# **ALEXB PROGRAMS MANUAL**

Rev. 171222



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## ABOUT ME

AlexB is a one-man company, so:

Hi!I'm Alex:)

I have been a member of the Acustica Audio community since the 2007, and started Beta-Testing in 2009. I released my first commercial program libraries for Nebula Pro in 2009 because I wasn't satisfied by the sound of theplugins.

What I looked for was a good emulation of the console to improve my music - I have composed a lot of songs for Café del Mar in that years. My first Café del Mar recording was done with a Korg CR-4 only, then the following years I have moved to PC world and Nebula has been found as the plugin of my dreams.

Sincerely at the first test I wasn't satisfied at all by the sound. The libraries was very poorly sampled and the plugin was a little cloudy and flat.

After being in touch with Giancarlo (the genius behind Acustica Audio) and to have said him about my thoughts about what to improve in Nebula, he has promptly given me a new improved release of the plugin. We have continued for the whole afternoon and after some exchanges of test and new releases, finally Nebula became dynamic, open, deep and with life. Thank you Giancarlo !

So, pushed by this experience I've made some of the most highly sought after and rare hardware devices available for use in the digital world while maintaining virtually all of the analog character that makes recording a true art-form. Every sampled hardware piece has been refurbished and modified to improve the sonic characteristics, thanks to my 30+ years of experience in electronics and audio engineering. With hyper-realistic samplings of pristine mastering equalizers, top class consoles, the most sought after compressors, and the rarest vintage devices, I'm proving to the audio community that Acustica Audio sets the standard for the finest sound quality in the digital realm by facilitating a true analog experience with programs that make full use of the VVKT technology.

Please visit the website for more information: <u>http://www.alexb.eu</u>

Thank you !

AlexB... Audio Renaissance.

## NOTICES

<u>Please do not illegally share the program libraries, your financial support allow me to continue in</u> <u>developing</u>. **Be aware: there isn't any authorized reseller of my programs**.

#### Disclaimer

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Technical support is for customers only. You can ask support via email or web form and receive a reply at least into 24 hours.

Thank you

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# 1. Documentation, Installation and Support

## 1.1 - Introduction

Thank you for purchasing the AlexB library programs for Nebula.

Now you have one of the best professional high quality audio software. I have spent countless hours to develop these no-compromise programs to give you only the best sound and the most realistic "feel" as possible to the real hardware. I'm confident that this plugin will help you make better and more professional mixes (while enjoying yourself even more)... Because: Sound First !

If you have any trouble with the software please do not hesitate to contact me at:

support@alexb.eu

## 1.2 - Overview

Despite the digital revolution in the pro audio industry, many of today's top albums are still mixed on analog consoles and with analog outboard gear. Mixing into an analog desk just sounds better. Everything sits better in the mix, there is more weight to the bottom, and the overall sound is more three dimensional.

Analog devices produce electrical artifacts that affect frequency response, add harmonics, cause signal clipping and increase noise. These artifacts, which audio engineers often consider the character of a particular device, result from a combination of factors such as component grade, technology type (i.e. vacuum tubes, ICs, transistors), power supply specifications, equipment casing and other variables.

Depending on the circuit characteristics, input signal frequency response varies. Some circuits cut frequencies, others boost them. This behaviour is part of the overall device character and should not be confused with user adjustable EQ.

Total harmonic distortion (THD) is based on the levels of the odd and even harmonics of an input signal, usually at a level much lower than the fundamental level. THD balance and decay are circuit dependent, and thus differ from device to device.

Cross-Talk and Noise are two elements which every designer tends to avoid to not affect the audio quality. Since in the analog world they can't be avoided, fortunately in digital domain with Volterra Technology I have reduced the noise at less of -120dBfs and completely avoided Cross-Talk during the sampling.

The result is an optimum full quality sound from a like-new working condition hardware.

I have recreated these non linearity characteristics into these programs by sampling the units in excellent condition. Your tracks will become more alive with the classic vibe of a real hardware and you may notice that your mixes may take on an almost magical quality with punch, glue, and dimension that you didn't hear with your other algorithmically based plugins.

#### 1.3 - Sampling Process

I believe that "Vectorial Volterra Kernels Technology" is the path of the future and will enable analog sound to be implanted into digital DAW environments with real harmonic content and analog vibe. In my creation of these Nebula Programs, I use only top notch modern and vintage gear, precisely sampled by using my own proprietary technique with custom converters I have built specifically for NAT3 which outperforms top notch commercial converters. Ultra filtered and stable AC supply, high end cables, with particular care to the connections, levels and impedance matching were used to translate the sonic qualities of this priceless devices into the Nebula software technology. Every captured sample is analyzed and carefully listened. Every volume change, gain change, frequency change is tested and accurately programmed without destructive digital processing for optimized sound and then compared to the original device. The result is a virtually indistinguishable digital replication of this landmark device.

The hardware is sampled without introduction of noise or aliasing. The thinking behind this process is to provide the full quality of the analog behavior, which means placing all emphasis on quality over cpu resources. The process is extremely efficient and optimized to be used on current computer technology with a forward thinking to the future of more powerful systems, but this will be a more cpu-intensive device than your typical software. Consider the value in having even one instance of the original unit in your hardware rack and choose to see the true value in having the best sound that technology has to offer.

The preset doesn't sound processed, harsh or digital as many plugins do, but instead it sounds like a natural extension of the original audio, gluing your tracks in the mix with an analog vibe.

Some plugins make your recordings sound like digital. Some plugins are supposed to make your recordings sound like analog. THIS plugin helps make recordings sound like MUSIC !

## 1.4 – Golden Edition Plus

Golden Edition *Plus* is the last evolution in sampling and programming to answer at the customers demand for a program library which covers the whole sample rate range used in musical production: 44.1kHz, 48kHz, 88.2kHz and 96kHz.

To make this a new resampling of the units was necessary, so why not to improve the audio quality also ?

A revision of my custom-built self-made converters has been done, which employs a non commercial chip used in military satellites - thanks to my previous work as chief technician into electronics and telecommunication lab for over 15 years, where called me "the doctor"... (who?), I had access at that technology - and a new sampling and programming technique has been developed with custom template and build up process.

The new Golden Edition *Plus* library allows better sound with less - unnecessary - kernerls, i.e. less CPU/RAM load and less latency which doesn't make necessary anymore the LE version; new and useful set of presets with program-change to expand the possibilities by leaving room for creativeness.

#### 1.5 – Compressor's Regeneration

My mastering studio is full analog and the reason is because I never liked digital compressors, neither vst or Nebula world. So I was reluctant to revise my old releases of compressor programs library for Nebula, BUT some beta-testers and a good friend have pushed me to try to improve the behavior and audio performance as much as possible.

As usual my wish was to release a good program library with the authentic behavior and sound, to give the opportunity at who can't own the hardware unit to have that expensive sound in the box, at a fraction of his cost.

So, I have tried several ways to make work better my "bad" compressors, after five new internal releases that I haven't liked, I have decided to start from zero.

A new complete multi-template has been developed, without the use of my obsolete ten years old NAT3 release.

Every single sample, program line, every parameter and digit, every compression curve, attack and release shapes have been programmed, edited and calibrated manually, then tested, compared and listened with the original unit.

When the program was ready, a fine tuning has been done with double check: analyzing and listening session. This has been done for every single input/record changed/edited bit.

A very long and hard work, the same I do when I modify/upgrade the hardware !

The whole development's process has required over 960 hours of work, sampling, programming, testing, thus converting into digital world over 6000 records manually (!!!).

The final result was a musical compressor with the reaction and behavior very close at the unit sampled, with the exact curve's shape of the compression, attack and release which follow the envelope-follower. The attack curve's shape gives the character by bringing the transient - it makes recognizable the classic compression sound of the hardware: snap, smooth puff, etc... - while the release curve's shape gives his breath at the music.

At the end of this fantastic adventure:

thanks to all many customers that have written me emails by showing their respect and support for my work, so as the beta-testers and friends.

Cheers



The curve's shape of the compression soft and hard knees

The curve's shape of the attack and relese transients



Attack: 2.63 ms Attack measure: 63.0 % GR Release measure: 63.0 % GR

The curve's shape of the Gate release

The curve's shape and timing of the compressor

## 1.6 - System Requirements

- Intel or AMD CPU based PC or MAC computer
- Free space on Hard Disk or better SDD (library size depending)
- Nebula3 v1.3.903 or Nebula4 with installed commercial license

## 1.7 – Installation and file BACKUP

After downloading, unpack the files and **make a safe backup** of the library. I reccommend to use a Toshiba Canvio 2.5" HD as well to do a regular backup of your system with Acronis True Image.

Copy the files manually, \*.N2P into \programs folder and \*.N2V into \vectors folder. Clean the \temp folder in the main root nebulatemprepository.

#### 1.8 - The Skin

Skins for Nebula3 and Nebula4 have a cost but they are included in the libraries as gift.

To install the skin into Nebula3:

- 1 copy the \*.N2S file into the root skin folder
- 2 run your DAW and open Nebula
- 3 go into MAST Page
- 4 set the Skin to ALEXB\_N3
- 5 click on save and reload Nebula

To install the skin into Nebula4:

- 1 copy the \*.N2S file into the root skin folder
- 2 copy the Properties files into Properties root folder (present only if special N4 skin is available)
- 3 run your DAW and open Nebula
- 4 load a preset

SK libraries have special functions like "preset change" which allow you to switch between the programs by retaining the settings. The use requires Nebula Setup. You can follow the video instruction in the product web page.

After installation it's recommended to clean the \nebulatemprepository\temp folder. Now you are ready to go at the next step to read how to use your new Nebula library!

#### <u>Remember:</u>

Scientific studies have proven that the brain is influenced more by the visual stimuli than acoustics. What you see is not what you hear. In mixing and mastering nobody can hear your screen.

# 2. General Use

## 2.1 - Parameter Settings

Some parameters must to be set into Nebula to work correctly with AlexB Programs.

<u>Nebula3</u>

The best way is to make copy-and-paste of Nebula3.dll and Nebula3.xml (or whatever is the name of your installed Nebula plugin has) then rename both copies as AlexB-N3.dll and AlexB-N3.xml. Now set the following parameters by editing the AlexB-N3.xml file:

<AHEADLENGTH> 6000 </AHEADLENGTH>
<RATECONVERSION> 4500000 </RATECONVERSION>
<OFREQD> 11 </OFREQD>
<SKINNAME> ALEXB\_N3.N2S </SKINNAME>
<DSPBUFFER> 8192 </DSPBUFFER> (optional for better audio quality)

click on save and load the AlexB-N3 in your DAW.

<u>Nebula4</u>

The best way is to make copy-and-paste of N4.dll and N4.xml then rename both copies as AlexB-N4.dll and AlexB-N4.xml. Now set the following parameters by editing the AlexB-N4.xml file:

<AHEADLENGTH> 5000 </AHEADLENGTH> <OFREQD> 11 </OFREQD> <OTIMED> 5 </OTIMED> <LEDSPEED> 3 </LEDSPEED> <DSPBUFFER> 8192 </DSPBUFFER> (optional for better audio quality)

click on save and load the AlexB-N4 in your DAW.

**NOTE:** MAC users find more info on the "MAC Nebula4 Setup Addendum" on the website: www.alexb.eu/nebula/AlexB\_MAC\_Nebula4\_Setup\_Addendum.pdf

## 2.2 - Off Line Process

If your DAW isn't powerful or you want/need to freeze or export processed audio tracks I strongly recommend the Free NEBULASETUP2 by Zabukowski: http://zabukowski.com/software/

## 2.3 – Web Tricks, Trolls, Haters, Rumors, Myths...

#### TIMED and Kernel Length

On the forums you will find many "tricks" which theoretically will improve sound and performance: **WRONG !** Please leave the libraries at their original conditions !

Results from these changes are widely varied and often lead to very undesirable results, as losing dynamics and details.

The presets are programmed to sound as close as possible to the original sampled hardware. **If you** change any parameter than the sound changes and it will be very different from the original sampled unit.

Don't care, I don't, about all these rumors, tricks, myths and a tons of misinformations from wannabe, trolls, haters & Co. which make things up about what someone has said by pretending to know everything about what he thinks, how he works, what he does... And what he have to do.

My programs are perfect as is, they don't need any fix or debug\*.

I'm referring to MY programs only. I haven't the arrogant presumption to say how other 3rd party developers work, think, or to tell them what they should do.

I sample at the right level and matched impedance, my converters allow to set and fine tuning these parameters.

I use real OdBVU = -18dBfs reference to capture the real spectral and harmonic contents. Sampling in this way gives the best and authentic sound compared to the sampled unit but also some minor and irrelevant side effects which will be described underneath.

Sampling with lower value and then rise it digitally will produce a processed lifeless sound.

A lot of confusions and misinformations has appeared with the event of the plugin analyzers. These tools are funny to use with plugins but if used with libraries they can show some good and some not so good things, in some case they are artifacts created by them self.

(I don't use these tools, they are amateur-funny but not reliable for professional use. They use single sweep/tone analysis, professional tools use calibrated multitone analysis and they cost 1000 times more).

## Chirp... Chiorp, Chiurp !

Analyzing the library without the right gain staging it can show distortion and spike (someone called it "chirp" – but chirp is a sweep, as reported in the Audio Precision user manual) because the analyzer clips the library to 0dBfs while a library has the sweet spot at -18dBfs. So, no birds in the library. XD

At the right level, no audible artifact is perceived and in the worse case that spike lives in the -80dBfs region. very close at the noise floor of the majority of the hardware processors. So, don't care.

To go to fix something that is not present or evident, because I wouldn't like to see it on the screen, it damages and compromises the sound only by making the audio lifeless and flat. My test with the beta-team proves it.

#### <u>Wooobble !</u>

Another side effect I saw at the beginning of the sampling era is the ripple, which someone call it wobble. Like the spike, ripple is a side product of the sampling process which lives in the bottom end of the frequency spectrum. With the right use of the library and the right gain staging and clean monitoring-room system it is almost inaudible or negligible. Reducing this artifact with programming tricks only it's not good because the sound become lifeless and flat.

Recently with the Golden Edition releases the new sampling-programming process allows to reduce the ripple at +/-0,1dB.

Curiously in over ten years nobody has complained about ripple and spike, before the event of these plugin analyzers, and a lot of records has been produced – as Grammy Hawards, Cine Hollywood, Top Hits Records ... - .

But now yes: we hear all these artifacts with the eyes ! LoL

## Another myth is the preamp. In the equalizer library.

Assuming that this hardware hasn't the preamp but a make-up gain depending by the circuit adopted, my equalizer libraries don't need that "preamp" preset because they has been developed to work and to sound in the same way as the sampled hardware. The interaction between the preset at 1K and 3k or 5K, as described in the program manual, it gives the exactly behavior and sound by filters and make-up stage. A different mode like filters + preamp has given poor and inferior results in terms of audio quality during beta-testing: lifeless, narrow and flat stereo image, unfocused details and less dynamics compared to my technology.

I have tried it in the 2009 and beta-tested it again and again during these years, so I still don't use filter + premp mode because the hardware is not built in this way and this system-preset doesn't sound good.

\*At the end:

the demo audio and some demo programs are available to evaluate the quality and usefulness of my programs. If you don't like what you hear simply don't use/buy it.

Thanks

## 2.4 - Gain Staging

GUI's meters show the value in dBfs.

Take care with gain staging since the programs are close to the hardware, as reference OdBVU on the hardware corresponds to -18dBFS on your DAW digital meter.

Normally the best sound is achieved with <u>occasional maximum digital peaks to -10dBfs</u>, i.e. kick or snare transients, pluck synth and other hits. On the mixbus the whole mix can hit an <u>occasional</u> <u>maximum digital peaks between -8dBfs and -6dBfs</u>. (imperative!)

When the signal is too high the sound will be congested and saturated/distorted in a bad way, too high peaks (and inter-sample peaks) overload Nebula which plays a BLIP as alert.

I recommend to mix with a good and precise VU Meter like this by Waves: https://www.waves.com/plugins/vu-meter



It mimics the way our ears react to sound by giving you a more realistic representation of the way audio level changes are actually perceived.

In this way you can easily check the levels on every single track and for the whole mix by inserting the VUMeter as last instance on the mixbus and by setting the OdBVU = -18dBfs on it (Headroom).

I suggest to deactivate or remove the VU Plugin when you export the mix to avoid any coloration. Yes, some plugins color the sound even if they are analyzers and/or bypassed.

**NOTE:** a console, limiter, equalizer, tape machine or compressor is not a guitar amp! If you drop the level back to where it wuold be using the real hardware, libraries can sound huge.

#### Useful video about to use the VU Meter and Gain Staging:

https://www.youtube.com/watch?v=2DVz\_T48M-Q https://www.youtube.com/watch?v=ECRx4WF3pcc

Great book about audio recording engineering: https://bobbyowsinski.com/recording-engineers-handbook/

Another great book about music production with my contribution about console: https://www.routledge.com/Producing-Music-1st-Edition/Hepworth-Sawyer-Hodgson-Marrington/p/book/9780415789226

## 2.5 - Common Controls

All programs have some common controls which are detailed below.

#### Input Gain

The Input Gain control sets the level at the input of the plugin. The range is from  $-\infty$  dB to +6 dB.

#### **Output Gain**

The Output Gain control sets the level at the output of the plugin. The range is from  $-\infty$  dB to +6 dB.

#### Bypass

This switch control sets the plugin operative or bypassed

#### Meters

Input and Output Meters display the levels at the input and output of the plugin in dBfs. Compressors and Expander/Gate have a gain reduction meter also.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 3. Modern Flagship Console – Golden Edition

## 3.1 - About the original hardware

The Modern Flagship Console has set new standards as the ultimate analogue console and has become the signature of excellence for the world's premier engineers, producers and studios. Professionals throughout the world have chosen the full, clean sound of the Modern Flagship Console. Its high bandwidth pure audio path, superior dynamics, greater dynamic range and greater control make the Modern Flagship Console the first choice for recording and mixing the purest high fidelity recordings.

With its 100kHz bandwidth the Modern Flagship Console has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

#### 3.2 - Session Setup

Modern Flaghship Console reproduces the sound of Modern British Recording Console by using a library programs consisting of channels input, group bus and mixbus. To faithfully reproduce into the DAW the analog console signal chain and workflow, I recommend using the Modern Flagship Console in these session setup configuration:

Recording Console Emulation

- Insert the Line Input preset on the first insert of the DAW audio tracks
- Insert the Mix Bus preset on the first insert of the DAW master bus
- If you group channels in you DAW, i.e. drums elements, you can insert the Group Bus preset as first insert in the submix group bus.
- Start your mix !

#### Mixing Console Emulation

- Insert the Line Input preset on the last insert of the DAW audio tracks
- Insert the Mix Bus preset on the last insert of the DAW master bus
- If you group channels in you DAW, i.e. drums elements, you can insert the Group Bus preset as last insert in the submix group bus.
- Start your mix !

You should set the Pan Law in the DAW at -3dB.

**TRICK:** to emulate the non linearity between the channels of the console, you can set the GDRV control slightly different on every track into a range of +/-3dB.

#### **TIP:** Which configuration to use ?

If you have recorded your tracks with a console or with colored preamps – by hardware or by processing the audio files with, for example, the Preamp Colors & Saturation library – then the Mixing Console Emulation is the right choice.

If you have tracking with clean and sterile preamps or your song has a lot of VST-instruments, the Recording Console Emulation may to work better.

Experimenting and choosing by personal taste is the best way.

#### 3.3 - Preset list:

The Modern Flagship Console GE library includes the following programs displayed into menu "MFC" and subgrouped into 44.1kHz, 48kHz, 88.2kHz and 96kHz.

MFCGE Input Line MFCGE MIC Preamp MFCGE LFE MFCGE G.Bus MFCGE M.Bus MFCGE M.Bus Add-Ons

#### **MFCGE Input Line**

Input Line is the first stage of the console, normally it works as line amplifier and you should insert it in every track as first or as last insert.

#### MFCGE MIC Preamp

Microphone Preamplifier has more coloration than Input Line and you can use it when more character is needed. You can use it instead-or-with the Input Line, at your taste.

#### MFCGE LFE

The Low Frequency Effect Channel is a special channel used for sub frequency effects like explosions, deep bass, etc. It should be used in parallel with a normal channel since LFE has a low pass filter at 120Hz.

#### MFCGE G.Bus

If you send some tracks to a submix bus group in your DAW and you like to have the real sound by Bus Group of the console, you can use the G.Bus preset as insert into DAW's submix bus group. G.Bus has new concept in the Golden Edition: instead to have more presets with different colors, there is one only with the control labeled G.BUS which allows to choose different colors:

- 1: Clean = Original Clean G.Bus, the sound from the console
- 2: Drum = Original Clean G.Bus with 88RS channel eQ patched
- 3: Percussions = Original Clean G.Bus with vintage Pultec patched
- 4 : Acoustic = Original Clean G.Bus with GML8200 patched
- 5 : Guitars = Original Clean G.Bus with vintage API 550A patched
- 6: Synthpad = Original Clean G.Bus with vintage Moog PEQ patched
- 7: BGVocals = Original Clean G.Bus with custom handmade AlexB Parametric EQ patched
- 8 : Ambient = Original Clean G.Bus with vintage Filtek PB1 parched

#### MFCGE M.Bus

M.Bus is the final stage of the console, it must be the first or last insert in the mixbus of the DAW. The M.BUS gives the original clean glue of the console.

#### MFCGE M.Bus Add-Ons

M.Bus has new concept in the Golden Edition: instead to have more presets with different colors, there is a preset called M.Bus ADD-Ons which could be used to give different colors. The TONE control switchs between the sound of some top notch hardware with light equalization setup:

1 : Vintage = Vintage TG Mastering eQ 2 : Classic = Vintage Sontec 432 3 : Modern = SPL PQ

**NOTE:** ADD-Ons preset must be placed after M.Bus preset for the right interaction with it. Use the ADD-Ons only if you need it, of course.

3.4 - Controls

Over the common and the above described controls, MFCGE has also:

## - GDRV: GDrive Control

The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

## - THD: Drive Control

The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. It rises ALL the harmonics at the same time. The available range is ±12 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 4. Modern Flagship eQualizer – Golden Edition

#### 4.1 - About the original hardware

The Modern Flagship eQualizer has set new standards as the ultimate analogue processor and has become the signature of excellence for the world's premier engineers, producers and studios.

This equalizer is very usable and controls most situations effortlessly and musically, with a smooth filters section, a sweet top-end and powerful lows, with less midrange aggression than a classic British eQ.

Modern Flagship eQualizer manages to sound clean and crystal clear without being weak and characterless. There is little apparent colouration, just a maturity of tone.

With its 100kHz bandwidth the Modern Flagship eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

#### 4.2 - Session Setup

Modern Flaghship eQualizer reproduces the characteristic sound of Modern British Console channel strip's eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, I recommend using the MFeQ in all tracks where you need to shape the sound.

- On single track the Modern Flaghship eQualizer works great on all instruments and voices.
- On master track the Modern Flaghship eQualizer gives at the whole mix his classic clean, natural and musical sound.

To emulate the original unit sound you should use both presets 1k and 3k by mixing them in this way:

- When a single equalization band only is required you should use the 3k preset.
- When you need more than one band of equalization you should use the 1k presets and as last band the 3k. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one 3k preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the THD control slightly different on every instance into a range of +/-2dB.

4.3 - Preset list:

The Modern Flagship eQualizer GE library includes the following programs displayed into menu "MFQ" and subgrouped into 44.1kHz, 48kHz, 88.2kHz and 96kHz, every subgroup has 1k and 3k subgroup.

MFeQGE HPF MFeQGE Low Shelf / Bell MFeQGE 120 – 1300Hz MFeQGE 1.3 – 9Khz MFeQGE High Shelf / Bell MFeQGE LPF

#### MFeQGE HPF

High Pass Filter -12dB/oct from 30Hz to 300Hz.

#### MFeQGE Low Shelf / Bell

Low Band from 33Hz to 440Hz +/- 20dB switchable from shelf to bell with Q 0.7 and Q 2.0.

#### MFeQGE 120 – 1300Hz

Low-Mid Band from 120Hz to 1300Hz +/- 20dB with variable Q from 0.4 to 10.

#### MFeQGE 1.3 - 9Khz

High Mid Band from 1.3kHz to 9kHz +/- 20dB with variable Q from 0.4 to 10.

#### MFeQGE High Shelf / Bell

High Band from 1.5kHz to 18kHz +/- 20dB switchable from shelf to bell with Q 0.7 and Q 2.0.

#### MFeQGE LPF

Low Pass Filter -12dB/oct from 1.5k to 18kHz.

4.4 - Controls
Over the common and the above described controls, MFeQGE has also:

#### - CUTOF: Cut Off Control

The "CUTOF" control affects the filter's frequency cut.

# - S/B : Shelf / Bell Control

This control switchs between shelf, bell with Q 0.7 and Bell with Q 0.2.

#### - FREQ: Frequency Control

The "FREQ" control sets the frequency to be boosted or attenuated.

#### - GAIN: Gain Control

The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.

#### - Q: Q Control

The "Q" control sets the amplitude of the filter selected by FREQ control.

#### - THD: THD Control

The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. It rises ALL the harmonics at the same time. The available range is ±12 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

## 5. Modern Flagship Dynamics – Golden Edition

### 5.1 - About the original hardware

The Modern Flagship Dynamics has set new standards as the ultimate analogue processor and has become the signature of excellence for the world's premier engineers, producers and studios.

This compressor is very usable and controls most situations effortlessly and musically, with a smooth or hard knee, a sweet top-end and powerful lows, with less aggression than a classic RMS compressor.

Modern Flagship Dynamics manages to sound clean but with character without being weak and harsh. There is little apparent colouration, just a maturity of tone.

With its 100kHz bandwidth the Modern Flagship Dynamics has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

#### 5.2 - Session Setup

Modern Flaghship Dynamics reproduces the characteristic sound of Modern British Console channel strip's Conmpressor, Expander and Gate; this kind of dynamics are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, I recommend using the MFD in all tracks where you need to control dynamically the sound.

On single track the Modern Flaghship Compressor/Gate-Exp works great on all instruments and voices. You can use it on group bus also with excellent results.

To emulate the original unit sound you should use the presets in this way:

- When a compressor is required you should use the Comp preset followed by the Line Out preset.
- When your track needs a Gate or Expander, you should use the Gate or Exp preset followed by the Line Out preset.
- If you need both Gate/Expander and Compressor you should insert the Gate, or Exp, preset then the Comp preset and finally the Line Out preset.

Compressor loves to be pushed hot, input peak signal between -2dBfs to -6dBfs are good for that typical softness transient sound of this unit. Input levels above -8dBfs allows more glue and musicality. Anyway: use your ears and enjoy ! :)

#### External SideChain

The Sc presets are useful to control the dynamic module of the Compressor or the Gate/Expander via external sidechain for ducking, pumping or other effect. To use sidechaining correctly please refer at the manual of your DAW.

This function works on Nebula4 only.

**NOTE:** use the presets you need only. Stacking unnecessary presets is the wrong way to emulate the sampled hardware. i.e. don't stack Gate/Exp + Comp + Line Out if you need the Comp or Gate/Exp only.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the THD control slightly different on every instance into a range of +/-2dB.

#### 5.3 - Preset list:

The Modern Flagship Dynamics GE library includes the following programs displayed into menu "MFD" and subgrouped into 44.1kHz, 48kHz, 88.2kHz.

MFDGE Gate MFDGE Gate Sc MFDGE Exp MFDGE Exp Sc MFDGE Comp MFDGE Comp Sc MFDGE Line Out

#### MFDGE Gate

Gate with attack, release, threshold, range and HPF controls.

#### MFDGE Gate Sc

The same as the Gate preset but with external sidechain input and without HPF.

#### MFDGE Exp

Expander with attack, release, threshold, range and HPF controls.

#### MFDGE Exp Sc

The same as the Exp preset but with external sidechain input and without HPF.

#### MFDGE Comp

Compressor with attack, release, threshold, ratio, knee, HPF, gain makeup and wet/dry controls.

