AlexB Programs Manual

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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: http://www.alexb.eu

Thank you !

AlexB... Audio Renaissance.

NOTICES

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

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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@alessandroboschi.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

Golden Edition 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 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 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.

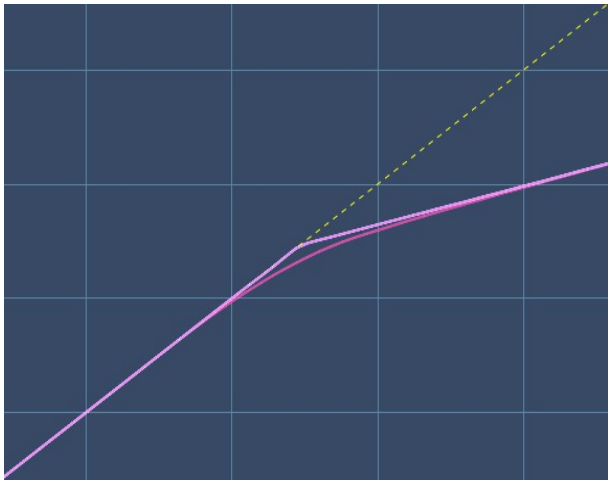
So, I have tried several ways to make work better my "bad" compressors, after five new internal releases that I haven't liked, I have decided to start from zero.
A new complete multi-template has been developed, without the use of my obsolete ten years old NAT3 release.

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 (!!!).

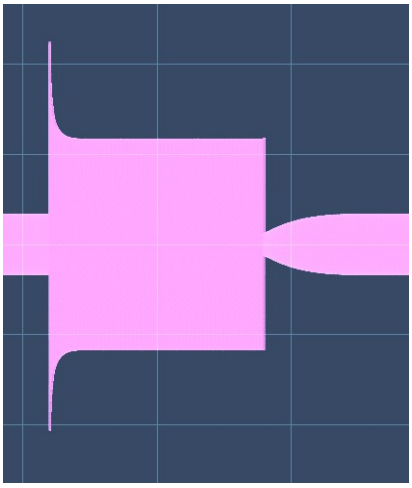
The final result was a musical compressor with the reaction and behavior very close at the unit sampled, with the exact curve's shape of the compression, attack and release which follow the envelope-follower. The attack curve's shape gives the character by bringing the transient - it makes recognizable 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.

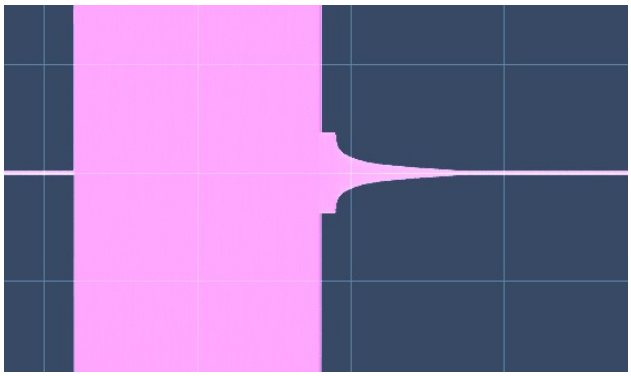
Cheers



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



The curve's shape of the attack and relese transients



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.

1.8 - The Skin

Skins for Nebula3 and Nebula4 are included in the libraries as gift.
Skins have a cost and I prefer to invest in the audio quality instead graphic: I work as electronic and audio engineer not as painter :)

The official AlexB skin developer is JPN, he creates the best and tested skins for my libraries.
If you want to buy an optional skin, you can contact him:

- https://www.facebook.com/jpnskins
- jpnskins@hotmail.com

<u>To install the skin into Nebula3:</u>
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

<u>To install the skin into Nebula4:</u>
1 - copy the *.N2S file into the root skin folder
2 - copy the Properties files into Properties root folder
3 - run your DAW and open Nebula
4 – load a preset

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!

Remember:
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 ALL the AlexB Programs as for better performance and Nebula experience.
These settings refer at VST2 version which I recommend to use because it sounds better than VST3.

Nebula3
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>
<EXPORTAUDIOQUALITY> 1 </EXPORTAUDIOQUALITY>
<DSPBUFFER> 8192 </DSPBUFFER>
<SKINNAME> ALEXB_N3.N2S </SKINNAME>

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

Nebula4
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>
<EXPORTAUDIOQUALITY> 1 </EXPORTAUDIOQUALITY>
<DSPBUFFER> 8192 </DSPBUFFER>

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

* DSPBUFFER can be lower but at cost of audio quality.

