ACUSTICA

MINT

SERVICE MANUAL

INDEX

1. INTRODUCTION

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

1.1. OVERVIEW

Mint is a suite consisting of four different plug-ins embodying a very rare solid-state console called GL2112 built by an engineer from a well-known Swiss company on commission in the late 1970s.

Mint is the second in a new series of 'Boutique Collection' Acqua plugins that aims to reproduce the essence of unique gear, those elusive, extremely hard to find devices, of which very few units were ever built and/or whose traces have almost been lost in the mist of time.

The centerpiece of this project is the recreation of an iconic vintage analog console module assembled with the best elements that Swiss technology offered at that time, sampled thanks to the invaluable contribution of ©Oxygen Recording Studio (www.oxygenrecordingstudio.com) and guitarist, producer and sound engineer Paride Lanciani, the owner of this priceless equipment.

1.1.1. DETAILS

In Paride's words::

'The GL2112 a very rare console built by a hardware design guru in the 1970s. I know of only one second twin still in operation today in a well-known studio in Paris called ©CBE studio. The Swiss engineer who made them was at the time running one of the best known and most important companies in Switzerland in the field and building consoles to special order for studios and clients.

My GL2112 was commissioned by ©TOTA studios in Paris (broadcast studios) and was operational until the mid 1990s, and then replaced. On the advice of a well known British engineer named Tony Arnold, I bought it and later retrofitted it to the Oxygen.

It's a rather simple but very effective mixer: 32 channels, 8 effects returns, and 8 additional line in channels. Over the years it has undergone various upgrades to make it more effective and communicative with today's times, without changing the audio design at all. Its peculiarities: a double 80-16,000 Hz eq in cascade and a very useful limiter on each channel strip.
It is a desk whose sound is rather aggressive and requires careful control, qualitatively made with high level components that effectively render the sounds we are looking for'.

Isn't it great that today's technology can now bring these unique colors from the past to everyone?

THE TIME HAS COME TO BE ABLE TO TURN THIS INIMITABLE SOUND INTO A PLUG-IN SUITE!

About the Oxygen Recording Studios - "Oxygen to your ears!"

Oxygen Recording Studios is a recording facility located in the north of Italy, owned by producer/guitarist Paride Lanciani (Kash, Instrumental Quarter, Maniac du Jour). The studio offers a comfortable space where bands, musicians and artists can stay and produce their work in an isolated and relaxed setting, nestled in a quiet hillside home surrounded on all sides by nature and magnificent scenery.

OXYGEN
recording studio

1.2. MINT SUITE

Mint includes:

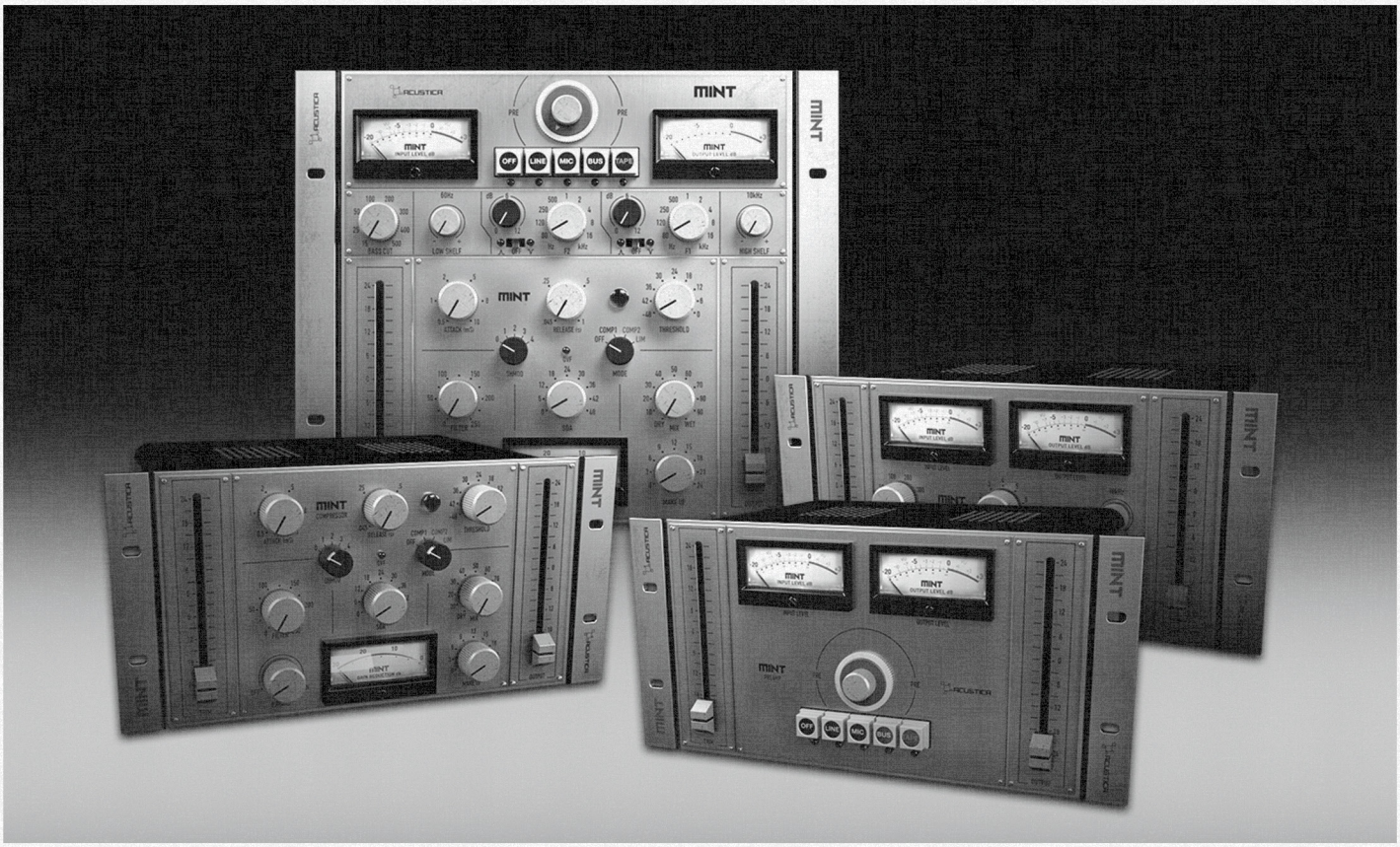
- MINT EQ: features a 4-band EQ (Peculiarities: a double 80-16000 Hz for the Mids) with Bass Cut, plus eight solid state Line preamps from the eight channels derived from the GL2112 console from the 70s.

