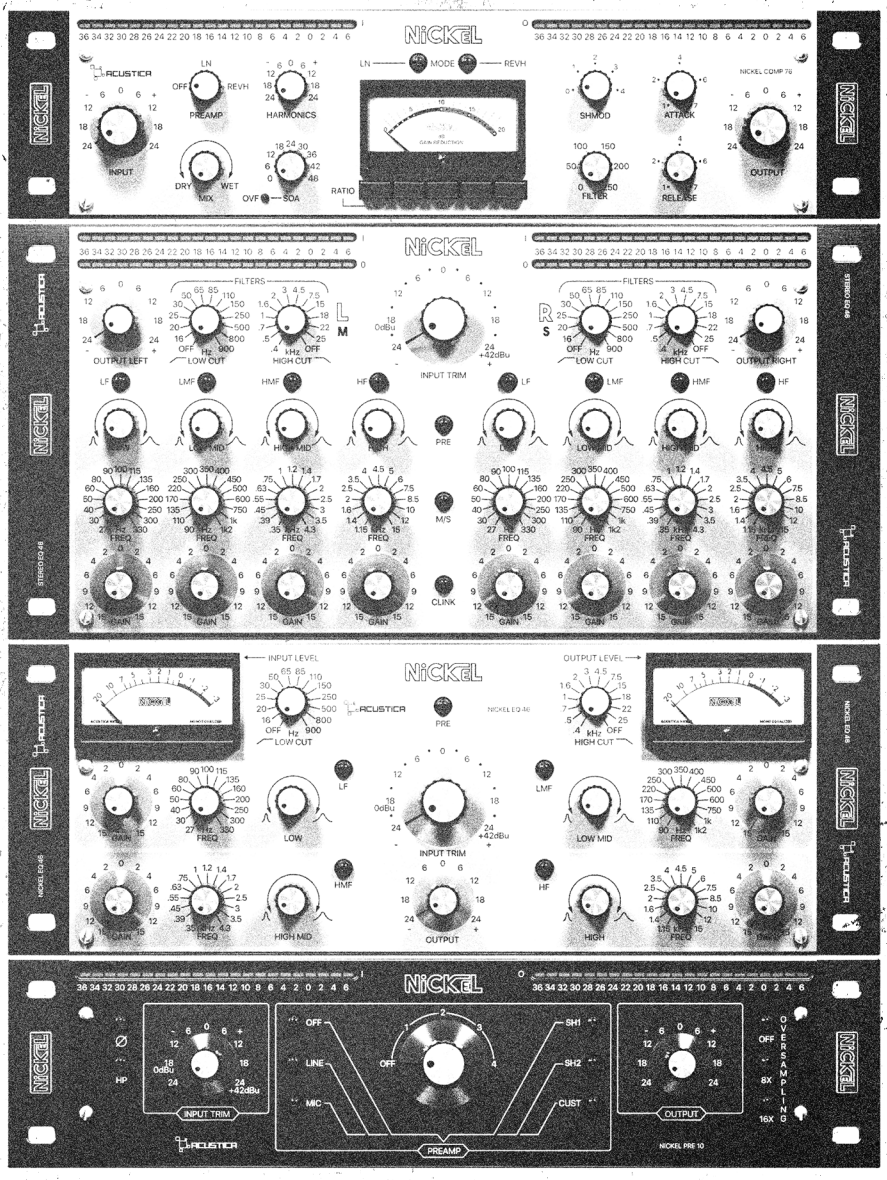
# NiCKEL




ACUSTICA

Index

# 1. Introduction

Thank you for purchasing Nickel. To get the most out of your new plugin suite, please take the time to read this user manual carefully.

## 1.1. Overview

Nickel is a "Made in the USA" plugin suite consisting of four different plugins that include emulations of rare units from the late 60s to the present day, paying homage to the genius of Bill Putnam one of the greatest audio engineer and pioneers in the Pro Audio industry.

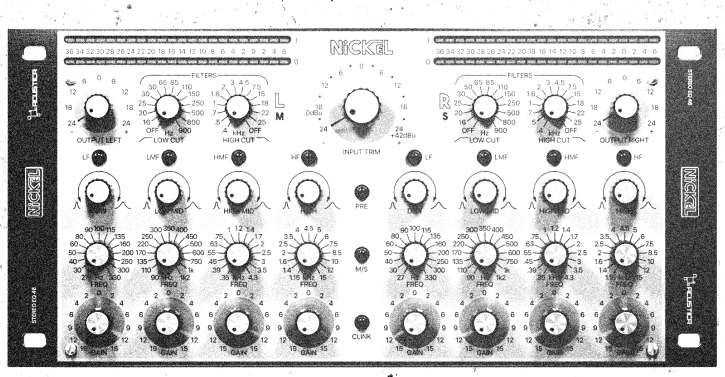
The fulcrum of this suite is certainly represented by the Nickel Compressor plug-in, which faithfully embodies the behaviour of two different famed 'Revisions' (H - LN) of the most recognizable compressor of all time is. The staple of all worldwide major recording studios and still today among the most used gear. These flagships were used to sculpt the sound of countless records from Guns n Roses to Bruce Springsteen, The Killers to Joe Cocker and many others.

In addition to the Nickel Comp, this suite includes a Stereo Parametric EQ with 4 fully parametric bands plus HP and LP filters per channel, a Dual-Mono EQ derived from the Stereo EQ version and last but not least the emulation of a modern 'out of stock' multi-channel mic preamp with Class-A discrete electronics, switchable transformer and a fixed HP filter from this beast we derived a total of 20 different preamps.