NOTE: *MAC users find more info on the "MAC Nebula4 Setup Addendum" on the website.*

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 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 must 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 know: 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 0dBVU = -18dBfs reference to capture the real spectral and harmonic contents. Sampling in this way gives the best and autentic 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 funny but not so good for my professional use).

Cirp, Ciorp, Ciurp !

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. 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 mayority 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.

Wooobble !

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 trascurable. 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 Hiths Records ... - .

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

Another myth is the preamp. In the equalizer library.
Asuming 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 decribed in the program manual, it gives the exactly behavoir 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.

*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 0dBVU on the hardware corresponds to -18dBFS on your DAW.
Normally the best sound is achieved with maximum digital peaks to -10dBfs. In very few cases the level can be hotter as suggested in this manual.

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

It mimicks 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 0dBVU = -18dBfs on it (Headroom).

I suggest to bypass 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.

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:
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 -∞ dB to +6 dB.

Output Gain
The Output Gain control sets the level at the output of the plugin.
The range is from -∞ 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: *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.*

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: *u*se 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 non-gated/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 ±12 dB.

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

6. Modern Tube Console – Golden Edition

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-your-face 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 M.Bus Add-Ons

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 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.*

7. Modern Tube eQualizer – Golden Edition

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

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

TC1GE 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 TC1GE in all tracks and group bus where you need to control dynamically the sound.
On single track the TC1GE works great on acoustic instruments and voices. On group bus the TC1GE 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: *u*se 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 TC1GE library includes the following programs displayed into menu “TC1” and subgrouped into 44.1kHz, 48kHz, 88.2kHz.

TC1GE Comp
TC1GE Comp SC
TC1GE Line Out

TC1GE Comp
Compressor with attack, release, threshold, ratio, Input, HPF, gain makeup and wet/dry controls.

TC1GE Comp SC
The same as the Comp preset but with external sidechain input and without HPF.

TC1GE 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

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: *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.*

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: *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.*

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.

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. The available range is ±6 dB for Bass and ±12dB for Treble.
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*

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: *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.

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: *Q 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	**Cut Off Control** The “CUTOF” control affects the filter's frequency cut.
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. The available range is ±16 dB.
Q	**Q Control** The “Q” control sets the amplitude of the filter selected by FREQ control.
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.*

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.

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 range is variable 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 available range is 40ms to 4s

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 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

Ahead Control
The “AHEAD” control sets the look-ahead to control the fast transients.
The range is variable from 0ms to 6ms

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 ±24 dB

GAIN

Gain Control
The “GAIN” control sets the output level of gain makeup.
The range is variable from 0dB to 25dB

HPF

HPF 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 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.

13.2 - Session Setup

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: *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.

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

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

HEIGH

Height Control
The "HEIGH" control sets the amount by which the frequency setting is boosted or attenuated.
The available range is ±20 dB.

WIDTH

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

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.

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).*

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.

14.2 - Session Setup

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

i-Drive Control

The "I-DRV control affects the drive input level at the 1st amplifier stage.
The available range is 0-10 numerical.

TONE

Tone Control

The "Tone" control sets the point where the exciter begins to engage.
The available range is 0-10 numerical.

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.

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).*

15. American 16 Console

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.

15.2 - Session Setup

American 16 Console reproduces the sound of Modern American 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 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.

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 A16 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.*

15.3 - Preset list:

The American 16 Console library includes 29 different programs:
HQ presets with 10 kernels and LE presets with 3 and 5 kernels displayed into sub-menu “A16”
A16 Line in : line input channel
A16 MIC Pre : microphone preamplifier
A16 DI in : Input Amplifier for keyboard and guitars
A16 G.Bus Clean : Group Bus clean signal
A16 G.Bus Acoustic : Group Bus with equalizer patched useful for acoustic instruments
A16 G.Bus AmbFX : Group Bus with equalizer patched useful for ambient & FX
A16 G.Bus BG Vox : Group Bus with equalizer patched useful for backing vocals
A16 G.Bus Drum : Group Bus with equalizer patched useful for drums
A16 G.Bus GTR : Group Bus with equalizer patched useful for guitars
A16 G.Bus Percussions : Group Bus with equalizer patched useful for percussions
A16 G.Bus SynthPad : Group Bus with equalizer patched useful for synthesizers and pads
A16 M.Bus Clean : MixBus clean
A16 M.Bus Modern : MixBus with equalizer patched useful for modern and polished sound
A16 M.Bus Vintage : MixBus by vintage console for a “vision-ary” sound
A16 Panner : Panner -3dB pan law

A16 Line in
The American 16 Console Line in is the first stage of the console, normally it works as line amplifier and you should insert it in every track.

