

# 990 SPARK MULTIBAND



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## **Greetings and Welcome!**

Thank you for choosing MIA Laboratories. Please take the time to read through this user guide in order to get familiar with the components and use of 990 Spark Multiband.

### **Overview:**

990 Spark Multiband is an advanced 4-band saturator unit, based on three core modules: Compressor, EQ, and Saturator. This unique synergy enables users to sculpt their sound with precision and creativity, unlocking a rich spectrum of saturation effects, from subtle warmth to bold distortion.

In the core of 990 Spark lies a suite of carefully crafted saturation algorithms, including emulations of Diode, Triode, and Pentode circuits, while the Compressor and EQ modules provide the ability to balance dynamics and spectral characteristics. Within each band, users can select from 16 saturation algorithms, 4 compressor types inspired by MIA's renowned compressors (925, 409, Compressor ONE), and 8 filters, including Musiqua EQs (Red, Green, Blue), along with the essential filter options (HP/LP/Peak/Shelving filters). The Compressor, EQ and Saturation modules can be rearranged at will within each band, offering unique control and opening up a world of sonic possibilities.

Whether in electronic music production, live sound engineering, or acoustic applications, 990 Spark Multiband serves as an invaluable tool for audio professionals, offering detailed control and creative expression, while enriching audio content with depth and character.

### **Features:**

- 16 Saturation algorithms
- 4 Compressor types
- Musiqua EQs along with classic filters
- 4x oversampling
- 25 presets

# Controls:



- Band On/Off
- Band Select
- Band Solo
- Phase invert
- Add / Remove Bands
- Full Spectrum (WideBand)



Band Gain

Double-click  
to input value

Band Upper Limit

Extra  
Settings

## COMPRESSOR:



The COMPRESSOR module alters the behavior of the saturation effect based on the input signal dynamics. It may introduce variations in saturation intensity based on signal amplitude, allowing for more natural and musical saturation effects that respond dynamically to the input signal.

### Compressor types

- **925 Slope** - sensitive, offering smooth compression with envelope following.
- **925 Ratio** - same principles with 925 Ratio, but more precise with a sharper knee.
- **409 Opto** - soft with character, providing gentle and transparent compression.
- **Compressor One** - precise, suitable for tight compression / limiting. Best suited algorithm for heavy low end.

### Controls

**Threshold** : -60dB - 0dB

#### Attack

- **925 Slope / 925 Ratio** : 0 ms - 258 ms
- **409 Opto** : 0 ms - 200 ms
- **Compressor One** : 0 ms - 100 ms

#### Release

- **925 Slope / 925 Ratio** : 26 ms - 3223 ms
- **409 Opto** : 25.2 ms - 787.5 ms
- **Compressor One** : 4 ms - 500 ms

## EQUALIZER:



The EQUALIZER module can be used to shape the frequency response of the saturated signal, emphasizing or attenuating certain frequency ranges to tailor the sound to your preference.

### Filter types:

- Musical Blue, Musical Red, Musical Green ([more info](#))
- Peak Filter
- Low Pass Filter (12dB/octave)
- High Pass Filter (12dB/octave)
- Low Shelf
- High Shelf

### Controls:

“**COLOUR**” knob is available only for Musical Blue, Red, Green and needs some gain to be applied in order to take effect.

“**Q**” control does apply to Musical Blue, Red, Green

## SATURATOR:



The SATURATOR module provides users with a comprehensive set of tools to shape and customize the saturation effect to suit their audio production needs, ranging from subtle harmonic enhancement to gritty distortion and everything in between.

**“TYPE”** Choose between different types or models of saturation, each offering a unique character and tonal coloration. Options include: Soft, Medium, Simple Distortion, Diode, Triode, Pentode, Fuzz, Hard Clipper, Bitcrusher, Sigmoid, Guatermanian, Euler, Sinus, Arctangent, Tangent, Modified Tangent.

**“DRIVE”** knob controls the amount of signal being sent into the saturation circuit. Increasing the drive adds more input signal, driving the saturation effect harder and resulting in a more pronounced distortion or saturation effect.

**“SATURATION”** knob determines the intensity or strength of the saturation effect applied to the signal. As you increase this parameter, the saturation effect becomes more pronounced, adding harmonics and warmth to the audio signal.

**“MIX”** knob determines the balance between the dry (unprocessed) and wet (saturated) signals. By adjusting this parameter, you can blend the original signal with the saturated signal to achieve the desired level of saturation while retaining the clarity and dynamics of the dry signal.

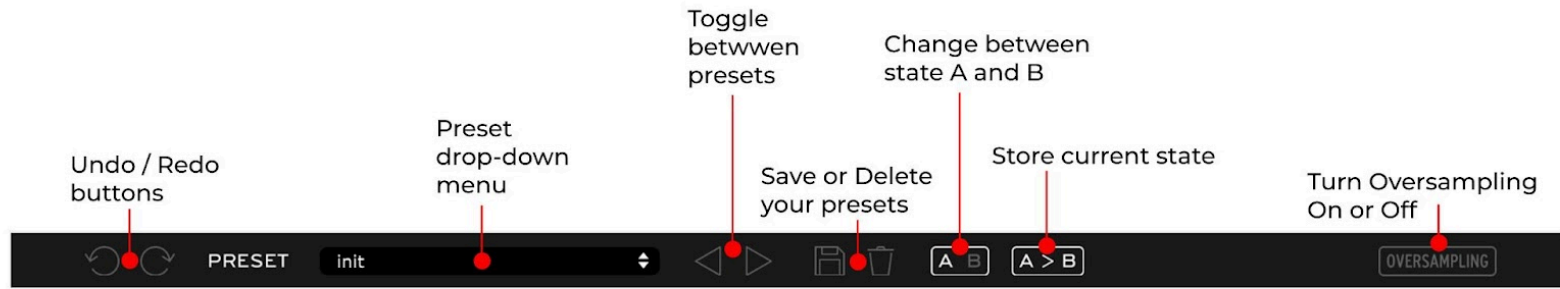
**“CTRL”** knob allows you to control the shape of the transients by removing or attenuating high-frequency components, resulting in a smoother or more rounded transient response.

In "Triode" and "Pentode" modes, the "CTRL" knob serves as a versatile control to adjust the bias-like parameters, allowing users to dial in the desired amount of saturation, distortion, and tonal characteristics, akin to adjusting the bias of a physical tube.

In “Bitcrusher” mode, lets you adjust the bit-depth of the crushing effect.

**“OUTPUT”** controls the level of the output signal after saturation processing. It allows you to compensate for any gain changes introduced by the saturation effect, ensuring that the overall output level remains consistent with the original signal or desired level.

## Preset Bar:



## Installation

Installing 990 Spark Multiband is fairly easy, just download and run the appropriate installer for your operating system. The license for this plugin requires the use of iLok license manager software and an iLok account. The license can be deposited on a physical iLok (2 nd generation or higher) on iLok Cloud or host computer. For further information regarding the activation process, please refer to the activation guide provided.

**Thank you for using MIA Laboratories.**

May the sound be with you!

