Lunatic Audio

Rocket Fuel

Manual

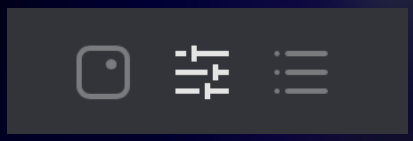
INTRODUCTION

At A Glance

- 9 in-built effects units
- Chain effects in series
- Modulate multiple parameters simultaneously with the gorgeous XY pad
- 4 in-built LFOs to control effects
- Extensive preset bank for customisation of the FX Chain and Modulation
- Control global settings of every LFO and dry/wet mix

What is Rocket Fuel?

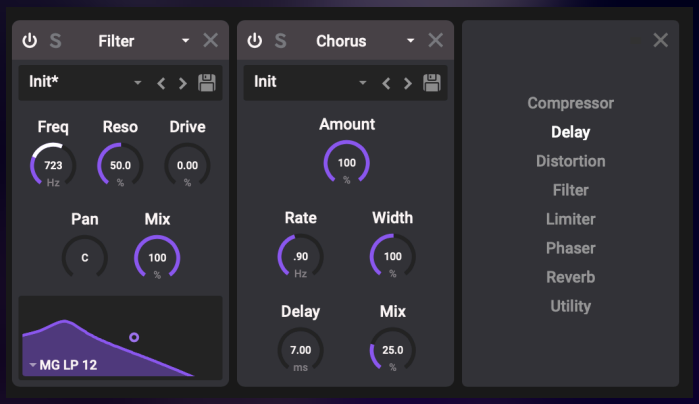
At its core, Rocket Fuel is an inspiring and creative multi-effect, boasting some unique and powerful features that give you the ability to transform audio in ways you've never heard before.



Navigate through the 3 main areas of Rocket Fuel using tab buttons at the top. These are Left: XY Pad // Middle: Effects and LFOs // Right: Modulation Matrix.

Check out some of the presets to see the following things happening...

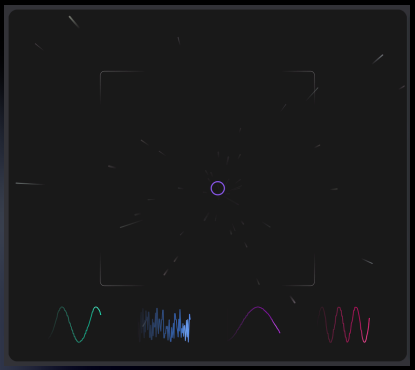
A chain of effects is set up, stacking up to 12 processes like Reverb, Delay, Chorus and Filter from a choice of 9 different effects. (image right)



Most parameters in Rocket Fuel can be modulated by the onboard LFOs or XY pad. To create a modulation routing, click the ✚ icon on a modulator (LFO or XY controller) and drag it to the parameter you want to move using that modulator. In the image on below-right, there is a ✚ for each LFO, next to its name.

There are four LFOs. (image right). These can be mapped to any effects parameters, and work best when cycling at different rates and depths to create interest.

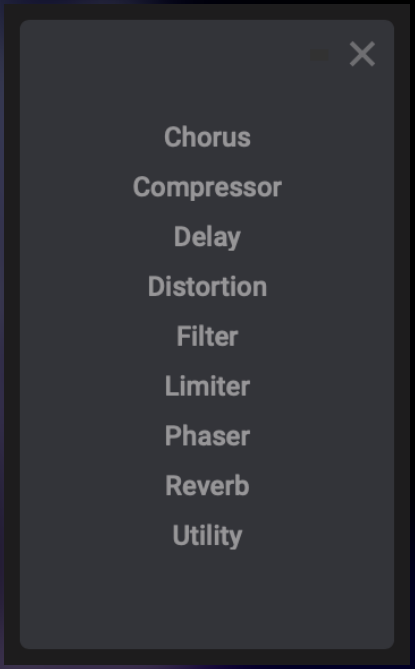
Hurtling through space, an XY pad (image right) also modulates effect and LFO properties, helping you evolve the sound in maximum ways with minimum effort = potentially just moving a single control.



The Modulation Matrix section lets you see all currently assigned modulation routings at a glance, edit them or make new ones.

Effects

Rocket Fuel comes with a powerful lineup of 9 effects units. You can use them alone or in series, and each individual parameter on each effect can be modulated with its own independent LFO.



Choose from:

Chorus, Compressor, Delay, Distortion, Filter, Limiter, Phaser, Reverb & Utility.

