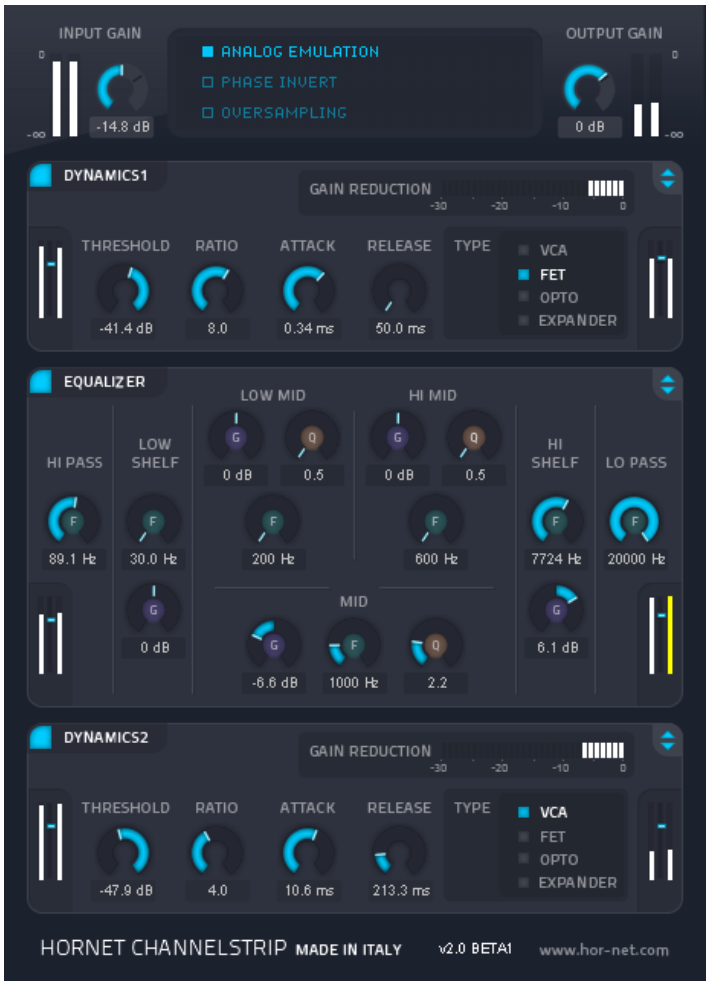
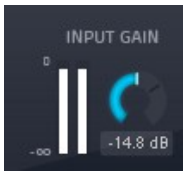
HoRNet ChannelStrip MK2
User Guide



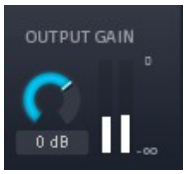
The HoRNet ChannelStrip is a sound processor that gives you two dynamics and one equalizer module, in addition you also get oversampling where it matters and an analog emulation switch that smooths out the sound in a pleasant way. The **ChannelStrip** is designed to be light on the CPU so that can be used on every track as you would do with an analog console.

Input section



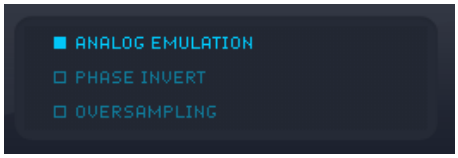
In the top left corner you can find the input control and next to it the input VU meter, yes VU meter not peak meter and this VU meter is calibrated so that 0VU are equal to -18dBFS, this is done so that the analog engine has 18dB of headroom before clipping

Output section



In the top right corner you can find the output control and next to it the output VU meter, this VU meter is calibrated to -18dBFS to be able to output the right intensity of signal to avoid overloading the following plugins

Options section



In the center of the top part of the interface you can find the options section from where you control the behavior of the DSP models. The options are:

- **Analog emulation** – this option turns on and off the analog emulation of the plugin, each processor has a different analog characteristic and a different kind of saturation.
- **Phase Invert** – this switch inverts the phase of the signal
- **Oversampling** – this option activates the oversampling for the DSP models, the oversampling is not global, but to save CPU it's only done where it matters and it's not a fixed amount, depending on the model it can vary

Common module controls

Every module, both dynamics and equalizer, has a set of common controls used to control it:

In the top left corner of every module you can find the on/off button for that module that allow you to save CPU by shutting off unused modules

In the top right corner of every module you can find the rearrange button, clicking on it allows you to change the routing of the modules and change the signal flow

In the left and right bottom corners of every module you can find the input and output VU meters and controls, the small light blue control between the meters acts as a level control, like a fader, dragging it up increases the level, dragging it down decreases the level

The Equalizer

The HoRNet ChannelStrip has one equalizer module that give you:

- Hi pass filter with 18dB/octave slope
- Low pass filter with 12dB/octave slope
- A resonant low shelf (a curve similar to that you would get using a vintage passive equalizer in push/pull mode)
- An aggressive high shelf inspired by that of some famous british console
- Three different full parametric band filters to clean and shape the signal the way you like it
- If the analog emulation is enabled a saturation similar to that of operational amplifiers circuit is applied to the signal and if a stereo signal is fed into the equalizer a small variance of frequency response between left and right channel is applied

The Dynamics processor

The HoRNet ChannelStrip provides two different dynamics processors each with four different processing models. In the center of the module you can find the usual compressor controls like threshold, ratio, attack and release (ratio, attack and release are not available in the OPTO model) in the top of the module there is the gain reduction meter, each segment of the meter represent 1 dB of gain reduction.
For each of the dynamics modules one between the four different models can be selected:

- **VCA**: this model mimics the behavior of an 80s VCA compressor as found on some big console, it is an RMS compressor and has a fairly hard knee, if the analog emulation is on the saturation made by operational amplifiers circuit is added to the signal and, if the signal is stereo, some different level of

compression is applied between left and right channel

- **FET:** this model emulates the specific sound of vintage FET compressors, it's a feedback design and it's very fast with a fairly hard knee. If the analog emulation is on it adds the saturation typical of class A transistor amplifiers to the signal and, if the signal is stereo, some different level of compression is applied between left and right channel
- **OPTO:** this model emulates the behavior of the optic cell found in some compressors, it has a smooth sound with a fast attack but a program dependent release that changes with the intensity of the signal and its frequency content. If the analog emulation is on adds the saturation typical of class A transistor amplifiers to the signal and, if the signal is stereo, some different level of compression is applied between left and right channel

VU Meters

VU meters are in every input and output section of the plugin because knowing the level of the signal is crucial to proper gain staging, since the HoRNet ChannelStrip is built around its analog emulation you have to be careful not to overload each module (or drive them hard if you want dramatic distortion out of them). Each VU meter respect the VU standard and has a rise and fall time of 300ms, this means that what you are seeing is a representation of the average level of the signal, that's why these meter are calibrated so that 0VU equals to -18dBFS this gives the emulation engine 18dB of overhead to handle transients like the one found in drum sounds. When the signal is over the 0VU level the meter will start becoming yellow up to +3VU, above this level they will become red to indicate possible clipping of the signal.