

ACUSTICA

FROST



1 INTRODUCTION

1.1 FROST

Thank you for choosing Frost!

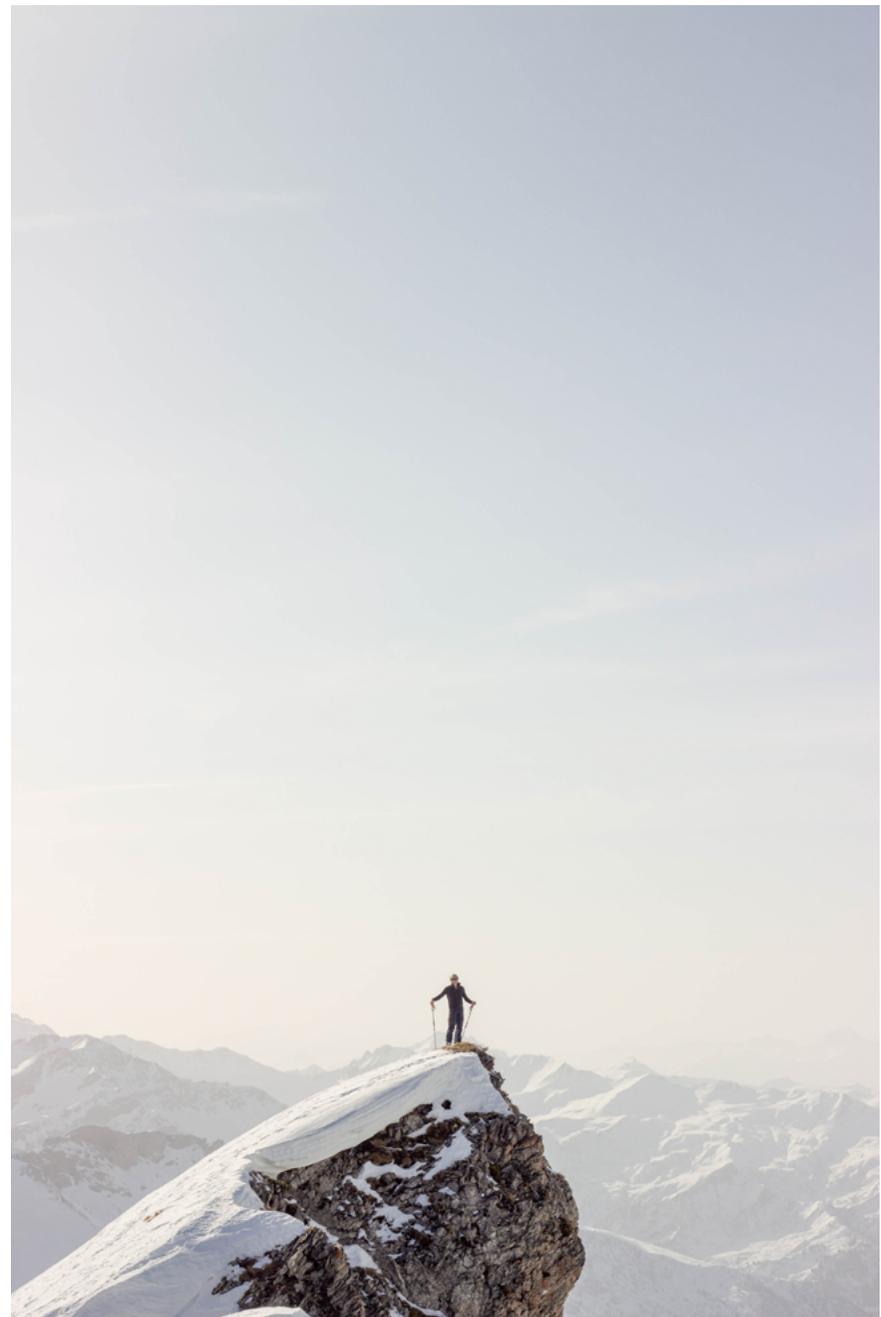
The new powerful, fully hyper, channel strip plugin from our Acqua series, available in VST, VST3, AU and AAX format, which represents the ultimate expression of Acustica's new high-performance Hyper technology.

It is one of Acustica's most versatile and creative plugins, able to take on just about any job, made up of different precious tools used and appreciated by world wide Pro Audio engineers and carefully selected by Acustica to create the ultimate all-in-one channel strip.

