

HORNET TOTAL EQ

HoRNet TOTAL EQ is a precise and versatile equalizer with a handy spectrum analyzer. The peculiar feature of TOTAL EQ is that every parameter of each equalizer band can be controlled from the control point on the frequency chart, this simply means that you will never have to look around to find the controls for the band you are editing, but everything will be there right at your mouse pointer reach.

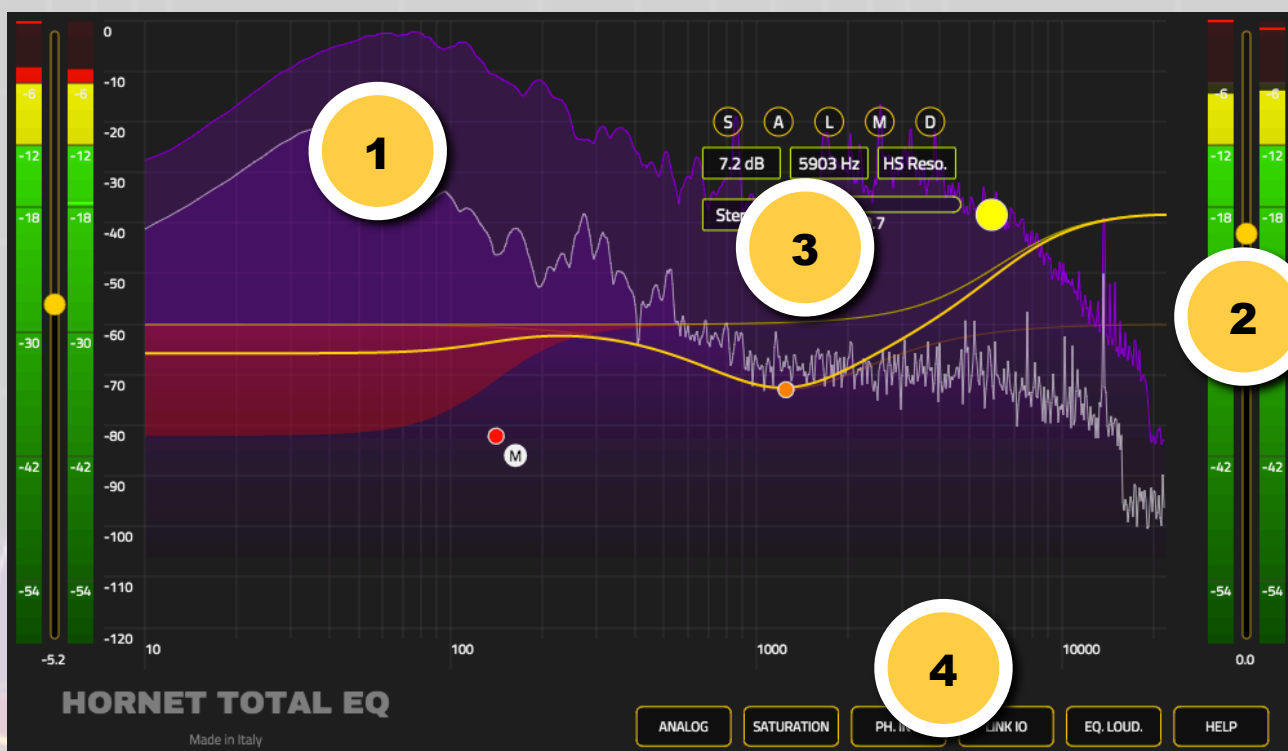
The equalizer itself is very versatile providing up to 12 different bands, any of them can behave like digital precise EQs or can have analog character. The analog emulation in this plugin is the most advanced we have ever made, of course it emulates the saturation of analog gear but also the component tolerance so that no band behaves like another. In a few words it means a slight level of unpredictability that make things more interesting and "alive".

Each band can work like any of the 17 different available filter type, including low pass, high pass, band pass, high shelf, low shelf and the classic fully parametric peak equalizer.

In addition to the standard eq controls specific to the filter type, every band can work as a dynamic filter borrowing the automatic attack and release and the automatic threshold from our HoRNet DynEQ, this approach gives you easy control on the dynamic behaviour of the each band without needing many controls and making dynamic EQ as easy as dragging a dot on the screen.

Each band of the EQ has Mid/Side capabilities allowing you to select individually the source and to correctly fine tune the frequency response of your stereo image. The plugin also provide global controls that allow you to enable or disable analog emulation and saturation globally, and the ability to link input and output so that when you change one the other gets updated accordingly and you can easily drive the analog engine of the plugin without changing its output level.

To take EQ decision more easily we also added the "EQ LOUD" button that stands for "equal loudness", borrowing the code from our CLMS plugin we are able to keep the loudness level constant no matter what you do to your eq bands, this in turns gives you the ability to judge your EQ decisions removing the infamous "loudness bias"



HORNET TOTAL EQ GUI

The GUI of the plugin revolves around the spectrum analyzer that occupies the largest part of it. Overlaid on the analyzer we can find the EQ curve that also acts as control for each of the bands. Double click on any point of the yellow curve creates a band and brings on the band's control. To remove an EQ control point simply double click it again.

