



# 1. INTRODUCTION

Thank you for purchasing Tulip.

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

## 1.1. OVERVIEW

Tulip is the third in our new 'Boutique Collection' of Acqua plugins (VST/VST3/AAX/AU) 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.

This suite of plug-ins pays tribute to a prestigious Dutch electronics company that from the 1950s began producing quality professional audio equipment with truly amazing features for their record label, which over the years was home to an array of landmark artists such as David Bowie, The Bee Gees, Shirley Bassey, Nina Simone, Demis Roussos, Dusty Springfield, Roy Hamilton and many other.

This is the first Acqua plugin suite in which our brand new 'Hyper preamplification technology' has been used for the first time. It significantly improves the standard of current preamplifier emulations, offering the highest possible audio quality, precision and low CPU consumption, taking full advantage of the extraordinary potential of our VVK technology.

## 1.2. TULIP SUITE

Tulip suite includes:

### - TULIP EQ:

Two switchable Equalizers, plus three different preamps.

- the 8122 EQ model, derived from a 3-band passive EQ module included in a very rare tracking/mixing console from the mid 70s;

- the 3675 EQ model derived from a 3-band passive germanium transistor-based EQ originally part of a 60s mixing console;

NOTE: Both these 3-band EQs, as per the Acustica tradition, have become 4-bands, doubling the medium bands. The 8122 was 'customized' by the owner who was able to build an LMF band that was not strictly present in the original unit.



**- TULIP COMP:**

A solid-state VCA Compressor / Limiter; featuring 4 different switchable dynamic processor emulations (the original model called COMP, a 'Frankenstein mode' created by Acustica called ULTRACOMP based on our 'Hyper' compression tech and finally two different Brickwall limiters, plus the compressor pre-amp emulation.



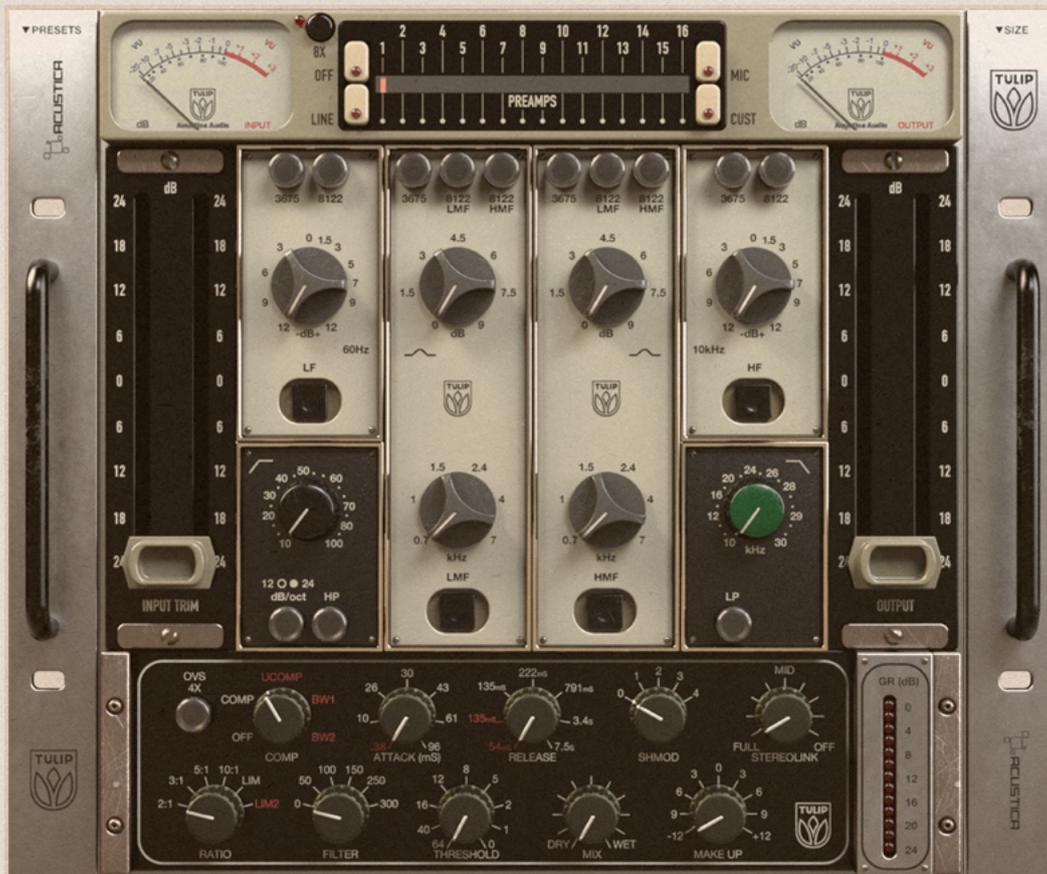
**- TULIP PRE:**

16 Line preamplifiers, 16 Mic preamps, plus six Custom pre-amps based on our 'Hyper' preamplification tech.



**- TULIP CHANNEL STRIP:**

Two switchable Passive Equalizers, a VCA Compressor/limiter with 4 different switchable modes, a complete preamp section for a total of 38 preamplifiers (16 Line – 16 Mic – 6 Custom emulations) based on our ‘Hyper’ compression and preamplification tech.





