

# HoRNet SyncPressor

SyncPressor is a dynamics processor designed for the master bus, it's a collaboration between HoRNet Plugins and Antonio Porcelli, a top Italian mixing engineer and it's a plugin that aim to provide "glue" to your mix while being transparent.

The effect is accomplished using a simple assumption: the compression moves dynamically with the track so attack and release time should be set according to the track's tempo, for this reason in SyncPressor you will not find the usual attack and release knobs, but two dropdown that use time divisions relative to the compressor's internal tempo, which in turn can be synched to the DAW, set manually or automatically detected from the audio.

With this trick the time constants of the compressor will always be set to a useful amount for your track and will never work "against" it.

HoRNet SyncPressor can also work as a track compressor, so you get the usual compressor settings with variable knee, RMS mode, feedback processing, external sidechain and an HP filter on the sidechain detector (both internal and external).

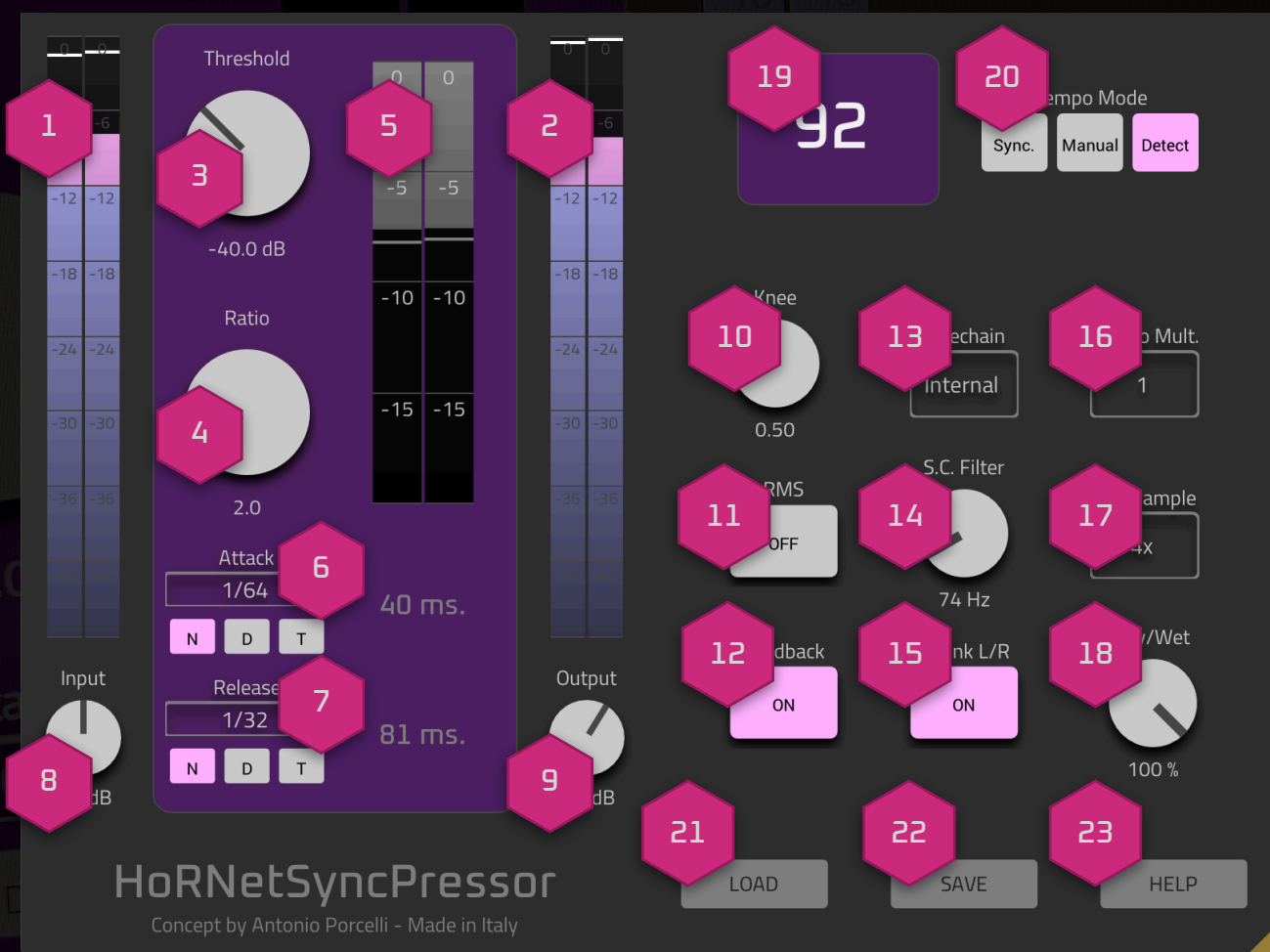
Another master bus specific option is the ability to "unlink" left and right channels in the internal detector so that the compressor actually works like a "dual mono" processor compressing left and right channels individually; this trick gives you a wider stereo image and it's one of secrets for a high level mix.

