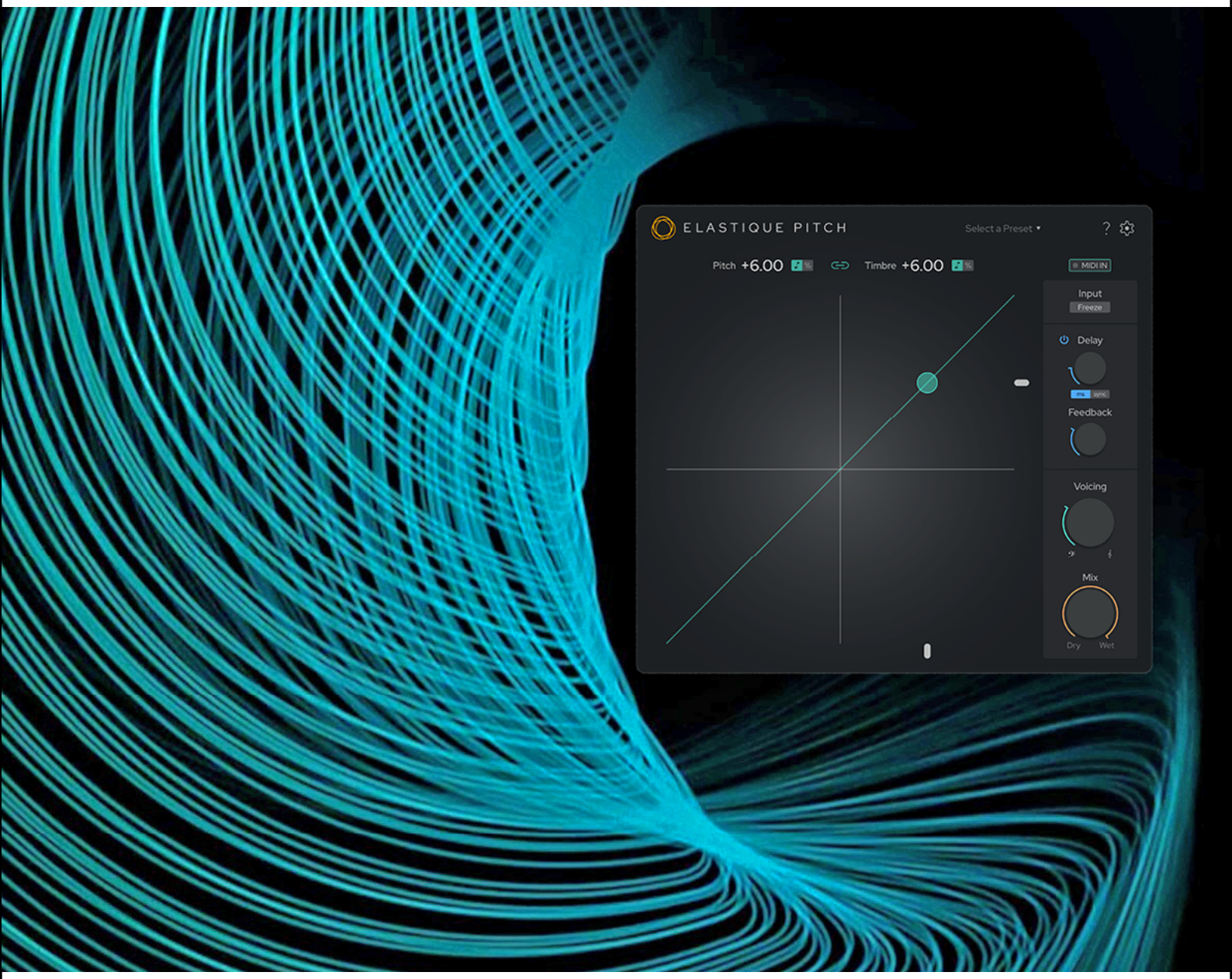
ELASTIQUE PITCH



User Manual

Version 2.5 / November 2025

zplane

Contents

1 Introduction

ELASTIQUE PITCH is a real-time pitch shifting plugin powered by zplane's **élastiquePro v3 technology**. This industry-leading algorithm is used by millions of musicians and producers worldwide and is also integrated into many popular DAWs and audio tools, ensuring the highest-quality, program-independent pitch shifting.

With version 2.5, ELASTIQUE PITCH has been redesigned from the ground up, featuring a new user interface and improved workflow. The result is even faster, more intuitive access to parameters, making the plugin an ideal solution for film and video conversion, sound design, and pitch adjustment in recording scenarios.

1.1 Key Features

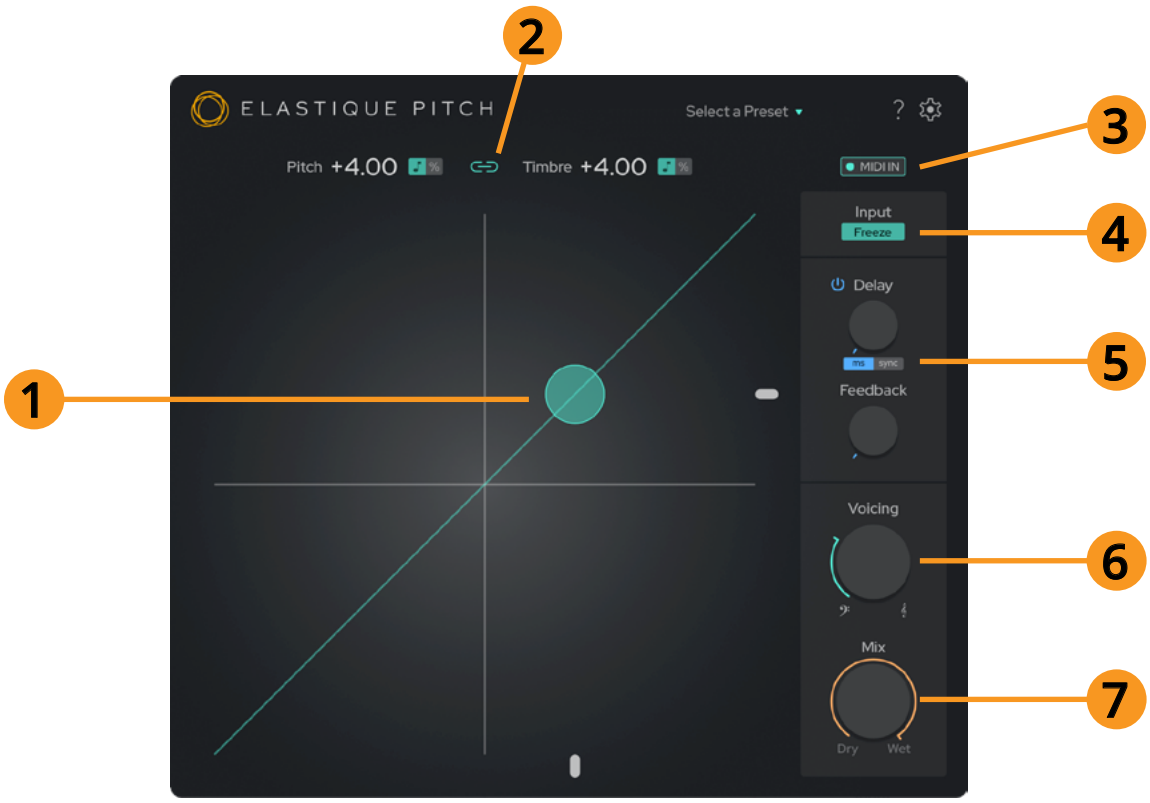
- **Multi-channel support:** Synchronous pitch shifting of up to 16 audio channels.
- **Real-time operation:** No offline pre-analysis required.
- **Program-independence:** High-quality pitch shifting for all audio types (speech, monophonic instruments, complete mixes, etc.).
- **Phase-coherence:** Absolute phase stability between all input channels.
- **MIDI input:** Real-time pitch control via MIDI.
- **Formant-shifting:** Shift formants independently from pitch.
- **Factory presets:** Ready-made for film pull-ups/pull-downs and creative sound design.
- **Delay effect:** Create pitch- or formant-shifted repeats.
- **Freeze:** Infinitely stretch and sustain audio.
- **Multiple plugin formats:** Supports VST3, AU, and AAX

