

USER MANUAL

\_PITCH SHIFTER 910

**ARTURIA**

\_The sound explorers

# Special Thanks

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## Special Messages

This manual covers how to use Pitch Shifter-910, provides a comprehensive look at its features, and details how to download and activate it. First, some important messages:

### **Specifications Subject to Change:**

The information contained in this manual is correct at the time of printing. However, Arturia reserves the right to change or modify any of the specifications or features without notice or obligation.

### **IMPORTANT:**

The software, when used in combination with an amplifier, headphones or speakers, may be able to produce sound levels that could cause permanent hearing loss. DO NOT operate for long periods of time at a high volume or at a level that is uncomfortable.

If you encounter any hearing loss or ringing in your ears, please consult an audiologist.

### **NOTICE:**

Service charges incurred due to lack of knowledge relating to how a function or a feature works (when the software is operating as designed) are not covered by the manufacturer's warranty, and are therefore the owner's responsibility. Please study this manual carefully and consult your dealer before requesting additional support.

# Introduction

## **Congratulations on your purchase of Pitch Shifter-910**

Thank you for purchasing Pitch Shifter-910, an audio effect plug-in crafted to give you an inspiring and perhaps unstable musical journey through digital pitch shifting. Drawn from ground-breaking boxes of the mid-1970s you'll quickly discover why they were used so extensively on records ever since for a wide variety of reasons.

Excellence is placed at the heart of every Arturia product, and Pitch Shifter-910 is no exception. Explore the presets, tweak a few controls, get lost in the features - dive as deeply as you like.

Be sure to visit the [www.arturia.com](http://www.arturia.com) website for information on all our other inspiring hardware and software instruments, effects, MIDI controllers, and more. They have become indispensable tools for many visionary artists around the globe.

Musically yours,

**The Arturia team**

# Table Of Contents

1. Welcome to Pitch Shifter-910.....	3
1.1. The History of Pitch Shifting.....	3
1.2. What does Pitch Shifter-910 add to the original? .....	4
1.3. Features of Pitch Shifter-910 .....	4
2. Activation and Getting Started.....	5
2.1. Compatibility .....	5
2.2. Download and Install .....	5
2.2.1. Arturia Software Center (ASC).....	5
2.3. Working with Pitch Shifter-910 as a plug-in.....	6
2.3.1. Audio and MIDI settings.....	6
3. User Interface Overview.....	7
4. Upper Toolbar.....	8
4.1. Main Menu.....	8
4.1.1. New Preset.....	8
4.1.2. Save Preset.....	9
4.1.3. Save Preset As.....	9
4.1.4. Save as Opening Preset .....	10
4.1.5. Import.....	10
4.1.6. Export .....	10
4.1.7. Resize .....	11
4.1.8. Tutorials.....	12
4.1.9. Help.....	13
4.1.10. About.....	13
4.2. Browsing Presets.....	13
4.2.1. Preset Browser button .....	13
4.2.2. Preset Name.....	13
4.2.3. Arrow Icons .....	14
4.2.4. Liked Presets.....	14
4.3. A/B Comparison.....	14
4.4. Advanced Button.....	15
4.5. Output Level Knob .....	15
5. Main Controls.....	16
5.1. Input.....	17
5.2. Shifter.....	18
5.2.1. Pitch .....	18
5.2.2. Formant .....	19
5.2.3. Formant Link.....	19
5.2.4. Formant Bypass.....	19
5.2.5. Mode .....	19
5.3. Delay / Pitched Delay.....	20
5.3.1. Rate.....	21
5.3.2. Feedback .....	21
5.3.3. EQ LP/HP .....	21
5.3.4. Offset (Stereo Instances only) .....	21
5.3.5. Mix (Delay only).....	21
5.4. Output .....	22
5.4.1. Mix .....	22
5.4.2. Mix Lock.....	22
5.4.3. Brightness .....	22
6. Advanced Controls.....	23
6.1. Voice Mode.....	23
6.2. Vibrato .....	24
6.3. MIDI IN.....	25
6.3.1. How MIDI control works .....	26
6.3.2. The MIDI IN Panel.....	27
6.3.3. MIDI Mode.....	28
6.4. MIDI IN Routing Guide .....	29
6.4.1. Ableton Live Setup.....	29
6.4.2. Cubase Setup.....	31
6.4.3. FL Studio Setup.....	32

6.4.4. Logic Pro Setup .....	33
<b>7. Lower Toolbar .....</b>	<b>35</b>
7.1. Parameter Name .....	35
7.2. MIDI Mode.....	35
7.3. Bypass .....	35
7.4. Undo .....	36
7.5. Undo History .....	36
7.6. Redo.....	36
7.7. CPU Meter .....	36
7.8. Resize handle.....	36
<b>8. Working with Presets .....</b>	<b>37</b>
8.1. Preset Name Pane .....	37
8.1.1. Arrow Icons.....	37
8.1.2. Quick Browser.....	38
8.2. The Preset Browser.....	39
8.2.1. Searching Presets .....	39
8.2.2. Using Tags as a filter.....	40
8.2.3. The Results Pane.....	43
8.2.4. Preset Info Section.....	45
<b>9. Software License Agreement.....</b>	<b>48</b>

# 1. WELCOME TO PITCH SHIFTER-910



Thank you for purchasing our pitch-shifting and harmonic-mangling effect, Pitch Shifter-910. The plug-in draws on and is inspired by digital pitch-shifting hardware from the mid-1970s, which first introduced us to the uncanny separation between pitch and playback speed. With these machines, you could, for the first time, add a convincing harmony to your lead lines, melodies, or vocals. But it was so much more than that. With a bit of manipulation, engineers and musicians found that you could play chords with a monosynth, fatten and detune basslines, thicken up snares, correct vocals, and send guitars on weird interplanetary adventures.

Arturia's Pitch Shifter-910 wallows in the character of those classic machines, embracing the gritty tone and musical unpredictability. But we've also added some cleaner options for a more modern approach to vocal, synth, and instrument processing. You'll find advanced tools for formant shifting, voice modes that mimic the power of multiple machines, deliciously wayward vibrato, and MIDI-driven harmonic generation. So *"pitch-shifter"* is a bit of an understatement, and you will find countless uses for this fascinating technology baked into Pitch Shifter-910.

## 1.1. The History of Pitch Shifting

For as long as we've had recorded sound, we've enjoyed the often hilarious results of making the playback run too fast or too slow. Animation studios put it to good use in creating funny voices for cartoon characters. Innovative musicians such as Les Paul and the Beatles pioneered pitch shifting by using varispeed controls on tape machines and record players. The downside of these analog formats was that pitch was always tied to the playback speed. They had to come up with creative ways to minimize the problem by doing things like playing slowly and recording at half speed, so that when the recording was played back at regular speed, it was both shifted in pitch and still intelligible.

It wasn't until digital signal processors were able to get their binaries into the studio that pitch shifting became less of an experiment and more of a useful creative tool. The most important attribute was that the DSP could shift the pitch of audio running through it without altering the speed. It was an incredible development that had immediate and diverse applications. Sure, it could create harmonies, but it could also correct pitch, detune vocals, add stereo width, fatten things up, generate digital delays, and descend into endless feedback. The slight instability in the technology gave it a very human feel that did fascinating and largely unintentional things to vocal tracks.

The effect appeared on a wide range of records by artists such as AC/DC, Led Zeppelin, Frank Sinatra, Suzanne Vega, U2, David Bowie, and Frank Zappa. One early adopter was New York City's Channel 5, which used the technology to pitch down *I Love Lucy* reruns after speeding them up to squeeze in more ads.

More hardware pitch shifters followed suit over the years, and they remain very popular, particularly as guitar pedal effects. Most of vocal processing has been taken over by software plug-ins such as the ubiquitous Autotune, which, while impressive and pristine, doesn't have the character of these early digital hardware boxes. Arturia's Pitch Shifter-910 has captured all that character to bring some vintage digital feel to your harmonizing.

## 1.2. What does Pitch Shifter-910 add to the original?

For all the tactile loveliness of interacting with hardware, these old boxes are hard to find, expensive, and prone to failure. Even with our integrated and often hybrid workflows, it can be tricky to work an old box into a modern setup. You'll also be able to do only one thing at a time with the one box, which can be a serious limitation.

With an Arturia plug-in, we aim to deliver a product that drops perfectly into your workflow while encompassing all the qualities and character of the original hardware. So, you get nuanced, authentic behaviour without any headaches.

The interface has been refined to offer a flexible and modern workflow. Every section of the effect processor has more control. At the input, the level and drive are separate for when you desire that distortion and for when you don't. The Shifter has been split into Pitch and Formant to let you move the character within the pitch. A Vintage switch lets you choose between the artifacts of the original hardware or the clarity of modern processing. The Delay has its own section, with some useful EQ, a variable rate control derived from the tempo, an offset to push into stereo effects, and that all-important Feedback knob to push echoes into self-oscillation. Finally, at the output, you have a Tilt EQ to handle the brightness.