Antonio Porcelli lives in the south east of Italy, in beautiful Puglia and he's an Italian sound engineer. He is mainly known for his work with Caparezza. He has collaborations with Chris Lord Alge, Gavin Lurssen and Reuben Cohen.

On the live side he has done shows all over the world, Italy, Europe and the United States.



Finally a dry/wet control allows you to mix back some of the “clean” unprocessed signal and a “tempo multiplier” setting lets you double or halve the attack and release times to quickly try out different combinations. HoRNet SyncPressor uses a fully hardware accelerated GUI using OpenGL on windows and Metal on macOS so the CPU is left for audio processing.



## 1. Input Meters

These two digital peak meters show the input level for the left and right channels, they also provide a peak hold indicator.



## 2. Output Meters

These two digital peak meters show the output level for the left and right channels, they also provide a peak hold indicator.

## 3. Threshold

The threshold knob allows you to set the action threshold for the compressor, if the signal rises above this level, gain reduction starts to take place, the amount of gain reduction depends on the "ratio" and "knee" knobs setting.

## 4. Ratio

This knob determines how much gain reduction the compressor applies when the signal passes the threshold level. For example, a ratio of 4:1 means that for every 4 dB the signal rises above the threshold, the compressor will increase the output by 1 dB

## 5. Gain reduction meter

This meter shows the amount of gain reduction applied by the compressor, it is displayed as a single meter when the "unlink L/R" button is off, and as two separate meters for left and right channels when the button is turned on.

## 6. Attack

This dropdown allows you to choose the attack time for the compressor using the song's tempo as reference. It can be set from one full measure length (1/1) to 1/512 (so from really slow to very fast). the three buttons below the dropdown allows you to modify the length of the attack time using the standard musical "dot" and "triplet" variation (respectively the D and T in the buttons) while the N keeps the original computed time.



## 7. Release

This dropdown allows you to choose the release time for the compressor using the song's tempo as reference. It can be set from one full measure length (1/1) to 1/512 (so from really slow to very fast). The three buttons below the dropdown allow you to modify the length of the release time using the standard musical "dot" and "triplet" variation (respectively the D and T in the buttons) while the N keeps the original computed time.

## 8. Input knob

This control allows you to change the input level for the compressor.

## 9. Output knob

This control allows you to change the output level for the compressor.

## 10. Knee

This knob allows you to decide how fast the compression is applied to the signal once it surpasses the threshold.

It allows you to determine how curved the transition from uncompressed to compressed sound will be.

If the knee is set to zero, then the transition is immediate from no compression to the compression you dialed in.

If you want a slower transition, where the compression slowly kicks in, or if you want to compress the signal slightly when it crosses the threshold but compress it progressively more as the signal gets louder, turn this knob towards right.

## 11. RMS

When this button is turned on, the RMS value of the control signal is used for compression so instead of working on fast peaks, the overall loudness is evaluated making the compressor work smoothly.



## 12. Feedback

This button enables the “feedback” mode of the compressor. By default the control signal is taken after the input knob and then run through the attack and release, threshold and ratio controls and then used to compute the gain reduction. When the feedback mode is activated the control signal is taken before the dry/wet knob so the control signal and the gain reduction itself are more interlinked and create a different kind of interaction that makes the compressor more stable and less prone to the “pumping” effect.

## 13. Sidechain

With this dropdown you can chose the source of the control signal for the compressor. By default it uses the input of of the compressor itself but you can choose to select an external source (usually another track or a bus). This is very useful if you want to create space for the kick ducking the bass when the kick plays or if you want to create the classic “pumping” effect of dance music when the kick plays.

## 14. S.C. Filter

This knob allows you to set the cutoff frequency of an high pass filter set on the control signal path, the higher you set this filter the less low frequencies have an impact on the control signal. Setting this control help you to reduce the weight of kick and bass on the compression.

## 15. Unlink L/R

When this button is turned on the plugin works in “dual-mono” mode, this means that you have independent control signals for left and right channels and also the gain reduction is applied independently to each channel. The result is a wider stereo image and a more interesting sound.



## 16. Tempo mult.

With this control you can multiply the internal tempo by the value specified in the dropdown, the effect is to double or halve the attack and release times allowing you to quickly test quicker or slower time constants.

## 17. Oversampling

This dropdown allows you to set the internal oversampling for the compressor, the higher the oversampling, the more accurate the processing and the higher the CPU usage.

## 18. Dry/Wet

This knob allows you to let part of the original unprocessed signal to be mixed with the compressed one. This is useful if you want to apply the technique called "parallel compression" to keep the original transients and add the "compressed" body of the signal to get more sustain

## 19. Tempo

This box contains the tempo used by the compressor, it can be edited when the "tempo mode" control is set to manual

## 20. Tempo mode

This switch lets you change the tempo mode from synched to DAW to manual (and you can enter the tempo value in the tempo box) . The third option allows the plugin to auto detect the tempo using the audio on its input.

## 21. Load

This button displays a drop down that lets you choose one of the factory preset or load one from the hard drive.



## 22. Save

This button allows you to save the current plugin status as preset.

## 22. Help

When this switch is activated a tooltip is shown every time you move the mouse on a control explaining what the control does.