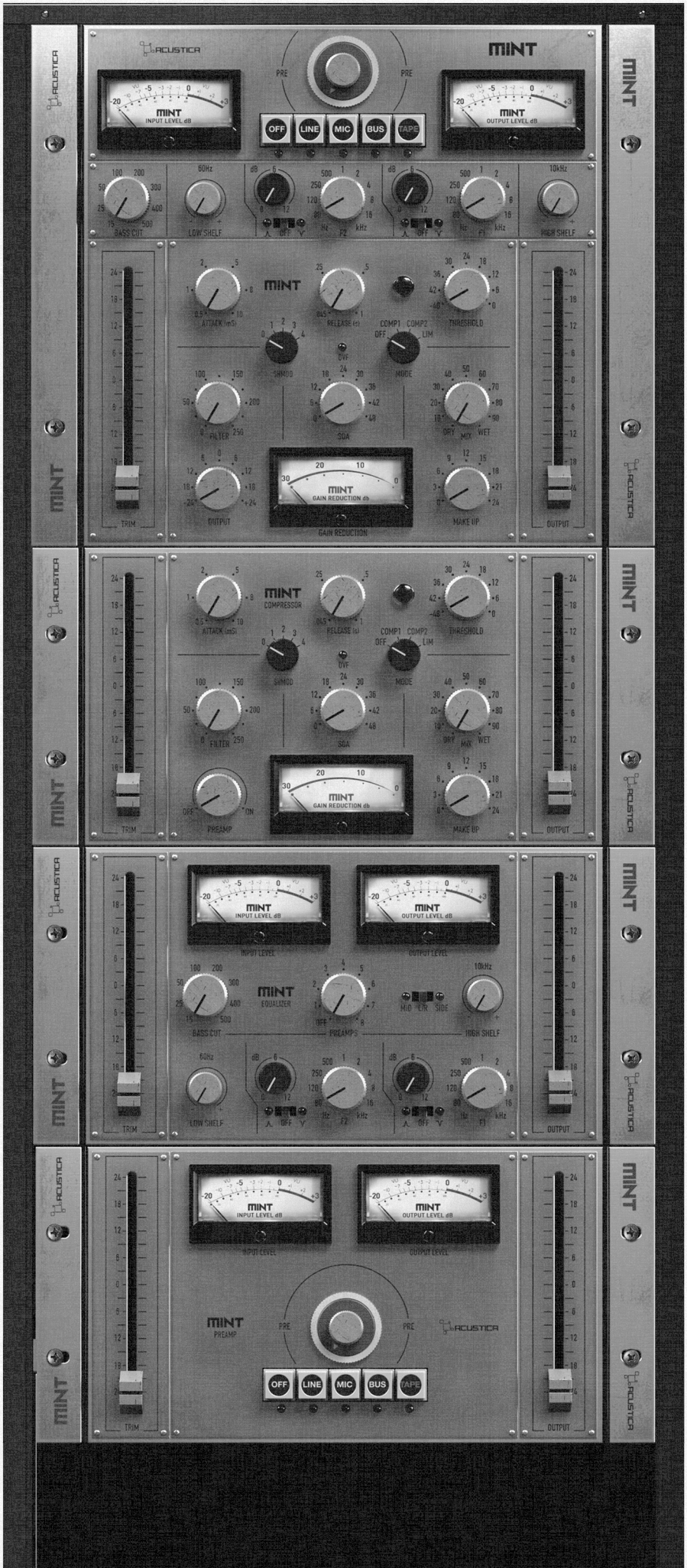
- MINT COMP: A Solid-State Compressor / Limiter; featuring 3 different switchable dynamic processor emulations (the original model called COMP 1, a 'Frankenstein mode made more aggressive by Acustica called COMP2 and finally the Limiter) with a preamp emulation.