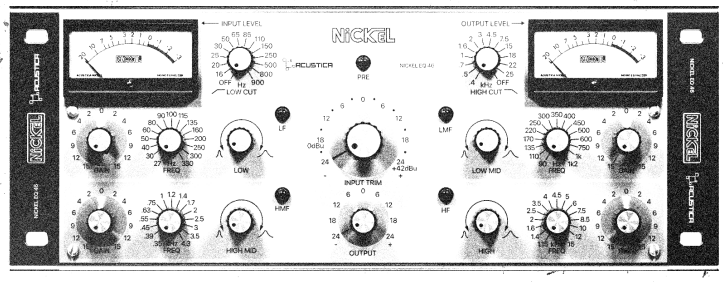
## 2. Nickel Suite

Nickel includes:

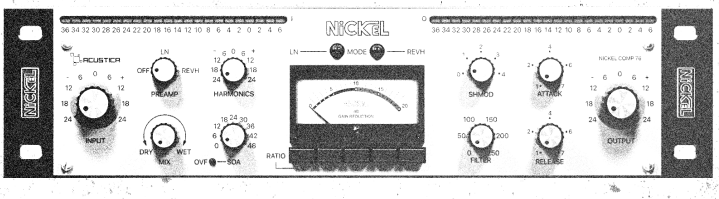
NICKEL STEREO EQ: A Stereo 4-band fully-parametric EQ with High and Low-pass Filters derived from historic US-made unit from the 60s-70s.



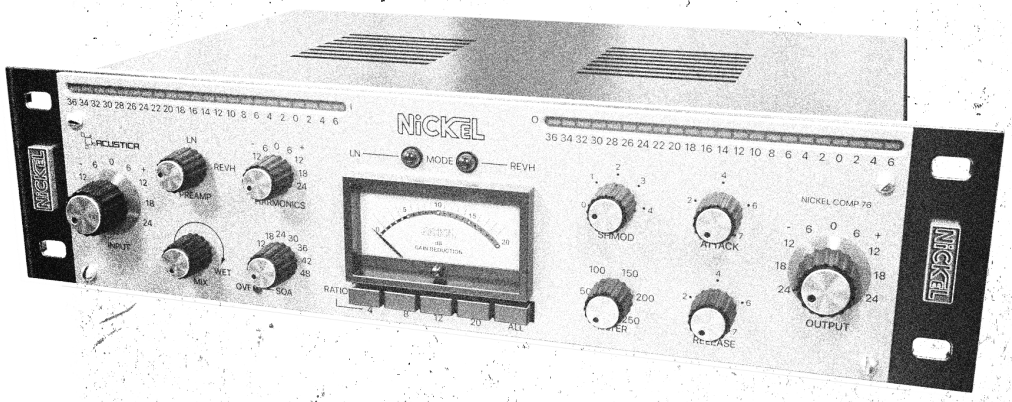

NICKEL MONO EQ: A Mono 4-band fully-parametric EQ derived from the Stereo EQ.



NICKEL COMP: A legendary '60s FET compressor, hands-down one of the most popular compressor designs of all time. More specifically this plugin features 2 switchable emulations (rev H, rev LN) each one is the result of sampling two different Revisions, also their relative preamp emulations are included.




NICKEL PRE: Four Line Preamps, four Mic Preamps, four SH1 (Shape mode 1) preamps, four SH2 (Shape mode 2) preamps from a modern Precision Microphone Preamplifier with Class-A discrete electronics, plus four Custom Preamps for a total of twenty preamp emulations. It also includes a fixed High-pass Filter (100Hz, 6dB/octave), a phase reverse button plus an Oversampling button to change the oversampling-rate (8x, 16x) to improve the quality of the processing.




## 2.1 Download and Authorization

2.1 Nickel, and all Acustica Audio products, can be downloaded, installed, and authorized using the Aquarius desktop application, our dedicated free app for macOS and Windows. When you purchase a product on the Acustica store, the registration is automatic.

For more information, please visit our website.

Please Note: make sure Aquarius is always updated to the latest version. If you experience any issues during the authorization of your products, uninstall the plugin(s) and then re-install them using the latest version of Aquarius.

## 2.2 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.

All technical specifications of Acustica Audio products provided are intended to be estimates or approximations.
Due to numerous variables, no guarantees of compatibility or performance can be made.
The end-user is solely responsible for, prior to purchase, ensuring that the end-user's devices are compatible and meet the system requirements for Acustica Audio products.

| | PC Windows | | Apple macOS | |
|---|---|---|---|---|
| | MINIMUM | RECOMMENDED | MINIMUM | RECOMMENDED |
| OPERATING SYSTEM | Windows 10 1909 64 bits (1) (9) | Windows 21H1 10 64 bits (1) (9) | macOS 10.14 (1) (9) | macOS 10.15 (1) (9) |
| CPU | Intel i5 4th generation (2) (8) | Intel i9 10th generation (2) (8) | Intel i5 4th generation (2) (8) | Intel i9 10th generation (2) (8) |
| RAM | 4 GB of RAM (3) | 64 GB of RAM (3) | 4 GB of RAM (3) | 64 GB of RAM (3) |
| SSD | It depends on the product (4) | It depends on the product (4) | It depends on the product (4) | It depends on the product (4) |
| SCREEN RESOLUTION | FHD (1920x1080) | UHD (3840x2160) | FHD (1920x1080) | UHD (3840x2160) |
| PLUG-IN FORMAT | VST & AAX | VST & AAX | VST, AAX & AU | VST, AAX & AU |
| PLUG-IN ARCHITECTURE | 64-bits | | 64-bits | |
| TRIAL / DEMO | 30 Days (5) | | 30 Days (5) | |
| SUPPORTED DAW / NLE | Cubase 64-bits & Pro Tools 64-bits (6) | | Cubase 64-bits & Pro Tools 64-bits & Logic Pro X 64-bits (6) | |
| AQUARIUS APPLICATION | YES & Mandatory | | YES & Mandatory | |
| INTERNET CONNECTION | YES & Mandatory (7) | | YES & Mandatory (7) | |

