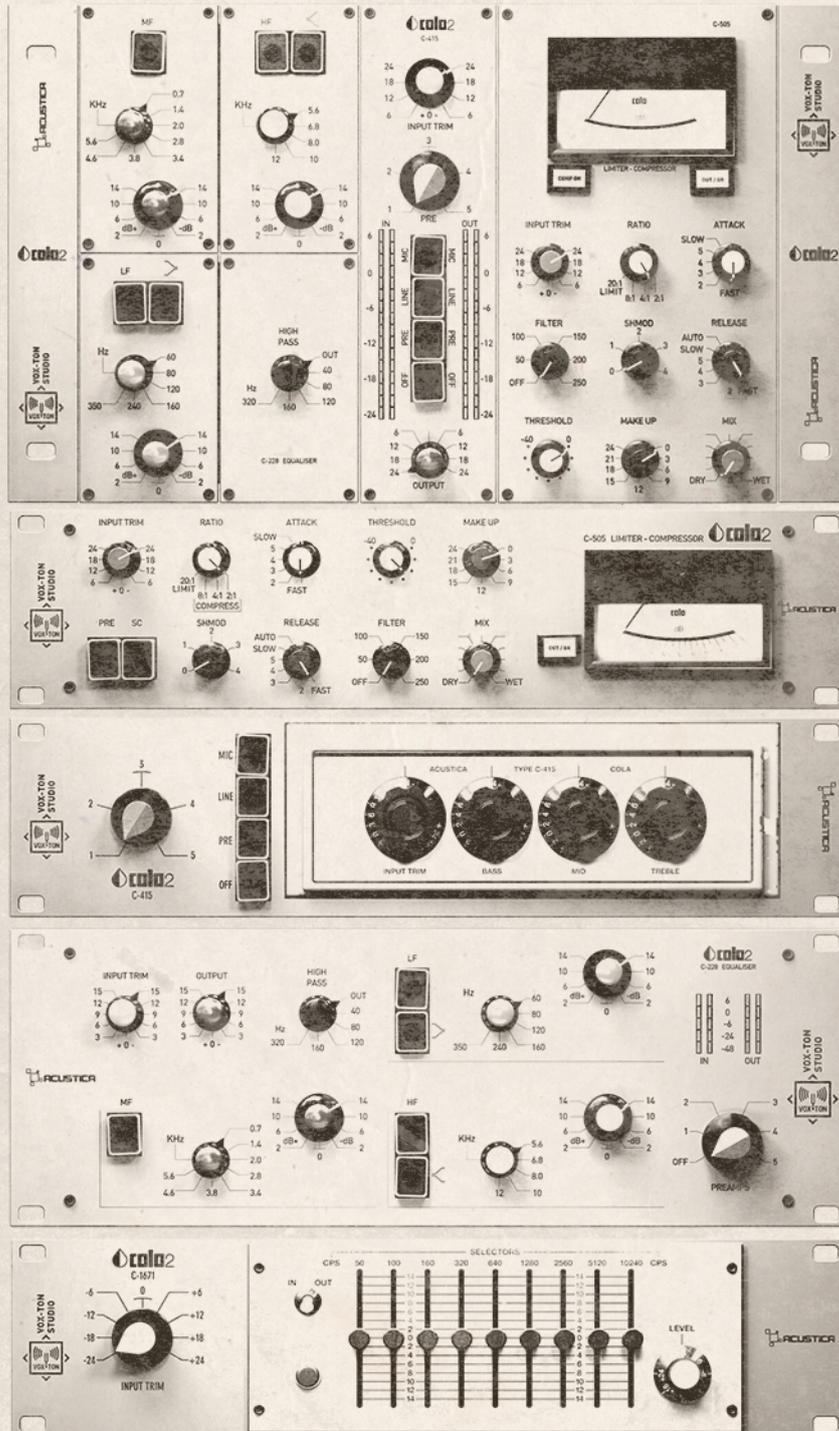


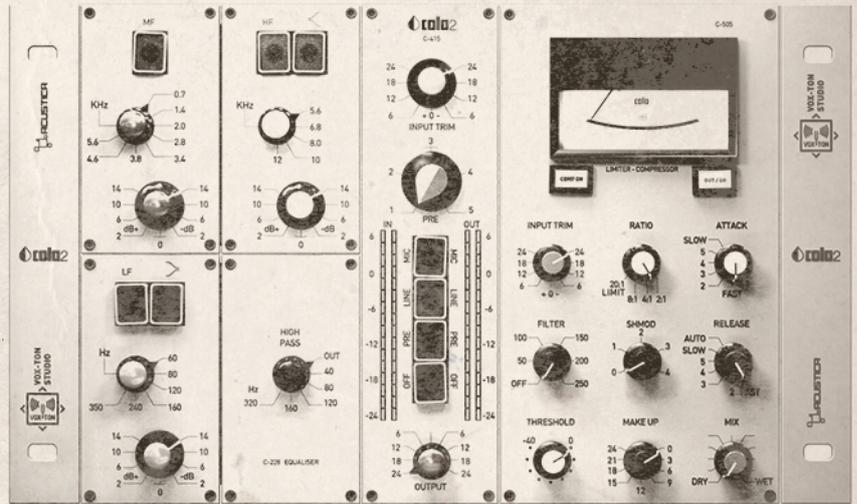
cola2



Index

page 1	Overview
page 2	Introduction
page 3	Acustica Audio
	The Endorsement - Vox Ton Stu-
page 5	dio
page 6	Technology
page 7	Core 15
page 8	Performance Caution
page 9	System Requirements
page 10	Sampling Process
	Operation
page 14	Cola2 C-228 Eq
page 18	Cola2 C-415
page 20	Cola2 C-1671 Eq
page 22	Cola2 C-505 Comp
page 24	Cola2 Channel-strip
page 25	Cola2 C-228 Experimental Ap- proach
	Preset Management
page 26	Product Registration
	Product Authorization
	References
	Copyrights and Credits

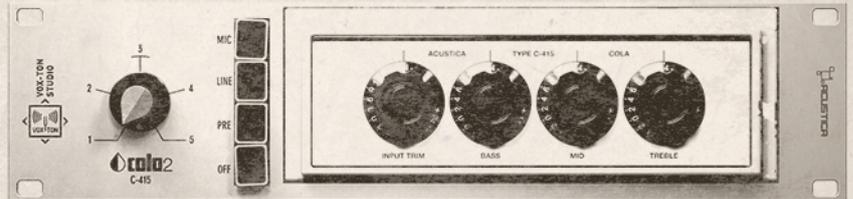
1. Overview



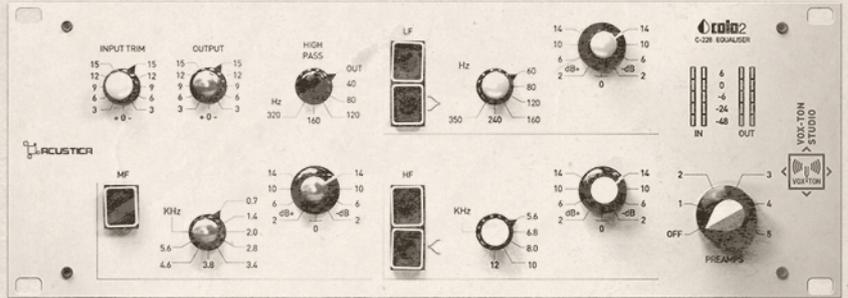
Cola2 Channel Strip



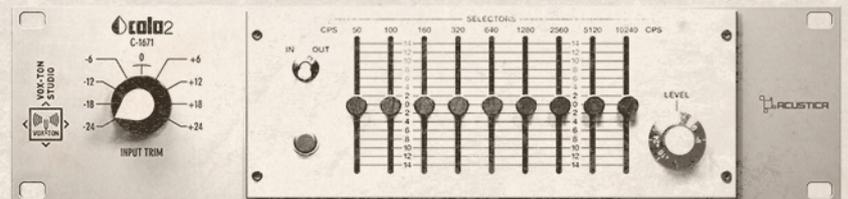
Cola2 C-505 Compressor



Cola2 C-415 Pre



Cola2 C-228 Equaliser



Cola2 C-1671 Equaliser

2. Introduction

The centerpiece of this new Acustica plugin suite is a beautiful emulation of a rare vintage british console from 1972. A lot of iconic albums by AC/DC, Queen, the Clash, the Sex Pistols, were mixed on these evergreen consoles. Our emulation embodies the essence and the behaviour of this 70s British console, fully discrete and class A, with mastering grade inductor Eq's on each channel and a 44 Volts audio power supply that gives a smooth and clear sound with big and solid bass, low noise and lots of headroom. In addition to this beautiful console we have emulated some extremely refined and very rare pieces of gear to accurately deliver a digital representation of the Vox-Ton (<http://www.vox-ton.com/>) sound. Acustica and Vox-Ton studio joined forces for this exciting project to give you one of the best 'Vintage' plugin suites ever created in the digital domain. So let's give a big, warm welcome to Cola!