On The bottom of the GUI you can easily find the global controls and also a handy "help" button that when enabled display a quick explanation of every control when your mouse is over it.

1

This is the main display that shows input and output spectrum of the signal with two different shades of violet. Also the white line displays the peak of the output spectrum so that it can be clearly read in every phase of the plugin usage.

Overlaid on the spectrum analyzer we can find the EQ response curve, the yellow one is the final curve of the EQ and in addition to that the response of every single band is displayed with a line of a different color for ever band.

A double click on any point in the yellow line creates a new control point and displays its controls, another double click on any control point removes it and disables the corresponding EQ band. When a control point is clicked, the input peak spectrum is shown.

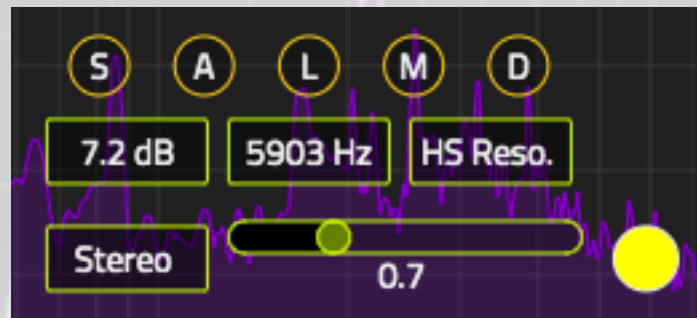
2

These are the input and output meters, they are sample peak meters that display the instantaneous level of the input and output signal.

Between the left and right meters you can find the input and output volume slider respectively. The input and output gain can be adjusted from -30dB to +15dB, if the "LINK IO" button is pressed moving one of the sliders changes the other accordingly.

3

This is the standard set of controls for an EQ band:



The controls are placed next to the “control dot” (the yellow circle found on the right in this image) and they can be placed both on the left (if the control dot is in the right part of the GUI) and on the right (if the control dot is in the left part of the GUI).

Dragging the control dot up and down changes the gain of the band, while dragging it from left to right changes its frequency. You can have finer control on these parameters dragging on the frequency and gain boxes. You can also enter a value directly double clicking on any of these two boxes.

Also next to the control dot we have the filter type selector that allows you to choose between the filter types available (not every control may be available for every filter type)

On the bottom we find the Q slider, dragging it left to right makes the filter less or more selective. Scrolling the mouse wheel when a control point is active allows you to change the filter’s Q if the selected filter has a Q parameter.

Next to the Q slider we have the source selector which is available only if the plugin is placed on a stereo track. This dropdown gives you access to the M/S capability of the plugin letting you choose to filter only the “Mid” or “Side” components of the stereo signal, by default it’ll work on both channels together like a standard stereo EQ. The spectrum analyzer always shows the the source you have selected, so if you select

“mid” or “side” the value shown in the analyzer is the current and peak levels for that specific channel.

On top of the control dot we have five buttons:

- **S** : activates the analog saturation for the band, when this button is enabled a vertical slider appears on the left, this slider allows you to increase the amount of saturation. By default it's 1, this means a headroom of the plugin of 18dB.
- **A** : activates the analog emulation of the band, when active the set parameters are slightly altered and if you are on a stereo track there is a small difference between left and right channel. Also the EQ parameter becomes sensitive to the input level and suffer from slight variation on strong peaks
- **L** : the “listen” button allows you to hear the band in isolation so that you can better understand what you are filtering out.
- **M**: this button bypasses the process for this specific band so you can better judge if what you are doing is working or not.
- **D** : makes the band a dynamic one, the eq line becomes a filled area indicating the possible range of the EQ gain. Attack and release times are set accordingly to the DAW tempo and are one beat length, threshold is automatic and compares the input signal with the level of that band. Simply dragging the control dot allows you to get more or less effect of the dynamic process.

5

These are the global controls, with these buttons you can change the plugin's global settings, from left to right:

- **ANALOG** : enables the analog behaviour of the eq globally, this is equivalent to clicking the “A” button on every single band.
- **SATURATION** : turns on the saturation for every band, it's like clicking the “S” button for every single band.
- **PH. INV.** : a handy phase inversion button that reverses the polarity of the input signal
- **LINK IO** : when turned on input and output slider are linked, changing the input gain of a certain amount applies the same inverse amount

on the output one. This feature is very handy if you want to overdrive the saturation engine without having to deal with great level changes on the plugin output.

- EQ. LOUD. : this button stands for “equal loudness”, when turned on the plugin automatically compensates for loudness changes introduced by your EQ. It uses the CLMS algorithm that evaluates the loudness at the plugin's input every 300ms, then compares it with the output loudness and computes the needed gain to bring it back to the input's level. While it's a handy monitoring feature, it's not recommended to leave it on as for its time varying nature it can create volume changes especially with dynamic bands.
- HELP : when turned on moving your mouse over any control will show a brief description of the control so you can learn how to use the plugin without this manual :D

Extra:

Clicking on the plugin name will show a popup with version and copyright notice.

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