## 1.2.1. DETAILS

### *ABOUT THE SAMPLED GEAR*

Tulip 8122 EQ:

This model is based on a rare discrete 32-channel console from the mid-1970s, designed and built by Mr. Peter K Burkowitz, the head of the technical department of an entertainment company and major music record label founded in 1962 by the Dutch company that we honour with the Tulip suite. The Dutch multinational company acquired and created many labels over the years (including the one that made this desk) and used to rebrand the sound consoles they produced with the names of each of them, so it is not surprising to find the 'same' modules branded differently.

Very few were produced and they were sold exclusively to the Dutch multinational's label studios, so very few engineers were exposed to them. This is probably why people have forgotten about them. The build quality of these consoles is still impressive today... after all, when money was no object for design and it was done to very high quality standards, the result was usually very good, if not excellent. The sound of this desk is absolutely rich, smooth, clean and very hi-fi sounding.

The console we used for our sampling was built in 1975 and is still in excellent condition today; it is located in the recording studio of Oliver Gregor and Peter 'jem' Seifert in Düsseldorf. (Germany).

## Tulip 3675 EQ:

Thanks to the precious contribution of Peppe De Angelis, sound engineer at the Monopattino Recording Studio located in southern Italy, we managed to recover a perfectly functioning EQ module of this historic brand. It is a very rare 3-band germanium transistor equaliser designed in 1964, whose design, according to legend, also bears the signature of one of the greatest gurus of professional audio, Mr. Rupert Neve.

These equaliser units are famous for their sound, there were some classic recordings made with these console modules (made in the Netherlands) that really beat many recordings made with the competition's flagship decks, in terms of sound quality for the era in which they were made!

It is a rather simple equaliser in terms of the number of controls, but built to a very high technical level and standard, guaranteeing a really great sound.



## Tulip Compressor/Limiter:

This is based on a Solid state VCA compressor/limiter from the FM Recording Studio 'Fonologie Monzesi' - Monza (Italy) owned by sound engineers Massimo Faggioni and Raffaele Stefani.

An aura of mystery is shrouded around this unit, many tracks have traced the origin of this gear back to the famous dutch manufacturer we pay tribute to with the Tulip suite. A sister unit of this compressor deck is jealously guarded and used in the Wisseloord studios in the Netherlands. Given the historical situation of the studio, the hypothesis that these compressors were developed by engineers of the well-known brand alongside the resident sound engineers seems credible.

The original unit has been enriched and enhanced with our new 'Hyper' comp technology.

It sported many unique features that made it a "must have" for demanding sound engineers. Especially suitable to process punchy and tight rhythmic patterns (percussive acoustic/electronic sound, drums, etc).

Its 'custom' brickwall limiters, designed to offer a fast and intuitive way to make mixes competitive without destroying their musicality and dynamics with harsh peaks, also adding a touch of 'vintage vibe' when used in conjunction with the pre-amplifier, while the sound of compression offers many facets, thanks to the different modes introduced in the plugin and a natural and smooth compression feel even at the most extreme settings.

## 2. 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 Tulip we recommend that you calibrate your input levels to:  $-18\text{dBFS} = 0\text{dBu}$ .

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.

### **New Hyper engine**

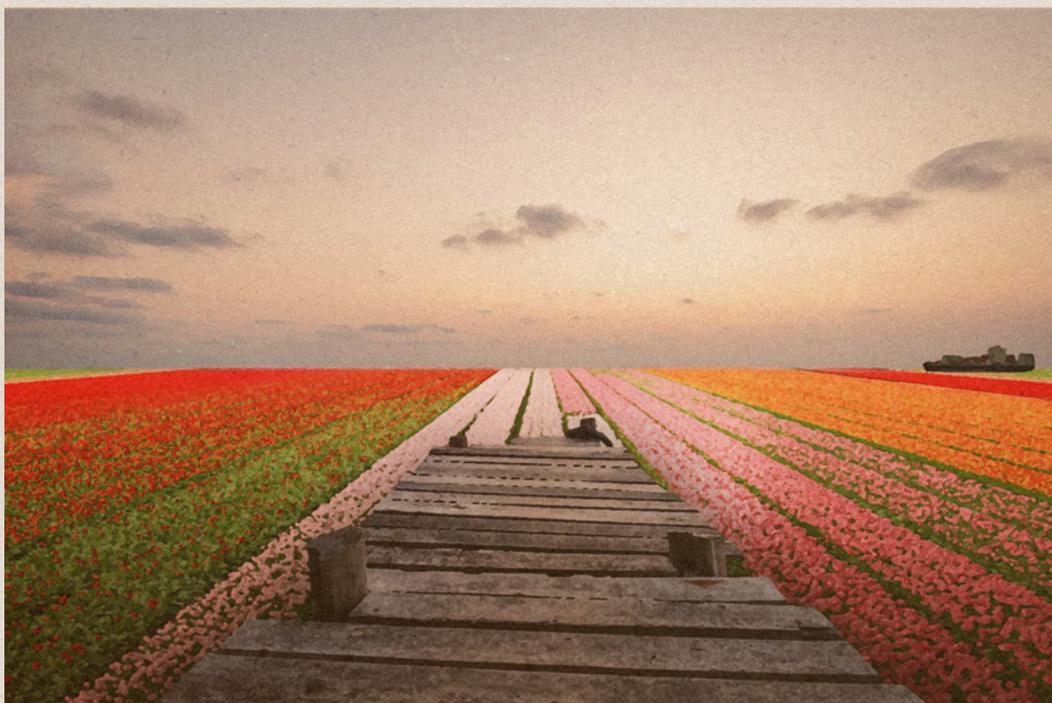
Our standard compressors run at 22kHz regardless of sample rate or oversampling; this implies that the reduction, attack, and release curves are not calculated for every sample but for every 'n' samples, where 'n' depends on the sample rate. For example, on fast transients, the input level is evaluated 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.