The Filter and Utility effects can be added into the chain twice, while every other effect can be added only once.

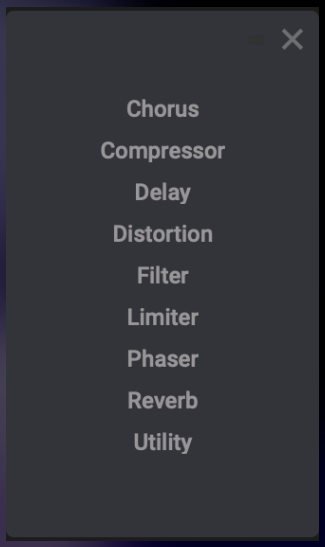
ROCKET FUEL IN DEPTH

How Rocket Fuel Works

The basic workflow of Rocket Fuel allows you to load effects in series and modulate the parameters of each effect with individual LFOs. You can also assign parameters to an XY pad which too can be modulated, with macros controlling multiple effects simultaneously.

EFFECTS

Rocket Fuel comes with nine effects (right) that can be loaded in series in any order. Choose from Chorus, Compressor, Delay, Distortion, Filter, Limiter, Phaser, Reverb & Utility.



Loading Effects

To load an effect, click the middle icon at the top of the interface to enter the effects section then click the + icon (left) and select an effect, Or click the dice Icon to load a random effect.

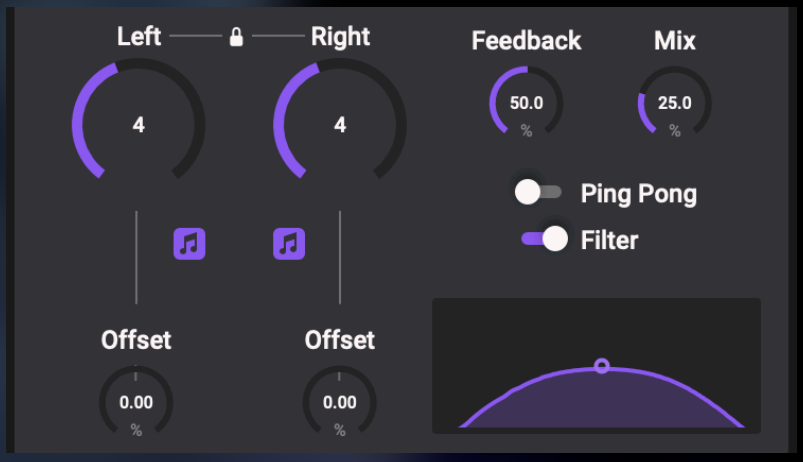
Once you have one or more effects loaded, the + icon will remain next to the final effect in the chain. Click on this to insert a new effect unit at that point in the chain.

Most of the effects can only be selected once, however you can add two Filters and two Utility modules to the chain. Once the maximum number of an effect has been added to your chain, that effect will disappear from the effects menu.

The effects are hot-swappable and can easily be dragged into different orders in the chain. Just click on any non-parameter section of an effect and drag into a new position.

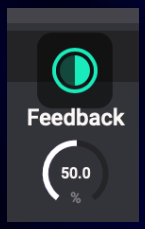
Editing Effects

To alter the parameters of an effect, mouse-over and click-drag on any of the knobs attached to the effect you want to edit.



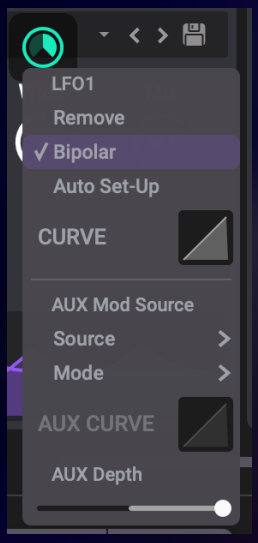
Hold ctrl / cmd whilst dragging for finer adjustments.

Click directly on a number to input a precise value via your keyboard.



