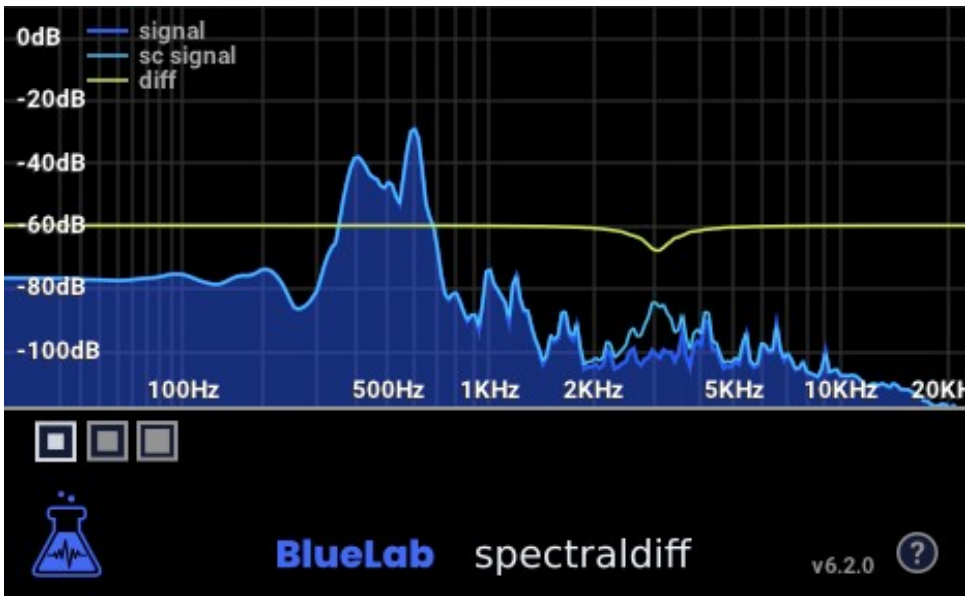
BlueLab spectraldiff

plugin version: 6.2.0
manual version: 3.0

www.bluelab-plugs.com

DESCRIPTION

The **SpectralDiff** plugin detects if two audio files are identical or slightly different. For this purpose, it computes and display as spectrum the difference between the two files during the playback. The difference is computed and updated in real-time, which means that the plugin detects if the two signals are identical at one point then are slightly different later on the track.



EXAMPLES OF USE

Comparing two bounces of a mix
We have several audio files, for example several bounces of a mix, and we don’t remember if they are identical or if we made some changes.

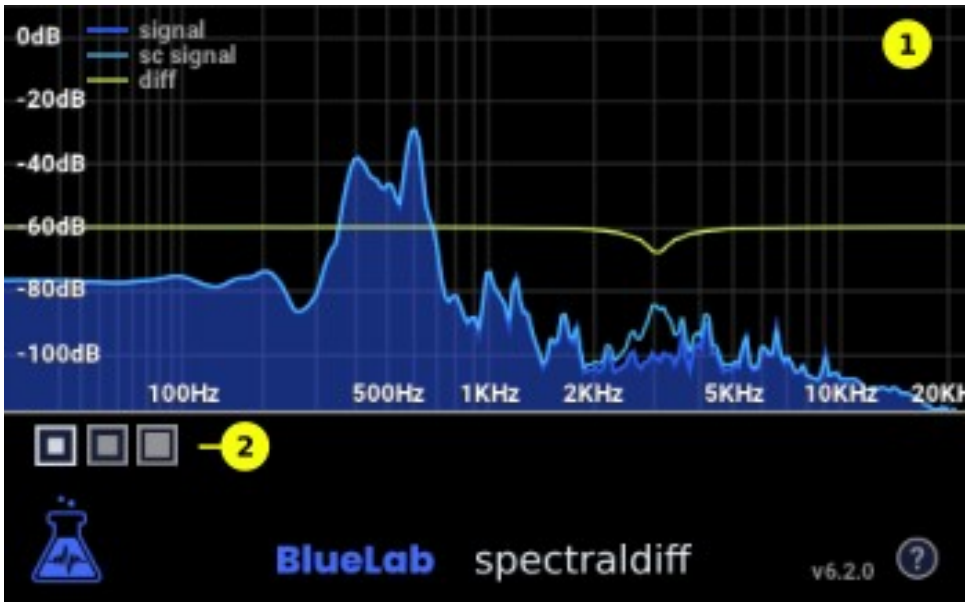
Comparing versions of audio tracks
In the case where we didn’t make the sound recording ourselves, but we only have to make the mix, and we receive several versions of each track to mix. When listening we have the feeling that some tracks are duplicated.

USAGE

Note : The **SpectralDiff** plugin requires the use of sidechain. Some DAWs don’t provide this feature. Please check that the DAW you are using provides this feature.

- Import the first audio file on a track and insert the **SpectralDiff** plugin on this same track
- Make the signal of a second track enter by the sidechain input of the plugin
- Launch the playback

Note: if the input is stereo and if we have only one channel sidechain input, the difference will be computed between the sidechain input and the left stereo channel only.