## 3. OPERATION

Tulip packs an authentic collection of rare vintage emulations, highly sought-after by collectors worldwide. It includes a Channelstrip, an Equalizer, a Compressor/Limiter and a Pre-amp module. Below we will immerse ourselves into the explanation of the controls included in this new powerful plugin.

### 3.1. TULIP EQ

#### - Model 8122:

This 4-band EQ plugin emulates the characteristics of a rare console produced in the mid-1970s. The plugin faithfully reproduces the behaviour of the original desk and can be used to add great tones to your audio. This equaliser has five main equalisation bands, LF and HF shelving with fixed corner frequencies, while LMF and HMF have bell responses and fixed centre frequencies and include a Q control, as well as a cut filter section (low-pass/high-pass).

Details:

LOW Frequencies: 60 Hz;

LOW Gain Range: approx -/+ 12 dB;

LOW MID Frequencies: from 20 Hz to 1 kHz

LOW MID Gain Range: approx -/+ 12 dB;

LOW MID Q: from 1 to 10

HIGH MID Frequencies: from 0.2 kHz to 10 kHz

HIGH MID Gain Range: approx -/+ 12 dB;

HIGH MID Q: from 1 to 10

HIGH Frequencies: 10 kHz;

HIGH Gain Range: approx -/+ 12 dB;

The plugin features a Hi-cut (30-10 kHz) and Lo-cut (10 kHz-100 Hz) filter.

**-Model 3675:**

Four of the sweetest sounding (and looking) three-band EQ modules from the mid '60s with 7Khz emphasis, 10Khz and 60Hz. As per Acustica's tradition it became a 4-band by doubling the mid-band.

TIP: It is an extremely musical EQ, with a great sound, you can't really do surgical stuff with it but its 10 Khz is pure 'magic'... try a 12dB boost at 10k and enjoy the surprising result!

Details:

LOW Frequencies: 60 Hz;

LOW Gain Range: approx -/+ 12 dB;

LOW MID Frequencies: 0.7 to 7 kHz

LOW MID Gain Range: approx -/+ 9 dB\*;

HIGH MID Frequencies: 0.7 to 7 kHz

HIGH MID Gain Range: approx -/+ 9 dB\*;

HIGH Frequencies: 10 kHz;

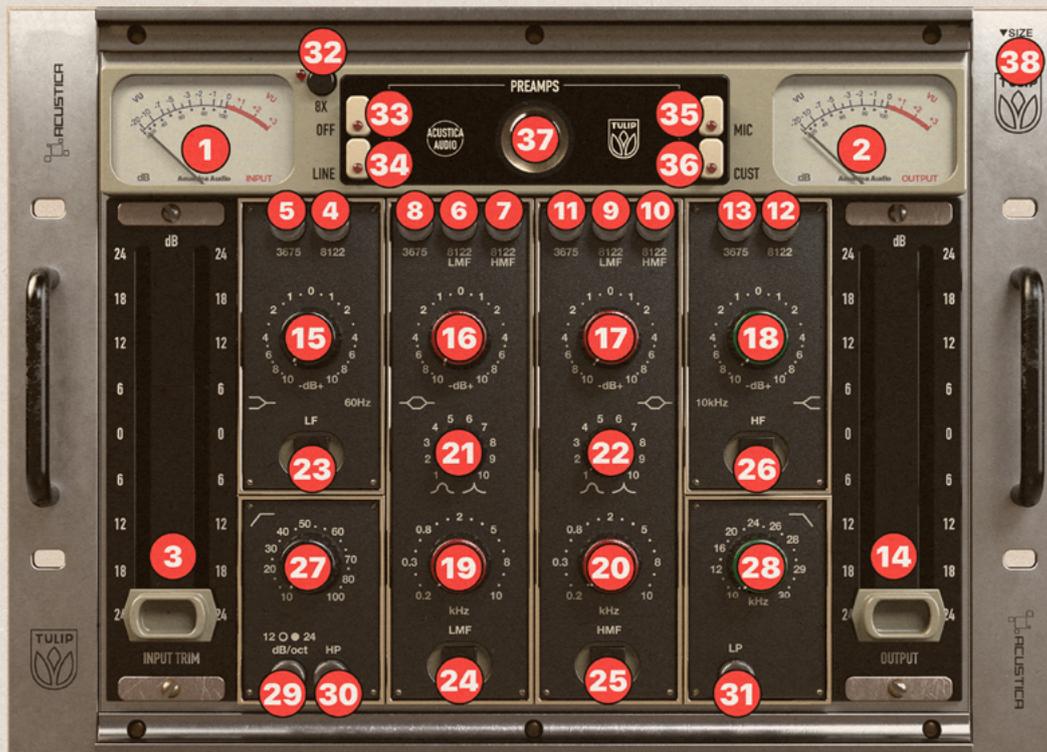
HIGH Gain Range: approx -/+ 12 dB

\*NOTE:

Original unit 3675 features gain for the mid-band from 0 dB to +9 dB.

Starting with Tulip's release B010 and Tulip Trial's A009, negative excursion has been added to EQ model 3675's gain control (from 0 to -9 dB) for the mid-bands (LMF- HMF) to provide greater versatility.

## 3.1.1. TULIP EQ CONTROLS



### 1. Input VU meter:

Measures the Input signal level. Range: -20 dB, +3 dB.

### 2. Output VU meter:

Measures the Output signal level. Range: -20 dB, +3 dB.

### 3. (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.

**4. 8122 – LF (Band1):**

Selects the LF band 1 of the 8122 EQ model.

**5. 3675 – LF (Band1):**

Selects the LF band 1 of the 3675 EQ model

**6. 8122 – LMF (Band2):**

Selects the LMF band 2 of the 8122 EQ model.

**7. 8122 – HMF (Band2):**

Selects the HMF band 2 of the 8122 EQ model

**8. 3675 – LMF/HMF (Band2):**

Selects the LMF/HMF band 2 of the 3675 EQ model

**9. 8122 – LMF (Band3):**

Selects the LMF band 3 of the 8122 EQ model

**10. 8122 – HMF (Band3):**

Selects the HMF band 3 of the 8122 EQ model

**11. 3675 – LMF/HMF (Band3):**

Selects the LMF/HMF band 3 of the 3675 EQ model

**12. 8122 – HF (Band4):**

Selects the HF band 4 of the 8122 EQ model

**13. 3675 – HF(Band4):**

Selects the HF band 4 of the 3675 EQ model

**14. Output:**

controls the output level of the Eq.

**15. Low Shelf – Gain:**

This knob is a gain control for the Low Shelf at 60Hz - ranging from approx -12dB to +12dB for the 3675 EQ, from -10dB to +10dB for the 8122 EQ.

**16. Low Mid Frequency peak gain:**

Approx -10 to +10dB for the 8122 EQ; approx -9 dB to +9 dB for the 3675 EQ.

**17. High Mid Frequency peak gain:**

Approx -10 to +10dB for the 8122 EQ; approx -9 dB to +9 dB for the 3675 EQ.

## **18. High Shelf – Gain:**

This knob is a gain control for the High Shelf at 10kHz - ranging from approx -12dB to +12dB for the 3675 EQ, from -10dB to +10dB for the 8122 EQ.

## **19. Low Mid Frequency band (Band2):**

From 20 to 1 kHz for the Band2 selecting the LMF 8122 EQ model. From 0.7 to 7 kHz for the Band2 selecting the model 3675 EQ model.

## **20. High Mid Frequency band (Band3):**

From 0.2 to 10 kHz for the Band3 selecting the HMF 8122 EQ model; From 0.7 to 7 kHz for the Band3 selecting the model 3675 EQ model.

## **21. Low Mid Q:**

The Q button modifies the bandwidth of the Low-Mid (LMF) frequency bands (Peaking) of the 8122 EQ model. It toggles between Broad to Narrow. This control is NOT available for the 3675 EQ model.

## **22. High Mid Q:**

The Q button modifies the bandwidth of the High-Mid (LMF) frequency bands (Peaking) of the 8122 EQ model. It toggles between Broad to Narrow. This control is NOT available for the 3675 EQ model.

## **23. LF – EQ button (Low Freq - band 1):**

This buttons allow you to activate the EQ band1.

## **24. LMF – EQ button (Low Mid Freq - band 2):**

This buttons allow you to activate the EQ band2.

## **25. HMF – EQ button (High Mid Freq - band 2):**

This buttons allow you to activate the EQ band3.

## **26. HF – EQ button (High Freq - band 2):**

This buttons allow you to activate the EQ band4.

## **27. Lo Cut (HP):**

From 10 Hz to 100 Hz.

## **28. Hi Cut (HP):**

From 30 kHz to 10 kHz.

### **29. Lo Cut filter Slope:**

This button change the slope of the Low Cut (HP) filter from a 12 dB/oct slope to a 24 dB/oct.

### **30. Lo Cut activation button:**

Activates (Led On) the Low Cut /High-pass filter.

### **31. Hi Cut activation button:**

Activates (Led On) the Hi Cut /Low-pass filter.

### **32. 8X button:**

Oversampling button that act exclusively on the Preamplification section (Line-Mic-Cust) changing the oversampling rate (8x) to improve processing quality.