PACKAGE CONTENTS

The Cola2 suite consists of:

- Cola2 228 (A Vintage 3-Band Inductor Equalizer with High-pass and Low-pass Filters).
- Cola2 415 (A Vintage Valve Pre / 3-Band Passive Equalizer).
- Cola2 1671 (A Vintage Germanium Graphic Equalizer).
- Cola2 A505 (A Vintage Discrete Compressor/Limiter).
- Cola2 Channel-strip (A Channel strip that includes some of the previous cited standalone plugins).

During the modeling process we used the best converters and cables on the market, we measured the unit in excellent conditions, and employed skilled experts in the sampling process using our self-developed sampling application.

Now you have one of the best, high-quality professional audio software plugins in your audio work-station. We spend countless hours developing these no-compromise plug-ins to give you nothing but the best sound and feel that is as close to the real hardware as can be imagined. We are confident that this plugin will help you make more professional mixes... Because: Sound First!

Cola2 comes in a "Standard version" or an alternative ""ZL*" version which operates at * zero latency and is thus suitable for use when tracking, at the cost of the extra processing resources. (Details at Chapter 7.)

3. Acustica Audio

Acustica Audio is a leading company specializing in analog hardware virtualization. Since the birth of Nebula in the summer of 2005, there has been an active collaboration between forward thinking developers, beta testers, audio engineers and equipment samplers from around the world. The research and development has progressed through many stages and employs many innovative processes and technologies as yet unheard of in other products or devices.

The company's goal is to provide the most authentic reproduction of sampled vintage gear and other high-end hardware devices, using the revolutionary technology Vectorial Volterra Kernels Technology (V.V.K.T.) without the negative artifacts created by the current convolution technology. After many years of fruitful labor, this creative forward thinking group has evolved into a team of experts in knowing what it takes to serve the "best of both worlds" (digital & analog).

Acustica... Audio Renaissance

4. The Endorsment

Vox-Ton is a fully analog recording studio based in Berlin, Germany and run by Francesco Donadello and Niels Zuiderhoek.

 **Vox-Ton Recording Studio**



They provide a nice blend of vintage equipment, digital audio workstations, tape machines, a beautiful live room and lots of great instruments.

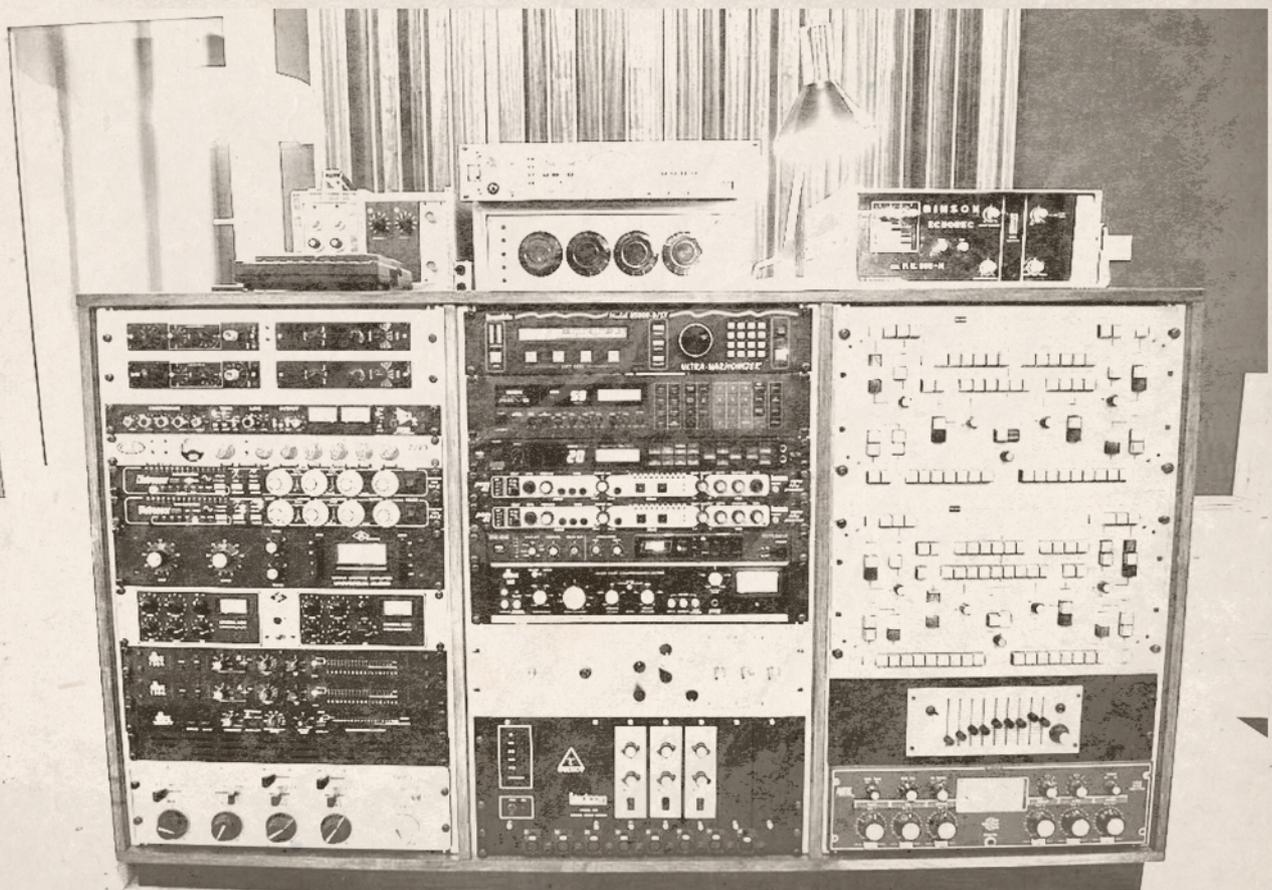
Vox-Ton is the perfect studio to record any kind of music, from classical, electronic, soundtracks, jazz and rock. It is also one of the few studios where you can still produce a record fully analog, without computers or digital equipment. There is a vast choice of vintage tape machines and formats.

The main Live room with natural day light and a superb wooden floor, has a nice and smooth natural reverb, perfect for pianos, strings, and ensembles, but also great for jazz and rock bands.



The control room offers a cozy and relaxing atmosphere which is also perfect for the most demanding projects.

Contact: <http://www.vox-ton.com/Vox-Ton> Recording Studio Berlin, Germany



5. Technology

Our technology provides seamless real-time emulations of pre-amplifiers, equalizers, compressors, reverbs, multi-effects, stomp-boxes, cabinets, microphones and tape emulations, on Intel based machines, both for Windows and OSX. The Acustica Acqua Engine is a combination of multiple advanced technical processes that are unique to Acustica Audio.

Effects devices can be successfully sampled without further editing or adjustment, and then immediately processed and reproduced via the same engine, where the sampled data is stored and available for recalling, loading, saving, and advanced editing when desired. The quality of reproduction of sampled sources is nearly indistinguishable from the originals.

The following techniques are merged into a single model. Nonlinear convolution: The Volterra theorem is applied as a complete re-thinking, replacement, and generalized substitution of the convolution algorithm that is commonly used in audio applications. Accurate sampling, processing, and reproduction of up to 9 harmonics is possible with our proprietary technology.

Nonlinear convolution, dynamic Volterra series, and time-varying models are just some of the state-of-the-art features that the Core Acqua Engine offers. The Core Acqua Engine comes complete with all of its internal tools, and also includes the N.A.T. sampling system, a stand-alone application shipped with most of Acustica Audio's products using different configurations.

Support is provided directly from the R&D Team that is continuously developing the engine. Work-shops and project-specific learning sessions can be organized for your team. The Core Acqua Engine is available with a diverse stand-alone library, ready for inclusion in 3rd party products.

Vectorial Volterra Kernels Technology (V.V.K.T.): Volterra kernels are stored in tree data structures (managing up to 100,000 elements in real-time using a CPU Pentium IV 3 GHz). The Acqua Engine is capable of implementing a list of modules commonly used in audio synthesizers (LFO, envelope followers, dynamic modules, FUNS). Multiple combinations of these processes may be applied to control sources and destinations.

Time Varying Models (T.M.V.): A collection of kernels collect data using an advanced sampling technique, creating a multi-dimensional snapshot of a nonlinear/time-varying system. Multiple recordings are interpolated in order to mimic the time evolution and response to external variables such as user parameters and input/output assessments (e.g. time-varying cyclic effect processors, stomp-boxes, digital multi-effect units).