#### MFDGE Comp Sc

The same as the Comp preset but with external sidechain input and without HPF.

#### **MFDGE Line Out**

Line Out stage with Gdrive and THD controls.

#### 5.4 - Controls

Over the common and the above described controls, MFDGE has also:

#### Compressor

#### - ATT: Attack Control

The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The original unit has program dependent attack time which is based on transient speed. It's not possible to mimic rightly this behavior in Nebula, so the attack time in the preset is program dependent based on the audio level. The normal operation value is between 3ms to 7 ms (labeled 3.70), the fast operation value is between 1ms to 7ms (labeled 1.70). In the original unit the fast attack is activated when the control knob is pulled-out, in the preset when the control is rotated fully clockwise. This control is switchable between these two values but some slightly variants in timing can be obtained by moving the control between the two switch points.

#### - REL: Release Control

The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level.

The available range is 10ms (labeled 0.01) to 2,9s, at 3s the control switchs to AUTO program dependent release based on audio levels. In the original unit the program dependent release is based on transient speed.

#### THR: Threshold Control

The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected. The range is variable from 0 to -64.

### – RATIO: Ratio Control

The "RATIO" defines the amount of gain reduction to be processed by the module. When the control is at maximum (10), the ratio is effectively infinity to one, yielding the limiting effect.

The range is variable from 1:1 to 10:1

#### - KNEE: Knee Control

The "KNEE" control sets the compression characteristics. With hard knee compression, the gain reduction applied to the signal occurs as soon as the signal exceeds the level set by the threshold. With soft knee compression, the onset of gain reduction occurs gradually after the signal has exceeded the threshold, producing a more musical response.

The compressor has soft knee characteristics (labeled 6dB) as standard with hard knee (labeled 0dB) available by rotating fully clockwise the switchable control.

### - HPF: High Pass Filter Control

The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 2000Hz.

MAKP: Gain Makeup Control
 The "MAKP" control sets the output level of gain makeup.

The range is variable from 0dB to 25dB.

### - WET: Dry/Wet Control

This control lets you balance between processed (Wet) and original signal (Dry) allowing you to do parallel compression without routing to buses/aux. The range is variable from 0% (Dry) to 100% (Wet).

### Gate/Expander

### - ATT: Attack Control

The "ATT" control defines the attack time of the Gate/Expander.

The normal operation value is 500us, the fast value is 50us. In the original unit the fast attack is activated when the control knob is pulled-out, in the preset when the control is rotated fully clockwise. This control is switchable between these two values but some slightly variants in timing can be obtained by moving the control between the two switch points. We're speaking of microseconds, of course.

### - REL: Release Control

The "REL" control sets the amount of time it takes for processing to disengage once the input signal drops below the threshold level.

The available range is 10ms (labeled 0.01) to 3s.

### - THR: Threshold Control

The "THR" control defines the input level at which expansion or gating occurs. Any signals below this level are processed. Signals above the threshold are unaffected. The range is variable from 0 to -43.4.

### - RANGE: Range Control

The "RANGE" controls the difference in gain between the gated/expanded and nongated/expanded signal. Higher values increase the attenuation of signals below the threshold. When set to zero, no gating or expansion occurs. The available range is 0 dB to 60 dB.

### - HPF: High Pass Filter Control

The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 2000Hz.

### Line Out

### - GDRV: GDrive Control

The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach. It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

#### - THD: Drive Control

The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. It rises ALL the harmonics at the same time. The available range is  $\pm 12$  dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

### 6. Modern Tube Console – Golden Edition SK

6.1 - About the original hardware

The inclusion of valves in this console is not just a token addition. They form an essential part of the signal path at several key points within the console: every channel and mic preamp incorporates an ECC83/12AX7A valve stage, as do the Group and Stereo master MixBus amplifiers.

The original smooth and musical tube sound has been improved for better performance in headroom and dynamics by cleaning audio path and replacing the stock 12AX7 tubes with 1960 NOS Telefunken, 1980 NOS Siemens and 1970 NOS Tesla, all hand selected, balanced and matched. Some electrolytic capacitors have been replaced with Panasonic FR, Nichicon MUSE and BC while other caps have been replaced with Wima. The power supply has been improved and the sound now has more air, punch and detail with great warmth, rich harmonic content and natural in-yourface tube saturation!

With its large bandwidth the Modern Tube Console has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

### 6.2 - Session Setup

Modern Tube Console reproduces the sound of British Tube Recording Console by using a library programs consisting of channels input, group bus and mixbus. To faithfully reproduce into the DAW the analog console signal chain and workflow, I recommend using the Modern Tube Console in these session setup configurations:

Recording Console Emulation

- Insert the Line Input preset on the first insert of the DAW audio tracks
- Insert the Mix Bus preset on the first insert of the DAW master bus
- If you group channels in you DAW, i.e. drums elements, you can insert the Group Bus preset as first insert in the submix group bus.
- Start your mix !

Mixing Console Emulation

- Insert the Line Input preset on the last insert of the DAW audio tracks
- Insert the Mix Bus preset on the last insert of the DAW master bus
- If you group channels in you DAW, i.e. drums elements, you can insert the Group Bus preset as last insert in the submix group bus.
- Start your mix !

You should set the Pan Law in the DAW at -3dB.

**TRICK:** to emulate the non linearity between the channels of the console, you can set the GDRV control slightly different on every track into a range of +/-3dB.

### **TIP:** Which configuration to use ?

If you have recorded your tracks with a console or with colored preamps – by hardware or by processing the audio files with, for example, the Preamp Colors & Saturation library – then the Mixing Console Emulation is the right choice.

If you have tracking with clean and sterile preamps or your song has a lot of VST-instruments, the Recording Console Emulation may to work better.

Experimenting and choosing by personal taste is the best way.

### 6.3 - Preset list:

The Modern Tube Console GE library includes the following programs displayed into menu "MTC" and subgrouped into 44.1kHz, 48kHz, 88.2kHz and 96kHz.

MTCGE Input Line MTCGE MIC Preamp MTCGE G.Bus MTCGE M.Bus

#### **MTCGE Input Line**

Input Line is the first stage of the console, normally it works as line amplifier and you should insert it in every track as first or as last insert.

#### MTCGE MIC Preamp

Microphone Preamplifier has more coloration than Input Line and you can use it when more character is needed. You can use it instead-or-with the Input Line, at your taste.

#### MTCGE G.Bus

If you send some tracks to a submix bus group in your DAW and you like to have the real sound by Bus Group of the console, you can use the G.Bus preset as insert into DAW's submix bus group. G.Bus has new concept in the Golden Edition: instead to have more presets with different colors, there is one only with the control labeled G.BUS which allows to choose different colors:

- 1: Clean = Original Clean G.Bus, the sound from the console
- 2: Drum = Original Clean G.Bus with 88RS channel eQ patched
- 3 : Percussions = Original Clean G.Bus with vintage Pultec patched
- 4: Acoustic = Original Clean G.Bus with GML8200 patched
- 5: Guitars = Original Clean G.Bus with vintage API 550A patched
- 6: Synthpad = Original Clean G.Bus with vintage Moog PEQ patched
- 7 : BGVocals = Original Clean G.Bus with custom handmade AlexB Parametric EQ patched
- 8: Ambient = Original Clean G.Bus with vintage Filtek PB1 parched

#### MTCGE M.Bus

M.Bus is the final stage of the console, it must be the first or last insert in the mixbus of the DAW. The M.BUS gives the original clean glue of the console.

#### MTCGE M.Bus Add-Ons

M.Bus has new concept in the Golden Edition: instead to have more presets with different colors, there is a preset called M.Bus ADD-Ons which could be used to give different colors. The TONE control switchs between the sound of some top notch hardware with light equalization setup:

1: Vintage = Vintage TG Mastering eQ 2: Classic = Vintage Sontec 432 3: Modern = SPL PQ ADD-Ons preset must be placed after M.Bus preset for the right interaction with it. Use the ADD-Ons only if you need it, of course.

### 6.4 - Controls

Over the common and the above described controls, MTCGE has also:

### - GDRV: GDrive Control

The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach. It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing

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the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

### - THD: Drive Control

The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. It rises ALL the harmonics at the same time. The available range is  $\pm 12$  dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 7. Modern Tube eQualizer – Golden Edition SK

### 7.1 - About the original hardware

No other high end equaliser can offer the same degree of power and flexibility as the Modern Tube eQualizer which is included in the Modern Tube Console as parametric channel equalizer. This equalizer is very usable and controls most situations effortlessly and musically, with his warmth, transparency, smoothness and less midrange aggression than a classic British eQ. Modern Tube eQualizer manages to sound clean and clear without being weak and characterless. There is little tube colouration, just a maturity of tone.

With its broad bandwidth the Modern Tube eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

### 7.2 - Session Setup

MTeQGE reproduces the characteristic sound of Vintage Modern Tube eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the MTeQGE in all tracks where you need to shape the sound.

- On single track the Modern Tube eQualizer works great on all instruments and voices.
- On master track the Modern Tube eQualizer gives at the whole mix his classic clean, natural and musical sound.

To emulate the original unit sound you should use both presets 1k and 3k by mixing them in this way:

- When a single equalization band only is required you should use the 3k preset.
- When you need more than one band of equalization you should use the 1k presets and as last band the 3k. This interaction gives the right color and harmonic contents.

**NOTE:** *u*se the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one 3k preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the THD control slightly different on every instance into a range of +/-2dB.

### 7.3 - Preset list:

The Modern Tube eQualizer GE library includes the following programs displayed into menu "MTQ" and subgrouped into 44.1kHz, 48kHz, 88.2kHz and 96kHz, every subgroup has 1k and 3k subgroup.

MTeQGE Shelf MTeQGE 50 – 330Hz MTeQGE 330-2000kHz MTeQGE 2 – 18Khz

#### MTeQGE Shelf

Low and High Shelf combo at 80Hz and 12kHz +/- 15dB

#### MTeQGE 50 – 330Hz

Low-Mid Band from 50Hz to 330Hz +/- 15dB with variable Q from 0.8 to 7.

#### MTeQGE 330 - 2000Hz

High Mid Band from 330Hz to 2000Hz +/- 15dB with variable Q from 0.8 to 7.

#### MTeQGE 2 - 18kHz

High Band from 2kHz to 18kHz +/-15dB with variable Q from 0.8 to 7.

#### 7.4 - Controls

Over the common and the above described controls, MTeQGE has also:

#### - FREQ: Frequency Control

The "FREQ" control sets the frequency to be boosted or attenuated.

#### - GAIN: Gain Control

The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.

### - Q: Q Control

The "Q" control sets the amplitude of the filter selected by FREQ control.

### - THD: THD Control

The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. It rises ALL the harmonics at the same time. The available range is ±12 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 8. Tube Compressor 1 – Golden Edition SK

### 8.1 - About the original hardware

The Tube Compressor 1 maintains its position as the most flexible, polished sounding high end tube compressor on the market today.

This compressor has been heavy modified becoming very usable and it controls most situations effortlessly and musically, with a smooth tube sound, a sweet top-end and powerful lows, with less aggression than a classic VCA compressor.

Tube Compressor 1 manages to sound clean but with character without being weak and harsh. There is little tube and input stage colouration, just a maturity of tone. With its broad bandwidth the Tube Compressor 1 has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

### 8.2 - Session Setup

TCIGE reproduces the characteristic sound of classic British Tube Compressor; this kind of unit are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, I recommend using the TCIGE in all tracks and group bus where you need to control dynamically the sound.

On single track the TCIGE works great on acoustic instruments and voices. On group bus the TCIGE works great on drums and percussions.

To emulate the original unit sound you should use the presets in this way:

- When you need to control the dynamic Insert the Comp preset followed by the Line Out preset.
- By changing the input stage you achieve different color of the resulting sound and different compression behavior for the transients.

Compressor loves to be pushed hot, input peak signal between -2dBfs to -6dBfs are good for that typical softness transient sound of this unit. Input levels above -8dBfs allows more glue and musicality. Anyway: use your ears and enjoy ! :)

#### External SideChain

The Sc presets are useful to control the dynamic module of the Compressor via external sidechain for ducking, pumping or other effect. To use sidechaining correctly please refer at the manual of your DAW.

This function works on Nebula4 only.

**NOTE:** use the presets you need only. Stacking unnecessary presets is the wrong way to emulate the sampled hardware.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

#### 8.3 - Preset list:

The TCIGE library includes the following programs displayed into menu "TCI" and subgrouped into 44.1kHz, 48kHz, 88.2kHz.

TCIGE Comp TCIGE Comp SC TCIGE Line Out

#### TC1GE Comp

Compressor with attack, release, threshold, ratio, Input, HPF, gain makeup and wet/dry controls.

### TCIGE Comp SC

The same as the Comp preset but with external sidechain input and without HPF.

#### TCIGE Line Out

Line Out stage with Gdrive and THD controls.

### 8.4 - Controls

Over the common and the above described controls, TC1GE has also:

### - ATT: Attack Control

The "ATT" control defines the attack time of the Compressor. The control varies from 0.5ms to 50ms.

#### - REL: Release Control

The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The control varies from 40ms (0.04) to 4s.

#### - THR: Threshold Control

The "THR" control defines the input level at which compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected. The range is variable from 0 to -64.

#### - Input: Input Stage Control

The Input control sets the input stage of the compressor: DI, Line, Mic-preamp. The switchable values are 1 (DI), 2 (Line) and 3 (Mic-preamp).

#### - HPF: High Pass Filter Control

The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 2000Hz.

#### - MAKP: Gain Makeup Control

The "MAKP" control sets the output level of gain makeup. The range is variable from 0dB to 25dB.

### - WET: Dry/Wet Control

This control lets you balance between processed (Wet) and original signal (Dry) allowing you to do parallel compression without routing to buses/aux. The range is variable from 0% (Dry) to 100% (Wet).

#### Line Out and Line Out FX

### - GDRV: GDrive Control

The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

### - THD: Drive Control

The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. It rises ALL the harmonics at the same time. The available range is ±12 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 9. Vintage Mastering eQualizer – Golden Edition SK

### 9.1 - About the original hardware

Custom designed for the classical mastering division of Teldec Records, these very rare discrete stereo mastering program equalizers are passive coils. The original circuit has received some modification to make it suitable for modern mastering purpose by improving the original musicality that makes program audio sound better and more punchy just by passing through it even when set "flat".

One unit has three bands: low, mid and high while the other unit, even more rare and used to equalize the audio in the cinema, has two bands only: low and high.

With its broad bandwidth the Vintage Mastering eQualizer GE has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

### 9.2 - Session Setup

VMeQGE reproduces the characteristic sound of Vintage Program eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the VMeQGE in all tracks where you need to shape the sound.

- On single track the Vintage Mastering eQualizer works great on all instruments and voices.
- On master track the Vintage Mastering eQualizer gives at the whole mix his classic clean, natural and musical sound.

To emulate the original unit sound you should use both presets 1k and 3k by mixing them in this way:

- When a single equalization band only is required you should use the 3k preset.
- When you need more than one band of equalization you should use the 1k presets and as last band the 3k. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one 3k preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the THD control slightly different on every instance into a range of +/-2dB.

#### 9.3 - Preset list:

The Vintage Mastering eQualizer GE library includes the following programs displayed into menu "VMQ" and subgrouped into 44.1kHz, 48kHz, 88.2kHz and 96kHz, every subgroup has 1k and 3k subgroup.

VMeQGE MPE30 Movie VMeQGE HFs VMeQGE LFs VMeQGE MF

#### VMeQGE Movie

Low and High Shelf combo at 60Hz and 10kHz +/- 12dB

#### VMeQGE HFs

High Shelf fixed 10k, 20k, 30kHz +/- 10dB

#### VMeQGE LFs

Low Shelf fixed 30, 40, 60Hz +/- 10dB

#### VMeQGE MF

Mid bell fixed 125\*, 250, 500, 700, 1k, 1.4K, 2k, 2.8k, 4k, 5.6kHz +/- 10dB

**NOTE:** \* display shows 0.13kHz but the correct working frequency is 0.125kHz i.e. 125Hz.

#### 9.4 - Controls

Over the common and the above described controls, VMeQGE has also:

- FREQ: Frequency Control
  The "FREQ" control sets the frequency to be boosted or attenuated.
- GAIN: Gain Control

The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.

#### - THD: THD Control

The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. It rises ALL the harmonics at the same time. The available range is ±12 dB. **NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 10. Em-i Broadcast eQualizer

### 10.1 - About the original hardware

A Very Rare piece of British Broadcasting history, EBeQ is the rare vintage germanium program equalizer built for BBC broadcast console in the '70 years. The unit has been totally refurbished and re calibrated since it was improperly racked into fake Abbey Road case using telephone cables and low quality components.

Now, with audio grade electronics and Mogami premium cables, this fantastic EQ is returned to shine with his stunning lows, wide midrange and an incredibly airy top end, with the full germanium character and coils sweetness. This unit share the same circuitry of the Abbey Road mastering console TG12410.

With its broad bandwidth the Em-i Broadcast eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

### 10.2 - Session Setup

Em-i Broadcast eQualizer reproduces the characteristic sound of Vintage Program eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the EBeQ in all traks where you need to shape the sound.

- On single track the Em-i Broadcast eQualizer works great on all instruments and voices.
- On master track the Em-i Broadcast eQualizer gives at the whole mix his classic clean, natural and musical sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

### 10.3 - Preset list:

The Em-i Broadcast eQualizer library includes 4 different programs: HQ presets with 7 kernels and LE presets with 1 kernel displayed into sub-menu "EBQ"

EBeQ Presence : Mid bell fixed 1.4K, 2.8k, 4k, 5.6kHz + 6dB EBeQ Shelf: Low and High Shelf combo at 60Hz (Bass) +/- 6dB and 10kHz (Treb) +/- 12dB

#### 10.4 - Controls

The Em-i Broadcast eQualizer has only a few but intuitive and effective controls which are detailed below.

#### Frequency Control

**FREQ** The "FREQ" control sets the frequency to be boosted or attenuated.

#### **Gain Control**

**GAIN** The "GAIN" control sets the amount by which the frequency setting is boosted. The available range is ±6 dB for Bass and ±12dB for Treble.

#### Drive Control

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

# 11. Orbital eQualizer

### 11.1 - About the original hardware

This is an American classics from the 1980's: a quasi-parametric equalizer of high professional quality. The flexibility offered by the OReQ makes it a particularly powerful tool in nearly all areas of audio: sound reinforcement, public address, recording studio, broadcasting, motion picture sound, disco, theatre. Equipped with the optional output transformer and totally refurbished as new, the unit sounds clean, slightly dense with a nice mojo. The OReQ easily meets the quality, performance, and reliability requirements of the demanding professionals, and is also well suited for use in semi pro applications.

With its broad bandwidth the Orbital eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

### 11.2 - Session Setup

Orbital eQualizer reproduces the characteristic sound of the classic American eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the OReQ in all tracks where you need to shape the sound.

- On single track the Orbital eQualizer works great on all instruments and voices.
- On master track the Orbital eQualizer gives at the whole mix his classic clean, natural and musical sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**NOTE2:** on some frequencies when boosting or cutting, the whole volume can rise up or fall down a little, you can compensate this with the Output Gain Control.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

### 11.3 - Preset list:

The Orbital eQualizer library includes 10 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "ORQ"

OReQ 20-63Hz : Bell variable from 20 to 63Hz +/- 16dB variable Q from 0 to 10 OReQ 63-180Hz : Bell variable from 63 to 180Hz +/- 16dB variable Q from 0 to 10 OReQ 180-440Hz : Bell variable from 180 to 440Hz +/- 16dB variable Q from 0 to 10 OReQ 440-1400Hz : Bell variable from 440 to 1400Hz +/- 16dB variable Q from 0 to 10 OReQ 1.4-4.2kHz : Bell variable from 1.4k to 4.2kHz +/- 16dB variable Q from 0 to 10 OReQ 4.2-8kHz : Bell variable from 4.2k to 8kHz +/- 16dB variable Q from 0 to 10 OReQ 8-20kHz : Bell variable from 8k to 20kHz +/- 16dB variable Q from 0 to 10 OReQ BAX : Low and High Baxandall combo +/- 16dB OReQ HPF : High Pass Filter -12dB/oct from 20Hz to 2kHz OReQ LPF : Low Pass Filter -12dB/oct from 2kHz to 20kHz

**NOTE:**  $\varphi$  is numerical as in the original sampled hardware.

### 11.4 - Controls

The Orbital eQualizer has only a few but intuitive and effective controls which are detailed below.

CUTOF	<b>Cut Off Control</b> The "CUTOF" control affects the filter's frequency cut.
FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated. The available range is ±16 dB.
Q	<b>Q Control</b> The "Q" control sets the amplitude of the filter selected by FREQ control.

### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 12. Orbital Dynamics

### 12.1 - About the original hardware

Orbital Dynamics are composed by a compressor and a limiter. Both units are a classics American Broadcast dynamics and they come from an FM Broadcast station located in Texas, they have been refurbished but the original broadcast setup has been kept (upon customer demand). So the sound sampled is unusual and more on the FX side with really BIG bottom.

The Compressor (G-Ravity) has program dependent attack and release, the basic preset emulates the original unit. The Limiter (Co-Smonaut) is a pretty fast limiter at 1kernel with HF control which emphasizes the high frequency over 3kHz, as G-Ravity the basic Co-Smonaut's preset emulates the original unit.

#### 12.2 - Session Setup

Orbital Dynamics reproduces the characteristic sound of classics American Broadcast Compressor and Limiter, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the ORD in all tracks where you need to control dynamically the sound.

On single track : Orbital Dynamics is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : Orbital Dynamics is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the original sound closely, you should set the AHEAD control to 5.4ms.

### 12.3 - Preset list:

The Orbital Dynamics library includes 4 different programs: HQ presets with 5 kernels and LE presets with 1 kernels displayed into sub-menu "ORD"

ORD G-Ravity : Compressor with variable controls and HPF on internal sidechain ORD G-Ravity esc : Compressor with variable controls and external sidechain ORD Co-Smonaut : Limiter with variable controls and HPF on internal sidechain ORD Co-Smonaut esc : Limiter with variable controls and HPF on internal sidechain

### 12.4 - Controls

The Orbital Dynamics has only a few but intuitive and effective controls which are detailed below.

#### Attack Control

ATT The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 0,5ms to 50ms

#### **Release Control**

**REL** The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 40ms to 4s

#### Threshold Control

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected. The range is variable from 0dB to -48,1dB

### RAT Ratio Control

The "RAT" defines the amount of gain reduction to be processed by the module. The range is variable from 1,5:1 to 30:1

### Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms

#### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

#### **Gain Control**

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

#### HPF Control

HPF The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 500Hz

#### HF Control

**HF** The "HF" control emphasizes the high frequency over 3kHz. The range is variable from 0 to 10 numerical.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.
# 13. Magic Parametric eQualizer

# 13.1 - About the original hardware

Designed in the '70 era, this rare 2 unit rack is a clean parametric equalizer and is greatly revered even today for its performance and quality, especially on electric bass, synth bass, electric guitars, synthesizers and voice. The line amp has a drive knob which gives harmonic saturation up to 10dB, the bell filters allow to cut and boost to over 20dB. The MPeQ easily meets the quality, performance, and reliability requirements of the demanding professionals.

With its broad bandwidth the Magic Parametric eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

Magic Parametric eQualizer reproduces the characteristic sound of this classic eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the MPeQ in all tracks where you need to shape the sound.

- On single track the Magic Parametric eQualizer works great on all instruments and voices.
- On master track the Magic Parametric eQualizer gives at the whole mix his classic musical sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**NOTE2:** on some frequencies when boosting or cutting, the whole volume can rise up or fall down a little, you can compensate this with the Output Gain Control.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

# 13.3 - Preset list:

The Magic Parametric eQualizer library includes 5 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "MPQ"

MPeQ 31-440Hz : Bell variable from 31 to 440Hz +/- 20dB variable Q from 0,25 to 4 MPeQ 440-3200Hz : Bell variable from 440 to 3.2kHz +/- 20dB variable Q from 0,25 to 4 MPeQ 3,2-16kHz : Bell variable from 3.2k to 16kHz +/- 20dB variable Q from 0,25 to 4 MpeQ Line Clean: line amp clean MPeQ Line Driven: line amp driven

# 13.4 – Controls

The Magic Parametric eQualizer has only a few but intuitive and effective controls which are detailed below.

FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
HEIGH	<b>Height Control</b> The "HEIGH" control sets the amount by which the frequency setting is boosted or attenuated. The available range is ±20 dB.
WIDTH	<b>Width Control</b> The "WIDTH" control sets the Q amplitude of the filter selected by FREQ control.
DRIVE	<b>Drive Control</b> The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect.

The available range is ±30 dB.

# **GDrive Control**

GDRV The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.
It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance.

The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is  $\pm 12$  dB.. Note that increasing the input signal the internal headroom will be reduced.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 14. Vintage American X-citer

# 14.1 - About the original hardware

The Vintage American X-citer brought its distinctive sound by leading recording artists in the middle of 1970. A true ground-breaker, this unit was highly regarded for its ability to increase and enhance presence, brightness, and detail on vocal tracks and masters alike. The VAX easily meets the quality, performance, and reliability requirements of the demanding professionals.

With its broad bandwidth the Vintage American X-citer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

Vintage American X-citer reproduces the characteristic sound of a vintage American Exciter, this kind of Aural Exciter are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the VAX in all tracks where you need to control dynamically the sound.

On single track : Vintage American X-citer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : Vintage American X-citer is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

#### 14.3 - Preset list:

The Vintage American X-citer library includes 9 different programs: HQ presets with 10 kernels displayed into sub-menu "VAX"

Vintage American X-Citer: complete emulation with input stage drive and tone controls VAX Acoustic : Hi-Quality Preset useful for acoustic material VAX Drum Bus: Hi-Quality Preset to use on Drum Bus VAX Guitars : Hi-Quality Preset to use with Guitars tracks VAX Synth : Hi-Quality Preset to use with Synth tracks VAXVocals : Hi-Quality Preset to use with Vocals tracks VAX Mastering : Hi-Quality Preset for mastering use VAX Crisp Mastering : Hi-Quality Preset for mastering use VAX Dark Mastering : Hi-Quality Preset for mastering use

# 14.4 – Controls

The Vintage American X-citer has only a few but intuitive and effective controls which are detailed below.

I-DRV	<b>i-Drive Control</b> The "I-DRV control affects the drive input level at the 1 <sup>st</sup> amplifier stage. The available range is 0-10 numerical.
TONE	<b>Tone Control</b> The "Tone" control sets the point where the exciter begins to engage. The available range is 0-10 numerical.
DRIVE	<b>Drive Control</b> The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

# **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is  $\pm 12$  dB.. Note that increasing the input signal the internal headroom will be reduced.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 15. American 16 Console Golden Edition Plus

# 15.1 - About the original hardware

This American Company has rightfully earned its place in the music history books, not to mention the hearts of all kinds of engineers. And this stalwart American console, the A16, deserves its spot in 2520 Op-Amp's legendary lineage. Here, you get the premium analog circuitry and unmistakable mojo of a straight-from-the-'60s American console.

Professionals throughout the world have chosen the rich and punching sound of the American 16 Console. Its high bandwidth pure audio path, superior dynamics and greater control make the American 16 Console the first choice for recording and mixing Rock, Pop, Jazz and more.

With its broad bandwidth the American 16 Console has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

American 16 Console reproduces the sound of Modern American Recording Console using a library programs consisting of channels input, group bus, mixbus and pan-fader. To faithfully reproduce into the DAW the analog console signal chain and workflow, we recommend using the American 16 Console in one of two following session setup configurations.

As a virtual summing box : Input Channel is inserted on the last insert of the DAW audio tracks, like a direct out routed to a summing box. The MixBus is placed on the first insert of the master track, just as the stereo return would be routed from the analog console back to the DAW.