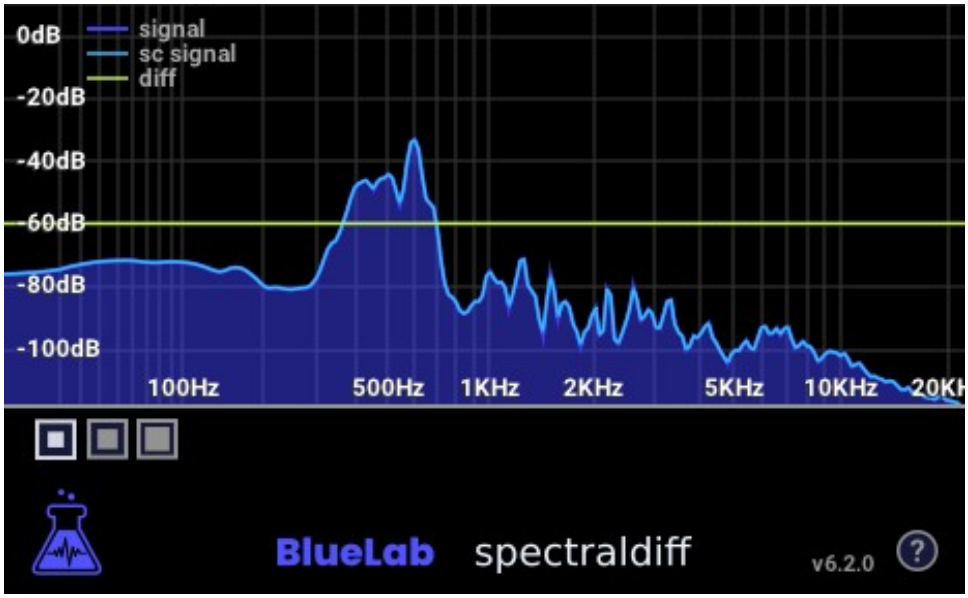


The **GRAPH (1)** displays the **SIGNAL** curve of the track, as well as the curve of the signal entering by sidechain, **SC SIGNAL**, and the curve representing the difference between the two signals, **DIFF**.

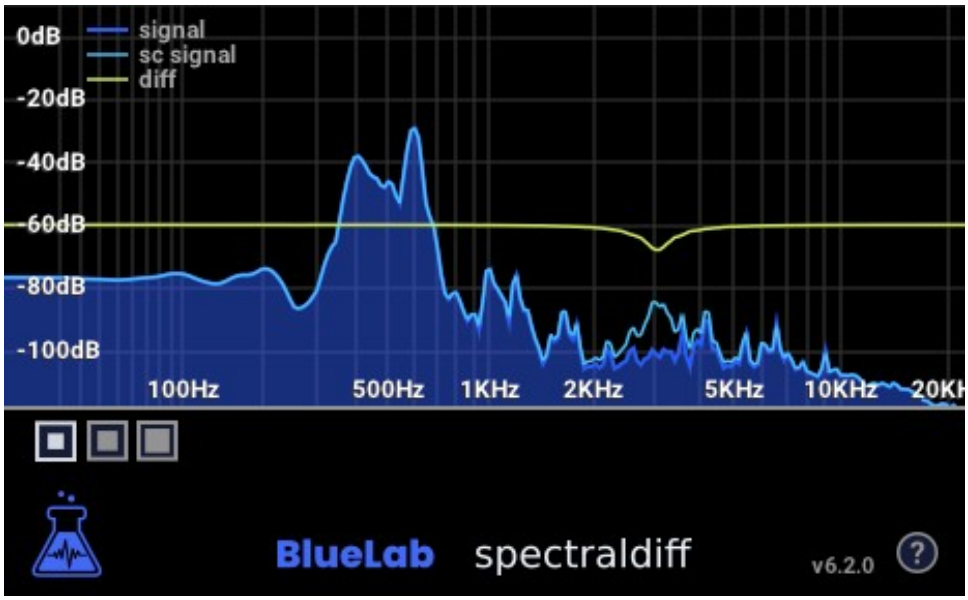
Note: The difference is displayed with a reference point at -60dB to be able to display negative and positive differences, depending on if the level of the signal of the track is smaller or greater than the one entering by sidechain.

If the difference curve **DIFF** stays straight at -60dB during the playback, then we can be sure that the two sound files are identical.

The **SIZE BUTTONS (2)** are used to change the size of the plugin window.



Two audio files that are strictly identical:
the DIFF curve stays straight during the playback



Two audio files that are not identical:
the DIFF curve shows the difference (around 3KHz)

FAQ

The two audio files seem identical, but the sidechain curve doesn’t update in the plugin

With some DAWs, if the signal of a track is strictly identical to the sidechain signal, the sidechain signal will be blocked and doesn’t pass through the sidechain input.

In this case, in order to make the curves to display correctly, it will be necessary to slightly modifiy the signal, for example by inserting a gain plugin just before the **SpectralDiff** plugin, and setting a very small gain increase or decrease.

The curves show that the signal and the sidechain signal are delayed one with respect to the other, and then the difference curve is not right

This is a problem on some DAWs, if a plugin has an inner latency, the sidechain input may not be delayed according to this latency. This is a problem for using the **SpectralDiff** plugin, but one can try to compensate this delay by adding a small delay plugin on the signal track or on the track arriving by sidechain.