More info about our technology can be found at the following link: <http://www.acustica-audio.com/pages/engine>

New Hyper engine

Our standard compressors run at 22kHz regardless of sample rate or oversampling; this implies that the reduction, attack, and release curves are not calculated for every sample but for every 'n' samples, where 'n' depends on the sample rate. For example, on fast transients, the input level is evaluated correctly; however, the reduction is calculated after 'n' samples, so the signal containing the transient is not compressed in time, and the transient "escapes" compression.

This new Hyper compression tech calculates the amount of compression and the attack and release curves at each sample, so compression is applied immediately and no longer after 'n' samples.

The speed of these new compressors can be further increased by oversampling while keeping the power consumption at 1/12th of our standard compressors.

In this suite you can appreciate for the first time our brand new 'Hyper preamplification technology'. It significantly improves the standard of current preamplifier emulations, offering the highest possible audio quality, precision and low CPU consumption (keeping CPU consumption between 1/3rd and 1/2nd of our standard preamps), taking full advantage of the extraordinary potential of our VVK technology. The quality of these new preamplifiers can be further increased by oversampling, while keeping CPU consumption the same as our previous preamplifiers, but sounding much better in all respects.

||HYPERCOMP

7. What Is a ZL Instance For?

Acustica Audio's plug-ins come in two versions: ZL (zero latency) and normal (non ZL).

While the ZL version does not introduce any latency to your system, the standard version does. This buffer varies in size for each plug-in and helps to significantly reduce the CPU and system load of your computer. For this reason we recommend that you use a ZL instance whilst tracking.

Keep in mind that anything that can reduce the CPU load on your system should be considered. For example the track count of your session, the number of plug-in instances used, sample rate, etc.

You could also consider the use of direct monitoring or double the buffer/hybrid audio engine in your host if available.

Basically both plug-in instances are identical but the current Aqua engine can work with a long audio buffer or without any audio buffer. The instance without audio buffers, "ZL", or zero latency, do not have any audio buffer pre-loaded, and will process the audio without any delay, so at the same time the CPU load will be higher compared to the standard non ZL instance. The idea behind a ZL instance is to give users the option to run Aqua Effect products with minimal latency, which is useful for direct monitoring for example.

8. Performance Caution

In order to maximize performance and usability of Cola on your computer, we suggest you follow some precautionary rules that will help you save precious CPU cycles.

-First of all, set your buffer size setting as large as possible. There is generally no specific reason for using a low buffer size setting during mixing or mastering sessions. Increasing buffer sizes (hence also latency) highly decreases required CPU power.

-You should also consider only using the necessary features. We do not ensure the complete absence of bugs or the perfect operation of the product. Before purchasing, we suggest you download the Trial version to verify the behavior of the plug-in with your system.

Trial products are fully-functional versions of the relative commercial plug-in.

The trial period expires 30 days after activation.

We do not take any responsibility for misuse of the product, or collateral problems derived from it. Normally the Early Access period ends within 30 days from the publication on the product page but this period may vary at our discretion.

This manual includes a description of the product but gives no guarantee for specific characteristics or successful results. The design of our products is under continuous development and improvement. Technical specifications are subject to change.



9. System Requirements

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>

10. Sampling Process

The sampling process has been performed by Acustica Audio. The units were sampled with mastering quality converters, using a method which takes considerably more time than the normal sampling standard. This method is of benefit to the entire audio spectrum.

Two sample rates are provided with Cola; the native sample frequency was 96kHz. The 44.1kHz frequency was derived from the native one by a down-sampling and up-sampling process. This method avoids any negative sample rate conversion (SRC) artifacts when matching projects with different sample rates and also helps with project loading times.



11. Operation

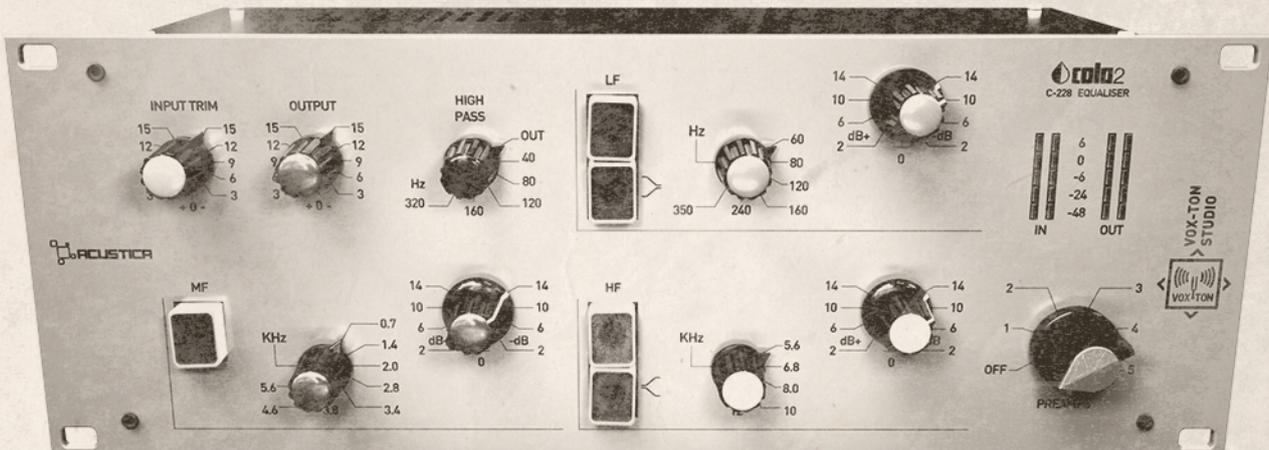
The Cola2 bundle isn't just a suite of some clones of rare vintage units. It's another important addition to our list of "endorsed" plug-ins and carries the unique tone of Vox-Ton's sonic signature.

Analogue warmth seems to be the Holy Grail in these digital days so Acustica and Vox-Ton are very happy to give you this 'new-old' state-of-the-art plugin suite, available to producers, musicians, and sound engineers who want unique tools for different sound shades. Cola can give you a vintage sound that will enhance your project by making it warm, with big and solid bass, without sacrificing a smooth and clear sound.

The plugins contained in this powerful bundle are all very different from one another, this diversity represents the major asset of this new suite. With its unique features we believe that it will make mixing and mastering a pleasure, giving you satisfaction and at the same time guaranteeing the Acustica Audio high-quality standard without compromise.

Below we immerse ourselves into the explanation of Cola suite, we get into the details of each individual standalone plugin to facilitate the understanding of each of the controls included in this new Acqua Effect Plugin bundle.

11.1 Cola2 C-228 Eq



If you are not familiar with this unit, it's one of the best consoles manufactured by a celebrated British company founded in 1968 with a long history of excellence in the world of recording, touring and theater.

The Cola 228 Vintage EQ plug-in is a faithful emulation of one of the best desk models of this company. It includes several controls and is amazingly intuitive to use.

11.1.1 Controls

-INPUT TRIM: this function allows for a "one knob" internal gain staging control by automatically linking input and output gain stages with an inverse law. The control sets the input level from -15dB to +15dB, and it is used to adjust the internal operational level of the plugin. Note that this is different from a standard input gain control due to the linked output gain stage, which always ensures that whatever gain change is introduced at Cola's input, the output level is automatically compensated so that there's no perceived level change.

-OUTPUT: this knob is an output gain control ranging from -15dB to +15dB.

-PREAMPS: this knob enables the preamp stage that closely emulates the phase, frequency response and harmonic distortion of the original device. It is possible to select from 5 different emulations:

- 1-MIC derived from the Cola 228 EQ
 - 2-LINE derived from the Cola 228 EQ
 - 3-PRE from the Cola 1671 graphic equalizer
 - 4-PRE from the Cola C415
 - 5-PRE from the Cola A505 Compressor
- Cola 228 is characterized by 3 independent bands and a High-pass filter.

Details:

-LF band

- **FREQ knob:** the internal stepped knob allows you to switch the frequency of the band, there are 6 steps from 60Hz to 350Hz.
- **GAIN knob:** The external knob is used to increase or decrease the gain of the band from -14db to +14db.

- **Q:** The default setting of the band is peak mode, but you can also enable the SHELF mode instead if you so desire by pressing the relative Shelf button. The shelf mode is only available for LOW and HIGH bands.