Pitch Shifter-910 also has some advanced controls. You can use any MIDI controller or sequencer to control pitch, level, and modulation. A Voice Mode doubles up on the emulation to give you unison and dual mono modes for detuning and stereo spread. Rounding out the advanced controls is a highly (and intentionally) unstable vibrato that can bring a lot of movement to the effect.

With a library of presets at your disposal, you have much to explore in Pitch Shifter-910.

## 1.3. Features of Pitch Shifter-910

- Legendary studio sound modelled on early digital pitch shifter effects
- Classic pitch shifting +/-1 octave
- Gritty and unruly processing
- Cleaner mode for less artifacts
- Separate pitch and formant shifting
- MIDI control over pitch, velocity, and modulation
- Delay, Pitched Delay detuning, and thickening effects
- Low and high-pass filter in Delay feedback
- Offset for stereo delay effects
- Humanized vibrato
- Unison and Dual Mono Voice Modes
- Overdrive for saturating the input
- Tilt EQ on output
- Rack mount stylings and 7-segment LED pitch shift display

## 2. ACTIVATION AND GETTING STARTED

### 2.1. Compatibility

Pitch Shifter-910 works on computers and laptops equipped with Windows 8.1 or later or macOS 10.13 or later. It is compatible with the current generation of Apple Silicon processors, as well as Intel (and similar) processors. You can use it as an Audio Unit, AAX, VST2, or VST3 plug-in within your favorite recording software.



### 2.2. Download and Install

You can download Pitch Shifter-910 directly from the [Arturia Products Page](#) by clicking either the Buy Now or Get Free Demo options. The free demo is limited to 20 minutes of operation.

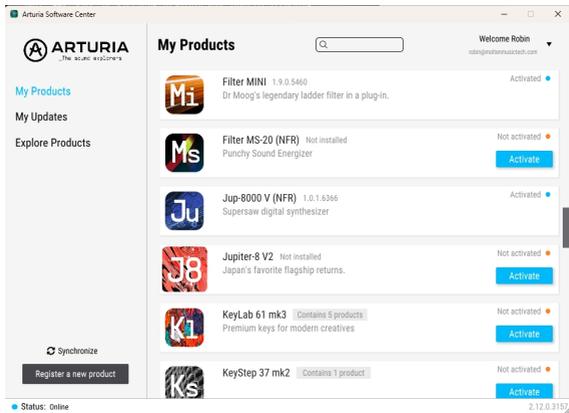
If you have not already done so, now is a good time to create an Arturia account by following the instructions on the [My Arturia webpage](#).

Once you install Pitch Shifter-910, the next step is to register the software. This is a simple process that involves a different software program, the **Arturia Software Center**.

#### 2.2.1. Arturia Software Center (ASC)

If you haven't installed ASC yet, please go to this web page: [Arturia Downloads & Manuals](#).

Look for Arturia Software Center near the top of the page, and then download the installer version for the system you're using (Windows or macOS). ASC is a remote client for your Arturia account, letting you conveniently manage all your licenses, downloads, and updates from one place.



After you install Arturia Software Center, launch it and do the following: - Log into your Arturia account from ASC's interface. - Scroll down to the My Products section of ASC. - Click on the Activate button next to the software you want to start using (in this case, Pitch Shifter-910). - This will activate the license for the software on your computer. You can activate it on several computers at the same time, for example on your studio computer as well as your travel laptop. - Click the Install button to install the software on your computer. - Follow any prompts your computer may give you during the installation process.

It's as simple as that!

## **2.3. Working with Pitch Shifter-910 as a plug-in**

Pitch Shifter-910 is used as a plug-in within all major Digital Audio Workstation (DAW) programs including Cubase, Digital Performer, Live, Logic, Pro Tools, Reaper, Studio Pro, and more.

Plug-ins have numerous advantages over hardware, including: - You can use as many instances on different tracks as your computer can handle. - You can automate the plug-in's settings via your DAW's automation feature. - All settings and changes are saved with your DAW project, letting you pick up right where you left off.

### **2.3.1. Audio and MIDI settings**

Since Pitch Shifter-910 is a plug-in, settings for audio and MIDI routing are handled in your recording software or DAW. They are generally located in some type of Preferences or Settings menu, though each product does things a bit differently. So, consult your recording software's documentation for information on how to select your audio interface, activate outputs, set the sample rate, assign MIDI ports, set project tempo, adjust buffer size, and the like.

Now that you've set up your software, it's time to set things in motion!

### 3. USER INTERFACE OVERVIEW

We'll start with an overview of the Pitch Shifter-910 interface so that you can get comfortable with what's going on and jump right into mangling some sound. With the basics squared away, you can then follow the links for deeper explanations and guidance through every aspect of the plug-in.



Number	Area	Description
1.	<a href="#">Upper Toolbar [p.8]</a>	Access to the Pitch Shifter-910 menu, Preset Browser, A/B Comparison Tools, Advanced panel reveal button, and master output level.
2.	<a href="#">Main Control Pane [p.16]</a>	Contains the primary controls for Pitch Shifter-910, including pitch and formant shifting, delay, feedback, input/output controls, and the main display
3.	<a href="#">Advanced Control Panel [p.23]</a>	This panel appears when the Advanced button is clicked in the Upper Toolbar. It gives access to MIDI input controls, Voice Modes, and Vibrato.
4.	<a href="#">Lower Toolbar [p.35]</a>	This features the tool tip display, Bypass button, undo/redo functions, CPU meter, and window resizing handle.

The links above will take you to the various parts of the manual that cover these functions. You are welcome to jump around to find what you need, but we do recommend that you go through the manual in order at least once to get the fullest Pitch Shifter-910 experience. Pitch Shifter-910 is designed so that you can get to work and be creative without ever looking at the manual, but some subtle tricks and functions might not be obvious at first. Reading the manual will help you be sure that you have a good handle on what this plug-in can do.

## 4. UPPER TOOLBAR

Before we jump into the main controls, we need to introduce you to the Upper Toolbar that runs along the top of the plug-in's interface. It houses the main menu, the Preset Browser, an A/B comparison switch, a button to enter Advanced Mode, and a knob to control the overall output level. Let's go through them from left to right.



### 4.1. Main Menu

Click the "hamburger" icon (three horizontal lines) in the top left corner of the upper toolbar to bring up the main menu. There are some useful functions in here regarding presets, the interface and help in getting you started with Pitch Shifter-910. Let's go through them one at a time.



#### 4.1.1. New Preset

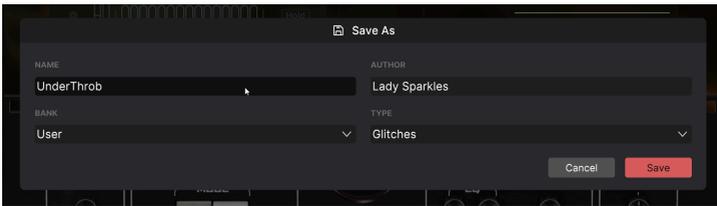
Creates a new preset with default settings for all parameters. None of the Pitch Shifter-910 elements are activated, so it gives you a fresh, clean space in which to build your own effect.

### 4.1.2. Save Preset

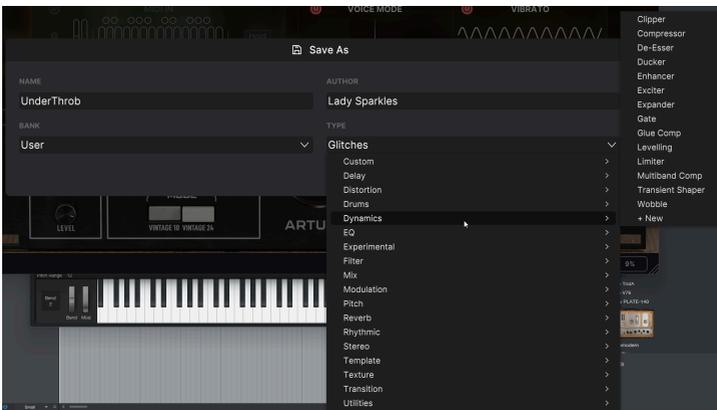
Overwrites the current preset with any changes you have made. This only applies to user presets, so the option is greyed out for factory presets, including the "Default" preset that's generated when you click "New Preset". To start saving a new preset, you need the option below.

### 4.1.3. Save Preset As

Saves the current state of the Pitch Shifter-910 under a different preset name. Clicking this option opens the "Save as" window, where you can enter a preset name, add your name as the author, choose a Type, or add a new one that best describes your preset. By default, the preset is saved in the "User" bank, but you can also create additional banks for more precise organisation.



Pitch Shifter-910 offers a highly detailed categorization system with many types and sub-categories to helpfully organise your presets. You can see this in the pop-up menus that appear when you click on the Type.



If nothing really matches, you can create your own type.

 ! The Bank, Author, and Type fields are useful when searching for presets in the [Preset Browser](#) [p.39].

#### 4.1.4. Save as Opening Preset

This lets you select the Preset that is loaded into Pitch Shifter-910 when you open a new instance of the plug-in. You might have a preset you use all the time, or some settings you like to start from, and this will enable you to have it available by default as soon as you load the plug-in.