(1) Case sensitive file systems are not supported.
(2) Intel 17/19 X and Xeon processors need CORE 16 or superior. The CPU speed is more important than the number of CPU cores.
(3) In order to run more plug-ins instances it is always necessary to increase the amount of RAM.
(4) Each format needs three times more space than what the product is in order to download and decompress the installation files.
(5) Trial settings cannot be transferred from the trial to the commercial version.
(6) For others DAWs or NLEs, try trial before buy
(7) TCP/UDP ports 8080 and 443 should be open. Reliable and fast internet connection is recommended
(8) For Apple Silicon (ARM) computers, check compatibility before purchasing. AMD processors are not officially supported.
(9) For other operating systems, check compatibility before purchasing using the trial version.

IMPORTANT: Genuine Apple device with a valid serial number or valid volume ID on Windows operating systems is mandatory.
IMPORTANT: It is highly recommended to make a complete backup before making changes to your computer systems.
IMPORTANT: Acustica Audio cannot be held responsible for any loss or damage arising directly or indirectly from any error or omission in this manual.

## 2.3 What is a ZL plugin?

Acustica plugins come in two versions: ZL (zero latency) and a regular version. While the ZL version does not introduce any latency to your system, the standard version does. This buffer varies in size for each plugin and helps reduce the CPU and system load of your computer significantly.

We recommend that you use a ZL instance when tracking.

Basically, both plugin instances are identical, but the current Acqua engine can work either with or without an audio buffer. The idea behind a ZL instance is to give you the option to run an Acqua Effect with minimal latency, which is helpful for tracking or direct monitoring.

NOTE: Please keep in mind that for Nickel we recommend that you calibrate your input levels to: -18dBFS = 0dBu. We suggest that you do not overload the input. This way you will avoid any unwanted distortion or unpredictable behavior due to excessive input levels.

## 3 Operation

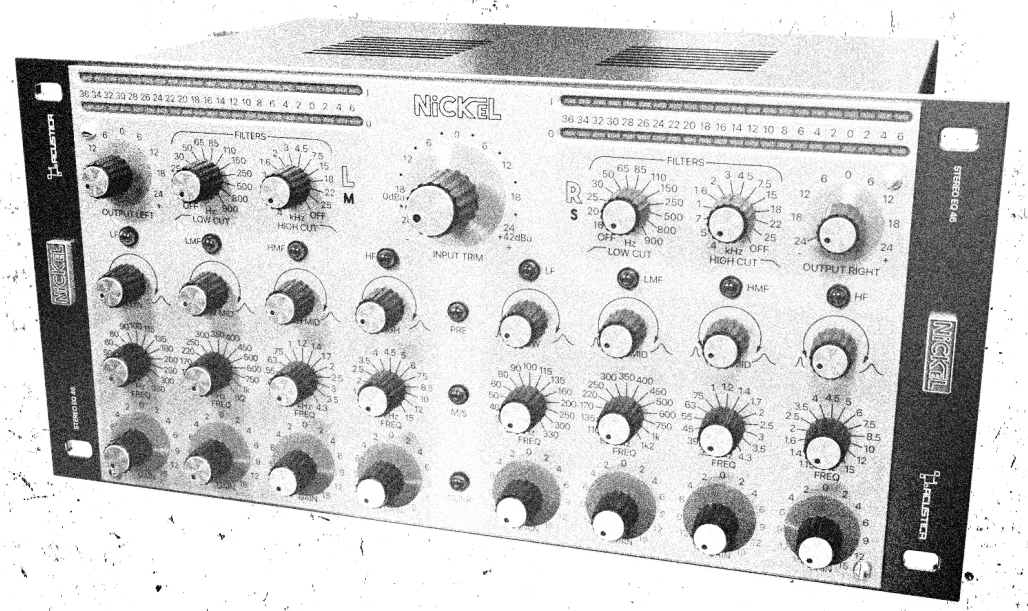
3 Nickel packs an authentic collection of rare vintage and modern emulations, highly sought-after by collectors worldwide. It includes two Equalizers, a Compressor, and a Preamp module.