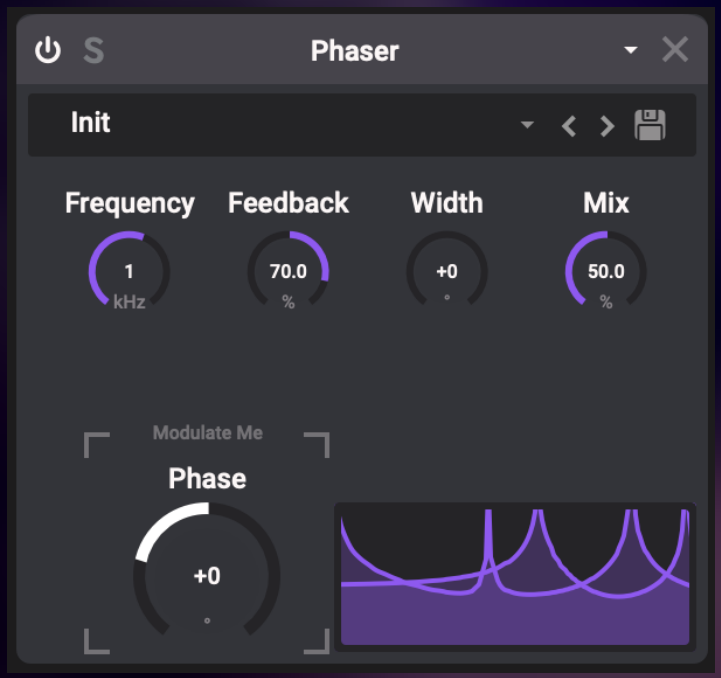
You can also modulate these parameters by clicking and dragging the + button of any of the LFOs to the desired parameter. The same can be done with the X and Y macros. You'll then be presented with an extra pop-up dial, for you to adjust the positive / negative strength percentage of the LFO over that particular parameter.

If you assign ,multiple LFOs to the same parameter, multiple coloured dials will be shown.



Right click the coloured dial for more options, covered in the "Modulation Matrix" section of this manual. (image left)

The available editable parameters will depend on the effect you are editing, but all operate in a similar way, with the parameter adjustments and LFO assignments operating identically. (image right)



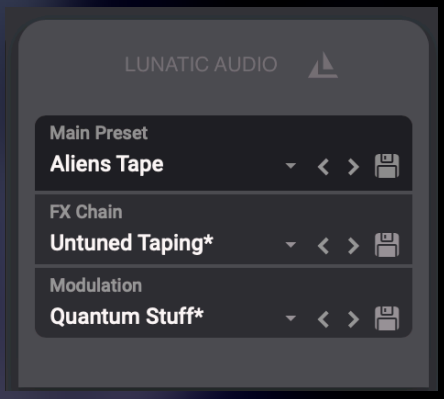
PRESETS

Effect Presets

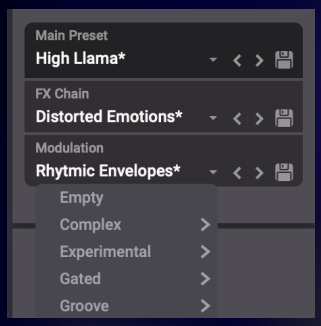
Rocket Fuel boasts a large number of presets, and each effect also has its own presets. The preset selector sits above the effect parameters within each effect unit.

Main Presets

Here you can select one of the many main presets with Rocket Fuel, add a preset to your favourites folder, save a preset, open the presets folder on you computer's file system, and copy and paste presets.



Main presets consist of an effects chain preset and a modulation preset.

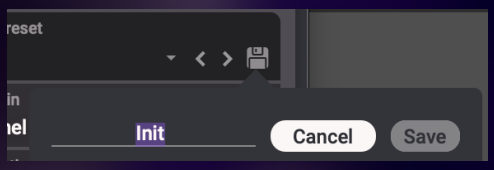


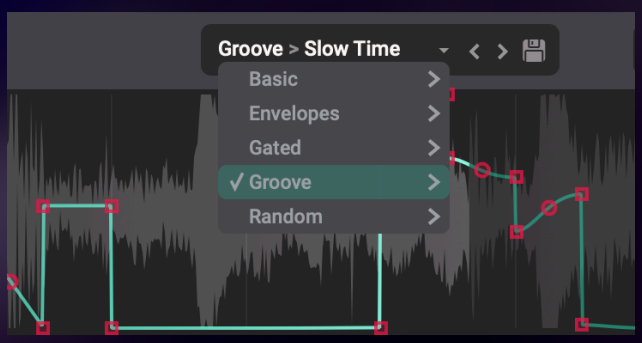
Both the modulation preset and effects chain preset can also be changed individually.

Random Preset

You can also click the dice icon in the top right corner of Rocket Fuel and, with a burst of colour, a unique preset will be chosen at random.

