



**SIGNALWORK**  
AUDIO

MAC + WINDOWS

# SW Delay

User guide: how to use it, control by control.



DIGITAL / TAPE / ANALOG • MONO / STEREO / PING-PONG / DUAL

SW Delay 1.0.0

AU and VST3 for macOS • VST3 for Windows

[signalworkaudio.com](https://signalworkaudio.com)

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## About this guide

SW Delay is a stereo delay with three voices (Digital, Tape and Analog) and four ways to place the repeats (Mono, Stereo, Ping-pong and Dual). This guide shows how to install it, start it, and use every control.

**Reading a control name.** Bold names are labels in the plug-in. A slash separates choices, such as **Warm / Grit**. Screenshots show the Aqua theme; your theme may differ.

**Mac and Windows.** Cmd is the Mac Command key. Where this guide says Cmd + click, use Ctrl + click on Windows.

# Install SW Delay

## macOS

Quit your DAW, then open the installer package and follow the steps. It installs SW Delay for macOS 11 or later, on Apple silicon and Intel:

`/Library/Audio/Plug-Ins/Components/SW Delay.component (AU)`

`/Library/Audio/Plug-Ins/VST3/SW Delay.vst3 (VST3)`

Both formats are selected by default. An administrator password is needed. The installer does not install or remove SW Rack or the Signalwork Suite plugins, and your preferences, licenses and presets are kept.

If an older SW Delay of the same format is in your own user Library, it is moved to `~/Library/Application Support/Signalwork/rollback/` so it cannot shadow the new one. Nothing is deleted. Afterwards, fully quit and reopen your DAW so it rescans its plug-ins.

## Windows

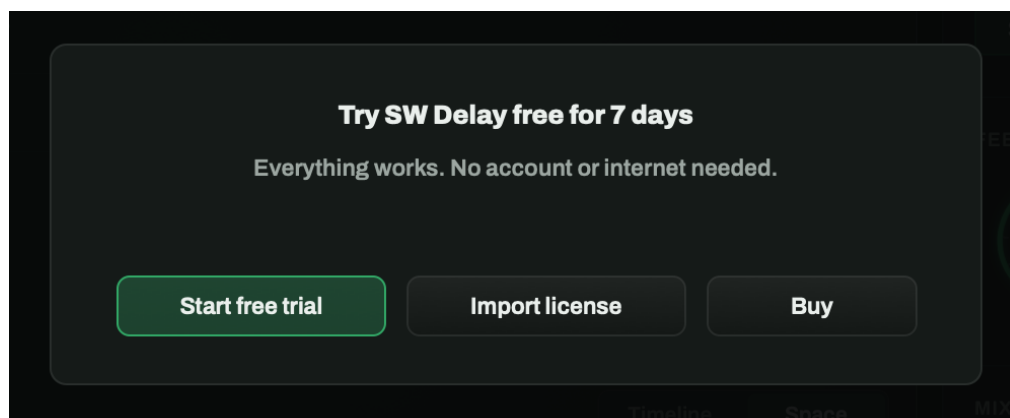
SW Delay for Windows is a VST3 in a ZIP file. It needs Windows 10 or 11 and a 64-bit DAW that supports VST3. You do not need the Microsoft Visual C++ Redistributable.

1. Quit your DAW.
2. Extract the ZIP. Copy the whole **SW Delay.vst3** folder into **C:\Program Files\Common Files\VST3**.  
Windows asks for administrator permission; that is expected. SW Delay is a folder, not a single file, so copy the whole folder. If an older SW Delay is there, replace it.
3. Open your DAW, rescan your VST3 plugins and confirm SW Delay 1.0.0.

## Updating and removing

To update, install the new version the same way. To remove SW Delay, delete `SW Delay.component` and `SW Delay.vst3` from the folders above (Mac), or the `SW Delay.vst3` folder (Windows). Your presets, preferences and license stay on your computer.