### 3.1 Nickel Stereo EQ

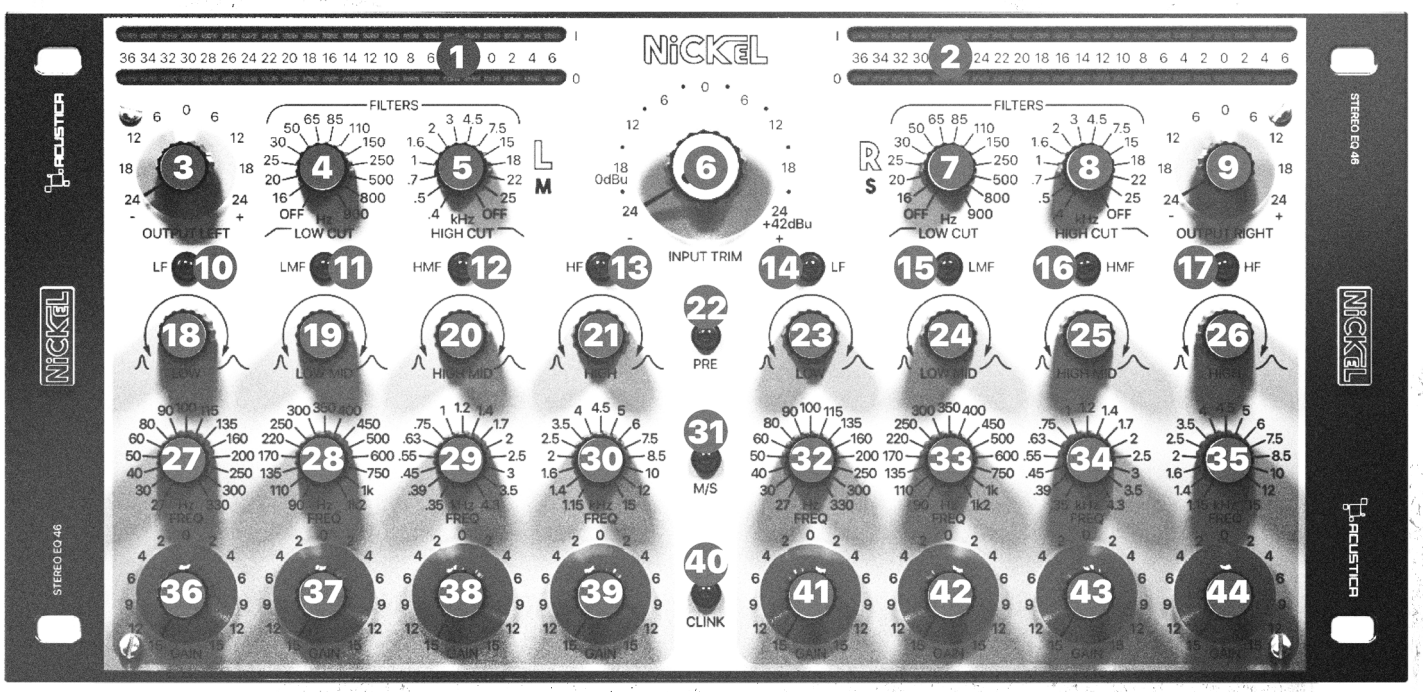
3.1 The Nickel Stereo EQ features a 4-band Stereo, Fully Parametric EQ derived from a '60s/'70s rare piece of gear made in USA.

Each of the two channels includes Low, Low Mid, High Mid, and High band sections, each with variable frequency, cut/boost, and bandwidth controls plus Low pass, and High pass filters.

Tip: It's very useful, especially for EQ'ing kicks and toms "on the way in" (perfect for super-carved, hard-rock drum sounds).



## 3.1.1 Nickel Stereo EQ - Controls




1- Left/Mid Input-Output Meters: Displays the input-output levels (Left/Mid) of the plugin. Range IN-OUT: -36dB to +6dB.

2- Right/Side Input-Output Meters: Displays the input-output levels (Right/Side) of the plugin. Range IN-OUT: -36dB to +6dB.

3- Output (Left Channel): This knob is an output gain control of the Left Channel ranging from -24dB to +24dB.

4- Low Cut Frequency (Left Channel): From 16 to 900 Hz (12 dB per octave), the first knob step (OFF) bypasses the filter.

5- Hi-Cut Frequency (Left Channel): From 25 to 0.4 kHz (12 dB per octave), the first knob step (OFF) bypasses the filter.

6- Input Trim (Left-Right Channels): 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 of the Left-Right Channels, and it is used to adjust the plugin's internal level. Note: when the preamp stage is bypassed (Lamp= OFF), the 'Input Trim' mode has no effect. It is possible to increase the harmonic saturation with this Input trim knob.

7- Low Cut Frequency (Right Channel): From 16 to 900 Hz (12 dB per octave), the first knob step (OFF) bypasses the filter.

8- Hi-Cut Frequency (Right Channel): From 25 to 0.4 kHz (12 dB per octave), the first knob step (OFF) bypasses the filter.

9- Output (Right Channel): This knob is an output gain control of the Right Channel ranging from -24dB to +24dB.

10- LF band activation button (Left Channel): Activates (Led On) the Low Frequency band in the Left Channel.

11- LMF band activation button (Left Channel): Activates (Led On) the Low-Mid Frequency band in the Left Channel.

12- HMF band activation button (Left Channel): Activates (Led On) the High-Mid Frequency band in the Left Channel.

13- HF band activation button (Left Channel): Activates (Led On) the High Frequency band in the Left Channel.

14- LF band activation button (Right Channel): Activates (Led On) the Low Frequency band in the Right Channel.

15- LMF band activation button (Right Channel): Activates (Led On) the Low-Mid Frequency band in the Right Channel.

16- HMF band activation button (Right Channel): Activates (Led On) the High-Mid Frequency band in the Right Channel.

17- HF band activation button (Right Channel): Activates (Led On) the High Frequency band in the Right Channel.

18- Low Frequency Q Selector (Left Channel): Sets the Q of the LF band in the Left Channel. The bandwidth is variable from ¼ to 4 octaves.

19- Low Mid Frequency Q Selector (Left Channel): Sets the Q of the LMF band in the Left Channel. The bandwidth is variable from ¼ to 4 octaves.

20- High Mid Frequency Q Selector (Left Channel): Sets the Q of the HMF band in the Left Channel. The bandwidth is variable from ¼ to 4 octaves.

21- High Frequency Q Selector (Left Channel): Sets the Q of the HF band in the Left Channel. The bandwidth is variable from ¼ to 4 octaves.

22- Pre: Activates the stereo preamp emulation of the plugin.

23- Low Frequency Q Selector (Right Channel): Sets the Q of the LF band in the Right Channel. The bandwidth is variable from ¼ to 4 octaves.