- MINT PRE: sixteen Line preamplifiers, sixteen Mic preamplifiers and two Stereo bus pres to recreate the same sound as the original console, a powerful and colorful sound that can evolve into a range of distortions whose musicality is unmatched. Plus, to make the section even more interesting, two extra preamp emulations have been added, derived from a tape machine sampled at two different speeds (15 - 30 ips).

This tape machine is one of the standard models par excellence used and sought after in the world's major studios. In particular, this unit has been meticulously restored by Tony Arnold, who was one of the manufacturer's official engineers in Europe and embodies part of the sound of the Oxygen recording studio.

- MINT CHANNEL STRIP: a 4 band Equalizer, a Compressor/limiter with 3 different switchable modes, a complete preamp section.




ACUSTICA
MINT
PRE
OFF
LINE
MIC
BUS
TAPE
INPUT LEVEL dB
OUTPUT LEVEL dB
BASS CUT
LOW SHELF
HIGH SHELF
ATTACK (mS)
RELEASE (s)
THRESHOLD
SHMOD
MODE
COMP1
COMP2
LIM
OVF
FILTER
SGA
DRY
MIX
WET
TRIM
OUTPUT
MAKE UP
GAIN REDUCTION db
GAIN REDUCTION
COMPRESSOR
PREAMP
ON
EQUALIZER
MID
L/R
SIDE
PREAMPS
INPUT LEVEL
OUTPUT LEVEL

2. OPERATION

Mint brings together emulations derived from the extremely rare GL2112 console, built as prototypes by a 'Guru' designer and engineer from a well-known Swiss Pro Audio company, who built them to order and has been creating professional equipment for various studios around the world for some time.

The Mint suite includes 4 different plugins: a channel strip, an EQ, a dual-mono compressor and a preamp module.

NOTE: Please keep in mind that for each plug-in in the Mint suite we recommend that you calibrate your input levels to: -18dBFS = 0dBu. In this way you will avoid any unwanted distortion or unpredictable behavior due to excessive input levels.

Below you will find the explanation of each plugin included in this powerful suite.

2.1. MINT EQ

The Mint EQ includes an EQ with several perculiarities that make it truly unique plus eight different Line preamp emulations.

IMPORTANT: There's more. Don't forget that these are 'vintage' EQs, so don't be alarmed if you see some slightly strange curves or inaccurate gain values appearing in your analyser! This is 60 years old equipment!

In Paride's words:

'The special feature of the EQ module is mainly the F1 and F2 bands. The bank in fact is characterized by a double EQ in cascade with a frequency range from 80 to 16000 Hz'.

Let's take a closer look at the EQ models included in Mint:

EQ Specs:
A four-band solid-state equalizer (Low Shelf - Mid1 - Mid2 - High Shelf) that combines ease of use and effectiveness to deliver the aggressive sound of the vintage GL2112 console.

The Low-shelf filter significantly increases or decreases (approx. +/- 15 dB) the amplitude around 60 Hz, while the High-shelf filter significantly increases or decreases (approx. +/- 15 dB) the amplitude of the frequency range around 10 KHz.

The EQ also features a Bass Cut filter (High-Pass) with a frequency range from 15 to 500 Hz.

Mint EQ includes eight different preamp emulations.
More info about preamps at page 11.

Acustica Mint Stand-Alone Equalizer

2.1.1. MINT EQ CONTROLS

1. (Input) Trim:
A one-slider to increase the harmonic saturation.

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

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

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

5. Low Shelf – Gain:
This knob is a gain control for the Low Shelf at 60Hz - ranging from -15dB to +15dB.

6. High Shelf – Gain:
This knob is a gain control for the High Shelf at 10 kHz - ranging from -15dB to +15dB.

7. F1 Band - Frequency range:
variable from 80 Hz to 16 kHz.

8. F1 Band – Gain:
This knob is a gain control for the F1 Band (Mid) - ranging from -/+0dB to -/+12dB according to the F1 toggle.

