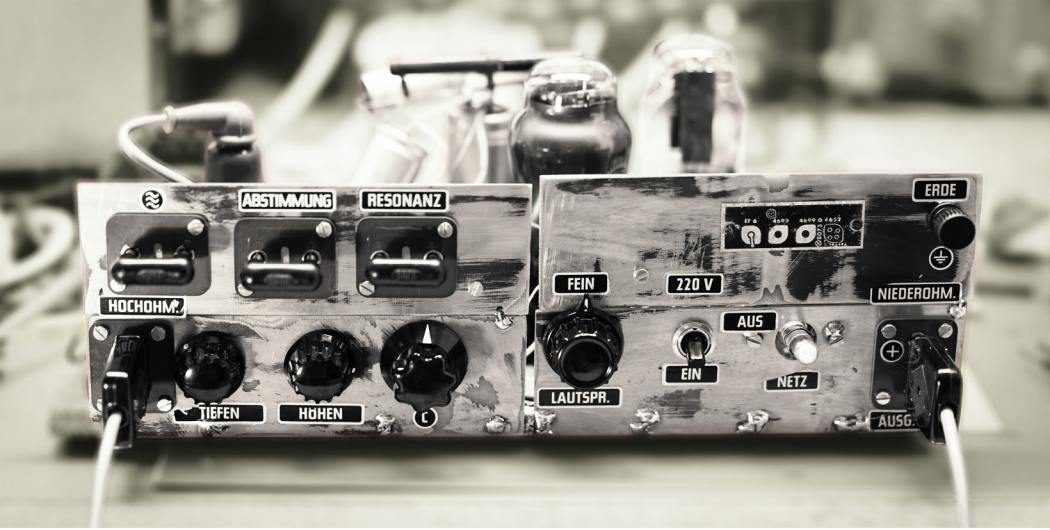


NEOLD



BIG AL

Manual



THE POWER SATURATOR

Big AI is a dual stage tube saturator which offers a broad palette of marvelous sound flavors flowing from the interactive network within its transformer-coupled pre and power amp. Based on completely novel circuitry and NOS components from the 1930s, the one-off analog hardware has been exclusively designed for this plugin.

FILTER FREAK

Big AI's frequency conditioning begins right in the EF9 preamp stage. The Low control allows to adjust saturation intensity around 100Hz in optional combination with boosting or cutting the bass at the same time. The High peaking filter boosts or cuts high frequency content around 10kHz, which is essential for inciting or taming Big AI's treble aggression potential.

ONBOARD MODS

A jumper matrix grants access to Big AI's core circuitry: Emphasis Shift, Bass Compensator and Voltage Sag provide powerful options for making complex changes to the distortion profile by inserting or pulling a few simple plugs. The finishing spice is added by the AL4 power pentode and its output transformer, driven hot by the pre-amp stage. The result? A truly gorgeous kind of harmonic saturation which will always sound organic, musical and bold.



EF9

Introduced in 1938, the Red Series EF9 is the first control pentode with a sliding screen grid voltage. Originally, this variable mu amplifier pentode was used in the automatic gain control stages of Superhet receivers and for radio frequency amplifiers. Its low microphonics and not too steep characteristic curve make it the perfect pre-amp tube within Big Al's special circuitry.



AL4

Another child of the Thirties is the indirectly heated AL4 power pentode with its significant bottle form, debuting with remarkable mutual conductance and efficiency values at its time. Originally intended for radio power amp designs, this beautiful species has a maximum speech power of 4.3 watt, which is just perfect for producing truly beautiful saturation effects caused by complex tube and transformer interactions. This is where the magic happens!



AZ1

The AZ1 is a full wave rectifier which also saw the light of day in the 1930s. While its basic function is to convert AC into DC current, it also affects dynamics by introducing a slightly soft, indulgent feel. Especially in a saturator this side effect is a welcome one, as it reduces harshness and promotes a pleasant tone.

QUICK START



- ① Controls the intensity of saturation ranging from subtle accents to full-on drive.
- ② Adjusts the output level, implemented as linear gain without additional coloration.
- ③ Mixes the dry and processed signals to create the perfect blend of clean and mean.
- ④ Boosts or cuts high frequencies for inciting or taming the beast.
- ⑤ Intensifies the generation of harmonics in the low frequency range and boosts/cuts bass.
- ⑥ Engages or bypasses the entire signal processing chain.
- ⑦ Shows either input level, saturation-dependent gain reduction or output level.
- ⑧ Toggles between input, gain reduction and output metering.