To simulate a console : Input Channel is inserted on the first insert of the DAW audio tracks, the MixBus is placed on the last insert of the master track. If you group channels in your DAW, i.e. drums elements, you can insert the GroupBus as last insert in the submix group bus to achieve the classic bus coloration. Optionally you can insert the pan-fader at the end of each channel track.

You should set the Pan Law in the DAW at -3dB. You might like to use the Pan-Fader (included in the library) on some stereo tracks and group bus instead of the DAW's panner, the A16GE+

Pan-Fader should be the last insert into DAW's track or group bus leaving the Pan Law in the DAW to 0dB.

Obviously the Panner doesn't work on mono tracks but you can still use the fader which gives better sound and precision compared to the DAW's counterpart.

**TRICK:** to emulate the non linearity between the channels of the console, you can set the GDRV control slightly different on every track into a range of +/-3dB.

# 15.3 - Preset list:

The American 16 GE+ library includes the following programs displayed into menu "A16" and subgrouped into 44.1kHz, 48kHz, 88.2kHz and 96kHz.

A16GE+ Input A16GE+ G.Bus A16GE+ M.Bus A16GE+ Panner

#### A16GE+ Input

The A16GE+ Input in is the first stage of the console, normally it works as line amplifier and you should insert it in each track of the mix. With the Input preset you can choose between DI (1), Line (2) and Mic-Preamp (3) by selecting them with the Source control.

#### A16GE+ G.Bus

If you send some tracks to a submix bus group in your DAW and you like to have the real sound by Bus Group of the console, you can use the G.Bus preset as insert into DAW's submix bus group. G.Bus has new concept in the Golden Edition+: instead to have more presets with different colors, there is only ones with the "Type" control which allows to choose different colors:

- 1: Clean = Original Clean G.Bus, the pure sound from the console
- 2: Drum = Original Clean G.Bus with 88RS channel eQ patched
- 3 : Percussions = Original Clean G.Bus with vintage Pultec patched
- 4 : Acoustic = Original Clean G.Bus with GML8200 patched
- 5 : Guitars = Original Clean G.Bus with vintage API 550A patched
- 6: Synthpad = Original Clean G.Bus with vintage Moog PEQ patched
- 7: BGVocals = Original Clean G.Bus with Neumann W492 EQ patched
- 8: Ambient = Original Clean G.Bus with vintage Filtek PB1 parched

# A16GE+ M.Bus

M.Bus has new concept in the Golden Edition+: instead to have more presets with different colors, there is only ones with the "Type" control which allows to choose different colors:

- 1: Vintage = The sound of the "Vision-airy" console Mixbus
- 2: Clean = Original clean console mixbus
- 3 : Modern = Original Clean Mixbus with modern API 5500 eQ patched

M.Bus has been sampled at full headroom so you have to follow the gain staging (pag.27). By using the G.Drive you get from clean to very hot/saturated signal out.

# A16GE+ Panner

Console stereo panner and fader with -3dB Pan Law.

# 15.4 - Controls

The American 16 Console has only a few but intuitive and effective controls which are detailed below.

# Source Control

**SOURCE** The "SOURCE" control selects the input source of the first stage of the console. The options are: DI, Line and Mic-Preamp.

# TYPE TypeControl

The "Type" control selects the optional type of G.Bus or M.Bus. See description.

# GDRV GDrive Control

The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and

sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is  $\pm 12$  dB.. Note that increasing the input signal the internal headroom will be reduced.

# DRIVE Drive Control

The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±12 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 16. American 5A eQualizer Golden Edition Plus

# 16.1 - About the original hardware

Designed by the now legendary Saul Walker in the late 60's, this discrete EQ was first used as a modular OEM equalizer. As the industry rapidly embraced the sonic quality of this unit, it quickly found it's way into many custom console designs becoming the standard channel module EQ when the company began manufacturing consoles in 1971.

The combination of Walker's incomparable 2520 op amp and his "Proportional Q" circuitry give the user an uncomplicated way to generate acoustically superior equalization.

With its broad bandwidth the American 5AGE+ eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

Two hand-selected refurbished units has been sampled fitted in the console in real stereo configuration, to achieve the best sound by console's internal strong and clean power supply.

American 5AGE+ eQualizer reproduces the characteristic sound of vintage American eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the A5AGE+ eQ in all tracks where you need to shape the sound.

- On single track : American 5AGE+ eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : American 5AGE+ eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

*Fine Tuning:* You have to respect the correct gain staging (pag.27) To emulate the original unit sound you can use one or more presets in this way:

- When a single equalization band only is required you have to set the " $\Delta$ " (D) control to +3,5
- When two equalization bands is required you have to set the " $\Delta$ " (D) control to +1.5
- When three equalization bands is required you have to set the " $\Delta$ " (D) control to +0

\* " $\Delta$ " (D) control has to be set on each one used preset.

**NOTE:** *u*se the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

# 16.3 - Preset list:

The American 5A Golden Edition Plus eQualizer library includes 8 different programs displayed in main menu "A5A": presets with stock stepped gain control displayed into sub-menu "STG" and presets with continuous gain control displayed into sub-menu "CNG".

A5AGE+ Filter : Band Pass Filter at 50Hz / 15k 12dB/octave A5AGE+ Filter Alone : Band Pass Filter at 50Hz / 15k 12dB/octave A5AGE+ Low Shelf/Bell : Low Shelf & Bell filters 50, 100, 200, 300, 400Hz +/- 12dB A5AGE+ 75-1000Hz : Low Mid Bell 400, 800, 1.5k, 3k, 5kHz +/- 12dB proportional Q A5AGE+ High Shelf/Bell : High Shelf & Bell filters 5k, 7k, 10k, 12.5k, 15kHz +/- 12dB proportional Q

**Note:** Filter preset doesn't need " $\Delta$ " (D) control when stacked with other presets. If you need the Filter only without stacking other bands, for example before a reverb FX, then use Filter Alone preset.

#### 16.4 – Controls

The American 5AGE+ eQualizer has only a few but intuitive and effective controls which are detailed below.

# Frequency Control

**FREQ** The "FREQ" control sets the frequency to be boosted or attenuated. Stepped

#### Gain Control

GAIN The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.
The available range is ±12 dB stepped.

#### THD **A** Delta Control

See section 17.2

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 17. American 5B eQualizer Golden Edition Plus

# 17.1 - About the original hardware

Originally conceived for use in American's consoles, this latest version is a continuation of the original 1967 equalizer with one additional filter band and several new frequencies. Incorporating American's exclusive circuitry and proprietary components (such as the legendary 2520 op-amp), the A5BGE+ artfully blends the past with the present.

Many eQs today offer a huge assortment of complex features, but the A5BGE+ provides exactly the right number of controls to the professional engineer.

With its broad bandwidth the American 5BGE+ eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

Two vintage hand-selected refurbished units has been sampled fitted in the console in real stereo configuration, to achieve the best sound by console's internal strong and clean power supply.

American 5BGE+ eQualizer reproduces the characteristic sound of Classic American eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the A5BGE+ eQ in all tracks where you need to shape the sound.

- Onsingle track : American 5BGE+ eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : American 5BGE+ eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

# Fine Tuning: You have to respect the correct gain staging (pag.27)

To emulate the original unit sound you can use one or more presets in this way:

- When a single equalization band only is required you have to set the " $\Delta$ " (THD) control to +4
- When two equalization bands is required you have to set the " $\Delta$ " (THD) control to +1.5
- When three equalization bands is required you have to set the " $\Delta$ " (THD) control to +1
- When four equalization bands is required you have to set the " $\Delta$ " (THD) control to 0

\* " $\Delta$ " (D) control has to be set on each one used preset.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

# 17.3 - Preset list:

The American 5B Golden Edition Plus eQualizer library includes 8 different programs displayed in main menu "A5B": presets with stock stepped gain control displayed into sub-menu "STG" and presets with continuous gain control displayed into sub-menu "CNG"

A5BGE+ Low Shelf/Bell : Low Shelf & Bell filters 30, 40, 50, 100, 200, 300, 400Hz +/- 12dB A5BGE+ 75-1000Hz : Low Mid Bell 75, 150, 180, 240, 500, 700, 1kHz +/- 12dB proportional Q A5BGE+ 0.8-12.5kHz : High Mid Bell 800, 1.5k, 3k, 5k, 8k, 10k, 12.5kHz +/- 12dB proportional Q A5BGE+ High Shelf/Bell : High Shelf & Bell filters 2.5k, 5k, 7k, 10k, 12.5k, 15k, 20kHz +/- 12dB

# 17.4 – Controls

The American 5BGE+ eQualizer has only a few but intuitive and effective controls which are detailed below.

#### **Frequency Control**

**FREQ** The "FREQ" control sets the frequency to be boosted or attenuated. Stepped

# **Gain Control**

**GAIN** The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated. The available range is ±12 dB stepped.

# THD **A** Delta Control

See section 17.2

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 18. American 5 Dynamics

# 18.1 - About the original hardware

The American 5 Dynamics, originally released in the 70s, is a feedback type compressor with an additional "Ceiling" fine-tune function which can increase gain reduction and varying the frequency and THD response.

Equally useful as a tracking, mixdown or program compressor/limiter, the A5D utilizes "vintage" dynamics control and an easy to use multi-function control set. It delivers dynamics control behavior unlike VCA feed forward compressors so common today. American 5 Dynamics makes use of the 2510 and 2520 op-amps and manages to sound clean but with character without being weak and harsh.

With its broad bandwidth the American 5 Dynamics has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

American 5 Dynamics reproduces the characteristic sound of American Vintage Console Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the A5D in all tracks where you need to control dynamically the sound.

On single track : American 5 Dynamics is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : American 5 Dynamics is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the original sound closely, you should set the AHEAD to 5.4ms.

# 18.3 - Preset list:

The American 5 Dynamics library includes 16 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "A5D"

A5D VT Comp : 2:1 compressor with variable controls and HPF on internal sidechain A5D VT Comp esc : 2:1 compressor with variable controls and external sidechain A5D FT Comp : 2:1 compressor with fixed attack time and HPF on internal sidechain A5D FT Comp esc : 2:1 compressor with fixed attack time and external sidechain A5D VT Lim : 20:1 limiter with variable controls and HPF on internal sidechain A5D VT Lim esc : 20:1 limiter with variable controls and external sidechain A5D FT Lim : 20:1 limiter with fixed attack time and external sidechain A5D FT Lim : 20:1 limiter with fixed attack time and HPF on internal sidechain A5D FT Lim : 20:1 limiter with fixed attack time and HPF on internal sidechain

#### 18.4 – Controls

The American 5 Dynamics has only a few but intuitive and effective controls which are detailed below.

#### Attack Control

**ATT** The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 3ms to 10ms

#### Release Control

**REL** The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 100ms to 2.5s

# Threshold Control

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected. The range is variable from 0dB to -48,1dB

	Ceiling Control
CLING	The "CLING" can increase gain reduction while simultaneously varying the frequency and THD response. The range is variable from 0 to 20:1
AHEAD	<b>Ahead Control</b> The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms
GAIN	<b>Gain Control</b> The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB
HPF	<b>HPF Control</b> The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 19. American 5 Mastering eQualizer

# 19.1 - About the original hardware

This musical sounding dual eQualizer embodies more than 40 years of tradition where the original proportional Q filter design with reciprocal boost and cut is used. It's through this design and sound that all-discrete Class AB 2520 amplifier products have achieved a nearly sacrosanct, if not mythical, status amongst audio engineers.

The new range control broadens the unit's utility to include mastering applications by changing the four bands' boost/cut steps from the original 2 dB into continuous variable step. This made the unit useful for mixing and mastering use making audio program sounds better and more punchy and 3D just by passing through it, even while set "flat."

With its broad bandwidth the American 5 Mastering eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

American 5 Mastering eQualizer reproduces the characteristic sound of Modern American eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the A5M eQ in all tracks where you need to shape the sound.

- On master track : American 5 Mastering eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- On single track : American 5 Mastering eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- Mastering : American 5 Mastering eQualizer is inserted on the audio track as insert in the position at your taste.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**NOTE2:** on some frequencies when boosting or cutting, the whole volume can rise up or fall down a little, you can compensate this with the Output Gain Control.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

#### 19.3 - Preset list:

The American 5 Mastering eQualizer library includes 12 different programs: HQ presets with 7 kernels and LE presets with 1 kernel displayed into sub-menu "A5M"

A5M Low Shelf : Low Shelf 30, 40, 50, 100, 200, 300, 400Hz +/- 12dB A5M Low Peak : Low Peak 30, 40, 50, 100, 200, 300, 400Hz +/- 12dB proportional Q A5M Low Mid : Low Mid Bell 75, 150, 180, 240, 500, 700, 1kHz +/- 12dB proportional Q A5M High Mid : High Mid Bell 800, 1.5k, 3k, 5k, 8k, 10k, 12.5kHz +/- 12dB proportional Q A5M High Peak : High Peak 2.5k, 5k, 7k, 10k, 12.5k, 15k, 20kHz +/- 12dB proportional Q A5M High Shelf : High Shelf 2.5k, 5k, 7k, 10k, 12.5k, 15k, 20kHz +/- 12dB

#### 19.4 – Controls

The American 5 Mastering eQualizer has only a few but intuitive and effective controls which are detailed below.

#### Frequency Control

**FREQ** The "FREQ" control sets the frequency to be boosted or attenuated. Stepped.

GAIN Gain Control

The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated. The available range is  $\pm 12$  dB continuous.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 20. Neev 14 Console

# 20.1 - About the original hardware

One of the classic Neev consoles of the early 70s is the N14. This high quality, Class A desk, was the first of the "80 series" of legendary top class consoles and it bears "His" name. His preamp modules have established themselves as the most sought after mic-pres in the history of recording. This is especially true for vocals. The amazing summing amp gives a rich, warm and fat sound...that "magic Neev sound"!

Professionals throughout the world have chosen the rich and fat sound of the Neev 14 Console. Its high bandwidth pure audio path, superior dynamics and greater control make the Neev 14 Console the first choice for recording and mixing Rock, Pop, Jazz and more.

With its large bandwidth the Neev 14 Console has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

Neev 14 Console reproduces the sound of Vintage British Recording Console using a library programs consisting of channels input, group bus and mixbus. To faithfully reproduce into the DAW the analog console signal chain and workflow, we recommend using the Neev 14 Console in one of two following session setup configurations.

As a virtual summing box : Input Channel is inserted on the last insert of the DAW audio tracks, like a direct out routed to a summing box. The MixBus is placed on the first insert of the master track, just as the stereo return would be routed from the analog console back to the DAW.

To simulate a console : Input Channel is inserted on the first insert of the DAW audio tracks, the MixBus is placed on the last insert of the master track. If you group channels in your DAW, i.e. drums elements, you can insert the GroupBus as last insert in the submix group bus to achieve the classic bus coloration.

You should set the Pan Law in the DAW at -3dB. You might like to use the analog panner (included in the library) on some stereo tracks and group bus instead of the DAW panner, the N14 Panner should be the last insert into DAW's track or group bus leaving the Pan Law in the DAW to 0dB.

**TRICK:** to emulate the non linearity between the channels of the console, you can set the GDRV control slightly different on every track into a range of +/-3dB.

# 20.3 - Preset list:

The Neev 14 Console library includes 27 different programs: HQ presets with 10 kernels and LE presets with 3 and 5 kernels displayed into sub-menu "N14"

N14 Line in : line input channel

N14 MIC Pre : microphone preamplifier

N14 G.Bus Clean : Group Bus clean signal

N14 G.Bus Acoustic : Group Bus with equalizer patched useful for acoustic instruments

N14 G.Bus AmbFX : Group Bus with equalizer patched useful for ambient & FX

N14 G.Bus BG Vox : Group Bus with equalizer patched useful for backing vocals

N14 G.Bus Drum : Group Bus with equalizer patched useful for drums

N14 G.Bus GTR : Group Bus with equalizer patched useful for guitars

N14 G.Bus Percussions : Group Bus with equalizer patched useful for percussions

N14 G.Bus SynthPad : Group Bus with equalizer patched useful for synthesizers and pads

N14 M.Bus Clean : vintage original MixBus

N14 M.Bus Modern : MixBus with modern transformer

N14 M.Bus Fat : MixBus with additional transformer for a more fat sound

N14 Panner : Panner -3dB pan law

# N14 Line in

The Neev 14 Console Line in is the first stage of the console, normally it works as line amplifier and you should insert it in every track.

#### N14 MIC in

The Neev 14 Console microphone preamplifier has more coloration than Line in and you can use it when more character is needed.

#### N14 G.Bus Clean

If you send some tracks to a submix bus group in your DAW and you like to have the real sound by Bus Group of the console, you can insert the G.Bus Clean preset as last insert into DAW's submix bus group.

#### N14 G.Bus Acoustic

When acoustic instruments are grouped into a submix in your DAW, you might want to have the G.BUS Acoustic preset as last insert into DAW's submix bus group to give a cohesive colored glue.

#### N14 G.Bus Amb&FX

When ambients, reverb, echo and other effects are used into an aux-send/return in your DAW, you may like to have the G.BUS Amb&FX preset as last insert into these DAW's channels to give more spatial dimension.

#### N14 G.Bus BG Vox

When backing vocals tracks are grouped into a submix in your DAW, try inserting the G.BUS BG Vox preset as last insert into DAW's submix bus group to push a little in the backward the sound by achieving air and transparency.

#### N14 G.Bus Drum

When drum instruments are grouped into a submix in your DAW, you may want to have the G.BUS Drum preset as last insert into DAW's submix bus group to give a cohesive punching glue.

#### N14 G.Bus GTR

When guitars are grouped into a submix in your DAW, try using the G.BUS GTR preset as last insert into DAW's submix bus group to give a cohesive brilliant glue.

#### N14 G.Bus Percussions

When percussions are grouped into a submix in your DAW, you might like to have the G.BUS Percussions preset as last insert into DAW's submix bus group to give a cohesive snapping glue.

#### N14 G.Bus SynthPad

When synthesizers and Pads are grouped into a submix in your DAW, maybe try the G.BUS SynthPad preset as last insert into DAW's submix bus group to give a cohesive focused glue.

#### N14 M.Bus Clean

Neev 14 Console Mix Bus is the final stage of the console, it must be inserted in the mixbus of the DAW.

The M.BUS Clean gives the original clean glue.

#### N14 M.Bus Modern

When a polished glued mix is needed, try the M.BUS Modern preset as last insert into DAW's mixbus.

#### N14 M.Bus Fat

When a more fat sound is needed, use the M.BUS Fat preset as last insert into DAW's mixbus.

# 20.4 - Controls

The Neev 14 Console has only a few but intuitive and effective controls which are detailed below.

#### **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is  $\pm 12$  dB.. Note that increasing the input signal the internal headroom will be reduced.

#### DRIVE Drive Control

The "DRIVE" control affects the harmonic contents in an unnatural way, but

suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 21. Neev 73 eQualizer

# 21.1 - About the original hardware

First launched in 1970, the N73 modules have established themselves as one of the most sought after mic pres in the history of recording. This Class-A discrete transistor mic/line amp with 3-band EQ and high-pass filter epitomizes the Neev "essence", it can add texture and vibe to the music that is unique to the unit. Get the sound of a real vintage unit, with St.Ives/Marinair transformers and Motorola power transistor. Not a modern reissue or a clone with cheap electronic components. The N73 easily meets the quality, performance, and reliability requirements of the demanding professionals.

With its broad bandwidth the Neev 73 eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

Neev 73 eQualizer reproduces the characteristic sound of the Vintage British eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the N73 in all tracks where you need to shape the sound.

- On single track : Neev 73 eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : Neev 73 eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**NOTE2:** on some frequencies when boosting or cutting, the whole volume can rise up or fall down a little, you can compensate this with the Output Gain Control.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

# 21.3 – Preset list:

The Neev 73 eQualizer library includes 8 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "N73"

N73 Low Cut Filter : High Pass Filter -18dB/oct at 50, 80, 160, 300Hz N73 Low Shelf : Low Shelf 35, 60, 110, 220Hz +/- 15dB N73 Mid Freq: Bell Filter 0.36, 0.7, 1.6, 3.2, 4.8, 7.2kHz +/- 18dB N73 High Shelf: High Shelf +/- 18dB

#### 21.4 – Controls

The Neev 73 eQualizer has only a few but intuitive and effective controls which are detailed below.

#### Cut Off Control

**CUTOF** The "CUTOF" control affects the filter's frequency cut.

#### Frequency Control

**FREQ** The "FREQ" control sets the frequency to be boosted or attenuated.

#### Gain Control

**GAIN** The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.

# DRIVE Drive Control The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 22. Neev 64 Dynamics

# 22.1 - About the original hardware

Designed in 1974, the Vintage N64 mono Limiter/Compressor unit quickly became a legend by achieving secret-weapon status among studio professionals, thanks to its unique sound and functionality. Discrete, Class A/B design and transformer-coupled circuits used in the input ensured a totally unique sound. This unit is still sought after, decades after production stopped, and they remain one of the milestone pieces of studio equipment.

Neev 64 Dynamics manages to sound clean but with character without being weak and harsh. There is little apparent colouration, just a maturity of tone.

With its large bandwidth the Neev 64 Dynamics has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

Neev 64 Dynamics reproduces the characteristic sound of Vintage British Console Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the N64 in all tracks where you need to control dynamically the sound.

On single track : Neev 64 Dynamics is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : Neev 64 Dynamics is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the original sound closely, you should set the controls DRIVE to +3dB and AHEAD to 5.4ms.

# 22.3 - Preset list:

The Neev 64 Dynamics library includes 8 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "N64"

N64 Compressor : Compressor with variable controls and HPF on internal sidechain. Fixed attack 3ms.

N64 Compressor esc : Compressor with variable controls and external sidechain. Fixed attack 3ms. N64 Limiter : Limiter with variable controls and HPF on internal sidechain. Fixed attack 4ms. N64 Limiter esc : Limiter with variable controls and external sidechain. Fixed attack 4ms.
# 22.4 – Controls

The Neev 64 Dynamics has only a few but intuitive and effective controls which are detailed below.

## Release Control

REL The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 100ms to 1,5s for the compressor and 50ms to 800ms for the limiter.

## Threshold Control

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected.

The range is variable from 0dB to -48,1dB

## **Ratio Control**

RAT The "RAT" defines the amount of gain reduction to be processed by the module.When the control is at maximum (10), the ratio is effectively infinity to one, yielding the limiting effect.The range is variable from 1,5:1 to 6:1 for the compressor.

# Ahead Control The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from Oms to 6ms Drive Control DRIVE The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

# Gain Control

GAINThe "GAIN" control sets the output level of gain makeup.The range is variable from 0dB to 25dB

## HPF Control

**HPF** The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain.

The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 23. Neev 54 Dynamics

# 23.1 - About the original hardware

Neev's Holy Grail of compressors, the vintage N54 began life as a module in Neev's legendary 1970s mixing consoles, applying its trademark colored sound to signals fed into it. As you'd expect from a classic Neev product, it isn't exactly transparent – instead, think rich, think 'thick', and think 'round'. It can do great things on single track but it excels on stereo bus operation, where the N54's abilities to glue stereo sub-mixes together are in a class of their own with buss compression.

Neev 54 Dynamics manages to sound clean but with character without being weak and harsh. There is little apparent colouration, just a maturity of tone.

With its large bandwidth the Neev 54 Dynamics has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

Neev 54 Dynamics reproduces the characteristic sound of Vintage British Console Bus Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the N54 in all tracks where you need to control dynamically the sound.

On single track : Neev 54 Dynamics is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : Neev 54 Dynamics is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the original sound closely, you should set the controls DRIVE to +3dB and AHEAD to 5.4ms.

# 23.3 - Preset list:

The Neev 54 Dynamics library includes 8 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "N54"

N54 Compressor : Compressor with variable controls and HPF on internal sidechain. Fixed attack 5ms.

N54 Compressor esc : Compressor with variable controls and external sidechain. Fixed attack 5ms. N54 Limiter : Limiter with variable controls and HPF on internal sidechain. Fixed attack 5ms. N54 Limiter esc : Limiter with variable controls and external sidechain. Fixed attack 5ms.

## 23.4 - Controls

The Neev 54 Dynamics has only a few but intuitive and effective controls which are detailed below.

#### **Release Control**

REL The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 400ms to 1,5s for the compressor and 100ms to 800ms for the limiter.

## **Threshold Control**

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected.

The range is variable from 0dB to -48,1dB

## Ratio Control

**RAT** The "RAT" defines the amount of gain reduction to be processed by the module. When the control is at maximum (10), the ratio is effectively infinity to one, yielding the limiting effect. The range is variable from 1,5:1 to 6:1 for the compressor.

## Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms

## **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

## **Gain Control**

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

#### HPF Control

**HPF** The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain.

The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 24. Valve Tech Dynamics

# 24.1 - About the original hardware

All tube-based Opto compressors from 1985. The number of hit records featuring these compressors is countless and the number of stars demanding them for their recording and mixing is extreme! Use them for keys, guitars, vocals, mixbus, mastering, the result is always musical and transparent. Some differences exist between the two units, the C2A dual compressor has a little more "round" character to the compression and a little different frequency response compared to C1B mono compressor. Valve Tech Dynamics manages to sound clean but with character without being weak and harsh. There is little apparent colouration, just a maturity of tone. The units has been refurbished with BC audio capacitors and NOS Telefunken / Siemens tubes.

The Valve Tech Dynamics has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

Valve Tech Dynamics reproduces the characteristic sound of Vintage Denmark Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the VTD in all tracks where you need to control dynamically the sound.

On single track : C1B or C2A is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : C2A is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the original sound closely, you should set the AHEAD to 5.4ms.

## 24.3 - Preset list:

The Valve Tech Dynamics library includes 8 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "VTD"

C1B Compressor : Compressor with variable controls and HPF on internal sidechain. C1B Compressor esc : Compressor with variable controls and external sidechain. C2A Compressor : Compressor with variable controls and HPF on internal sidechain. C2A Compressor esc : Compressor with variable controls and external sidechain.

## 24.4 – Controls

The Valve Tech Dynamics has only a few but intuitive and effective controls which are detailed below.

# **Attack Control**

**ATT** The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 0.5ms to 300ms (C1B) and from 3ms to 60ms (C2A)

## **Release Control**

**REL** The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is from 50ms to 10s (C1B) and 60ms to 2s (C2A)

# Threshold Control

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected.

The range is variable from 0dB to -48,1dB

## **Ratio Control**

**RAT** The "RAT" defines the amount of gain reduction to be processed by the module. The range is variable from 2:1 to 10:1 (C1B) and 1.5:1 to 10:1 (C2A)

#### Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms

## **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

## **Gain Control**

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

## **HPF Control**

HPF The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 25. T95 Program eQualizer SK

# 25.1 - About the original hardware

Elegant and Natural sounding, this is the first version of super rare pure class-A germanium equalizer by Telefunken (not to be confused with the next silicon transistor release, the W395, which has different transformers also). T95GE delivers a pure heavenly sound for drums, voice, acoustic instruments, guitars, as well as entire mixes during mixdown and mastering. Two units have been completely refurbished and match-calibrated. The T95GE easily meets the quality, performance, and reliability requirements of any demanding professional.

With its broad bandwidth the T95GE Program eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

With its broad bandwidth the T95GE Program eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

T95GE Program eQualizer reproduces the characteristic sound of Vintage Germanium Program eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the T95GE in all tracks where you need to shape the sound.

- On Bus Group : T95GE Program eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : T95GE Program eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- Mastering : T95GE Program eQualizer is inserted on the audio track as insert in the position at your taste.

To emulate the original unit sound you should use both presets 1K and 3K by mixing them in this way:

- When a single equalization band only is required you should use the 3K preset.
- When you need more than one band of equalization you should use the 1k presets and as last band the 3k. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one 3K preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**NOTE2:** on some frequencies when boosting or cutting, the overall volume can increase or decrease a little, you can compensate this with the Output Gain Control.

**TRICK:** to emulate the non linearity between the tracks, you can set the THD control slightly different on every instance into a range of +/-2dB.