-MF band

- **FREQ knob:** the internal stepped knob allows you to switch the frequency of the band, there are 7 steps from 0.7Hz to 5.6kHz.
- **GAIN knob:** The external knob is used to increase or decrease the gain of the band from -14db to +14db.
- **Q fixed:** Peak mode;

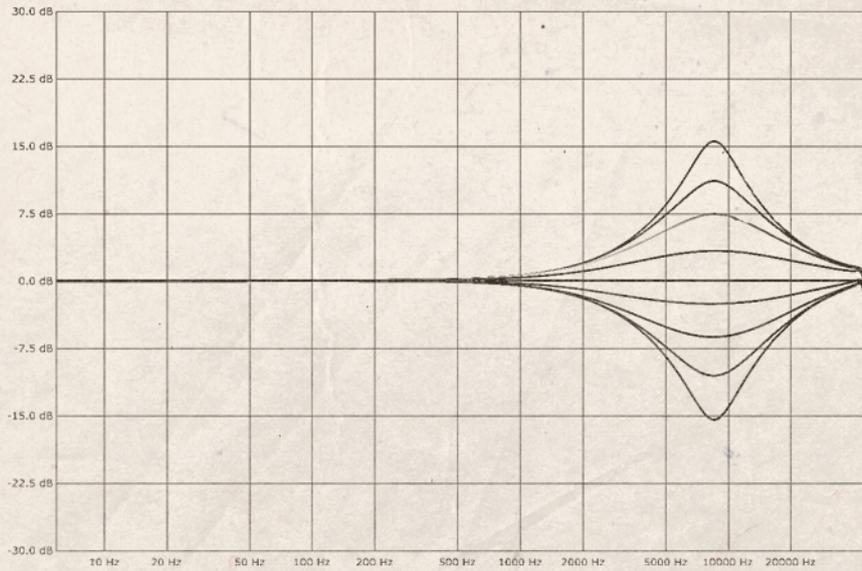
-HF band

- **FREQ knob:** The internal stepped knob allows you to switch the frequency of the band, there are 5 steps from 5.6kHz to 12kHz.
- **GAIN knob:** The external knob is used to increase or decrease the gain of the band from -14db to +14db.
- **Q:** The default setting of the band is peak mode, but you can also enable the SHELF mode instead if you so desire by pressing the relative Shelf button. The shelf mode is only available for LOW and HIGH bands.

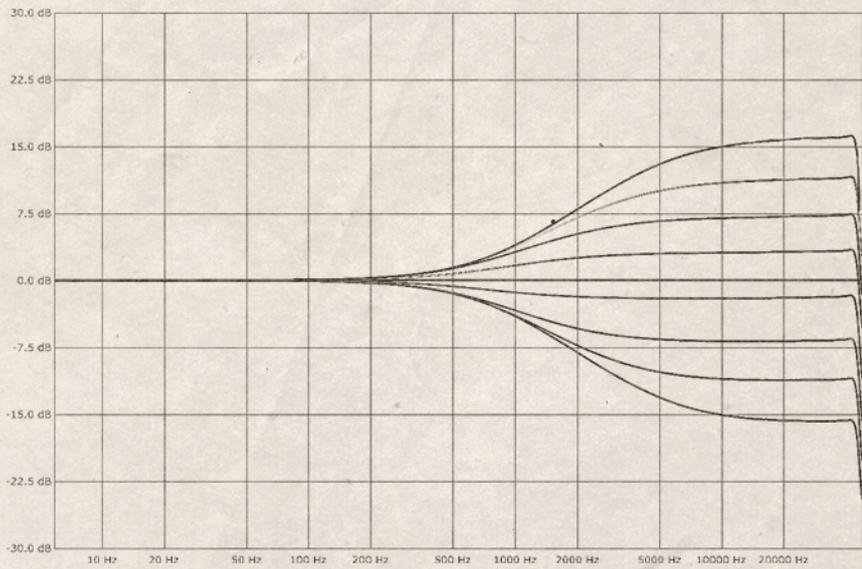
-HP filter

The Cola 228 standalone plugin is equipped with a variable high-pass filter knob tunable between 40 Hz and 320 Hz and has a slope of 6 dB per octave.

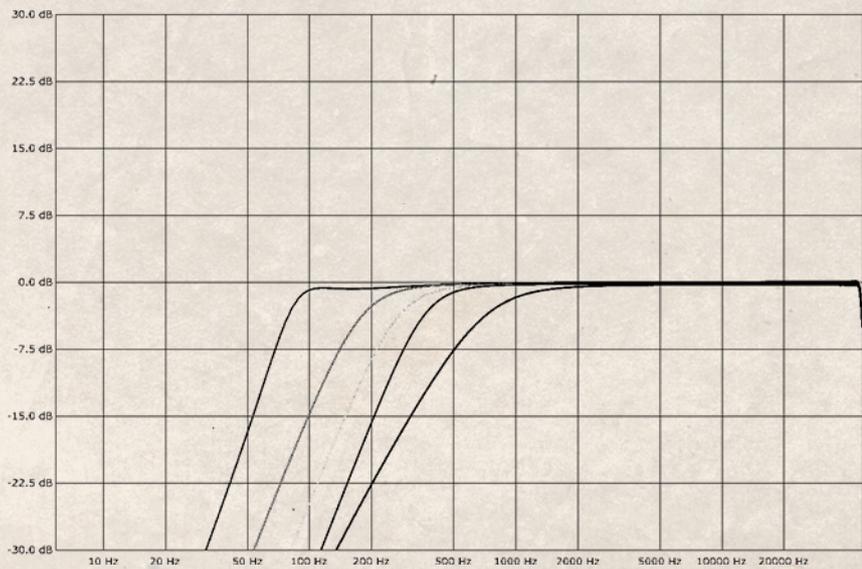
First knob step: bypasses the filter so it may be switched OFF (OUT) if desired.



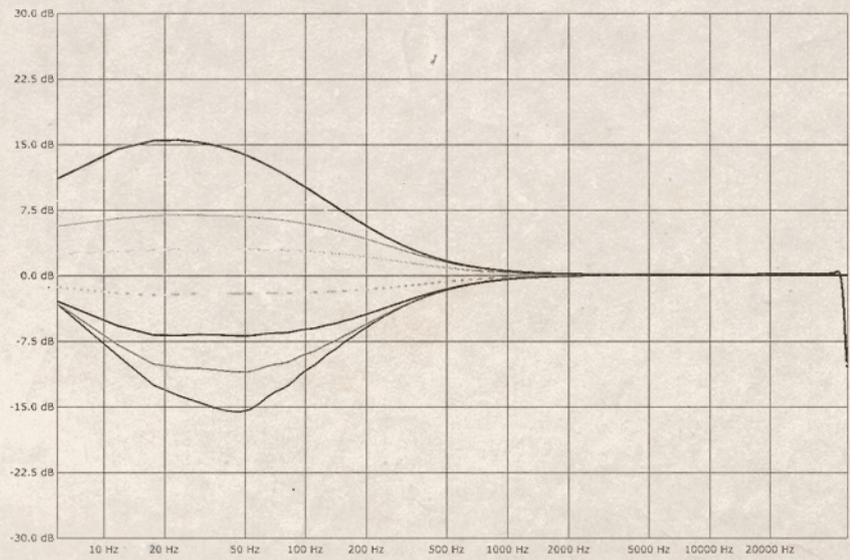
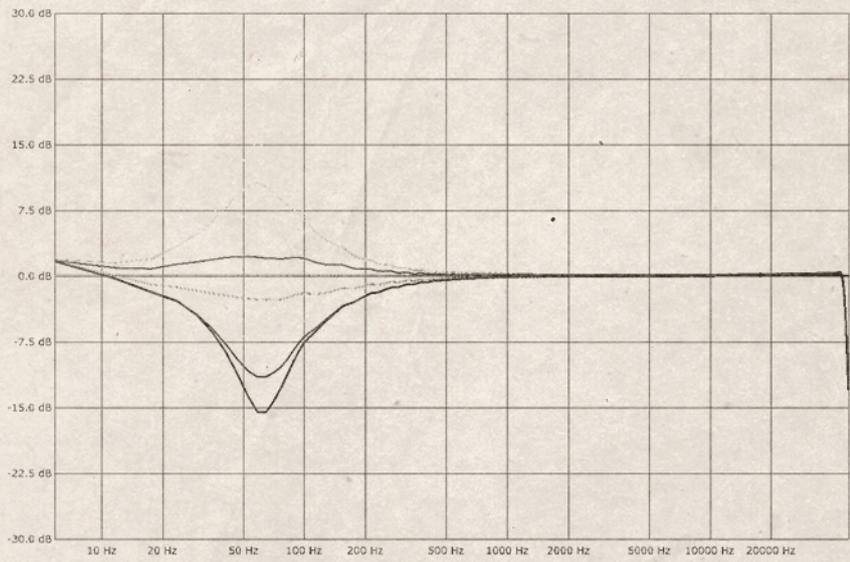
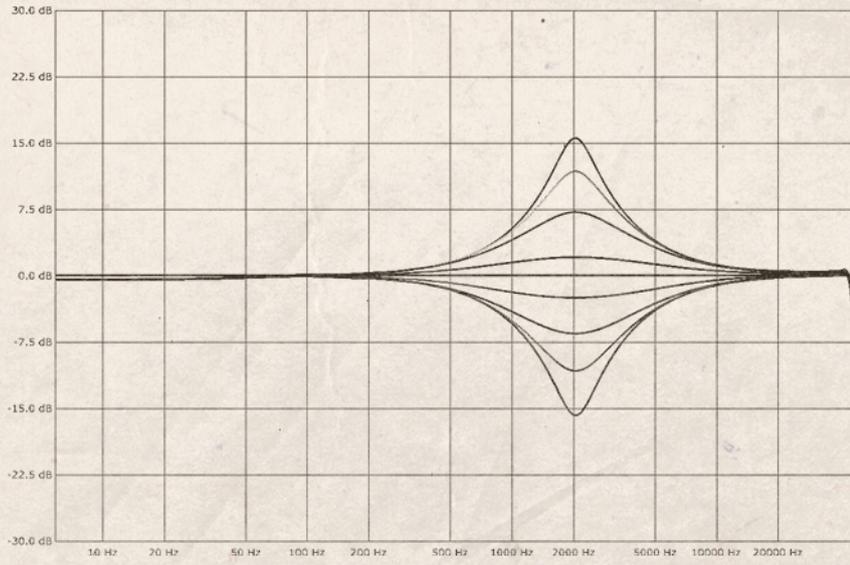
High freq. - 8000 Hz - peak mode