A16 MIC in
The American 16 Console microphone preamplifier has more coloration than Line in and you can use it when more character is needed.

A16 DI in
The American 16 Console D.I. preamplifier has different coloration than Line in and Mic Pre and you can use it for some instruments which need more shine.

A16 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.

A16 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.

A16 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.

A16 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.

A16 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.

A16 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.

A16 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.

A16 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.

A16 M.Bus Clean
American 16 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.

A16 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.

A16 M.Bus Vintage
When a vintage “Vision-ary” sound is needed, use the M.BUS Vintage preset as last insert into DAW's mixbus.

15.4 - Controls

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

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

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).*

16. American 5A eQualizer

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 5A 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.

16.2 - Session Setup

American 5A 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 A5A eQ in all tracks where you need to shape the sound.

- On single track : American 5A 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 5A 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.

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.*

16.3 - Preset list:

The American 5A eQualizer library includes 12 different programs:
HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu “A5A”

A5A Filter : Band Pass Filter at 50Hz / 15k 12dB/octave
A5A Low Shelf : Low Shelf 50, 100, 200, 300, 400Hz +/- 12dB
A5A Low Peak : Low Peak 50, 100, 200, 300, 400Hz +/- 12dB proportional Q
A5A Mid : Mid Bell 400, 800, 1.5k, 3k, 5kHz +/- 12dB proportional Q
A5A High Peak : High Peak 5k, 7k, 10k, 12.5k, 15kHz +/- 12dB proportional Q
A5A High Shelf : High Shelf 5k, 7k, 10k, 12.5k, 15kHz +/- 12dB

16.4 – Controls

The American 5A 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.

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

17. American 5B eQualizer

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 A5B artfully blends the past with the present.
Many eQs today offer a huge assortment of complex features, but the A5B provides exactly the right number of controls to the professional engineer.

With its broad bandwidth the American 5B 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.

17.2 - Session Setup

American 5B 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 A5B eQ in all tracks where you need to shape the sound.

- Onsingle track : American 5B 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 5B 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.

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.*

17.3 - Preset list:

The American 5B eQualizer library includes 12 different programs:
HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu “A5B”

A5B Low Shelf : Low Shelf 30, 40, 50, 100, 200, 300, 400Hz +/- 12dB
A5B Low Peak : Low Peak 30, 40, 50, 100, 200, 300, 400Hz +/- 12dB proportional Q
A5B Low Mid : Low Mid Bell 75, 150, 180, 240, 500, 700, 1kHz +/- 12dB proportional Q
A5B High Mid : High Mid Bell 800, 1.5k, 3k, 5k, 8k, 10k, 12.5kHz +/- 12dB proportional Q
A5B High Peak : High Peak 2.5k, 5k, 7k, 10k, 12.5k, 15k, 20kHz +/- 12dB proportional Q
A5B High Shelf : High Shelf 2.5k, 5k, 7k, 10k, 12.5k, 15k, 20kHz +/- 12dB

17.4 – Controls

The American 5B 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.

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.

18.2 - Session Setup

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 HPF on internal sidechain
A5D FT Lim esc : 20:1 limiter with fixed attack time and external sidechain

18.4 – Controls

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

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 range is variable from 3ms to 10ms

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 100ms to 2.5s

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 0dB to -48,1dB

CLING

Ceiling Control
The "CLING" can increase gain reduction while simultaneously varying the frequency and THD response.
The range is variable from 0 to 20:1

AHEAD

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

GAIN

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

HPF

HPF 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 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.

19.2 - Session Setup

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: *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.

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.

FREQ — **Frequency Control**
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 ±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.

20.2 - Session Setup

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.

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

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.

21.2 - Session Setup

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: *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.

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.

CUTOF	**Cut Off Control** The “CUTOF” control affects the filter's frequency cut.
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.
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.

22.2 - Session Setup

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.

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 100ms to 1,5s for the compressor and 50ms to 800ms for the limiter.