# 25.3 - Preset list:

The T95GE Program eQualizer library includes 12 different programs: 3K presets with 3 kernels and 1K presets with 1 kernel displayed into sub-menu "T95"

T95GE Shelf A: Low and High Shelf at 60Hz and 10kHz +/- 12dB (unit A) T95GE Shelf B: Low and High Shelf at 60Hz and 10kHz +/- 12dB (unit B) T95GE Shelf Combo: A+B units configured in stereo mode, Low and High Shelf at 60Hz and 10kHz

+/- 12dB (both units in dual-mono->stereo)

T95GE Mid A : Mid bell fixed 700, 1k, 1.4K, 2k, 3kHz + 8dB (unit A)

T95GE Mid B : Mid bell fixed 700, 1k, 1.4K, 2k, 3kHz + 8dB (unit B)

T95GE Mid Combo : A+B units configured in stereo mode, Mid bell fixed 700, 1k, 1.4K, 2k, 3kHz + 8dB (both units in dual-mono->stereo)

# 25.4 – Controls

The T95GE Program eQualizer has only a few but intuitive and effective controls which are detailed below.

# **Frequency Control**

**FREQ** The "FREQ" control sets the frequency to be boosted or attenuated.

# **Gain Control**

GAIN The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.
The MF bell has broad curve when boosted and narrow curve when it is cut.

## THD Control

**THD**The "THD" control affects the harmonic contents in an unnatural way, but suitable<br/>if you look for an effect.<br/>The available range is ±12 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

# 26. T361A Dolbee Sys

# 26.1 - About the original hardware

The T361A is one of a series of noise reduction systems for use in analog magnetic tape recording. T361A is the first professionally built broadband noise reduction for recording studios in 1965 by Telefunken. Today this unit is often used as FX on many audio materials as voice, guitars, and synth. By increasing and enhancing presence, brightness, and details. The T361A easily meets and exceeds he quality, performance, and reliability requirements of the demanding professionals.

With its broad bandwidth the T361A has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

T361A reproduces the characteristic sound of a vintage Dolbee Sys, this kind of gears are used in all records in the world in the tape era. To faithfully reproduce this analog sound in the DAW, we recommend using the T361A in all tracks where you need to control dynamically the sound.

On single track : T361A is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : T361A is inserted on the group bus, as last insert giving at the whole submix his classic sound.

Mastering : T361A is inserted on the audio track as last insert, before the brickwall limiter.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

**NOTE:** in the "Test Tone" folder there are the audio sample of the original D-Tone

# 26.3 - Preset list:

The T361A library includes 9 different programs: HQ presets with 10 kernels displayed into sub-menu "361"

T361A Line Standard: line input (normally the signal comes from the console) T361A Line Mod1: line input with CAT22 board modified T361A Line Mod2: line input with CAT22 board modified T361A Line Mod3: line input with CAT22 board modified T361A Tape Standard: tape input (normally the signal comes from the tape) T361A Tape Mod1: tape input with CAT22 board modified T361A Tape Mod2: tape input with CAT22 board modified T361A Tape Mod2: tape input with CAT22 board modified T361A Tape Mod3: tape input with CAT22 board modified T361A Tape Mod3: tape input with CAT22 board modified T361A Mastering: your secret-weapon for mastering use!

**NOTE:** be careful when the Tape Mod\* presets are used, these presets can give freak FX ! Please use them with a low audio level.

## 26.4 – Controls

T361A has only a few but intuitive and effective controls which are detailed below.

## **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

## **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is  $\pm 12$  dB.. Note that increasing the input signal the internal headroom will be reduced.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to

## zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 27. Neev 81 Sidecar Console

# 27.1 - About the original hardware

Custom designed and hand-made by AlexB, the sidecar console is based on eight legendary vintage Class AB mic-preamps and equalizers which come from the 70's era "with a lot of character". The summing amp has a vintage design of pure Class A with Carnhill transformers which gives that "in your face" Neev sound.

A professional studio requested me to build this sidecar console for their dance-techno production, choosing the rich, dynamics and fat sound it has. Its high bandwidth pure audio path, superior dynamics and greater control make the Neev 81 Sidecar Console the first choice for recording and mixing Rock, Pop, Dance and more.

With its large bandwidth the Neev 81 Sidecar Console has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

Neev 81 Sidercar Console reproduces the sound of Vintage British Recording Console using a library programs consisting of channels input, equalizer and mixbus. To faithfully reproduce into the DAW the analog console signal chain and workflow, we recommend using the Neev 81 Sidecar Console in one of two following session setup configurations.

As a virtual summing box : Input Channel is inserted on the last insert of the DAW audio tracks, like a direct out routed to a summing box. The MixBus is placed on the first insert of the master track, just as the stereo return would be routed from the analog console back to the DAW.

To simulate a console : Input Channel is inserted on the first insert of the DAW audio tracks, the MixBus is placed on the last insert of the master track.

You should set the Pan Law in the DAW at -3dB. You might like to use the analog panner (included in the library) on some stereo tracks and group bus instead of the DAW panner, the N81 Panner should be the last insert into DAW's track or group bus leaving the Pan Law in the DAW to OdB.

**TRICK:** to emulate the non linearity between the channels of the console, you can set the GDRV control slightly different on every track into a range of +/-3dB.

# 27.3 - Preset list:

The Neev 81 Sidecar Console library includes 23 different programs: HQ presets with 10 and 3 kernels and LE presets with 5, 3 and 1 kernels displayed into sub-menu "N81"

N81 Input Line : line input channel N81 Mic Pre : microphone preamplifier N81 MixBus : MixBus N81 Panner : Panner -3dB pan law N81 Low Cut Filter: 18dB/octave slope 27, 47, 82, 150, 270Hz N81 Hi-Cut Filter: 18dB/octave slope 3.9, 5.6, 8.2, 12, 18kHz N81 Low Freq Peak : bell filter 33, 56, 100, 180, 330Hz +/-18dB N81 Low Freq Shelf : shelf filter 33, 56, 100, 180, 330Hz +/-18dB N81 Low Mid Freq : bell filter 20Hz, 270, 330, 390, 470, 560, 680, 820, 1000, 1200Hz +/-18dB, Low/Hi Q N81 Hi-Mid Freq: bell filter 1.5, 1.8, 2.2, 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 8.2kHz +/-18dB, Low/Hi Q N81 Hi-Freq Shelf : shelf filter 3.3, 4.7, 6.8, 10, 15kHz +/-18dB N81 Hi-Freq Peak : peak filter 3.3, 4.7, 6.8, 10, 15kHz +/-18dB

# N81 Input Line

The Neev 81 Sidecar Console Input Line is the first stage of the console, normally it works as line amplifier and you should insert it in every track.

# N81 Mic Pre

The Neev 81 Sidecar Console microphone preamplifier has more coloration than Line in and you can use it when more character is needed.

#### N81 MixBus

Neev 81 Sidecar Console MixBus is the final stage of the console, it must be inserted in the mixbus of the DAW

to give the original clean glue.

## 27.4 - Controls

The Neev 81 Sidecar Console has only a few but intuitive and effective controls which are detailed below.

## **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is  $\pm 12$  dB.. Note that increasing the input signal the internal headroom will be reduced.

## DRIVE Drive Control

The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

#### **Cut Off Control**

**CUTOF** The switchable "CUTOF" control affects the filter's frequency cut.

## Frequency Control

**FREQ** The switchable "FREQ" control sets the frequency to be boosted or attenuated.

#### **Gain Control**

**GAIN** The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated. The available range is ±18 dB.

## **Q** Control

**Q** The switchable "Q" control sets the amplitude of the filter selected by FREQ control.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 28. Chandly Ltd Germanium

# 28.1 - About the original hardware

Chandly Ltd Germanium is a class A compressor with transformers, the compression circuit uses FET gain reduction element. The compression curve, the knee, can be selected by various diode combination and the tone can be selected from flat, smooth and driven.

Chandly Ltd Germanium manages to sound with character without being weak and harsh. There is little apparent colouration, just a maturity of tone. This library programs is the result of more than 300GB of sampled data from the original hardware.

With its large bandwidth the Chandly Ltd Germanium has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

Chandly Ltd Germanium reproduces the characteristic sound of Germanium Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the CLG in all tracks where you need to control dynamically the sound.

On single track : Chandly Ltd Germanium is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : Chandly Ltd Germanium is inserted on the group bus, as last insert giving at the whole submix his classic sound.

## Some notes on useage:

It is helpful to understand a little about what the different curves are (based on the diode selected, going from softest to hardest knee)

**Resistance** - This is the gentlest and most neutral of the knee curves.

**Germanium Soft** - Uses a single germanium diode. Has a very slightly sharper knee and starts to introduce some "vibe".

**Germanium Medium** - This uses 5 germanium diodes (different type than the other) as well as the diode from the soft setting. This is even slightly more sharper kneed and more colorful.

**Silicon Medium** - This uses a single silicon diode and ihas a sharper knee than the other modes. It also has a different tonal character than the other modes.

**Silicon Hard** - This uses 2 silicon diodes in combination, sharpening the knee even more, and of course adding yet more "vibe".

**Zener Hard** - This uses a single zener diode, and contributes the sharpest knee character. It also introduces another different tonal and compression character.

It is important to note here that in the original hardware, the attack and release were tuned by ear to be musical, and NOT configured using math and ratios. So the numerical settings on the Nebula version are approximates based on the hardware, they are NOT faithful numerical representations of milliseconds!

Again, I strongly urge you to look up and download the manual and even the "brochure" they offer. In those you will find much very interesting and useful information that will help you enjoy this library more and understand the depth of it's usage.

# **TRICK:** to emulate the original sound closely, you should set the AHEAD to 5.4ms. **28.3 - Preset list:**

Chandly Ltd Germanium library includes 72 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "CLG"

CLG R Flat: Compressor with Resistance (soft) knee and HPF on internal sidechain. Flat tone. CLG R Flat esc : Compressor with Resistance (soft) knee and external sidechain. Flat tone. CLG R Smooth : Compressor with Resistance (soft) knee and HPF on internal sidechain. Smooth tone.

CLG R Smooth esc : Compressor with Resistance (soft) knee and external sidechain. Smooth tone. CLG R Driven : Compressor with Resistance (soft) knee and HPF on internal sidechain. Driven tone. CLG R Driven esc : Compressor with Resistance (soft) knee and external sidechain. Driven tone. CLG GS Flat: Compressor with Germanium Soft knee and HPF on internal sidechain. Flat tone. CLG GS Flat esc : Compressor with Germanium Soft knee and external sidechain. Flat tone. CLG GS Smooth : Compressor with Germanium Soft knee and HPF on internal sidechain. Smooth tone.

CLG GS Smooth esc : Compressor with Germanium Soft knee and external sidechain. Smooth tone. CLG GS Driven : Compressor with Germanium Soft knee and HPF on internal sidechain. Driven tone.

CLG GS Driven esc : Compressor with Germanium Soft knee and external sidechain. Driven tone. CLG GM Flat: Compressor with Germanium Medium knee and HPF on internal sidechain. Flat tone. CLG GM Flat esc : Compressor with Germanium Medium knee and external sidechain. Flat tone. CLG GM Smooth : Compressor with Germanium Medium knee and HPF on internal sidechain. Smooth tone. CLG GM Smooth esc : Compressor with Germanium Medium knee and external sidechain. Smooth tone.

CLG GM Driven : Compressor with Germanium Medium knee and HPF on internal sidechain. Driven tone.

CLG GM Driven esc : Compressor with Germanium Medium knee and external sidechain. Driven tone.

CLG SM Driven esc : Compressor with Silicon Medium knee and external sidechain. Driven tone. CLG SM Flat esc : Compressor with Silicon Medium knee and external sidechain. Flat tone. CLG SM Smooth : Compressor with Silicon Medium knee and HPF on internal sidechain. Smooth tone.

CLG SM Smooth esc : Compressor with Silicon Medium knee and external sidechain. Smooth tone. CLG SM Driven : Compressor with Silicon Medium knee and HPF on internal sidechain. Driven tone. CLG SM Driven esc : Compressor with Silicon Mard knee and external sidechain. Driven tone. CLG SH Driven esc : Compressor with Silicon Hard knee and external sidechain. Driven tone. CLG SH Flat esc : Compressor with Silicon Hard knee and external sidechain. Flat tone. CLG SH Smooth : Compressor with Silicon Hard knee and HPF on internal sidechain. Smooth tone. CLG SH Smooth esc : Compressor with Silicon Hard knee and external sidechain. Smooth tone. CLG SH Driven esc : Compressor with Silicon Hard knee and HPF on internal sidechain. Driven tone. CLG SH Driven : Compressor with Silicon Hard knee and external sidechain. Driven tone. CLG SH Driven esc : Compressor with Silicon Hard knee and external sidechain. Driven tone. CLG SH Driven esc : Compressor with Silicon Hard knee and external sidechain. Driven tone. CLG SH Driven esc : Compressor with Zener Hard knee and external sidechain. Driven tone. CLG ZH Flat esc : Compressor with Zener Hard knee and external sidechain. Smooth tone. CLG ZH Smooth : Compressor with Zener Hard knee and HPF on internal sidechain. Smooth tone. CLG ZH Smooth esc : Compressor with Zener Hard knee and external sidechain. Smooth tone. CLG ZH Smooth esc : Compressor with Zener Hard knee and HPF on internal sidechain. Smooth tone. CLG ZH Driven : Compressor with Zener Hard knee and HPF on internal sidechain. Smooth tone. CLG ZH Driven : Compressor with Zener Hard knee and external sidechain. Driven tone. CLG ZH Driven : Compressor with Zener Hard knee and HPF on internal sidechain. Driven tone.

**TRICK:** using the presets in conjunction with the DRIVE control you can create hundreds of different tones. It's highly recommended to download and read the manual of the original sampled hardware.

## 28.4 – Controls

Chandly Ltd Germanium has only a few but intuitive and effective controls which are detailed below.

## Attack Control

ATT The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 3ms to 120ms

## **Release Control**

REL The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 100ms to 1,2s

# **Threshold Control**

The "THR" control defines the input level at which limiting or compression begins. THR Signals that exceed this level are processed. Signals below the threshold are unaffected.

The range is variable from 0dB to -48,1dB

## Ratio Control

**RAT** The "RAT" defines the amount of gain reduction to be processed by the module. The range is variable from 1,5:1 to 10:1

# Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms

# **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

## Gain Control

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

## HPF Control

**HPF** The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain.

The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 29. Vinylizer

# 29.1 - About the original hardware

This is a little collection of the best vinyl players: from a '40 gramophone, an old '50 player, two vintage '70 players with tube and solid state, two modern players with tube and solid state, and a vintage '60 Jukebox. The entire signal path was sampled, from the pickup to final amp stage. We even included samples with some with dust, scratch, hum, motor and noise. The Vinylizer easily meets and exceeds he quality, performance, and reliability requirements of the demanding professionals.

With its broad bandwidth the Vinylizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

Vinylizer reproduces the characteristic sound of vinyl players. To faithfully reproduce this analog sound in the DAW, we recommend using the Vinylizer in all tracks where you need to add this kind of sound.

On single track : Vinylizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : Vinylizer is inserted on the group bus, as last insert giving at the whole submix his classic sound.

Mastering : Vinylizer is inserted on the audio track as last insert, before the brickwall limiter.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

## 29.3 - Preset list:

The Vinylizer library includes 14 different programs: HQ presets with 7 kernels and LE presets with 3 kernel displayed into sub-menu "VNL"

VNL2 Gramophone: 1940's British Gramophone VNL2 JukeBox: 1960's German JukeBox VNL2 Modern Solid State: 2010's American solid state player VNL2 Modern Tube State: 2010's American tube state player VNL2 Old: 1950's American player VNL2 Vintage Solid State: 1970's Japanese solid state player VNL2 Vintage Tube State: 1970's French tube state player Samples at 44,1kHz/24bit and 96kHz/24bit

Noise\_lift Noise\_motor Noise\_motor\_gramophone Noise\_motor\_old Noise1 Noise2 Noise3 Noise4 Noise5 Noise6

**TRICK:** You can use the samples to add a new dimension and effect to your digital music. When properly set up, these noises will interfere with your songs less than you might expect. To make it sounds realistic, set the levels so that sample becomes just audible in the quietest passages of your songs.

## 29.4 – Controls

Vinylizer has only a few but intuitive and effective controls which are detailed below.

## Drive Control

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

## **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the

channel's levels. The available range is  $\pm 12$  dB.. Note that increasing the input signal the internal headroom will be reduced.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# **30. Massive Mix eQualizer**

# 30.1 - About the original hardware

The Massive Mix eQualizer makes everything sound better. You can expect the best strengths of Pultec-style equalizers as well as choice console, parametric, and graphic Eqs. All the radical shaping you'll need for the most demanding of sessions as well as the delicate, subtle shadings needed for vocals and mastering.

Massive Mix eQualizer manages to sound clean without being weak and characterless. There is little apparent colouration, just a maturity of tone.

With its broad bandwidth the Massive Mix eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

Massive Mix eQualizer reproduces the characteristic sound of Modern Passive Tube eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the MMeQ in all tracks where you need to shape the sound.

- On single track : Massive Mix eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : Massive Mix eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** *u*se the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

# 30.3 - Preset list:

The Massive Mix eQualizer library includes 24 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "MMQ"

MMeQ HPF : High Pass Filter -18dB/oct from 0 to 220Hz MMeQ LPF : Low Pass Filter -18dB/oct from 6k to 18kHz MMeQ B 22-180Hz: Bell variable from 22 to 180Hz +/- 20dB variable Q from 1,5 to 3 MFeQ LS 22-150Hz: Low Shelf variable from 22 to 150Hz +/- 20dB variable overshoot/undershoot MMeQ B 180-820Hz: Bell variable from 180 to 820Hz +/- 20dB variable Q from 1,5 to 3 MMeQ LS 150-560Hz: Low Shelf variable from 150 to 560Hz +/- 20dB variable overshoot/undershoot MMeQ B 820-3900Hz: Bell variable from 820 to 3900Hz +/- 20dB variable Q from 1,5 to 3 MMeQ LS 560-3900Hz: Low Shelf variable from 560 to 3900Hz +/- 20dB variable overshoot/undershoot MMeQ B 3.9-27kHz: Bell variable from 3.9k to 27kHz +/- 20dB variable Q from 1,5 to 3 MMeQ HS 220-1200Hz: High Shelf variable from 220 to 1200Hz +/- 20dB variable overshoot/undershoot MMeQ HS 1.2-4.7kHz: High Shelf variable from 1.2k to 4.7kHz +/- 20dB variable overshoot/undershoot MMeQ HS 4.7-27kHz: High Shelf variable from 4.7k to 27kHz +/- 20dB variable overshoot/undershoot

# 30.4 – Controls

The Massive Mix eQualizer has only a few but intuitive and effective controls which are detailed below.

CUTOF	<b>Cut Off Control</b> The "CUTOF" control affects the filter's frequency cut.
FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated. The available range is ±20 dB.
Q	<b>Q Control</b> The "Q" control sets the amplitude of the filter selected by FREQ control.
## **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

## 31. 4K Console

## 31.1 - About the original hardware

It's the world's most successful studio production console. Its reputation is built upon excellence of design, advanced electronic engineering and a sound quality that has produced hundreds of best-selling recordings. A key element in the sound of many of these recordings is the punch and drive of the mixes created by this classic '80 console.

This unit has been serviced and upgraded to give serious punch and animal power with unbelievable cleanness.

With its analog punchy sound the 4K Console has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

4K Console reproduces the sound of Classic Logic Console by using a library programs consisting of channels input, group bus and mixbus. To faithfully reproduce into the DAW the analog console signal chain and workflow, we recommend using the 4K Console in one of two following session setup configurations.

As a virtual summing box : Input Channel is inserted on the last insert of the DAW audio tracks, like a direct out routed to a summing box. The MixBus is placed on the first insert of the master track, just as the stereo return would be routed from the analog console back to the DAW.

To simulate a console : Input Channel is inserted on the first insert of the DAW audio tracks, the MixBus is placed on the last insert of the master track. If you group channels in your DAW, i.e. drums elements, you can insert the GroupBus as last insert in the submix group bus to achieve the classic bus coloration.

You should set the Pan Law in the DAW at -4,5dB. You might like to use the analog panner (included in the library) on some stereo tracks and group bus instead of the DAW panner, the 4KC Panner should be the last insert into DAW's track or group bus leaving the Pan Law in the DAW to 0dB.

**TRICK:** to emulate the non linearity between the channels of the console, you can set the GDRV control slightly different on every track into a range of +/-3dB.

## 31.3 - Preset list:

The 4K Console library includes 27 different programs: HQ presets with 10 kernels and LE presets with 3 and 5 kernels displayed into sub-menu "4KC" 4KC Line in : line input channel 4KC MIC Pre : microphone preamplifier 4KC G.Bus Clean : Group Bus clean signal 4KC G.Bus Acoustic : Group Bus with equalizer patched useful for acoustic instruments 4KC G.Bus AmbFX : Group Bus with equalizer patched useful for ambient & FX 4KC G.Bus BG Vox : Group Bus with equalizer patched useful for backing vocals 4KC G.Bus Drum : Group Bus with equalizer patched useful for drums 4KC G.Bus GTR : Group Bus with equalizer patched useful for guitars 4KC G.Bus Percussions : Group Bus with equalizer patched useful for percussions 4KC G.Bus SynthPad : Group Bus with equalizer patched useful for synthesizers and pads 4KC M.Bus Clean : MixBus clean tone 4KC M.Bus Vintage : MixBus original vintage tone 4KC M.Bus Modern : MixBus with equalizer patched useful for modern and polished sound 4KC Panner : Panner -4,5dB pan law

## 4KC Line in

The 4K Console Line in is the first stage of the console, normally it works as line amplifier and you should insert it in every track.

#### 4KC MIC in

The 4K Console microphone preamplifier has more coloration than Line in and you can use it when more character is needed.

#### 4KC G.Bus Clean

If you send some tracks to a submix bus group in your DAW and you like to have the real sound by Bus Group of the console, you can insert the G.Bus Clean preset as last insert into DAW's submix bus group.

### 4KC G.Bus Acoustic

When acoustic instruments are grouped into a submix in your DAW, you might want to have the G.BUS Acoustic preset as last insert into DAW's submix bus group to give a cohesive colored glue.

### 4KC G.Bus Amb&FX

When ambients, reverb, echo and other effects are used into an aux-send/return in your DAW, you may like to have the G.BUS Amb&FX preset as last insert into these DAW's channels to give more spatial dimension.

#### 4KC G.Bus BG Vox

When backing vocals tracks are grouped into a submix in your DAW, try inserting the G.BUS BG Vox preset as last insert into DAW's submix bus group to push a little in the backward the sound by achieving air and transparency.

#### 4KC G.Bus Drum

When drum instruments are grouped into a submix in your DAW, you may want to have the G.BUS Drum preset as last insert into DAW's submix bus group to give a cohesive punching glue.

#### 4KC G.Bus GTR

When guitars are grouped into a submix in your DAW, try using the G.BUS GTR preset as last insert into DAW's submix bus group to give a cohesive brilliant glue.

#### **4KC G.Bus Percussions**

When percussions are grouped into a submix in your DAW, you might like to have the G.BUS Percussions preset as last insert into DAW's submix bus group to give a cohesive snapping glue.

#### 4KC G.Bus SynthPad

When synthesizers and Pads are grouped into a submix in your DAW, maybe try the G.BUS SynthPad preset as last insert into DAW's submix bus group to give a cohesive focused glue.

#### 4KC M.Bus Clean

4K Console Mix Bus is the final stage of the console, it must be inserted in the mixbus of the DAW. The M.BUS Clean gives a clean glue.

#### 4KC M.Bus Vintage

When the original vintage tone is needed, use the M.BUS Vintage preset as last insert into DAW's mixbus.

#### 4KC M.Bus Modern

When a polished glued mix is needed, with a lot of air and punch, try the M.BUS Modern preset as last insert into DAW's mixbus.

#### 31.4 - Controls

The 4K Console has only a few but intuitive and effective controls which are detailed below.

#### **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

## **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

## 32. 4KeQ Brown

## 32.1 - About the original hardware

The legendary sonic signature of an early 80 s classic: the Brown 02 which was featured on countless 1980 s recordings. This punchy EQ has a unique character which sculpts the sound perfectly to fit in the mix.

4KeQ Brown manages to sound clean without being weak and characterless. There is little apparent colouration, just a maturity of tone.

With its gritty punchy sound, the 4KeQ Brown has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

4KeQ Brown reproduces the characteristic sound of Clasic Logic eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the 4KeQ Brown in all tracks where you need to shape the sound.

- On single track : 4KeQ Brown is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : 4KeQ Brown is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

## 32.3 - Preset list:

The 4KeQ Brown library includes 18 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "4KQ" BRN HPF : High Pass Filter -18dB/oct from 20 to 350Hz BRN LPF : Low Pass Filter -12dB/oct from 3k to 20kHz BRN Low Shelf: Shelf variable from 30 to 450Hz +/- 15dB variable BRN Low Bell: Bell variable variable from 30 to 450Hz +/- 15dB variable, fixed Q 0,8 BRN 200-600Hz: Bell variable from 200Hz to 600Hz +/-15dB variable, variable Q from 0.5 to 2,5 BRN 600-3200Hz: Bell variable from 600Hz to 3200Hz +/-15dB variable, variable Q from 0.5 to 2,5 BRN 3200-7000Hz: Bell variable from 3200Hz to 7000Hz +/-15dB variable, variable Q from 0.5 to 2,5 BRN High Bell: Bell variable variable from 1.5k to 16kHz +/- 15dB variable, fixed Q 0,8

## 32.4 – Controls

The 4KeQ Brown has only a few but intuitive and effective controls which are detailed below.

CUTOF	<b>Cut Off Control</b> The "CUTOF" control affects the filter's frequency cut.
FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.
Q	<b>Q Control</b> The "Q" control sets the amplitude of the filter selected by FREQ control.

## **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 33. 4KeQ Black

## 33.1 - About the original hardware

Famous and rare equalizer from the early eighteen classic console. Cleaner and punchier than the Brown and also with taller bell curves, it was featured on countless recordings. 4KeQ Black manages to sound clean without being weak and characterless. There is little apparent colouration, just a maturity of tone.

With its clean punchy sound the 4KeQ Black has been engineered to deliver recordings at the best conceivable quality onto any format and at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

4KeQ Black reproduces the characteristic sound of Clasic Logic eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the 4KeQ Black in all tracks where you need to shape the sound.

- On single track : 4KeQ Black is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : 4KeQ Black is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

## 33.3 - Preset list:

The 4KeQ Black library includes 18 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "4KQ" BLK HPF : High Pass Filter -18dB/oct from 20 to 350Hz BLK LPF : Low Pass Filter -12dB/oct from 3k to 20kHz BLK Low Shelf: Shelf variable from 30 to 450Hz +/- 18dB variable BLK Low Bell: Bell variable variable from 30 to 450Hz +/- 18dB variable, fixed Q 1.3 BLK 220-680Hz: Bell variable from 220Hz to 680Hz +/-18dB variable, variable Q from 0.5 to 4 BLK 680-2200Hz: Bell variable from 680Hz to 2200Hz +/-18dB variable, variable Q from 0.5 to 4 BLK 2200-7000Hz: Bell variable from 1.5k to 16kHz +/- 18dB variable, fixed Q 1.3 BLK High Bell: Bell variable variable from 1.5k to 16kHz +/- 18dB variable, fixed Q 1.3

## 33.4 – Controls

The 4KeQ Black has only a few but intuitive and effective controls which are detailed below.

CUTOF	<b>Cut Off Control</b> The "CUTOF" control affects the filter's frequency cut.
FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.
Q	<b>Q Control</b> The "Q" control sets the amplitude of the filter selected by FREQ control.

## **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 34. 4K Channel Dynamics

## 34.1 - About the original hardware

Channel Dynamics from the world's most successful studio production console which was the first one to incorporate dynamics processing with channel, and a master compressor in the console centre section. It's the first choice of world's best audio engineers to give punch, drive and to glue the mix together, maintaining control of the dynamics of single tracks.

