

STEREO DEREVERB



DESCRIPTION

The **Stereo DeReverb** plugin removes the reverb from a stereo sound recorded in a reverberant environment. This plugin provides a very simple GUI, but uses state-of-the-art sound processing. It can also be used as a basic denoiser plugin for removing stereo hiss.



PRINCIPLE

The **Stereo DeReverb** plugin makes an in-depth stereo sound processing. It separates the sound that is focused in the stereo field and the sound that is spread over the stereo field. The sound that is focused in the stereo field can be a recorded voice for example, either centered or panned. The sound that is spread over the stereo field is for example the multiple reverberations of the recorded source.

The plugin separates these two types of sounds, and makes possible to re-mix them. For example it separated the dry recorded source from the reverb, and makes possible to diminish or increase the natural reverb of the recording.

The plugin can also be used as a basic denoiser plugin. Indeed, for stereo recordings, the hiss is most of the time a stereo hiss and it is spread over the stereo field. The plugin can then separate the hiss from the focused recorded source and then suppress it.

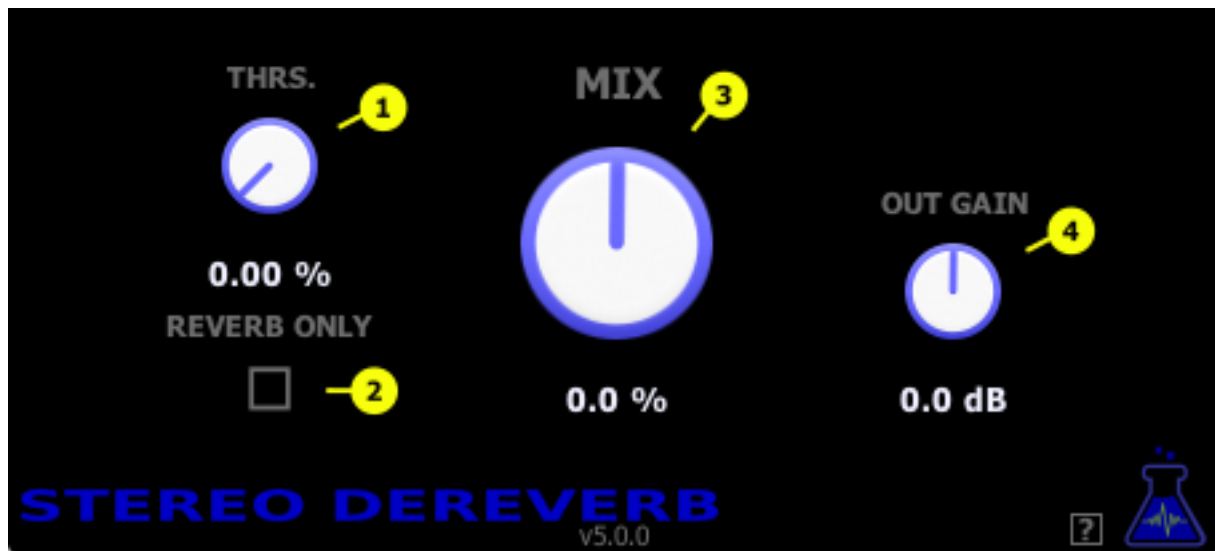
NOTE: The **Stereo DeReverb** plugin can only be used with real stereo sounds. It is not suitable for double-mono sounds.

NOTE: The plugin can also be used to remove a reverb that was added by another plugin, if this reverb is a stereo reverb.

NOTE: The plugin can process several sources in the same recording.

NOTE: The plugin manages better the reverbs with dominant reverb tails than the reverbs with dominant early reflections.

USAGE



The **THRS. (1)** parameter sets the separation threshold between the dry and the reverberant signal. A common value is around 30%. When the threshold value is too high, some parts of the dry sound can be muted, such as some voice breath and sibilance for example.

The **REVERB ONLY (2)** parameter makes possible to hear only the extracted reverberant. It is used when setting the **THRS. (1)** parameter, to know how much signal we consider as reverberant signal.

The **MIX (3)** parameter mixes the extracted reverberant sound. When set to 0%, the output signal is the same as the input signal. The reverberant sound is neither diminished, nor increased. When set to -100%, the reverberant sound is totally attenuated. The output sound is close to the dry signal. When set to 100%, the reverberant sound is increased to the maximum, making possible to increase the natural reverb of a stereo recording.

The **OUT GAIN (4)** parameter makes possible to adjust the output gain.

QUICK START GUIDE: REMOVE THE REVERB FROM A RECORDING

- Insert the plugin on the stereo track.
- Check the **REVERB ONLY (2)** checkbox.
- Adjust the **THRS. (1)** knob, in order to have as much reverb sound as possible, but without having the dry signal.
- Uncheck the **REVERB ONLY (2)** checkbox.
- Set the **MIX (3)** parameter to -100%.

