

# FUMIGATE



# Fumigate User Manual

Vain Audio 2024

# About Fumigate

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Fumigate is a multiband stereo expansion plugin. The incoming signal is split into up to five frequency bands. From there stereo width and chorus processing can be applied individually to each frequency band. The resulting signals are summed and output.

## Getting Started

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The top half of the plugin window consists of the frequency analyzer and band visualizer. The bottom half of the plugin window can be split into four distinct sections:

- A. The information visualizer in the top left has extra band controls and shows tooltips and status messages.
- B. The top center contains the band cutoff controls.
- C. The top right is the Stereo Spread section.
- D. The bottom left control panel contains the Chorus controls.



# Band Controls

Band controls exist primarily within the information visualizer. The band cutoff controls will appear directly to the right of the information visualizer depending on which band is selected and how many processing bands there are.

## Band Enable

Individual bands can be enabled or disabled. In this context, enable/disable refers to the processing done on each frequency band. If a band is disabled its processing is completely bypassed. In other words the signal for that band is completely dry.



## Band Solo

Bands can be soloed. This is done using the toggle button in the information visualizer labeled 's'. When a band is soloed all other bands will be muted and only the soloed band's signal will be audible. This is useful for listening to the effect a parameter has on an individual band.



## Band Mute

Bands can be muted using the toggle button in the information visualizer labeled 'm'. Solo takes precedence over mute. If a soloed band is also muted there will be no output signal.



## Band Mix

Bands mix can be adjusted using the vertical slider in the top right of the information visualizer.



## Band High Cut / Low Cut

The frequency band position can be adjusted using the two sliders at the center top of the plugin controls.



## Stereo Spread

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### Haas

Adjusting this parameter increases the delay time on the right channel, up to a maximum of 30 ms in samples to create a pseudo stereo effect.

### Balance

In its initial position, balance is the original signal. Fully to the left is just mid signal, and fully to right is just the sides of the signal.

## Pan

With this knob you can move the entire signal through the stereo field, from fully left to fully right.

## Chorus Modes

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### Phosphine

A simple flanger. Increase feedback to get metallic tones, or keep it low to enjoy a smooth sweeping modulation.

### Ethylene

A special type of flanger that will rise forever.

### Methrin

Composed of multiple variable delay lines all tuned to different phases for optimal thickness.

### Triazine

Consisting of the same amount of delay lines as Methrin except they move through time using a pseudo-random algorithm.

## Chorus Parameters

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### Pre-Delay

A simple flanger. Increase feedback to get metallic tones, or keep it low to enjoy a smooth sweeping modulation.

### Frequency

The rate at which the chorus modulates in Hz. At lower values this induces subtle sweeps while larger values can create more intense, visceral fluctuations.

## Feedback

The amount of the signal that is fed back in with the input signal. In flangers this creates a more metallic delay sound, while in choruses it will create a more pleasant pseudo-reverberation effect.

## Depth

Chorus depth controls the extent of modulation range, where lower settings offer subtle variations, an optimal midrange setting provides a balanced effect, and at maximum depth, the chorus spans the entire spectrum, though extreme values may lead to an unsettling motion sickness-like auditory experience.

# Acknowledgments

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Fumigate uses spectrum visualization code written by Daniel Walz (Foleys Finest Audio UG)

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Fumigate uses gin.

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