### **33. Preamp bypass:**

This bypasses the preamp stage of the plugin.

### **34. Line preamp:**

The LINE button enables (lamp ON) the first preamp emulation of the plugin which is the Line - Channel 1 preamp of the 8122 model.

### **35. Mic preamp:**

The MIC button enables (lamp ON) the second pre-amp emulation of the plugin which is the Mic - Channel 1 preamp emulation of the 8122 model.

### **36. Cust preamp:**

The CUST button enables (lamp ON) the third preamp emulation of the plugin which is the Line preamp emulation of the 3675 model.

### **37. Magic eye lamp:**

Shows the input signal level of the plugin.

### **38. Size:**

Adjust the whole plugin-GUI size. Choose between 3 magnifications (1x - 1.5x - 2x) from the top right SIZE drop-down menu. Once the desired size has been selected, the plugin must be removed and re-loaded in order to apply the new size. New instances of the same plugin will open with this size.

## 3.2. TULIP COMP

Tulip is equipped with four dynamics processors:

- The original emulation of the Discrete VCA Compressor/Limiter (COMP) enriched with new attack & release times.
- A 'Custom' Ultracomp version of the original compressor enriched with new attack & release times and powered by our 'Hyper engine' tech.
- Two Brickwall limiters ( 1-2 ), the first a more 'traditional' and the second a more 'pioneering' in their conception both based on our new 'Hyper' compression technology.

NOTE:

- The main idea behind the included VCA compressor is to provide a clean transparent, musical mix where you want control over a large range of parameters without neglecting the ability to create distinctive new sounds as well as vintage ones, too.
- With a few dB of threshold you get a high level in RMS avoiding unwanted 'pumping effects', it's well suited to mastering sessions as with small amounts of threshold they can give immediate compression thanks to the addition of new 'custom' release times and extremely fast attacks.

## 3.2.1. TULIP COMP CONTROLS



### 1. (Input) Trim:

An 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. Attack:

The attack time control of the compressor. All Comp/Limiter models included in Tulip share the same attack times.

Values: 0.38 mS, 10 mS, 26 mS, 30 mS, 43 mS, 61 mS, 96 mS.

NOTE: In Brickwall1 this controls isn't available.

The attack times in 'red', were added by Acustica to make the compressor even more powerful.

### **3. Release:**

Release time control of the compressors. All Comp/Limiter models included in Tulip share the same release times.

Values: 54 mS, 35 mS, 135 mS, 222 mS, 791 mS, 3.4 S, 7.5 S  
The release times in 'red', were added by Acustica to make the compressor even more powerful.

### **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. Compressor modes:**

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

COMP (a faithful 'digital' copy of the compressor unit). Oversampling-rate functions available (1x, 2x, 4x, 8x, 16x).

ULTRACOMP (a 'Frankenstein' Compressor by Acustica based on our 'Hypercomp' tech). Oversampling-rate functions available (1x, 2x, 4x, 8x, 16x).

BRICKWALL1 (1st 'Frankenstein' brickwall limiter by Acustica). It's an emulation of a traditional brickwall limiter that does not allow transients to exceed the maximum limit when the input gain is set to maximum. Sc Filter, Stereo link, Attack and SHMOD controls not available in this mode. Oversampling-rate functions available (1x, 2x, 4x, 8x, 16x).

BRICKWALL2 (2nd 'Frankenstein' brickwall limiter by Acustica). It is characterised by Tulip's attack-release times, a fixed ratio (static curve) derived from an iconic VCA compressor. Unlike the more 'traditionally' designed Brickwall 1, Brickwall 2 is able, by adjusting the available attack and SHMOD controls, to achieve the desired volume while preserving the transients and dynamics of the track. The SC Filter, Stereo link and Ratio controls aren't available in this mode. Oversampling-rate functions available (1x, 2x, 4x, 8x, 16x).

### **6. Ratio:**

Sets the ratio of the compressor; Range: 2:1 – 3:1 – 5:1 -10:1 Lim (20:1) Lim2 (30:1). This control isn't available in Ultra-comp, Brickwall1 and Brickwall2.

### **7. Threshold:**

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

### **8. Make up:**

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

### **9. 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%.

### **10. Gain Reduction meter:**

This meter displays the gain reduction level applied by the compressor. Range: -38dB to +0 (in Peak and RMS).

### **11. Stereo Link:**

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

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

## **12. Size:**

Adjust the whole plugin-GUI size. Choose between 3 magnifications (1x - 1.5x - 2x) from the top right SIZE drop-down menu. Once the desired size has been selected, the plugin must be removed and re-loaded in order to apply the new size. New instances of the same plugin will open with this size.

## **13. Special Buttons:**

- In '0' mode no attenuation is applied.
- In '-0.5' mode the output volume is attenuated by -0.5 dB.
- In '-1' mode the output volume is attenuated by -1 dB.

This feature was introduced due to the inherent nature of dynamic processor algorithms, the oversampling function, and the fact that the recommended processor chain would include the subsequent use of a true peak limiter.

