Natalus Dynamic Stereo Console EQ

Plugin Manual

Plugin developed by Brainworx Audio in partnership with Harris Doyle and distributed by Plugin Alliance

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Natalus DSCEQ
Plugin Manual

About Natalus Dynamic Stereo Console EQ

Natalus DSCEQ will impact your audio in a positive, and musical fashion and will add "more" to your sound!

The Natalus Dynamic Stereo Console EQ Plugin is based on the hand-built hardware from Harris Doyle. We have expertly modelled its unique features and capabilities to provide the same exceptional sound quality and performance you expect from this unique hardware.

Featuring a Single Ended Class A amplifier, transformer-coupled input and output stage, passive inductor EQ with Low-Cut, and 4 Bands of overlapping frequency control, this plugin provides a versatile and powerful tool for mixing, mastering, producing and recording.

The proprietary „Peak level" circuit design manipulates the harmonic information of the source signal in a way that is both dynamic and musical, just like the hardware. This "Peak level" circuit design responds to transients magnetically, similar to analog tape and transformers.

Whether you're working in a professional studio or at home, the Natalus Dynamic Stereo Console EQ Plugin is a must have for powerful coloring and soundshaping needs!

Brainworx enhanced the Natalus DSCEQ Plugin, to provide analog experience in the digital world. With our groundbreaking TMT (Tolerance Modeling Technology, US Patent No. 10,725,727) feature offering an unrivalled analog experience in the box and ensuring that your recordings sound warm and authentic.

The plugin also includes M/S features found in almost all Brainworx plugins, such as the MonoMaker and Stereo Width. This allows you to fine-tune the stereo image of your tracks with ease.

Additionally, we have included a separate Mono Version to use the plugin on individual tracks such as Bass Drum, Snare, Bass, Vocals, etc.

Natalus DSCEQ

Plugin Manual

❶ Peak Level

Selects the headroom of Natalus' unique magnetic saturation limiting circuit. At moderate input levels the selected Peak Level will result in that same amount of headroom between the RMS level and peak level of the transients.

Turning down the Peak Level will keep the perceived level the same while keeping transients limited to the selected Dynamic Range while introducing a "bloom" effect on any sound.

❷ Low Cut On

Engages or disengages the Low Cut filter.

❸ Low Cut Frequency

Selects the cutoff frequency of the 6dB/oct Low Cut filter.

❹ EQ On

Engages or disengages the 4 bands of the EQ section.

❺ Band Polarity

Selects the polarity of the EQ band. It will either be boosting or cutting by the amount selected with the respective gain control or bypassed in the circuit.

❻ Band Gain

Selects the applied gain of the selected EQ band.

Natalus DSCEQ

Plugin Manual

❶ Band Frequency

Selects the center frequency of the selected EQ band.

❷ Peak/Shelf (only High Band)

Selects the High band's filter type between peak and shelf.

Due to Natalus DSCEQ's topology, the following effects occur:

- having a band engaged ("+" or "-" setting) will effect the overall behaviour even with the gain at 0
- the eq-bands of a path are interconnected, the resulting amount of boost or cut applied at the specific frequency may vary
- the bands also vary in Q so that interesting musical results will occur with overlapping frequency bands. Try boosting and cutting the same frequency in neighboring bands!

Global Parameters

❸ Power

Activates the plugin or switches into bypass.

❹ Meter Reset

Click anywhere on the input or output meters to reset the clip warning indicators.

Natalus DSCEQ

Plugin Manual

BXToolbar

❶ Power

Activates the plugin or switches into bypass.

❷ UI Scale

❸ Bank

Switches between different banks of settings per preset.

❹ Monitoring

The Solo buttons control which part of the output signal is monitored. The mid (M) or side band (S) can be selected via the "Solo M" and "Solo S" buttons respectively.

With a second click on the active button, the current solo option will be deactivated and return to default Stereo monitoring.

❺ Show bx_rack

Shows or hides the bx_rack module containing the plugin only features.

Natalus DSCEQ
Plugin Manual

bx_rack / Plugin Only Feature Module

❶ Input

Adjusts the gain at the input of the plugin to allow for proper gain staging. This is applied before the input meter, so you can keep your hot mixes below the red.