24- Low Mid Frequency Q Selector (Right Channel): Sets the Q of the LMF band in the Right Channel. The bandwidth is variable from ¼ to 4 octaves.

25- High Mid Frequency Q Selector (Right Channel): Sets the Q of the HMF band in the Right Channel. The bandwidth is variable from ¼ to 4 octaves.

26- High Frequency Q Selector (Right Channel): Sets the Q of the HF band in the Right Channel. The bandwidth is variable from ¼ to 4 octaves.

27- Low Frequency Selector (Left Channel): Sets the frequency of the LF filter band in the Left Channel. Frequency ranges from 27 Hz to 330 kHz.

28- Low Mid Frequency Selector (Left Channel): Sets the frequency of the LMF filter band in the Left Channel. Frequency ranges from 90 Hz to 1.2 kHz.

29- High Mid Frequency Selector (Left Channel): Sets the frequency of the HMF filter band in the Left Channel. Frequency ranges from 350 Hz to 4.3 kHz.

30- High Frequency Selector (Left Channel): Sets the frequency of the HF filter band in the Left Channel. Frequency ranges from 1.15 kHz to 15 kHz.

31- M/S: This button allows you to enable the MID-SIDE configuration of the plug-in; when bypassed, the plug-in operates in LEFT-RIGHT mode (default).

32- Low Frequency Selector (Right Channel): Sets the frequency of the LF filter band in the Right Channel. Frequency ranges from 27 Hz to 330 kHz.

33- Low Mid Frequency Selector (Right Channel): Sets the frequency of the LMF filter band in the Right Channel. Frequency ranges from 90 Hz to 1.2 kHz.

34- High Mid Frequency Selector (Right Channel): Sets the frequency of the HMF filter band in the Right Channel. Frequency ranges from 350 Hz to 4.3 kHz.

35- High Frequency Selector (Right Channel): Sets the frequency of the HF filter band in the Right Channel. Frequency ranges from 1.15 kHz to 15 kHz.

36- Low - Gain (Left Channel): Provides ±15 dB of Cut or Boost which takes placed at the selected frequency of the LF filter band in the Left Channel.

37- Low Mid- Gain (Left Channel): Provides ±15 dB of Cut or Boost which takes placed at the selected frequency of the LMF filter band in the Left Channel.

38- High Mid- Gain (Left Channel): Provides ±15 dB of Cut or Boost which takes placed at the selected frequency of the HMF filter band in the Left Channel.

39- High- Gain (Left Channel): Provides ±15 dB of Cut or Boost which takes placed at the selected frequency of the HF filter band in the Left Channel.

40- CLINK: This switch links the controls of left and right channels. Note: The automation only works using the controls on the left-hand side.

41- Low - Gain (Right Channel): Provides ±15 dB of Cut or Boost which takes placed at the selected frequency of the LF filter band in the Right Channel.

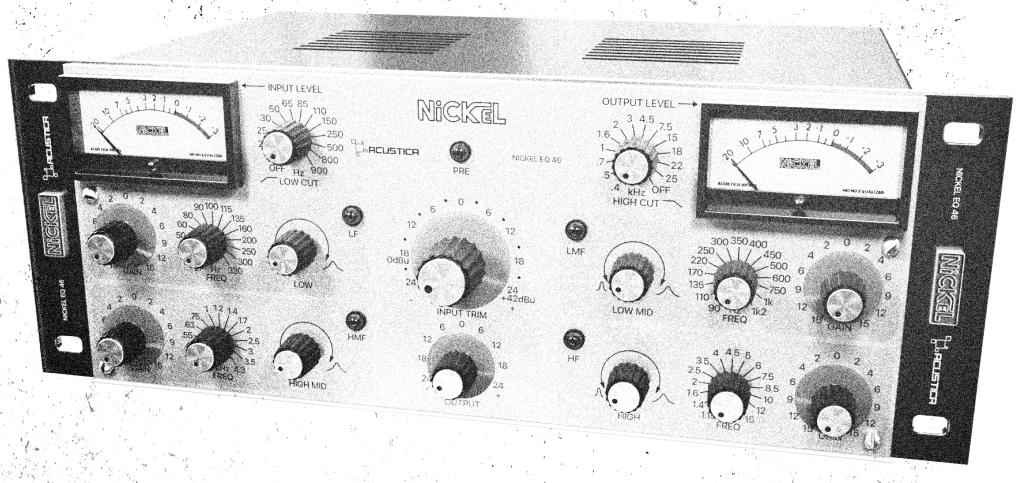
42- Low Mid- Gain (Right Channel): Provides ±15 dB of Cut or Boost which takes placed at the selected frequency of the LMF filter band in the Right Channel.

43- High Mid- Gain (Right Channel): Provides ±15 dB of Cut or Boost which takes placed at the selected frequency of the HMF filter band in the Right Channel.