1.2 Version 2.5 – New Features and Changes

- Completely redesigned, resizable user interface.
- Multi-channel support doubled to 16 audio channels.
- MIDI indicator and switch for pitch factor control via MIDI.
- Display of MIDI Pitch-Bend movements as secondary grey ball in the **[X/Y Display]**.
- Improved UX: **[Link]** switch and numerical **[Pitch]** & **[Timbre]** fields are now positioned above the **[X/Y Display]**; the **[Voicing]** control is now a rotary knob in the side panel.
- **[Delay]** On/Off switch
- The UI now always operates in **"Advanced Mode"** (other views removed).
- Legacy **VST2** support discontinued.

1.3 Overview

The ELASTIQUE PITCH interface is designed for ease of use, featuring only a few essential controls. At its core is a large **[X/Y control] (1)** for simultaneous editing of **[Pitch]** and **[Timbre]**. By deactivating the **[LINK]** button **(2)**, you can adjust these parameters independently, making ELASTIQUE PITCH highly versatile.



The side panel provides additional creative tools, including the **[MIDI In]** button **(3)** for activating **[Pitch]** factor control via MIDI, the **[Freeze]** control **(4)**, and a **[Delay]** section **(5)**: Each **[Feedback]** iteration is shifted by the set **[Pitch]** value, creating pitched delay effects.

The **[Voicing]** control **(6)** fine-tunes the algorithm's performance, while **[Mix] (7)** adjusts the dry/wet balance.

At the top of the window, you'll find a **"Preset"** menu with factory presets, plus buttons for **[Settings/Activation]** and **[Help]**.

A detailed description of all interface controls is provided in Section "3. The ELASTIQUE PITCH Interface" on page 5.

1.4 Naming Conventions

In this documentation, interface elements are styled as follows:

- **Buttons, sliders, & indicators**
are written in bold font within brackets, e.g., **[Freeze]**, **[Voicing]**.

- **Menu options**
are written in bold font within quotation marks, e.g., **"Stereo", "Mono"**.

- **Image references**
(numbered pointers) are written in bold font within parentheses, e.g., **(1), (2).**

2 Registration, Installation & Activation

ELASTIQUE PITCH is protected by a combination of a **serial number** and a corresponding **unlock key**. After purchasing the product, you will receive your **serial number** by e-mail.

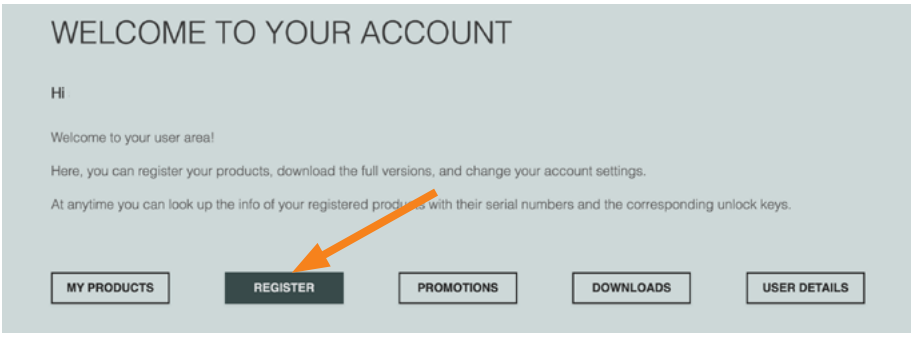
To obtain your **unlock key**, visit the zplane website and register ELASTIQUE PITCH using your serial number as described below. This process will generate the unlock key.

Once you have received the unlock key, you can download, install and activate the plugin within your host application.

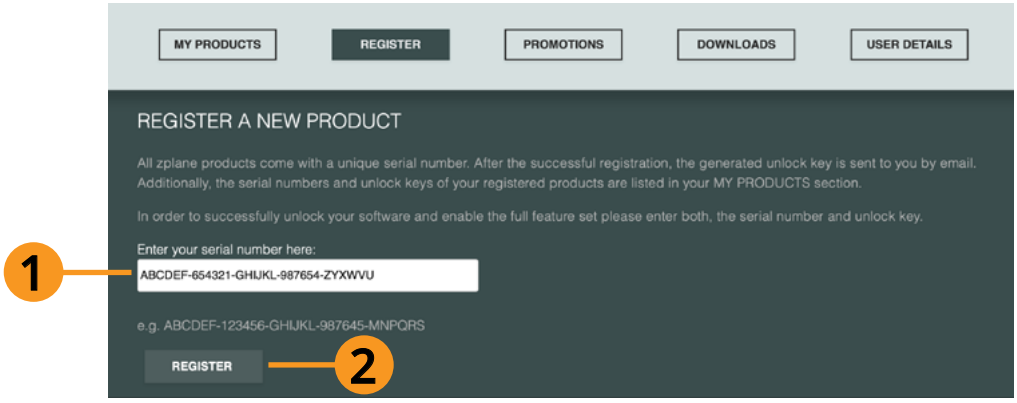
2.2 Registering Your Product

In order to receive your unlock key, please log in to your account at the zplane website — or create a new account, if you don't have one already. Then follow these steps:

1. Click the [REGISTER] button in the menu bar:



2. Paste your ELASTIQUE PITCH serial number into the data entry field (1), and click the [REGISTER] button (2) on the right:



3. Now your ELASTIQUE PITCH unlock key will be shown.

> **NOTE:** *You can recall your serial numbers and unlock keys at any time by logging in to your account and clicking the **[MY PRODUCTS]** button in the menu. This will display the serial numbers and unlock keys for all the zplane products you have registered in your account.*

2.2 Installation

After registering your ELASTIQUE PITCH serial number, the installers will be available in both the **“My Products”** and **“Download”** sections of your user account.

