MICROPITCH
Immersive

User Guide

Eventide®

Copyright 2025, Eventide Inc.
P/N: 141934, Rev 4

Eventide is a registered trademark of Eventide Inc.

AAX and Pro Tools are trademarks of Avid Technology. Names and logos are used with permission.

Audio Units and macOS are trademarks of Apple, Inc.

Dolby, Dolby Atmos, and the double-D symbol are registered trademarks of Dolby Laboratories Licensing Corporation. Manufactured under license from Dolby Laboratories. Confidential unpublished works. Copyright ©2012-2021 Dolby Laboratories. All rights reserved.

VST is a trademark of Steinberg Media Technologies GmbH.

All other trademarks contained herein are the property of their respective owners.

Eventide Inc.
One Alsan Way
Little Ferry, NJ 07643
201-641-1200
www.eventide.com

Contents

1 Welcome **1**
1.1 About This Product . . . 1

2 MicroPitch Immersive **2**
2.1 Navigating the Plug-In . . . 2
2.2 Supported Channel Formats . . . 3
Upmixing . . . 3
LFE . . . 4
2.3 Levels and Monitoring . . . 5
Master Controls . . . 5
Input Gain . . . 5
Output Gain . . . 5
Channel Levels . . . 5
In/Out/Levels . . . 5
Channel Faders . . . 5
Meters . . . 5
LFE Mute . . . 5
2.4 Controls . . . 6
Mix . . . 6
Mix Lock . . . 6
Detune Controls . . . 6
Feedback . . . 7
Crossfeed . . . 7
Kill Dry . . . 7
Kill Wet . . . 7
Morph . . . 7
Modulation Depth . . . 8
Modulation Rate . . . 8
Modulation Retrigger . . . 8
Modulation Shape . . . 8
Tempo Sync . . . 8
Predelay . . . 8
Loop delay . . . 8
Delay Link . . . 8
Delay Pattern . . . 9
EQ . . . 10
2.5 Preset Bar . . . 12
Controls . . . 12

3 Conclusion **14**

Welcome

PART 1



1.1 About This Product

Thank you for your purchase of the Eventide MicroPitch Immersive plug-in. Eventide MicroPitch Immersive is a classic Eventide pitch effect for adding spatial depth and richness. For over 50 years, innovative effects like these have made Eventide an industry leader, and we are proud that they continue to be in demand today.

Before you forget, please take a few minutes to register online. This helps us keep you informed of any important software updates and provide you with special offers that may only be available to registered users.

MicroPitch Immersive PART 2

MicroPitch Immersive is a powerful tool for adding spatial depth and richness to your immersive mixes. The MicroPitch effect has been a mainstay of audio production and musical performance since it was first introduced within the legendary H910 and H949 effects processors. Its subsequent appearance in the H3000 Harmonizer® further popularized the effect and cemented its place in musical history as a quintessential studio tool.

In redesigning MicroPitch Immersive for Dolby Atmos® and surround formats, we have added functions and features that extend the capabilities of the original algorithm significantly. This is not just adding more channels to the classic algorithm—it is now possible to control the dynamics of the spatial image.

2.1 Navigating the Plug-In

The MicroPitch Immersive user interface is designed with an emphasis on user control and playability. Specifically, the knobs are easily adjusted with an up-and-down motion of the mouse/finger. Fine-tune drag is available via the ⌘ (Mac) or Ctrl (Windows) modifiers. The Morph control allows you to program ranges of settings and change dynamically between sounds. All controls produce smooth, glitch-free changes in audio.

2.2 Supported Channel Formats

Eventide designed MicroPitch Immersive in accordance with the Dolby Atmos® speaker setup guides.

To ensure the highest quality results, we recommend reviewing the speaker placement specifications for your configuration on the Dolby website.

At present, the following output formats are supported:

- Mono
- Stereo
- LCR
- Quadraphonic
- 5.0, 5.0.2, 5.0.4
- 5.1, 5.1.2, 5.1.4
- 7.0, 7.0.2, 7.0.4, 7.0.6
- 7.1, 7.1.2, 7.1.4, 7.1.6
- 9.0.4, 9.0.6
- 9.1.4, 9.1.6



When running as a VST3, the 9.0.4 ITU, 9.0.6 ITU, 9.1.4 ITU, and 9.1.6 ITU formats are also supported. This is done to provide compatibility with DAWs which only support the ITU formats.

For the 9.x.x ITU formats, MicroPitch Immersive will remap the Left Centre and Right Centre channels to the Wide Left and Wide Right channels. This effectively creates a 9.x.x Atmos format, where it is expected that the Wide Left and Wide Right speakers are placed outside the Front Left and Front Right speakers.