To save a preset, click the Save icon and a name for your preset will be automatically generated. Click into the name to edit it yourself before saving.

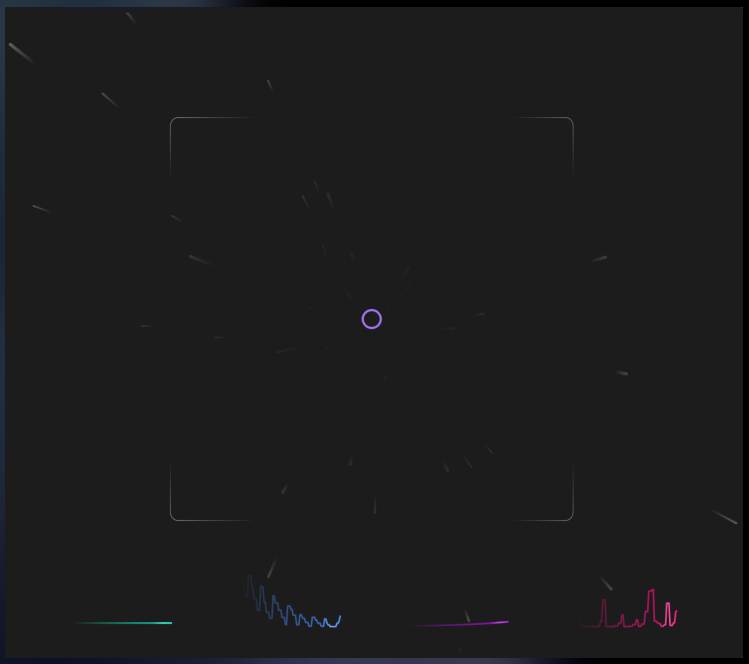




LFO Presets

The LFO Presets are located just above the LFO grid. When clicked, a drop down menu will appear allowing you to choose from a range of different LFO styles. These presets will change the shape of the LFO but not its rate.

XY PAD



Rocket Fuel's XY pad is very flexible. Almost any parameter within Rocket Fuel can be modulated by it. Additionally, the XY pad itself can be modulated by each of the LFOs; modulating the X and Y value.

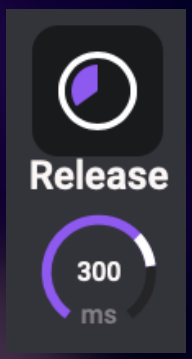
You can quickly navigate to the XY pad by clicking the box with the dot in it at the top of Rocket Fuel.

Assigning X and Y modulation parameters

You can assign almost any parameter to be modulated by either, or both, the X and Y values, and you can assign as many parameters as you like to both X and Y.

To assign a parameter to be modulated, simply drag the + icon next to either the X or Y parameters and drag it onto the parameter you would like to modulate.

When a routing has been made, the modulation depth can be set by hovering over the modulated parameter and increasing or decreasing the dial that appears above. (image right)



MODULATION MATRIX

By clicking the three dotted lines at the top of Rocket Fuel you can find the modulation matrix section.

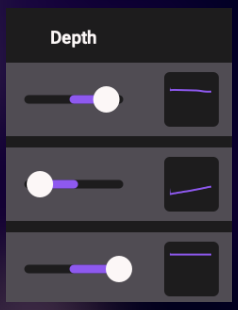
Here you'll see every modulation routing that's already been made, expressed with its Source, Target and more properties. This view is more advanced, allowing you more power to fine-tune how any modulation routings work.
Below the bottom row, you can "Select source and target" to create a new modulation routing from scratch, by selecting the target of your new modulation routing and then its source on the left.

Source and Target

Source on the far left and Target in the middle are the most crucial controls of any modulation routing. They set which modulator is being used (source) to modulate which parameter (target). If a modulation routing is set up on another screen (for example, by dragging LFO assignments), then these essential parameters will have been set up automatically in this matrix.

Depth

The depth parameter changes the amount of modulation of the parameter. The more depth, the more the source is moving the target.



Curve

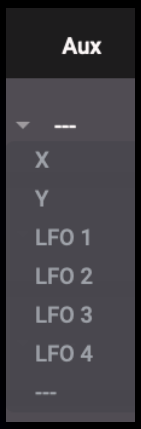
This parameter changes the shape of the LFO waveform as applied to the modulation target. You may have chosen a perfect sine wave for your LFO, but with the curve set anywhere other than linear, this shape will be different.