9. F1 Band
Boost/OFF/Cut Toggle:
F1 band has a toggle to select whether that band will be boosted, cut or bypassed.

10. F2 Band
Frequency range:
Variable from 80 Hz to 16 kHz.

11. F2 Band – Gain:
This knob is a gain control for the F2 Band (Mid) - ranging from -/+0dB to -/+12dB according to the F1 toggle.

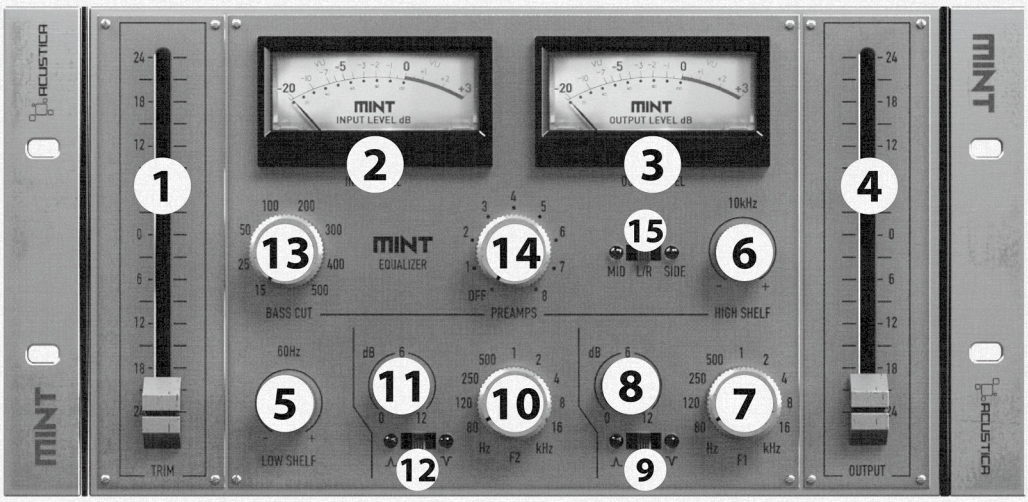
12. F2 Band
Boost/OFF/Cut Toggle:
F2 band has a toggle to select whether this band will be boosted, cut or bypassed.

13. Bass Cut (HP):
From 15 to 500 Hz.

14. Preamp selector:
Use this knob to select the desired preamp from eight different LINE preamps. The OFF step bypasses this section.

15. L-R /MID/SIDE switch:
Left/Right processing is enabled by selecting the center step of this switch (the default processing mode). When this mode is enabled, the input signal to the plugin is split into two processing channels, Left & Right.
The signal is then 'summed' back to Stereo at the plugin's output. However, when the MID mode is selected, the EQ processing is applied to the center of your soundstage. When SIDE mode is selected, processing is applied to the edges of your soundstage.

NOTE: MID and SIDE buttons are mutually exclusive, this doesn't allow you to make changes to both the Mid and Side channels at the same time.



2.2. MINT COMP

The Mint Dual-Mono Comp is derived from the Solid-State compressor/limiter modules included in GL2112 desk.

In Paride's words:

The compressor included with the GL2112 is fairly simple in terms of the number of controls, but requires careful control. Mint includes three different dynamics processor modes, with COMP1 you will emulate the exact mode of the one on the desk.

Acustica has kept its spirit and introduced some improvements to make it even more versatile and usable by creating 3 different emulations (Modes):

COMP1: A faithful 'digital' copy of the original GL2112 dynamic processor.

COMP2: This is where things get fun. A 'Frankenstein' compressor from Acustica with a different and higher compression ratio than the COMP1 model derived from one of the most famous dynamics processors sampled by Acustica.

This compression ratio is characterised by an extremely musical, relatively gentle and very characteristic curve.

LIMITER: A Limiter by Acustica featuring a compression ratio of 12:1

Also, the Mint Comp includes the preamp emulation of the original unit.

Acustica Mint Stand-Alone Compressor

2.2.1. MINT COMP CONTROLS

1. (Input) Trim: A one-slider 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 plugin, and it is used to adjust the plugin's internal level.
Note: when the preamp stage is bypassed, the 'Input Trim' mode has no effect. It is possible to increase the harmonic saturation with this Input trim slider.

2. Preamp selector: Turn the knob to ON to enable the preamp stage.

3. Attack: The attack time control of the compressor. All Comp/Limiter models included in Mint share the same attack times.
Values:
A1 0.5ms - A2 1ms - A3 2ms - A4 5ms
A5 8ms - A6 100ms

4. 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: In compressor mode 2, SHMOD control is not available.

