

Thank you for using Brainworx plugins.

bx_saturator – The concept.

The **bx_saturator** is an M/S & multi-band saturation tool which can be used for mastering, mixing and sound-design. From easy glue to heavy crunch, you choose.

The **bx_saturator** plugin offers a warm and subtle distortion which can be applied to individual signals of a mix or even the stereo master channel using our **NEW “True-Split” crossover technology** that ensures **Mid and Side channels are perfectly in phase**.

The **bx_saturator** belongs to the new „**Brainworx Rock’n’Roll line**“ of creative plugins. Technical excellence for the creative musician and engineer.

Although we offer a mono / multi-mono version of the plugin we consider the stereo M/S plugin the main version which will enable you to thicken and boost any stereo signal or mix in a more discrete way than ever.

Increase the perceived volume of mixes without clipping them, or bring out delicate signals like acoustic guitars and percussion in full mixes without increasing their actual level or eq-ing them in a harsh and offensive way.

Distort vocals in full mixes without losing the punch of your drums or the clarity of your keyboard sounds and stereo guitars.

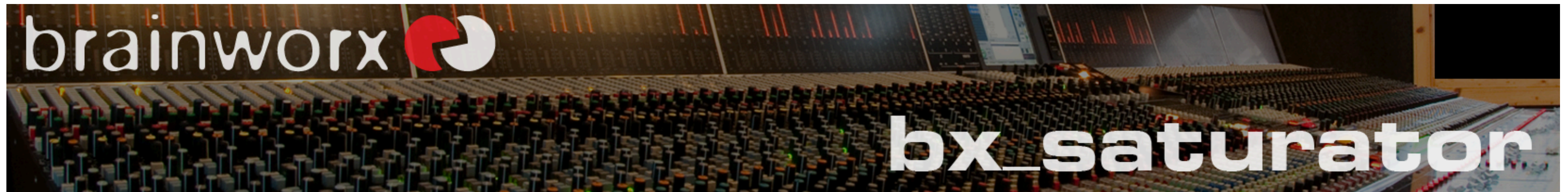
The ability to phatten and even distort M & S signals independently - and separately for high and low frequencies - will give you many great, fresh and inspiring sounds.

Natural sound – in your face.

We believe that the plugin layout almost speaks for itself, so we have kept the manual as short as possible. Please read it though. Understanding the main features will help you get the best out of it.

Bypass, Undo / Redo, A/B/C/D Settings, Copy / Paste

The top toolbar will enable you to bypass the whole plugin. 32 steps of Undo / Redo give you the freedom to experiment without losing your initial ideas. 4 settings can be used to store and recall momentary snapshots that also can be automated. A setting for your chorus, another one for verses, etc.



XL Active, Auto Solo, Master XL & Master Drive, Mid / Side meter, Output meter

XL Active will engage or disengage all 4 XL units in the bx_saturator (2 in the mono version). Mono-Maker and Output Levels will not be bypassed here, so this is not a global bypass switch. You can also bypass single XL units using their respective switches (see below).

Auto Solo will only make isolated elements of your signal audible as long as you click & hold certain knobs & controls. This way it might be easier to set the distortion of any of the 4 XL units.

Master XL and Master Drive control the overall XL and Drive sound (see below), and will boost or attenuate all 4 individual controls of the 4 XL units at the same time while retaining their ratios. The Master controls will keep any difference between individual settings you may have dialed in through the 4 independent XL units.

The Mid /Side meter will indicate if you are boosting the Mid or the Side channel more with the plugin settings. You can correct any changes in level with the M & S output gain controls (see below). The Output meter and "Over LED" will let you monitor the stereo output and any clipping that may occur.