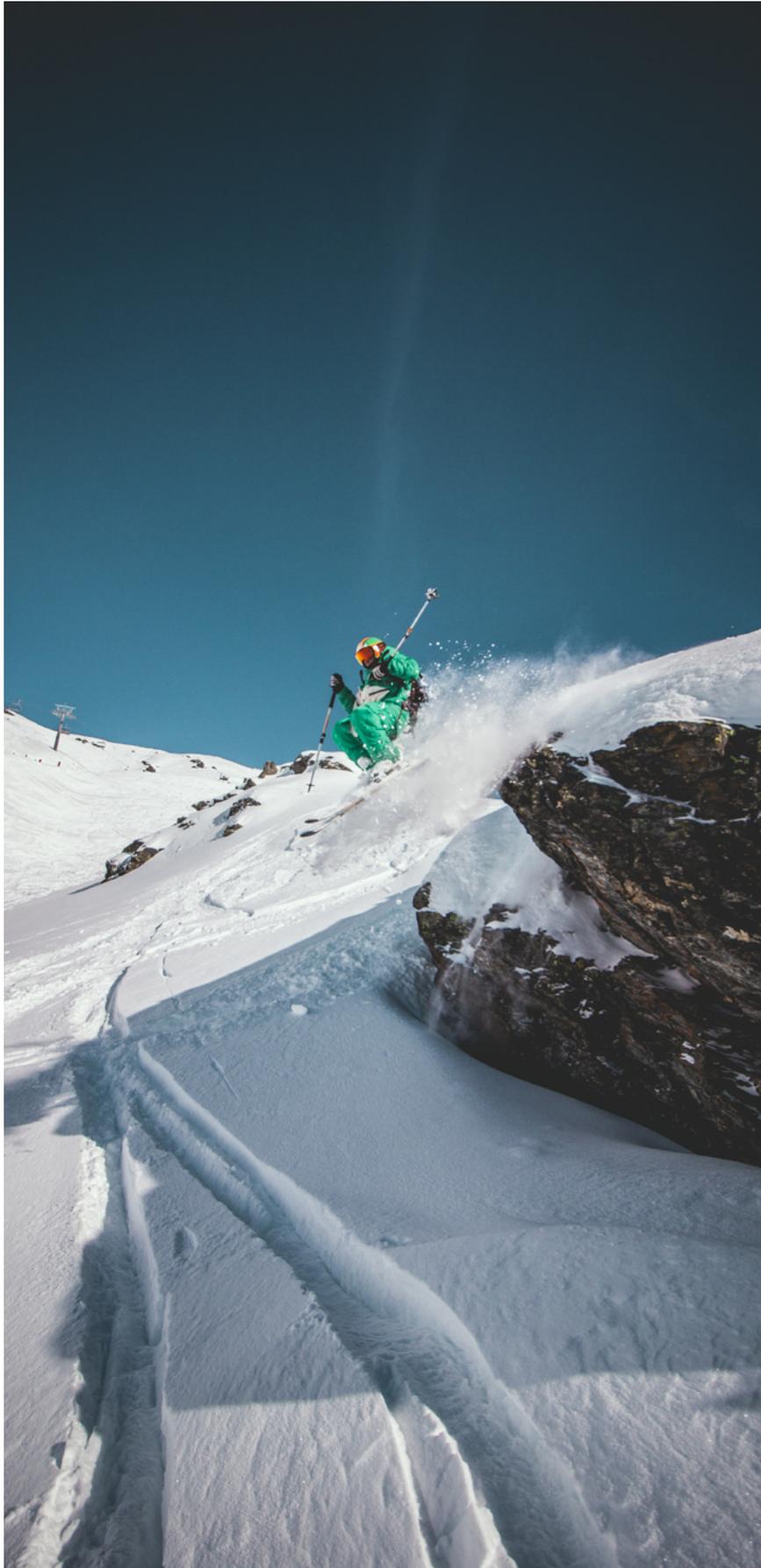
This Channel strip is made up of three processing modules, an EQ section (1), a Dynamic section (2) and a Pre/Clipper/Saturator section (3). All of them hold up on their own, but all together they make sparks fly!