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 0dB to -48,1dB

RAT

Ratio Control
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

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

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 ±24 dB

GAIN

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

HPF

HPF 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 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.

23.2 - Session Setup

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.

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 400ms to 1,5s for the compressor and 100ms to 800ms for the limiter.

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 0dB to -48,1dB

RAT

Ratio Control
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

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

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 ±24 dB

GAIN

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

HPF

HPF 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 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.

24.2 - Session Setup

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.

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

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 from 50ms to 10s (C1B) and 60ms to 2s (C2A)

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 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 2:1 to 10:1 (C1B) and 1.5:1 to 10:1 (C2A)

AHEAD

Ahead Control

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

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 ±24 dB

GAIN

Gain Control

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

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). T95 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 T95 easily meets the quality, performance, and reliability requirements of any demanding professional.
With its broad bandwidth the T95 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 T95 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.

25.2 - Session Setup

T95 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 T95 in all tracks where you need to shape the sound.

- On single track : T95 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 : T95 Program eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- Mastering : T95 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 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.

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 DRIVE control slightly different on every instance into a range of +/-5dB.*

25.3 - Preset list:

The T95 Program eQualizer library includes 6 different programs:
HQ presets with 7 kernels and LE presets with 3 kernel displayed into sub-menu “T95”

T95 Shelf unit A: Low and High Shelf at 60Hz and 10kHz +/- 12dB
T95 Shelf unit B: Low and High Shelf at 60Hz and 10kHz +/- 12dB
T95 Shelf Combo: A+B units configured in stereo mode, Low and High Shelf at 60Hz and 10kHz +/- 12dB
T95 Mid unit A : Mid bell fixed 700, 1k, 1.4K, 2k, 3kHz + 8dB
T95 Mid unit B : Mid bell fixed 700, 1k, 1.4K, 2k, 3kHz + 8dB
T95 Mid Combo : A+B units configured in stereo mode, Mid bell fixed 700, 1k, 1.4K, 2k, 3kHz + 8dB

25.4 – Controls

The T95 Program eQualizer has only a few but intuitive and effective controls which are detailed below.

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. The MF bell has broad curve when boosted and narrow curve when it is cut.
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*

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.

26.2 - Session Setup

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 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

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.

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).*

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.

27.2 - Session Setup

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 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.*

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 220Hz, 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.

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

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.

CUTOF

Cut Off Control

The switchable “CUTOF” control affects the filter's frequency cut.

FREQ

Frequency Control

The switchable “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.
The available range is ±18 dB.

Q

Q Control

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.

28.2 - Session Setup

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

CLG ZH Driven esc : Compressor with Zener Hard knee and external 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.

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 range is variable from 3ms to 120ms

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 100ms to 1,2s

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 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 10:1

AHEAD

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

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 ±24 dB

GAIN

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

HPF

HPF 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 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.

29.2 - Session Setup

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
Noise_motor_vintage
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

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.

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).*

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.

30.2 - Session Setup

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	**Cut Off Control** The “CUTOF” control affects the filter's frequency cut.
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. The available range is ±20 dB.
Q	**Q Control** The “Q” control sets the amplitude of the filter selected by FREQ control.
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.*

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.

31.2 - Session Setup

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.

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

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).*

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.

32.2 - Session Setup

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: *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.*

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
BRN High Shelf: Shelf variable variable from 1.5k to 16kHz +/- 15dB variable

32.4 – Controls

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

CUTOF	**Cut Off Control** The “CUTOF” control affects the filter's frequency cut.
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.
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.*

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.

33.2 - Session Setup

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: *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.*

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 2200Hz to 7000Hz +/-18dB variable, variable Q from 0.5 to 4
BLK High Bell: Bell variable variable from 1.5k to 16kHz +/- 18dB variable, fixed Q 1.3
BLK High Shelf: Shelf variable variable from 1.5k to 16kHz +/- 18dB variable

33.4 – Controls

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

CUTOF	**Cut Off Control** The “CUTOF” control affects the filter's frequency cut.
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.
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.*

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.

34.2 - Session Setup

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.

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 range is variable from 3ms to 30ms

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 100ms to 4s

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 0dB to -48,1dB

RAT

Ratio Control

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

Ahead Control

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

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 ±24 dB

GAIN

Gain Control

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.

35.2 - Session Setup

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 relese and external sidechain

35.4 – Controls

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

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 range is variable from 0.1ms to 30ms

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 100ms to 1.2s

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 0dB to -48,1dB

RAT

Ratio Control

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

Ahead Control

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

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 ±24 dB

GAIN

Gain Control

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.