4K Channel Dynamics manages to sound clean but with character, never weak and harsh. There is little apparent colouration, just a maturity of tone.

With its punching vintage tone, the 4K Channel Dynamics has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

4K Channel Dynamics reproduces the characteristic sound of Classic Logic Console Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the 4K CH in all tracks where you need to control dynamically the sound.

On single track : 4K Channel Dynamics is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : 4K Channel Dynamics is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**NOTE:** please set the parameters as described into cap.2.1

**TRICK:** to emulate the original sound closely, you should set the controls DRIVE to +3dB and AHEAD to 5.4ms.

## 34.3 - Preset list:

The 4K Channel Dynamics library includes 8 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "4KD"

4KD CH Comp : Compressor with variable controls and HPF on internal sidechain
4KD CH Comp esc : Compressor with variable controls and external sidechain
4KD LMC : Listen Mic Compressor with fixed attack and release, HPF on internal sidechain
4KD LMC esc : Listen Mic Compressor with fixed attack and release, external sidechain

## 34.4 – Controls

The 4K Channel Dynamics has only a few but intuitive and effective controls which are detailed below.

## **Attack Control**

**ATT** The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 3ms to 30ms

## **Release Control**

**REL** The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 100ms to 4s

## Threshold Control

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are

unaffected. The range is variable from 0dB to -48,1dB

### **Ratio Control**

**RAT** The "RAT" defines the amount of gain reduction to be processed by the module. When the control is at maximum (10), the ratio is effectively infinity to one, yielding the limiting effect. The range is variable from 1,5:1 to 40:1

### Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms

### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

### **Gain Control**

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

#### **HPF** Control

**HPF** The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain.

The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

## 35. 4K G.Comp

## 35.1 - About the original hardware

Stereo Bus Compressor from the world's most successful studio production console which was the first to incorporate dynamics processing with every channel, and a master compressor in the console centre section. It's the first choice of world's best audio engineers to give punch, drive and to glue the mix together, maintaining control of the dynamics of single tracks.

4K G.Comp manages to sound clean but with character without being weak and harsh. There is little apparent colouration, just a maturity of tone.

With its characteristic punching glue, the 4K G.Comp has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

4K G.Comp reproduces the characteristic sound of Classic Logic Console Stereo Bus Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the 4K G.Comp in all tracks where you need to control dynamically the sound.

On single track : 4K G.Comp is inserted on the audio tracks as insert in the position at your taste. It works great on some instruments like piano and pads.

On master track : 4K G.Comp is inserted on the group bus and/or stereo mixbus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the original sound closely, you should set the controls DRIVE to +3dB and AHEAD to 5.4ms.

## 35.3 - Preset list:

The 4K G.Comp library includes 8 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "4KD"

4K G.Comp : Compressor with variable controls and HPF on internal sidechain
4K G.Comp esc : Compressor with variable controls and external sidechain
4K G.Comp A : Compressor with variable controls, auto release and HPF on internal sidechain
4K G.Comp A esc : Compressor with variable controls, auto release and external sidechain

## 35.4 – Controls

The 4K G.Comp has only a few but intuitive and effective controls which are detailed below.

#### **Attack Control**

**ATT** The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 0.1ms to 30ms

#### **Release Control**

**REL** The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 100ms to 1.2s

#### Threshold Control

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected. The range is variable from 0dB to -48,1dB

## **Ratio Control**

**RAT** The "RAT" defines the amount of gain reduction to be processed by the module. When the control is at maximum (10), the ratio is effectively infinity to one, yielding the limiting effect. The range is variable from 2:1 to 10:1

### Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms

#### Drive Control

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

#### Gain Control

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

#### HPF Control

**HPF** The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# **36. Fenix Compressors**

## 36.1 - About the original hardware

Anyone who has ever wanted the ultimate tube compressor that can bring a vocal forward, add a little air, hold the dynamics in place and add a size and dimension to the audio without that audio getting cloudy can now realize their wildest dreams!!! This Vari-Mu compressor embodies all that is good and right with tube compressors that actually use the tube in the gain reduction circuit. Two units sampled: the Balck Mix Compressor with stock Siemens and NOS Amperex Bugle Boy tubes, and the Red Mastering Limited Edition compressor with NOS Mullard and NOS Telefunken tubes.

With its analog warm sound, the Fenix has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

Fenix reproduces the characteristic sound of Vari-Mu Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the FNX in all tracks where you need to control dynamically the sound.

On single track : the FNX is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : FNX is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**NOTE:** please set the parameters as described into cap.2.1

**TRICK:** to emulate the original sound closely, you should set the AHEAD to 5.4ms.

## 36.3 - Preset list:

The Fenix library includes 16 different programs:

HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "FNX"

Fenix Black AMP : Mix Compressor with variable controls and HPF on internal sidechain. Amperex Tubes.

Fenix Black AMP esc : Mix Compressor with variable controls and external sidechain. Amperex Tubes.

Fenix Black SMN : Mix Compressor with variable controls and HPF on internal sidechain. Siemens Tubes.

Fenix Black SMN esc : Mix Compressor with variable controls and external sidechain. Siemens Tubes.

Fenix Red MRD : Mastering Compressor with variable controls and HPF on internal sidechain. Mullard Tubes.

Fenix Red MRD esc : Mastering Compressor with variable controls and external sidechain. Mullard Tubes.

Fenix Red TFK : Mastering Compressor with variable controls and HPF on internal sidechain. Telefunken Tubes.

Fenix Red TFK esc : Mastering Compressor with variable controls and external sidechain. Telefunken Tubes.

## 36.4 – Controls

The Fenix Compressor has only a few but intuitive and effective controls which are detailed below.

#### Attack Control

**ATT** The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 4ms to 120ms

#### **Release Control**

**REL** The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is from 40ms to 2,4s

#### Threshold Control

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected. The range is variable from 0dB to -48,1dB

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### Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms

#### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

#### Gain Control

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

#### HPF Control

**HPF** The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

## **37. Ely X Qualizer**

## 37.1 - About the original hardware

Class A, solid state stereo equalizer which can be considered a "secret weapon" due to the similarity with the legendary Pultec in the lower band controls. EXeQ sounds very transparent and clean, with crisp transients and a solid bottom end. The passive coil filter is subtle but surprisingly effective, and it will definitely appeal to digital phobics, the top end sheen it bestows can be quite addictive. The unit has been modified to improve the audio quality without changing the original character.

With its musical sound, the EXeQ has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

Ely X Qualizer reproduces the characteristic sound of Modern Program eQualizer, this kind of equalizer are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the EXeQ in all tracks where you need to shape the sound.

- On single track : Ely X Qualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : Ely X Qualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

## 37.3 - Preset list:

The Ely X Qualizer library includes 14 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "EXQ"

EXeQ HPF : High Pass Filter -12dB/oct from 30 to 900Hz with resonance control EXeQ LPF : Low Pass Filter -12dB/oct from 700Hz to 28kHz with resonance control EXeQ Low Shelf : Low Shelf variable from 20 to 900Hz +/- 16dB EXeQ 45-1000Hz : Bell Filter variable from 45 to 1000Hz +/- 13dB variable Q from 0.5 to 1.0 EXeQ 1-16kHz : Bell Filter variable from 1 to 16kHz +/- 13dB variable Q from 0.5 to 1.0 EXeQ High Shelf : High Shelf variable from 700Hz to 28kHz +/- 16dB ExeQ Passive Filter: Passive Coil Filter with slight resonance peak at 12kHz and starts to fall of at 17kHz.

## 37.4 – Controls

The Ely X Qualizer has only a few but intuitive and effective controls which are detailed below.

CUTOF	<b>Cut Off Control</b> The "CUTOF" control affects the filter's frequency cut.
RESON	<b>Resonance Control</b> The resonance filter puts an accent on a selected frequency without boosting the complete spectrum.
FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.

## Q Control

**Q** The "Q" control sets the amplitude of the filter selected by FREQ control.

## **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 38. Fa-Tzu

## 38.1 - About the original hardware

Fa-Tzu is one of the most popular "sweetening" processors today for adding analog tape vibe to warm up digital tracks. The Harmonic Generation and Soft Clipper modes use a Class A circuit to gently round-off the peaks of your audio, just like saturated tubes or tape would. The Transformer and Tape Head Emulation simulates the effect of input and output transformers of vintage gear and sounds fantastic on just about anything you run through it. The Fa-Tzu compressor modes give you smooth dynamics and undeniable character that you'll want to use on every track. Also, a new ratio "Eleven", which emulates a favorite classic compressor setting,

Whether you're tracking drums, creating electronic music, or finalizing a full mix, you'll soon be addicted to adding smooth analog saturation and compression to your tracks with the Fa-Tzu.

With its analog warm sound, the Fa-Tzu has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

Fa-Tzu reproduces the characteristic sound of the Full Analog Tape simulator-Optimizer, this kind of gear is used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the FTZ in all tracks where you need to control dynamically the sound.

On single track : Fa-Tzu is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : Fa-Tzu is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

## 38.3 - Preset list:

The Fa-Tzu library includes 18 different programs: HQ presets with 5 and 6 kernels, LE presets with 3 and 1 kernel displayed into sub-menu "FTZ"

FA-Tzu: complete tape head emulation with Warmth and Tranny continuous controls
Fa-Tzu Eleven : 20:1 slow attack and fast release compressor with Warmth control
Fa-Tzu Eleven Tr : 20:1 slow attack and fast release gentle compressor with Tranny and Warmth control
Fa-Tzu Buss : 2:1 slow attack and fast release gentle compressor with Warmth control
Fa-Tzu Buss Tr : 2:1 slow attack and fast release gentle compressor with Tranny and Warmth control
Fa-Tzu Buss Tr : 2:1 slow attack and fast release gentle compressor with Tranny and Warmth control
Fa-Tzu Spank : famous talkback limiter compressor with Warmth control
Fa-Tzu Spank Tr : famous talkback limiter compressor with Tranny and Warmth control
Fa-Tzu Tracking : Distress type compressor with Warmth control
Fa-Tzu Tracking Tr : Distress type compressor with Tranny and Warmth control

## 38.4 – Controls

The Fa-Tzu has only a few but intuitive and effective controls which are detailed below.

#### Warmth Control

Warmth simulates the softening of the high frequencies that occurs with analog tape saturation
 The available range is 0.0-7.0 numerical.

#### Tranny Control

**T** The Tranny circuit adds frequency rounding by emulating a transformer. The available range is 0.0-1.0 numerical.

### Threshold Control

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected. The range is variable from 0dB to -48,1dB

AHEAD	<b>Ahead Control</b> The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms
DRIVE	<b>Drive Control</b> The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB
GAIN	<b>Gain Control</b> The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB
HPF	<b>HPF Control</b> The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 39. Feel-Tek MK3

## 39.1 - About the original hardware

Originally designed in the 1970's the MK3 was first built and distributed only by the Swiss based company. Later the design was copied and licensed as an eq design for Danner Cassettes. All circuitry for the MK3 is high quality and built according to the standards of the IRT (Institute für Rundfunktechnik). MK3 follows a long tradition of fine vintage broadcast modules. In the beginning these modules were built for radio stations exclusively due to their high factory price. Years later they found their way into recording studios around the world as used and now affordable gear. The MK3 equalizers are fully transformer-balanced.

With its musical sound, the EXeQ has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

#### Note:

Two units has been sampled in pair for real stereo use, every unit has been sampled two times.
The first sampling is of the unit is in it's original aged conditions. This status gives a degraded sound (aged) with less frequency response, less dynamics response, less harmonic contents, less stereo depth and stereo image. This sound is erroneously considered "vintage", when in reality it's "aged" due to the degradation of the electronic components. This degradation happens after 15-20 years of life.

The second sampling is of the unit completely refurbished and returned to the original as new conditions. This technical intervention restores the unit to the original sound and it can then rightfully be called "vintage". It's the same sound you can listen on thousands old hit records. The most critical, and most difficult task is to refurbish the unit without making changes to the original character and sound. This is achieved by the thoughtful choice of the right electronic components, and expert skills and experience in electronic engineering.

The aged sound can be a very useful fix to some badly recorded, harsh and digital tracks, but a nice recording will shine with the vintage sound. It is, however, possible to effectively and creatively use the aged version on nicely recorded tracks to impart some specific color if desired (art is subjective, after all).

## 39.2 - Session Setup

Feel-Tek MK3 reproduces the characteristic sound of Vintage Parametric eQualizer, this kind of equalizer are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the Feel-Tek MK3 in all tracks where you need to shape the sound.

- On single track : Feel-Tek MK3 is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : Feel-Tek MK3 is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

## 39.3 - Preset list:

The Feel-Tek MK3 library includes 16 different programs:

HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "FTK"

MK3S Filters: High and Low Pass Combo Filters -18dB/oct from 80 to 500Hz and 5 to 15kHz stock unit

MK3S 50-400Hz : Bell Filter stepped from 50 to 400Hz +/-16dB variable Q from 1 to 3 stock unit MK3S 400-2200Hz : Bell Filter stepped from 400 to 2200Hz +/-16dB variable Q from 1 to 3 stock unit MK3S 2,2-18kHz : Bell Filter stepped from 2,2 to 18kHz +/-16dB variable Q from 1 to 3 stock unit MK3R Filters: High and Low Pass Combo Filters -18dB/oct from 80 to 500Hz and 5 to 15kHz refurbished unit

MK3R 50-400Hz : Bell Filter stepped from 50 to 400Hz +/-16dB variable Q from 1 to 3 refurbished unit

MK3R 400-2200Hz : Bell Filter stepped from 400 to 2200Hz +/-16dB variable Q from 1 to 3 refurbished unit

MK3R 2,2-18kHz : Bell Filter stepped from 2,2 to 18kHz +/-16dB variable Q from 1 to 3 refurbished unit

#### 39.4 – Controls

The Feel-Tek MK3 has only a few but intuitive and effective controls which are detailed below.

FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.
Q	<b>Q Control</b> The "Q" control sets the amplitude of the filter selected by FREQ control.
DRIVE	<b>Drive Control</b> The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 40. SP79 German Mastering Console – Golden Edition

### 40.1 - About the original hardware

The legendary sound of the 1980's era was mastered with this German console which makes program audio sound better just by passing through it's circuits. When you shape your sound with this console the results will be fantastic, regardless of musical style.

The unit has been completely refurbished and returned to the original as new conditions. This technical intervention restores the unit to the original sound and it can then rightfully be called "vintage". It's the same sound you can listen on thousands old hit records.

The most critical, and most difficult task is to refurbish the unit without making changes to the original character and sound. This is achieved by the thoughtful choice of the right electronic components, and expert skills and experience in electronic engineering.

With its amazing sound the SP79GE German Mastering Console has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

SP79GE Console reproduces the sound of Vintage German Mastering Console by using a library programs consisting of channels input, group bus and mixbus. To faithfully reproduce into the DAW the analog console signal chain and workflow, we recommend using the SP79GE Console in one of two following session setup configurations.

As a virtual summing box : Input Channel is inserted on the last insert of the DAW audio tracks, like a direct out routed to a summing box. The MixBus is placed on the first insert of the master track, just as the stereo return would be routed from the analog console back to the DAW.

To simulate a console : Input Channel is inserted on the first insert of the DAW audio tracks, the MixBus is placed on the last insert of the master track. If you group channels in your DAW, i.e. drums elements, you can insert the GroupBus as last insert in the submix group bus to achieve the classic bus coloration.

**TRICK:** to emulate the non linearity between the channels of the console, you can set the GDRV control slightly different on every track into a range of +/-3dB.

#### 40.3 - Preset list:

The SP79GE Console library includes 18 different programs: HQ presets with 10 kernels and LE presets with 3 and 5 kernels displayed into sub-menu "P79"

SP79GE Filters: High and Low Pass stepped combo Filters – 20, 30, 40Hz / 16, 18, 20kHz 18dB/Oct. SP79GE Input Clean : input channel modern clean tone SP79GE Input Vintage : input channel aged tone SP79GE M.Bus Clean : MixBus modern clean tone SP79GE M.Bus Chocolate : MixBus warmth tone SP79GE M.Bus Creamy : MixBus glue tone SP79GE M.Bus Vintage : MixBus aged tone SP79GE M.Bus Vanilla : MixBus natural clean tone SP79GE M.Bus Air : MixBus with patched the famous "Swiss" Linear Phase eQ

#### SP79GE Filters

Stepped Combo Filters, HPF and LPF

### SP79GE Input Clean

The Input Clean is the first stage of the console, normally it works as line amplifier and you should insert it in every track. Input and output transformers are present in the audio path.

#### SP79GE Input Vintage

The Input Vintage it's the "aged" line input and has more coloration than Input Clean, you can use it when more character is needed. Input and output transformers are present in the audio path.

**NOTE:** don't use any Input preset if you need a clean and neutral sound.

#### SP79GE M.Bus Clean

SP79 Console Mix Bus is the final stage of the console, it must be inserted in the mixbus of the DAW. The M.BUS Clean gives a modern clean finished sound.

#### SP79GE M.Bus Chocolate

When the warm tone is needed, use the M.BUS Chocolate preset as last insert into DAW's mixbus.

#### SP79GE M.Bus Creamy

When a polished glued mix is needed try the M.BUS Creamy preset as last insert into DAW's mixbus.

#### SP79GE M.Bus Vintage

When the classic "aged" tone is needed, use the M.BUS Vintage preset as last insert into DAW's mixbus.

#### SP79GE M.Bus Vanilla

When the natural and clean tone is needed, use the M.BUS Vanilla preset as last insert into DAW's mixbus.

#### SP79GE M.Bus Air

When the clean and airy tone is needed, use the M.BUS Air preset as last insert into DAW's mixbus.

#### 40.4 - Controls

The SP79GE Console has only a few but intuitive and effective controls which are detailed below.

#### **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach. It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation. This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

### THD Control

**THD** The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. Increasing the value for a fat and saturated sound, lowering the value for a thin and detailed sound.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 41. W95S German Mastering eQualizer

### 41.1 - About the original hardware

The iconic sound of "The Dark Side of the Moon" by Pink Floyd was mastered with this German eQ, as was 90% of all vinyl discs made between the 1970's and 1990. The unit has been completely refurbished and returned to the original as new conditions. This technical intervention restores the unit to the original sound and it can then rightfully be called "vintage". It's the same sound you can listen on thousands old hit records.

The most critical, and most difficult task is to refurbish the unit without making changes to the original character and sound. This is achieved by the thoughtful choice of the right electronic components, and expert skills and experience in electronic engineering.

With its broad bandwidth the German Mastering eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

W95S reproduces the characteristic sound of German Mastering eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the W95S in all tracks where you need to shape the sound.

- On single track : W95S is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : W95S is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- Mastering : W95S is inserted on the audio track as insert in the position at your taste.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

### 41.3 - Preset list:

The German Mastering eQualizer library includes 8 different programs: HQ presets with 7 kernels and LE presets with 1 kernel displayed into sub-menu "W95"

W95S LFs: Low Shelf fixed 40, 60 100Hz +/- 15dB W95S Low Mid: Bell Filter stepped from 175 to 1000Hz +/-10dB variable Q from 0,25 to 1 W95S High Mid: Bell Filter stepped from 1 to 5,6kHz +/-10dB variable Q from 0,25 to 1 W95S HFs: High Shelf fixed 7, 10 14kHz +/- 15dB

### 41.4 – Controls

The W95S has only a few but intuitive and effective controls which are detailed below.

#### Frequency Control

**FREQ** The "FREQ" control sets the frequency to be boosted or attenuated.

#### Gain Control

**GAIN** The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.

The MF bell has broad curve when boosted and narrow curve when it is cut. The available range is ±10dB or ±15dB continuous.

#### Q Q Control

The "Q" control sets the amplitude of the filter selected by FREQ control.

### Drive Control

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

# 42. W95B German Mixing eQualizer

### 42.1 - About the original hardware

This is the mono version of the W95S equalizer, sampled in dual-mono. With different circuits and input/output transformers, the sound is more colored and thick making this eQ useful in mixing. The unit has been completely refurbished and returned to the original as new conditions. This technical intervention restores the unit to the original sound and it can then rightfully be called "vintage". It's the same sound you can listen on thousands old hit records.

The most critical, and most difficult task is to refurbish the unit without making changes to the original character and sound. This is achieved by the thoughtful choice of the right electronic components, and expert skills and experience in electronic engineering.

With its broad bandwidth the German Mixing eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

W95B reproduces the characteristic sound of German Mixing eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the W95B in all tracks where you need to shape the sound.

- On single track : W95B is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : W95B is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

### 42.3 - Preset list:

The German Mixing eQualizer library includes 8 different programs: HQ presets with 7 kernels and LE presets with 1 kernel displayed into sub-menu "W95"

W95B LFs: Low Shelf fixed 40, 60 100Hz +/- 15dB W95B Mid: Bell Filter stepped from 175Hz to 5,6kHz +/-10dB variable Q from 0,25 to 1 W95B HFs: High Shelf fixed 7, 10 14kHz +/- 15dB

### 42.4 – Controls

The W95S has only a few but intuitive and effective controls which are detailed below.

FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.

The MF bell has broad curve when boosted and narrow curve when it is cut. The available range is  $\pm 10$ dB or  $\pm 15$ dB continuous.

### Q Q Control

The "Q" control sets the amplitude of the filter selected by FREQ control.

#### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

# 43. U73 German Mastering Compressor

### 43.1 - About the original hardware

This was the main VCA compressor/limiter for disc cutting in the vinyl era and from the late 1970´s to 1990 it was used on 90% of all record in that time.

The unit has been completely refurbished and returned to the original as new conditions. This technical intervention restores the unit to the original sound and it can then rightfully be called "vintage". It's the same sound you can listen on thousands old hit records.

The most critical, and most difficult task is to refurbish the unit without making changes to the original character and sound. This is achieved by the thoughtful choice of the right electronic components, and expert skills and experience in electronic engineering.

U73 manages to sound clean but with character without being weak and harsh. There is little apparent colouration, just a maturity of tone.

With its characteristic glue, the U73 has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

U73 reproduces the characteristic sound of German Mastering Console Stereo Bus Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the U73 in all tracks where you need to control dynamically the sound.

On single track : U73 is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : U73 is inserted on the group bus and/or stereo mixbus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the original sound closely, you should set the controls DRIVE to +3dB and AHEAD to 5.4ms.

### 43.3 - Preset list:

The U73 library includes 6 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "U73"

U73 Comp : Compressor with variable controls and HPF on internal sidechain
U73.Comp esc : Compressor with variable controls and external sidechain
U73 Comp AR : Compressor with variable controls, auto release and HPF on internal sidechain
U73 Comp AR esc : Compressor with variable controls, auto release and external sidechain

#### 43.4 – Controls

The U73 has only a few but intuitive and effective controls which are detailed below.

#### Attack Control

ATT The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 0.25ms to 25ms

#### **Release Control**

REL The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 100ms to 1.2s

#### **Threshold Control**

THR The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected.

The range is variable from 0dB to -48,1dB

### **Ratio Control**

**RAT** The "RAT" defines the amount of gain reduction to be processed by the module. When the control is at maximum (10), the ratio is effectively infinity to one, yielding the limiting effect. The range is variable from 1,1:1 to 10:1

### Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms

#### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

#### Gain Control

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

#### HPF Control

HPF The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 44. Vintage PoolTeQ

### 44.1 - About the original hardware

Designed in 1951 by Eugene Shenk, this program equalizer is still revered today for its performance and quality. Totally passive with push-pull tube stage amplifiers. Two units, previously refurbished, have been sampled. This equalizer is renowned for its unique ability to boost and cut the same frequencies simultaneously, thereby creating a resonant shelf. The wide range of equalization curves provided makes it possible to boost the very low or very high frequency notes without "muddying up" the middle register instruments, this made the unit useful for mixing and mastering use. It has also always been famous for making audio program sound better just by passing through it even in "bypass" mode.

With its broad bandwidth the Vintage PoolTeQ has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

Vintage PoolTeQ reproduces the characteristic sound of Vintage Tube Program eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the PTeQ in all tracks where you need to shape the sound.

- On single track : Vintage PoolTeQ is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : Vintage PoolTeQ is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- Mastering : Vintage PoolTeQ is inserted on the audio track as insert in the position at your taste.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

## 44.3 - Preset list:

The Vintage PoolTeQ library includes 18 different programs: HQ presets with 7 kernels and LE presets with 1 kernel displayed into sub-menu "PTQ"

PoolTeQ 20Hz Combo: Low Shelf combo at 20Hz with two controls: +10dB and -10dB PoolTeQ 30Hz Combo: Low Shelf combo at 30Hz with two controls: +10dB and -10dB PoolTeQ60Hz Combo: Low Shelf combo at 60Hz with two controls: +10dB and -10dB PoolTeQ 100Hz Combo: Low Shelf combo at 100Hz with two controls: +10dB and -10dB PoolTeQ LF : Low Shelf from 20 to 100Hz +/- 10dB

PoolTeQ MF : Mid Bell from 3 to 16kHz +10dB with variable bandwidth

PoolTeQ HF : High Shelf fixed 5k, 10k, 20kHz -10dB

PoolTeQ BP TFK : Line Driver in Bypass mode with Vintage Telefunken tubes PoolTeQ BP TSL : Line Driver in Bypass mode with Vintage Tesla tubes

### 44.4 – Controls

KPS

**Frequency Control** 

The Vintage PoolTeQ has only a few but intuitive and effective controls which are detailed below.

CPS	The "KPS" and "CPS" controls set the frequency to be boosted or attenuated.
ATTEN	<b>Attenuation Control</b> The "Atten" control sets the amount by which the frequency setting is attenuated. The available range is -10 dB.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated. The available range is ±10 dB.
BANDW	<b>Bandwidth Control</b> The "BANDW" control sets the amplitude of the filter selected by CPS control.
GDRV	<b>GDrive Control</b> The "GDRV" control is a unique feature not found in similar products from others

brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

### **Drive Control**

DRIVE The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

## 45. Ely X Comp

### 45.1 - About the original hardware

Pristine sound without compromise in signal quality, this flexible machine covers all the standards with his discrete class-A audio path design which combines a clear and open sound with a good amount of punch. It shines in many different applications, thanks to Warm mode which puts the compressor into transparency or saturation mode.

This stereo rack unit has been hardly modified to improve the DC and Audio path by improving dynamics, details and multi-dimensional sound.

EXComp manages to sound clean but with character without being weak and harsh. There is little apparent colouration, just a maturity of tone.

With its characteristic glue, the EXComp has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

EXComp reproduces the characteristic sound of German Stereo Bus Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the EXComp in all tracks where you need to control dynamically the sound.

On single track : EXComp is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : EXComp is inserted on the group bus and/or stereo mixbus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the original sound closely, you should set the AHEAD control to 5.4ms.

### 45.3 - Preset list:

The EXComp library includes 8 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "EXC"

EXComp Norm : Compressor with variable controls and HPF on internal sidechain EXComp Norm esc : Compressor with variable controls and external sidechain EXComp Warm : Compressor with Warm mode ON, variable controls and HPF on internal sidechain

EXComp Warm esc : Compressor with Warm mode ON, variable controls and external sidechain

### 45.4 - Controls

The XComp has only a few but intuitive and effective controls which are detailed below.

#### **Attack Control**

ATT The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 3ms to 120ms

#### **Release Control**

REL The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 50ms to 1.3s

#### **Threshold Control**

THR The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected.

The range is variable from 0dB to -48,1dB

#### **Ratio Control**

**RAT** The "RAT" defines the amount of gain reduction to be processed by the module. When the control is at maximum (10), the ratio is effectively infinity to one, yielding the limiting effect. The range is variable from 1,1:1 to 40:1

### Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from Oms to 6ms

#### **Drive Control**

DRIVE The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

#### **Gain Control**

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

#### **HPF Control**

**HPF** The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 46. Neo Console

### 46.1 - About the original hardware

The Series One was the first major console endeavour from Neo-Technology, and we saw their design come into being in Chicago in the late 70's. The Series One preamps and line input are quiet and life-like and excel on anything needing a warm and natural feel. You can run your tracks and samples through these to give them an added boost or do a bit of filtering also. The simple, very clean signal path contributes to the overall elegance of how the sound is handled.