#### 4.1.5. Import

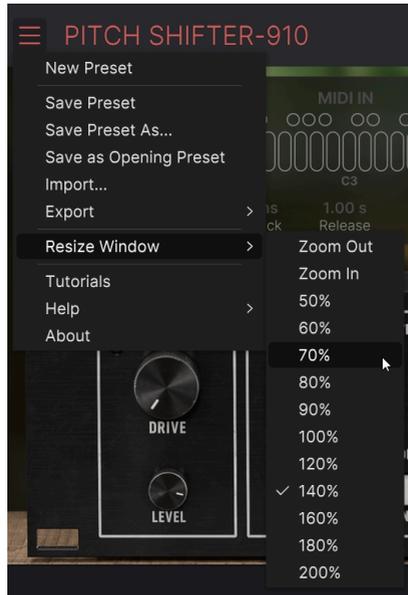
This command lets you import a Preset file, which can be either a single Preset or an entire bank of Presets. This can be useful if you were installing Pitch Shifter-910 on another computer and wanted to transfer your user Presets to that new machine, or if you wanted to use presets sent to you from another user.

#### 4.1.6. Export

You can export presets in two ways: as a single Preset or as a bank.

- **Export Preset:** Exporting a single Preset is handy when you want to share a Preset with someone else. The default path to these files will appear in the "save" window, but you can create a folder at another location if you like. The saved Preset can be reloaded using the Import Preset menu option.
- **Export Bank:** This option lets you export an entire bank of sounds from the instrument, which is useful for backing up or sharing Presets. Saved banks can be reloaded using the Import Preset menu option.

### 4.1.7. Resize

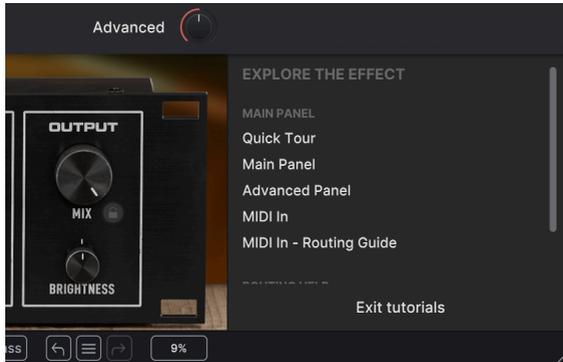


The Pitch Shifter-910 window can be resized from 50% to 200% of its original size without any visual artifacts. On a smaller screen such as a laptop, you may wish to reduce the interface size so it doesn't dominate the display. On a larger screen or a second monitor, you can increase the size to get a better view of the controls. The controls work the same at any zoom level, but smaller controls can be easier to use at higher magnification.

**i** ! While working with Pitch Shifter-910, you can also use the keyboard shortcuts CTRL- / CTRL+ (Windows) or COMMAND- / COMMAND+ (macOS) to quickly adjust the window size by one step down or up. Dragging the lower-right corner of the window ([Lower Toolbar](#) [p.35]) will also resize the interface to the next window size up or down. Note that in some DAWs, the same key commands may be used for zoom control. In this case, the DAW will take priority.

## 4.1.8. Tutorials

Pitch Shifter-910 comes with integrated Tutorials that walk you through different features of the plug-in. When you click on "Tutorials" in the main menu, a list of chapters will pop up on the right side of the main interface.



When you select a chapter, it will load a special preset and guide you through with step-by-step instructions on how to make the most of Pitch Shifter-910. As you go through the tutorial, parts of the control panel are highlighted to show you where to focus your attention.



Click the X in the upper right corner to exit a particular chapter, and click Exit Tutorials at the bottom of the table of contents to close the Tutorials tab entirely.

**i** ! If you're editing a Preset, make sure to save it before opening the Tutorials, because doing so will replace your current Preset with a special Tutorial preset and overwrite any unsaved edits. Be sure to save frequently!

### 4.1.9. Help

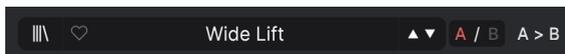
This section provides handy links to the Pitch Shifter-910 User Guide and Frequently Asked Questions page on Arturia's website. Note that accessing these pages will require an Internet connection.

### 4.1.10. About

Here you can view the Pitch Shifter-910 software version and developer credits. Click outside the About window to close it.

## 4.2. Browsing Presets

Pitch Shifter-910 comes with a bunch of great-sounding presets, and there are three different ways you can access them via the Preset Browser controls in the middle of the Upper Toolbar.



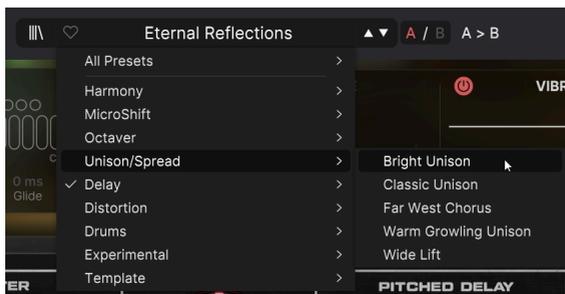
### 4.2.1. Preset Browser button

The icon with four lines that look like books on a shelf opens and closes the Preset Browser. This is covered in detail in the [Working With Presets \[p.37\]](#) chapter.

### 4.2.2. Preset Name

Clicking on the name reveals a dropdown menu with other available Presets. Click on any name to load that Preset or click away from the menu to close it. The sound categories on the left let you quickly jump to the appropriate subgroups of Presets (called [Types \[p.40\]](#)) without having to dive into the Preset Browser itself.

 ! If you edit a Preset, an asterisk ("star") will appear next to the Preset Name, prompting you to save your edits before loading a different Preset.



Note that if you've set any search filters in the Preset Browser, pulling up any of these lists in this way ignores them. You will see all the Presets of the selected Type.

### 4.2.3. Arrow Icons

The Arrow icons are the third way to access the presets, and you can simply select the next or previous preset in the filtered list by clicking on them. This is the same as clicking the Preset name and selecting the next patch on the list, but it does so with only one click.

### 4.2.4. Liked Presets

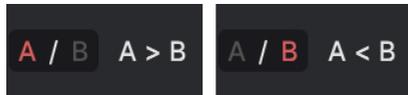
Between the Preset Browser button and the Preset name is a heart icon. This is the Like button that lets you quickly tag presets you like for easy recall later. Inside the Preset Browser, you can view, sort, and search for Liked Presets.

For more information about presets check out the chapter [Working with Presets \[p.37\]](#).

## 4.3. A/B Comparison

To the right of the Preset section are the **A/B Select** and **A/B Copy** controls. While editing a Preset, you can actually store two different sets of parameter values in slots A and B and switch between them for comparison. Clicking the A/B select button will switch between the two (the current one will be highlighted in red). The A/B Copy button lets you copy the current version into the other slot. It's a quick way to compare edits without generating multiple preset iterations.

You could use it to work on the plug-in until you find a sound you like, and then copy the work-in-progress to slot B. You can continue tweaking the plug-in and return to what you liked originally by switching to slot B. Clicking the A/B Switch button again lets you swap back and forth to compare the original with the new tweaks.



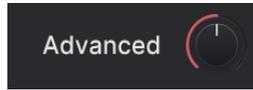
*Left: Slot A selected, Copy button shows A to B. Right: Slot B selected, Copy button shows B to A*

You can also load different presets into both slots and swap between them without having to rebind them in the browser. Whatever you load into slots A and B will remain until you unload the plug-in or close your DAW. Next time you load up an instance of Pitch Shifter-910, the B slot will be empty.

**i** Parameters stored in the A/B slots are temporary and will be lost if not saved before unloading the plug-in or closing your DAW. You should save edits in slots A and B as separate presets if you want to recall them both.

## 4.4. Advanced Button

Pressing the Advanced button reveals the Advanced panel containing the MIDI Input, Voice Mode, and Vibrato. For more details, please go to the [Advanced Controls \[p.23\]](#) Chapter.



## 4.5. Output Level Knob

Very simply, it sets the overall output level of the sound from the plug-in. The 12 o'clock position is 0dB, and it ranges from -24dB to +24dB.

## 5. MAIN CONTROLS

Pitch Shifter-910 is laid out to emulate the controls you'd expect to find on a piece of rack-mount gear.



Number	Area	Description
1.	<a href="#">Input</a> [p.17]	Controls the Input level and adds drive for a richer tone.
2.	<a href="#">Shifter</a> [p.18]	Adjusts the Pitch and Formant of the incoming audio either individually or linked, ranging from -12 to +12 semitones. Formant control can be disabled. There's a pair of Mode switches to select the algorithm with or without artifacts.
3.	Display	Shows the current Pitch selection visually in an arc-shaped meter and as a digital numeric display in semitones and multiples of 10 cents. In MIDI IN mode, the numeric display is replaced with the word 'MIDI', but pitch is still displayed on the meter.
4.	<a href="#">Delay / Pitched Delay</a> [p.20]	Clicking the text label of this section lets you switch between Delay and Pitched Delay. You get controls for the delay rate and feedback, as well as lowpass and highpass EQ. With the regular Delay selected, you also get a Mix knob.
5.	<a href="#">Output</a> [p.22]	Sets the overall level. The Brightness knob provides a tilt EQ to adjust the tone.

