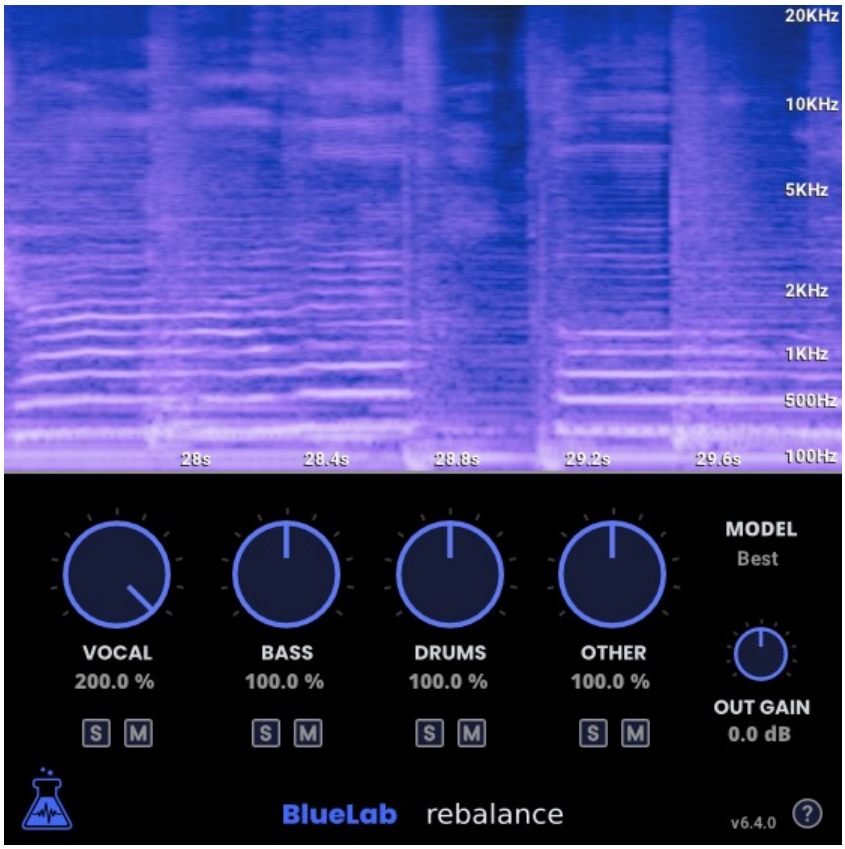
BlueLab rebalance

plugin version: 6.4.0
manual version: 2.3

www.bluelab-plugs.com

DESCRIPTION

The **Rebalance** plugin identifies vocal, bass, and drums in an already done musical mix, and makes possible to modify the gain of each part. It can process in real-time, by using machine learning techniques.



EXAMPLES OF USE

Prepare a song for karaoke
From a single track song, **Rebalance** can diminish a lot the vocal part, which can make the result usable for singing over the remaining instrumental parts.

Remove an instrument to create a backing track
The bass for example can be removed to almost 100 % from an already mixed track, and makes possible to play bass over this new created backing track. This is also possible diminish a lot the vocal parts, drums, and in some cases guitars and keyboards.

Adjust the level of instruments of a rough live recording
The **Rebalance** plugin makes possible to adjust the level of the different instruments and vocal of a recording of a live concert made on a single track. This can be useful for improving the sound of a live concert roughly recorded, in order to make a demo for example.

Adjust the level of a sample extracted from a track
If you extracted for example a vocal sample from a song, but there are some remaining notes of keyboard, guitar or other instruments at the same time, the plugin can be used to lower these remaining sounds. And exactly the same way if you have a bass sample, a drum break or anything else that you want to enhance from the rest on an extracted sample.