This console has been only slightly modified to improve the DC and Audio path by improving dynamics, details and multi-dimensional sound.

With its analog punchy sound the 4K Console has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

Neo Console reproduces the sound of Vintage Neo-Technology Console by using a library programs consisting of channels input, group bus and mixbus. To faithfully reproduce into the DAW the analog console signal chain and workflow, we recommend using the Neo Console in one of two following session setup configurations.

As a virtual summing box : Input Channel is inserted on the last insert of the DAW audio tracks, like a direct out routed to a summing box. The MixBus is placed on the first insert of the master track, just as the stereo return would be routed from the analog console back to the DAW.

To simulate a console : Input Channel is inserted on the first insert of the DAW audio tracks, the MixBus is placed on the last insert of the master track. If you group channels in your DAW, i.e. drums elements, you can insert the GroupBus as last insert in the submix group bus to achieve the classic bus coloration.

**TRICK:** to emulate the non linearity between the channels of the console, you can set the GDRV control slightly different on every track into a range of +/-3dB.

### 46.3 - Preset list:

The Neo Console library includes 24 different programs: HQ presets with 10 kernels and LE presets with 3 and 5 kernels displayed into sub-menu "NEO"

NEO Line in : line input channel

NEO MIC Pre : microphone preamplifier

NEO G.Bus Clean : Group Bus clean signal

NEO G.Bus Acoustic : Group Bus with equalizer patched useful for acoustic instruments

NEO G.Bus AmbFX : Group Bus with equalizer patched useful for ambient & FX

NEO G.Bus BG Vox : Group Bus with equalizer patched useful for backing vocals

NEO G.Bus Drum : Group Bus with equalizer patched useful for drums

NEO G.Bus GTR : Group Bus with equalizer patched useful for guitars

NEO G.Bus Percussions : Group Bus with equalizer patched useful for percussions

NEO G.Bus SynthPad : Group Bus with equalizer patched useful for synthesizers and pads

NEO M.Bus Clean : MixBus clean original tone

NEO M.Bus Modern : MixBus with equalizer patched useful for modern and polished sound

### NEO Line in

The NEO Console Line in is the first stage of the console, normally it works as line amplifier and you should insert it in every track.

### NEO MIC in

The NEO Console microphone preamplifier has more coloration than Line in and you can use it when more character is needed.

#### **NEO G.Bus Clean**

If you send some tracks to a submix bus group in your DAW and you like to have the real sound by Bus Group of the console, you can insert the G.Bus Clean preset as last insert into DAW's submix bus group.

#### **NEO G.Bus Acoustic**

When acoustic instruments are grouped into a submix in your DAW, you might want to have the G.BUS Acoustic preset as last insert into DAW's submix bus group to give a cohesive colored glue.

#### NEO G.Bus Amb&FX

When ambients, reverb, echo and other effects are used into an aux-send/return in your DAW, you may like to have the G.BUS Amb&FX preset as last insert into these DAW's channels to give more spatial dimension.

#### **NEO G.Bus BG Vox**

When backing vocals tracks are grouped into a submix in your DAW, try inserting the G.BUS BG Vox preset as last insert into DAW's submix bus group to push a little in the backward the sound by achieving air and transparency.

#### NEO G.Bus Drum

When drum instruments are grouped into a submix in your DAW, you may want to have the G.BUS Drum preset as last insert into DAW's submix bus group to give a cohesive punching glue.

#### NEO G.Bus GTR

When guitars are grouped into a submix in your DAW, try using the G.BUS GTR preset as last insert into DAW's submix bus group to give a cohesive brilliant glue.

#### **NEO G.Bus Percussions**

When percussions are grouped into a submix in your DAW, you might like to have the G.BUS Percussions preset as last insert into DAW's submix bus group to give a cohesive snapping glue.

#### NEO G.Bus SynthPad

When synthesizers and Pads are grouped into a submix in your DAW, maybe try the G.BUS SynthPad preset as last insert into DAW's submix bus group to give a cohesive focused glue.

#### NEO M.Bus Clean

NEO Console Mix Bus is the final stage of the console, it must be inserted in the mixbus of the DAW.

The M.BUS Clean gives a clean glue.

#### NEO M.Bus Modern

When a polished glued mix is needed, with a lot of air and punch, try the M.BUS Modern preset as last insert into DAW's mixbus.

### 46.4 - Controls

The NEO Console has only a few but intuitive and effective controls which are detailed below.

#### **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is  $\pm 12$  dB.

Note that increasing the input signal the internal headroom will be reduced.

### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 47. Trinit-eQ

## 47.1 - About the original hardware

The sweet musicality of the Trinit-eQ gives plenty of control and is pleasing to the ears. This equalizer section comes from the solid state Interface Console built in the early 1990 and gives at the sound a nice punch and tridimensional sound-stage yielding tight bass and crispy highs. The sampled unit has been only slightly modified to improve the DC and Audio path by improving dynamics, details and multi-dimensional sound.

With its broad bandwidth the Trinit-eQ has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

Trinit-eQ reproduces the characteristic sound of Interface Console eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the Trinit-eQ in all tracks where you need to shape the sound.

- On single track : Trinit-eQ is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : Trinit-eQ is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

## 47.3 - Preset list:

The Trinit-eQ library includes 10 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "TRQ" Trinit-eQ HPF: High Pass Filter 70Hz fixed Trinit-eQ Low Shelf : Low Shelf fixed at 80Hz +/- 15dB Trinit-eQ Low Mid : Low Mid Bell from 10 to 2000Hz +/-15dB Trinit-eQ high Mid : High Mid Bell from 2000 to 8000Hz +/-15dB Trinit-eQ High Shelf : High Shelf fixed at 12kHz +/-15dB

### 47.4 – Controls

The Trinit-eQ has only a few but intuitive and effective controls which are detailed below.

### Frequ Frequency Control

The "Frequ" control sets the frequency to be boosted or attenuated.
## **Gain Control**

**GAIN** The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated. The available range is ±15 dB.

### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

# 48. Morpheus

## 48.1 - About the original hardware

Morpheus is an AlexB Custom Shop hand made compressor for tracking, mixing and mastering use. The pure class A design, fixed ratio (3:1) and the hybrid gain-makeup circuit allow to control and shape the sound in a creative way with a touch of elegance and exclusivity.

The gain-makeup hybrid circuit gives you tube and solid-state sonics and everything in-between, by the "Morph" continuous control, offering a practically infinite range of unique tones.

With its broad bandwidth the Morpheus has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

Morpheus reproduces the characteristic sound of AlexB Custom Shop Compressor. To faithfully reproduce this analog sound in the DAW, we recommend using the Morpheus in all tracks where you need to control dynamically the sound.

On single track : Morpheus is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : Morpheus is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the original sound closely, you should set the controls DRIVE to +3dB and AHEAD to 5.4ms.

## 48.3 - Preset list:

Morpheus library includes 4 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "MRF"

Morpheus : Compressor with variable controls and HPF on internal sidechain. Fixed ratio 3:1. Morpheus esc : Compressor with variable controls and external sidechain. Fixed ratio 3:1.

## 48.4 – Controls

The Morpheus has only a few but intuitive and effective controls which are detailed below.

#### Attack Control

ATT The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 3ms to 80ms

## **Release Control**

**REL** The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 100ms to 1,2s.

#### Threshold Control

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected.

The range is variable from 0dB to -48,1dB

#### **Morph Control**

**MORPH** The "MORPH" control sets the output gain-makeup circuit from solid-state (10) to tube (100) and everything in-between by the continuous control, offering a practically infinite range of unique tones.

### Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms

### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

### **Gain Control**

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

## **HPF** Control

**HPF** The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain.

The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 49. Rupert 88 Console

## 49.1 - About the original hardware

This excellent console has the most sweet, modern and musical sound. The circuit topology is unprecedented: custom transformers, high voltage, discrete op-amp cards that have been developed to offer extended headroom, dynamic range, and frequency response. Some circuits of the sampled unit have been slighty modified by enhancing in the DC and audio path with top grade audio components by improving dynamics, details and multi-dimensional sound. The resulting sound is breathtaking!

With its broad bandwidth the Rupert 88 Console has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

Rupert 88 Console reproduces the sound of Modern British Recording Console by using a library programs consisting of channels input, group bus and mixbus. To faithfully reproduce into the DAW the analog console signal chain and workflow, we recommend using the Rupert 88 Console in one of two following session setup configurations.

As a virtual summing box : Input Channel is inserted on the last insert of the DAW audio tracks, like a direct out routed to a summing box. The MixBus is placed on the first insert of the master track, just as the stereo return would be routed from the analog console back to the DAW.

To simulate a console : Input Channel is inserted on the first insert of the DAW audio tracks, the MixBus is placed on the last insert of the master track. If you group channels in your DAW, i.e. drums elements, you can insert the GroupBus as last insert in the submix group bus to achieve the classic bus coloration.

You should set the Pan Law in the DAW at -3dB. You might like to use the analog panner (included in the library) on some stereo tracks and group bus instead of the DAW panner, the R88 Panner should be the last insert into DAW's track or group bus leaving the Pan Law in the DAW to 0dB.

**TRICK:** to emulate the non linearity between the channels of the console, you can set the GDRV control slightly different on every track into a range of +/-3dB.

# 49.3 - Preset list:

The Rupert 88 Console library includes 27 different programs: HQ presets with 10 kernels and LE presets with 3 and 5 kernels displayed into sub-menu "R88"

R88 Line in : line input channel

R88 MIC Pre : microphone preamplifier

R88 MIC Pre Silk : microphone preamplifier with silky sound

R88 G.Bus Clean : Group Bus clean signal

R88 G.Bus Acoustic : Group Bus with equalizer patched useful for acoustic instruments

R88 G.Bus AmbFX : Group Bus with equalizer patched useful for ambient & FX

R88 G.Bus BG Vox : Group Bus with equalizer patched useful for backing vocals

R88 G.Bus Drum : Group Bus with equalizer patched useful for drums

R88 G.Bus GTR : Group Bus with equalizer patched useful for guitars

R88 G.Bus Percussions : Group Bus with equalizer patched useful for percussions

R88 G.Bus SynthPad : Group Bus with equalizer patched useful for synthesizers and pads R88 M.Bus Clean : MixBus clean

R88 M.Bus Modern : MixBus with R33 equalizer patched, useful for modern and polished sound R88 Panner : Panner -3dB pan law

## R88 Line in

The Rupert 88 Console Line in is the first stage of the console, normally it works as line amplifier and you should insert it in every track.

#### **R88 MIC Pre**

The Rupert 88 Console microphone preamplifier has more coloration than Line in and you can use it when more character is needed.

#### **R88 MIC Silk**

The Rupert 88 Console microphone preamplifier has more coloration and harmonics than Mic Pre and you can use it when more character by silky sound is needed.

### R88 G.Bus Clean

If you send some tracks to a submix bus group in your DAW and you like to have the real sound by Bus Group of the console, you can insert the G.Bus Clean preset as last insert into DAW's submix bus group.

### **R88 G.Bus Acoustic**

When acoustic instruments are grouped into a submix in your DAW, you might want to have the G.BUS Acoustic preset as last insert into DAW's submix bus group to give a cohesive colored glue.

### R88 G.Bus Amb&FX

When ambients, reverb, echo and other effects are used into an aux-send/return in your DAW, you may like to have the G.BUS Amb&FX preset as last insert into these DAW's channels to give more spatial dimension.

#### R88 G.Bus BG Vox

When backing vocals tracks are grouped into a submix in your DAW, try inserting the G.BUS BG Vox preset as last insert into DAW's submix bus group to push a little in the backward the sound by achieving air and transparency.

#### R88 G.Bus Drum

When drum instruments are grouped into a submix in your DAW, you may want to have the G.BUS Drum preset as last insert into DAW's submix bus group to give a cohesive punching glue.

## R88 G.Bus GTR

When guitars are grouped into a submix in your DAW, try using the G.BUS GTR preset as last insert into DAW's submix bus group to give a cohesive brilliant glue.

## **R88 G.Bus Percussions**

When percussions are grouped into a submix in your DAW, you might like to have the G.BUS Percussions preset as last insert into DAW's submix bus group to give a cohesive snapping glue.

## R88 G.Bus SynthPad

When synthesizers and Pads are grouped into a submix in your DAW, maybe try the G.BUS SynthPad preset as last insert into DAW's submix bus group to give a cohesive focused glue.

#### R88 M.Bus Clean

Modern Flagship Console Mix Bus is the final stage of the console, it must be inserted in the mixbus of the DAW.

The M.BUS Clean gives the original clean glue.

# R88 M.Bus Modern

When a polished glued mix is needed, with some of air and punch, try the M.BUS Modern preset as last insert into DAW's mixbus.

# 49.4 - Controls

The Rupert 88 Console has only a few but intuitive and effective controls which are detailed below.

## **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

## **Drive Control**

DRIVE The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 50. Rupert 33 eQualizer

## 50.1 - About the original hardware

Uses input and output custom designed R.N. transformers, which are so much of the heart of the sound of Mr N's classics. We're not sure what magic is inside of this eQ, but everything we send through it immediately sounds good... The sampled unit has been modified by enhancing in the DC and audio path with top grade audio components. This is a fantastic eQ !!!

With its broad bandwidth the Rupert 33 eQualizer has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

Rupert 33 eQualizer reproduces the characteristic sound of Modern British Console eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the R33eQ in all tracks where you need to shape the sound.

- On single track : Rupert 33 eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : Rupert 33 eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

## 50.3 - Preset list:

The Rupert 33 eQualizer library includes 14 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "R33" R33 HPF : High Pass Filter variable from 0 to 250Hz 12dB/Oct R33 Low Shelf : Low Shelf variable from 30 to 3000Hz +/- 12dB R33 50-290Hz : Bell Filter variable from 50 to 290Hz +/- 12dB variable Q from 0.7 to 5.0 R33 290-850Hz : Bell Filter variable from 290 to 850Hz +/- 12dB variable Q from 0.7 to 5.0 R33 850-6000Hz : Bell Filter variable from 850 to 6000Hz +/- 12dB variable Q from 0.7 to 5.0 R33 6000-16000Hz : Bell Filter variable from 6000 to 16000Hz +/- 12dB variable Q from 0.7 to 5.0 R33 High Shelf : High Shelf variable from 2.5k to 25kHz +/- 12dB

## 50.4 – Controls

The Rupert 33 eQualizer has only a few but intuitive and effective controls which are detailed below.

## Cut Off Control

**CUTOF** The "CUTOF" control affects the filter's frequency cut.

#### **Frequency Control**

**FREQ** The "FREQ" control sets the frequency to be boosted or attenuated.

#### **Gain Control**

GAIN The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.
 The available range is ±12 dB.

#### Q Control

**Q** The "Q" control sets the amplitude of the filter selected by FREQ control.

#### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 51. Rupert 43 Compressor

#### 51.1 - About the original hardware

New and powerful approach to dynamic processing! This widely-acclaimed dual compressor/limiter embodies feed-forward (modern) and feed-back (vintage) mode, both with that legendary, classic and elegantly silky sound. The sampled unit has been improved with NOS Signetics ICs, Rubycon audio caps, and DC path revised. Compared to the original unit, the sound is more detailed, deeper, warmer, and with a better stereo image.

With its broad bandwidth the Rupert 43 Compressor has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

Rupert 43 Compressor reproduces the characteristic sound of Modern British Console Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the R43 in all tracks where you need to control dynamically the sound.

On single track : Rupert 43 Compressor is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : Rupert 43 Compressor is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the original sound closely, you should set the controls DRIVE to +3dB and AHEAD to 5.4ms.

#### 51.3 - Preset list:

The Rupert 43 Compressor library includes 8 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "R43"

R43 FB : Feed-Back compressor with variable controls and HPF on internal sidechain R43 FB esc : Feed-Back compressor with variable controls and external sidechain R43 FF : Feed-Forward compressor with variable controls and HPF on internal sidechain R43 FF esc : Feed-Forward compressor with variable controls and external sidechain

#### 51.4 – Controls

The Modern Flagship Dynamics has only a few but intuitive and effective controls which are detailed below.

## **Attack Control**

ATT The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 20ms to 75ms

### **Release Control**

**REL** The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 100ms to 2,5s

## Threshold Control

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected.

The range is variable from 0dB to -48,1dB

#### **Ratio Control**

**RAT** The "RAT" defines the amount of gain reduction to be processed by the module. When the control is at maximum (10), the ratio is effectively infinity to one, yielding the limiting effect. The range is variable from 1,1:1 to 40:1

### Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms

### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

### Gain Control

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

### HPF Control

HPF The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 52. Rupert 42 Tape FX

## 52.1 - About the original hardware

The R42 provides a extraordinary simulation of true tape sound through the inclusion of genuine tape drive circuitry. This emulation circuit provides the nostalgic tone rounding and compression usually only achieved by the use of actual tape. This typically offsets the harshness often found in digital recordings. The unit has been modified by enhancing in the DC and audio path with top grade audio components.

With its analog warm sound, the Rupert 42 Tape FX has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

Rupert 42 reproduces the characteristic sound of the Full Analog Tape simulator-saturator, this kind of gear is used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the R42 in all tracks where you need to saturate the sound.

Use the "Tape FX" preset if you need a light CPU load, this combo instance gives the full sound of the hardware but without the dynamics behavior.

To emulate the full characteristics of the hardware you must use two instance: "Magnetic Head" + "Line Amp".

On single track : R42 is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : R42 is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

**NOTE:** Tape control is continuous from 7,5 to 15ips. This allows you to express all your creativity.

# 52.3 - Preset list:

The Rupert 42 library includes 5 different programs: HQ presets with 5 and 6 kernels, LE presets with 3 and 1 kernel displayed into sub-menu "R42"

R42 Tape FX: complete tape+head emulation with Saturation and Tape speed continuous controls R42 Magnetic Head : Magnetic Head stage only with Saturation and Tape speed control R42 Line Amp Stock: stock circuit of line amplifier with Gdrive and Drive control R42 Line Amp Classic: modified circuit of line amplifier with Gdrive and Drive control R42 Line Amp Vintage: modified circuit of line amplifier with Gdrive and Drive control

#### 52.4 – Controls

The Rupert 42 only a few but intuitive and effective controls which are detailed below.

#### Saturation Control

**SAT** Saturation controls the harmonics that occurs with analog tape saturation The available range is 0.0 - 5.0 numerical.

#### **Tape Control**

**TAPE** The Tape Control sets the speed of the tape. The available range is 7,5 ~ 15 ips

#### **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach. It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with

moderation. This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 53.9K Console

## 53.1 - About the original hardware

This new release brings audio performance to an astounding level, Audio purity was a major design goal, and the XL Series incorporates touches such as DC coupling, short signal paths, no electrolytic capacitors in the audio pathways, OFC internal wiring, fully balanced mix buses, angelically pure mic preamp, exceptionally low THD, noise floor & crosstalk levels keep your audio absolutely pristine, while the legendary headroom carries every nuance of your audio and allows engineers to mix 'hotter' without distortion with a devilish punch.

With its analog punchy sound the 9K Console has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

9K Console reproduces the sound of Modern Logic XL Console by using a library programs consisting of channels input, group bus and mixbus. To faithfully reproduce into the DAW the analog console signal chain and workflow, we recommend using the 9K Console in one of two following session setup configurations.

As a virtual summing box : Input Channel is inserted on the last insert of the DAW audio tracks, like a direct out routed to a summing box. The MixBus is placed on the first insert of the master track, just as the stereo return would be routed from the analog console back to the DAW.

To simulate a console : Input Channel is inserted on the first insert of the DAW audio tracks, the MixBus is placed on the last insert of the master track. If you group channels in your DAW, i.e. drums elements, you can insert the GroupBus as last insert in the submix group bus to achieve the classic bus coloration.

You should set the Pan Law in the DAW at -4,5dB. You might like to use the analog panner (included in the library) on some stereo tracks and group bus instead of the DAW panner, the 9KC Panner should be the last insert into DAW's track or group bus leaving the Pan Law in the DAW to 0dB.

**TRICK:** to emulate the non linearity between the channels of the console, you can set the GDRV control slightly different on every track into a range of +/-3dB.

# 53.3 - Preset list:

The 9K Console library includes 31 different programs: HQ presets with 10 kernels and LE presets with 3 and 5 kernels displayed into sub-menu "9KC" 9KC Line in : line input channel 9KC MIC Pre: microphone preamplifier 9KC G.Bus Clean : Group Bus clean signal 9KC G.Bus Acoustic : Group Bus with equalizer patched useful for acoustic instruments 9KC G.Bus AmbFX : Group Bus with equalizer patched useful for ambient & FX 9KC G.Bus BG Vox : Group Bus with equalizer patched useful for backing vocals 9KC G.Bus Drum : Group Bus with equalizer patched useful for drums 9KC G.Bus GTR : Group Bus with equalizer patched useful for guitars 9KC G.Bus Percussions : Group Bus with equalizer patched useful for percussions 9KC G.Bus SynthPad : Group Bus with equalizer patched useful for synthesizers and pads 9KC LFE Channel : Channel for low frequency effects as explosions and deep bass 9KC M.Bus Clean : MixBus clean natural tone 9KC M.Bus Punch : MixBus for punching music 9KC M.Bus Modern : MixBus with equalizer patched useful for modern and polished sound 9KC M.Bus Warm : MixBus with warm tone and harmonic contents 9KC Panner : Panner -4,5dB pan law

# 9KC Line in

The 9K Console Line in is the first stage of the console, normally it works as line amplifier and you should insert it in every track.

### 9KC MIC in

The 9K Console microphone preamplifier has more coloration than Line in and you can use it when more character is needed.

#### 9KC G.Bus Clean

If you send some tracks to a submix bus group in your DAW and you like to have the real sound by Bus Group of the console, you can insert the G.Bus Clean preset as last insert into DAW's submix bus group.

### **9KC G.Bus Acoustic**

When acoustic instruments are grouped into a submix in your DAW, you might want to have the G.BUS Acoustic preset as last insert into DAW's submix bus group to give a cohesive colored glue.

#### 9KC G.Bus Amb&FX

When ambients, reverb, echo and other effects are used into an aux-send/return in your DAW, you may like to have the G.BUS Amb&FX preset as last insert into these DAW's channels to give more spatial dimension.

#### 9KC G.Bus BG Vox

When backing vocals tracks are grouped into a submix in your DAW, try inserting the G.BUS BG Vox preset as last insert into DAW's submix bus group to push a little in the backward the sound by achieving air and transparency.

#### 9KC G.Bus Drum

When drum instruments are grouped into a submix in your DAW, you may want to have the G.BUS Drum preset as last insert into DAW's submix bus group to give a cohesive punching glue.

## 9KC G.Bus GTR

When guitars are grouped into a submix in your DAW, try using the G.BUS GTR preset as last insert into DAW's submix bus group to give a cohesive brilliant glue.

#### **9KC G.Bus Percussions**

When percussions are grouped into a submix in your DAW, you might like to have the G.BUS Percussions preset as last insert into DAW's submix bus group to give a cohesive snapping glue.

#### 9KC G.Bus SynthPad

When synthesizers and Pads are grouped into a submix in your DAW, maybe try the G.BUS SynthPad preset as last insert into DAW's submix bus group to give a cohesive focused glue.

## 9KC LFE Channel

The Low Frequency Effect Channel is a special channel used for sub frequency effects like explosions, deep bass, etc. It should be used in parallel with a normal channel since LFE has a low pass filter at 120Hz.

#### 9KC M.Bus Clean

9K Console Mix Bus is the final stage of the console, it must be inserted in the mixbus of the DAW. The M.BUS Clean gives a clean glue.

#### 9KC M.Bus Punch

When a mix with great impact is needed, use the M.BUS Punch preset as last insert into DAW's mixbus.

#### 9KC M.Bus Modern

When a polished glued mix is needed, with a lot of air and punch, try the M.BUS Modern preset as last insert into DAW's mixbus.

#### 9KC M.Bus Warm

When a warm mix is needed, use the M.BUS Warm preset as last insert into DAW's mixbus to add warm and harmonics.

#### 53.4 - Controls

The 9K Console has only a few but intuitive and effective controls which are detailed below.

#### **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

## **Drive Control**

DRIVE The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 54. 9KeQ

## 54.1 - About the original hardware

The modern parametric equalizer with High and Low Pass Filters and pure analog audio path for transparent and musical sound from the XL series Console, accuracy for surgical problem solving, smoother broader sound shaping or a little more aggressive character.

With its clean punchy sound, the 9KeQ has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

9KeQ reproduces the characteristic sound of Modern Logic XL eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the 9KeQ in all tracks where you need to shape the sound.

- On single track : 9KeQ is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : 9KeQ is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** *u*se the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

## 54.3 - Preset list:

The 9KeQ library includes 18 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "9KQ"

9KeQ HPF: High Pass Filter -18dB/oct from 20 to 450Hz 9KeQ LPF: Low Pass Filter -12dB/oct from 3k to 35kHz 9KeQ Low Shelf: Shelf variable from 40 to 600Hz +/- 16dB variable 9KeQ Low Bell: Bell variable variable from 40 to 600Hz +/- 15dB variable, fixed Q 2,5 9KeQ 200-600Hz: Bell variable from 200Hz to 600Hz +/-20dB variable, variable Q from 0.7 to 2,5 9KeQ 600-3200Hz: Bell variable from 600Hz to 3200Hz +/-20dB variable, variable Q from 0.7 to 2,5 9KeQ 3200-7000Hz: Bell variable from 3200Hz to 7000Hz +/-20dB variable, variable Q from 0.7 to 2,5 9KeQ High Bell: Bell variable variable from 1.5k to 22kHz +/- 20dB variable, fixed Q 2,5 9KeQ High Shelf: Shelf variable variable from 1.5k to 22kHz +/- 20dB variable

## 54.4 – Controls

The 9KeQ has only a few but intuitive and effective controls which are detailed below.

CUTOF	<b>Cut Off Control</b> The "CUTOF" control affects the filter's frequency cut.
FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.
Q	<b>Q Control</b> The "Q" control sets the amplitude of the filter selected by FREQ control.
DRIVE	<b>Drive Control</b> The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 55. 9K Channel Dynamics

# 55.1 - About the original hardware

Channel dynamics from the XL Series Console, pure analog audio path technology that provides exceptional audio quality and punch, delivering the classic analog warmth and grit normally reserved for older mixing consoles.

9K Channel Dynamics manages to sound clean but with punch and character, never weak and harsh. There isn't apparent colouration, just a maturity of tone.

With its punching clean tone, the 9K Channel Dynamics has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

9K Channel Dynamics reproduces the characteristic sound of Modern Logic XL Console Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the 9K CH in all tracks where you need to control dynamically the sound.

On single track : 9K Channel Dynamics is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On master track : 9K Channel Dynamics is inserted on the group bus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the original sound closely, you should set the controls DRIVE to +3dB and AHEAD to 5.4ms.

## 55.3 - Preset list:

The 9K Channel Dynamics library includes 8 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "9KD"

9KD CH Comp : Compressor with variable controls and HPF on internal sidechain
9KD CH Comp esc : Compressor with variable controls and external sidechain
9KD LMC : Listen Mic Compressor with fixed attack and release, HPF on internal sidechain
9KD LMC esc : Listen Mic Compressor with fixed attack and release, external sidechain

## 55.4 – Controls

The 4K Channel Dynamics has only a few but intuitive and effective controls which are detailed below.

#### Attack Control

**ATT** The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 3ms to 30ms

## **Release Control**

**REL** The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 100ms to 4s

## Threshold Control

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected. The range is variable from 0dB to -48,1dB

## **Ratio Control**

**RAT** The "RAT" defines the amount of gain reduction to be processed by the module. When the control is at maximum (10), the ratio is effectively infinity to one, yielding the limiting effect. The range is variable from 1,5:1 to 100:1

### Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms

### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

## **Gain Control**

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

#### **HPF** Control

**HPF** The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 56. 9K G.Comp

## 56.1 - About the original hardware

Stereo Bus Compressor from the XL series Console. It makes complete mixes sound bigger with it's pure analog audio path, with more power, punch and drive. It brings cohesion and strength to your mix without compromising clarity. The 9KG Comp brings this classic 'audio glue' to you with spectacular audio performance.