## 5.1. Input

The Input section controls the level of your audio before it reaches the pitch-shifting algorithm.



- **Level:** The Level knob adjusts the input gain from -70dB up to +12dB. 0dB, to maintain the original audio level, can be found around the 4 o'clock position on the knob.
- **Drive:** Adds harmonic richness by saturating the input. You can use it to add color and tonal interest, but pay attention to the clipping LED to avoid pushing it too hard.

## 5.2. Shifter

The Shifter section is the main event, the reason why we're here, and provides direct control over the pitch shifting and shape of the formants.



It's important to understand how Pitch and Formant shifting relate to each other in the context of this plug-in. Pitch shifting concerns changes to the musical note and how high or low it sounds. Formant shifting is concerned with changes in tonal character achieved by altering the resonant peaks that define a sound's timbre without changing its pitch. It's often called Formant "shaping" to make it more distinct from the idea of shifting pitch.

Typically, when shifting pitch, the formants shift along with it, and the result can sound unnatural and unrelated to the original sound. If the formants can be preserved in their original shape while the pitch is shifted, then you get a much more natural sound.

Pitch Shifter-910 allows you to adjust the Pitch and Formant completely separately. So you can radically change the timbre of a sound without affecting its pitch, or shift its pitch without losing its character. Perhaps more importantly, you can pitch shift a voice or instrument while preserving the recognisable qualities of that sound.

**i** ↓ Formants are responsible for defining the character of a sound. In vocals, this extends to distinguishing between vowel sounds, projection, gender identity, and voice recognition. With other sounds, formant manipulation can add vocal qualities or simply play with the brightness of a sound.

**i** ↓ The original hardware machines paid no attention to formants, so the pitch shifting quickly descended into the "chipmunk effect". If you are after that sort of authentic experience you can link the Formant to the Pitch, or disable it entirely.

### 5.2.1. Pitch

Sets the amount of pitch shifting applied. It can range from -12 semitones to +12 semitones, although it is continuous and not restricted to semitone steps. The main display shows the numeric shift in units of 10 cents, whereas the pop-up value on the knob is shown in semitones and cents.

### 5.2.2. Formant

Sets the amount of formant shifting applied. It also ranges from -12 to +12 semitones and is continuous to match the pitch control.

### 5.2.3. Formant Link

Links the pitch and format controls so that they move together. If the knob positions are offset, the relationship will be maintained until either knob reaches its maximum or minimum value. Linking them at the same value will mirror the behaviour of the original hardware, where pitch and formant were always shifted by the same amount.

### 5.2.4. Formant Bypass

Disables the formant process entirely. This can have the same effect as linking the Pitch and Formant at the same value and mirrors the original behaviour.

### 5.2.5. Mode

Selects between two pitch-shifting algorithms.

- **Vintage 10:** A true emulation based upon the original algorithm and signal path through the hardware.
- **Vintage 24:** A variation where only the algorithm is emulated giving fewer artifacts and a cleaner tone.



♪ For the most authentic recreation of the classic sound, keep the Pitch and Formant linked at the same value and set the Mode to Vintage 10.



♪ For a more natural tone as you shift the pitch, leave the Formant at 0 to preserve the spectral character of the original audio. Set the Mode to Vintage 24 for a bit more clarity.

### 5.3. Delay / Pitched Delay

The digital delay line was part of the hardware design, turning it into what could be called a multi-effects unit. What made it special was how the delay output was fed back into the pitch-shifting processor, meaning that each repeat got another shift in pitch. With enough feedback, you could get it to play a whole scale from a single note. You'd often find there was a button to bypass the pitch shifting and operate it purely as a delay line.

Pitch Shifter-910 takes those ideas and fleshes them out into a Delay and a Pitched Delay. They are not separate processes; they simply have different signal routing. The Delay routes straight out of the plug-in and gains a Mix knob to balance the repeats with the original signal. The Pitched Delay routes the taps back through the Shifter section for further processing. To switch between them, click on the text of the "Delay" or "Pitched Delay" (whichever one is currently loaded) and select from the pop-up menu.





! When switching between Delay and Pitched Delay, the controls stay exactly the same. It's only the routing that has changed.

### 5.3.1. Rate

Adjusts the delay time. The delay time can range from 24ms to 2 seconds. If the musical note button next to Rate is lit, then the delay time is synced to your DAW. You have the following options:

- Seconds - delay time is measured in milliseconds
- Sync Straight - delay time is set as a division of tempo
- Sync Triplet - delay time is set as a triplet division of tempo
- Sync Dotted - delay time is set as a dotted division of tempo

### 5.3.2. Feedback

Controls how much of the delayed signal is fed back. This dictates how many repetitions you are likely to get; the higher the feedback, the more repeats. Pushing the Feedback up to 100% will often result in self-oscillation and the building of a continuously pulsing and deteriorating mass of sound. A Feedback of 0% will turn the delay off; there's no separate bypass.

### 5.3.3. EQ LP/HP

Adjusts the high/low-pass filter cutoff from 20Hz to 20kHz. These two filters sit inside the feedback loop, and so each repeat becomes more filtered. They enable you to control the high and low frequencies of the repeats independently and keep the delay from crowding or overwhelming the mix.

### 5.3.4. Offset (Stereo Instances only)

Introduces a small delay between the left and right delay times to create a widening stereo effect. When Pitch Shifter-910 is inserted on a mono track, this knob vanishes.

### 5.3.5. Mix (Delay only)

Controls the blend of processed audio entering the delay processor with the delayed audio. When in Pitched Delay mode, this knob vanishes as the delay is fed back to the Shifter and becomes part of the processed audio. The Mix is then found at the Output stage.



! If you want a delay effect that is super-gritty, artifact-ridden, and full of character, but don't want to pitch shift, then leave the Shifter section set to zero and use the Pitched Delay mode. The repeats will be routed through the Shifter algorithm and be subject to the vintage circuitry, but without any pitch or formant change.

## 5.4. Output

The Output section contains controls for blending the dry signal from before the plug-in with the processed signal. If you want to create harmonies, then this is where you can create the balance between the original and the pitch-shifted audio.



### 5.4.1. Mix

Controls the blend of the dry audio from before Pitch Shifter-910 and the processed audio coming from the plug-in.

### 5.4.2. Mix Lock

The little padlock icon lets you lock the Mix control so that it remains the same when changing presets. If unlocked, the Mix will be set to whatever balance the preset defined it as.

### 5.4.3. Brightness

Controls the brightness of the processed signal. Behind the Brightness is a vintage-style Tilt EQ, which will either bring brightness or dullness depending on which way you turn it.



! The Brightness is applied only to the processed signal, not to the dry signal or mixed output.

## 6. ADVANCED CONTROLS

Neatly tucked away behind the rack are some Advanced features that add further opportunities for modulation, processing, and pitch control that were not available in the original machines.

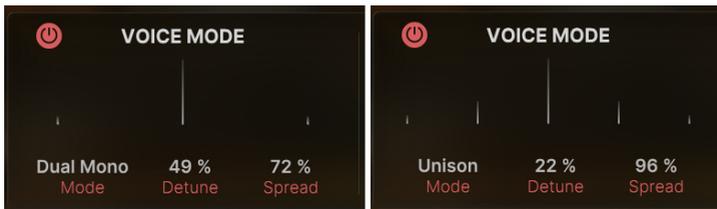


Number	Area	Description
1.	Advanced button	Open / Close the Advanced panel.
2.	<a href="#">MIDI IN</a> [p.25]	Enables MIDI control of pitch, level, and modulation functions.
3.	<a href="#">Voice Mode</a> [p.23]	Unison and Dual Mono modes that emulate effects created by using two digital pitch shifters together.
4.	<a href="#">Vibrato</a> [p.24]	A pitch modulation effect.

### 6.1. Voice Mode

It was common practice to use two pitch-shifters in parallel to create lush doubling and stereo effects. The fun thing about plug-ins is that you can load up as many instances as you want and experiment with how that sounds. With Pitch Shifter 910, Arturia has taken a couple of aspects of using multiple machines and baked them into a single plug-in to save you the trouble of working with two interfaces.

Voice mode lets you switch between two configurations: **Dual Mono** or **Unison**.



- **Dual Mono:** Based on the classic configuration of two machines in parallel, slightly detuned and panned left and right to create a wide and animated stereo image.
- **Unison:** Adds a third voice for a detuned ensemble effect.

For both modes, the controls are the same.

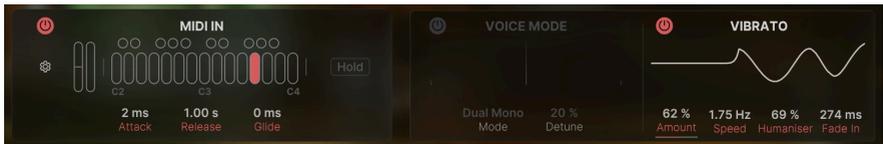
- **Voice Mode Bypass:** On / Off power button.
- **Mode:** Swap between Dual Mono (2 voices) and Unison Mode (3 voices)
- **Detune:** Adjusts the tuning offset applied to the extra voices
- **Spread** (Stereo version only): Controls how wide the voices are placed across the stereo field. With mono tracks, this control does not exist.

