

MicroFX Refiner

USER MANUAL

Welcome to MicroFX Refiner

MicroFX are small, but powerful plugins, each focusing on a different effect. *MicroFX Refiner* is your go-to mix sweetener – a multi-effect combining dynamics processing, saturation, and tonal shaping to tighten, brighten, and transform your tracks into release-ready perfection.

About the Effect

MicroFX Refiner uses a combination of different effects to create an all-in-one solution for bus processing and mastering. The effects and parameters have been fine-tuned to get you the best results as quickly as possible.

The signal chain of *MicroFX Refiner* is as follows:

EQ → clipping → compression → saturation → stereo imaging → limiting

The intention of the effect and this signal chain is to add clarity and glue to a mix or master bus and help to maximize loudness without compromising quality.

With that said, you can activate the **DIRTY** button to add extra grit and saturation, which can help fatten a drum bus, or add extra sizzle to a vocal bus.

The MicroFX Framework

The *MicroFX* line uses the same control framework for most of its plugins.

Please refer to the **MicroFX Quickstart Guide** for information about the general features of the line, including how to activate your plugin.

MicroFX Refiner is an exception to the majority of plugins the line because it does not use the modulation system, but instead focuses on high-quality metering.

Parameter Reference

Below is a list of the controls specific to *MicroFX Refiner* with a description of what they do.



The XY Pad is linked to the two most important parameters to be controlled together:

- **X: Compression** – Controls the intensity of the compression effect.
- **Y: Boost** – Controls the gain at multiple stages of the signal chain in order to boost the loudness of the signal.

The additional controls are as follows:

- **Dirty:** Toggles the dirty variation on or off. When active, extra saturation will be applied.
- **Compressor Mode:** The buttons to the lower left of the interface let you select which compression settings to use:
 - **Gentle:** a slow and mellow setting. This is the most transparent and neutral setting.
 - **Wide:** sets the compressor and saturation to a Mid/Side configuration. This will make the signal sound wider.
 - **Punchy:** a fast and heavy parallel compression. The intensity of the compression is balanced by being blended with the dry signal.
- **Emphasis:** Sets how much the effect should focus on the low or high frequencies. This will not only alter the tonal balance but will change how the saturation behaves. Move the knob to the left for a darker tone, or to the right for a brighter tone.
- **Width:** Controls the stereo width of the signal. This effect is neutral at the centre position, mono when set all the way to the left, and extra wide when set all the way to the right.
- **Clarity:** Controls the amount of tonal balancing that will be applied to the signal.
- **Clipping:** Sets the clipping threshold that is applied before the signal is processed by the dynamics effects.

Metering

Metering is a useful part of the mixing and mastering process, which is why we added several meters to the *MicroFX Refiner*, beyond the simple input and output meters seen with the other plugins in the line.

Gain Reduction

The meters to the left of the XY Pad display the gain reduction being applied by the compressor (**CMP**) and limiter (**LIM**). It can be helpful to reference these meters to check how much work is being done by these two effects.

Output Levels

The meters to the right display the output level, using both **RMS** (Root Mean Square – in other words an average level) and **PEAK** measurements. The peak meter will give you an accurate measurement of the output level of the plugin, whereas the RMS meter will give you a better sense of the perceived loudness of the output.

The RMS meter closely follows AES loudness measurement standards, and so can be used as a good guide if you have loudness restrictions or targets. You can also right-click on the RMS meter to set the averaging window size (by default this is 3 seconds).

Stereo Image

Behind the XY Pad is a **goniometer**, which displays information about the stereo image. If the goniometer displays a simple vertical line, then the signal is mono; if it displays a line that is at an angle, the signal is mono but panned off axis; if it displays any kind of complex shape then the signal has differences between the left and right channels.

These attributes make the goniometer useful for checking the stereo image in a number of ways. For example, you will be able to see if the parts of the signal that should be mono are mono and central in the stereo image. It will also give an overall sense of the width of the output over time.

Clipping

The final meter is integrated into the **Clipping** slider. This meter is a peak meter that will show you exactly when the clipping is being applied and by how much. If you want the clipper to remain as transparent as possible, you will only want to clip the very loudest short peaks, and this meter will help you do that.