5. 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%.

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

7. Gain reduction VU meter: This VU meter displays the gain reduction level applied by the compressor. Range: -20dB to +0.

8. Release: Release time control of the compressors. All Comp/Limiter models included in Mint share the same release times.
Values:
R0 0.045S - R1 0.25S - R2 0.5S - R3 1S

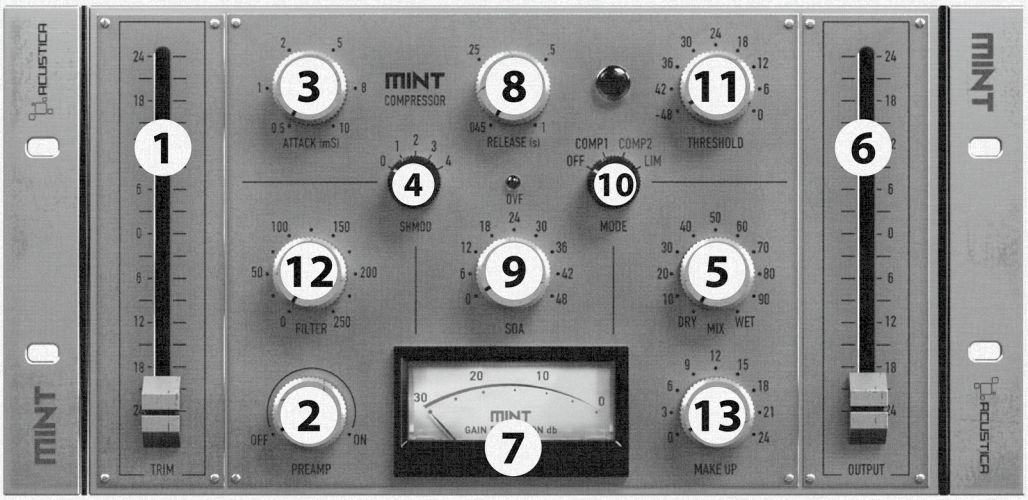
9. SOA control- OVF LED: An acronym derived from 'safe operating area'; This is a gain control added to find the sweetspot of the compressor (comfort zone) so that the attack and release times always work properly and consistently even with 'weak' signals.
An Overflow LED has been added to this control, this warns about possible clipping and unpredictable behavior due to excessive input levels to the compressor.

10. Compressor modes: This control allows you to select between 3 different and mutually exclusive compression modes:
COMP1 (a faithful 'digital' copy of the compressor unit)
COMP2 (a 'Frankenstein' Compressor by Acustica)
LIM (a 'Frankenstein' limiter by Acustica). First knob step (OFF) bypasses the compressor.

11. Threshold: Sets the threshold of the compressor (range: -48 dB to + 0 dB).

12 Filter: This control sets the cut frequency of a very gentle 1-pole high-pass filter inserted in the sidechain 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.

13. Make-up gain: Compensates for the compressor's gain reduction. Gain range: from 0 dB to +24 dB.



2.3. MINT PRE

The Mint Pre plugin includes sixteen Line preamps, sixteen Mic preamps, 2 Stereo Buses and 2 'extra' Tape preamps emulations.

These recreate the same sound and behavior of the original GL2112 console from the 1970s.

As with the hardware, the plugin can be used to obtain various colors increasing the harmonic distortion, starting from a clear, powerful and colorful sound, that can evolve into a range of distortions whose musicality is unmatched.