Bipolar

By clicking the arrows under the Bipolar heading you switch the direction of the modulation from unipolar to Bipolar.

A unipolar routing (one-headed arrow) will only increase the target parameter's value, using the value you've set as the baseline. A bipolar routing (two-headed arrow) will move the target parameter up and down, with the value you've set as its midpoint.

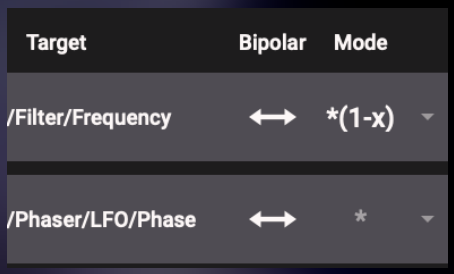
Aux



You can choose a second LFO source signal using the Aux selector. If a slow LFO is used and the main source and a very fast LFO is used as the Aux source, you can expect both to have an effect on the destination parameter.

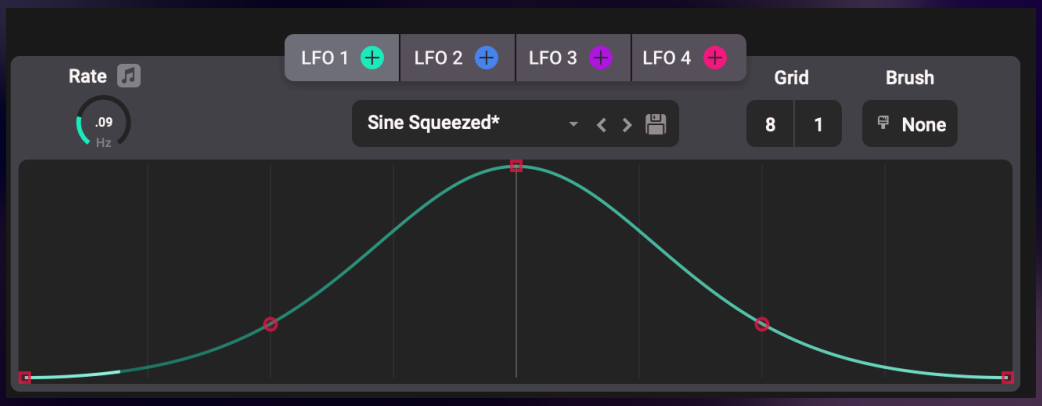
Mode

The mode allows you to invert the effect of the Aux source. * Means that when the aux source is at maximum the modulation is at its highest. If the Mode is *(1-x) this is flipped. Meaning the highest amount of modulation is when the aux source is at its lowest.



LFOs

Rocket Fuel has four LFOs that are used to modulate parameters. Each LFO gives users for a huge amount of control over its waveform shape and its rate. The grid size can also be changed to effect the length of the LFO. The Brush Tool can also be used to 'paint' LFO shapes for quick creativity.



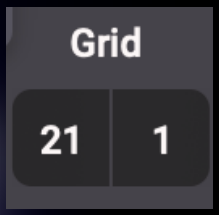
An LFO shape can be quickly dragged onto a parameter by using the plus symbol next to each LFO.

Rate and Sync

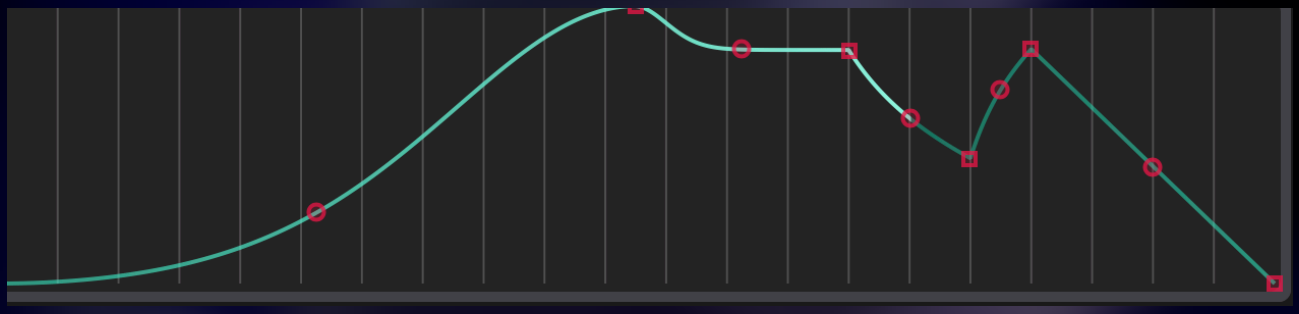
The rate of each LFO can be changed from 0.1Hz - 100Hz by moving the Rate knob. This alters the time it takes for the LFO to finish its cycle and trace its whole shape.