This plugin is so precisely controllable and so versatile, and its sonic character so configurable, that its use really isn't limited to specific genres and tasks. Ranging from ultra-clean to warm and musical, aggressive to chilled out, it's all about supporting your choices and needs.

To get the most out of your new plugin, please read this user manual carefully.







1.2 FEATURES

- Hyper technology.
- Hyper 'Glue' Compressor plus two Brickwall limiters.
- Hyper 'British-style' 4-band EQ plus HP-LP filters.
- Hyper Dynamic EQ mode.
- Hyper Saturation, Preamp, Clipper.
- 3 modes of operation - Classic Stereo (LR), Mid or Side.
- External Sidechain.
- Top quality product suite with a great, distinctive and impeccable sound.
- Oversampling for all sections.
- Low CPU consumption.

2 OVERVIEW

Frost aims to become your inseparable 'British-style' channel strip, providing all the basic processing - equalisation (static and dynamic), compression, pre-amplification, saturation and clipping - in one single, easy-to-manage plugin, created to work 360 degrees effectively and organically.

This innovative and versatile plugin will allow you to manage different scenarios, regardless of the musical genre you are working with.

It will allow you to better manage your sounds by "marrying" them in a beautiful and cohesive way, creating that much sought-after 'glue'. It can be a great tool for sculpting vocals and solo instruments, giving them considerable energy thanks to its preamplification/saturation section, or for widening the stereo panorama by giving it more three-dimensionality thanks to its EQ section.

Also, don't underestimate the potential of the sampled equaliser included in this plug-in, that can make for a very quick and efficient mixing and mastering workflow.



2.1 AT A GLANCE

Frost channel strip features three different sections:

- 1 -> a 'Sand-style' [pun intended considering the AA world] EQ affair inspired by one of the most 'British' EQs, it sounds classy, smooth and very musical with fixed Q, HF and LF shelving curves address the extremes (3k,8k, 10k, 12k, 14kHz / 30, 60, 100, 200 and 400Hz) along with both high and low mid-band EQ with peaking curves (0.7k,0.96k, 1.3k, 1.8k, 2.5k, 3.5k, 4.8k, 6.6k, 9k,12k5 and 17kHz / 20, 28, 40, 60, 80, 120, 170, 240, 350, 490 and 700Hz) with oversampling-rate buttons (1x - 2x - 4x - 8x).

This section also includes High-pass (from 65Hz to 1.5kHz) and Low-Pass (from 18kHz to 1.4kHz) cutting filters derived from the same gear.

- 2 -> a 'Sand-style' [pun intended considering the AA world] VCA Bus Compressor providing fast, relatively clean and detailed compression with oversampling-rate buttons (1x - 2x - 4x - 8x). Two Brickwall limiters (1-2), the first a more 'traditional' and the second a more 'pioneering' in their conception both based on our new 'Hyper' compression technology with oversampling-rate buttons (1x - 2x - 4x - 8x); and a Dynamic EQ option.

- 3 -> a Preamp/Saturation/Clipping stage with oversampling-rate buttons (1x - 4x - 8x) derived from a Tube Vari-mu compressor, which can make your sound vary from subtle to extremely aggressive, but always remain musical. Sensible use of the saturation options helps make a mix sound bigger, more cohesive and more interesting.

Moreover the plugin includes a series of additional controls including: MID - SIDE - L-R buttons, a complete Input-Output meter section and finally a series and External sidechain. Check the 'Operation' chapter for more details.

The Frost signal chain:

Input -> Static Eq -> Compressor -> Dynamic Eq -> Pre->Saturation/Clipper -> Output

3 OPERATION

Sonically, this channel won't let you down, delivering the kind of smooth, controllable sound you would expect from a real channel strip, providing a tool that can easily sculpt a perfect sound, whether it's processing a single instrument, grouped tracks or even during mastering.

It is capable of providing saturation options that can help make a mix sound bigger, more cohesive and more interesting, and a range of dynamic processors that can crush the sound or "glue together" your tracks. Let's find out together how it is able to do that by going into the details of the controls of each section of this powerful plugin.



3.1 FROST CONTROLS

Section1 > EQ:

Modify the equalisation at the begin of the chain.

OFF: disables the Eq.

LF Frequency: Selects the frequency of the LF band - 5 cutoff points - from 30 to 400 Hz with shelving curves.

