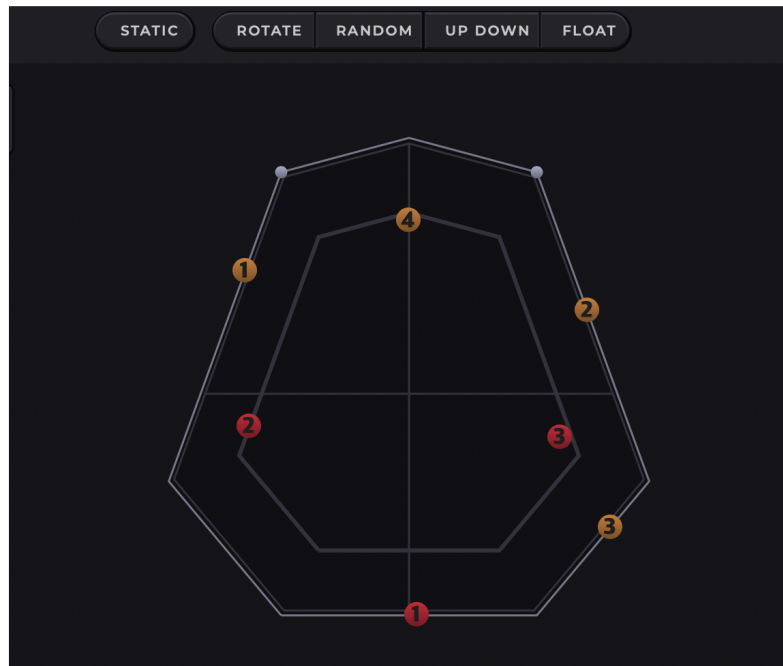


Figure 18. Movement Modifiers

In the Movement Modifiers menu, you can monitor the movement of particles and delays in the format that suits you best.

- 1. Static** - The sounds generated by the plugin stay fixed in position according to the placement of the handlers.
- 2. Rotation** - The sounds generated by the plugin can move clockwise or counterclockwise, with an adjustable speed ranging from 0 to 4000 m/s.
- 3. Random** - The delays and particles move around the sound stage randomly, with any speed between 0 and 4000m/s.
- 4. Up Down** - This movement was created for configurations with flown speakers where the sounds generated by the inDelay travel in a vertical motion.
- 5. Float** - The sounds generated by the plugin move within a certain area. This area can be up to 180° from the original point, with a speed ranging from 0 to 4000m/s.

FILTERS



Figure 19. Filters

How to choose various types of filters: 3 Band, Parametric, Air.

- 1. 3 Band** - Boost or cut three fixed frequency bands (Low, Mid, High) using the three knobs.
- 2. Parametric** - Adjust the parameters of a single frequency band using the Frequency, Q factor, and Gain controls.
- 3. Air** - This effect applies the necessary distance attenuation so that the sounds generated by inDelay closely resemble real-life sound events.

TIME EDITOR

In the time editor, you can visualize and edit time and level settings depending on the mode you are using. For the Channels and Taps modes, you can define the Time and Gain (by clicking and dragging the first repetition of each channel/tap) or the Feedback (by clicking and dragging any other repetition of each channel/tap).

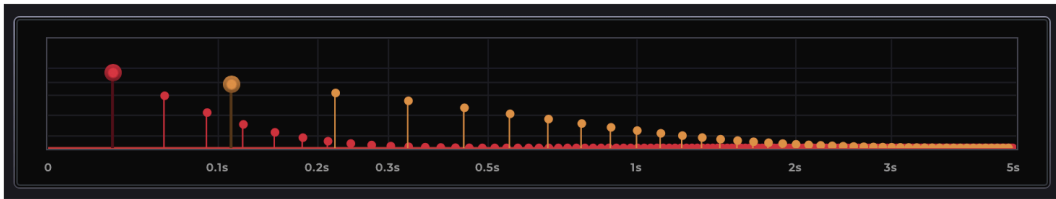


Figure 20. Filters

On the Particles mode, you can set the Delay Time (by clicking and dragging the main handler) and Time Divergence (by clicking and dragging any of the side arrows).

