iZotope Trash Delay for Wwise

Introduction

The iZotope Trash Delay effect for Wwise is a great way to add delay with some character to any audio. By using one of several different types of distorted delays including tape, tape/tube, analog, digital and lo-fi digital delays, it's possible to get a wide variety of unique and creative delay sounds.

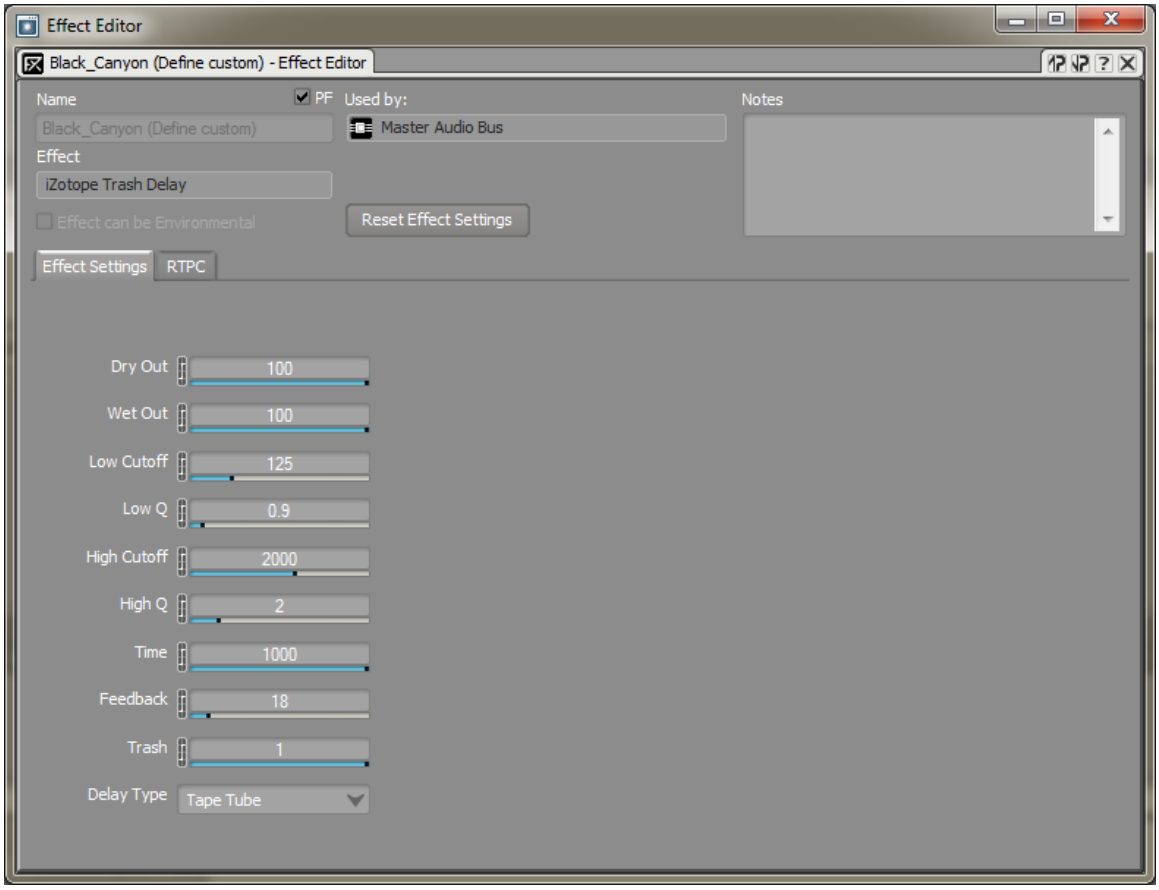

Figure 1 - iZotope Trash Delay

Delay Controls

The main controls for Trash Delay are the *Time* and *Feedback* controls. The *Time* control determines how long after the dry signal the delayed signal plays (defined in milliseconds), while the *Feedback* control (%) adjusts the number of times and level at which the delayed signal repeats.