Here are step-by-step instructions of the installation on your specific operating system:

2.2.1 Windows

- Download the **ELASTIQUE PITCH Windows Installer** application ***(.exe)***.
- Double-click the file to launch the Installer.
- Click **[Next]** in the installer window.
- Read the End User License Agreement and, if you agree, click **[Next]**, otherwise, click **[CANCEL]** to abort the installation.
- Follow the on-screen instructions to complete the installation. You can choose to install all plugin variants or only specific ones during the process.

2.2.2 macOS

- Download the **ELASTIQUE PITCH macOS Installer** ***(.pkg)***.
- Double-click the installer file (.pkg).
- Click **[Continue]** in the installer window.
- Read the End User License Agreement, then click **[Continue]**. if you agree, click **[Agree]** in the dialog that appears; otherwise click **[Disagree]** to abort the installation.
- Follow the on-screen instructions to complete the installation. You can choose to install all plugin variants or only specific ones during the process.
- When installation is complete, click **[Close]** to exit the installer.

2.3 Activating Your Product

Before using ELASTIQUE PITCH, you need to activate it from within the plugin. Load the plugin in any compatible host application and follow these steps:

1. Open the ELASTIQUE PITCH user interface.

Most hosts will automatically display the plugin window as soon as it is loaded.
Access the Activation Screen by clicking the **[?] Help Page** button **(1)** in the top-right corner of the header bar.

2. Enter your license information.

Paste your **Serial Number (1)** and **Unlock Key (2**) into the fields provided, then click the **[Activate]** button **(3)**.

3. Confirm activation.

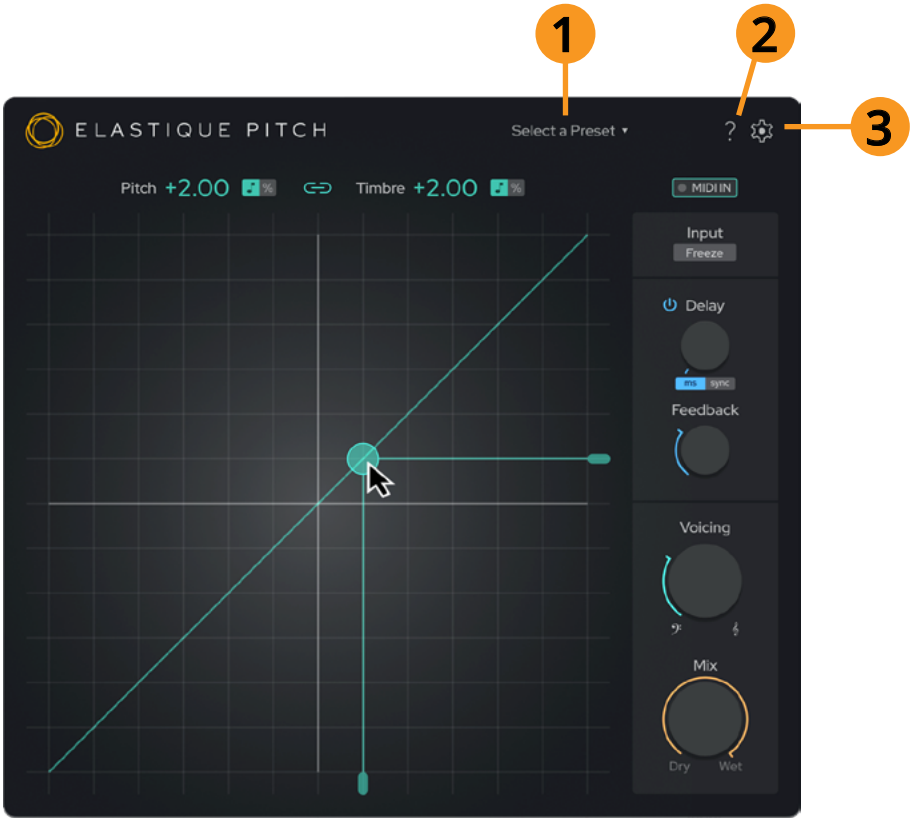
ELASTIQUE PITCH will activate and display your registered serial number.

4. Return to the main window.

After successful activation, close the Activation Screen to return to the main plugin interface.

3. The ELASTIQUE PITCH Interface

This chapter introduces the ELASTIQUE PITCH user controls in detail. The main parameters for pitch shifting are **[Pitch]**, **[Timbre]**, and **[Voicing]**, while the side panel offers additional creative features such as **[MIDI In]** for pitch control, **[Freeze]**, and the pitched **[Delay]** effect.



3.1 Presets Menu (1)

ELASTIQUE PITCH includes a range of built-in factory presets showcasing its creative potential, including the [Delay] feature and voice-altering capabilities. You'll also find a collection of conversion presets useful for frame-rate adjustments and other playback conversions.

To load a preset, click the "Select a Preset" (1) field at the top of the ELASTIQUE PITCH interface. This opens a dropdown menu where you can select a preset with the mouse.