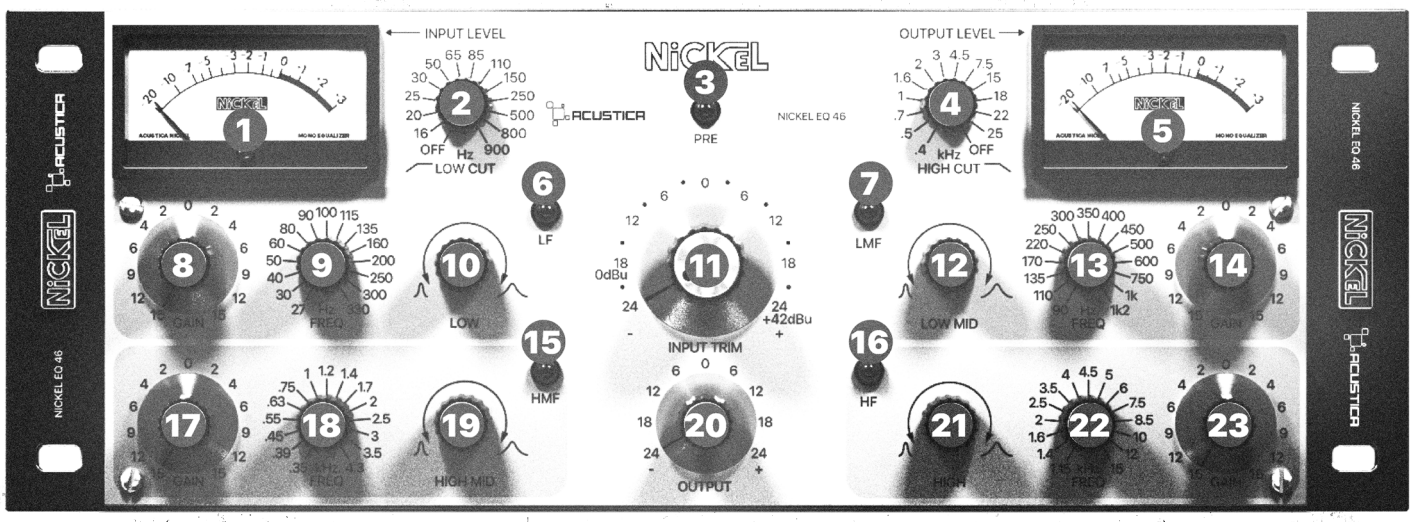
44- High- Gain (Right Channel): Provides ±15 dB of Cut or Boost which takes placed at the selected frequency of the HF filter band in the Right Channel.

## 3.2 Nickel Mono EQ

This is the same sampled equalizer as Nickel Stereo EQ but offered as a Dual-mono version




### 3.2.1 Nickel Mono EQ - Controls




1- Input VU Meter: Displays the input level of the plugin. Range IN: -20dB to +3dB.

2- Low Cut Frequency: From 16 to 900 Hz (12 dB per octave), the first knob step (OFF) bypasses the filter.

3- Pre: Activates the mono preamp emulation of the plugin.

4- Hi-Cut Frequency: From 25 to 0.4 kHz (12 dB per octave), the first knob step (OFF) bypasses the filter.

5- Output VU Meter: Displays the output level of the plugin. Range IN: -20dB to +3dB.

6- LF band activation button: Activates (Led On) the Low Frequency band.

7- LMF band activation button: Activates (Led On) the Low-Mid Frequency band.

8- Low - Gain: Provides ±15 dB of Cut or Boost which takes placed at the selected frequency of the LF filter band in the Left Channel.

9- Low Frequency Selector: Sets the frequency of the LF filter band. Frequency ranges from 27 Hz to 330 kHz.

10- Low Frequency Q Selector: Sets the Q of the LF band. The bandwidth is variable from ¼ to 4 octaves.

11- 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 (Lamp= OFF), the 'Input Trim' mode has no effect. It is possible to increase the harmonic saturation with this Input trim knob.

12- Low Mid Frequency Q Selector: Sets the Q of the LF band. The bandwidth is variable from ¼ to 4 octaves.

13- Low Mid Frequency Selector: Sets the frequency of the LMF filter band. Frequency ranges from 90 Hz to 1.2 kHz.

14- Low Mid- Gain: Provides ±15 dB of Cut or Boost which takes placed at the selected frequency of the LMF filter band .

15- HMF band activation button : Activates (Led On) the High-Mid Frequency band.

16- HF band activation button: Activates (Led On) the High Frequency band.

17- High Mid- Gain : Provides ±15 dB of Cut or Boost which takes placed at the selected frequency of the HMF filter band.

18- High Mid Frequency Selector: Sets the frequency of the HMF filter band . Frequency ranges from 350 Hz to 4.3 kHz.

19- High Mid Frequency Q Selector: Sets the Q of the LF band. The bandwidth is variable from ¼ to 4 octaves.

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

21- High Frequency Q Selector: Sets the Q of the HF band. The bandwidth is variable from ¼ to 4 octaves.

22- High Frequency Selector: Sets the frequency of the HF filter band. Frequency ranges from 1.15 kHz to 15 kHz.

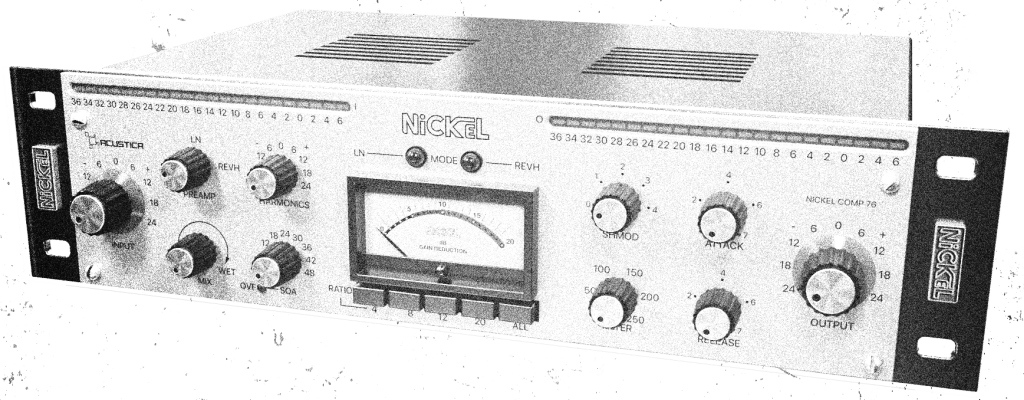
23- High- Gain: Provides ±15 dB of Cut or Boost which takes placed at the selected frequency of the HF filter band.