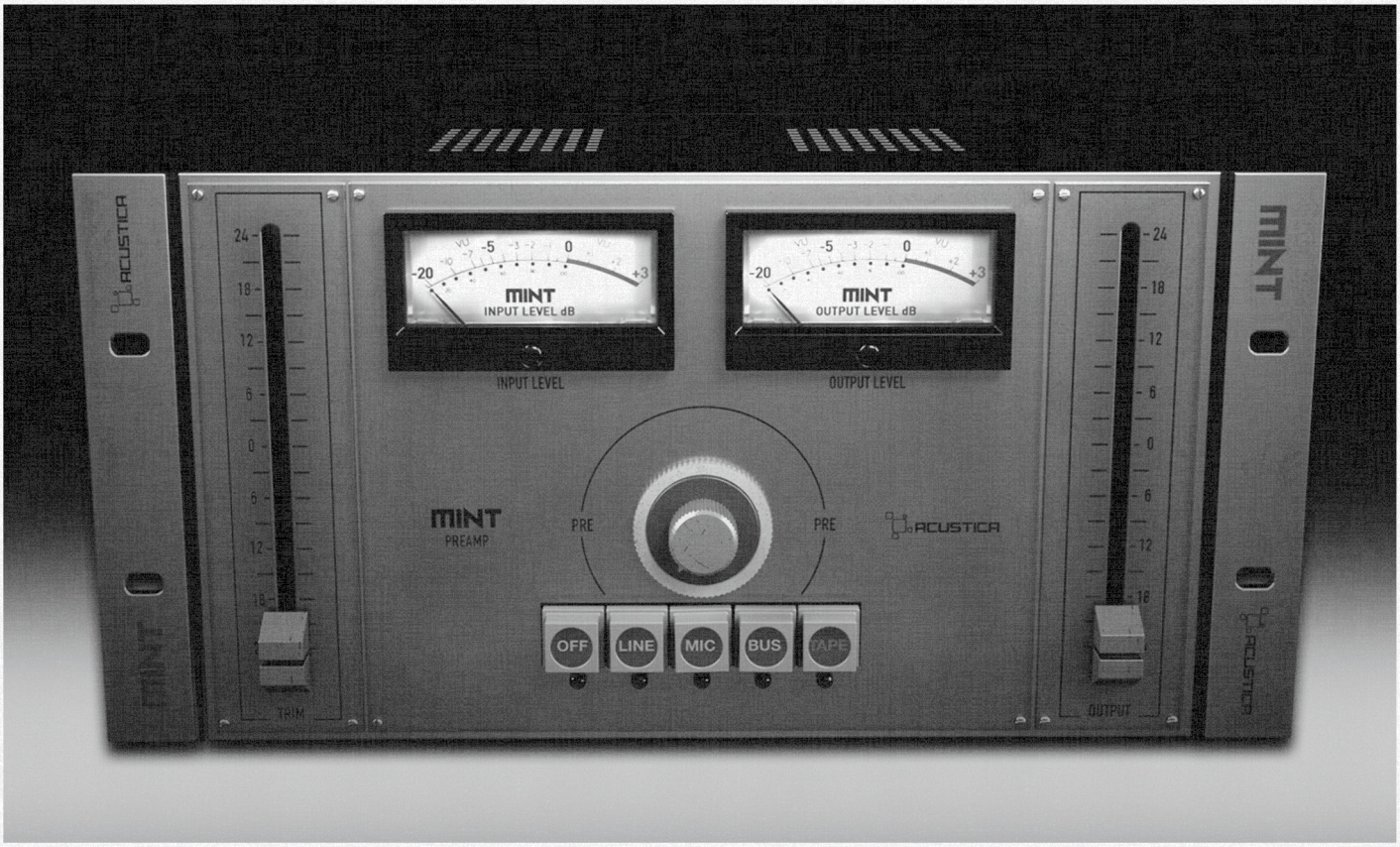
You can use the distinct palette of tones in this plug-in as a 'mojo sparkler' for your mix.

PRE LINE: 16 Line preamps (Ch.1 through 16)

PRE MIC: 16 Mic preamps (Ch.1 through 16)

PRE BUS: 2 Stereo Buses preamps

PRE TAPE: 2 Tape preamps (1-2)



Acustica Mint Stand-Alone Preamp

2.3.1. MINT PRE CONTROLS

1. (Input) Trim: A one-slider 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 plugin, and it is used to adjust the plugin's internal level.

Note: when the preamp stage is bypassed, the 'Input Trim' mode has no effect. It is possible to increase the harmonic saturation with this Input trim slider.

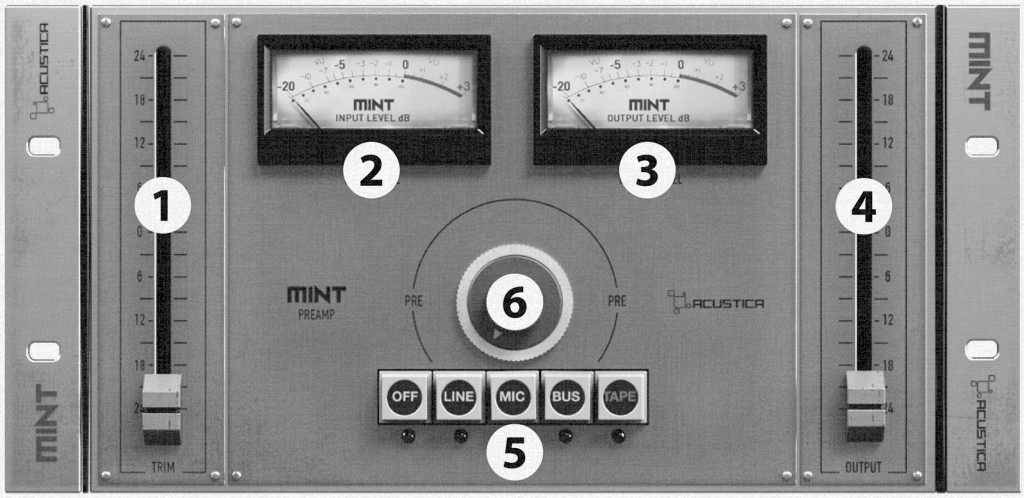
2. Input VU Meter: Displays the input level of the plugin. Range IN: -20dB to +3dB.