> **NOTE:** *Factory presets in ELASTIQUE PITCH cannot be selected directly from a DAW's preset management system. To make a preset accessible within your DAW, first load it in the plugin, then save it using the DAW's preset manager. Refer to your DAW's documentation for details.*

3.2 Help (2) and Settings (3)

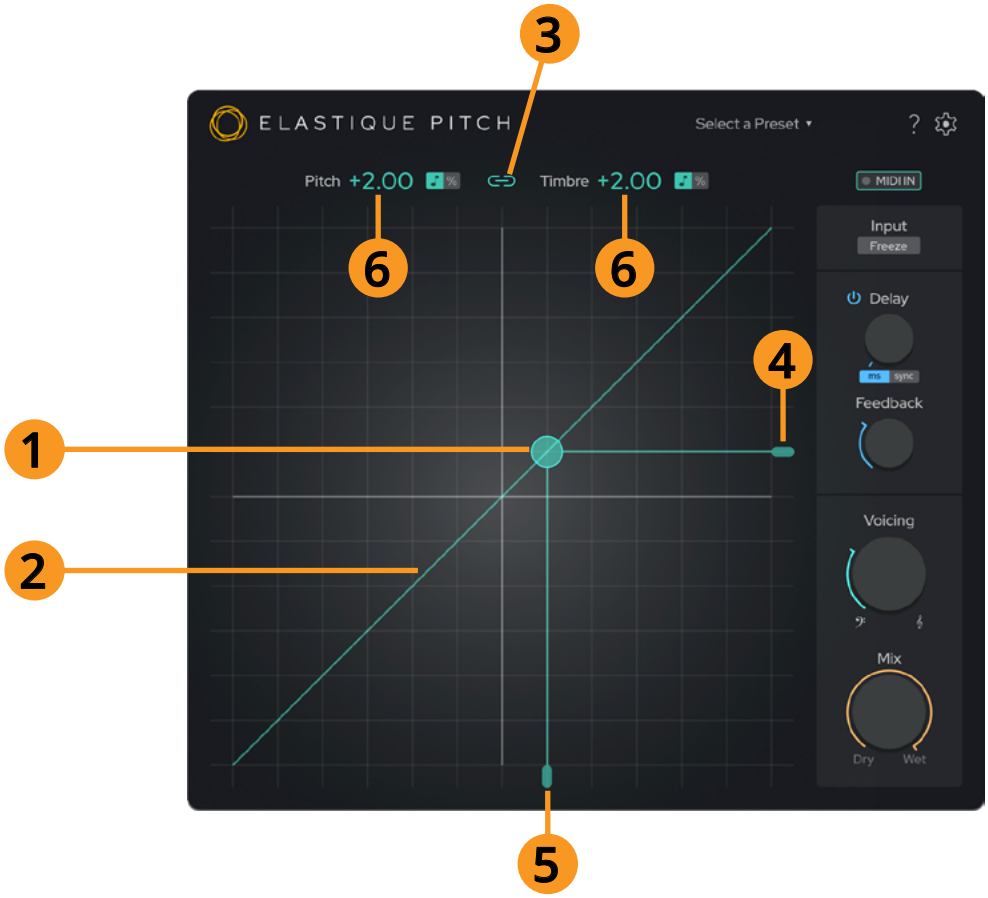
Click the **[?] Help Page** button **(2)** to access product activation or–if the product is already activated– to view your serial number and version information, as well as links to this PDF user manual and the zplane website.

The **[⚙] Sprocket Wheel** button **(3)** opens the **Settings Page**.

3.3 [X/Y Display]

Click and drag the **ball handle (1)** in the **[X/Y Display]** to control both **[Pitch]** and **[Timbre]** simultaneously. By default, movement is restricted along a 45˚angle **(2)**.

Hold **[Shift**] while dragging to adjust in **semitones**, or double-click to **reset to 0**.
Hold **[Cmd]** (Mac) or **[Ctrl]** (Win) for fine control. To adjust **[Pitch]** and **[Timbre]** independently, turn the **[Link]** switch **(3)** off. Hovering over the display reveals a grid for precise control.



3.3.1 [Link] Switch (3)

When **[Link]** is active, **[Timbre]** (= Formant) shifting follows **[Pitch]**, producing the familiar "Mickey Mouse" or "Darth Vader" effects. Deactivate **[Link],** to control **[Pitch]** and **[Timbre]** independently — for example, to shift pitch vertically while preserving a voice's character, or move horizontally to alter tone without changing pitch.

3.3.2 [Pitch] Slider (4)

Along the right border of the **[X/Y Display]** is the **[Pitch]** Slider **(4)**.
Drag it up or down to adjust the pitch shift. The **[Pitch]** Factor can also be controlled via MIDI.

3.3.3 [Timbre] Slider (5)

The **[Timbre] Slider (5)** is located at the bottom of the display. Move it left or right to shift the signal's formants, altering its tonal quality without changing pitch:
• Moving **[Timbre]** right shifts formants upward (a "Mickey Mouse" effect).
• Moving **[Timbre]** left shifts formants downward (a "Darth Vader"-like effect).

3.3.4 Numerical [Pitch] and [Timbre] Fields (6)

Above the display are numerical **[Pitch]** / **[Timbre]** parameter fields **(6)**. Click the **[Display Units]** button to toggle between values in percent **[%]** or semitones **[♪].**
Double-click a numerical value for direct text entry**.**

3.4 [Voicing] Dial

To achieve the best **[Timbre]**-shifting quality for different types of input signals, adjust the **[Voicing]** rotary control **(1)** to match the dominant frequency range of the source:

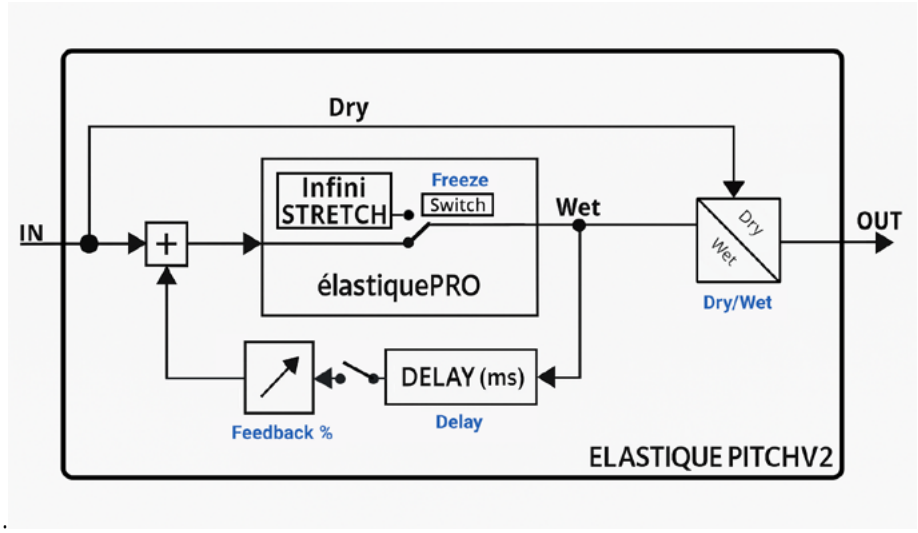
The default position works well for most audio material. However, you can experiment for optimal results: turn the control **left** for signal with a low dominant frequency, and **right** for those with a high dominant frequency.