High freq. - 8000 Hz - shelf mode



High pass filter curves



11.2 Cola2 C-415



Cola2 C-415 is an plugin emulation inspired by a British valve mic-amp/mixer from the 1950/60s used by producer Joe Meek to which we have added: an entire and authentic collection of vintage preamps, an accurate end-to-end circuit emulation of the bass, mid and treble EQ sections, taking inspiration from his big brother namely the 4M/15W model. These microphone mixers / preamplifiers / EQs have gained a somewhat cult status in the vintage recording world. They were used on many legendary records from the 1950s and 60s and used extensively at famous studios for film productions. A classic vintage British sound and an amazing piece of recording history. It was a real honor to recreate this unit in the digital domain and we are sure it will give you great satisfaction. It is one of the most user-friendly standalone plugins by Acustica Audio, the perfect solution for use on your mixes!

The C-415 EQ is equipped by:

- Low (shelving), Mid (peaking) and Treble (shelving) Bands; A fixed frequency for each band and an adjustable Gain control (-15/+15 dB);
- Preamps Banks (MIC, LINE, PRE) and relative Input trim controls (-24/+24 dB);
- Bypass (OFF);

Just a little bit of history:

The British manufacturer of these incredible units was very famous for high quality public address amplifiers, mixers and much later, tape recorders. Having been formed in October 1936, by two brothers, the company was born out of a small trading shop that had been a supplier of components, later specialising in transformers. At their peak in the 1950s, the products of this company sold in relatively large numbers as evidenced by the survival rate of some of this equipment today. With the outbreak of war in the 1940s, the firm found themselves under the direction of the UK Government for war work, the company claimed that many hundreds of their products were in use by the ARP and government. Post war they produced a recording amplifier for disc recording purposes and a Magnetophon recording and replay amplifier in the summer of 1947 specifically to drive the German originated magnetic tape recorder deck of the same name. This development makes them an early, if not indirect entrant into the tape recording field as the UK did not see magnetic recording commercially introduced until a little later with a professional unit (that we already sampled and released in our Cream suite :-)).

The domestic markets would have to wait until 1948/9 before the emergence of a complete home tape recorder. This British company did not produce their own self contained recorder for these markets until early 1953. In early 1949, the firm announced a stereophonic amplifier using a single PX4 as the output valve in each channel.

Unfortunately, nothing further is known about this development although the equipment continued to be advertised in one form or another throughout the early 1950s.

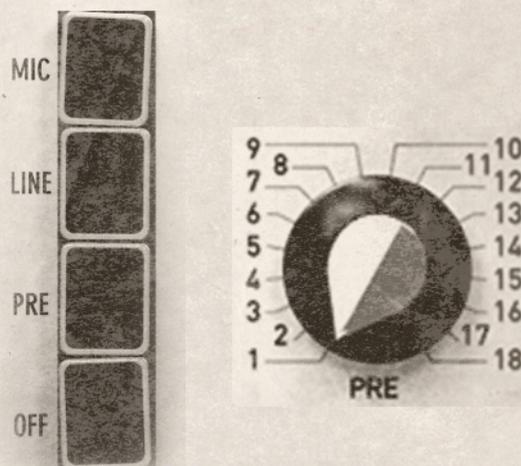
11.2.1 Controls

INPUT TRIM: this function allows for a "one knob" internal gain staging control by automatically linking 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 internal operational level of the plugin. Note that this is different from a standard input gain control due to the linked output gain stage, which always ensures that whatever gain change is introduced at Cola's input, the output level is automatically compensated so that there's no perceived level change. The first processing stage is the preamp section. This section equipped by 3 different mutually exclusive preamps banks allows you to switch between them and an OFF button to disable this stage. We are very proud to provide to our customers a complete virtual console emulation that reproduces all the channel pre-amps of this iconic desk:

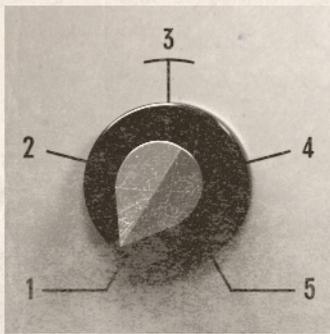
- In order to select a specific bank, just press the relevant button. As expected, each button is mutually exclusive; as a consequence, only one preamp emulation at a time can be activated. Each preamp bank contains different emulations, details below.

- You can select the preamp emulation for each bank using the relative stepped knob.

Preamps included in the Cola channel-strip (and relevant stand-alone plug-in):



- 1) Mic 1-18
18 different channel paths (mic input to group output)
- 2) Line 1-18
18 different channel paths (line input to group output)
- 3) Pre 1-5
5 different preamps emulations derived from each Cola standalone plugin.
- 4) Preamp bypass



- step 1 - MIC derived from Cola C228 EQ
- step 2 - LINE derived from Cola C228 EQ
- step 3 - PRE from Cola C1671 graphic equalizer
- step 4 - PRE from Cola C415
- step 5 - PRE from Cola C505 Compressor

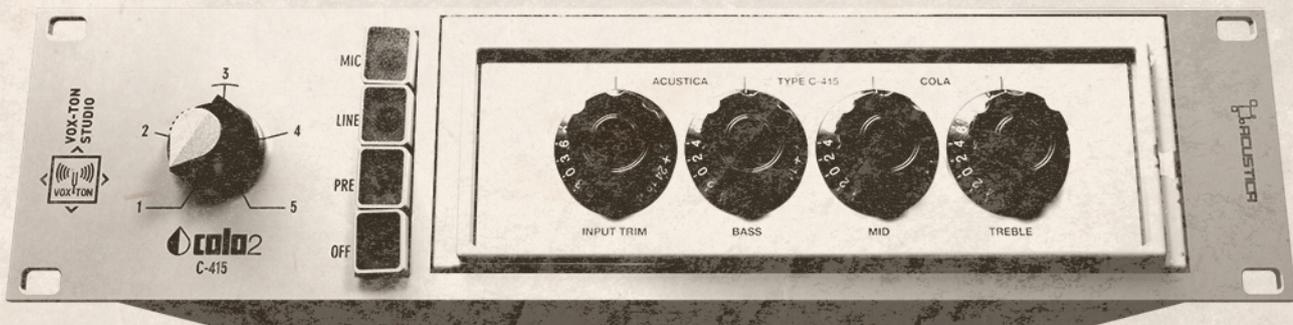
NOTE: when the Preamp section is bypassed the Input Trim control has no effect on the plugins

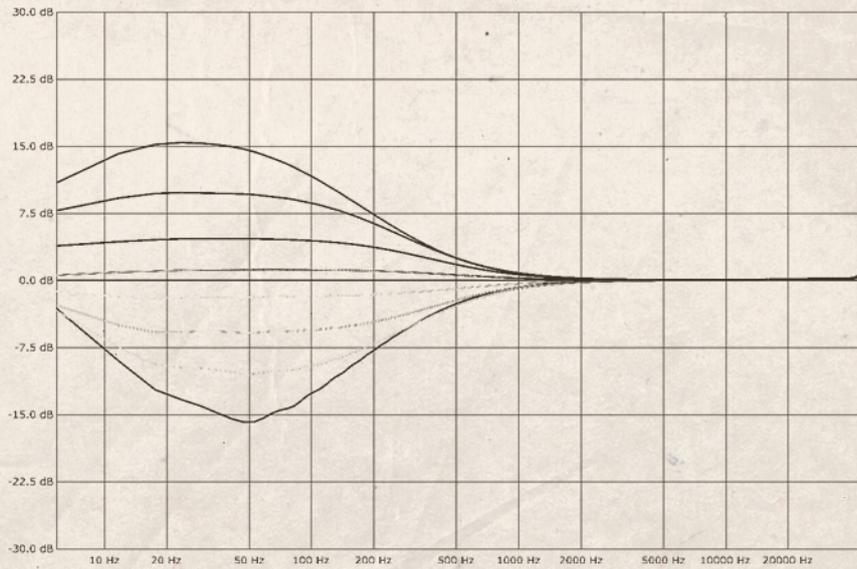
Available bands are:

- 1) Low
 - Frequency fixed at 80 Hz;-Gain: approx -14dB/+14dB cut/boost. Counter clockwise for increased attenuation. Clockwise for increased equalization.
 - Q fixed: Shelving mode;

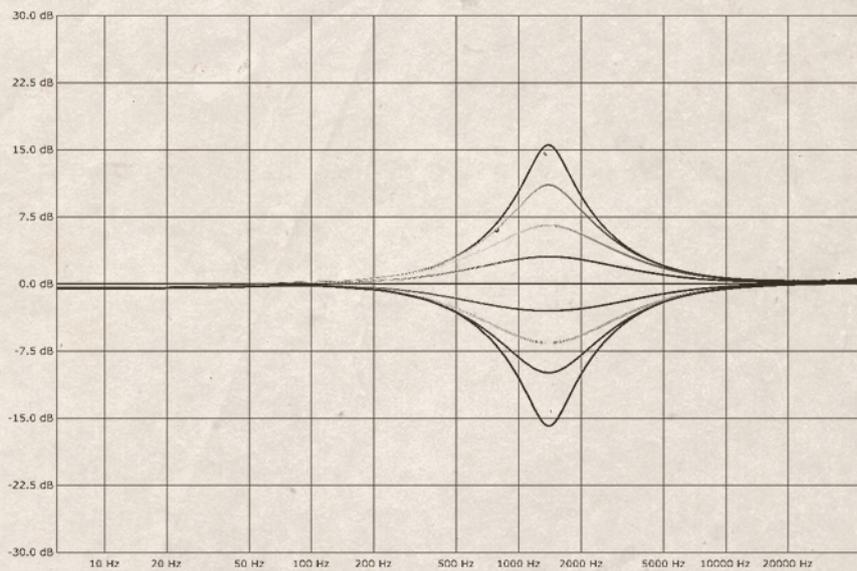
- 2) Mid
 - Frequency fixed at 1400 Hz;
 - Gain: approx -14dB/+14dB cut/boost. Counter clockwise for increased attenuation. Clockwise for increased equalization
 - Q fixed: Peaking mode;

- 3) Treble/High
 - Frequency fixed at 12 kHz;
 - Gain: approx -14dB/+14dB cut/boost. Counter clockwise for increased attenuation. Clockwise for increased equalization.
 - Q fixed: Shelving mode;

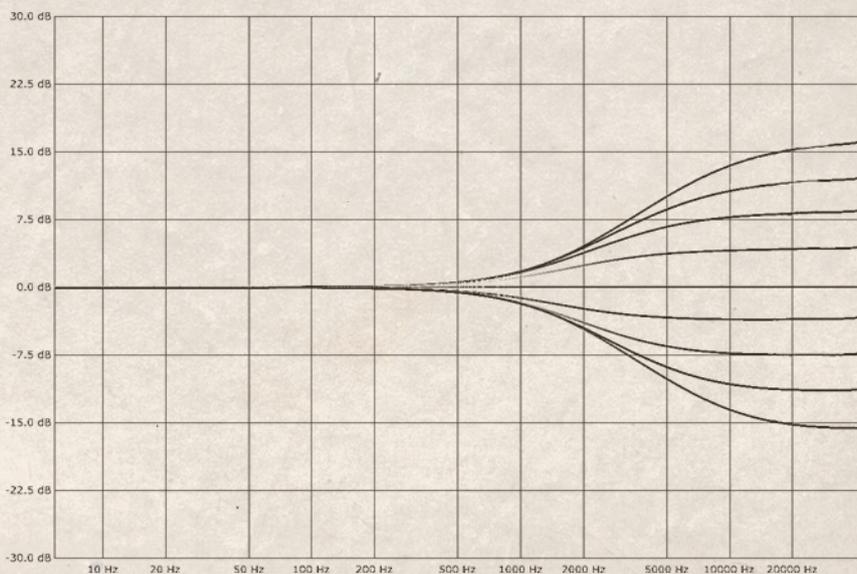




Bass Frequencies

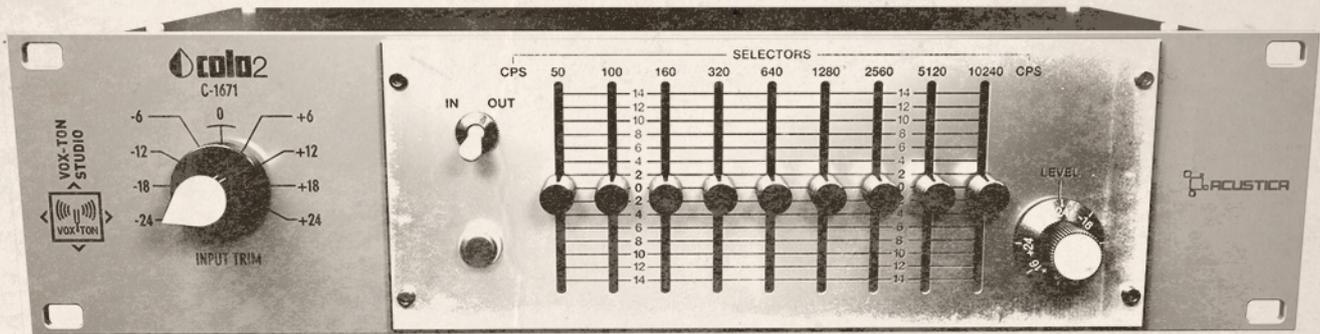


Mid Frequencies



High Frequencies

11.3 Cola2 C-1671 Eq



Cola2 1671 is a 9-band graphic EQ based on a rare discrete germanium equalizer introduced in U.K. in the early 1960s.

This highly appreciated solid-state device employed germanium transistors and came with a remote, something that was quite unique for the 60s. It was used for many years and it was integral part of the Outboard Processors in several recording studios in the middle of the 60s/70s and was used for many famous musical productions. The great engineer Neil Kernon recalls that: "we had racks of these Eqs back in the day". He used them all the time for doing extremeEqing.

"Although it's a fantastic all-around Eq, it's one of my favorite on bass and synths"

-Francesco Donadello

So Let yourself be conquered by this iconic graphic eq plugin, trust us, it can be a very powerful tool for sculpting out the perfect space for your instruments in a mix!

Below is the detailed explanation of Cola 1671 graphic equalizer controls.

11.3.1 Controls

-Input Trim: this function allows for a "one knob" internal gain staging control by automatically linking input and output gain stages with an inverse law.

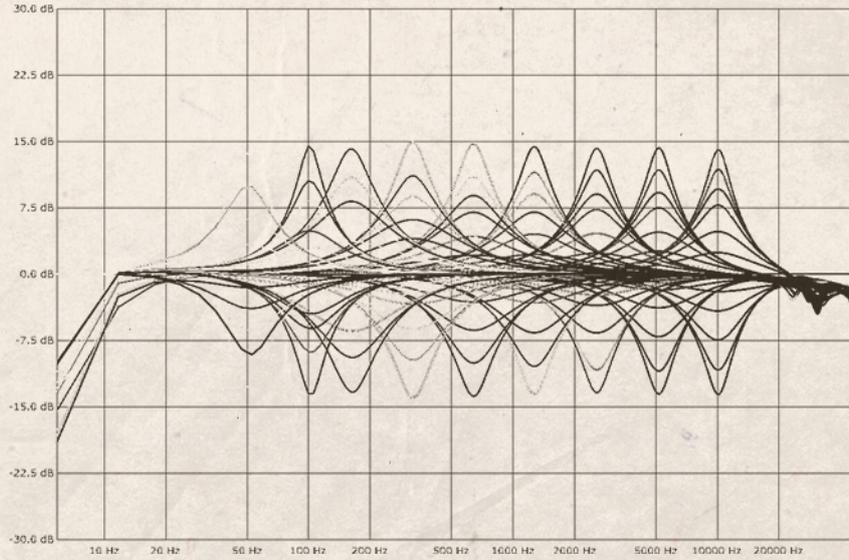
The control sets the input level from -24dB to +24dB, and it is used to adjust the internal operational level of the plugin. Note that this is different from a standard input gain control due to the linked output gain stage, which always ensures that whatever gain change is introduced at Cola's input, the output level is automatically compensated so that there's no perceived level change.

-Level (Output): this knob is an output gain control ranging from -24dB to +24dB.