While non-standard, this behavior mirrors that of several major DAWs which still support the ITU format, but also route Left and Right Centre in this manner.

Upmixing

In addition to symmetrical formats (where input format = output format), MicroPitch Immersive will automatically upmix the input source to match the output configuration if necessary. Mono-in, stereo-in, and additional input combinations are provided for each output format (DAW dependent).

LFE

The LFE channel is excluded from the effect's signal path. Accordingly, the Mix knob has no effect on its level. The LFE channel's level may be adjusted using its channel fader, and a mute button is provided for removing LFE content entirely from the mix.

When upmixing (e.g., from mono or stereo to 5.1), if the input format does not contain an LFE channel, the LFE channel's output will be silent.

2.3 Levels and Monitoring

Master Controls

Input Gain Controls the input gain to the plug-in, between -60 and +12 dB. This parameter sets the input gain for both wet and dry signals. Please note that if input levels are too hot, it is possible to clip the signal internally.

Output Gain Controls the output gain of all channels of the plug-in, between -60 and +12 dB. This gain is applied post-mix, and affects both wet and dry signals.

Channel Levels

In/Out/Levels Three-way switch to choose what information to display for the individual channels.

In and Out views show dot meters indicating the presence of signal (nominal level of -60 dBfs) for individual input or output channels respectively. These meters make it easy to quickly diagnose routing issues. The dot meters also include clipping indicators. These indicators may be reset by clicking on any dot meter.

The Level view shows individual channel faders with level meters.

Channel Faders Controls the output gain for individual speakers. The link buttons link the gain for the sliders within the group in order to preserve the stereo image within the group when changing gain.

When the Link button for a group is engaged, only the left channel of the group will be read from automation or control surfaces. The other channel faders in the group will be ignored.

Meters Individual channel meters appear next to the channel faders. These meters display the channel's peak level, RMS level, and held peak level. Additionally, a clipping indicator appears at the top of the channel meter. Clipping indicators can be cleared via mouse click.

LFE Mute Mutes the LFE channel when active. The mute and gain controls for the LFE channel only affect the level of the dry signal since the effect does not use the LFE channel.

2.4 Controls

Many of MicroPitch Immersive's controls will be familiar to users of Eventide's stereo MicroPitch plug-in. For those users, please note that the following parameters are new in MicroPitch Immersive:

- Left/Right Detune
- Left/Right Detune Tilt
- Front/Rear Detune
- Front/Rear Detune Tilt
- Top/Main Detune
- Top/Main Detune Tilt
- Crossfeed
- Kill Dry
- Kill Wet
- Loop Delay
- Delay Link
- EQ section
- Individual speaker levels

Mix — Determines the relative level of the wet and dry signals.

Mix Lock — The Mix Lock control is located to the right of the Mix dial's value. When locked, it prevents the Mix value from changing as you load presets. This is especially useful on an effect return track where the mix should always be set to 100%.

Detune Controls

The Left/Right, Front/Rear, and Top/Main Detune controls can be used to alter the apparent spatial width, depth, and height of the input.

Note: when typing values in for Left/Right, Front/Rear, or Top/Main, the respective Detune dial and Detune Tilt slider will automatically be adjusted to match the values entered.

Left/Right — This knob sets the range in cents of the detuning for the left and right halves of the room. Values to the left of center will shift down for Left and up for Right, whereas values to the right of center will shift up for Left and down for Right.

Left/Right Tilt — Weights the detune towards Left or Right by scaling down the opposite side's value. Set Left/Right to the maximum desired pitchshift, then move Left/Right Tilt positive to make the Right detune value smaller (i.e., towards zero), or negative to make the Left detune value smaller.

Front/Rear — This knob sets the range in cents of the detuning for the front and rear halves of the room. Values to the left of center will shift down for Front and up for Rear, whereas values to the right of center will shift up for Front and down for Rear.

Front/Rear Tilt — Weights the detune towards Front or Rear by scaling down the opposite side's value. Set Front/Rear to the maximum desired pitchshift, then move Front/Rear Tilt positive to make the Rear detune value smaller (i.e., towards zero), or negative to make the Front detune value smaller.

Note: Disabled in formats without Rear speakers

Top/Main — This knob sets the range in cents of the detuning for the top (elevated) and main (non-elevated) speaker groups. Values to the left of center will shift down for Top and up for Main, whereas values to the right of center will shift up for Top and down for Main.