Double-click the label or the edge of the control to **reset it to default** (30). When hovering over the control, a numerical value appears at its center. Double-click this value for **direct text entry**.

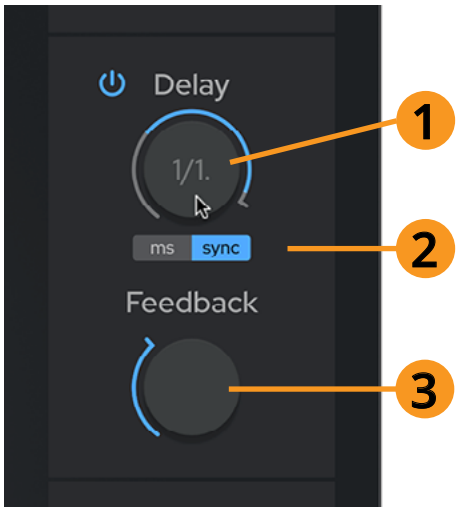
NOTE: *The **[Voicing]** setting affects only formant shifting, not the pitch-shifting quality.*

3.5 Delay Effect

ELASTIQUE PITCH includes a delay effect, that creates an adjustable, time-delayed copy of the audio signal, which can be fed back into the input for repeating echo-style effects. As shown in the signal flow diagram below, ELASTIQUE PITCH adds a unique twist by inserting the élastiquePRO algorithm into the delay's feedback path:



This means that each repetition passing through the feedback loop can have additional **[Pitch]** and/or **[Timbre]**-shifts applied, producing a delay effect with a constant delay time but repetitions that rise or fall in pitch over time.



3.5.1 [Delay] Dial (1)

Adjust the delay time using the **[Delay]** dial **(1)**. Turning the control clockwise increases the delay time. The power icon next to the label lets you toggle the delay on or off. Due to the pitch feedback, the minimal delay time is 163 ms.

3.5.2 [Sync] Switch (2)

Use the **[Sync]** switch **(2)** to toggle delay time between milliseconds (**"ms"**) and musical values (**"sync"**).

In **"ms"** mode, the delay is set in milliseconds and does not follow tempo.

In **"sync"** mode, it's set in beat divisions (e.g., 1/4, 1/8, 1 bar) that follow the project tempo — for example, at 120 – 160 BPM, the range spans from 1/16 to 1 bar. If the ring position and value appear greyed out, the selected time is out of range for the current tempo.

3.5.3 [Feedback] Dial (3)

Control feedback using the **[Feedback]** dial **(3)**, expressed as a percentage of the wet output.

- At **0%**, no feedback is applied, and only the shifted sound is heard.
- At **100%**, the delayed signal is fully fed back into the input, creating infinite repeats.

Experiment with [Feedback] to shape the echo or automate it for variation.

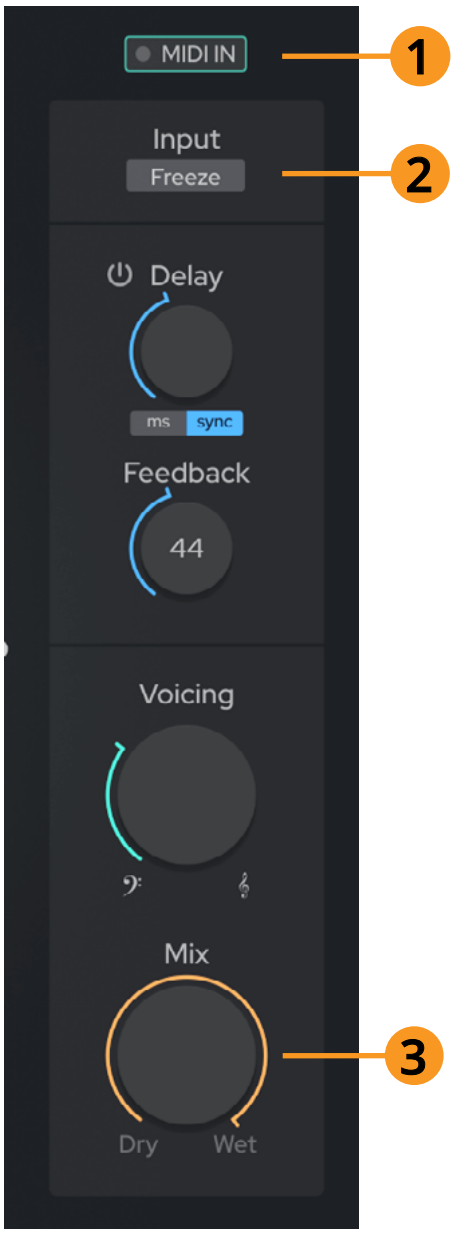
> **NOTE:** *While **[FREEZE]** is active, the feedback path of the Delay effect is disconnected. Changing **[FEEDBACK]** or **[DELAY]** settings will not affect the sound.*

3.6 [MIDI In] Button (1)

Activating the **[MIDI In]** button enables real-time control of the **[Pitch]** factor from a MIDI keyboard within a range of ±1 octave (C3 = 0, C2 = –12, C4 = +12). You can also apply **Pitch Bend** with a fixed range of ±2 semitones.

Note that the overall pitch range is **limited at ±12 semitones**. So if the **[Pitch]** factor is set to a value beyond ±10 semitones, the effective Pitch Bend range will be reduced accordingly.

The small **LED** to the left of the label lights up when MIDI data is received.



To route MIDI input, select ELASTIQUE PITCH as a MIDI destination in your DAW. Refer to your DAW's documentation for detailed routing instructions.

3.7 [Freeze] Button (2)

When the **[Freeze**] button is activated, the **élastiquePRO** algorithm's **infiniStretch**-feature is enabled. The signal currently held in **élastiquePRO**'s input buffer is then stretched and sustained indefinitely.

The "frozen" audio can also be pitch-controlled via MIDI.

3.8 [Mix] Dial (3)

The **[Mix]** dial adjusts the balance between the direct input signal (**"Dry"**) and the processed output (**"Wet"**). At **0%**, only the original, unshifted signal is heard; at **100%** only the shifted and delayed output is audible.

For most applications, keep the **[Mix]** dial at its default **100%** position to hear only the processed sound.
Intermediate settings can create unique effects such as parallel harmonies — for example, shifting [Pitch] down four semitones with a 50% Dry/Wet mix.