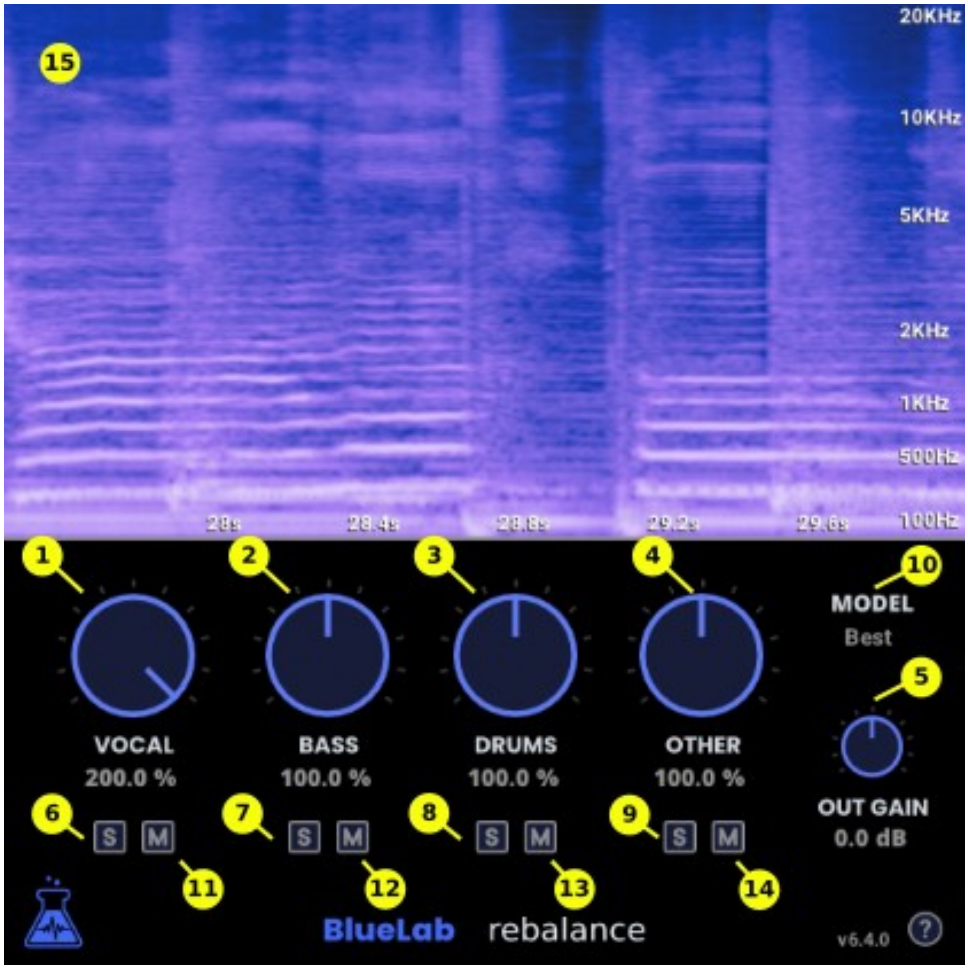
PRINCIPLE

The **Rebalance** plugin uses machine learning to identify each part of a mix. The algorithm has been trained on many mixes, and has learned how to recognize vocal, bass, drums and the remaining parts in a mix.

When the plugin processes a mix, it separates each part, and gives the possibility to increase or decrease the gain of each part.

NOTE : The algorithm finds a good approximation of each part, but this remains an approximation. The sound of one detected part can bleed a little to another part, which is not too much noticeable unless when using extreme values of the mix knobs.

USAGE



The **VOCAL (1)** parameter attenuates or increases the vocal part of a mix. It attenuates until -120dB and increases until +12dB. It can increase or attenuate a single voice or choruses.

The **BASS (2)** parameter attenuates or increases the bass in a mix. It attenuates until
-120dB and increases until +12dB. It can process various bass sounds.

The **DRUMS (3)** parameter attenuates or increases the drums in a mix. It attenuates until -120dB and increases until +12dB. It can process the different drum parts (bass drum, snare drums, cymbals…) and other percussion elements as well.

The **OTHER (4)** parameter attenuates or increases everything that is not vocal, bass or drums (most of the time guitars and keyboards). It attenuates until -120dB and increases until +12dB.

The **SPECTROGRAM (15)** shows the spectrogram of the result. When the host is not playing, the whole spectrogram updates in real-time when mix or solo/mute parameters are changed.

The **MODEL (10)** parameter chooses the DNN model. It defines the quality of the sound processing. With a higher quality, the different parts in the mix will be better separated, with less bleeding and less gated sound. When increasing the quality, the plugin consumes more CPU.

Note: when changing the model, the plugin needs to recompute the whole spectrogram with the new model. This can take several seconds. During this time, the plugin is dedicated to recomputing the result and will not respond.

The **SOLO (6)(7)(8)(9)** buttons can be used to totally solo a part.

The **MUTE (11)(12)(13)(14)** buttons can be used to totally mute a part.

The **OUT GAIN (5)** can increase or decrease the output gain.

Note: The **Rebalance** plugin works internally at 44100Hz. Using it at higher sample rates won’t increase the quality of the result but will just consume more CPU resources. For sample rate of 48000Hz and its multiples (48000Hz, 96000Hz etc.), the quality of the result won’t be optimal compared to sample rates of 44100Hz and its multiples (44100Hz, 88200Hz etc.).