## **14. TP:**

A true Peak mode has been added to offer the best performance without any compromise in terms of sound quality to confidently hit your loudness targets without leaving behind any artefacts and distortion-inducing inter-sample peaks. This mode is highly recommended if the clipper is being used at the end of the chain.

## **15. Oversampling menu:**

This menu allows you to change the oversampling rate to improve the audio quality increasing the sampling frequency of the plugin and minimize aliasing artefacts:

- The 1x mode bypasses the oversampling functionality.
- The 4x mode increase the sampling frequency of the preamp being processed by a fixed multiple of 4x.
- The 8x mode increase the sampling frequency of the preamp being processed by a fixed multiple of 8x (CPU intensive).
- The 16x mode increase the sampling frequency of the preamp being processed by a fixed multiple of 16x (very CPU intensive).

## 16. Comp preamp:

This button enables (lamp ON) or bypasses (lamp OFF) the preamp of the compressor.

## 17. 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.

## 18. Input meters:

These meters display the input level of the plugin. Range: -38 dB to +0 dB (in Peak and RMS).

## 19. Output meters:

These meters display the output level of the plugin. Range: -38 dB to +0 dB (in Peak and RMS).



### 3.3. TULIP PRE

The Tulip Pre plugin includes sixteen Line preamps, sixteen Mic preamps, six Custom preamps emulations. These recreate the same sound and behavior of the original units sampled for this project.. 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.

In this suite you can appreciate for the first time the 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, taking full advantage of the extraordinary potential of our VVK technology.

#### **PRE LINE:**

16 Line preamps from the 8122 console  
(Ch.1 through 16).

#### **PRE MIC:**

16 Mic preamps from the 8122 console  
(Ch.1 through 16).

#### **PRE CUST:**

- 1) 8122 ST MIX (Stereo Mix).
- 2) 8122 MONO MIX (Mono Mix).
- 3) 3675 ST (Stereo Pre from two 3675 EQ units).
- 4) 3675 MONO (Mono Pre from a 3675 EQ unit).
- 5) COMP ST (Stereo Pre from the Compressor unit).
- 6) COMP MONO ( Mono Pre from the Compressor unit).

### 3.3.1. TULIP PRE CONTROLS



#### **1. Input Trim:**

An 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 output level of the plugin. Range IN: -20dB to +3dB.

#### **4. Output:**

This knob 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-CUST. Use the Preamp Selector (6) to choose the desired pre-amp emulation. The OFF button bypasses this section.

## 6. Preamp selector:

Use this slider to select the desired preamp (for each BANK: LINE-MIC-CUST); Hold down the selector or drag it to select the desired preamp.

LINE: from Ch.1 to Ch 16

MIC: from Ch.1 to Ch 16

CUST: from Model.1 to Model 6

## 7. Oversampling menu:

This menu allows you to change the oversampling rate to improve the audio quality increasing the sampling frequency of the plugin and minimize aliasing artefacts:

- The 1x mode bypasses the oversampling functionality.
- The 4x mode increase the sampling frequency of the preamp being processed by a fixed multiple of 4x.
- The 8x mode increase the sampling frequency of the preamp being processed by a fixed multiple of 8x (CPU intensive).

## 8. Size:

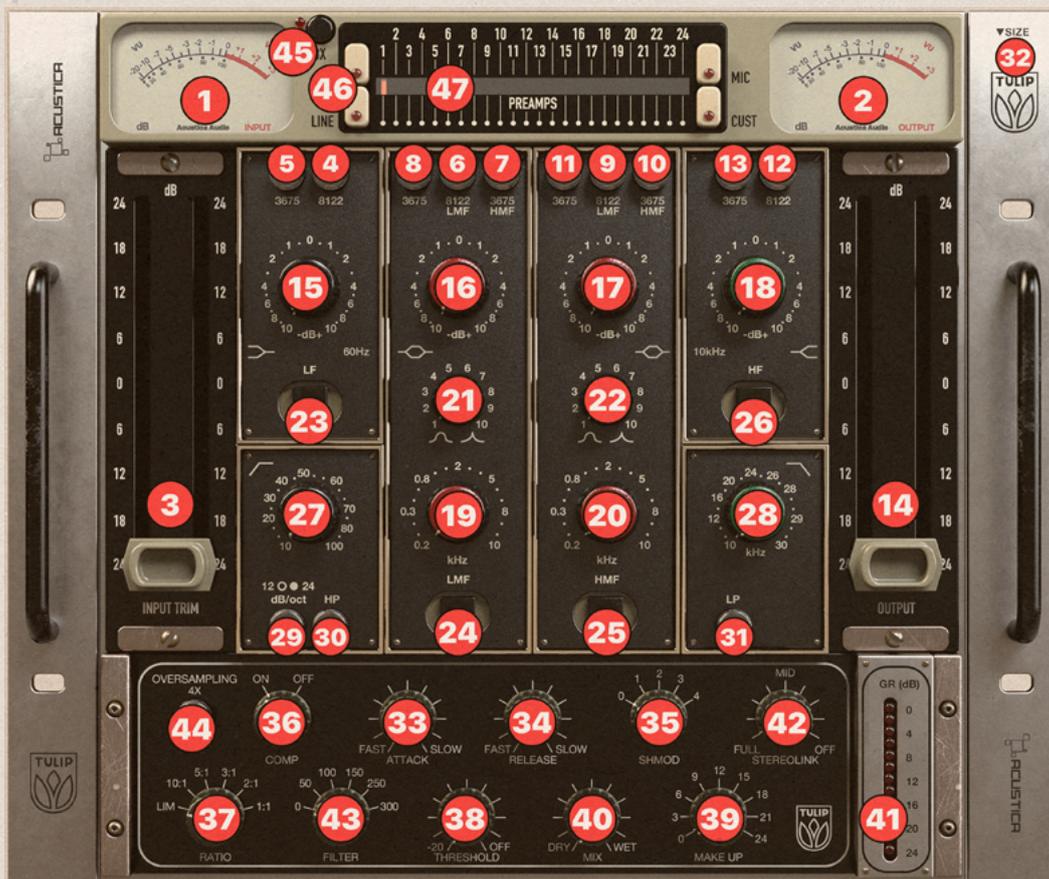
Adjust the whole plugin-GUI size. Choose between 3 magnifications (1x - 1.5x - 2x) from the top right SIZE drop-down menu. Once the desired size has been selected, the plugin must be removed and re-loaded in order to apply the new size. New instances of the same plugin will open with this size.