NOTE: *While **[FREEZE]** is active, the feedback path of the Delay effect is disconnected.*

4. Using ELASTIQUE PITCH

4.1 Loading ELASTIQUE PITCH

• ELASTIQUE PITCH is designed to be used as an insert effect.
The exact method for inserting the plugin on a track may vary depending on your host application — please refer to your host's documentation for details on loading plugins as track inserts.

• Audio processing order:
For optimal results, place ELASTIQUE PITCH before other processing tools in the signal chain. This is especially important for dynamic processors such as compressors or limiters, since pitch shifting can alter the signal levels and affect how these processors respond.

• Using multiple instances:
You can load ELASTIQUE PITCH on multiple tracks in your project or apply it to the master track if desired. Each instance operates independently, with its own unique pitch-shifting settings.

• Using ELASTIQUE PITCH on a multi-channel bus:
You can also load the plugin on multi-channel buses with **up to 16 channels**, for example in surround applications. In this case, all incoming channels are processed phase-coherently and with the same pitch shift.

4.2 Controlling ELASTIQUE PITCH via MIDI

In your DAW, route the MIDI input from a keyboard or controller to ELASTIQUE PITCH and use the following options:

• Control the The [Pitch] factor by playing MIDI notes.
MIDI Note 60 **(C3)** corresponds to the original tuning **(no shift)**.
Playing notes in the octave below C3 shifts the pitch down by the corresponding number of semitones, while notes in the octave above C3 shift it upward. Once you go beyond the one-octave range, no additional pitch shift will occur.

• Use your MIDI controller's Pitch Wheel.
This allows you to smoothly adjust the **[Pitch]** factor within a range of **±2 semitones** in addition to the played MIDI note. Once you reach the maximum pitch range of one octave, further movement will be clipped (e.g., if you set the pitch factor to +11 and move the pitch wheel up, the range will be limited to +1 semi-tone upwards.)

On the following pages setup examples are provided for a variety of DAWs:

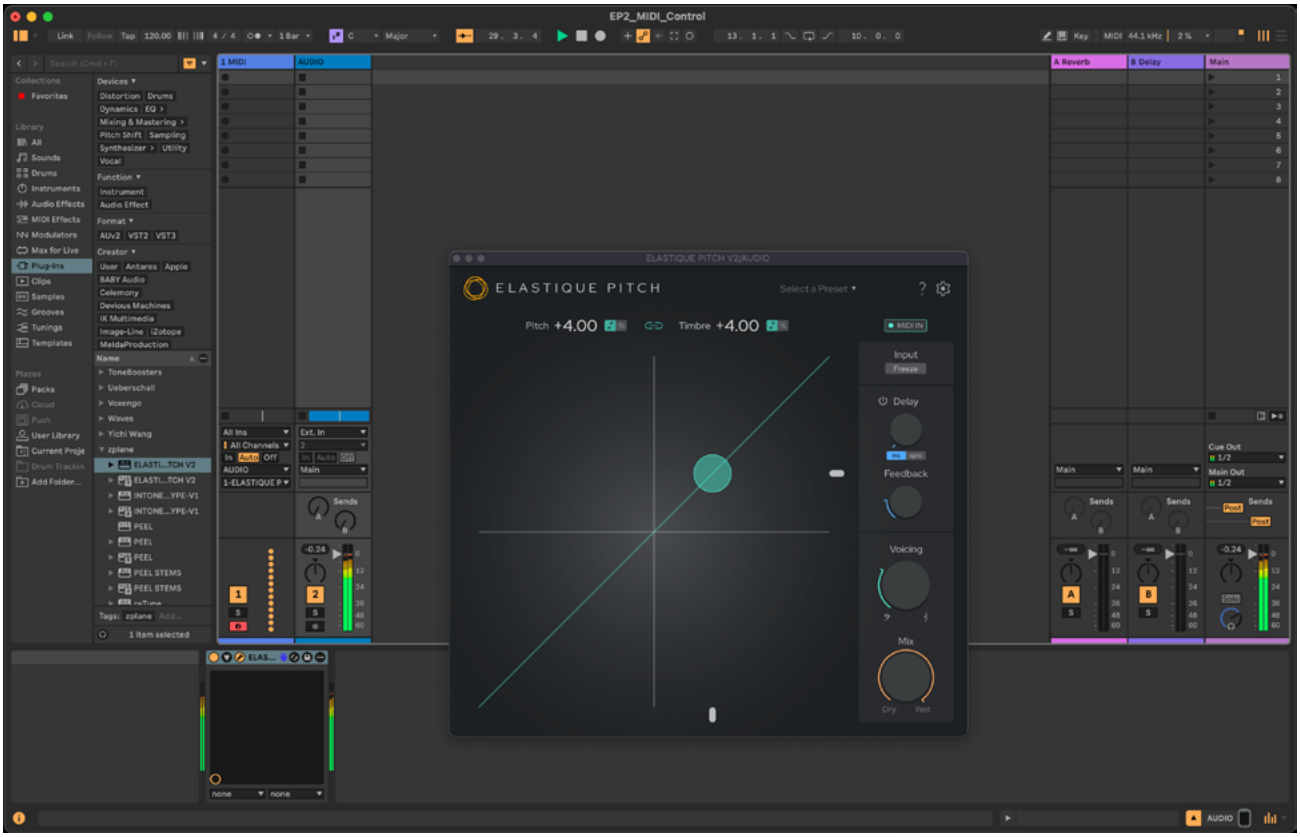
> **NOTE:** *When the **[Link]** switch is off, only the **[Pitch]** factor is controlled via MIDI— **[Timbre]** remains fixed at its current position. Turning the **[Link]** switch on links both parameters, causing **[Timbre]** to shift together with **[Pitch]**.*

4.2.1 Setting up MIDI Control in Ableton Live

The process for controlling ELASTIQUE PITCH with a MIDI keyboard in Ableton Live requires the following steps:

1. **Load ELASTIQUE PITCH onto the Track.**
   This can be an Audio Track or a MIDI Track loaded with a software instrument
2. **Create a MIDI Track.** This track will be used to capture MIDI notes from your keyboard controller and route them to ELASTIQUE PITCH on the other Track.
3. **Specify the MIDI Input to use**. This is "All Inputs" by default but can be changed to a specific MIDI Device/Port and MIDI Channel if desired.
4. **Route the output of the MIDI Track to ELASTIQUE PITCH**. ELASTIQUE PITCH is an audio effect rather than a MIDI effect, so ELASTIQUE PITCH will be either on an Audio Track or on a MIDI Track where an instrument plugin has been loaded.
5. **Enable MIDI input monitoring on the MIDI Track**. This allows live input to go through the track and out to ELASTIQUE PITCH.

