

CH4D v1.0

4-DELAY STEREO CHORUS



INTRODUCTION

CH4D is a classic chorus effect with four delay taps with fixed ratios. You control all four delays with single knob and plugin automatically calculates time and amplitude differences. Since chorus effect can create stereo problems at lowest frequencies and unpleasant phasing sound at highest frequencies, CH4D lets you reduce processed spectrum with two resonant cut filters. You don't have to worry when working with basses or sounds with ultra-precise highs, because it will leave their critical parts intact and process only the midrange.

- Four delay taps (two per L/R channel);
- Low-cut and high-cut filters with adjustable resonance (12dB/octave slopes);
- Advanced LFO that avoids unnatural repetitive modulation;
- Phase inversion and soloing for wet signal;
- Continuous dry/wet mix control;
- Simple output correlation meter;
- 32-bit internal precision with zero latency and low CPU consumption;

USAGE

Some instruments just don't need chorus and you will degrade them no matter how carefully you adjust CH4D. You should check if instrument already uses some type of chorus internally, because it's a common practice for enhancing synthesized sounds. Disable it and use only one instance (if any) or you will probably get too much of it and the result will be blurred mess. Since chorus adds density, it usually doesn't work well with noisy or heavily distorted instruments. Sometimes, even if instrument does sound better chorused while isolated, it will lose its sharpness that can help it to cut through the mix, so check how the overall effect fits in the bigger picture. Use CH4D sporadically, when you really need to add some density/motion to sparse/static sounds.

There are no presets, because setting all the controls is very easy and intuitive. First, you should adjust LCF and HCF frequencies (purple knobs), so that wet signal nicely complements dry. Each filter's resonance is adjusted with corresponding red knob, zero position meaning no resonance at all. You can use solo button for wet signal and adjust all the controls more easily (except delay time – it affects time difference between dry and wet signal, i.e., you can't hear its effects in solo mode). Phase inversion (Inv) flips phase of right wet channel. Use the correlation meter above it to check if stereo becomes too wide. Delay time range is from 3 to 9ms. Lower values fit instruments with shorter and more prominent attacks (percussion, plucked sounds etc.), while higher values are usually more appropriate for longer attacks (pads, SFX, textures etc.). Rule of thumb for LFO is that higher depth needs less speed, and vice versa, otherwise modulation becomes either too mild or too obvious. Small LED indicator turns orange at -3dBFS and red at 0dBFS. Use CTRL+mouse for fine adjustment of every knob and double-click to reset them to default positions.