36.2 - Session Setup

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.

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 range is variable from 4ms to 120ms

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 from 40ms to 2,4s

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 0dB to -48,1dB

AHEAD

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

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 ±24 dB

GAIN

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

HPF

HPF 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 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.

37.2 - Session Setup

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: *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.*

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	**Cut Off Control** The “CUTOF” control affects the filter's frequency cut.
RESON	**Resonance Control** The resonance filter puts an accent on a selected frequency without boosting the complete spectrum.
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.
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.*

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.

38.2 - Session Setup

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 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 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.

W	**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.
T	**Tranny Control** The Tranny circuit adds frequency rounding by emulating a transformer. The available range is 0.0-1.0 numerical.
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 0dB to -48,1dB
AHEAD	**Ahead Control** The "AHEAD" control sets the look-ahead to control the fast transients. The range is variable from 0ms to 6ms
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 ±24 dB
GAIN	**Gain Control** The "GAIN" control sets the output level of gain makeup. The range is variable from 0dB to 25dB
HPF	**HPF 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 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: *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.*

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	**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.
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.*

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.

40.2 - Session Setup

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.

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

THD Control

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.

41.2 - Session Setup

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: *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.*

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.

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. 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	**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*

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.

42.2 - Session Setup

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: *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.*

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	**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. 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	**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*

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.

43.2 - Session Setup

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 relese and external sidechain

43.4 – Controls

The U73 has only a few but intuitive and effective controls which are detailed below.

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 range is variable from 0.25ms to 25ms

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 100ms to 1.2s

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 0dB to -48,1dB

RAT

Ratio Control
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

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

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 ±24 dB

GAIN

Gain Control
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.

44.2 - Session Setup

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: *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.*

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

The Vintage PoolTeQ has only a few but intuitive and effective controls which are detailed below.

KPS
CPS

Frequency Control
The "KPS" and "CPS" controls set the frequency to be boosted or attenuated.

ATTEN

Attenuation Control
The "Atten" control sets the amount by which the frequency setting is attenuated.
The available range is -10 dB.

GAIN

Gain Control
The "GAIN" control sets the amount by which the frequency setting is boosted or attenuated.
The available range is ±10 dB.

BANDW

Bandwidth Control
The "BANDW" control sets the amplitude of the filter selected by CPS control.

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

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*

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.

45.2 - Session Setup

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.

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 range is variable from 3ms to 120ms

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 50ms to 1.3s

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 0dB to -48,1dB

RAT

Ratio Control

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

Ahead Control

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

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 ±24 dB

GAIN

Gain Control

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

HPF

HPF 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 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.

46.2 - Session Setup

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.

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

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).*

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.

47.2 - Session Setup

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: *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.*

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 — **Gain Control**
The “GAIN” control sets the amount by which the frequency setting is boosted or attenuated.
The available range is ±15 dB.

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*

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.

48.2 - Session Setup

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.

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 range is variable from 3ms to 80ms

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 100ms to 1,2s.

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 0dB to -48,1dB

MORPH

Morph Control
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

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

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 ±24 dB

GAIN

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

HPF

HPF 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 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.

49.2 - Session Setup

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.

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

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).*

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.

50.2 - Session Setup

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: *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.*

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.

CUTOF	**Cut Off Control** The “CUTOF” control affects the filter's frequency cut.
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. The available range is ±12 dB.
Q	**Q Control** The “Q” control sets the amplitude of the filter selected by FREQ control.
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.*

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.

51.2 - Session Setup

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.

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 range is variable from 20ms to 75ms

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 100ms to 2,5s

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 0dB to -48,1dB

RAT

Ratio Control
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

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

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 ±24 dB

GAIN

Gain Control
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.

52.2 - Session Setup

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.

53.2 - Session Setup

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.

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

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).*

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.

54.2 - Session Setup

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	**Cut Off Control** The “CUTOF” control affects the filter's frequency cut.
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.
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.*

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.

55.2 - Session Setup

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.

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 range is variable from 3ms to 30ms

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 100ms to 4s

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 0dB to -48,1dB

RAT

Ratio Control

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

Ahead Control

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

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 ±24 dB

GAIN

Gain Control

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.

56.2 - Session Setup

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 relese and external sidechain

56.4 – Controls

The 9K G.Comp has only a few but intuitive and effective controls which are detailed below.