# Start your trial or import a license



The first time you open SW Delay. Nothing starts until you choose.

## The free trial

SW Delay offers a free 7-day trial with everything working. No account or internet connection is needed. The trial starts only when you press **Start free trial** in the SW Delay plug-in; installing, scanning or opening it never starts the clock. Opening SW Rack never starts the SW Delay trial either.

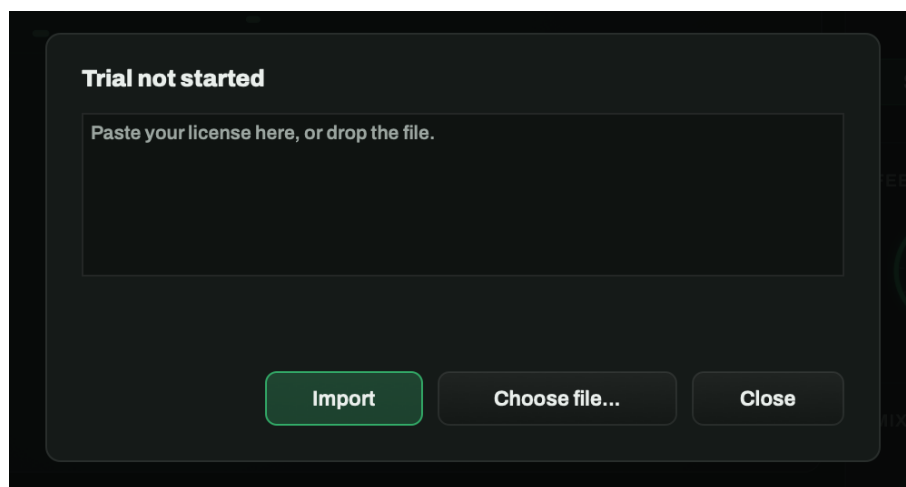
During the trial the bottom bar shows **Trial: 7 days left** (counting down) and a **Buy** button, which opens the SW Delay page in your browser. Click the days-left label to open the License panel.

## Import a license

After you buy, you receive a license. Choose **Import license** (or the days-left label, or **License...** in the display settings), then paste the whole license and click **Import**, choose the file with **Choose file...**, or drop the file onto the panel. SW Delay confirms with **License imported**. Every open SW Delay of the same format unlocks at once. Licenses are checked on your computer; nothing goes online.

A license for SW Rack does not unlock SW Delay, and a SW Delay license does not unlock SW Rack.

# Import a license, step by step



The License panel: paste the license, or choose or drop the file.