## 6.2. Vibrato

In the original machines, vibrato tended to be a side effect. It was a product of early digital technology and the instability of the clock. However, they did have a CV input which could also be a gateway to wobbling the pitch with an LFO. In Pitch Shifter-910, the Vibrato is a bit more intentional, although there is plenty of instability available should you wish to enjoy it.



- **Vibrato On/Off:** Disables or enables the Vibrato effect.
- **Amount:** Sets the depth of the pitch modulation.
- **Speed:** Controls how fast the pitch oscillates from 0.01Hz to 10Hz
- **Humanizer:** Adds randomness to the vibrato for a more natural and slightly unstable feel.



- **Fade** (MIDI Mode only): When using the MIDI IN to trigger the Pitch Shifter-910 and control the pitch (fully explained in the next section), a Fade control appears on the Vibrato panel. This allows you to fade in the vibrato so it takes time to reach its full modulation, very much like how vibrato is generated by the voice or other instruments.

## 6.3. MIDI IN

The hardware supported the use of a keyboard to control the pitch of up to three machines, turning them into a playable and potentially polyphonic instrument. With Pitch Shifter-910, we can use a MIDI controller keyboard to do the same and more. Along with the note selection, we have an envelope, glide, pitch bend, and modulation that can be routed to the vibrato or stereo spread. For harmonies, Pitch Shifter-910 supports up to four voices, enabling you to generate chords and choral arrangements from a single note.

The MIDI IN works within the limitations of the Pitch Shifter-910 hardware emulation, which can only shift the pitch up or down by 12 semitones. Any notes or pitch bending outside of that two octave range will be ignored and will not sound. When MIDI IN is engaged, the Pitch control in the Shifter panel no longer functions as the MIDI has now taken over this role. The Formant and Mode controls still work as before, although you can't link the Formant to the incoming MIDI notes.

**i** ! If you are playing outside the two octave range, a vertical line on either side of the virtual keyboard will flash red to indicate whether you are higher or lower.



Number	Area	Description
1.	MIDI IN	The MIDI IN panel that displays the notes, gives controls over the envelope and glide, and allows you to set modulation routing and levels.
2.	Display	Shows 'MIDI' on the display when MIDI IN is enabled and shows the MIDI notes on the pitch arc.
3.	<a href="#">MIDI Mode</a> <a href="#">[p.28]</a>	Determines the MIDI note triggering mode or polyphony.

**i** ! When you enable MIDI IN, you may find that you no longer get any sound from the Pitch Shifter-910. This is normal. Read on to find out why.

### 6.3.1. How MIDI control works

When MIDI IN is enabled, two important things happen. Firstly, the Pitch control is taken over by the pitch of the incoming MIDI notes, and secondly, the output of the processed signal from the Pitch Shifter-910 is given an envelope triggered by the incoming MIDI notes. This means that unless you play a MIDI note into the MIDI IN of Pitch Shifter-910, you won't hear anything.

 ! We're assuming here that the output Mix is set to 100% wet. If you dial down the Mix to allow dry audio through, you will hear that as the envelope only applies to the processed signal.

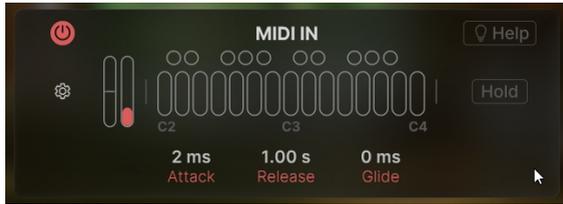
So, when you play a note, the envelope opens, audio flows through the plug-in, the pitch is shifted to the value of the MIDI note, and you hear it at the output. It's common to think the MIDI note generates the sound, but it doesn't; it just applies the pitch shift. The sound is coming from whatever you are routing through the Pitch Shifter-910.

For example, you drop the Pitch Shifter-910 onto a vocal track and set it playing. You can manually play with all the shifting and delay settings and hear the effect on the vocals. When you enable MIDI IN (assuming the MIX is 100%), the sound from the plug-in disappears. You will now only hear the processed vocal when you press a key on your MIDI keyboard. All the same processing is applied from the Delay and Formant controls, but now the pitch shift is dictated by the notes you play.

 ! For MIDI IN to function properly, MIDI notes must be routed to the effect using your DAW. These can be notes from a MIDI keyboard or sequenced MIDI notes from another track. If you are unsure how to do this, please refer to the section on MIDI Routing.

 ! For a number of DAWs, including Ableton Live, Cubase, FL Studio, and Logic Pro, MIDI routing instructions are built directly into the plug-in. Click the 'Help' button, and the right-side tutorial panel will open and guide you through the setup based on the DAW you are running. If you are not running one of those four DAWs, it will say it's an "Unknown Host" and direct you to check your DAW's manual for instructions. However, the guidance in the section on [MIDI Routing \[p.29\]](#) (below) can be helpful for any DAW.

### 6.3.2. The MIDI IN Panel

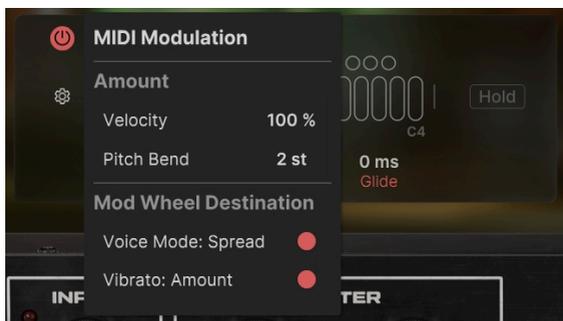


Click on the Advanced button to reveal the Advanced Panel, where we will find the MIDI IN controls.

- **MIDI IN On/Off:** Enable or disable the MIDI IN function.
- **Settings:** Opens the MIDI Modulation popup window.
- **Virtual Keyboard:** Displays incoming MIDI notes. You can click on it to trigger notes with your mouse. It also has a virtual pitch bend, Mod Wheel and indicators if you are playing out of range.
- **Envelope Attack:** Sets how quickly the sound reaches full level after a note is played. The range is from 2ms to 10 seconds.
- **Envelope Release:** Sets how long the sound fades out after the note ends or the key is released. The range is from 5ms to 10 seconds.
- **Glide:** Sets how long a note takes to glide from its original pitch to the new pitch. The range is 0ms to 5 seconds.
- **Hold:** With Hold enabled, new MIDI notes will be sustained within the context of the chosen MIDI Mode polyphony.
- **Help:** Launches a DAW-specific MIDI routing tutorial.

#### 6.3.2.1. Settings

The MIDI Modulation settings can be found by clicking on the little cog icon on the MIDI IN panel.

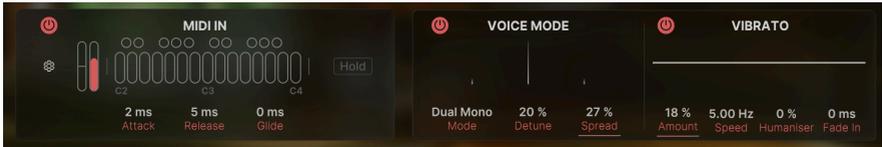


### 6.3.2.2. Amount

- **Velocity:** Controls how the velocity of incoming notes affects the amplitude of the envelope. At 0%, the amplitude is always at its maximum regardless of the velocity present in the notes. At 100%, the velocity of the MIDI notes directly determines the envelope's amplitude.
- **Pitch Bend:** Defines the pitch bend range from 0 up to 12 semitones.

### 6.3.2.3. Mod Wheel Destination

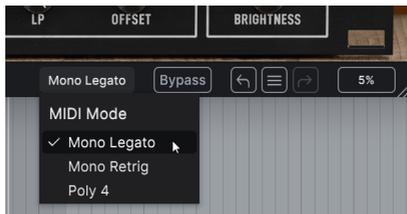
- **Voice Mode: Spread** (Stereo only): Mod Wheel modulates the spread of the Voice Mode. On a mono track, this control does not appear.
- **Vibrato: Amount:** Mod Wheel modulates the amount of Vibrato.



When you enable the Mod Wheel destinations, a line appears below the Spread (Voice Mode) and Amount (Vibrato) to show the amount of modulation. The Mod Wheel adds to the value already set on the panel, allowing you to create an offset and range of modulation. Do note that if it's set to 100%, the Mod Wheel will have no effect.

### 6.3.3. MIDI Mode

On the opposite end of the interface, hidden away on the [Lower Toolbar \[p.35\]](#) is the MIDI triggering and polyphony mode button.



The MIDI IN can operate in three different modes: Mono Legato, Mono Retrig, and Poly 4.

- **Mono Legato** - Monophonic mode where the envelope continues smoothly when notes are played legato, or without gaps.
- **Mono Retrig** - Monophonic mode where the envelope restarts with each new note regardless of any overlap.
- **Poly 4** - A four-voice polyphonic mode where you can trigger up to four independent pitch shifts and envelopes. Voice mode is disabled in this mode.