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 range is variable from 0.1ms to 30ms

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 100ms to 1.2s

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 0dB to -48,1dB

RAT

Ratio Control

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

Ahead Control

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

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 ±24 dB

GAIN

Gain Control

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 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.

57.2 - Session Setup

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: *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.*

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.

CUTOF	**Cut Off Control** The “CUTOF” control affects the filter's frequency cut.
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.
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	**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).*

58. Tube Magnetic Saturator

58.1 - About the original hardware

Tube Magnetic Saturator is a homemade hardware piece that I built some years ago. It includes 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 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.

58.2 - Session Setup

Tube Magnetic Saturator reproduces the characteristic sound of the Analog Tube 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 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 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.*

58.3 - Preset list:

The Tube Magnetic Saturator library includes 4 different programs:
HQ presets with 11 and 3 kernels, LE presets with 6 and 1 kernel displayed into sub-menu “TMS”

TMS magnetic Head : Magnetic Tape Head stage only with Saturation and Tape speed control
TMS Line Amp: Tube circuit of line amplifier with Gdrive and Drive control

58.4 – Controls

The Tube Magnetic Saturator only a few but intuitive and effective controls which are detailed below.

SAT — **Saturation Control**
Saturation controls the harmonics that occurs with analog tape saturation
The available range is 0.0 - 5.0 numerical.

TAPE — **Tape Control**
The Tape Control sets the speed of the tape. The available range is 7,5 ~ 15 ips

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 — **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).*

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.

59.2 - Session Setup

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

Speed Control
It sets the speed of the tape.
The available range is 7,5 - 15 - 30 ips.

GAIN

Gain Control
The Gain Control sets the input gain of the Magnetic Head.
The available range is -15/+15 dB.

TAPE

Tape Control
The Tape Control sets one of three available tape simulations
1: A456
2: GP9
3: S111

DRIVE

Drive Control
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

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.

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).

60.2 - Session Setup

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 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.

NOTE: *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 DRIVE control slightly different on every instance into a range of +/-5dB.*

60.3 - Preset list:

The T65 Program eQualizer library includes 8 different programs:
HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu “T65”

T65S Low High: Low and High Shelf at 60Hz and 10kHz +/- 15dB stock unit
T65S Mid : Mid bell fixed 700, 1k, 2k, 3k, 4kHz + 8dB stock unit
T65R Low High: Low and High Shelf at 60Hz and 10kHz +/- 15dB refurbished unit
T65R Mid : Mid bell fixed 700, 1k, 2k, 3k, 4kHz + 8dB refurbished unit

60.4 – Controls

The T65 Program eQualizer has only a few but intuitive and effective controls which are detailed below.

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. The MF bell has broad curve when boosted and narrow curve when it is cut.
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*

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.

61.2 - Session Setup

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.

62.2 - Session Setup

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: *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.*

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 “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

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 WSW 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.

63.2 - Session Setup

WSW eQ 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 WSW eQ in all tracks where you need to shape the sound.

- On single track : WSW 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 : WSW 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: *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.*

63.3 - Preset list:

The WSW eQ library includes 6 different programs:
HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu “WSW”

WSW HPF: Resonant High Pass Filter -12dB/oct at 60 and 120Hz
WSW Low High : Combo Low and High Shelf at 60Hz and 12kHz +/- 15dB
WSW Mid : Mid bell fixed 1k, 1.4k, 2k, 2.8k, 4k, 5.6kHz + 9dB

63.4 – Controls

The WSW eQ has only a few but intuitive and effective controls which are detailed below.

CUTOF	**Cut Off Control** The “CUTOF” control affects the filter's frequency cut.
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.
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.*

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 BP1 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.*

64.2 - Session Setup

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: *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.*

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	**Frequency Control** The “FREQ” control sets the frequency to be boosted or attenuated.
SLOPE	**Slope Control** The “SLOPE” control sets the steepness of the filter's attenuation.
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.*

65. W295A eQualizer

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 W295A 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.

65.2 - Session Setup

W295A 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 T65 in all tracks where you need to shape the sound.

- On single track : W295A 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 : W295A eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- Mastering: W295A 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: *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.*

65.3 - Preset list:

The W295A eQualizer library includes 2 programs:
HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu “295”

W295A: Low and High Shelf at 60Hz and 10kHz +/- 15dB and TilT Mid eQ

65.4 – Controls

The T65 Program eQualizer has only a few but intuitive and effective controls which are detailed below.