LMF Frequency: Selects the frequency of the LMF band - 11 cutoff points - from 20 to 700 Hz with peaking curves.

HMF Frequency: Selects the frequency of the HMF band - 11 cutoff points - from 0.7 to 17 kHz with peaking curves.

HF Frequency: Selects the frequency of the HF band - 5 cutoff points - from 3 to 14 kHz with shelving curves.

Gain LF: Controls the gain of the Low Frequency band ranging approx. -6/+6 dB.

Gain LMF: Controls the gain of the Low Mid Frequency band ranging approx. -10/+10 dB.

Gain HMF: Controls the gain of the High Mid Frequency band ranging approx. -10/+10 dB.

Gain HF: Controls the gain of the Low Frequency band ranging approx. -6/+6 dB.

HP filter: Can be set between 30 Hz – 1.5 kHz; first knob step (OFF) bypasses the filter.

LP filter: Can be set between 18 kHz – 1.4 kHz; first knob step (OFF) bypasses the filter.

Oversampling: Selects the Eq oversampling factor.

Left-Right: Left/Right processing is enabled by pressing the L-R button (the default processing mode).

Mid: MID processing is enabled by pressing the MID button, EQ processing is applied to the center of your soundstage (Mid component).

Side: SIDE processing is enabled by pressing the SIDE button, EQ processing is applied to the edges of your soundstage. (Side component).

NOTE: These processing modes effect only the EQ both static and dynamic (LR/MID/SIDE)

Section2 > DYNAMICS:

Modify the equalisation at the begin of the chain.

Attack: Sets the compressor's attack time, ranging from 0.1 mS (fast) to 30 mS (slow).

Release: Sets the compressor's release time, ranging from 0.8 S (fast) to 14 S (slow); plus, two even slower times were added, called A1 and A2.

Threshold: Sets the threshold of the compressor (range: -64 dB to + 0 dB). When DYN EQ is enabled, this sets the signal level where the dynamic eq starts working.

When the audio breaches the threshold, boosts and cuts are applied, thus compressing or expanding the dynamic range of the frequencies concerned.

Compressor modes: This control allows you to select between 4 different and mutually exclusive compression modes:

COMP (a faithful algo 'copy' of the VCA bus compressor unit): Oversampling- rate functions available (1x, 2x, 4x, 8x).

BRICKWALL1 (1st 'Frankenstein' brickwall limiter by Acustica):

It's an emulation of a traditional brickwall limiter that does not allow transients to exceed the maximum limit when the input gain is set to maximum. Sc Filter, Stereo link, Attack and SHMOD controls not available in this mode. Oversampling- rate functions available (1x, 2x, 4x, 8x, 16x).

BRICKWALL2 (2nd 'Frankenstein' brickwall limiter by Acustica):

It is characterised by Tulip's attack-release times, a fixed ratio (static curve) derived from an iconic VCA compressor. Unlike the more 'traditionally' designed Brickwall 1, Brickwall 2 is able, by adjusting the available attack and SHMOD controls, to achieve the desired volume while preserving the transients and dynamics of the track. The SC Filter, Stereo link and Ratio controls aren't available in this mode.

DYN EQ: Used to modify the gain (compression/expansion) of the dynamic eq and the frequency of both the static and dynamic eq.

Ratio: Sets the ratio of the compressor; Range: from 2:1 to explosive 100:1

SOA button: An acronym derived from 'safe operating area'; This is a fine-tuning button to set the input level signal to the compressor at +18 dB.

Threshold: Sets the threshold of the compressor (range: -64 dB to + 0 dB).

Make up: Compensates for the compressor's gain reduction. Gain range: from -12 dB to +12 dB.

Mix: This controls the proportion between the original (dry) and 'effected' (wet) signal. In other words, it lets you balance the compressed with the uncompressed signal. Range: 0% to 100%.

Stereo Link: Use this control to link or unlink the response of the left/right channels when working on a stereo source. Makes the control signal mono (100%).

Filter: This control sets the cut frequency of a very gentle 1-pole high-pass filter inserted in the side-chain path. Generally, the higher the frequency, the smaller the amount of gain reduction, since less of the low frequencies will be affecting the Compressor action. In the leftmost position (labeled '0'), the filter is bypassed.