## Messages you may see

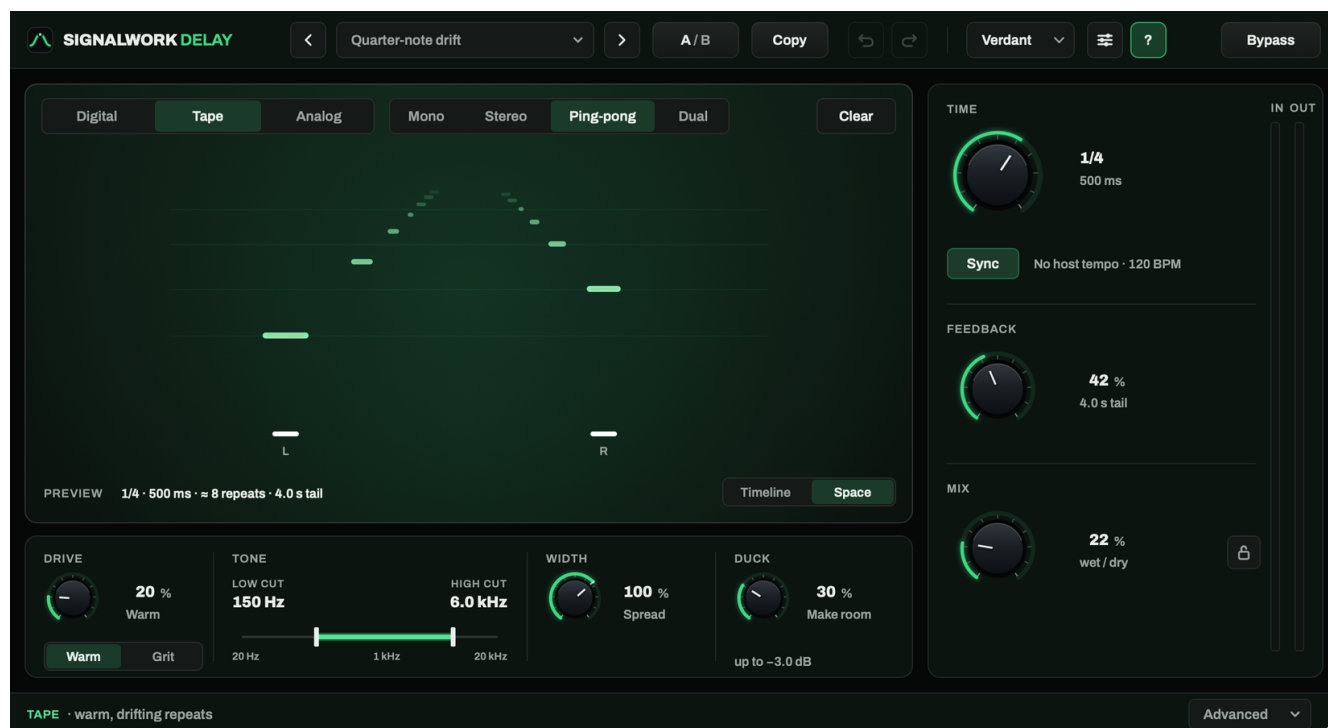
| Message                                                                     | What it means                                                                                     |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| License imported.                                                           | Done. SW Delay is licensed on this computer.                                                      |
| That license could not be read. Copy all of it, or choose the license file. | Part of the text is missing. Copy the whole license, or use the file.                             |
| That license does not work with this copy of SW Delay.                      | It is a license for another product, such as SW Rack.                                             |
| Licensed for this session. The license file could not be saved.             | It works now, but SW Delay could not save it. Check your disk and permissions, then import again. |
| Your permanent license stays in force.                                      | You imported a trial extension while a full license is already saved.                             |
| That trial extension has ended.                                             | The extension's last day has passed.                                                              |

## When the trial ends

SW Delay shows **Your SW Delay trial has ended.** with **Buy SW Delay** and **Import license**. Your settings are kept, and they come back unchanged when you import a license.

If the trial ends while your DAW is open, SW Delay keeps working until you quit the DAW, including new instances and offline bounces in the same plug-in format. The bottom bar then reads **Trial ended**.

# A first delay in a minute



SW Delay's default settings: the Quarter-note drift preset, in the Space view.

1. Insert SW Delay on a vocal, guitar or instrument track. It works on mono and stereo tracks. For a send, see Using SW Delay in a mix.
2. Pick a starting point from the preset menu at the top, or keep the default **Quarter-note drift**.
3. Set **TIME**. With **Sync** on it steps through note values that follow your song tempo.
4. Set **FEEDBACK** for how long the repeats last. The readout below it estimates the tail, such as 4.0 s tail.
5. Set **MIX** to taste. 15 to 25 % is a good start on an insert.
6. Choose a voice: **Digital** for clean repeats, **Tape** for warm drifting repeats, **Analog** for darker repeats that narrow as they fade.
7. If the repeats clash with the performance, raise **DUCK** so they step back while you play and come forward in the gaps.

The display shows where each repeat falls and how loud it should be. It updates as you turn any control.