❷ TMT Stereo Mode

Switches between different banks of settings per preset.

- **Analog: 2 different TMT channels.**
- **Digital: The same TMT channel used for both channels (L&R).**

This button is only available on Stereo instances and is the heart of Brainworx´s patented Tolerance Modelling Technology (TMT). When ANALOG is activated, small inherent differences between the modeled componentry in each left and right channel will produce a pleasing, analog sound, as though one were working between two adjacent channels on an actual console.

With the button switched to DIGITAL, the two Stereo channels will be identical in circuitry, providing a theoretically perfect, digital Stereo sound.

❸ TMT Channel selector

Select the TMT Channel (see description above) by rotating the encoder between the numbers.

❹ Random Channel

Assigns random values for the TMT channels, depending on the StereoMode button state (analog or digital).

❺ Parameter Link

If a control in one channel is changed, the same control on the other channel is set to the same value.

Natalus DSCEQ
Plugin Manual

❶ Mid / Side

Engages Mid/Side processing. When this is set to On, the Left Side processes the Mid Signal (sum) of both channels and the Right Side processes the Side Signal (difference) of both channels.

❷ Gain Range

Selects between the original ("Full") or reduced gain range for all EQ bands. Switching to the "Half" setting will limit the band gain parameters to +/-5.5 dB in 0.5 dB steps.

This will allow for finer adjustments of the EQ curve i.e. in delicate mastering scenarios.

❸ Mono Maker

This tool is a critical component to several Brainworx processors, and it is an invaluable tool when mastering or tightening up a mix. Sweepable from 20Hz to 2kHz, this parameter folds the processed sound to mono at and below the frequency set.

The most common setting is between 50-200 Hz, which ensures minimal loss of width while improving translation for lossy codecs and vinyl cutting.

❹ Stereo Width

Makes your mix wider than it originally was by increasing the Stereo Width without losing the center of your recordings.

❺ Headroom

Headroom adjusts input gain and compensates output gain to give you "More" or "Less" headroom, depending on the level and dynamic of your input signal.

Natalus DSCEQ
Plugin Manual

❶ TX Drive

This is the „Headroom" parameter for the transformer model only. The value is the 0dBFS reference level if the actual unit was connected in an AD/DA converter loop. Raising this value results in more harmonic distortion in low/low-mid frequencies, and lowering it results in less harmonic distortion. A small portion of the harmonics stays the same, as they result from the hysteresis phenomena that is also a part of our new transformer model.

With TX Drive set fully counterclockwise to "Off", the transformers are bypassed in the plugin, resulting in an entirely new transformerless variation of the circuit.

The default at +18dBu is the reference level we use for all our hardware models. This means that if both Headroom and TX Drive are left at default, the plugin should react the same way as a hardware unit connected to a converter with that reference level.

❷ Output

Adjusts the total output of the stereo signal. Ranges from -12dB to +12dB.

Meters per Channel

❸ Input

This meter shows the incoming dry signal right at the input.

❹ Output

This meter shows the processed output signal after the Monitoring (Solo M/Solo S) control.

Natalus DSCEQ
Plugin Manual

System Requirements & FAQ (Links)

For latest System Requirements & Supported Platforms

https://www.plugin-alliance.com/en/systemrequirements.html

Particular details for your product

https://www.plugin-alliance.com/en/products.html

Installation, Activation, Authorisation and FAQ´s

https://www.plugin-alliance.com/en/support.html

Modifier Keys

Tested with Logic Pro X, Protools, Cubase and Presonus Studio One Mac/Win.

AU

Fine Control	= Shift
Jump between Default / Last Setting	= Option
Output Link	= Command

VST / VST3

Fine Control	= Shift
Jump between Default / Last Setting	= Command (Mac), Ctrl (Win)
Output Link	= Option (Mac) / Alt (Win)

AAX

Fine Control	= Command (Mac), Ctrl (Win)
Jump between Default / Last Setting	= Option (Mac), Alt (Win)
Output Link	= Shift