Output: This knob is an output gain control of the compressor ranging from -24dB to +24dB.

Stereo Link: Stereo linking synchronizes the gain reduction applied across both channels, ensuring that both the left and right channels receive the same amount of gain reduction.

Turning the knob fully counterclockwise to the OFF position activates the LINKED mode, while turning it fully clockwise to the FULL position sets the UNLINKED mode.

External sidechain button: Used to modify the control signal, press this button to select if the control signal is taken from channels 1-2 to 3-4. Changes the gain of the control signal by +/- 24 dB.

Dyn EQ ON button: Press this to activate the Compressor/Dynamic section.

Dyn EQ OFF button: Press this to disable the Compressor/Dynamic section.

Mix/ Sensitivity: This controls the proportion between the original (dry) and 'effected' (wet) signal. In other words, it lets you balance the compressed with the uncompressed signal. Range: 0% to 100%. When the Dyn Eq is engaged this control become a Sensitivity knob, it determines the amount of the eq effect that is applied to the signal. Ranging from 0% to 100%.

Section3> PRE/SATURATOR/CLIPPER:

Pre In (Input Trim): A one-knob internal gain structure control linking the input and output gain stages with an inverse law. The control sets the input level from -24dB to +24dB, and it is used to adjust the plugin's internal level. Note: when the preamp stage is bypassed (OFF), the 'Input Trim' mode has no effect. It is possible

to increase the harmonic saturation with this Input trim knob.

Pre (In) ON button: Press this to activate the Preamp section.

Pre (In) OFF button: Press this to disable the Preamp section.

Saturation modes: Choose between OFF (Bypass) / Saturator / Clipper.

Saturation knob: This knob increases the distortion of the plugin, behaving differently depending on the type of processor selected (Saturation / Clipper).

Details:

- OFF: The distortion doesn't work.
- Clipper mode: Amplification before the clipping stage. Increase the input gain to drive the signal into the clipper. Range: from 0% to 100%.
- Saturation mode: Turn it up to increase the distortion of the plugin. Watch out, it can give an instrument a bit of analog character adding warmth or it will literally 'punish' the signal with extreme saturation becoming very aggressive, use it wisely! Range: from 0% to 100%.

Output: This knob is an output gain control of the plugin ranging from -24dB to +24dB.

