

SUBCOLOURS [RACK EXTENSION] v. 1.0

MANUAL

2018



Need a Bass? May be Sub-bass octaves?

Present a sub octave generator for your signal. But its not just sub-octave genertor..

Like an octave divider pedals, the tone is warm, fat, and a bit synth-like, as opposed to the crisper, more acoustically accurate transpositions of modern pitch-shift pedals.

This effect unit contain main function section of octave divider, control of input and output levels, built-in LFO and more at rear side panel.

Use this fx with guitars for warm sub backgrounds, with any samples for punch and sub-modulation, with synths to give subtle sounds fatty weight, with drums to expand the foundation of the basic source.

What at other side?

Compressor to control sub frequencies. Limiter to limit dry or wet signals. Widening to spread your output signal. So.. Lets start use it!







BYPASS - disable effect

ON - enable effect

OFF - mute incoming signals

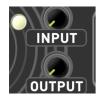




MAIN CONTROLS	
MAX FREQ	Maximum input frequency a sub octave will be generated for. Set from 35.0Hz up to 560Hz
TONE	Adjust harmonic content of generated sub-octave. Set from 0 up to 100%



DRY/WET	
DRY	level of the unprocessed input signal sent to the output.
WET	level of the effected signal



INPUT / OUTPUT	
INPUT	correction of input level (unprocessed input signal) befor it going to DRY/WET control
OUTPUT	correction of output level of the effected signal after DRY/WET control
LAMP	detection of signal activity



MODULATION / LFO SECTION	
AMOUNT	level of modulation from LFO or other sources.

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SRC	selection of modulation source:
	CONSTANT - source is only LFO section
	Automata A1 / A2 / A3 - CV-input sources of Automata* section.
DEST	destination parameter what t be modulated by effect:
	MAX FREQ / TONE / DRY signal / WET signal
LFO RATE	adjust the LFO rate per step.
LFO RANDOM	scale steps by random
WAVE	LFO waveform: SINE / TRIANGLE / SAWTOOTH / SQUARE / PULSE / TANGENS / RISEUP / TRAPEZOID
RATE AFFECT	set how much source value affects the LFO rate.
DEPTH MOD	set how much source value affects the LFO depth.





INPUT AND OUTPUT - connection of audio in/out signals.



COMPRESSOR	
ACTIVE	select destnation for compressing: ALL / DRY / WET / ALL (DRY/WET)
ATTACK	time it takes for gain reduction to increase when the signal level rises
RELEASE	time it takes for gain reduction to decrease when the signal level falls
TRASHOLD	level of signal above which compression is applied
RATIO	amount of gain reduction to apply.
SOFT KNEE	gradual increase in ratio as signal level crosses threshold



LIMITER	
ACTIVE	select destnation for compressing: ALL / DRY / WET / ALL (DRY/WET)
RELEASE	recovery time
MODE	Soft Knee / Hard knee / Hard Clipping



WIDENING - secret weapon to spread output signal.

We cut it from your eyes, but if you really need it, just open Combinator, and use Widening On/ Off button to enable/disable spread, and use Widening knob to set level of effect.



CV INPUTS - use this CV inputs to control by external source Curves:

- Max Frequency
- Tone
- -Dry/Wet signal



AUTOMATA - use this CV inputs as modulation sources with o without LFO. You can select one of A1/A2/A3 CV-inputs in modulation section on front panel at time. But we special create 3 Automata inputs and you can use them all with automation of modulation source selection on front panel (just switch A1/A2/A3)

HOW TO USE IT!!!

DRY/WET - NO TURN AT START TO 100%! You just going to only sub-octaves with may be RMS peaks.

Dry/Wet - is crossfade function from dry signal that you send, to processing signal.

You can work in parallel (50%) and line (100%) modes.

If Dry/Wet = 50% - you add sub octaves.

If Dry/Wet = 100% - you listen only processed signal. And there you must be accurate, because work with sub-octaves need your control (very easy touch to clipping).

Start from DRY/WET=0

Add some Wet position after set Max Freq to 20-30%.

Set TONE to 40-70%.

Add DRY/WET more to Center.

Add some TONE and small Max Freq.

Look at RMS meter, not come to red zone.

Now with Max Freq and Tone changes You must listen sub octaves.

Input and Output knobs - is correction knobs. Use them in work to set positions what you need for your sound and MaxFreq / TONE positions.

Input / Output correction knobs help you as first step to coming out from red zone and set nice level of signal.

But also you can use at rear panel - compressor and limiter. They help you find better changes with this fx type without clipping and overdrive.

After you find your sound, you can add Combinator and add Widening to spread your sound.