## 3.3 Nickel Comp

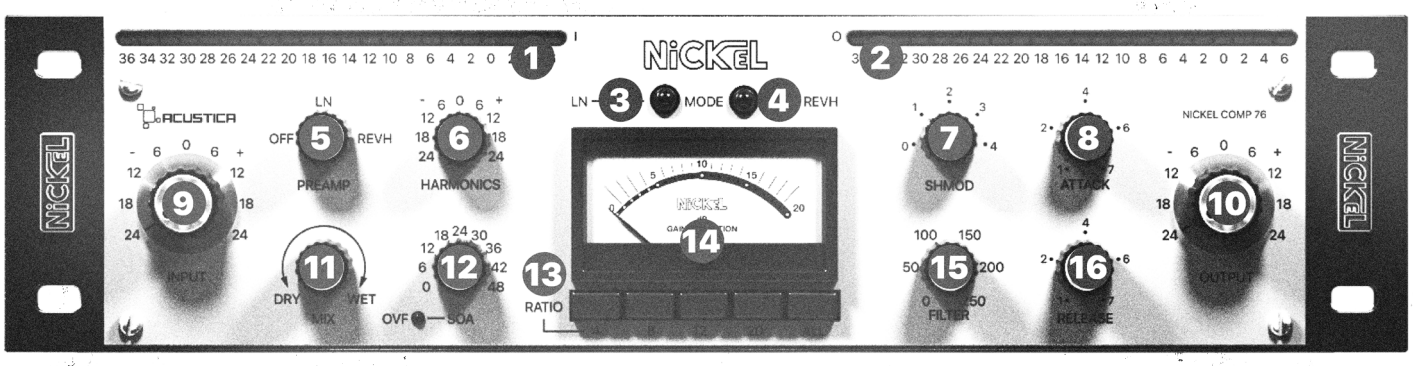
Nickel Comp arguably embodies one of the most recognizable compressor models of all time. The first completely solid-state compressor to be released designed by Bill Putnam, legendary recording engineer, originally released by his company in 1968.

This 'Evergreen' compressor has been through several revisions over the years.

In Nickel Comp you can enjoy two different versions, The H (Silver face) and the LN (black face) also including their relative preamp emulations.



## 3.3.1 Nickel Comp - Controls




1- Input Meters: Displays the input levels (L-R) entering the plugin. Range IN: -36dB to +6dB.

2- Output meters: Displays the output levels (L-R) of the plugin. Range OUT: -36dB to +6dB.

3- LN: Enables the LN compression mode.

4- REVH: Enables the H compression mode.

5- Preamp selector: Use this stepped knob to select the desired preamp (LN or REVH); The first step bypasses the Preamp section.

6- Harmonics: A Global boost of the harmonic content and linear material of the Preamp.

7 - Shmod: this alters the shape of the attack envelope, allowing you to fine-tune the attack behavior to adapt it to any audio source. Position 2 gives the original attack time of the modeled compressor. Position 1 gives you the fastest setting. Going from 1 down to 0, a lookahead function is enabled. The global range of the lookahead goes from 0 to 4 milliseconds. Values above 2 will slow down the attack time.
NOTE: By pressing the LN button the SHMOD knob disappears from the GUI, this control is not available in this compressor mode.

8- Attack: This knob sets the processor's attack time. The attack control determines the time it takes the comp to respond to the input signal and have gain reduction take place. Both compressor modes boast anywhere from an ultra-fast to a fast attack time. Seven (7) on the GUI label of the Attack control is ULTRA-FAST (5 mS) time; One (1) is FAST (70 mS).

9- Input gain: Controls the input level of the plugin (range: -24/+24 dB).

10- Output gain: Controls the output level of the plugin (range: -24/+24 dB).

11- 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%.

12- SOA control: An acronym derived from 'safe operating area'; This is a fine-tuning control for the Threshold to expand the headroom and to find the sweet spot of the compressor (comfort zone). An Overflow LED has been added to this control, this warns about possible clipping and unpredictable behavior due to excessive input levels to the compressor.

13- Ratio: This knob sets the compression ratio according to the selected compressor model (LN/REV H): 4:1 - 8:1 - 12:1 - 20:1 plus ALL that embodies the iconic "All Button" which famous sound adds more distortion of the compressor.

14- Gain reduction meter: This meter displays the gain reduction level applied by the compressor.

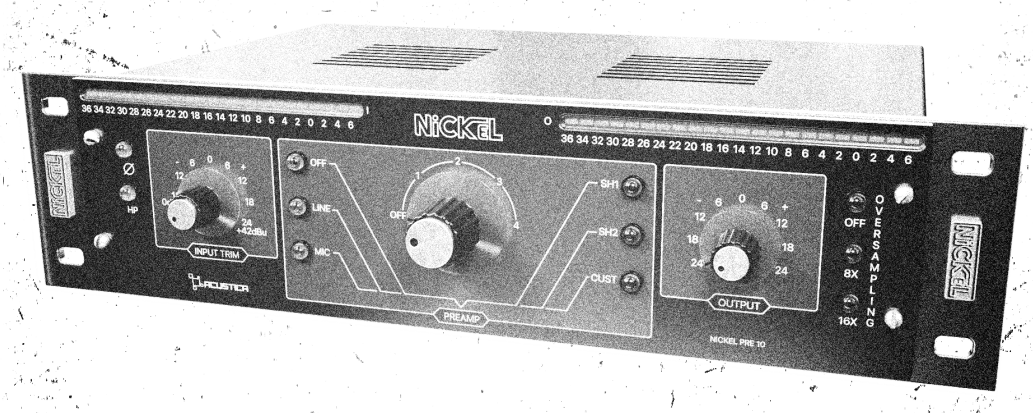
15- Filter: This control sets the cut frequency of a very gentle 1-pole high-pass filter inserted in the side-chain path. Generally, the higher the frequency, the smaller the amount of gain reduction, since less of the low frequencies will be affecting the Compressor action. In the leftmost position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

16- Release: This knob sets the processor's release time, namely it sets the time for the compressor's gain to return to the point of no gain reduction. Seven (7) on the GUI label of the Release control is 30 mS; One (1) is 780 mS.