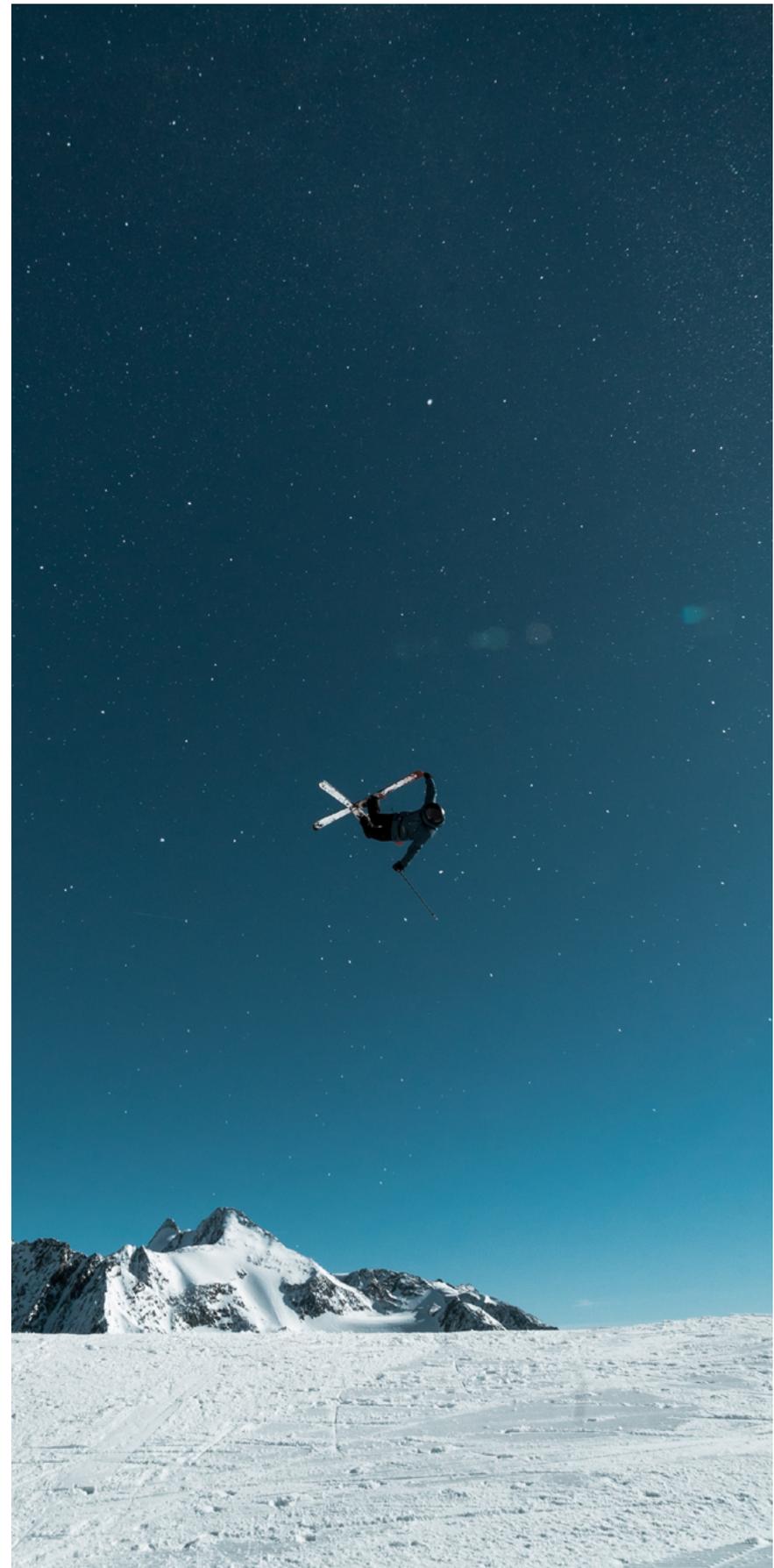
Preamp Oversampling: Modify the oversampling rate (1x -2x - 4x - 8x) to improve the audio quality, increasing only the sampling frequency of the Preamp

ADDITIONAL CONTROLS

To adjust and measure Input-output level and gain reduction.

Input-Output meters: They measure the input and output levels of the plugin.

Gain Reduction meters: They measure (L-R) the reduction level applied by the compressor. The meter indicates '0' in the absence of any input signal or any gain reduction. If the signal exceeds the compression threshold or limit level, the amount of gain reduction is shown.



4 HOW TO DOWNLOAD, INSTALL, AND AUTHORIZE YOUR PRODUCTS

Acustica Audio products can be downloaded, installed, and authorized using the Aquarius Desktop application.

The Aquarius Desktop application is a free standalone application that will manage every step in an automatic way without user intervention.

Download Aquarius Desktop Application

www.acustica-audio.com/pages/aquarius

4.1

How to download a product in Aquarius Desktop Application

To download a product using the Aquarius Desktop application go to the purchase page and select the product and format (VST2, VST3, AAX, AU) to install.

In case you can't find your product on the purchase page use the search page.

4.2

How to install a product in Aquarius Desktop Application

The installation is done automatically by the Aquarius Desktop application after the download. As the Aquarius Desktop application creates a temporary file of the downloaded products, known as the stage area, at the moment you want to reinstall a product it will not be necessary to download it again.

4.3

How to authorize a product in Aquarius Desktop Application

The authorization is done automatically by the Aquarius Desktop application after the product installation. You can manage your authorizations using the Aquarius Web Service.

Click [HERE](#) or a complete installation user guide

5 SYSTEM REQUIREMENTS

Modern computers are powerful enough to run many plugins at once. However, our technology requires more resources than algorithm-based software, so we recommend optimizing your system to work with high CPU loads and low audio latency.

Before starting the installation process, please confirm that your system meets the minimum system requirements to run the plugins please consult the following link:

<https://app.box.com/v/AASYSTEMREQUIREMENTS>

6 CUSTOMER CARE

To contact Acustica Audio, always use the single point of contact, which is this help-desk portal:

<https://acusticaudio.freshdesk.com/>

We do not provide official assistance via social networks, public forums, or email accounts. For troubleshooting and issue reporting, check the available solutions in the knowledge base.

7 COPYRIGHTS AND CREDITS

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