Top/Main Tilt — Weights the detune towards Top or Main by scaling down the opposite side's value. Set Top/Main to the maximum desired pitchshift, then move Top/Main Tilt positive to make the Main detune value smaller (i.e., towards zero), or negative to make the Top detune value smaller.

Note: Disabled in formats without Top speakers

Feedback — Controls the feedback around the entire effect. The Delay Pattern control determines the routing used for the Feedback knob.

Crossfeed — Controls the way echoes are distributed among the speakers. Because the level of echoes are dependent on the Feedback control, Crossfeed will have no effect if Feedback is at 0%.

Kill Dry — Mutes the input signal, allowing you to hear the reverb tail fade out. This can be useful to help dial in the sound, or it can be automated for a more tremolo-like effect.

Kill Wet — Kill Wet is a momentary button that damps the entire delay tail and clears all delay lines, giving an immediate fade of all volume. This can be automated for tremolo-like effects with the build-up of delay after each time Kill Wet is pressed.

Morph — The Morph slider is a macro control which morphs between two sets of values: I and II. To use the Morph slider, you must first assign some values to I and II. To do this, click the I button, then change the values of the main controls or the EQ section that you want to morph. Next, click the II button and then assign values in a similar fashion. Click the II button to exit assignment, or simply move the Morph slider. Now the Morph slider will interpolate between the values set for I and II. The mapped controls have highlighted values to indicate that they have been mapped. To remove a control from the morph, click the × on the highlight.

The Morph slider can be used to perform subtle or drastic transformations of the effects's settings. You could, for example, map the Crossfeed and Detune Left/Right knobs so that as the Morph slider moves from I to II the Crossfeed gets larger, while the Detune Left/Right amount decreases. Additionally, you could use it to shift the emphasis of the EQ from the front to the back of the room as the slider moves.

Modulation Depth Sets the modulation depth for the pitchshifters.

Values from 0 % to 100 % modulate from the current detune value towards 0. For example, if the detune values for Left/Right are -10 and 10 respectively, and modulation depth is 100 %, the ranges for the modulation will be from -10 to 0 cents on the Left and 10 to 0 cents on the Right.

Values from 100 % to 200 % modulate through zero. With detune values for Left/Right of -10 and 10, and modulation depth of 150 %, the ranges for the modulation will be from -10 to 5 cents on the Left and 10 to -5 cents on the Right.

Modulation Rate Sets the speed of the modulation LFO.

Modulation Retrigger Resets the phase of the modulation LFO.

Modulation Shape Sets the shape of the modulation LFO.

- Triangle
- Square
- Saw Up
- Sine
- Saw Down
- Random

Tempo Sync Controls the tempo mode of the plug-in for Predelay and Loop Delay.

- Sync Delay amounts sync to the tempo of the DAW session.
- Manual Delay amounts sync to manually set Tempo value.
- Off Delay amounts set in milliseconds.

Predelay Sets the amount of delay in front of the pitchshifters, ranging from 1 to 2000 ms. When Tempo Sync is off, the value is specified in milliseconds. When Tempo Sync is set to either Sync or Manual, the value is specified in beat subdivisions and is calculated using the specified tempo.

Loop delay Sets the amount of delay after the pitchshifters, before Feedback and Cross-feed are applied. The Loop Delay range is 1 to 2000 ms. When Tempo Sync is off, this ranges from 1 to 2000 ms. When Tempo Sync is set to either Sync or Manual, it is set in beat subdivisions and is calculated using the specified tempo.

In order to hear Loop Delay's effects, Feedback must be larger than 0%.

Delay Link The Delay Link button is located between the Predelay and Loop Delay dials. When active, the Predelay and Loop Delay values will be linked based on the value of the Predelay control.

When the Delay Link button is active, only the Predelay value will be read from automation or control surfaces.

Delay Pattern

The Delay Pattern control determines how the delayed signal moves around the room as the Feedback knob is turned up.

- Self — Echoes stay in their original spatial positions.
- Rotate Left — Echoes rotate counterclockwise on repeat.
- Rotate Right — Echoes rotate clockwise on repeat.

EQ

MicroPitch Immersive features a three-band equalizer (EQ) section consisting of Low, Mid, and High bands. The EQ section can be adjusted directly on the plot or using the draggable text controls beneath the plot.

The Low and High bands offer a choice between shelving and cut filters.

Speaker Groups

The EQ section allows independent settings for up to three spatial groups of speakers: Front, Top, and Rear. In the top-right of the EQ section, you can select the currently viewed group by clicking on the ALL, FRONT, TOP, or REAR buttons. To reset the EQ curve for a particular group or all groups, simply alt-click the relevant group button.