Below is a screenshot showing a MIDI Track and adjacent Audio Track set up such that the MIDI is routed to ELASTIQUE PITCH:



4.2.2 Setting up MIDI Control in Logic Pro

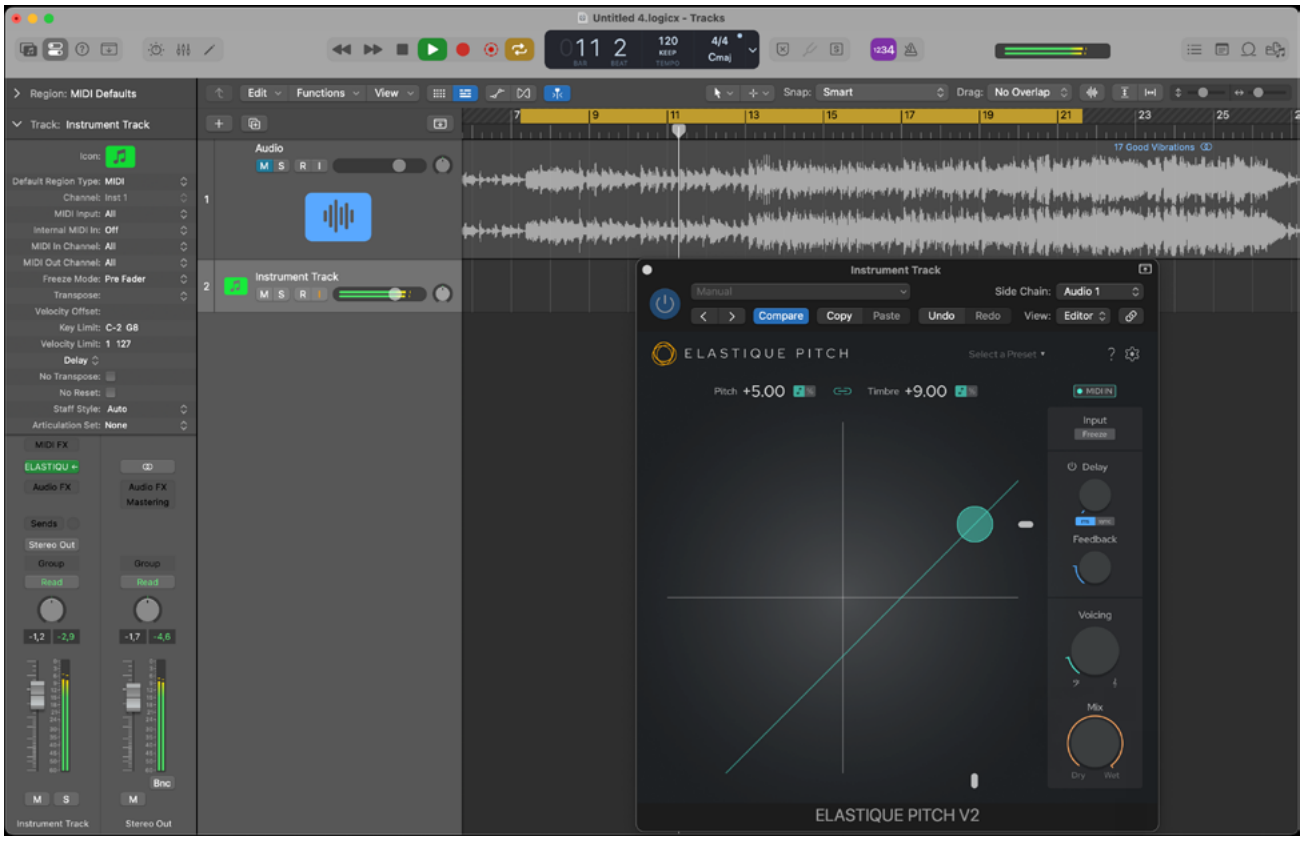
Because of how Logic Pro handles MIDI routing, setting up ELASTIQUE PITCH for keyboard control requires a slightly different approach. To control ELASTIQUE PITCH via a MIDI keyboard:

1. Create a new Software Instrument track: Load ELASTIQUE PITCH as a “MIDI-Controlled AU Effect” on his track.

2. Set the audio source: In the plugin’s “Side Chain” menu, select the audio track you want to process.

3. Mute the original audio track: Since ELASTIQUE PITCH replaces the input signal with its processed output, mute the original track to avoid hearing both at once (resulting it in being extremely loud).

Below is an example setup where ELASTIQUE PITCH is set up as a “MIDI-controlled AU effect” on Track 2, using Track 1 as the side-chain audio source:



> **NOTE:** *Logic Pro does not compensate any plugin delay on plugins loaded as MIDI-controlled effects. This results in ELASTIQUE PITCH’s output to sound late. Solve this by shifting the original track earlier to manually compensate for this delay.*

4.2.3 Setting up MIDI Control in Reaper

Unlike many DAWs, Reaper does not distinguish between “audio tracks” and “MIDI tracks”. Each track’s behavior is dictated by the type of content it contains.