The Rate can be synced to your project's tempo by clicking the Musical Note Icon. This means its possible values will be locked to values related to your tempo, such a 1/4 (of a bar) or 1/16 (a sixteenth-note), rather than an absolute value in Hertz.

Grid and Brush

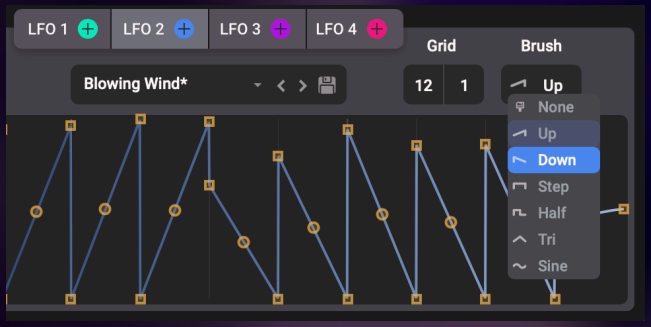


Change the size of the grid by entering a number into either the right or left side of the grid icon, or dragging with your mouse. The right side with change the number of vertical columns in the grid. The left side changes the number of horizontal rows in the grid.



You can move any of the points on the LFO by dragging the coloured square nodes around the grid, making different shapes. More movement points can be added by clicking anywhere on the LFO, Circles appear on lines between squares. Dragging up or down on a circle will change the line into a curve shape.

For easy and precise shaping, pick up a Brush. Select a shape from the Brush menu. Then click or and drag across the LFO grid to change the shape of the LFO between every vertical gridline.



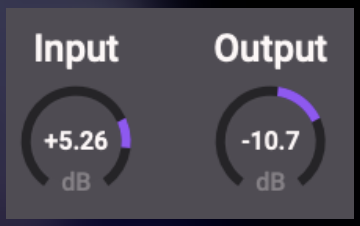
GLOBAL / OUTPUT

At the bottom right side of Rocket Fuel's interface you'll find the output area. Here you can change gain at the input and output stages and change which frequencies are being processed and shape the overall dry/wet mix.

Filter

The filter section allows you to choose which frequencies are affected by Rocket Fuel. Move this around by clicking and dragging both the high frequencies and low frequency indicators into the middle. Anything outside of the selected region will not be effected by Rocket Fuel.

Input and Output gain



Changing the levels in and out will change the volume of the signal going in as well as the volumes of the signal going out.

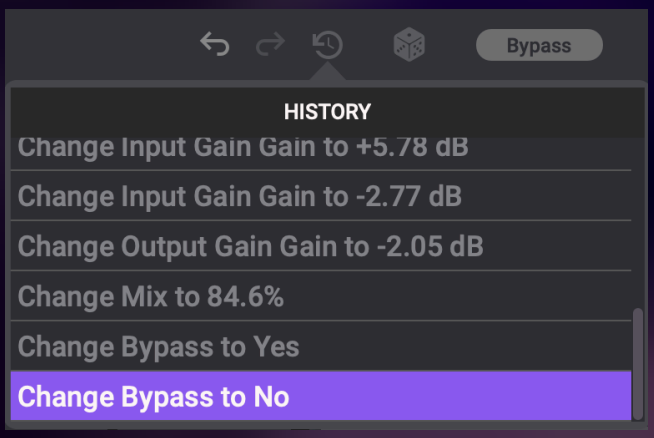
These can be useful to ensure that the level into the plugin and the level coming out are balanced.

Mix

The Mix knob changes the dry and wet balance of the output signal. Turn it to maximum, and you'll hear only the processed output. Turn the Mix down more and more, and you'll start to get more and more of the original input signal blended in.

History

Within the top-right corner of Rocket Fuel, you can access your edit history. This allows you to browse through previous changes you have made and return to them. The History tab has an in-depth description of the change made so that you can easily find the edit you made. The history tab is accessible by clicking the click icon in the top right corner.



Undo and Redo

The undo and redo buttons are found next to the history tab. The undo button erases the last edit made. The redo button brings the edit back.

Bypass

The bypass button completely bypasses Rocket Fuel. This means that Rocket Fuel is no longer effecting the incoming signal.