## 3.4. TULIP CHANNEL STRIP

The Tulip 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.

### 3.4.1. TULIP CHANNEL STRIP CONTROLS



#### 1. Input VU meter:

Measures the Input signal level. Range: -20 dB, +3 dB.

#### 2. Output VU meter:

Measures the Output signal level. Range: -20 dB, +3 dB.

### **3. (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.

### **4. 8122 – LF (Band1):**

Selects the LF band 1 of the 8122 EQ model.

### **5. 3675 – LF(Band1):**

Selects the LF band 1 of the 3675 EQ model.

### **6. 8122 – LMF (Band2):**

Selects the LMF band 2 of the 8122 EQ model.

### **7. 8122 – HMF (Band2):**

Selects the HMF band 2 of the 8122 EQ model.

### **8. 3675 – LMF/HMF(Band2):**

Selects the LMF/HMF band 2 of the 3675 EQ model.

### **9. 8122 – LMF (Band3):**

Selects the LMF band 3 of the 8122 EQ model.

### **10. 8122 – HMF (Band3):**

Selects the HMF band 3 of the 8122 EQ model.

### **11. 3675 – LMF/HMF(Band3):**

Selects the LMF/HMF band 3 of the 3675 EQ model.

### **12. 8122 – HF (Band4):**

Selects the HF band 4 of the 8122 EQ model.

### **13. 3675 – HF(Band4):**

Selects the HF band 4 of the 3675 EQ model.

### **14. Output:**

Controls the output level of the Channelstrip.

### **15. Low Shelf – Gain:**

This knob is a gain control for the Low Shelf at 60Hz - ranging from approx -12dB to +12dB for the 3675 EQ, from -10dB to +10dB for the 8122 EQ.

### **16. Low Mid Frequency peak gain:**

Approx -10 to +10dB for the 8122 EQ; approx -9 dB to +9 dB for the 3675 EQ.

### **17. High Mid Frequency peak gain:**

Approx -10 to +10dB for the 8122 EQ; approx -9 dB to +9 dB for the 3675 EQ.

### **18. High Shelf – Gain:**

This knob is a gain control for the High Shelf at 10kHz - ranging from approx -12dB to +12dB for the 3675 EQ, from -10dB to +10dB for the 8122 EQ.

### **19. Low Mid Frequency band (Band2):**

From 20 to 1 kHz for the Band2 selecting the LMF 8122 EQ model. From 0.7 to 7 kHz for the Band2 selecting the model 3675 EQ model;

### **20. High Mid Frequency band (Band3):**

From 0.2 to 10 kHz for the Band3 selecting the HMF 8122 EQ model. From 0.7 to 7 kHz for the Band3 selecting the model 3675 EQ model;

### **21. Low Mid Q:**

The Q button modifies the bandwidth of the Low-Mid (LMF) frequency bands (Peaking) of the 8122 EQ model. It toggles between Broad to Narrow. This control is NOT available for the 3675 EQ model.

### **22. High Mid Q:**

The Q button modifies the bandwidth of the High-Mid (LMF) frequency bands (Peaking) of the 8122 EQ model. It toggles between Broad to Narrow. This control is NOT available for the 3675 EQ model.

**23. LF – EQ button (Low Freq - band 1):**

This buttons allow you to activate the EQ band1.

**24. LMF – EQ button (Low Mid Freq - band 2):**

This buttons allow you to activate the EQ band2.

**25. HMF – EQ button (High Mid Freq - band 2):**

This buttons allow you to activate the EQ band3.

**26. HF – EQ button (High Freq - band 2):**

This buttons allow you to activate the EQ band4.

**27. Lo Cut (HP):**

From 10 Hz to 100 Hz.

**28. Hi Cut (HP):**

From 30 kHz to 10 kHz.