**i** Extremely high Glide values in Poly 4 mode can produce unusual and otherworldly pitch behavior.

## 6.4. MIDI IN Routing Guide

The MIDI IN function lets you use MIDI notes to control the effect's pitch and amplitude. These notes can come from a MIDI controller or your DAW, but they must be routed to the effect for MIDI IN to work. The exact routing method depends on the DAW you use.

In most hosts, this involves two tracks: one carrying the audio to be processed and another sending MIDI to the effect. For example, in Cubase, Ableton Live, and FL Studio, you create a MIDI track and route its output directly to the plugin. Logic Pro works differently: the effect must be placed on an instrument track, while audio is sent to it through the plugin's side chain input.

The steps vary slightly across hosts, but the principle remains the same.

Next, you'll find step-by-step routing guides for Ableton Live, Cubase, FL Studio, and Logic Pro. If you use a different host, try adapting these methods, consult your DAW's manual, or contact the developer for assistance.



**! Order Matters:** Always load the effect before routing MIDI to it.

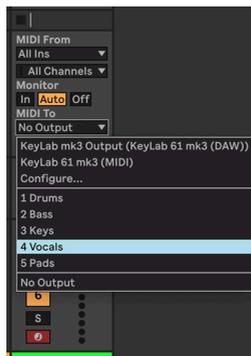


**! Live Control:** To control the effect live with a MIDI controller, the track that handles MIDI must be armed or have monitoring enabled so the MIDI notes reach the plugin.

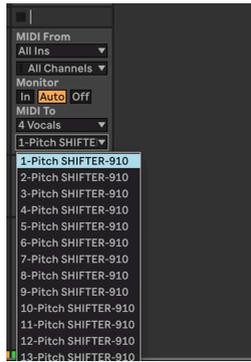
### 6.4.1. Ableton Live Setup

To route MIDI to the Pitch Shifter-910 in Ableton Live, proceed as follows:

1. Enable MIDI In on the effect: Open Pitch Shifter-910's advanced panel and enable MIDI In.
2. Create a MIDI track: This track will route MIDI to the effect.
3. Set the track output: In the MIDI track's "MIDI To" menu, choose the track where the effect is loaded ("4 Vocals" in the example below).



4. Select the Output Device/Channel: In the menu below, select "1-Pitch SHIFTER-910" from the list.



Now the track sends MIDI directly to the effect.



♪ **Live Control:** To control the effect live from your MIDI controller, keep the MIDI track selected or manually arm/record it.



♪ **Can't see Track's Output Options:** Ableton Live allows hiding a track's In/Out section. To show it, enable View > Mixer Controls > In/Out in the menu.



♪ **Multiple Devices:** All effects on the target track that support MIDI in will appear in the device list.



♪ **Why 16 Devices:** The number before each device represents its MIDI channel. Pitch Shifter-910 responds to all MIDI channels, so it behaves identically no matter which of the 16 you select.

## 6.4.2. Cubase Setup

To route MIDI to the Pitch Shifter-910 in Cubase, follow these steps:

1. Enable MIDI In on the effect: Open Pitch Shifter-910's Advanced panel and enable MIDI In.
2. Start creating a MIDI track: This track will send MIDI to the effect. Do not close the Add Track window yet.
3. Set the track's MIDI Output: In the MIDI Outputs menu, select the Pitch Shifter-910's instance.

In the example below, Pitch Shifter-910 is in Insert Slot 1 on the "Vocals" track, so the selection here is "Vocals: Ins. 1. Pitch Shifter-910 - Midi In".



4. Finish creating the MIDI track: Click Add Track to finish.

Now the track sends MIDI directly to the effect.

**i** **Change of Destination:** If needed, the MIDI Output can be changed later from the Track Inspector in the Routing section.

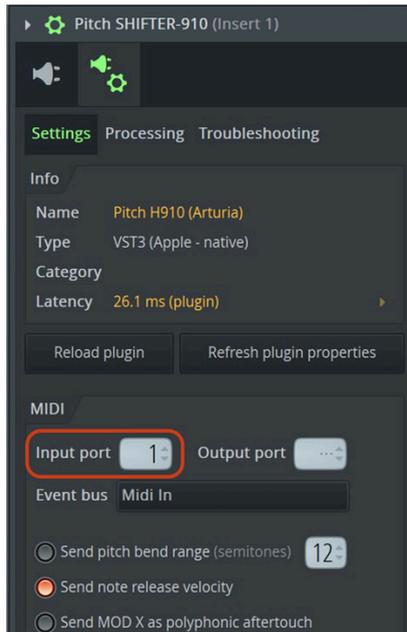
**i** **Live Control:** To control the effect live from your MIDI controller, keep the MIDI track selected or manually enable record for that track.

**i** **Track Types:** Pitch Shifter-910 can be loaded on either an audio track or an instrument track in Cubase. The routing process is the same in both cases.

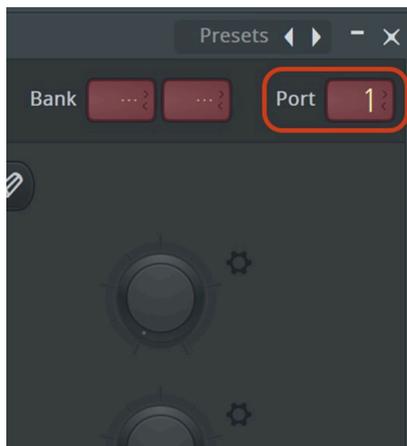
### 6.4.3. FL Studio Setup

To route MIDI to the Pitch Shifter-910 in FL Studio, proceed as follows:

1. Enable MIDI In on the effect: Open Pitch Shifter-910's Advanced panel and enable MIDI In.
2. Assign a MIDI Input Port to the effect: Open the plugin options (gear icon), then set a MIDI Input Port between 0 and 255. For this example, choose port 1.



3. Create a MIDI Out track: Add a MIDI Out generator and set its Port to the same number assigned to the effect (1 in this example). This track will send MIDI to the effect.



Now, MIDI Out sends MIDI directly to the effect.



Live Control: To control the effect live from your MIDI controller, keep the MIDI Out selected.

#### 6.4.4. Logic Pro Setup

To route MIDI to Pitch Shifter-910 in Logic Pro, proceed as follows:

1. Save the effect's state and bypass it: Start by saving the effect's current state as a user preset, then bypass it using the effect's Bypass button.
2. Create a Software Instrument track: In Logic Pro, effects can receive MIDI only when loaded in an instrument slot, so begin by creating a Software Instrument track.
3. Load the effect as a MIDI Controlled Effect: In the instrument slot, load Pitch Shifter-910 from the "AU MIDI-controlled Effects" section at the bottom of the list.
4. Recover the effect's previous state: Load the user preset you saved earlier.
5. Enable MIDI In on the effect: Open Pitch Shifter-910's Advanced panel and enable MIDI In.
6. Route audio to the effect: Open the plugin-in window header



Then select the track you want the effect applied to in the Side Chain menu.



**7. Mute the original track:** Mute the track containing the audio source to avoid doubling the dry and processed signals.



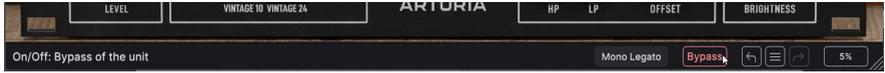
♪ **Still No Side Chain?** If you opened the plug-in window header and still cannot see the Side Chain selector, it means that the effect was not loaded as an "AU MIDI Controlled Effect" in the instrument slot.



♪ **Live Control:** To control the effect live from your MIDI controller, keep the software instrument track selected, or arm the instrument track for recording.

## 7. LOWER TOOLBAR

Rounding out the features of the Pitch Shifter-910 we have the utilities present in the Lower Toolbar, running along the bottom of the Pitch Shifter-910 user interface. While they have none of the glamour of the other sections they are very helpful nonetheless.



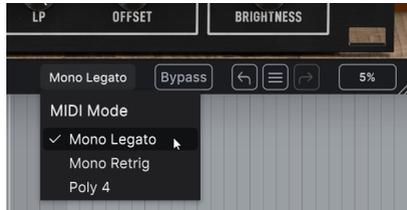
### 7.1. Parameter Name

On the left, the Parameter Name area displays the name of a parameter (and often a description of what it does) when you hover your mouse over it or click on it to adjust its value. The control's current value pops up in a tool tip that appears next to the control.

! You'll often find that simply hovering over a control brings up enough information to clarify what it does immediately. That way, you can remind yourself of most or all of Pitch Shifter's features without having to go back to the Tutorials.

### 7.2. MIDI Mode

This is only present when the MIDI IN panel is enabled and MIDI is being used to control the pitch shifting.



The MIDI IN can operate in three different modes: Mono Legato, Mono Retrigger, and Poly 4.

- **Mono Legato:** Monophonic mode where the envelope continues smoothly when notes are played legato, or without gaps.
- **Mono Retrigger:** Monophonic mode where the envelope restarts with each new note regardless of any overlap.
- **Poly 4:** A four-voice polyphonic mode where you can trigger up to four independent pitch shifts and envelopes. Voice mode is disabled in this mode.