QUICK START



- ⑨ **Emphasis Shift**
In: Mid frequency emphasis filter
Out: Off
- ⑩ **Bass Compensator**
In: THD boost/cut on Low control
Out: THD + Bass boost/cut on Low control
- ⑪ **Voltage Sag**
In: Screen grid voltage sag
Out: Off

- ① **Basic Workflow**
- ② Set desired amount of Drive.
- ③ Tweak behavior with jumpers.
- ④ Adjust tone with High and Low filters.
- ⑤ Finish by adjusting Mix and Level.

PARAMETERS



Drive

Sets the desired intensity of saturation by adding harmonic distortion (THD) to the input signal. With its EF9 and AL4 pentode tubes, Big Al produces a pleasant and rich harmonic spectrum which provides plenty of sonic variety across its 56dB of level-compensated Drive range. This tonal basis can be tweaked into many directions with the filter section and the jumper matrix.

Level

The output level of the entire processing chain can be increased or decreased by up to 12dB of clean gain for exact level matching.

Mix

This control blends the dry input and the saturated/filtered wet signal, providing convenient onboard parallel processing.

PARAMETERS



Low

Big AI's frequency conditioning begins right in the preamp: The Low and High bands are implemented as a 4th order active Baxandall filter wired around the EF9 stage.

The Low control increases or decreases saturation around 100Hz and boosts or cuts the bass at the same time. When operated in bass-compensated

mode (B jumper in), you can control just the THD in the low range without significantly affecting the frequency response and overall level.

High

The High band sits around 10kHz and interacts with the Low filter due to the Baxandall implementation. It can either be used for exciting the signal or taming harsh frequencies if needed.

PARAMETERS



E

Inserting the Emphasis Shift jumper shorts a capacitor in the cathode bias network of the EF9 stage which results in an emphasis in the mid frequency range. This change affects the frequency response (boost in the mids) as well as the harmonic spectrum (more THD generated in this range), offering an instant alternative voicing for mid-focused applications.

B

The Bass Compensator jumper enables an additional filter in front of the AL4 driver stage, so that energy added or removed by the Low band of the EF9 Baxandall input filter is compensated for. In this mode you can control the amount of THD introduced in the lows without boosting or cutting the bass at the same time, so the overall signal level will not be affected.

PARAMETERS



V

The Voltage Sag jumper pulls the screen grid of the AL4 pentode towards ground potential through an additional capacitor. This shifts the operating point of the AL4 driver, causing asymmetric clipping. This drastically raises the generation of even order harmonics which adds a subtle rasping quality to Big Al's saturation characteristics, especially when the signal starts to break up.

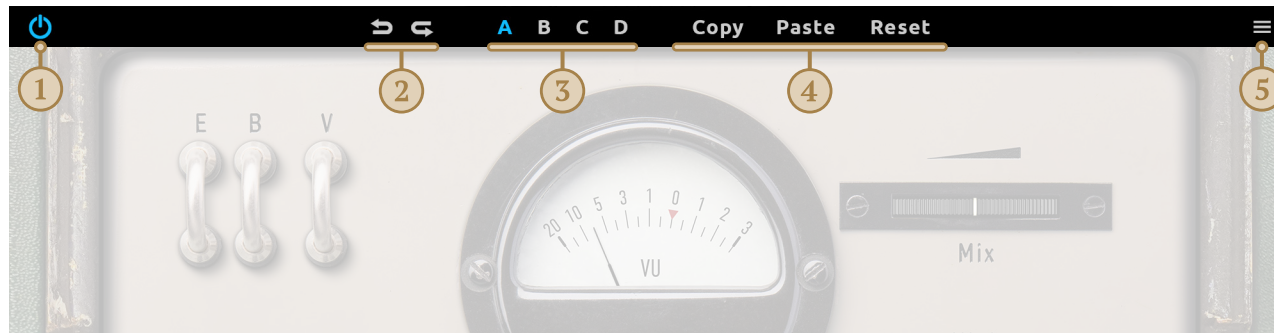
Meter

The meter shows either input level, saturation-dependent gain reduction (peaks cut by clipping) or output level, which can be selected by turning the meter screw.

Power

Engages or bypasses the entire plugin.

TOOLBARS



- ① This icon provides a master bypass function for the entire plugin.
- ② Undo/Redo offers up to 32 steps of your recent settings. Just go back and forth.
- ③ Four individual preset banks which can also be automated in your DAW.
- ④ Copy and paste current settings to/from clipboard or reset current settings to default.
- ⑤ Opens GUI preferences (set interface size and quality here).
- ⑥ Clicking the Plugin Alliance logo will send you to the PA website via your web browser.
- ⑦ This icon will guide you to the Plugin Alliance Store via your web browser.
- ⑧ Brings up the activation dialog for authorizing plugin licenses for your devices.
- ⑨ Here you will find the manual (requires PDF reader installed) and other useful info.
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