Front	Front (L/C/R) and Wide
Top	Top Front, Top Side, and Top Rear
Rear	Surround Side and Surround Rear

Editing the EQ for a single group

When viewing FRONT, TOP, or REAR, only the handles for the selected group are shown and any edits to the plot only affect the current group.

Editing the EQ for multiple groups

When viewing ALL curves, the white handles and curves indicate shared settings. If you click and drag on a white handle, it will affect multiple groups at once. Similarly, dragging on a band rather than a handle within the plot will affect all of the groups while preserving their relative offsets from each other. To set the other handles in a band to match a particular handle, double-click the desired handle and the other handles will jump to its position.

Plot Mouse Controls

Action	Mac	Windows
Adjust Q	⇧ drag	⇧ drag
Precision Drag	⌘ drag	Ctrl drag
Reset handle	⌥-click	Alt-click
Join handles (All view)	double-click	double-click

EQ Controls

The Frequency, Gain, and Q controls displayed below the plot correspond to the selected group of speakers: All, Front, Top, or Rear. When the All group is selected, if a parameter has different values for the Front, Top or Rear groups, the control beneath the plot will read "--" to indicate that there are multiple values associated with that parameter. To set the value for all groups to a single value, simply click on the text and then enter the desired value.

Low Filter Type	Selects the filter type for the Low band for all groups: low shelf (default) or low cut.
Low Frequency	Adjusts the frequency of the Low band in the current group.
Low Gain	Adjusts the gain of the Low band in the current group. This control is disabled when using a low cut filter.
Low Q	Adjusts the Q of the Low band in the current group.
Mid Frequency	Adjusts the frequency of the Mid band in the current group.
Mid Gain	Adjusts the gain of the Mid band in the current group.
Mid Q	Adjusts the Q of the Mid band in the current group.
High Filter Type	Selects the filter type for the High band for all groups: high shelf (default) or high cut.
High Frequency	Adjusts the frequency of the High band in the current group.
High Gain	Adjusts the gain of the High band in the current group. This control is disabled when using a high cut filter.
High Q	Adjusts the Q of the High band in the current group.

2.5 Preset Bar



Located at the top of the MicroPitch Immersive Plug-In, the Preset Bar lets you load and save presets, along with several other features.

When MicroPitch Immersive is installed, the factory preset library is placed in the following platform-specific location:

Mac	`<user>/Music/Eventide/MicroPitch Immersive/Presets`
Windows	`<user>/Documents/Eventide/MicroPitch Immersive/Presets`

Within the `Presets` folder are two sub-folders: `Factory Presets` and `User Presets`. The first contains the presets that come with the plug-in. The second is for storing any presets that you create. You can create sub-folders within the `User Presets` folder for organizing your presets if you wish. Presets for MicroPitch Immersive have a **.tidex** extension and can be saved or loaded from the MicroPitch Immersive preset bar in any supported DAW.

> ⚠ *Many DAWs offer an additional generic preset bar that saves DAW-specific presets to a separate location. We strongly recommend only saving your presets using the MicroPitch Immersive preset bar to ensure that your presets will be accessible from any DAW and fully compatible with the plug-in.*

Controls

UNDO The Undo button undoes the last change, and restores the plug-in to the previous state. Pressing this button multiple times will move you backwards in the plug-in's state history.

REDO The Redo button reverses the last undo command, if any. Pressing this button multiple times will move you forwards in the plug-in's state history.

PREVIOUS PRESET Loads the preset before the current preset in the preset menu.

NEXT PRESET Loads the preset after the current preset in the preset menu.

PRESET CHOOSER Choose a preset from the Factory or User preset collections.

- **Save as...** Save the preset with a new name or location.
- **Load...** Open a preset from a location on disk.
- **Import...** Copy a preset from a location on disk into the User preset collection.

SAVE Saves the preset to disk.

A ► B Switches between two temporary plug-in states, A and B. This is useful for making A/B comparisons.

- Click A or B to switch states.
- Click ► to copy state A into B.
- Click ◄ to copy state B into A.

The A and B states are not saved in your DAW session. When you load a session, the current settings for the plug-in will be loaded into A and B.

INFO (I) Opens a drop-down menu with various help topics and settings.

- **User Guide** – Open this document.
- **Webpage** – Launches the MicroPitch Immersive webpage.

Conclusion

PART 3

We hope you enjoy the MicroPitch Immersive plug-in and put it to good use in all of your mixes. Please be sure to check out Eventide's other native plug-in offerings for more unique and interesting effects.

For further questions or support, head over to the user forums.