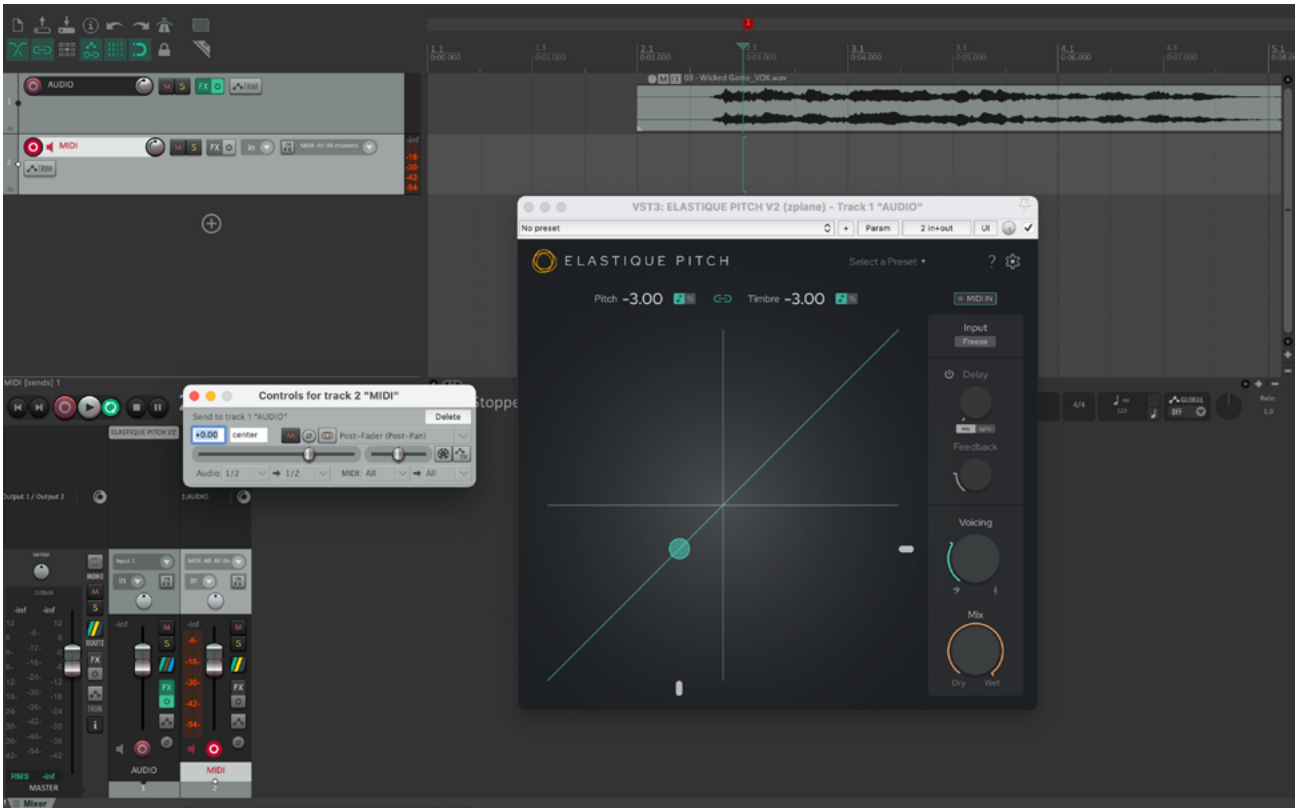
To control ELASTIQUE PITCH via a MIDI keyboard in Reaper:

1. Create a new track and enable recording.
Click the “**Record Arm”** button on the new track to display the input options.

2. Select your MIDI input.
Choose your MIDI keyboard or controller as the input source for the track.

3. Add a MIDI send.
Create a “**send**” from this track to the track containing ELASTIQUE PITCH.
This routes the MIDI data to the plugin while allowing the audio track to remain separate.

Below is an example showing **Track 2** receiving MIDI input and sending it to **Track 1,** which hosts ELASTIQUE PITCH:



4.2.4 Setting up MIDI Control in Studio One

To control ELASTIQUE PITCH via a MIDI keyboard in Studio One, follow these steps:

1. Insert ELASTIQUE PITCH on the audio track.
Load ELASTIQUE PITCH as an insert effect on the track you want to process.

2. Create a new Instrument track.
Add a new Instrument Track in Studio One to handle the MIDI input from your keyboard or controller.

3. Route the MIDI output.
In the Instrument Track's outpout settings, select "Existing Instrument" and choose ELASTIQUE PITCH from the list. This connects the MIDI track to the plugin for real-time **[Pitch]** control.

The final setup should look similar to this:

4.2.5 Setting up MIDI Control in Pro Tools

In order to send MIDI to ELASTIQUE PITCH in Pro Tools, set up a new **MIDI track**. In its **I/O settings,** choose your MIDI keyboard as the input. For the **Output**, select the ELASTIQUE PITCH instance on the track being processed. Click the **Record** button on the MIDI Track to enable monitoring of the MIDI input. Now you can control ELASTIQUE PITCH from your MIDI keyboard. The setup should look something like this:

4.2.6 DAWs Without MIDI Routing

Unfortunately, not all DAWs include the necessary features or architecture to route incoming MIDI data to ELASTIQUE PITCH. While ELASTIQUE PITCH can still be used to process audio in these DAWs, you won't be able to take advantage of its MIDI control features.

The DAWs we have tested that lack the required MIDI routing support are:

- **Apple GarageBand**
Although GarageBand shares similarities with Logic Pro, it does not support "MIDI-Controlled AU Effects", which are required to play ELASTIQUE PITCH via MIDI input.

- **FL Studio**
While it's possible to load ELASTIQUE PITCH on a track and enable MIDI Input, sending MIDI notes to the plugin also triggers the track's content, making precise and independent control difficult.

4.3 Resetting Controls

Double-click on a control, inside the 2D-field, or on a slider Handle to reset its value to default. Double-clicking a value field will open a text input field.

4.4 Standard [Timbre] Settings

No Formant Preservation
Activate the **[Link]** switch when both **[Pitch]** and **[Timbre]** have the same value (e.g. 100%, the default position). From now on, **[Pitch]** and **[Timbre]** factors will change together with the same shift.

Formant Preservation
Deactivate the **[Link]** switch and reset the **[Timbre]** factor to 100.00 **%** / ±0.00 ♪. Formants will now remain at their original positions as the **[Pitch]** changes independently.

Formant Shifting
Activate the **[Link]** switch when both **[Pitch]** and **[Timbre]** do not share the same value. Formants will now shift by a constant offset as **[Pitch]** changes.

5. Technical Specifications

Operating Systems	• macOS 12, 13, 14, 15+ • Windows 10 & 11
CPU Architecture	• Windows: 64-bit • macOS: Intel & Apple Silicon 64-bit
Audio Formats	• 1-16 channels (I/O) • 32kHz - 192kHz sample rate
Plugin Formats	• VST3 • AU (macOS only) • AAX
Audio Latency	• 150 ms @48 kHz

6. Feedback & Support

Our website products.zplane.de always provides the latest information and news about our products. Any issues you encounter may either be addressed in the FAQ section of the appropriate product or reported directly to us via post or email. Before contacting us directly, please ensure you are using the latest version of the product. Please also make sure that your issue is not covered in the manual, the forum, the FAQ or elsewhere on our website.

If you cannot find answers using the methods above and need to contact us directly, please provide the following details to enable us to help you as fast as possible:

• Your registration information (such as the name of your User Account or your login e-mail

• Your system specifications (hardware, operating system, host software)

• The exact version number of the plugin (see the “About” box by clicking on Help [?] button located at the lower-right of the ELASTIQUE PITCH interface)

• Include a detailed description of your problem with a step-by-step description of what led up to it so we can try to reproduce the issue

Please use the following contact methods:

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