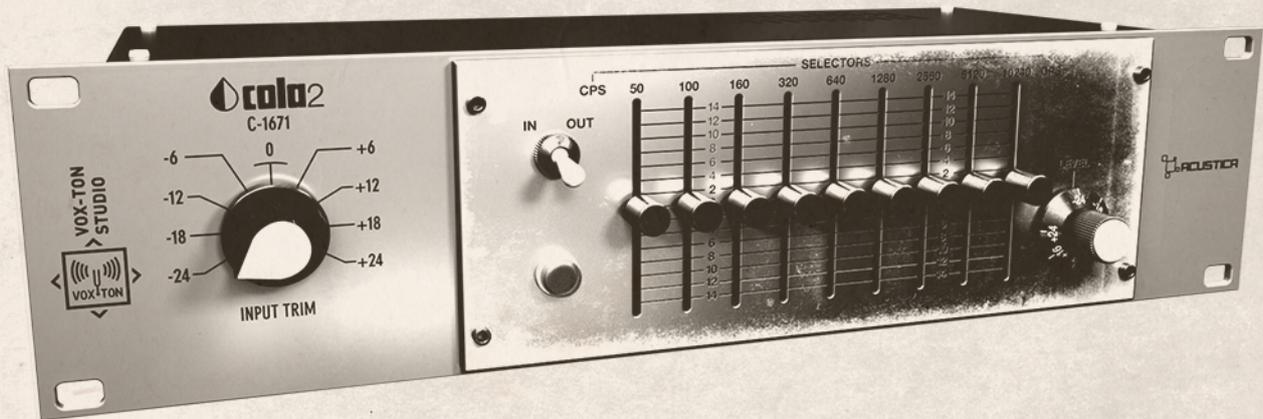
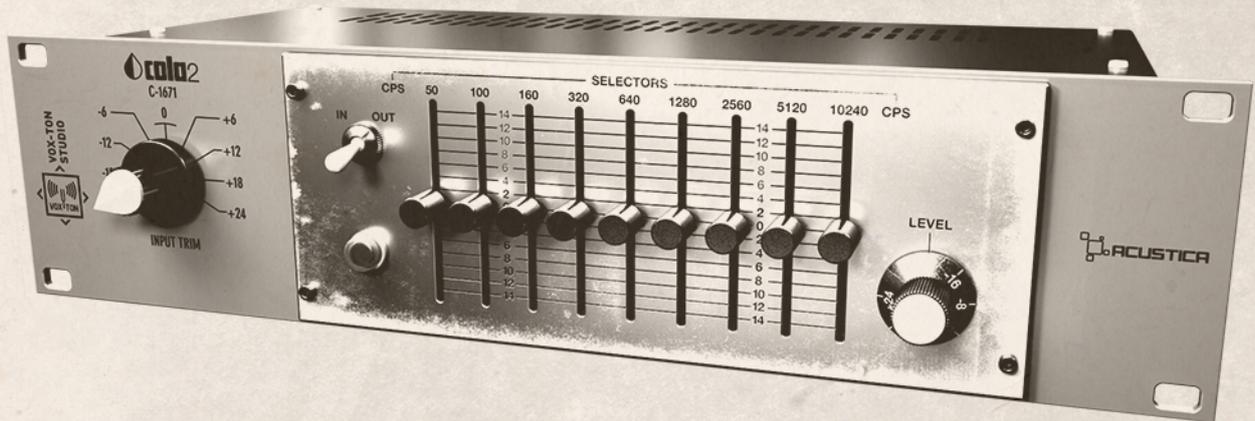
-Preamp switch (In-Out): this switch enables the Preamp stage of the plugin that closely emulates the phase, frequency response and harmonic distortion of the original equalizer. It gives an essential contribution to the authenticity of the global color tone of this equalizer. This control also shows the input level of the plugin, the higher the input amount the more the light is intense.

-Led: This LED automatically lights whenever the preamp stage is enabled.

-Frequency Band Slider Controls: Each one of these slider potentiometers will boost or cut at its noted frequency by approx ± 14 dB. When all the sliders are in the central position the output of this equalizer is flat. Available frequencies from: 50 Hz to 10240 Hz.



Cola C-1671 equaliser curves



11.4 Cola2 C-505 Comp



Cola2 C-505 is a versatile limiter/compressor plugin that provides the distinctive controls of an original British discrete transistor hardware, which is well-known for adding punch on busses and individual tracks. This compressor is super rare, we suspect that only 4 were custom built for the historic PYE Recording Studio in London. It features Marinair ins and outs, a S7C transformer and a mix of discrete class A transistors and some of the first OPamps ever developed.

As usual we offer to our customers a powerful compressor equipped with Acustica's standard controls: a variable Threshold, Ratio, Attack and Release which provides a smooth and musical action. In the following chapter we get into detail of the Cola Comp controls.

11.3.1 Controls

- **INPUT TRIM:** this function allows for a "one knob" internal gain staging control by automatically link-ing 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 internal operational level of the plugin.

- **Pre:** this button enables the preamp stage that closely emulates the phase, frequency response and harmonic distortion of the original compressor device. It gives an essential contribution to the authenticity of the global color tone of this dynamic processor.

- **External sidechain:** this button engages the external side-chain of the compressor.

- **Shmod:** SHMOD allows you to alter the shape of the attack envelope, allowing you to overcome this limitation by fine-tuning the attack behavior in order to adapt it to any audio source. Position 2 gives the original attack time of the modeled compressor. Position 1 gives the fastest setting. Going from 1 down to 0, a further look-ahead function is enabled. The range/amount of look-ahead goes from 0 to 4 milliseconds. Values above 2 will slow down the attack time.

- **Make Up:** This is the classic compressor make-up gain control (It ranges from 0dB to 24dB). It allows for the compressed signal to be boosted so that it is level matched to the uncompressed signal. This allows for an easier comparison between the two signals and a better judgment on the compressor's action.

• **Threshold:** This control sets the threshold of the compressor. It ranges from +10dB to +50dB.

• **Mix:** It controls the mix proportion between the original (dry) and 'effected'(wet) signals. In other words, it determines the balance between the compressed and uncompressed signal. Range: 0% to 100%.

• **Ratio:** This knob sets the compression ratio. Ratio settings on the Cola Comp (and channel-strip version) have 6 fixed values from 2:1 to 20:1.

• **Attack:** This knob sets the compressor's attack time, ranging from 0.1 ms to 6 ms.

• **Release:** This knob sets the compressor's release time. Release times range from 105 ms to 3.57 seconds.

• **Filter:** This high-pass side-chain filter is a very gentle 1-pole filter. Generally, the higher the frequency, the smaller the amount of gain reduction will be, since the low frequencies will be affecting the compressor action less. First step of this knob bypasses the filter.

• **Gain Reduction Meter:** This measures the gain reduction level applied by the compressor. The meter indicates '0' in the absence of an input signal or any gain reduction. If the signal exceeds the compression threshold or limit level, the amount of gain reduction is displayed

-**Meter:** Pressing OUT/GR button (lamp ON) the meter measures the gain reduction level of the compressor.

Mode Comp Drop-down menu:

Use this menu to choose the desired compression/limiter; from different emulations. Click on the label 'Mode' to display the various modes available:

-**Brickwall:** a '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.

-**Brickwall 4x OS:** Brickwall with 4x oversampling.

-**Brickwall 8x OS:** Brickwall with 8x oversampling.

-**Comp:** original compressor

-**Hyper comp:** a 'Frankenstein' Compressor by Acustica improved with our 'Hypercomp' tech).

-**Hyper comp 4x OS:** Hyper compressor with 4x oversampling

-**Hyper comp 8x OS:** Hyper compressor with 8x oversampling

Attack times:	Release times:
0.1 mS	105 mS
1.5 mS	204 mS
3 mS	254 mS
4 mS	320 mS
5 mS	414 mS
6 mS	578 mS
	3.57 S

11.5 Cola2 Channel Strip



As with similar Acustica releases, we offer to our customers a handy complete Channel-strip consisting of the best parts of the previous explained Cola standalone plugins. This Channel-strip contains many but not all of the features included in each standalone plugin, but in some cases it also offers useful extras, plus a few operating differences.

To simplify the understanding of this plugin, in the following chapter we will only explain the differences that characterize each COLA Channel-strip section/module, compared to the individual plug-ins.

The Cola2 Channel-strip aims to provide the unique and authentic reproduction of an acclaimed British console built in 1972 plus some interesting extras, courtesy of Vox-Ton studio and Acustica Audio.

- The Preamp section included in the Cola Channel-strip version was carefully sampled to impart color and warmth to your digital mixes. It is derived directly from the Cola C-415 standalone plugin and it provides a complete virtual console emulation that reproduces all the channel pre-amps of an iconic U.K. desk.

- The Equalizer section consists of 3 variable-frequency bands and a High-pass filter section, the first and last of which can be switched to a shelving response.

- Lastly, The COMP module features an ultra-rare compressor emulation. The Compressor section is not present in the original U.K. console, so this is an important addition, it's a rare vintage compressor from the same U.K. manufacturer of the sampled console built a few years later.