### 7.3. Bypass

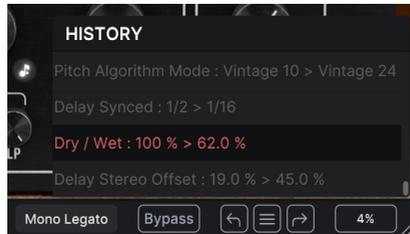
Bypass the entire plug-in so that any audio continues to play without going through any processes.

## 7.4. Undo

The left arrow undoes the last change in Pitch Shifter-910. If an event is chosen in the History, pressing Undo will move to the previous, earlier event.

## 7.5. Undo History

The center icon with the three "hamburger" horizontal lines displays a list of recent changes. Click on an entry to restore the patch to that state. This can be useful in the event you happened to go too far in your sound design and want to revert to an earlier version.



## 7.6. Redo

If a change is undone, the right arrow redoes that change. If an event is chosen in the History, pressing Redo will move to the next, more recent event in the list.

## 7.7. CPU Meter

Displays the current CPU usage of the instrument. Hovering your mouse over the CPU Meter will change it into a PANIC button. In the event of stuck notes or other issues, clicking on PANIC will send a MIDI Panic message, silencing all notes and resetting other MIDI control values.

## 7.8. Resize handle

The diagonal lines in the corner allow you to quickly resize the plug-in window. Click and drag, and when you release the mouse, the interface size will jump to the nearest option on the Resize menu.

Sometimes, when opening windows or changing applications on your computer, Mix DRUMS' window might pop up at an unusual window size. When this happens, you will see this logo over the Resize handle:



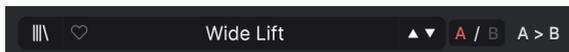
Clicking on this button will cause the window to resize to the nearest supported zoom level.

## 8. WORKING WITH PRESETS

The Preset Browser lets you browse, search, and select Presets from a clear and easy-to-use interface inside the plug-in. You can also create and save your own Presets in the User Bank. Of course, the state of any instance of the plug-in – including the current Preset – is automatically saved when you save your DAW project, so you can always pick up where you left off.

First, we will cover Preset functions from the Upper Toolbar in more depth.

### 8.1. Preset Name Pane



The name pane at top center is always displayed whether you're in the main controls view or the Preset Browser. It displays the name of the current Preset, obviously, but also offers further ways to browse and load Presets. A filled-in heart icon indicates a Liked Preset.

#### 8.1.1. Arrow Icons

The up and down arrows to the right of the Preset name step serially through Presets. This is limited by the results of any currently active search, i.e. the arrows will only step through those Presets. So, make sure any searches are cleared if you simply want to step through all available Presets until you find something you like.

## 8.1.2. Quick Browser

As mentioned briefly in a previous chapter, you can click on the Preset name in the center of the Upper Toolbar to bring up a drop-down Quick Browser for Presets. The first option in this menu is called All Presets, and it brings up a submenu of literally every Preset in the current Bank.



Below this are options that correspond to the Types. Each of these brings up a submenu of all Presets of its Type:

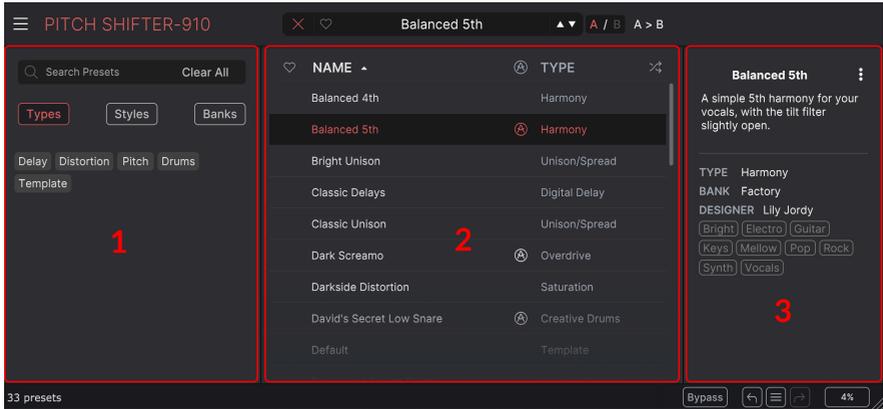
*Selecting Unison/Spread from the drop-down menu shows all the Presets of this type*

Unlike the up and down arrows, the "All Presets" submenu is independent of search criteria – it simply shows you every Preset available. Likewise for the Type choices below the line, which always include all Presets within that Type.

## 8.2. The Preset Browser

Click the “books on a shelf” icon (four vertical and tilted lines) in the Upper Toolbar to access the Preset Browser. When the Preset Browser is open, the icon becomes a large X, and is used to close the Browser when you’re done.

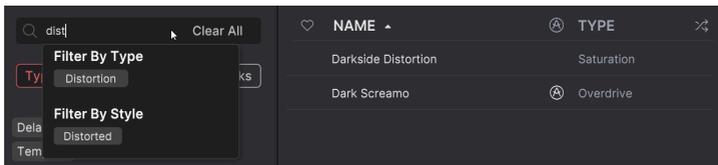
The three main areas of the Preset Browser are as follows:



Number	Area	Description
1.	<a href="#">Search [p.39]</a>	Searches for Presets by text entry with filters for Type, Style, and Bank.
2.	<a href="#">Results [p.43]</a>	Displays search results, or all Presets if no search criteria are active.
3.	<a href="#">Preset Info [p.45]</a>	Displays Preset Details; can edit details for Presets in User Bank.

### 8.2.1. Searching Presets

Click on the Search field at the top left and enter any search term. The browser will filter your search in two ways: First, simply by matching letters in the Preset name. Second, If your search term is close to that of a Type or Style it will include results fitting those tags as well. The Results Pane will show all Presets that fit your search. Click the Clear All text to clear your search terms.

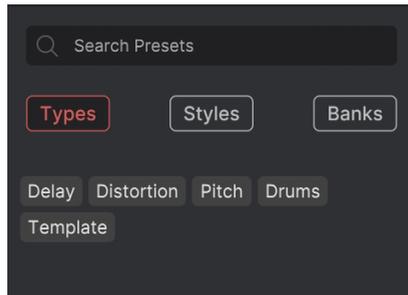


*For example, filtering by typing the letters “dist” in the search box brings up Type and Style tags that contain those letters and displays associated presets.*

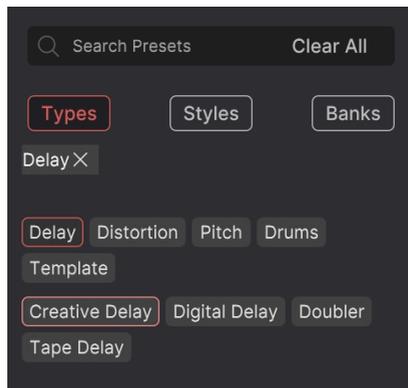
## 8.2.2. Using Tags as a filter

You can narrow (and sometimes expand) your search using different tags. There are two kinds of tags: **Types** and **Styles**. You can filter by one, the other, or both.

### 8.2.2.1. Types



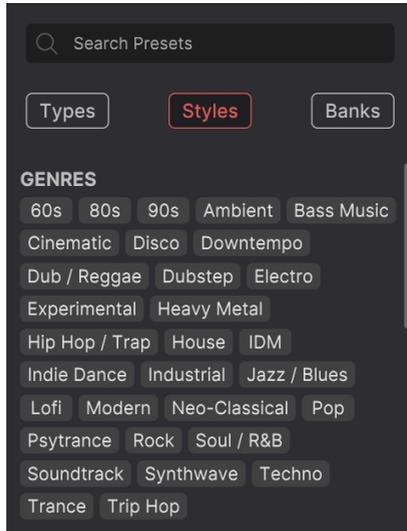
Types are categories of effects: Delay, Pitch, and so on. With a clear search bar, click the Types button to bring up the list of types. Types often include subtypes that you can reveal by clicking on them. Pitch Shifter-910 is relatively simple and so we only have a handful of Types and subtypes.



! You can specify the type when saving a Preset. That Preset will then show up in searches where you've selected that Type.

### 8.2.2.2. Styles

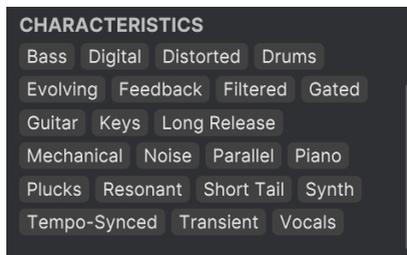
Styles are, well ... exactly that. Accessed by the Styles button, this area has three further subdivisions: - **Genres**: Identifiable musical genres such as Ambient, Bass Music, Industrial, etc.:



- **Styles**: General "vibe" such as Bizarre, Lush, Thick, etc.:



- **Characteristics**: Even more detailed audio qualities such as Filtered, Resonant, Mechanical, Noise, and more:



Click any one, and the results will show only Presets that match that tag. Notice that when you select any tag, several other tags usually grey out and become unavailable. This is because the browser is narrowing your search by a process of elimination.