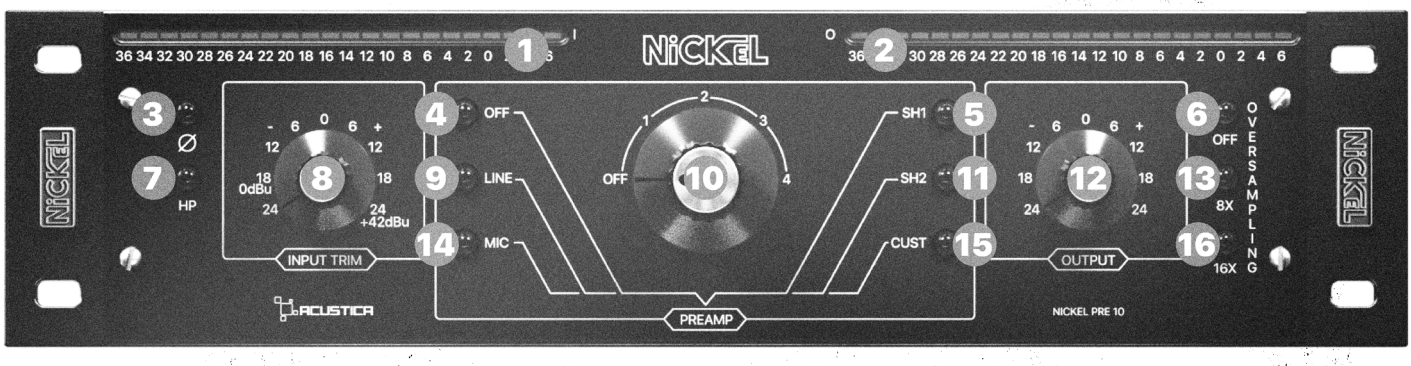
## 3.4 Nickel Pre

The Nickel Preamp plugin faithfully emulates all eight discrete mic and line preamp channels (with custom input stage transformers) of a premium Class A Precision Microphone Preamplifier unit considered by the manufacturer as the first analog product to break from their vintage roots offering a world-class modern ultra-fidelity tool for maximum sonic versatility providing musical and warm euphonics.

The plugin has been organized as per Acustica tradition in different Banks that contain a total of 20 different preamp emulations (including EQs and compressor preamp stages) , a fixed frequency high-pass filter(100Hz, 6dB/octave), a phase reverse button plus a the Oversampling buttons changing the oversampling-rate (8x, 16x) to improve the quality of the processing increasing the sampling frequency of the preamp.



## 3.4.1 Nickel Pre - Controls




1- Input Meters: Displays the input levels (L-R) entering the plugin. Range IN: -36dB to +6dB.

2- Output meters: Displays the output levels (L-R) of the plugin. Range OUT: -36dB to +6dB.

3- Phase reverse(ø): This button reverses the phase (ø) of the plugin input signal.

4- Off: bypasses the preamp section.

5- SH1: this bank includes 4 preamp emulations from four different channels by engaging the Shape control in 'Position 1' which is characterized by giving a more colorful sound that borrows from vintage circuits and adds transformer saturation, thus improving harmonic content.

6-13-16 Oversampling buttons: These mutually exclusive buttons (8x, 16x) act exclusively on the preamp section changing the oversampling rate to improve the processing quality increasing the sampling frequency of the preamp being processed by a fixed multiple of: 8x, 16x. The OFF button bypasses the oversampling functionality.

7- HP: Press the HP button to activate (Led On) the High-pass filter at 100 Hz (6 dB/octave);

8 - 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.

9 - Line button: Activates the Line preamp bank, use the Preamp Selector (4) to choose the desired preamp emulation (from Line 1 to Line 4).

10 - Preamp selector: Use to select the desired preamp (for each BANK: LINE-MIC-CUST);

11- SH2: this bank includes 4 preamp emulations from four different channels by engaging the Shape control in 'Position 2' which is characterized by giving a warm sound maintains transformer color adding soft limiting, particularly useful on rich transient and dynamic sounds.

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

14 - Mic button: Activates the Mic preamp bank, use the Preamp Selector (10) to choose the desired preamp emulation (from Mic 1 to Mic 4).

15 - Cust button: Activates the Cust preamps bank, use the Preamp Selector (4) to choose the desired preamp emulation (EQ=Mono preamp from Nickel Mono EQ; EQ ST= Stereo preamp from Nickel Stereo EQ; Rev H= Mono preamp from Nickel Comp mode H; LN= Mono Preamp from Nickel Comp mode LN).

## 4.1. Technical support

Technical support is exclusively provided via our dedicated 'Freshdesk' platform.
Please visit our website to learn more.

## 4.2. Troubleshooting and bug report

We are constantly improving our products and adding new features. On-going issues, bugs, and rare crashes can still be possible. If you are experiencing problems with your product, please head over to our website and visit the dedicated knowledge base section. Many answers have already been answered, and ready-to-use solutions can be found there.

## 4.2. Copyrights and credits

# NICKEL