Red Plugin Suite

User Guide

Version 2.0

Focusrite®

focusrite.com

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Introduction

It's time to take a massive step-up. Get ready to incorporate the iconic sound and sheer usability of two classic analogue processors in your tracks.

This Focusrite Red 2 and Red 3 Plugin Suite brings the sound of Focusrite's iconic equaliser and compressor – the renowned Red 2 and Red 3 – into your digital studio in VST, VST3, AU and AAX formats.

The on-screen front panels are as exquisitely detailed as the powerful, smooth DSP modelling behind them, and they deliver a classic Focusrite sound that'll blow your socks off.

Specifications

Plugin Formats

The formats available for version 2.0.0 of the Red Plugin Suite are:

macOS	Windows
VST3	VST3
AUv2	AAX
AAX	

System Requirements

The easiest way to check your computer's operating system (OS) is compatible with your device is to use our Help Centre's compatibility articles:

Focusrite Help Centre: Compatibility

As new OS versions become available, you can check for further compatibility information by searching our Help Centre at support.focusrite.com.

Installation and Software Activation

Red Plugin Suite Product Registration

1. If you have a Focusrite account, log in at customer.focusritegroup.com/register.
If you don't have an account you can create one by following the same link.
2. If you have not already done so, register your Focusrite hardware product.
3. Go to the Hardware and Software section of your account.
4. Find your Red Plug-in Suite activation code in the My Software tab.

Installation of Plugin Suite

1. Double-click on the Red Plugin Suite installer.
2. Follow on screen instructions to complete the installation.

Software Activation

You need to activate the Red Plugin Suite before you can use it. You need an internet connection to get your activation code (as explained above). However, once you have the code, you won't need an internet connection to activate the plugins.

> 📝 **Note**
> There is a demo mode available If you click 'Try without activating', however the plugin will silence your audio occasionally.

To activate your plugins:

1. Open your audio software (e.g., Pro Tools, Logic, Ableton).
2. Open any one of the plugins in the suite, just like you would open any other VST, AU or AAX plugin in your DAW. If you are unsure of how to do this, then please consult your DAW's user guide.
The following Analytics window will appear:
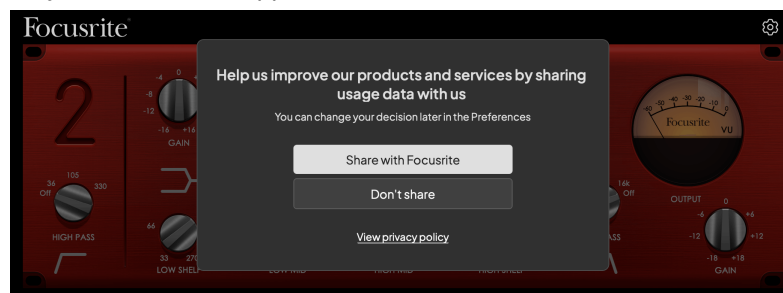
3. Click either Don't Share or Share with Focusrite– you can always change the analytics later in the Settings page.

4.   Enter your account e-mail address and Red Plugin Suite activation code (as explained above).
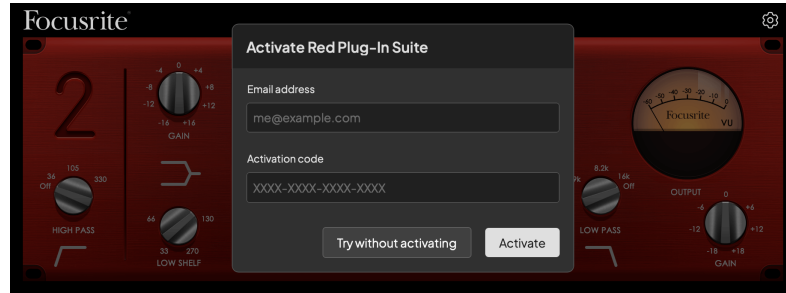
5.   Click Activate and your Red 2 and Red 3 plugins are now authorised and ready to use across all plugin formats and DAWs.

Red 3 Compressor

A compressor acts like an automatic volume control, turning down the volume of a signal if it gets too loud. This reduces variation between loud and quiet passages, as it automatically reduces the level when the sound goes above a set volume, the threshold. You can then turn up the overall level to make up the level drop and make the sound louder.

You can use a compressor to help even out a performance, preventing a signal from clipping and/or disappearing in the mix, or you can use a compressor to give your sound a whole new sonic character.

The Red 3 Compressor is modelled on the legendary Focusrite Red 3 hardware compressor. The Red 3 plugin (as with the original Red 3 compressor) has a warm, musical sound, and will provide sensitive compression to a wide range of musical sources without compromising the integrity of the original recording.

The controls are as follows:

Input

The dial in the bottom-left of the plugin window (INPUT) lets you control the level of gain at the plugin's input. The gain range is -18 dB to +18 dB. When the dial points vertically upwards (in the centre), 0 dB of input gain is applied.

Meters

There are two level meters on the Red 3 Compressor; the input/output meter (on the left) and the **GAIN REDUCTION** meter (on the right) of the plugin panel.

The input/output meter has two possible sources, selected by toggling the **INPUT/OUTPUT** switch beneath the meter.

When set to **INPUT**, the meter displays the signal level immediately after the **INPUT** gain control. The red needle in the meter also moves to show the threshold value selected by the **THRESHOLD** control. This helps show when the input signal exceeds the threshold, and if compression is being applied.

> **Note**
> The Red 3 Compressor is a 'soft knee' compressor. As the input signal approaches the threshold point, gentle compression is applied. The result is a smoother, more transparent compression. This also means that when the signal level on the meter is slightly below the red needle, a small amount of gain reduction will still be applied.