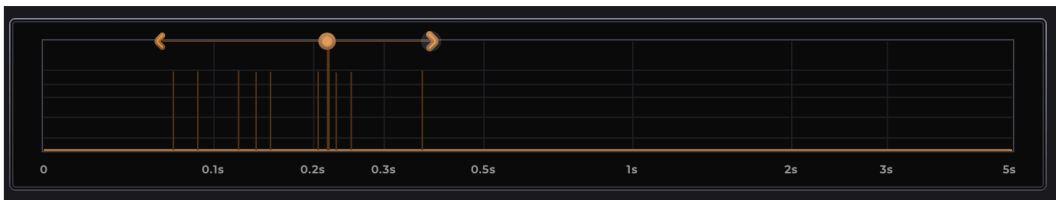


Figure 21. Filters

During the playback you also have a waveform history that helps visualizing the input signal being delayed. By right-clicking the Time Editor you have access to the following options to make it useful for your workflow:

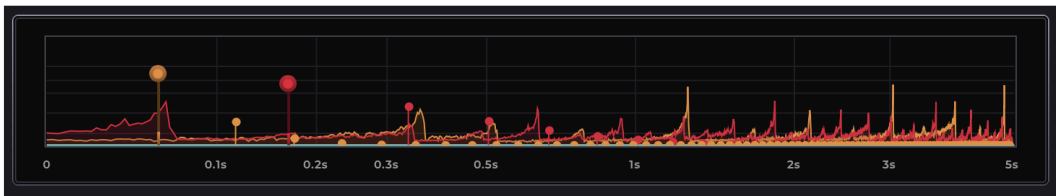


Figure 22. Filters

History - Opens a submenu with the options to show the history of all channels/tap, only the current channel/tap or hide the history of all channels/taps.

Meters - Opens a submenu with the options to show the VU meter on the first repetition for all channels/tap, only the current channel/tap or hide the VU meter for all channels/taps.

Show all channels/taps - When selected the Time Editor shows the repetitions of all channels/taps.

Show current channel/tap - When selected the Time Editor shows the repetitions of the current selected channel/tap.

Edit all channels/taps - When selected the Time Editor allows to edit the repetitions of all channels/taps.

Edit current channel/tap - When selected the Time Editor allows to edit the repetitions of the current selected channel/tap.

Linear time scale - Sets the time scale to linear where time is represented in a uniform way, and each unit of time is the same. For example, on a linear timeline, the time intervals between seconds are constant. If we were visualizing sound data over time, a linear scale would present each second or millisecond equidistantly.

Logarithmic time scale - Sets the time scale to logarithmic where time is represented in a non-uniform way. Each unit of time increases according to a logarithmic base. This means that each time interval represents a multiplication of the previous interval, not a constant addition.

Output Section

inDelay has an output section dedicated to the parameters that modify the already processed audio. These are the parameters:

- 1. Input (Dry)** - Controls the level of the input signal sent to the output (dry signal).
- 2. Delay (Wet)** - Controls the level of the processed signal sent to the output (wet signal).
- 3. Master** - Controls the output level of the plugin.

The current signal levels are visible in the VU meters located on the right side of the interface. Users can access a pop-up menu by right-clicking on the VU meters. This allows users to reset the VU's animation (e.g., if they have already clipped) and view the render format in use.

Bottom Bar

On the bottom of the window you also have access to a bottom bar with useful features:

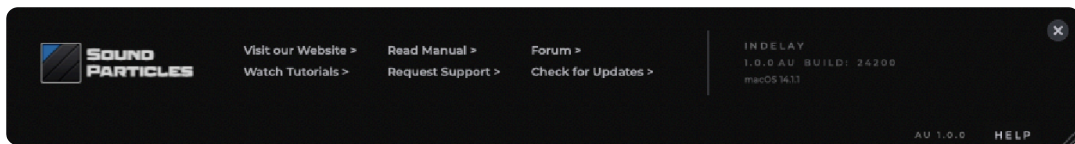


Figure 23. Bottom Bar

1. **Tooltips' section** - Every time you move the mouse cursor over a knob or any control, you will see a short description of that parameter.
2. **Update** - If the plugin is running on a computer with Internet access, it can detect if a newer update is available, informing the user, by showing a blinking phrase on the bottom of the display.
3. **Help button** - Open the Help Panel, which shows additional information and useful links.
 - a) **Visit our Website** – Link to soundparticles.com
 - b) **Watch Tutorials** – Link to inDelay [tutorials](#)
 - c) **Read Manual** – Web version of this Manual.
 - d) **Request Support** – Redirect users to the requested support page. This will automatically retrieve some data about your setup (OS, CPU, RAM, plugin version and host).
 - e) **Forum** – Link to our user Facebook group, [Sound Particles Forum](#).
 - f) **Check for Updates** - Access soundparticles.com to check if there are available updates. Normally, usually a new update comes out, the plugin automatically shows it but you can use this to be sure your version is up to date.
 - g) **Resize button** - Users are allowed to use a custom scaling factor by dragging the cursor in the bottom-right of the plugin's interface. Performing this makes the zoom pop-up display the custom value of the scaling. **Please note that hosts may deal differently with plugin resizes.*

Plugin and Presets Location

Installing inDelay copies the plugin into appropriate plugin folders, and the hosts will automatically recognize them. It also allows inDelay users to choose a custom folder for the installation, in both operating systems — MacOS and Windows.

On MacOS, the default paths for inDelay plugin architectures are the following:

- VST3: /Library/Audio/Plug-Ins/VST3
- AU: /Library/Audio/Plug-Ins/Components
- AAX: /Library/Application Support/Avid/Audio/Plug-Ins

On Windows, the default paths for inDelay plugin architectures are the following:

- VST3: C:\Program Files\Common Files\VST3
- AAX: C:\Program Files\Common Files\Avid\Audio\Plug-Ins

PRESETS LOCATIONS

User presets will be stored in a .spp file in the following locations:

On MacOS, the path for inDelay User presets is the following:

- /Users/USERNAME*/Library/Application Support/Sound Particles/inDelay/Presets

On Windows, the path for inDelay User presets is the following:

- C:\Users\USERNAME**\AppData\Roaming\Sound Particles\inDelay\Presets

*USERNAME is your login name. Your user Library folder may be hidden, in which case you can select the “Go To Folder” option in the Go menu of the Finder, enter “~/Library”, and click OK.

**USERNAME is your login name. AppData may be hidden; use the explorer view options to show system files.

Tips

Feedback Knob:

- Right-clicking on a parameter allows you to choose between percentage feedback or dB's.

Time Editor:

- Right-clicking on a parameter allows you to choose between linear or logarithmic scale.

Snap Option:

- Using the shift modifier you can snap to the speakers positions

Additional Notes

CHECK FOR UPDATES

If the plugin is running on a computer with internet access, it is able to detect if a newer update is available, informing the user of the existence of a new update, by showing a blinking phrase on the bottom bar of the plugin.

To achieve that, Sound Particles inDelay plugin tries to access a simple XML file located at <https://www.soundparticles.com>.

SOUND PARTICLES INDELAY DOES NOT SEND ANY INFORMATION FROM THE USER OVER THE INTERNET.

SUPPORT

If you detect a bug, if you have a crash, if you believe something is not perfect, or even if you have ideas for future versions, don't hesitate, and email us at support@soundparticles.com. We REALLY want to hear from you. Sometimes a bug lives on for too much time, simply because we haven't detected ourselves and we didn't receive any feedback from the affected users. Besides that, your feedback is very important to us.

Help us help you

Credits

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- Carolina Vicente

Developers:

- Ricardo Maltez
- Gonçalo Matos
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- Rui Rijo, PhD

QA:

- João Dionísio
- João Franco
- Luís Rodrigues
- Salvador Miranda

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100% Up and down* IN Mono OUT 7.1.2

INDELAY CHANNELS TAPS PARTICLES **SOUND PARTICLES**

Tap 1 Tap 2 Tap 3 Tap 4 Tap 5 Tap 6 Tap 7 Tap 8 Tap 9 Tap 10 Tap 11 Tap 12 Tap 13 Tap 14 Tap 15 Tap 16

INPUT DELAY

STATIC ROTATE RANDOM **UP DOWN** FLOAT NONE

TAP

VZ TEMPO SYNC

-14.9 dB GAIN

-29.2 dB FEEDBACK

Classic

180 % SPEED

KILL

0 -10 -20 -30 -40

-12.0 dB INPUT

0.0 dB DELAY

-6.0 dB MASTER

1/16 1/8 1/4 1/2 1/1 2/1

AAX 0.0.2 HELP