# The screen at a glance

| Where        | Controls                         | What they do                                            |
|--------------|----------------------------------|---------------------------------------------------------|
| Top bar      | Preset menu, < and >             | Choose, step through and save presets                   |
| Top bar      | A / B, Copy                      | Compare two settings                                    |
| Top bar      | Undo, Redo                       | Step back and forward through your edits                |
| Top bar      | Theme, settings, ?, Bypass       | Colors, Reduce motion and license, tooltips, and Bypass |
| Display      | Digital / Tape / Analog          | The voice: the character of the repeats                 |
| Display      | Mono / Stereo / Ping-pong / Dual | Where the repeats sit in the stereo field               |
| Display      | Clear                            | Erase the repeats now                                   |
| Display      | Timeline / Space                 | Two ways to see the repeats                             |
| Right panel  | TIME, Sync                       | Delay time, as a note value or in milliseconds          |
| Right panel  | FEEDBACK                         | How long the repeats last                               |
| Right panel  | MIX, Mix lock                    | Dry and delayed balance; keep Mix when changing presets |
| Right panel  | IN / OUT                         | Input and output level meters                           |
| Bottom strip | DRIVE, Warm / Grit               | How hard the repeats are driven, and how                |
| Bottom strip | TONE                             | Low cut and high cut on every repeat                    |
| Bottom strip | WIDTH                            | How wide the repeats spread                             |
| Bottom strip | DUCK                             | How far the repeats step back while you play            |
| Bottom bar   | Voice line, Advanced             | The voice in words; open the Advanced settings          |

The bottom bar also shows how many Advanced settings differ from the loaded preset, such as 2 advanced settings changed, while the Advanced drawer is closed.

## Hover for help

With ? turned on (it is on by default), every control shows a short tooltip when you rest the pointer on it. Click ? to turn tooltips off for every control.

# Voice and mode

## Voice: Digital, Tape or Analog

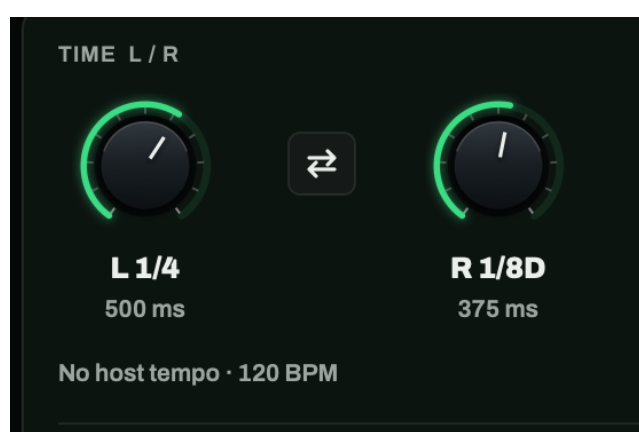
The voice sets the character of the repeats. The bottom bar describes the current voice.

| Voice   | Character                                                |
|---------|----------------------------------------------------------|
| Digital | Clean, exact repeats. Motion and Age do not apply.       |
| Tape    | Warm, drifting repeats.                                  |
| Analog  | Dark repeats that narrow toward the center as they fade. |

Clicking a voice also sets **Motion**, **Rate** and **Age** to that voice's starting values (Digital 0 %, 0.60 Hz, 0 %; Tape 25 %, 0.60 Hz, 35 %; Analog 30 %, 0.40 Hz, 50 %). Undo brings back your earlier Advanced settings if you need them.

## Mode: Mono, Stereo, Ping-pong or Dual

| Mode      | Where the repeats go                                                                                                  |
|-----------|-----------------------------------------------------------------------------------------------------------------------|
| Mono      | The input is summed to mono and the repeats sit in the center.                                                        |
| Stereo    | Left and right are delayed separately. <b>L/R offset</b> in the Advanced drawer makes one side repeat later.          |
| Ping-pong | Repeats alternate left, right, left, starting on the left. The first right repeat is about as loud as the first left. |
| Dual      | Left and right each have their own note value.                                                                        |



Dual: separate L and R note values, with the swap button between them.