QUICK START GUIDE: INCREASE THE REVERB OF A RECORDING

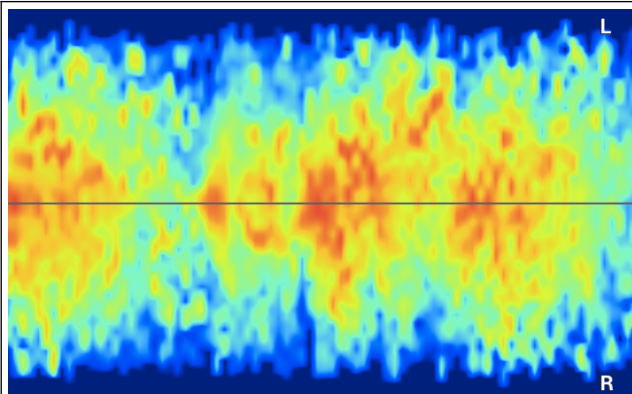
- Insert the plugin on the stereo track.
- Check the **REVERB ONLY (2)** checkbox.
- Adjust the **THRS. (1)** knob, in order to have as much reverb sound as possible, but without having dry signal.
- Uncheck the **REVERB ONLY (2)** checkbox.
- Set the **MIX (3)** parameter between 0 and 100 %.

QUICK START GUIDE: DENOISE A RECORDING

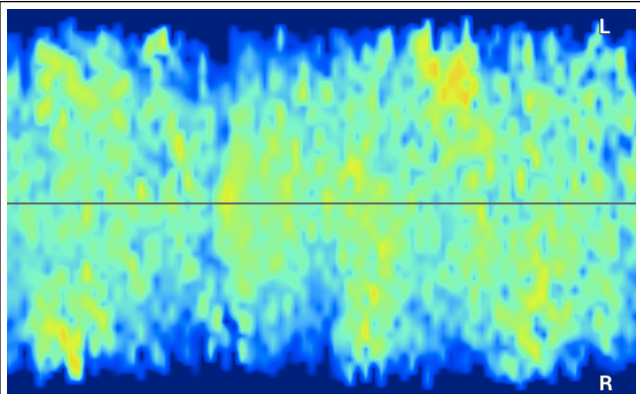
- Insert the plugin on the stereo track.
- Set the **MIX (3)** parameter to -100%.
- Increase the **THRS. (1)** parameter until the hiss is removed (do not increase this parameter too much in order to keep a good sound).

APPENDIX I – PANOGRAMS OF SOME RESULTS

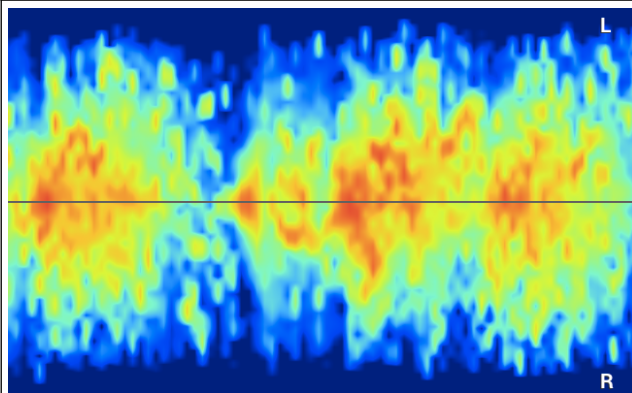
This section contains several panograms of some **Stereo DeReverb** results. On these panograms, the stereo center is the horizontal line in the middle. The left pan position is at the top, and the right pan position is at the bottom.



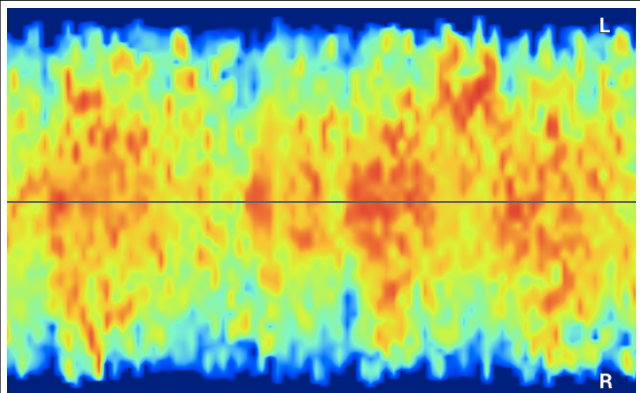
Panogram of the original sound: a voice recorded in stereo in a reverberant environment.



Panogram of the extracted reverb only. We keep the sound that is spread, and remove the sound that is focused in the center.



Panogram of the dry voice signal only. We keep the sound that is focused in the center, and diminish the sound that is spread.



Panogram of the voice with increased reverb effect. We increase the sound that is spread, mainly on the sides.