! Note that this is the opposite of how selecting multiple Types broadens your search.

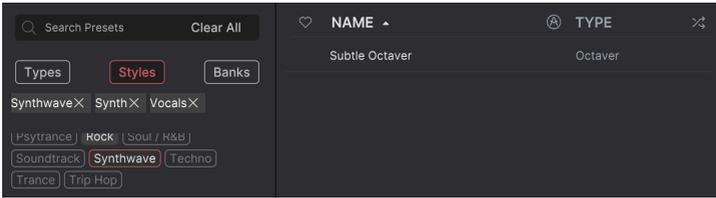
Deselect any tag to remove it and widen the search without having to start all over again. You can also clear the tag by clicking the X to the right of its text, which appears at the top.

Note that you can search by a string of text, Types and Styles, or both, with the search becoming narrower as you enter more criteria. Clicking Clear All in the search bar will remove all Type and Style filters as well as any text entry.

### **8.2.2.3. Banks**

To the right of the Types and Styles drop-down buttons is the **Banks** drop-down, which lets you do your search (using all the methods above) within the Factory or User Banks.

## 8.2.3. The Results Pane



Filtering by three tags at once narrows our choices to only one Preset.

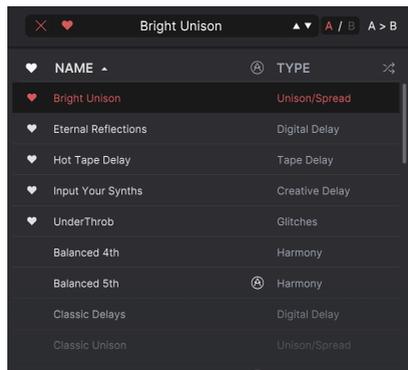
The central area of the browser shows search results, or simply a list of all Presets in the Bank if no search criteria are active. Simply click on a Preset name to load it.

### 8.2.3.1. Sorting Presets

Click the NAME header in the first column of the Results list to sort the results list of Presets in ascending or descending alphabetical order. Click the TYPE header in the second column to do the same thing by Type.

### 8.2.3.2. Liking Presets

As you explore and create Presets you can mark them as Liked by clicking the heart icon next to their names. This icon also appears in the Upper Toolbar's Preset Name Pane. Clicking on the heart icon makes all of your liked Presets show up at the top of the results list, as shown here:

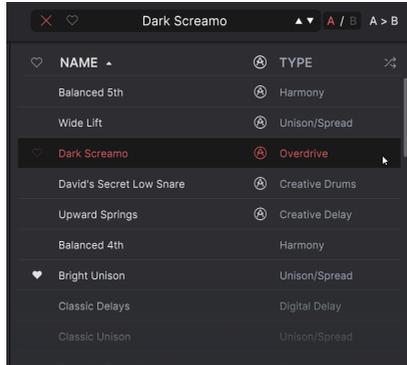


*Sort by likes*

A filled-in heart icon indicates a Liked Preset. An outline indicates a Preset that has not been Liked (yet). Click the heart at the top of the list again to return the list to its previous state.

### 8.2.3.3. Featured Factory Presets

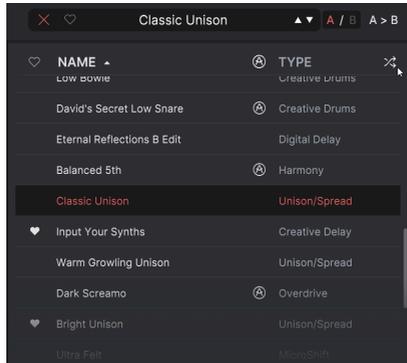
Presets accompanied by the Arturia logo are factory creations we think really showcase the capabilities of Pitch Shifter-910.



*Sort by Featured status*

Clicking the Arturia icon at the top of the Results pane sorts all featured Presets to appear at the top of the list.

### 8.2.3.4. Shuffle Button

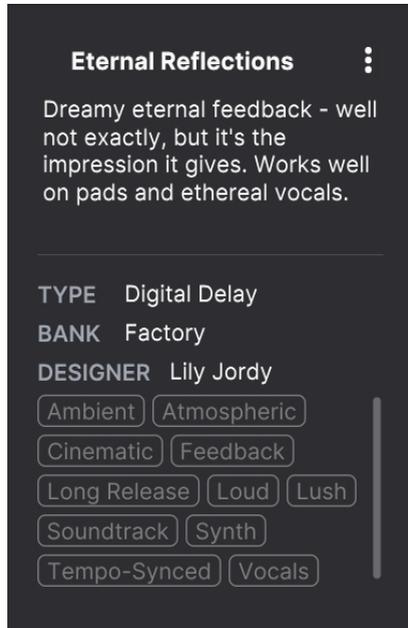


*Sorted randomly*

This button randomly reorders the Preset list. Sometimes it can help you find the sound you're looking for more quickly than scrolling through the entire list.

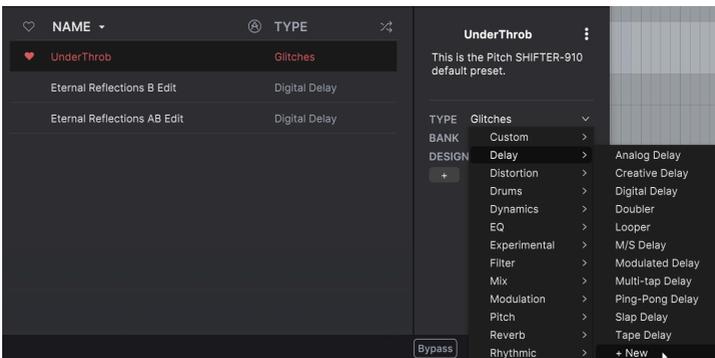
## 8.2.4. Preset Info Section

The right side of the browser window shows specific information about each Preset.



For Presets in the User bank (as the result of a Save As operation), you can enter and edit the information in the Preset Info Section and it will update in real time. This includes the designer (author), Type, all Style tags, and even a custom text description at the bottom.

To make the desired changes, you can type directly in the text fields or use one of the pulldown menus to change the Bank or Type. As shown here, you can also use a hierarchical menu to select the Type or even create a new Type or Subtype.



! Types and Styles changes you make here are reflected in searches. For example, if you remove the "Bright" Style tag from a Preset and then save that Preset, it will not show up in future searches for Bright Presets.

### 8.2.4.1. Preset Info Quick Menu

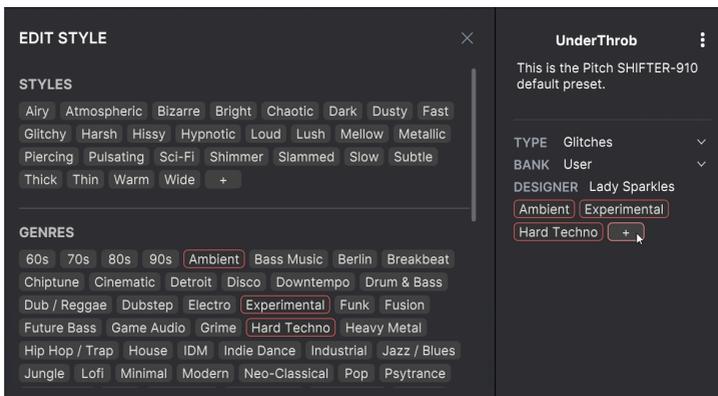
Clicking the icon with three vertical dots alongside the Preset name in the Info panel brings up a quick menu for Save, Save As, and Delete Preset operations:



For sounds in Factory banks, only *Save Preset As...* is available. This preserves the Factory Bank for future use by preventing accidental overwrites or deletions.

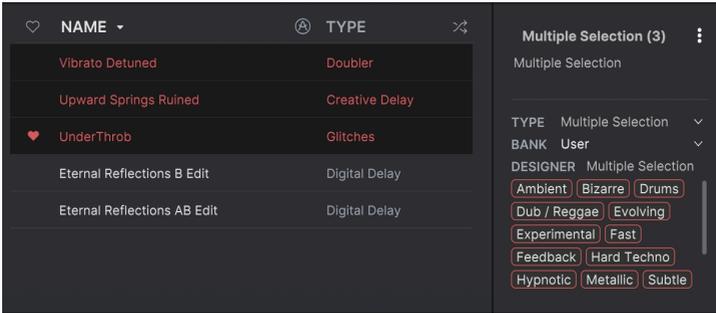
### 8.2.4.2. Edit Style

You can also create your own Style tags to help refine searches according to criteria that matter most to you. Clicking on the + icon in the list in the Preset Info pane opens the Edit Style pane, where you can create as many new tags as you'll ever need:



### 8.2.4.3. Editing Info for Multiple Presets

It's easy to edit information such as Types, Styles, designer name, and text description for several presets at the same time. Simply hold CMD (macOS) or CTRL (Windows) and click the names of the Presets you want to change in the Results list. Then enter the comments, change the Bank or Type, etc., and save.



*Selecting multiple presets*

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