**Dual** always uses note values, so the Sync button is hidden while it is on. The swap button between the L and R knobs exchanges the two note values. Click Mono, Stereo or Ping-pong to leave Dual.

# Time, Feedback and Mix

## Time and Sync

With **Sync** on, Time steps through 14 note values that follow your song tempo: 1/32, 1/16T, 1/16, 1/8T, 1/16D, 1/8, 1/4T, 1/8D, 1/4, 1/2T, 1/4D, 1/2, 1/2D and 1 bar. T means triplet and D means dotted. 1 bar is always four beats. The readout shows the note and its length in milliseconds.

With Sync off, Time is free, from 10 to 2000 ms, and the readout says **free time**. Turning Sync off keeps the time you were hearing; turning it on moves to the nearest note value.

Below Sync, SW Delay shows the tempo it follows, such as **Host • 120 BPM**. If your DAW sends no tempo, it reads **No host tempo • 120 BPM** and uses the last tempo it received, or 120 BPM.

SW Delay holds up to 6 seconds of audio. A long note at a slow tempo is held at 6 seconds and shows **6.0 s max**.

## Feedback

Feedback sets how long the repeats last. The readout estimates the tail, such as **4.0 s tail**. Even at 100 % the repeats always die away in the end; SW Delay has no infinite hold.

## Mix and Mix lock

**MIX** balances the dry and delayed sound. At 100 % the readout says **wet only (send)**: use this on a send. The padlock next to the readout is **Mix lock**. With it closed, choosing a preset keeps your current Mix and changes everything else. Mix lock is saved with your session.

## Meters

**IN** and **OUT** show the input and output peaks from -60 to 0 dBFS. The top turns red at 0 dBFS.

# Drive, Tone, Width and Duck

## Drive and Warm / Grit

**DRIVE** saturates the repeats; 0 % is clean. The amount is the same for quiet and loud sources. **Warm** rounds the repeats off. **Grit** adds edge and bite, and the tail roughens with each repeat.

## Tone: low cut and high cut

**TONE** shapes every repeat, not the dry sound. Drag either end of the strip: the end nearer the pointer follows it. **LOW CUT** thins the repeats and **HIGH CUT** darkens them. Each cut repeats with every echo, so later repeats get thinner and darker. Drag an end fully out to turn that cut **Off**.

## Width

**WIDTH** spreads the repeats, from 0 % (narrower) through 100 % to 150 % (wider). The readout says **Narrower**, **Spread** or **Wider**. A plain drag catches at 100 %; hold Shift to set values close to it. In Mono, Width does not apply and shows **Mono**.

## Duck

**DUCK** lowers the repeats while you play and lets them come back in the gaps, so the echoes stay out of the way of the performance. It works automatically, with no threshold to set. 100 % lowers them by up to 18 dB; the default 30 % is about 3 dB.

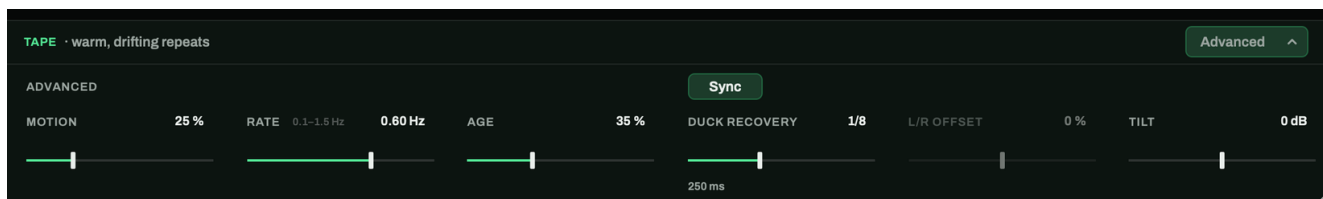
Below the knob, **up to -3.0 dB** shows the setting's full depth. While audio runs, a **GR** bar shows how much Duck is lowering the repeats right now. **Duck recovery** in the Advanced drawer sets how fast they come back.