9K G.Comp manages to sound clean but with character without being weak and harsh. There isn't apparent colouration, just a maturity of tone.

With its characteristic punching glue, the 9K G.Comp has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.
9K G.Comp reproduces the characteristic sound of Modern Logic XL Console Stereo Bus Compressor, this kind of compressor are used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the 9K G.Comp in all tracks where you need to control dynamically the sound.

On single track : 9K G.Comp is inserted on the audio tracks as insert in the position at your taste. It works great on some instruments like piano and pads.

On master track : 9K G.Comp is inserted on the group bus and/or stereo mixbus, as last insert giving at the whole submix his classic sound.

**TRICK:** to emulate the original sound closely, you should set the controls DRIVE to +3dB and AHEAD to 5.4ms.

# 56.3 - Preset list:

The 9K G.Comp library includes 8 different programs: HQ presets with 5 kernels and LE presets with 1 kernel displayed into sub-menu "9KD"

9K G.Comp : Compressor with variable controls and HPF on internal sidechain
9K G.Comp esc : Compressor with variable controls and external sidechain
9K G.Comp A : Compressor with variable controls, auto release and HPF on internal sidechain
9K G.Comp A esc : Compressor with variable controls, auto release and external sidechain

# 56.4 – Controls

The 9K G.Comp has only a few but intuitive and effective controls which are detailed below.

### Attack Control

**ATT** The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 0.1ms to 30ms

# **Release Control**

**REL** The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 100ms to 1.2s

### Threshold Control

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected.

The range is variable from 0dB to -48,1dB

### **Ratio Control**

**RAT** The "RAT" defines the amount of gain reduction to be processed by the module. When the control is at maximum (10), the ratio is effectively infinity to one, yielding the limiting effect. The range is variable from 2:1 to 20:1

## Ahead Control

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms

### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB

### **Gain Control**

**GAIN** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB

### **HPF** Control

**HPF** The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 500Hz

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 57. Harry 32

# 57.1 - About the original hardware

A gorgeous sounding channel strip that literally came from the legendary console that has made music history:

It doesn't cost much money money and you just can't beat it in the digital realm.

You will heal the world with the amazing sounds that go on and on.

Two channels has been repaired and refurbished and then sampled to capture all the nuances of their fantastic sound: the line input, mic preamp, equalizer and the renowned filters.

With its vintage sound, the H32 has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

H32 reproduces the characteristic sound of the vintage 32 series channel strip, this kind of sound is used in countless hit records in the world. To faithfully reproduce into the DAW the H32 channel strip and workflow, we recommend using the Harry 32 in the following setup configurations:

- Channel Strip : Line input or Mic Preamp is inserted on the first insert of the DAW audio tracks, then the equalizer band can be inserted if the track demand equalization.
- Equalizer only : equalizer preset is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

# 57.3 - Preset list:

The H32 library includes 16 different programs: HQ presets with 10 and 3 kernels, LE presets with 3 and 1 kernel displayed into sub-menu "H32"

H32C Line in: line input channel

H32C Mic Pre: microphone preamplifier

H32eQ HPF : High Pass Filter -12dB/oct from 25 to 3150Hz

H32eQ LPF : Low Pass Filter -12dB/oct from 160Hz to 20kHz

H32eQ Low Shelf: Shelf variable from 40 to 600Hz +/- 12dB variable

H32eQ 40-1000Hz: Bell variable from 40 to 1000Hz +/- 12dB variable, fixed Q 2

H32eQ 1-13kHz: Bell variable from 1 to 13kHz +/-12dB variable, fixed Q 2

H32eQ High Shelf: Shelf variable from 900Hk to 13kHz +/- 12dB variable

### 57.4 – Controls

The H32 has only a few but intuitive and effective controls which are detailed below.

#### **Cut Off Control**

**CUTOF** The "CUTOF" control affects the filter's frequency cut.

#### **Frequency Control**

**FREQ** The "FREQ" control sets the frequency to be boosted or attenuated.

#### Gain Control

**GAIN** The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.

### GDRV GDrive Control

The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance.

The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

### Drive Control

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 58. Tube Magnetic Saturator – Golden Edition

# 58.1 - About the original hardware

Tube Magnetic Saturator is a homemade hardware piece that I built some years ago. DTE is the first library come from that unit. The last evolution includes a discrete input stage, a vintage magnetic-tape head circuit followed by a modern class A tube preamp with 6 valves working at high voltage: 300V. The magnetic-head is digitally controlled to emulate, in analog domain, different speeds and tape printing, while a discrete solid state preamp drives the signal to saturate it.

With its analog warm sound, the TMS has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

Tube Magnetic Saturator reproduces the characteristic sound of the Analog Tube Tape simulatorsaturator, this kind of gear is used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the TMS in all tracks where you need to saturate the sound.

To emulate the full characteristics of the hardware you must use two instance: "Magnetic Head" + "Line Amp".

On single track : TMS is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On Bus : TMS is inserted on the group bus and/or stereo out bus, as last insert giving at the whole submix/mix his classic sound.

**TRICK:** to emulate the non linearity between the tracks, you can set the THD control slightly different on every instance into a range of +/-5dB.

### 58.3 - Preset list:

The Tube Magnetic Saturator library includes 2 different programs displayed into sub-menu "TMS"

TMSGE magnetic Head : Magnetic Tape Head stage with Saturation, Tape speed and Tape on/off control

TMSGE Line Amp: Tube circuit of line amplifier with HF, Gdrive and THD control

### 58.4 – Controls

The Tube Magnetic Saturator only a few but intuitive and effective controls which are detailed below.

	Speed Control
SPEED	The Speed Control sets the speed of the tape. The available steps are 7,5, 15, 30 ips

# Saturation Control

**SAT** Saturation controls the harmonics that occurs with analog tape saturation The available range is 0.0 - 5.0 numerical.

# TAPE Tape Control

Tape control engages print to tape OFF/ON OFF: no tape, only the input stage and magnetic head in the audio path ON: the audio is printed on the tape by magnetic head as in a classic tape machine

# HF HF Control

HF controls the high shelf filter 0/+5dB

# **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach. It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation. This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

# THD Control

**THD** The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±12 dB

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 59. Analog Tape Emulator – Golden Edition

# 59.1 - About the original hardware

The Analog Tape Emulator is the first product that uses the analog process for modelling complex analog circuitry entirely in the analog domain unlike digital plug-ins or processor-based outboard gear. The result is a faithful recreation of the original response, without using the original analog hardware. The circuit has been improved and a custom line-amp stage has been added, one with tubes, one solid state with transformer and one with custom vintage Jfet.

With its analog warm sound, the ATE GE has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

Analog Tape Emulator reproduces the characteristic sound of the Analog Tape simulator-saturator, this kind of gear is used in top records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the ATE GE in all tracks where you need to saturate the sound. To emulate the full characteristics of the hardware you must use two instance: "Magnetic Head" + "Line Amp".

On single track : ATE GE is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

On Bus : ATE GE is inserted on the group bus and/or stereo out bus, as last insert giving at the whole submix/mix his classic sound.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

**NOTE:** Tape control is continuous from 7,5 to 30ips. This allows you to express all your creativity.

# 59.3 - Preset list:

The Analog Tape Emulator library includes 16 different programs: presets with 5 and 3 kernels displayed into sub-menu "ATE"

ATEGE 102 Magnetic Head : Magnetic Tape Head stage only with Speed, Gain and Tape controls ATEGE M79 Magnetic Head : Magnetic Tape Head stage only with Speed, Gain and Tape controls ATEGE 351 Magnetic Head : Magnetic Tape Head stage only with Speed, Gain and Tape controls ATEGE A8C Magnetic Head : Magnetic Tape Head stage only with Speed, Gain and Tape controls ATEGE TapeX Magnetic Head : Magnetic Tape Head stage only with Speed, Gain and Tape controls ATEGE Line Amp Clean: original circuit of line amplifier with Gdrive and Drive control ATEGE Line Amp Transformer: vintage transformer discrete line amplifier circuit ATEGE Line Amp Tube: vintage tube and transformer line amplifier circuit ATEGE Line Amp JFET: vintage JFet line amplifier circuit

# 59.4 – Controls

The Analog Tape Emulator has only a few but intuitive and effective controls which are detailed below.

### **Speed Control**

SPEED	It sets the speed of the tape. The available range is 7,5 - 15 - 30 ips.
GAIN	<b>Gain Control</b> The Gain Control sets the input gain of the Magnetic Head. The available range is -15/+15 dB.
TAPE	<b>Tape Control</b> The Tape Control sets one of three available tape simulations 1: A456 2: GP9 3: S111

### **Drive Control**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but

suitable if you look for an effect. Increasing the value for a fat and saturated sound, lowering the value for a thin and detailed sound.

## GDRV GDrive Control

The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 60. T65 Program eQualizer – Golden Edition

# 60.1 - About the original hardware

This vintage module is a glorious "sound shaping" active resonance equalizer and paints in bold strokes with heaps of character. It's a well known unit for huge low end with amazing 60Hz control, great on almost any kind of bass. Stunning mid range boost which can help lift up an electric guitar, vocals and instruments. The 10kHz band is extremely useful for adding air.

With its musical sound, the T65 has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

T65 Program eQualizer reproduces the characteristic sound of Vintage TFK Program eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the T65 in all tracks where you need to shape the sound.

- On single track : T65 Program eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : T65 Program eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- Mastering : T65 Program eQualizer is inserted on the audio track as insert in the position at your taste.

To emulate the original unit sound you should use both presets 1K and 3K by mixing them in this way:

- When a single equalization band only is required you should use the 3K preset.
- When you need more than one band of equalization you should use the 1K presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** *u*se the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one 3K preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the THD control slightly different on every instance into a range of +/-5dB.

# 60.3 - Preset list:

The T65 Program eQualizer library includes 8 different programs: 3K presets with 3 kernels and 1K presets with 1 kernel displayed into sub-menu "T65"

T65GE Low High: Low and High Shelf at 60Hz and 10kHz +/- 15dB T65GE Mid : Mid bell fixed 700, 1k, 2k, 3k, 4kHz + 8dB

### 60.4 – Controls

The T65 Program eQualizer has only a few but intuitive and effective controls which are detailed below.

LOW Low Control Low Control Sets the boost or attenuation of 60Hz shelf filter

# HIGH High Control

High Control Sets the boost or attenuation of 10kHz shelf filter

FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated. The MF bell has broad curve when boosted and narrow curve when it is cut.
DRIVE	<b>Drive Control</b> The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

# 61. Stooder 9 Console – Golden Edition

# 61.1 - About the original hardware

This incredibly clean and sweet console was built in 1982 by a renovated Swiss Company that was the largest console manufacturer in the world in that era. The S9C sounds smooth and clean but still has amazing punch and stunning details that make music sound more alive. This console has been refurbished and then sampled to capture all the nuances of his fantastic sound: the line input, mic preamp, group bus, mix bus, equalizer and the renowned filters.

With its musical sound, the S9C has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

Stooder 9 Console reproduces the sound of Vintage Swiss Recording Console by using a library programs consisting of channels input, group bus and mixbus. To faithfully reproduce into the DAW the analog console signal chain and workflow, I recommend using the Stooder 9 Console in these session setup configurations:

Recording Console Emulation

- Insert the Line Input preset on the first insert of the DAW audio tracks
- Insert the Mix Bus preset on the first insert of the DAW master bus
- If you group channels in you DAW, i.e. drums elements, you can insert the Group Bus preset as first insert in the submix group bus.
- Start your mix !

# Mixing Console Emulation

- Insert the Line Input preset on the last insert of the DAW audio tracks
- Insert the Mix Bus preset on the last insert of the DAW master bus
- If you group channels in you DAW, i.e. drums elements, you can insert the Group Bus preset as last insert in the submix group bus.
- Start your mix !

You should set the Pan Law in the DAW at -3dB.

**TRICK:** to emulate the non linearity between the channels of the console, you can set the GDRV control slightly different on every track into a range of +/-3dB.

**TIP:** Which configuration to use ?

If you have recorded your tracks with a console or with colored preamps – by hardware or by processing the audio files with, for example, the Preamp Colors & Saturation library – then the Mixing Console Emulation is the right choice.

If you have tracking with clean and sterile preamps or your song has a lot of VST-instruments, the Recording Console Emulation may to work better.

Experimenting and choosing by personal taste is the best way.

### 61.3 - Preset list:

The Stooder 9 Console GE library includes the following programs displayed into menu "S9C" and subgrouped into 44.1kHz, 48kHz, 88.2kHz and 96kHz.

S9CGE Input Line S9CGE MIC Preamp S9CGE G.Bus S9CGE M.Bus S9CGE M.Bus Add-Ons

### S9CGE Input Line

Input Line is the first stage of the console, normally it works as line amplifier and you should insert it in every track as first or as last insert.

### S9CGE MIC Preamp

Microphone Preamplifier has more coloration than Input Line and you can use it when more character is needed. You can use it instead-or-with the Input Line, at your taste.

### S9CGE G.Bus

If you send some tracks to a submix bus group in your DAW and you like to have the real sound by Bus Group of the console, you can use the G.Bus preset as insert into DAW's submix bus group. G.Bus has new concept in the Golden Edition: instead to have more presets with different colors, there is one only with the control labeled G.BUS which allows to choose different colors:

- 1: Clean = Original Clean G.Bus, the sound from the console
- 2: Drum = Original Clean G.Bus with 88RS channel eQ patched

- 3 : Percussions = Original Clean G.Bus with vintage Pultec patched
- 4 : Acoustic = Original Clean G.Bus with GML8200 patched
- 5: Guitars = Original Clean G.Bus with vintage API 550A patched
- 6: Synthpad = Original Clean G.Bus with vintage Moog PEQ patched
- 7: BGVocals = Original Clean G.Bus with custom handmade AlexB Parametric EQ patched
- 8: Ambient = Original Clean G.Bus with vintage Filtek PB1 parched

# S9CGE M.Bus

M.Bus is the final stage of the console, it must be the first or last insert in the mixbus of the DAW. The M.BUS gives the original clean glue of the console.

# S9CGE M.Bus Add-Ons

M.Bus has new concept in the Golden Edition: instead to have more presets with different colors, there is a preset called M.Bus ADD-Ons which could be used to give different colors. The TONE control switchs between the sound of some top notch hardware with light equalization setup:

- 1: Vintage = Vintage TG Mastering eQ
- 2 : Classic = Vintage Sontec 432
- 3 : Modern = SPL PQ

ADD-Ons preset must be placed after M.Bus preset for the right interaction with it.

Use the ADD-Ons only if you need it, of course.

### 61.4 - Controls

Over the common and the above described controls, S9CGE has also:

## - GDRV: GDrive Control

The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

# - THD: Drive Control

The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. It rises ALL the harmonics at the same time. The available range is ±12 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 62. Stooder 9 eQualizer – Golden Edition

# 62.1 - About the original hardware

Rock solid low end, slightly aggressive mids and an absolutely gorgeous air band, it is easy use extreme settings with this eQ without sounding 'phasey'. Truly a musical all purpose parametric equalizer which comes from the amazing vintage S9 Console.

With its massive sound, the S9eQGE has been engineered to produce recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

S9eQGE reproduces the characteristic sound of Vintage Stooder 9 eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the S9eQGE in all tracks where you need to shape the sound.

- On single track the Stooder 9 eQualizer works great on all instruments and voices.
- On master track the Stooder 9 eQualizer gives at the whole mix his classic clean, natural and musical sound.

To emulate the original unit sound you should use both presets 1k and 3k by mixing them in this way:

- When a single equalization band only is required you should use the 3k preset.
- When you need more than one band of equalization you should use the 1k presets and as last band the 3k. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one 3k preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the THD control slightly different on every instance into a range of +/-2dB.

### 62.3 - Preset list:

The Stooder 9 eQualizer GE library includes the following programs displayed into menu "S9Q" and subgrouped into 44.1kHz, 48kHz, 88.2kHz and 96kHz, every subgroup has 1k and 3k subgroup.

S9eQGE HPF S9eQGE Low Shelf / Bell S9eQGE 120 – 680Hz S9eQGE 680-3300kHz S9eQGE 3.3 – 7Khz S9eQGEHigh Shelf / Bell S9eQGE LPF

### S9eQGE HPF

High Pass Filter -12dB/oct from 30Hz to 330Hz.

# S9eQGE Low Shelf / Bell

Low Band from 30Hz to 600Hz +/- 15dB switchable from shelf to bell.

### S9eQGE 120 – 680Hz

Low-Mid Band from 120Hz to 680Hz +/- 15dB with variable Q from 1.1 to 3.

### S9eQGE 680 - 3300Hz

High Mid Band from 680Hz to 3300Hz +/- 15dB with variable Q from 1.1 to 3.

### S9eQGE 3.3 - 7kHz

High Mid Band from 3.3kHz to 7kHz +/- 15dB with variable Q from 1.1 to 3.

# S9eQGE High Shelf / Bell

High Band from 0.7kHz to 18kHz +/- 15dB switchable from shelf to bell.

# S9eQGE LPF

Low Pass Filter -12dB/oct from 0.7k to 20kHz.

# 62.4 – Controls

Over the common and the above described controls, S9eQGE has also:

- CUTOF: Cut Off Control The "CUTOF" control affects the filter's frequency cut.
- **S/B : Shelf / Bell Control** This control switchs between shelf, bell with Q 0.7 and Bell with Q 0.2.

# - FREQ: Frequency Control

The "FREQ" control sets the frequency to be boosted or attenuated.

# - GAIN: Gain Control

The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.

- Q: Q Control
 The "O" control sets the amplitude of the filt

The "Q" control sets the amplitude of the filter selected by FREQ control.

# - THD: THD Control

The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. It rises ALL the harmonics at the same time. The available range is ±12 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 63. WSW eQ – Golden Edition SK

# 63.1 - About the original hardware

As beautiful looking as it sounds, this was exclusively hand-built in small numbers in the early to mid 60's for Austrian broadcast by WSW. Built using components of the highest quality available at the time along with as much iron, transformers and inductors as you can dream of, and still fitted with coveted germanium transistors! This oldest built WSW eQ has a sound character with addictive qualities, it adds a lovely richness and contour/body to anything you put through it with a sweet "airy" top end and powerful, huge low end. The mid frequency band does little miracles, especially to lead vocals or instruments. Additionally, there's a passive (LCR) low-cut filter included to clear out the mud whenever there is just too much going on.

With its musical sound, the WSWGE has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

WSWGE reproduces the characteristic sound of Vintage Broadcast Germanium eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the WSWGE in all tracks where you need to shape the sound.

- On Bus Group : WSWGE is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : WSWGE is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets 1k and 3k by mixing them in this way:

- When a single equalization band only is required you should use the 3K preset.
- When you need more than one band of equalization you should use the 1K presets and as last band the 3K. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one 3K preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

### 63.3 - Preset list:

The WSWGE library includes 6 different programs: 3K presets with 3 kernels and 1K presets with 1 kernel displayed into sub-menu "WSW"

WSWGE HPF: Resonant High Pass Filter -12dB/oct at 60 and 120Hz WSWGE Low High : Combo Low and High Shelf at 60Hz and 12kHz +/- 15dB WSWGE Mid : Mid bell fixed 1k, 1.4k, 2k, 2.8k, 4k, 5.6kHz + 9dB

### 63.4 – Controls

The WSWGE has only a few but intuitive and effective controls which are detailed below.

CUTOF	<b>Cut Off Control</b> The "CUTOF" control affects the filter's frequency cut.
FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.
THD	<b>THD Control</b> The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±12 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 64. BP1

# 64.1 - About the original hardware

High Quality Vintage German Broadcast Equipment, the BP1 is a LP and HP filter with either 12dB 18dB or 24db per octave. It is perfect for filtering duties during mixing to cut unwanted frequencies in precisely the low or high ranges. Thanks to the varied filter gradients and overlapping frequency ranges, it is possible to work very surgically in the frequency spectrum. It sounds fantastic on Reverb and Delay giving depth and 3D ambience. It's a perfect addition in mastering for external sidechaining a compressor to allow the compressor to respond only to a specific frequency range. But real Magic happens when you use it in the M/S technique\* by use it flat for the mid - it just cut at 18Hz with natural 6dB slope - and at taste on the side: your mix will sound more finished and tridimensional with more punch and definition.

With its musical sound thanks to Haufe in/out transformers, the BPI has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

\* the library is not implemented with M/S features, you can use any plugin to do it as the good free MSED by Voxengo.

BP1 reproduces the characteristic sound of Vintage Broadcast Germanium Filter, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the BP1 in all tracks where you need to shape the sound.

- On single track : BP1 is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : BP1 is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

#### 64.3 - Preset list:

The BP1 library includes 4 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "BP1"

BP1 HPF: High Pass Filter 30 40 58 80 112 160 225 320 450 640 900 1300Hz 12/18/24dB oct BP1 LPF: Low Pass Filter 0.7 1 1.4 2 2.8 4 5.4 8 10 14 18 kHz 12/18/24dB oct.

### 64.4 – Controls

The BP1 has only a few but intuitive and effective controls which are detailed below.

FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
SLOPE	<b>Slope Control</b> The "SLOPE" control sets the steepness of the filter's attenuation.
DRIVE	<b>Drive Control</b> The "DRIVE" control affects the harmonic contents in an unnatural way, suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

but

# 65. W295A eQualizer – Golden Edition SK

# 65.1 - About the original hardware

The W295A equalizer is a real vintage classic. Developed in the 1960´s it is the direct successor of the older passive W95C eQ. This eQ was the first transitorized module in the vintage german broadcast era, transformer-balanced, fully discrete 3-band in class-A quality. The 10kHz Hi-band and the 60Hz Low-band can be cut or boosted by ±15dB. The Mid band is a special tilt-eq. Today it is rare and very hard to find.

With its musical sound, the W295AGE has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

W295AGE reproduces the characteristic sound of Vintage Broadcast eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the W295AGE in all tracks where you need to shape the sound.

- On Bus Group : W295AGE is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : W295AGE is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.
The W295AGE library includes 1 program (the full equalizer in one preset): 3K presets with 3 kernels displayed into sub-menu "295"

W295AGE: Low and High Shelf at 60Hz and 10kHz +/- 15dB and TilT Mid eQ

#### 65.4 – Controls

The W295AGE Program eQualizer has only a few but intuitive and effective controls which are detailed below.

#### Gain Control

**GAIN** The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.

The MF bell has broad curve when boosted and narrow curve when it is cut.

## **TilT Control**

**TILT** The "TILT" control increases and cuts proportionately both High and Low bands. Turn up (+4dB) and the low-end gets increased while the high-end gets reduced automatically; turn down (-4dB) and the the high-end gets increased and the lowend is attenuated at the same time.

### THD Control

**THD**The "THD" control affects the harmonic contents in an unnatural way, but suitable<br/>if you look for an effect.<br/>The available range is ±12 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to

# 66. W295B eQualizer – Golden Edition SK

# 66.1 - About the original hardware

The W295B is a transformer-balanced, fully discrete 3-band eQ in class-A quality. It is the first successor of the earlier W95C which were used in conjunction with the tube preamp modules in the 1950's desks. The W295A was the first transistorized cassettes in the vintage german broadcast era. The 10kHz Hi-band and the 60Hz Low-band can be cut or boosted by ±15dB. The Mid-band offers six bands to choose from, which can be cut or boosted by a max. of ±8dB. Today it's hard to find and very rare.

With its musical sound, the W295BGE has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

W295BGE reproduces the characteristic sound of Vintage Broadcast eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the W295BGE in all tracks where you need to shape the sound.

- On Bus Group : W295BGE is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : W295BGE is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.

To emulate the original unit sound you should use both presets 1K and 3K by mixing them in this way:

- When a single equalization band only is required you should use the 3K preset.
- When you need more than one band of equalization you should use the 1K presets and as last band the 3K. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one 3K preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

The W295BGE library includes 4 different programs: 3K presets with 3 kernels and 1K presets with 1 kernel displayed into sub-menu "295"

W295BGE H-L Shelf: Low and High Shelf at 60Hz and 10kHz +/- 15dB W295BGE Mid : Mid bell fixed 700, 1k, 1,5k, 2,3k, 3,5k, 5,6kHz +/- 8dB

#### 66.4 – Controls

The W295BGE has only a few but intuitive and effective controls which are detailed below.

FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated. The MF bell has broad curve when boosted and narrow curve when it is cut.
THD	<b>THD Control</b> The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

# 67. SoundTec 432 Vintage Parametric Disk Master eQualizer – Golden Edition

# 67.1 - About the original hardware

It has been an honor for me to work on this Vintage Parametric Disk Master eQualizer, a wonderful and classic creation by Mr.Burgess Macneal. I have totally refurbished the unit, restoring it to it's original and beautiful sound, along with two mods done at request by the owner to make it more suitable for Mastering. The original Gain step has been changed from +/-12dB to +/-6dB and an additional High Shelf Filter at the Air Frequency of 16kHz has been added. Now this Holy Grail of equalizers fully expresses sweetness and musicality. It's not colored or necessarily "warm", but it is subtle, focused, detailed, fast, immediate and extremely natural. The more you listen it, you begin to notice a little something "special" imparted across the audio signal... Simply Beautiful.

At the end the owner has allowed me to sample the unit, so with a lot of care to not damage the delicate circuits. It's not only a matter of banal OVU = 0,775v but an accurate matching in signal, i/o impedance, filtered power supply, invisible converters and more. Now I'm glad to offer you the sound of this rare marvel for your music production, thanking you for the support that will allow me to keep on developing these programs.

With its musical sound, the S432GE has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

S432GE eQualizer reproduces the characteristic sound of Vintage Parametric Disk Master eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the S432GE in all tracks where you need to shape the sound.

- On single track : S432GE eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : S432GE eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- Mastering: S432GE eQualizer is inserted on the audio track as insert in the position at your taste.

To emulate the original unit sound you should use both presets 1K and 5K by mixing them in this way:

- on a single track when a single equalization band only is required you should use the 5K preset
- when you need more than one band of equalization you should use the 1K presets and as last band the 5K. This interaction gives the right color and harmonic contents. However if you want more or less color and saturation you can use the THD control.

**NOTE:** *u*se the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one 5k preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

The S432GE Vintage Parametric Disk Master eQualizer library includes 12 different programs: 5K presets and 1K presets into sub-menu "432"

S432GE Shelf Low-High : Low and High Shelf combo at 50Hz/100Hz and 10kHz +/- 6dB S432GE Shelf Low-Air : Low and High Shelf combo at 50Hz/100Hz and 16kHz +/- 6dB S432GE B 11-150Hz : Bell Filter from 11Hz to 150Hz +/- 6dB, slope from 5 to 15 dB/oct S432GE B 150-1000Hz : Bell Filter from 150Hz to 1000Hz +/- 6dB, slope from 5 to 15 dB/oct S432GE B 1-5.7kHz : Bell Filter from 1kHz to 5.7kHz +/- 6dB, slope from 5 to 15 dB/oct S432GE B 5.7-25kHz : Bell Filter from 5.7kHz to 25kHz +/- 6dB, slope from 5 to 15 dB/oct

## 67.4 – Controls

The S432GE eQualizer has only a few but intuitive and effective controls which are detailed below.

	Frequency Control
FREQ	The FREQ control sets the frequency to be boosted of attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated. The MF bell has broad curve when boosted and narrow curve when it is cut.
Slope	<b>Slope Control</b> The "Slope" control sets the steepness of the filter selected by FREQ control. The available range is from 5 to 15 dB/oct. <i>(Note2)</i>
THD	<b>THD Control</b> The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. Increasing the value for a fat and saturated sound, lowering the value for a thin and detailed sound.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

# 68. W91A German eQualizer

# 68.1 - About the original hardware

The W91A equalizer is one of the later developed. It was designed in the early 1990's when customers requested for more channels with full features. All circuitry for the W91A's is high quality and build after the standards of the IRT (Institut für Rundfunk Technik).