GAIN	**Gain Control** 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	**TilT Control** 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 low-end is attenuated at the same time.
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*

66. W295B eQualizer

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 W295B 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.

66.2 - Session Setup

W295B 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 W295B in all tracks where you need to shape the sound.

- On single track : W295B 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 : W295B eQualizer is inserted on the mixbus, or group bus, as last insert giving at the whole mix his classic sound.
- Mastering: W295B 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: *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.*

66.3 - Preset list:

The W295B eQualizer library includes 4 different programs:
HQ presets with 3 kernels and LE presets with 1 kernel displayed into sub-menu “295”

W295B H-L Shelf: Low and High Shelf at 60Hz and 10kHz +/- 15dB
W295B Mid : Mid bell fixed 700, 1k, 1,5k, 2,3k, 3,5k, 5,6kHz +/- 8dB

66.4 – Controls

The W295B eQualizer has only a few but intuitive and effective controls which are detailed below.

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. The MF bell has broad curve when boosted and narrow curve when it is cut.
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*

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 0VU = 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.

67.2 - Session Setup

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.

67.3 - Preset list:

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.

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. The MF bell has broad curve when boosted and narrow curve when it is cut.
Slope	**Slope Control** The “Slope” control sets the steepness of the filter selected by FREQ control. The available range is from 5 to 15 dB/oct. *(Note2)*
THD	**THD Control** 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.

68.2 - Session Setup

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: *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.*

68.3 - Preset list:

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	**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.
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*

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.

69.2 - Session Setup

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: *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.*

69.3 - Preset list:

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	**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.
CUTOF	**Cut Off Control** The “CUTOF” control affects the filter's frequency cut.
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*

70. Flexmix Console

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 100kHz 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.

70.2 - Session Setup

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.

> 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 Flexmix 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.*

70.3 - Preset list:

The Flexmix Console library includes 25 different programs:
HQ presets with 10 and 3 kernels and LE presets with 5, 3 and 1 kernels displayed into sub-menu "FLX"

FLEXMIX Line Input : line input channel
FLEXMIX MIC Pre : microphone preamplifier
FLEXMIX CH Brian: channel stip
FLEXMIX CH Freddie: channel strip
FLEXMIX CH John: channel strip
FLEXMIX CH Roger: channel strip
FLEXMIX M.Bus Clean: MixBus clean sound
FLEXMIX M.Bus Vintage: MixBus original vintage sound
FLEXMIX M.Bus Queen: MixBus Queen sound
FLEXI Panner : Panner -3dB pan law
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 Brian
The Flexmix CH Brian is a channel strip: line input + eQ tuned for electric guitar tracks.

FLEXMIX CH Freddie
The Flexmix CH Freddie is a channel strip: line input +eQ tuned for male voice tracks.

FLEXMIX CH John
The Flexmix CH John is a channel strip: lilne input + eQ tuned for Bass track.

FLEXMIX CH Roger
The Flexmix CH Roger is a channel strip: line input +eQ tuned for Drums track.

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 Vintage
The Flexmix Console M.Bus Vintage is the final stage of the console, it must be inserted in the mixbus of the DAW to give the original vintage glue.

FLEXMIX M.Bus Queen
The Flexmix Console M.Bus Queen is the final stage of the console, it must be inserted in the mixbus of the DAW to give the Queen Sound glue.

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 ±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.

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.

71.2 - Session Setup

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 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.

71.3 - Preset list:

The GM9GE Mastering eQualizer library includes 20 different programs:
HQ presets with 3 kernels and LE 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. The MF bell has broad curve when boosted and narrow curve when it is cut.
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 VC1 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.

72.2 - Session Setup

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.*

72.3 - Preset list:

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
VC1 Mic Pre: microphone preamplifier
VC1 Enhancer : Harmonic Enhancer
VC1 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

Low/Mid/High Control (eQ)
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

Drive Control (Line input – Mic Pre)
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.

ATT

Attack Control (Compressor)
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

REL

Release Control (Compressor)
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

THR

Threshold Control (Compressor)
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 0ms 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.

73.2 - Session Setup

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: *u*se 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.

73.4 - 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 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).

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 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 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.
  <u>Note that increasing the input signal the internal headroom will be reduced.</u>

- **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

74.1 - About the original hardware

Originally designed for broadcast material, tthe 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: *u*se 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, pre-emphasis, 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.*

END