The Dark dub throw preset: Analog voice, Mix 100 % for a send, long feedback.

# The Advanced drawer

Click **Advanced** at the bottom right to open six more settings. The window grows to make room. While the drawer is closed, the bottom bar counts how many of these differ from the loaded preset.



The Advanced drawer, open below the main controls.

| Setting       | What it does                                                                                                                                                            |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MOTION        | Gentle drift in the repeats, for movement and width. Tape and Analog only.                                                                                              |
| RATE          | How fast Motion drifts, from 0.1 to 1.5 Hz.                                                                                                                             |
| AGE           | Extra wear on each repeat: a little more loss of lows and highs, and a little more saturation, every time. On Analog it also narrows the repeats. Tape and Analog only. |
| DUCK RECOVERY | How fast the repeats come back after Duck. With its own <b>Sync</b> on it is a note value; with Sync off, 20 to 1000 ms.                                                |
| L/R OFFSET    | In Stereo, makes one side repeat later: <b>R +12 %</b> delays the right side, <b>L +12 %</b> the left.                                                                  |
| TILT          | Brighter or darker repeats, from -6 to +6 dB around 1 kHz. Each repeat tilts a little more.                                                                             |

Settings that do not apply to the current voice or mode are dimmed: Motion and Age on Digital, Rate when Motion is 0 %, and L/R offset outside Stereo. Drag a slider to set it; L/R offset and Tilt catch at the center.

# The display



The Timeline view: each repeat as a bar on a beat grid.

## Timeline and Space

Choose a view with **Timeline** / **Space** at the bottom right of the display. **Timeline** draws each repeat as a bar on a beat grid, with an L and an R lane (one lane in Mono). Bar size shows how loud each repeat should be. A dashed outline shows the level a repeat would have without Duck. **Space** shows the repeats receding into depth: short times stay near and long times move away. A new SW Delay opens in Space; the view is saved with your session.

While you play, the source glows and each repeat brightens when it should be sounding. The display is calculated from your settings; it does not listen to the output. Below it, **PREVIEW** sums it up, such as  $1/4 \cdot 500 \text{ ms} \approx 8 \text{ repeats} \cdot 4.0 \text{ s tail}$ .

## Clear

**Clear** erases all the repeats at once, with a very short fade, and the display shows **Repeats cleared**. It is an action, not a setting, so it is not automated or undone.

## Bypass

**Bypass** at the top right fades to the dry sound over 20 ms and erases the repeats, so old echoes never return when you switch back. Your settings stay editable while bypassed. Bypass is the plug-in's bypass parameter, so your DAW can automate it.

# Presets, A/B and Undo

## Factory presets

| Preset                       | Voice and mode           | Good for                                                  |
|------------------------------|--------------------------|-----------------------------------------------------------|
| Quarter-note drift           | Tape, Ping-pong, 1/4     | A warm all-rounder for vocals and guitars. The default.   |
| Dotted-eighth vocal          | Digital, Ping-pong, 1/8D | A clean rhythmic vocal delay that ducks under the singer. |
| Wide stereo eighths          | Digital, Stereo, 1/8     | Wide, clean eighths with the right side slightly later.   |
| Mono slapback                | Tape, Mono, 110 ms       | A short single slap for vocals, guitars and drums.        |
| Dark dub throw               | Analog, Ping-pong, 1/4D  | Long, dark throws on a send (Mix 100 %).                  |
| Dual quarter / dotted eighth | Tape, Dual, 1/4 and 1/8D | Two rhythms at once, one per side.                        |

Click the preset name to open the menu, or step with < and >. A dot on the preset name means you have changed something since loading it. Presets never change Bypass, and with **Mix lock** closed they keep your Mix.