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

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

5. Preamp Bank selector: Use these buttons to select the preamp BANK: LINE-MIC-BUS-TAPE.
Use the Preamp Selector (x) to choose the desired preamp emulation. The OFF button bypasses this section.

6. Preamp selector:
Use this stepped knob to select the desired preamp (for each BANK: LINE-MIC-BUS-TAPE); First knob step bypasses the preamp section.



2.4. MINT CHANNEL-STRIP

The Mint Channel-strip is the perfect choice that packs all of the features of the standalone versions, with a sensational and distinctive sound to enhance and massage your music, all in one easy-to-use interface.

Acustica Mint Channesltrip

2.4.1.
MINT CHANNEL-STRIP CONTROLS

1. (Input) Trim: A one-slider 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 plugin, and it is used to adjust the plugin's internal level.
Note: when the preamp stage is bypassed, the 'Input Trim' mode has no effect. It is possible to increase the harmonic saturation with this Input trim slider.

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

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

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

5. Preamp Bank selector: Use these buttons to select the preamp BANK: LINE-MIC-BUS-TAPE.
Use the Preamp Selector (x) to choose the desired preamp emulation. The OFF button bypasses this section.

6. Preamp selector: Use this stepped knob to select the desired preamp (for each BANK: LINE-MIC-BUS-TAPE); First knob step bypasses the preamp section.

7. Low Shelf – Gain: This knob is a gain control for the Low Shelf at 60Hz - ranging from approx -15dB to +15dB.

8. High Shelf – Gain: This knob is a gain control for the High Shelf at 10 kHz - ranging from approx -15dB to +15dB.

9. F1 Band - Frequency range: variable from 80 Hz to 16 kHz.

10. F1 Band – Gain: This knob is a gain control for the F1 Band (Mid) - ranging from -/+0dB to -/+12dB according to the F1 toggle.

11. F1 Band – Boost/OFF/Cut Toggle: F1 band has a toggle to select whether that band will be boosted, cut or bypassed.

12. F2 Band - Frequency range: variable from 80 Hz to 16 kHz.

13. F2 Band – Gain: This knob is a gain control for the F2 Band (Mid) - ranging from -/+0dB to -/+12dB according to the F1 toggle.

14. F2 Band – Boost/OFF/Cut Toggle: F2 band has a toggle to select whether that band will be boosted, cut or bypassed.

15. Bass Cut (HP): From 15 to 500 Hz;

16. Attack: The attack time control of the compressor. All Comp/Limiter models included in Mint share the same attack times.
Values:
A1 0.5ms - A2 1ms - A3 2ms - A4 5ms
A5 8ms - A6 100ms

17. 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: In compressor mode 2, SHMOD control is not available.

18. 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%.

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

20. Gain reduction VU meter: This VU meter displays the gain reduction level applied by the compressor. Range: -20dB to +0.

21. Release: Release time control of the compressors. All Comp/Limiter models included in Mint share the same release times.
Values:
R0 0.045S - R1 0.25S - R2 0.5S - R3 1S