When set to **OUTPUT**, the meter displays the signal level immediately post the **DRY/WET** control in the signal chain. In this mode the red needle will not operate, this is because the compression is applied to the input signal rather than the output signal.

The **GAIN REDUCTION** meter displays the amount the compressor is attenuating, or reducing, the signal. It works from right to left.

Attack

ATTACK determines how quickly compression is applied once the level of the source signal has risen above the threshold. The attack time is fastest when fully anti-clockwise, making the compressor react to the peak levels of the signal. This is sometimes desirable but can cause unwanted "pumping" of steadier low-level components of the signal, due to short transients.

Rotating the dial clockwise will make the attack time slower, causing the compressor to ignore short transients and respond more to the average loudness of the signal.

Faster attack times are useful on instruments such as a slapped bass guitar, where the compressor is being used to create a very 'punchy' sound. Slower attack times are more suitable on vocals or instruments where the compressor is required to provide a more subtle control of signal level.

Release

RELEASE sets how quickly the compression is removed once the level of the source signal has fallen below the threshold. The release time begins at 0.1 seconds (fully anti-clockwise). This is useful for rapidly varying signals to avoid compressing the beats that follow, but can result in distortion on more sustained sounds.

Clockwise rotation continuously increases the release time. This gives a smoother effect. The maximum release time is four seconds.

The setting of the **RELEASE** control will not affect the signal when the **AUTO RELEASE** button is engaged, as outlined below.

Auto Release

When you turn on **AUTO RELEASE**, the release curve response is set by the sound and the auto-release calculation. The release rate varies to suit the dynamics of the signal. This is especially effective on complex sounds and enables fast attack times without hearing any "pumping" artefacts. When **AUTO RELEASE** is on, you can still move the **RELEASE** knob, but the position and release value shown on the release knob does not affect the release time.

Ratio

The **RATIO** dial determines the rate at which compression is applied to a signal with increasing input and is the ratio of change in input level compared to change in output level. The control gives a continuous range of 1.5:1 to ∞:1

Lower ratio settings will be softer, and provide gentler control over the signal levels. As the ratio increases, however, the compression will become harder and more noticeable. At very high ratios, the compressor will behave in much the same way as a limiter.

Threshold

The **THRESHOLD** control sets when the compression starts, with a range of –50 dB to –10 dB. The lower the threshold, the more the signal is compressed. Setting a higher threshold leaves quieter passages unaffected, as only passages that exceed the threshold are compressed. When the input/output meter is set to **INPUT**, threshold is shown via the red needle as explained above.

Make-Up Gain

After the overall level has been reduced by compression, the **MAKE-UP GAIN** dial allows you to increase the output level. Up to 40 dB of make-up gain is available.

Dry/Wet

The **DRY/WET** control lets you mix your processed (compressed) and unprocessed signals, to help you maintain more of the dynamics of the source. When fully anti-clockwise (**DRY**), only the unprocessed signal will be audible. When fully clockwise (**WET**), only the compressed signal will be heard. When the dial points directly upwards (50/50), equal amounts of processed and unprocessed signals are mixed.

This simulates parallel compression: the common practice of mixing compressed and uncompressed signals on two separate channels of a mixing console. It lets you reduce the dynamic range of the signal without creating an overly 'squashed' sound.

This can be particularly useful when compressing drums, as a very heavily compressed signal, can be blended with the uncompressed signal. The **DRY/WET** control can also be used to great effect on signals where a very subtle compression is needed, such as on vocals.

Red 2 EQ

Equalisation (EQ) is an essential part of recording and mixing. EQ can remove or boost various parts of the audible frequency spectrum. The Red 2 EQ plug-in has three sections:

- Low Mid and High Mid parametric EQ (in the centre of the plug-in window)
- Low Shelf and High Shelf (either side of the Low Mid and High Mid)
- Low Filter and High Filter (far left and far right of the EQ sections)

Details of the different sections of the plug-in are as follows:

Low Mid and High Mid Parametric

The centre section of the plugin window features two separate bands of parametric EQ (**LOW MID** and **HIGH MID**); each with a Cut/Boost **GAIN** control from -16 dB to +16 dB, a frequency sweep control, and fully variable Q (bandwidth).

- The **LOW MID** band's centre frequency ranges from 40 Hz to 1.2 kHz.
- The **HIGH MID** band's centre frequency covers the range of 600 Hz to 18 kHz.

> 💡 **Tip**
> In terms of EQ, 'parametric' sounds complicated, but really it just means you have full control over every parameter in those ranges (low mid and high mid). By every parameter we're referring to the band's centre frequency, Q, and gain.

Low-shelf and High-Shelf

The low and high-frequency shelving sections provide a Cut/Boost **GAIN** control from -16 dB to +16 dB and a frequency sweep control.

- The **LOW SHELF** frequency selection ranges from 33 Hz to 270 Hz.
- The **HIGH SHELF** frequency selection ranges from 3.3 kHz to 15 kHz.

High Pass and Low Pass Filters

Two knobs provide full control of both **HIGH PASS** and **LOW PASS** filters. Rotating the controls past the **OFF** position turns on the filters, and allow a continuous sweep between the frequencies indicated on the dials (36 Hz to 330 Hz for the **HIGH PASS**, and 3.9 kHz to 16 kHz for the **LOW PASS** filters).

- **HIGH PASS** rolls off (attenuate) all frequencies below the selected frequency.
- **LOW PASS** rolls off all frequencies above the selected frequency.