## Your own presets

Choose **Save as...** in the preset menu and type a name. If the name exists, SW Delay asks before replacing it. Your presets appear under User in the menu and are shared by every SW Delay, including SW Delay inside SW Rack. They are saved as .swdelaypreset files in:

**Mac:** ~/Library/Application Support/Signalwork/Delay/Presets

**Windows:** %APPDATA%\Signalwork\Delay\Presets

## A / B and Copy

A / B flips between two complete sets of settings. **Copy** copies the side you are on to the other side; click it again within 3 seconds to confirm. A and B last until you close the project.

## Undo and Redo

Each complete edit is one step: a drag, a typed value, a click or a preset load. Undo and Redo affect only your own edits, never your DAW's automation. The history starts fresh each time the project opens.

# Controls and preferences

## Knobs

| To                    | Do this                                                                      |
|-----------------------|------------------------------------------------------------------------------|
| Change a value        | Drag up or down                                                              |
| Make a fine change    | Hold Shift while dragging                                                    |
| Return to the default | Cmd + click (Ctrl + click on Windows)                                        |
| Type an exact value   | Double-click the knob or its number, type, and press Return. Escape cancels. |
| Nudge                 | Use the scroll wheel                                                         |

You can type a value for Time, Feedback, Mix, Drive, Width and Duck. Type a note value by name, such as 1/8D. Numbers may include their unit: 1.5 s means 1500 ms, and 2 kHz means 2000 Hz.

The Tone strip and the Advanced sliders are set by dragging. For an exact value there, use your DAW's parameter view or automation; it accepts typing, including off for the two cuts.

## Look and window size

Choose a color theme from the theme menu at the top: **Verdant**, **Aqua**, **Violet**, **Amber** or **Neutral**. **Muted colors** softens the accent colors. The settings button next to it holds **Reduce motion**, which keeps the display still. Drag the corner at the bottom right to resize the window, from 75 to 150 %. SW Delay remembers the size.

## What is saved where

| Saved with          | What                                                                               |
|---------------------|------------------------------------------------------------------------------------|
| Your project        | Every setting, Mix lock, the view, whether Advanced is open, and the chosen preset |
| You (every project) | Theme, Muted colors, Reduce motion, tooltips and window size                       |
| Not saved           | A / B sides and the Undo history                                                   |

# Using SW Delay in a mix

## Insert or send

On an **insert**, keep Mix low (15 to 25 %) so the dry sound stays in front. Use **Mix lock** to keep that Mix while you try presets. On a **send**, set Mix to 100 %; the readout says **wet only (send)**. One send can feed several tracks, and **Duck** follows whatever arrives on the send.

## When the trial has ended on a send

An expired trial behaves like Bypass. On a fully wet send, the return carries the dry send signal, which can sound louder rather than going quiet. It takes effect once the trial has ended and you have quit and reopened your DAW. Import your license to restore the delay; your settings are kept.

## Tempo and timing

Synced times follow your DAW's tempo, including tempo changes. Changing any setting while playing never clicks: time changes glide or crossfade smoothly, and other controls move over a few milliseconds.

SW Delay adds no latency. It tells your DAW its tail is unlimited, so DAWs keep processing while echoes ring out after the audio stops.

## Mono and stereo tracks

SW Delay works mono in to mono out, mono in to stereo out, and stereo in to stereo out. On a mono output the repeats are folded to mono.

## Automation and sessions

Every control can be automated, including Bypass. SW Delay's presets are not exposed as DAW programs, so recalling a session never overwrites your settings with a preset. Sessions from earlier versions of SW Delay open with their settings intact.

## Long repeats and Clear

Lowering Feedback lets the existing repeats die away faster; **Clear** removes them at once. Bypass also erases the repeats.

# SW Delay inside SW Rack



SW Delay as a module in SW Rack. Rack provides the theme, tooltips and the module's on/off switch.