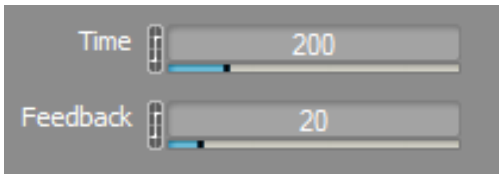

Figure 2 - Delay Controls

Note: To avoid audible artifacts, adjust the Time control between playbacks.

Filtering Controls

There are also filter parameters for shaping the response of the delayed portion of the signal. The Low Cutoff, Low Q, High Cutoff, and High Q controls change how much of the low and high frequency content is present in the delayed signal (these only affect the delayed portion not the dry signal).

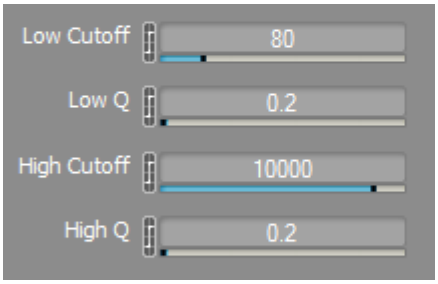

Figure 3 - Filter Controls

Delay Type and Character

The truly unique character of the Trash Delay effect comes from the various delay types offered and the ability to vary the distortion on each. The *Delay Type* dropdown menu is used to select from six different delay types while the *Trash* slider is used to affect the character of each of those delays. For example, higher *Trash* values for Tape delays results in more saturation and higher *Trash* values for Lo-Fi Digital delays results in more bit truncation and aliasing.

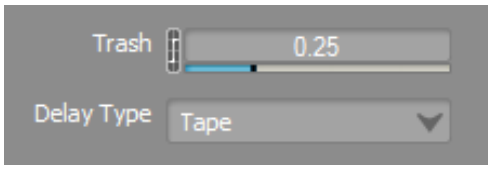

Figure 4 - Delay Type

Delay Type	Description
Tape	A straight tape delay effect with saturation and wow/flutter.
Tape/Tube	A tape delay effect with additional tube saturation properties.
Analog	A lo-fi analog delay effect with smearing and analog degradation.
Lo-Fi Digital	A lo-fi digital delay effect similar to the first digital delay stomp boxes.
Broken Bit	A digital delay effect with infinite feedback on the lowest bit - similar to a faulty "stuck bit" delay.
Digital	For completeness, a pure, clean digital delay.

Interface Element	Description
Dry Out	The output gain of the dry/undelayed signal. Default value: 100 Range: 0 to 100 Units: %
Wet Out	The output gain of the wet/delayed signal. Default value: 0 Range: 0 to 100 Units: %
Low Cutoff	The Low Frequency Filter Cutoff for the delayed signal. Default value: 80 Range: 20 to 20000 Units: Hz
Low Q	The Q or Bandwidth for the Low Frequency filter of the delayed signal. Default value: 0.2 Range: 0.2 to 12 Units: None
High Cutoff	The High Frequency Filter Cutoff for the delayed signal. Default value: 10000 Range: 20 to 20000 Units: Hz
High Q	The Q or Bandwidth for the High Frequency filter of the delayed signal. Default value: 0.2 Range: 0.2 to 12 Units: None

Time	The delay time in milliseconds. Adjust this control between playbacks to avoid audible artifacts. Default value: 200 Range: 10 to 1000 Units: milliseconds
Feedback	The gain of the delay feedback. Higher values will increase the number of repeats, as well as their respective levels. Default value: 20 Range: 0 to 200 Units: %
Trash	The amount of degradation for the delay. For example, higher Trash values for tape delays results in more saturation. Higher Trash values for lo-fi digital delays results in more bit truncation and aliasing. Default value: 0.25 Range: 0 to 1 Units: None
Delay Type	Selects the type of Delay used. The delay choices are: Tape Tape Tube Analog Lo Fi Digital Broken Bit Digital