The idea behind the W91A equalizer was to build a balanced eq module in a small, half fader (B1) cassette. The W91A is quit flexible and a good alrounder featuring with selectable frequencies and a q-factor. You can use the the W91A for mixing and mastering.

The W91A is a flexible eq with a relatively clean yet slightly aggressive character. It's ability to go from subtle filtering to extreme EQ-ing effects, makes the W91A a very powerful tool. The sound is much more "in the face" and you can still add loads of high frequencies without getting any harshness. Punchy!

With its musical sound, the W91A has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

W91A eQualizer reproduces the characteristic sound of Vintage Broadcast eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the W91A in all tracks where you need to shape the sound.

- On single track : W91A eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : W91A eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- Mastering; W91A eQualizer is inserted on the audio track as insert in the position at your taste.

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

The W91A eQualizer library includes 6 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "W91"

W91A 45-300Hz: Low Bell 45Hz to 300Hz +/- 15dB 1 to 3 Q W91A 300-1500Hz: Mid Bell 300Hz to 1500Hz +/- 15dB 1 to 3 Q W91A 1.5-15kHz: High Bell 1.5kHz to 15kHz +/- 15dB 1 to 3 Q

#### 68.4 – Controls

The W91A eQualizer has only a few but intuitive and effective controls which are detailed below.

FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.
Q	<b>Q Control</b> The "Q" control sets the amplitude of the filter selected by FREQ control.
DRIVE	<b>Drive Control</b> The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

# 69. W92 German eQualizer

## 69.1 - About the original hardware

TThe W92 equalizer is one of the classic '80 era. All circuitry for the W92's is high quality and build after the standards of the IRT (Institut für Rundfunk Technik).

The W92 is a flexible and a good alrounder featuring with HPF, selectable frequencies and each band can be switched in/out. You can use the the W92 for mixing and mastering.

The W92 is a flexible eq with a relatively clean character. It's ability to go from subtle filtering to extreme EQ-ing effects, makes the W92 a very powerful tool in mastering. The sound is much open and deep and you can still add loads of high frequencies without getting any harshness. Sweet!

With its musical sound, the W92 has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

W92 eQualizer reproduces the characteristic sound of Vintage Broadcast eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the W92 in all tracks where you need to shape the sound.

- On single track : W92 eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : W92 eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- Mastering: W92 eQualizer is inserted on the audio track as insert in the position at your taste.
  - Mastering :

To emulate the original unit sound you should use both presets LE and HQ by mixing them in this way:

- When a single equalization band only is required you should use the HQ preset.
- When you need more than one band of equalization you should use the LE presets and as last band the HQ. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

The W92eQualizer library includes 10 different programs: HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu "W92"

W92 HPF: High Pass Filter 20. 80, 140Hz 18dB/oct W92 Low Shelf: Low Shelf 50Hz to 400Hz +/- 15dB W92 60-1000Hz: Low Mid Bell 60Hz to 1000Hz +/- 15dB W92 1-16kHz: High Mid Bell 1kHz to 16kHz +/- 15dB W92 High Shelf: High Shelf 3kHz to 10kHz +/- 15dB

## 69.4 – Controls

The W92 eQualizer has only a few but intuitive and effective controls which are detailed below.

FREQ	<b>Frequency Control</b> The "FREQ" control sets the frequency to be boosted or attenuated.
GAIN	<b>Gain Control</b> The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.
CUTOF	<b>Cut Off Control</b> The "CUTOF" control affects the filter's frequency cut.
DRIVE	<b>Drive Control</b> The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

# 70. Flexmix Console - Golden Edition SK

## 70.1 - About the original hardware

This Classic 1979's funky compact desk was originally developed as a live console for Queen. Oodles of character to vibe up your recordings and mixes. The console has been carefully refurbished and modified in the AlexB Laboratory before the sampling process to improve the audio quality without to compromise the original British character.

These console are becoming extremely sought after!

With its large bandwidth the Flexmix Console has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, capturing all the energy and atmosphere of the original performance as perfectly as possible.

Flexmix Console reproduces the sound of Vintage British Live Console using a library programs consisting of channels input, equalizer and mixbus. To faithfully reproduce into the DAW the analog console signal chain and workflow, we recommend using the Flexmix Console in one of two following session setup configurations.

Recording Console Emulation

- Insert the Line Input preset on the first insert of the DAW audio tracks
- Insert the Mix Bus preset on the first insert of the DAW master bus
- If you group channels in you DAW, i.e. drums elements, you can insert the Group Bus preset as first insert in the submix group bus.
- Start your mix !

## Mixing Console Emulation

- Insert the Line Input preset on the last insert of the DAW audio tracks
- Insert the Mix Bus preset on the last insert of the DAW master bus
- If you group channels in you DAW, i.e. drums elements, you can insert the Group Bus preset as last insert in the submix group bus.
- Start your mix !

You should set the Pan Law in the DAW at -3dB.

**TRICK:** to emulate the non linearity between the channels of the console, you can set the GDRV control slightly different on every track into a range of +/-3dB.

## **TIP:** Which configuration to use ?

If you have recorded your tracks with a console or with colored preamps – by hardware or by processing the audio files with, for example, the Preamp Colors & Saturation library – then the Mixing Console Emulation is the right choice.

If you have tracking with clean and sterile preamps or your song has a lot of VST-instruments, the Recording Console Emulation may to work better.

Experimenting and choosing by personal taste is the best way.

The Flexmix Console library includes 11 different programs: 3K presets with 3 kernels and 1K presets with 1 kernels displayed into sub-menu "FLX"

FLEXMIX Line Input FLEXMIX MIC Pre FLEXMIX CH Add-Ons FLEXMIX M.Bus Clean FLEXMIX M.Bus Add-Ons FLEXI Low Shelf : shelf filter 60 to 150Hz +/-15dB\* FLEXI 0,3-10kHZ : bell filter 0,3 to 10KHz +/-15dB\*, very broad Q FLEXI High Shelf : shelf filter 8 to 12kHz +/-15dB\*

\* The values showed on the GUI are numerical with the original imperfection related to the real value in dB.

#### FLEXMIX Input Line

The Flexmix Console Input Line is the first stage of the console, normally it works as line amplifier and you should insert it in every track.

#### FLEXMIX Mic Pre

The Flexmix Console microphone preamplifier has more coloration than Line in and you can use it when more character is needed.

#### FLEXMIX CH Add-Ons

This add-ons can be inserted after the Line input, or Mic Pre, to set the track as channel srtip with four (4) different flavors you can set with the switchable Tone control:

- 1 Freddy: tuned for Male Voice tracks.
- 2 John: tuned for Bass track.
- 3 May: tuned for Guitar track.
- 4 Roger: tuned for Drums track.

You can use the CH Add-Ons as first insert for bus group also.

#### FLEXMIX M.Bus Clean

The Flexmix Console M.Bus Clean is the final stage of the console, it must be inserted in the mixbus of the DAW to give the clean glue.

## FLEXMIX M.Bus Add-Ons

M.Bus has new concept in the Golden Edition: instead to have more presets with different colors, there is a preset called M.Bus ADD-Ons which could be used to give different colors. The TONE control switchs between the sound of some top notch hardware with light equalization setup:

1: Vintage = Vintage TG Mastering eQ

2 : Queen = Vintage British eQ

3 : Modern = SPL PQ

ADD-Ons preset must be placed after M.Bus preset for the right interaction with it. Use the ADD-Ons only if you need it, of course.

## 70.4 - Controls

The Flexmix Console has only a few but intuitive and effective controls which are detailed below.

#### **GDrive Control**

**GDRV** The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is  $\pm 12$  dB.. Note that increasing the input signal the internal headroom will be reduced.

## THD THD Control

The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±12 dB.

#### **Frequency Control**

**FREQ** The switchable "FREQ" control sets the frequency to be boosted or attenuated.

#### Gain Control

**GAIN** The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated. The available range is ±15 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls, leave them at stock value (center 12 o'clock).

# 71. GM9 Mastering eQualizer – Golden Edition

# 71.1 - About the original hardware

The GM9GE Mastering eQ is a powerful and comprehensive workhorse for Mastering Engineers around the world. It is regarded as being one of the highest-quality EQs available and renowned for its incredible detail, precision, resolution and clarity, making it ideal for very precise and surgical-style EQ work for high quality audio.

The unit has been refurbished to retain the original sound and modified by installing an (switchable on/off) output custom made audio transformer to achieve improvement in the audio performance.

With its musical sound, the GM9GE has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

GM9GE Mastering eQualizer reproduces the characteristic sound of the famous Parametric Mastering eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the GM9GE in all tracks where you need to shape the sound.

- On single track : GM9GE Mastering eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.
- On master track : GM9GE Mastering eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- Mastering: GM9GE Mastering eQualizer is inserted on the audio track as insert in the position at your taste.

To emulate the original unit sound you should use both presets 1K and 5K by mixing them in this way:

- When a single equalization band only is required you should use the 5K preset.
- When you need more than one band of equalization you should use the 1K presets and as last band the 5K. This interaction gives the right color and harmonic contents.

**NOTE:** use the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware, the same by using more than one HQ preset.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

The GM9GE Mastering eQualizer library includes 20 different programs: presets with 5 kernels and presets with 1 kernel displayed into sub-menu "GM9"

GM9GE Low Shelf : Low Shelf from 13Hz to 800Hz +/- 6dB GM9GE B 13-320Hz : Bell Filter from 13Hz to 320Hz +/- 6dB, Q from 0.4 to 4 GM9GE B 320-3000Hz : Bell Filter from 320Hz to 3000Hz +/- 6dB, Q from 0.4 to 4 GM9GE B 3-26kHz : Bell Filter from 3kHz to 26kHz +/- 6dB, Q from 0.4 to 4 GM9GE High Shelf : High Shelf from 420Hz to 26kHz +/- 6dB

GM9TGE Low Shelf : Low Shelf from 13Hz to 800Hz +/- 6dB with transformer GM9TGE B 13-320Hz : Bell Filter from 13Hz to 320Hz +/- 6dB, Q from 0.4 to 4 with transformer GM9TGE B 320-3000Hz : Bell Filter from 320Hz to 3000Hz +/- 6dB, Q from 0.4 to 4 with transformer GM9TGE B 3-26kHz : Bell Filter from 3kHz to 26kHz +/- 6dB, Q from 0.4 to 4 with transformer GM9TGE High Shelf : High Shelf from 420Hz to 26kHz +/- 6dB with transformer

## 71.4 – Controls

The GM9GE Mastering eQualizer has only a few but intuitive and effective controls which are detailed below.

#### **Frequency Control**

**FREQ** The "FREQ" control sets the frequency to be boosted or attenuated.

#### Gain Control

**GAIN** The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.

#### Q Q Control

The "Q" control sets the steepness of the filter selected by FREQ control. The available range is from 0,4 to 4

## **THD Control**

**THD** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. Increasing the value for a fat and saturated sound, lowering the value for a thin and detailed sound.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

# 72. VC1 Vintage Voice Channel

# 72.1 - About the original hardware

A gorgeous sounding vintage british channel strip into a small green box, midrangey preamp, line amp, two opto compressors with different character and one harmonic enhancer. Only 55 units has been built !

Additionally there is another vintage green ½ U rack equalizer with three bands.

You will be amazed by the sound from these units to process your voice and instrumental tracks. The two green boxes has been repaired and refurbished and then sampled to capture all the nuances of their fantastic sound: the line input, mic preamp, enhancer, compressors and the equalizer.

With its vintage sound, the VCI has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy and atmosphere of the original performance as perfectly as possible.

VC1 reproduces the characteristic sound of the vintage britishchannel strip, this kind of sound is used in countless hit records in the world. To faithfully reproduce into the DAW the VC1 channel strip and workflow, we recommend using the VC1 in the following setup configurations:

Line input or Mic Preamp is inserted on the first insert of the DAW audio tracks, then the equalizer, compressor, enhancer can be inserted if the track demand them.

**TRICK:** to emulate the non linearity between the tracks, you can set the DRIVE control slightly different on every instance into a range of +/-5dB.

The VC1 library includes 9 different programs:

HQ presets with 10 and 3 kernels, LE presets with 3 and 1 kernel displayed into sub-menu "H32"

VC1 Line in: line input channel

VCI Mic Pre: microphone preamplifier

VC1 Enhancer : Harmonic Enhancer

VCl Compressor : Opto Compressor with two character and in-between

Joe eQ : combo equalizer with Low, Mid and High bands ±16 dB

## 72.4 – Controls

The VC1 has only a few but intuitive and effective controls which are detailed below.

## Low/Mid/High Control (eQ)

Low/Mid/High These control set the amount by which the frequency setting is boosted or attenuated.

The available range is ±16 dB.

### GDRV GDrive Control (Line input – Mic Pre)

The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

#### Drive Control (Line input – Mic Pre)

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±30 dB.

# Attack Control (Compressor)

**ATT** The "ATT" control defines the attack time of the compressor. Attack time is the duration between the input signal reaching the threshold and processing being applied.

The range is variable from 3ms to 20ms

## **Release Control (Compressor)**

**REL** The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The available range is 100ms to 1,2s

#### Threshold Control (Compressor)

**THR** The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected. The range is variable from 0dB to -48,1dB

# Type Control (Compressor)

**Type** The "Type" control sets the output gain-makeup circuit from compressor type1 (1) to compressor type2 (2) and everything in-between by the continuous control, offering a practically infinite range of unique tones.

#### Ahead Control (Compressor)

AHEAD The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from Oms to 6ms

## **Drive Control (Compressor)**

**DRIVE** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. The available range is ±24 dB.

## Drive Control (enhancer)

**DRIVE** The "DRIVE" control determines the depth and tone of the enhancement. The range is variable from 0 to 10.

#### **Reson Control (enhancer)**

**Reson** The "Reson" control determines the amount of the high-frequency harmonic. The range is variable from 0 to 10.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

**NOTE2:** do not adjust the ATTCK and RELS controls into Line Amp and Mic Pre presets, leave them at stock value (center 12 o'clock).

# 73. Neev 09 - Golden Edition

# 73.1 - About the original hardware

The original often called "Metal Knob" N09GE was a rack mounted adaptation of the Class A/B compressor/limiter console modules, which were a later incarnation of the fully Class A N54. All use what's called a "diode-bridge" topology to achieve gain reduction. It is a stereo compressor with an independent limiter section, this is the most desirable version with the original transformers which sounds incredibly musical.

N09GE manages to sound clean but with character without being weak and harsh. There is little apparent colouration, just a maturity of tone.

The N09GE has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

N09GE reproduces the characteristic sound of vintage bus Conmpressor; this kind of unit are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, I recommend using the N09 in group bus and stereo mixbus where you need to control dynamically the sound.

On single track the N09GE works great on acoustic instruments and voices.

To emulate the original unit sound you should use the presets in this way:

- When you need to control the dynamic Insert the Comp preset followed by the Line Out preset.
- If some limiting is needed, you should insert the Limit preset followed by the Line Out preset. The limiter is not a brick-wall and it should be used to limit the peak of the music between -0,1dB to -1dB of Gain Reduction for to keep transparency.
- Where a complete set of compression and limiting is demanded you should insert the Comp preset then the Limit preset and finally the Line Out preset.

Compressor loves to be pushed hot, input peak signal between -2dBfs to -6dBfs are good for that typical softness transient sound of this unit. Input levels above -8dBfs allows more glue and musicality. Anyway: use your ears and enjoy ! :)

#### External SideChain

The Sc presets are useful to control the dynamic module of the Compressor via external sidechain for ducking, pumping or other effect. To use sidechaining correctly please refer at the manual of your DAW.

This function works on Nebula4 only.

**NOTE:** use the presets you need only. Stacking unnecessary presets is the wrong way to emulate the sampled hardware. i.e. don't stack Comp + Limit + Line Out if you need the Comp or Limit only. Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

#### 73.3 - Preset list:

The N09GE library includes the following programs displayed into menu "N09" and subgrouped into 44.1kHz, 48kHz, 88.2kHz.

N09GE Comp N09GE Comp Sc N09GE Limit N09GE Line Out

#### N09GE Comp

Compressor with fixed attack (4ms), release, threshold, ratio, HPF, gain makeup and wet/dry controls.

#### N09GE Comp Sc

The same as the Comp preset but with external sidechain input and without HPF.

#### N09GE Limit

Limiter with attack, release, threshold, HPF, gain makeup and wet/dry controls.

#### **N09GE Line Out**

Line Out stage with Gdrive and THD controls.

Over the common and the above described controls, N09GE has also:

#### Compressor

## - REL: Release Control

The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level.

The switchable values are 100ms, 400ms, 800ms, 1,5s.

Two AUTO program dependent releases based on audio levels are available, they are labeled 4.1 and 4.2. In the original unit the auto program dependent releases A1 and A2 are based on transient speed.

#### - THR: Threshold Control

The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected. The range is variable from 0 to -64.

#### - RATIO: Ratio Control

The "RATIO" defines the amount of gain reduction to be processed by the module. The switchable values are 1.5:1 - 2:1 - 3:1 - 4:1 - 6:1.

#### - HPF: High Pass Filter Control

The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from OHz to 200Hz.

## - MAKP: Gain Makeup Control

The "MAKP" control sets the output level of gain makeup. The range is variable from 0dB to 25dB.

#### - WET: Dry/Wet Control

This control lets you balance between processed (Wet) and original signal (Dry) allowing you to do parallel compression without routing to buses/aux. The range is variable from 0% (Dry) to 100% (Wet).

## Limiter

## - ATT: Attack Control

The "ATT" control defines the attack time of the Limiter. The switchable values are 2ms and 4ms.

## - REL: Release Control

The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level.

The switchable values are 50ms, 100ms, 200ms, 800ms.

### - THR: Threshold Control

The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected. The range is variable from 0 to -27.2.

### - HPF: High Pass Filter Control

The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from OHz to 200Hz.

#### - MAKP: Gain Makeup Control

The "MAKP" control sets the output level of gain makeup. The range is variable from 0dB to 25dB.

#### - WET: Dry/Wet Control

This control lets you balance between processed (Wet) and original signal (Dry) allowing you to do parallel processing without routing to buses/aux. The range is variable from 0% (Dry) to 100% (Wet).

#### Line Out

### - GDRV: GDrive Control

The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

## - THD: Drive Control

The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. It rises ALL the harmonics at the same time.

The available range is ±12 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 74. Vintage Mastering Limiter – Golden Edition SK

74.1 - About the original hardware

Originally designed for broadcast material, the dual 179-400 has been refurbished and modified, then racked into a 1U with custom made high quality power supply. It's a totally unique analog mix/mastering VCA limiter with a character all of its own. It's a versatile and capable addition to any studio looking for that elusive magic touch. As a mastering limiter, the VMLGE allows the gentle shaping of transients giving better overall balance, hitting the digital brickwall limiter in a more detailed and pleasant way, often giving 0.5 to 1.5dB more punch previously unobtainable out of an already well-balanced track. Less work is required from the brickwall limiter giving a cleaner, more open sounding mix with the addition of detail, rather than the over-compressed destruction of transients and fatiguing boxiness that come from too much gain reduction processed in one stage.

The VMLGE has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, maintaining all the energy, atmosphere and life of the original performance as perfectly as possible.

## 74.2 - Session Setup

VMLGE reproduces the characteristic sound of vintage Broadcast Limiter; this kind of unit are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, I recommend using the VMLGE in group bus and stereo mixbus where you need to control dynamically the sound. On single track the VLMGE works great on acoustic instruments and voices.

To emulate the original unit sound you should use the presets in this way:

- If some limiting is needed, you should insert the Limit preset followed by the Line Out preset. The limiter is not a brick-wall and it should be used to limit the peak of the music between -0,1dB to -1dB of Gain Reduction for to keep transparency.
- If you need to control the peaks only, sometimes the soft-clipper works better alone followed by the Line Out preset.
- Where a complete set of limiting and soft-clipping is demanded you should insert the Limit preset then the Soft-Clipper preset and finally the Line Out preset.

**NOTE:** use the presets you need only. Stacking unnecessary presets is the wrong way to emulate the sampled hardware. i.e. don't stack Comp + Limit + Line Out if you need the Comp or Limit only. Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

## 3.3 - Preset list:

The VMLGE library includes the following programs displayed into menu "VML" and subgrouped into 44.1kHz, 48kHz, 88.2kHz.

VLMGE Limiter Stock VLMGE Limiter VLMGE Soft Clipper VLMGE Line Out VLMGE Line Out FX

#### VLMGE Limiter Stock

Stock Limiter unit with fixed attack (1.5ms), auto release (100ms to 20s), threshold, pre-emphasis, HPF, gain makeup and wet/dry controls.

#### **VLMGE** Limiter

Modified Limiter unit with fixed attack (1.5ms), continuous variable release from 100ms to 24s, threshold, pre-emphasis, HPF, gain makeup and wet/dry controls.

#### VLMGE Soft Clipper

Soft-Clipper with fixed attack (1ms), continuous variable release from 100ms to 24s, threshold, preemphasis, HPF and gain makeup controls.

#### **VLMGELine** Out

Line Out stage with Gdrive and THD controls.

#### VLMGELine Out FX

Modified Line Out stage with Gdrive and THD controls. It acts like a transients-inflator by entering with hot signal and/or tuning the GDRIVE control.

#### 3.4 - Controls

Over the common and the above described controls, VMLGE has also:

## Limiter and Soft Clipper

## – REL: Release Control

The "REL" control sets the amount of time it takes for processing to cease once the input signal drops below the threshold level. The control varies from 100ms to 24s.

#### - THR: Threshold Control

The "THR" control defines the input level at which limiting or compression begins. Signals that exceed this level are processed. Signals below the threshold are unaffected. The range is variable from 0 to -27,2.

#### - PMPH: Pre-Emphasis Control

The pre-emphasis is like a soft knee applied on threshold, which let engage it a little bit before.

The switchable values are 0 and 50us.

#### - HPF: High Pass Filter Control

The "HPF" control sets the cut-off point of a high-pass filter on the internal sidechain. The range is variable from 0Hz to 200Hz.

#### - MAKP: Gain Makeup Control

The "MAKP" control sets the output level of gain makeup. The range is variable from 0dB to 25dB.

#### - WET: Dry/Wet Control

This control lets you balance between processed (Wet) and original signal (Dry) allowing you to do parallel compression without routing to buses/aux. The range is variable from 0% (Dry) to 100% (Wet).

#### Line Out and Line Out FX

#### - GDRV: GDrive Control

The "GDRV" control is a unique feature not found in similar products from others brands that comes from Acustica Audio VVKT proprietary technology and sampling aproach.

It allows you to control the amount of harmonic distortion that is coming from the analog hardware. The "Input" control acts as the analog signal chain of the device, where reducing the volume also reduces the harmonic distortion in accordance. The "GDrive" function allows independent control of this harmonic content, so that the input level can be left alone while making adjustments to the harmonics. Reducing the harmonics leads to a cleaner signal with an already clean device. Increasing the harmonics should be done with moderation.

This type of effect is not truly representative of a real console, but it can be useful when you want more of the console's nonlinear "vibe" without altering the channel's levels. The available range is ±12 dB.

Note that increasing the input signal the internal headroom will be reduced.

#### - THD: Drive Control
The "THD" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. It rises ALL the harmonics at the same time. The available range is ±12 dB.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero.

# 75. SPQ Supreme Mastering eQualizer – Golden Edition SK

# 75.1 - About the original hardware

The SPQ Mastering eQ GE is a powerful and colorful state-of-the-art device for Mastering Engineers around the world. This unique equalizer can be switched between constant Q and proportional Q, which functionally provides ten fully parametric bands.

It is regarded as being one of the highest-quality EQs available and renowned for its incredible detail, precision, and resolution, as well as it's stunning looks! It's ideal for both very precise, surgical-style EQ duties, and painting broad strokes of character and tonal color into the audio.

The unit sampled has been refurbished to retain the original sound, and slightly enhanced by replacing the original Panasonic FC electrolytics caps to remove some harshness.

With its musical and toneful sound, the SPQGE has been engineered to deliver recordings at the best conceivable quality onto any format at any sample rate, improving, if needed, the energy and atmosphere of the original performance.

# 75.2 - Session Setup

SPQGE Mastering eQualizer reproduces the characteristic sound of the famous Parametric Mastering eQualizer, this kind of equalizers are used in countless records in the world. To faithfully reproduce this analog sound in the DAW, we recommend using the SPQGE in all tracks where you need to shape the sound.

- On single track : SPQGE Mastering eQualizer is inserted on the audio tracks as insert in the position at your taste. It works great on all instruments and voices.

- On master track : SPQGE Mastering eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- Mastering: APQGE Mastering eQualizer is inserted on the audio track as insert in the position at your taste.

**TRICK:** each band has a slightly different color and sound, even with the same frequencies. This is also true for the same constant Q and parametric Q.

Take some time to learn how to use this fantastic equalizer by experimenting with the same frequency and different combination of bands and Q to explore the many timbral nuances.

**NOTE:** *u*se the band/s you need only. Stacking unnecessary bands is the wrong way to emulate the sampled hardware.

Remember: every digital processing introduces quantizzation errors/noise which degrade the sound, a smart use of the digital processing keeps the sound alive.

# 75.3 - Preset list:

The SPQGE Supreme Mastering eQualizer library includes 10 different programs displayed into sub-menu "SPQ"

SPQGE C 10-330: Bell Filter from 33Hz to 330Hz +/- 7dB, constant Q from 15 to 0,6 SPQGE C 33-1000Hz : Bell Filter from 33Hz to 1000Hz +/- 7dB, constant Q from 15 to 0,6 SPQGE C 128-4100Hz : Bell Filter from 128Hz to 4100Hz +/- 7dB, constant Q from 15 to 0,6 SPQGE C 0,31-10,2kHz : Bell Filter from 0,31kHz to 10,2kHz +/- 7dB, constant Q from 15 to 0,6 SPQGE C 0,76-24kHz : Bell Filter from 0,76kHz to 24kHz +/- 7dB, constant Q from 15 to 0,6 SPQGE P 10-330: Bell Filter from 33Hz to 330Hz +/- 7dB, proportional Q from 5,8 to 0,08 SPQGE P 33-1000Hz : Bell Filter from 33Hz to 1000Hz +/- 7dB, proportional Q from 5,8 to 0,08 SPQGE P 128-4100Hz : Bell Filter from 128Hz to 4100Hz +/- 7dB, proportional Q from 5,8 to 0,08 SPQGE P 0,31-10,2kHz : Bell Filter from 0,31kHz to 10,2kHz +/- 7dB, proportional Q from 5,8 to 0,08 SPQGE P 0,76-24kHz : Bell Filter from 0,76kHz to 24kHz +/- 7dB, proportional Q from 5,8 to 0,08

**NOTE:** in constant Q mode, the amplitude is constant regardless of the selected bandwidth. This is ideal for eliminating interfering frequencies.

In proportional Q mode, the amplitude is proportional to the bandwidth. It decreases with increasing bandwidth and vice versa. At the smallest bandwidth setting, the maximum amplitude value is +/- 7,6 dB, while the maximum amplitude decreases to +/- 1,6 dB at the largest bandwidth setting. This control behavior simplifies sensitive, creative processing and is musically very useful, since high amplitudes become increasingly unusable with increasing bandwidth.

# 75.4 – Controls

The SPQGE Supreme Mastering eQualizer has only a few but intuitive and effective controls which are detailed below.

# Frequency Control

**FREQ** The "FREQ" control sets the frequency to be boosted or attenuated.

#### Gain Control

**GAIN** The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.

# Q Q Control

The "Q" control sets the steepness of the filter selected by FREQ control.

#### **THD Control**

**THD** The "DRIVE" control affects the harmonic contents in an unnatural way, but suitable if you look for an effect. Increasing the value for a fat and saturated sound, lowering the value for a thin and detailed sound.

**NOTE:** clicking on the controls while pressing "ctrl" on computer keyboard, the control returns to zero

END