## When the module is available

SW Delay is also available as a module in SW Rack 1.3.0 or later when both SW Rack and SW Delay are licensed or in their trial. Opening SW Rack never starts the SW Delay trial. Start the trial or import your license in the separate SW Delay plug-in. Then open Rack's editor or its module menu, and Rack picks up the change.

## What is different inside Rack

The module has every control, the display, presets and the Advanced drawer. Rack provides the theme and tooltips, and the module has no license screens, no Bypass button and no Undo; use the module's on/off switch in Rack. Your user presets are shared with the separate SW Delay.

## A saved Rack without access

If you open a Rack session with a SW Delay module while SW Delay is not available, the module keeps all its settings and automation and passes audio dry. Rack shows a short notice that a saved module is unavailable. After you buy or import a license and refresh Rack, the module comes back exactly as it was.

# Troubleshooting

| Problem                                     | What to try                                                                                                                                                                                                      |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SW Delay does not appear in my DAW          | Fully quit and reopen the DAW, then rescan plug-ins. On Windows, check that the whole SW Delay.vst3 folder is in C:\Program Files\Common Files\VST3. On Mac, check both plug-ins are in /Library/Audio/Plug-Ins. |
| I hear no delay at all                      | Check that Bypass is off and Mix is above 0 %. If the trial has ended, SW Delay passes the dry sound; import your license.                                                                                       |
| My send got louder                          | An expired trial behaves like Bypass, so a fully wet send returns the dry signal. Import your license.                                                                                                           |
| The repeats are out of time                 | Check Sync is on and the tempo line shows Host. If it shows No host tempo, your DAW is not sending tempo to plug-ins.                                                                                            |
| A long note value sounds shorter            | Above 6 seconds the time is held at 6.0 s max. Choose a shorter note value or a faster tempo.                                                                                                                    |
| The repeats will not stop                   | Click <b>Clear</b> , or lower Feedback.                                                                                                                                                                          |
| Choosing a voice reset my Advanced settings | Clicking a voice sets its Motion, Rate and Age. Use Undo to get your earlier values back.                                                                                                                        |
| The meters stopped                          | They go blank when your DAW stops sending audio, for example while the transport is stopped.                                                                                                                     |
| The license will not import                 | Copy all of the license text, or use <b>Choose file...</b> or drop the file. A SW Rack license does not unlock SW Delay.                                                                                         |
| A session opened with default settings      | It was saved by a newer version of SW Delay. Update SW Delay and reopen it.                                                                                                                                      |

# Reference and support

## Requirements

| Platform | Formats                               | Needs                                           |
|----------|---------------------------------------|-------------------------------------------------|
| macOS    | AU and VST3 (Apple silicon and Intel) | macOS 11 or later, and a 64-bit AU or VST3 host |
| Windows  | VST3 (x64)                            | Windows 10 or 11, and a 64-bit VST3 host        |

## Your files

License (Mac): ~/Library/Signalwork/SW Delay License.swlicense

License (Windows): %APPDATA%\Signalwork\SW Delay License.swlicense

Preferences: delay.xml in ~/Library/Application Support/Signalwork (Mac) or %APPDATA%\Signalwork (Windows)

Keep a copy of the license you received; you can import it again at any time.

## Version

Click the SIGNALWORK DELAY logo in the plug-in to see its version and a link to downloads. This guide covers SW Delay 1.0.0, the first release.

## Ask for help

Email [signalworkaudio@gmail.com](mailto:signalworkaudio@gmail.com) with SW Delay's version, your operating system, DAW and version, plug-in format, and whether the track is mono or stereo. Briefly describe what you did, what you expected and what happened instead.

## Downloads and release notes

## Contact support

## Credits

SW Delay uses the Archivo typeface by Omnibus-Type (SIL Open Font License 1.1) and the Steinberg VST 3 SDK (MIT License). Both licenses are included with the download.