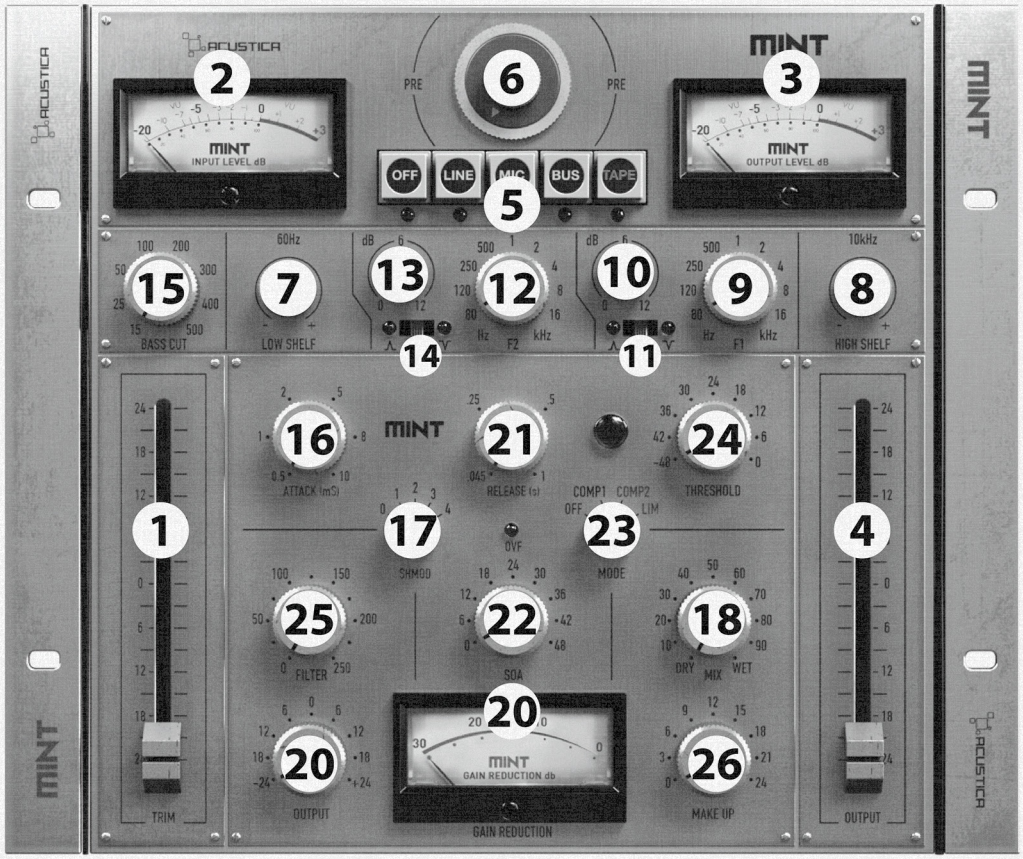
22. SOA control - OVF LED: An acronym derived from 'safe operating area'; This is a gain control added to find the sweetspot of the compressor (comfort zone) so that the attack and release times always work properly and consistently even with 'weak' signals. An Overflow LED has been added to this control, this warns about possible clipping and unpredictable behavior due to excessive input levels to the compressor.

23. Compressor modes: This control allows you to select between 3 different and mutually exclusive compression modes:
COMP1 (a faithful 'digital' copy of the compressor unit)
COMP2 (a 'Frankenstein' Compressor by Acustica)
LIM (a 'Frankenstein' limiter by Acustica). First knob step (OFF) bypasses the compressor.

24. Threshold: Sets the threshold of the compressor (range: -48 dB to + 0 dB).

25. Filter: This control sets the cut frequency of a very gentle 1-pole high-pass filter inserted in the sidechain 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.

26. Make-up gain: Compensates for the compressor's gain reduction. Gain range: from 0 dB to +24 dB.



3.
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

3.1.
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.

3.2.
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.

3.3. 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.

3.4. Click HERE or a complete installation user guide

4. 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 table:

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 with Microsoft Windows Intel CPU		Apple computer with macOS Intel CPU		Apple computer with macOS Silicon SOC	
	MINIMUM	RECOMMENDED	MINIMUM	RECOMMENDED	MINIMUM	RECOMMENDED
OPERATING SYSTEM	Windows 10 1909 64 bits (1) (9)	Windows 21H2 10 64 bits (1) (9)	macOS 10.14 (1) (9)	macOS 10.15 (1) (9)	macOS 11 (1) (9)	macOS 12 (1) (9)
CPU	Intel i5 4th generation (2) (8)	Intel i9 11th generation (2) (8)	Intel i5 4th generation (2) (8)	Intel i9 11th generation (2) (8)	ARM M1 (8)	ARM M1 (8)
RAM	8 GB of RAM (3)	64 GB of RAM (3)	8 GB of RAM (3)	64 GB of RAM (3)	8 GB of RAM (3)	16 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)	It depends on the product (4)	It depends on the product (4)
SCREEN RESOLUTION	Full HD (1920x1080)	UHD (3840x2160)	Full HD (1920x1080)	UHD (3840x2160)	Full HD (1920x1080)	UHD (3840x2160)
PLUG-IN FORMAT	VST & AAX	VST & AAX	VST, AAX & AU	VST, AAX & AU	VST, AAX & AU	VST, AAX & AU
PLUG-IN ARCHITECTURE	64-bits		64-bits		64-bits	
TRIAL / DEMO	30 Days (5)		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)		Cubase ARM 64-bits, Pro Tools ARM 64-bits & Logic Pro X ARM 64-bits (6)	
AQUARIUS APPLICATION	YES & Mandatory		YES & Mandatory		YES & Mandatory	
INTERNET CONNECTION	YES & Mandatory (7)		YES & Mandatory (7)		YES & Mandatory (7)	

(1) Case sensitive file systems are not supported.
(2) Intel i7/i9 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.

5. CUSTOMER CARE

5.1. CONTACT POINT

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.

5.2. COPYRIGHTS AND CREDITS

ACUSTICA

MINT