Individual XL units

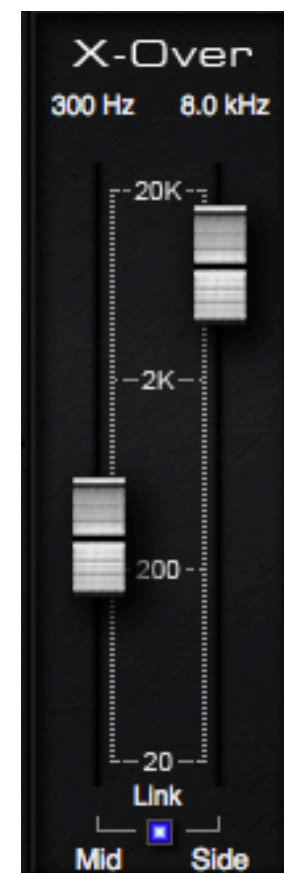
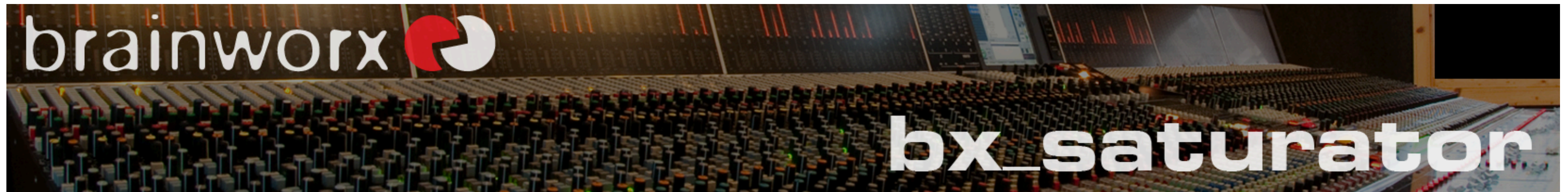
Each of the 4 XL units can be adjusted individually with the XL knob, which is the main level of distortion for that channel. Look at it as a mix control between your original signal and the distorted audio.

The Drive control determines how heavy the distortion will sound. Use „1“ as the standard mode for all „clean“ mastering work to increase the perceived volume of the signal without boosting its actual output level (with Compensation set to mode „1“ as well). Drive values of 3-6 will give you a soft, creamy distortion that can be used on S-channels of rock and pop mixes or to slightly crunch any stereo sound. Drive values of 7 and higher (up to 16) will give you a very audible and tight distortion.

Above the drive knob, there is an option menu that switches the Level Compensation mode. By default, mode 1 is selected (Compens.1). This automatically compensates the level increase caused by the Drive control. Mode 2 will do the same (Compens.2), but will keep a louder signal at the output.

- Make sure to use either Level Compensation mode "1" or "2" in most cases as the output level might be increased heavily otherwise (Compens.Off).

Gain can be used to trim or boost any XL unit, while setting the Gain to PRE mode will result in MORE or LESS distortion (gain at the input stage) whereas POST will trim the level at the output stage without altering the actual distortion sound.



X-Over Frequency (= Crossover frequency)

With these 2 sliders you can select the frequency ranges of the Mid Hi / Mid Lo & Side Hi / Side Lo channels. In the example on the left the Mid channel would be split at 300 Hz and the S channel would be split at 8 kHz (=8,000 Hz).

You can link the 2 faders (relative mode) to experiment with how different split points will affect your distortion sound.

For a tight sound in the low end for example try splitting the Mid channel around the bass-drum frequency (should be between 100 and 350 Hz, depending on your bass drum sound) and use less distortion on the Mid Lo channel than on the Mid Hi or Side Hi channels.

To get a crisp high-end try splitting the Side channel just underneath your cymbal sounds (should be around 6-10kHz) and use more distortion on the Side Hi channel than on the Side Lo or Mid channels.

You should experiment with various settings of the X-Over control as this is one of the key elements of the bx_saturator plugin when it comes to different sounds or flavors of distortion.



Output Gains Mid & Side, and Mono-Maker

You may increase or decrease the overall output level of the plugin using the linked mode of the Gain controls, or you can alter the Stereo Width by changing the ratio between the unlinked M & S gains (using the Link button left and right of the knobs). Do monitor the Output Level LEDs in the upper graphics to make sure you don't „clip“ your signal. Unlike the internal distortion of the bx_saturator any clipping caused by an output level of more than 0dB can cause unwanted artifacts.

The Mono Maker is a tool we use in many Brainworx plugins. It basically mixes the low end of your stereo signal to mono which lets you widen the high frequencies of your mix with much less phase problems.

Using the Mono-Maker will give you a tight bass-drum and bass sound in your mixes. Go Mono! ;-)



Plugin Alliance Toolbar

You can access the Alliance website, the new USB activation tools and the PDF manual via this toolbar. (Available Summer 2012)