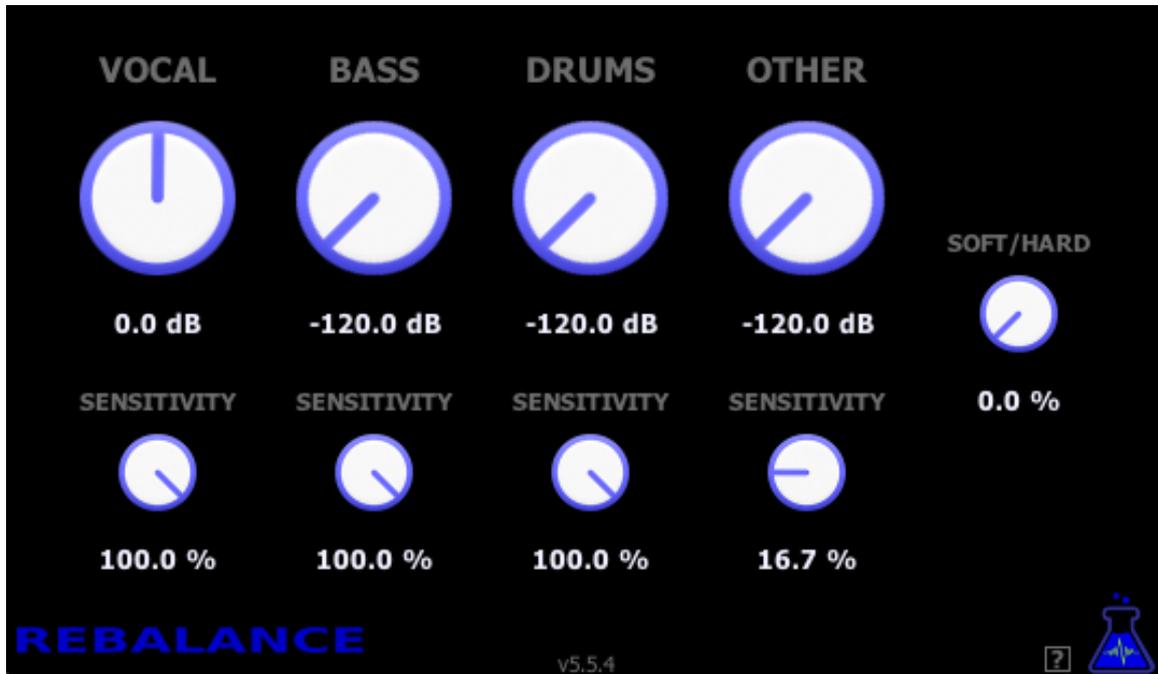


REBALANCE



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 processes in real-time, by using machine learning techniques.



EXAMPLES OF USE

Prepare a song for karaoke

From a single track song, **Rebalance** can diminish the vocal part to almost 100 %, which makes the result usable for singing over the remaining instrumental part.

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 with vocal, drums, and in some cases with 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.

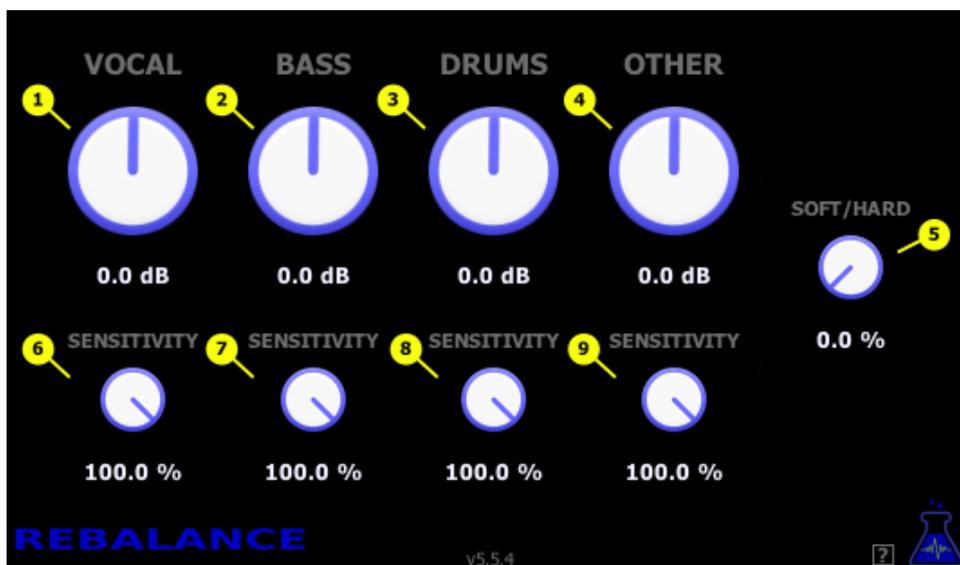
PRINCIPLE

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 which part correspond to each instrument, 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.

NOTE: Some of the 3 previous elements can sometimes bleed a little to the **OTHER (4)** category, so in this case, the **OTHER (4)** parameter should be set accordingly.

The **SOFT/HARD (5)** parameter defines the hardness of the extraction of the different elements (vocal, bass, drums and other), from a soft extraction at 0% to a hard extraction at 100%.

- With lower values, the 4 elements will be less separated, but with a better sound for the resulting mix. It can lead to some bleeding between the elements, for example a little ratio of vocal could be included in the “other” category.
- With harder extraction (close to 100%), each of the 4 elements will be separated more accurately, but the resulting mix could contain some glitch if the mix values (**VOCAL(1)**, **BASS (2)**, **DRUMS (3)** and **OTHER (4)**) are set too low or too high.

The recommended value for the **SOFT/HARD (5)** parameter is near 0% to be sure to keep a good resulting sound, and higher values should be used for particular cases.

The **SENSITIVITY (6)(7)(8)(9)** parameters are advanced parameters. By default, they are set to 100%, which means that we use 100% of identification of each part. If for example we want to ignore the **OTHER** part in the identification step, we can set the **SENSITIVITY (9)** parameter to 0%.

Example:

We want to extract the vocal part of a mix, but the result is “pumping” (like a too strong compressor). This is sometimes due to some parts of the **VOCAL** which are identified as **OTHER**. To decrease the pumping effect, we can lower the **SENSITIVITY (9)** for **OTHER** (lower or set to 0%). So in the identification step, **OTHER** will be less taken into account, and a part of the **OTHER** sound will be “reinjecte” in the **VOCAL, BASS, and DRUMS** parts.