Details

- The EQ section: The EQ module of the Cola Channel-strip version includes the Cola 228 EQ emulation. Since the 228 EQ controls have already been explained above, we invite readers to refer to Chapters 11.1 for details.

- The COMP section: The COMP module of the Cola Channel-strip version includes the Cola Comp emulation. Since the COMP controls have already been explained, we invite readers to refer to Chapter X for details.

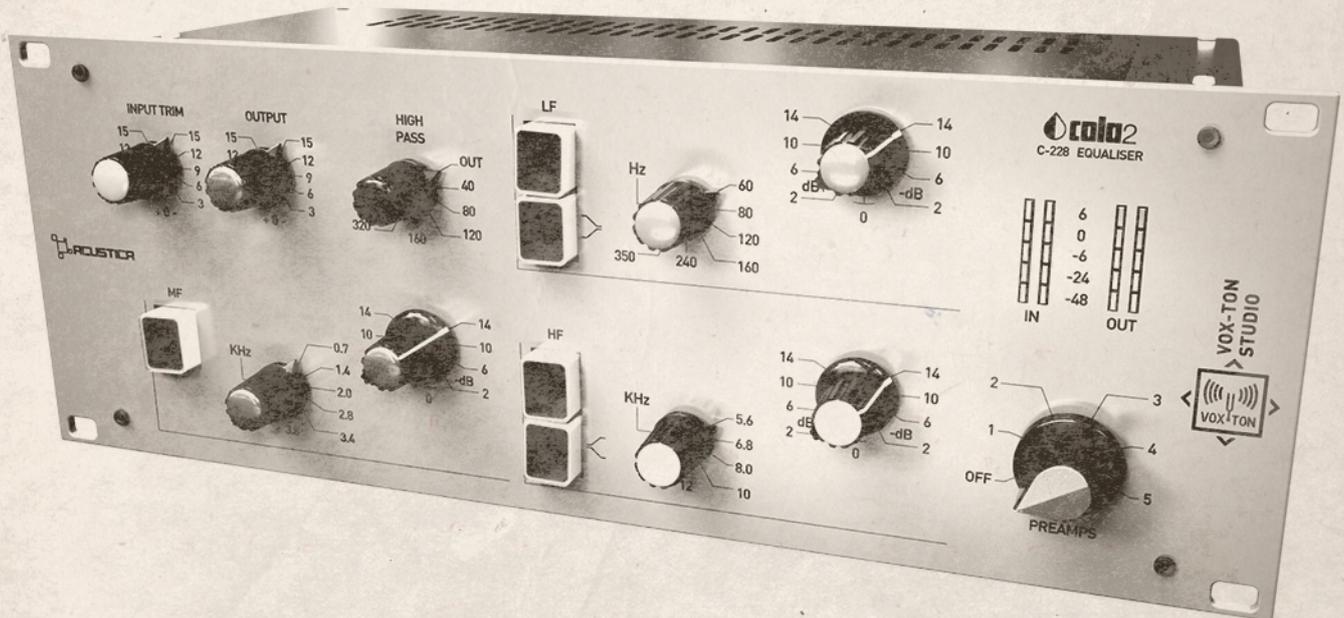
- The PREAMP section: The Pre section of the Cola Channel-strip includes the same Microphone/Line preamplifier of the Cola C-415, refer to Chapter 11.2 for details.



12. Cola2 C-228 AI

EXPERIMENTAL APPROACH

From Sampling hardware to sampling people through Deep Learning



With Cola2, we have introduced a first-of-its-kind in AI-based approaches to mixing. Unlike other companies, who classify audio content (violins, drums, vocals etc.) with the aim of implementing an auto-mix functionality of the software, we have chosen a completely different approach.

We decided to 'sample' the engineer and his or her approach to working on a track. Every mixing move is learned by the plugin based on both the audio material and the personal preference of the engineer using it.

This is achieved using a method based on a very deep, complex learning technology, which allows us to literally teach the plugin the 'secret moves' of a pro. This is all about the style and unique creative approach of every great engineer and not about creating fixed 'presets'. This means the plugin will react differently according to what it 'hears', based on what it has learned from the engineer who has used it.

For Cola, we sat down with Vox-Ton's head engineer Francesco Donadello, and let him use it on some orchestral recordings, whereas we had some fun on the subgroups of some of our mixes. So we basically taught Cola how we do things, in other words, what we like to hear in a mix. Most adjustments were subtle as the material was already pretty balanced but we will definitely try a more aggressive approach to the 'lessons' in the future.

This new approach might not 'immediately' give you the best results - your approach could in fact be the opposite of what some engineers like to do - but it will certainly give you a new perspective on how different people mix the same material.

Of course, this new technology is still in its infancy, we are still working on it, but the first results are very promising indeed. Stay tuned for more.

Cola2 Release G011 - WHAT'S NEW?

With this Cola2 update, and from release xxxx onwards, you can now enjoy significant new features for better performance and sound quality.

New features

- New 'Hyper'Comp / Brickwall emulations added.

- New 'Hyper'engine.

- Improved audio quality thanks to the oversampling available in the Cola 2 compressor standalone plugin (1x, 4 x , 8x)

- Less CPU consumption.

- Oversampling

- Various optimizations and graphical improvements.

13. Preset Management

The Cola2 228 EQ is the only plugin in the suite that includes the AI Presets The presets are present by default in both the commercial and the trial version of the COLA 228 EQ.

By clicking the "PRESET" drop down menu on the right hand side of the COLA 228 EQ you can select a preset from the displayed list. You can choose between 'Preset 1': the result of careful work by Vox-Ton's head engineer Francesco Donadello and 'Preset 2': the result of combined learning by Giancarlo Del Sordo, Francesco Donadello, Paolo Aliberti and Dario Khademi from BigBizStudio®.

A normal preset would simply load the same settings each time you use it. Our AI presets will assess the audio being fed into the plugin and then based on the data stored in it's memory from the "sampled" mix engineers knowledge it will make an eq change.

For the best results loop a short section of audio you think is best suited for the AI evaluation. The timeframe is quite short, only a couple of seconds, so different points in the audio will obviously give different results. Then click the preset you would like to use and watch as the eq changes. It works very well on individual tracks and groups, whereas results on the master may vary.

14. Product Registration

Product registration is automatic after you purchase a product in our web-shop and your newly purchased product will be available to download using our installation assistant application called Aquarius.

For details about registration please refer to the Aquarius user manual on the website.

15. Product Authorization

Product authorization and de-authorization is an on-line automatic process that creates a product license based on your computer's identification code.

This procedure is automatically guaranteed by our installation application, Aquarius. Its purpose is to simplify and automate the authorization, installation and uninstallation process of your purchased Acustica products (ACQUA plug-ins etc.).

RECOMMENDATION:

We recommend you always update Aquarius to the latest version available.

In case of authorization problems with an Acqua plugin, we recommend you proceed with a product uninstall and re-install through the Aquarius app.

16. References

Acustica Audio is a trademark of Acusticaudio s.r.l.
Via Tortini, 9
26900 - Lodi (LO) - Italy
www.acustica-audio.com

17. Copyrights and Credits

All content included in this document, such as texts, graphics, logos, button icons, images, sounds, videos, digital downloads, data compilations, and software, is the exclusive property of Acusticaudio s.r.l. or its content suppliers, and is protected by international copyright laws. All trade names mentioned in this manual are used for identification purposes only and are properties of their respective owners.

- Live is a trademark Ableton, Music software and hardware company.
- Acustica Audio is a trademark of Acusticaudio S.R.L.
- Nebula is a trademark of Acusticaudio S.R.L.
- Nebula Server is a trademark of Acusticaudio S.R.L.
- Aqua Engine is a trademark of Acusticaudio S.R.L.
- Native Application Tools is a trademark of Acusticaudio S.R.L.
- Logic Pro is a trademark of Apple Inc.
- Audio Units is a trademark of Apple Inc.
- Mac OS X is a trademark of Apple Inc.
- Pro Tools is a trademark of Avid Technology, Inc.
- Real Time Audio Suite is a trademark of Avid Technology Inc.
- AAX is a trademark of Avid Technology Inc.
- Sonar is a trademark of BandLab Technologies.
- Reaper is a trademark of Cockos Software.
- Streaming SIMD Extensions is a trademark of Intel Corporation.
- FL Studio is a trademark of Image-Line Software nv.
- Integrated Performance Primitives is a trademark of Intel Corporation.
- Windows is a trademark of Microsoft Corporation.
- Nvidia is a trademark of NVIDIA Corporation.
- Compute Unified Device Architecture is a trademark of NVIDIA Corporation.
- Prism Sound is a trademark of Prism Sound Ltd.
- Steinberg is a trademark of Steinberg Media Technologies GmbH - All rights reserved.
- Virtual Studio Technology is a trademark of Steinberg.
- Nuendo is a trademark of Steinberg Media Technologies GmbH - All rights reserved.

Acustica 2022