**29. Lo Cut filter Slope:**

This button change the slope of the Low Cut (HP) filter from a 12 dB/oct slope to a 24 dB/oct.

**30. Lo Cut activation button:**

Activates (Led On) the Low Cut /High-pass filter.

**31. Hi Cut activation button:**

Activates (Led On) the Hi Cut /Low-pass filter.

**32. Size:**

Adjust the whole plugin-GUI size. Choose between 3 magnifications (1x - 1.5x - 2x) from the top right SIZE drop-down menu. Once the desired size has been selected, the plugin must be removed and re-loaded in order to apply the new size. New instances of the same plugin will open with this size.

**33. Attack:**

The attack time control of the compressor. All Comp/Limiter models included in Tulip share the same attack times.

Values: 0.38 mS, 10 mS, 26 mS, 30 mS, 43 mS, 61 mS, 96 mS.

NOTE: In Brickwall1 this controls isn't available.

The attack times in 'red', were added by Acustica to make the compressor even more powerful.

### **34. Release:**

Release time control of the compressors. All Comp/Limiter models included in Tulip share the same release times.

Values: 54 mS, 35 mS, 135 mS, 222 mS, 791 mS, 3.4 S, 7.5 S.

The release times in 'red', were added by Acustica to make the compressor even more powerful.

### **35. 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.

### **36. Compressor modes:**

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

COMP (a faithful 'digital' copy of the compressor unit). Oversampling-rate functions available (1x, 2x, 4x, 8x, 16x).

ULTRACOMP (a 'Frankenstein' Compressor by Acustica based on our 'Hypercomp' tech). Oversampling-rate functions available (1x, 2x, 4x, 8x, 16x).

BRICKWALL1 (1st 'Frankenstein' brickwall limiter by Acustica). It's an emulation of a traditional brickwall limiter that does not allow transients to exceed the maximum limit when the input gain is set to maximum. Sc Filter, Stereo link, Attack and SHMOD controls not available in this mode. Oversampling-rate functions available (1x, 2x, 4x, 8x, 16x).

BRICKWALL2 (2nd 'Frankenstein' brickwall limiter by Acustica). It is characterised by Tulip's attack-release times, a fixed ratio (static curve) derived from an iconic VCA compressor. Unlike the more 'traditionally' designed Brickwall 1, the Brickwall 2 is able, by adjusting the available attack and SHMOD controls, to achieve the desired volume while preserving the transients and dynamics of the track. The SC Filter, Stereo link and Ratio controls aren't available in this mode. Oversampling-rate functions available (1x, 2x, 4x, 8x, 16x).

### **37. Ratio:**

Sets the ratio of the compressor; Range: 2:1 – 3:1 – 5:1 -10:1 Lim (20:1) Lim2 (30:1). This control isn't available in Ultra-comp, Brickwall1 and Brickwall2.

### **38. Threshold:**

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

### **39. Make-up:**

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

### **40. 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%.

### **41. Gain reduction meter:**

This meter displays the gain reduction level applied by the compressor. Range: -38dB to +0 (in Peak and RMS).

### **42. Stereo Link:**

Use this control to link or unlink the response of the left/right channels when working on a stereo source.

### **43. 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.

#### **44. Comp 4X button:**

Oversampling button that act exclusively on the Comp section changing the oversampling rate (4x) to improve processing quality.

#### **45. 8X button:**

Oversampling button that act exclusively on the Preamp section changing the oversampling rate (8x) to improve processing quality.

#### **46. Preamp Bank selector:**

Use these buttons to select the preamp BANK:  
LINE-MIC-CUST.

Use the Preamp Selector (6) to choose the desired preamp emulation.

The OFF button bypasses this section.

#### **47. Preamp selector:**

Use this LED slider to select the desired preamp (for each BANK: LINE-MIC-CUST). Hold down the selector or drag it to select the desired preamp.

Details:

PRE LINE: 16 Line preamps from the 8122 console  
(Ch.1 through 16)

PRE MIC: 16 Mic preamps from the 8122 console  
(Ch.1 through 16)

PRE CUST:

- 1) 8122 ST MIX (Stereo Mix)
- 2) 8122 MONO MIX (Mono Mix)
- 3) 3675 ST (Stereo Pre from two 3675 EQ units)
- 4) 3675 MONO (Mono Pre from a 3675 EQ unit)



## 4. HOW TO DOWNLOAD, INSTALL AND AUTHORIZE YOUR PRODUCT

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](http://www.acustica-audio.com/pages/aquarius)

### 4.1. DOWNLOAD A PRODUCT IN AQUARIUS DESKTOP APPLICATION

To download a product using the Aquarius Desktop application go to the purchase page and select the product and format (VST2, VST3, AAX, AU) to install. In case you can't find your product on the purchase page use the search page.

### 4.2. INSTALL A PRODUCT IN AQUARIUS DESKTOP APPLICATION

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

## 4.3. AUTHORIZE A PRODUCT IN AQUARIUS DESKTOP APPLICATION

The authorization is done automatically by the Aquarius Desktop application after the product installation. You can manage your authorizations using the Aquarius Web Service. Click [HERE](#) for a complete installation user guide

## 5. 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>

## 6. 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.

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