

1. PARAMETERS : Primary and Secondary

Each algorithm has up to 6 adjustable parameters. Three parameters are adjusted by *turning* the SPEED, DEPTH, or TWEAK knobs, these are the *Primary* parameters. The other three are adjusted by *twisting* (press-turn) the SPEED, DEPTH, or TWEAK knobs, these are the *Secondary* parameters.

 **Only Primary parameters may be ramped or controlled via expression pedal.**

2. X-Y SWAP.

When running 2 algorithms simultaneously, and tweaking them to find the desired settings, there'll be times where you want to know what would it sound like if the effect order is swapped, this can be very easily accomplished using the X-Y Swap function :



Both algorithms and parameters setting of each DSP are swapped, thereby preserving the complete state.

3. PRESET MODE vs STOMPBOX MODE.

Synesthesia has 2 modes of operation, *Preset Mode* and *Stompbox mode*, and a simple mechanism to quickly switch back and forth between the two.

3.1 Preset Mode

In this mode, everything you do essentially revolves around 'calling of presets', favorite settings that have been previously saved. Tap footswitch A/Y to call patch A, and tap footswitch B/X to call patch B. This is great for switching over many different sounds quickly.

 This mode is indicated by the **ORANGE** color of LED A/Y and LED B/X.

3.2 Stompbox Mode

In contrast, Stompbox mode allows you to treat the pedal as two individual stompboxes. The footswitches now act as on/off switches for the X and Y engines, just like using separate 2 pedals. The footswitches also now support *momentary action*, i.e. you can engage the X or Y momentarily by pressing on the footswitch and hold it for as long as you want the algorithm to run.

 This mode is indicated by the **RED** color of LED A/Y and LED B/X.

Toggling between Preset Mode and Stompbox Mode :

- Press and hold both footswitches, until all the bank LEDs blink 3x < the screen will temporarily display the active mode >.

- Stompbox Mode -



TAP

-> bypass / engage DSP-Y

HOLD (when bypassed) for more than 500 ms
-> engages DSP-Y momentarily

HOLD (when engaged) for more than 500 ms
-> engages DSP-Y ramping.

TAP

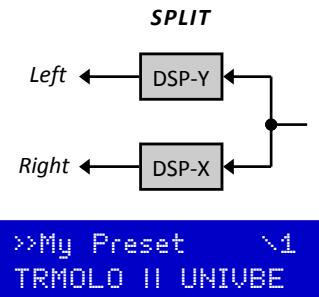
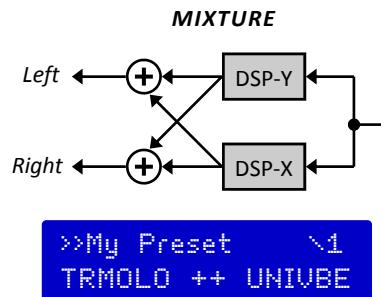
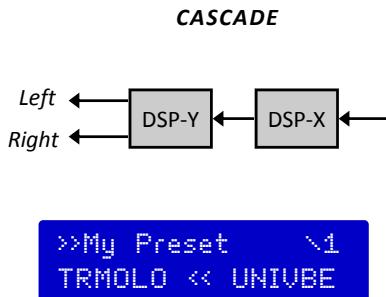
-> bypass / engage DSP-X

HOLD (when bypassed) for more than 500 ms
-> engages DSP-X momentarily

HOLD (when engaged) for more than 500 ms
-> engages DSP-X ramping.

4. DSP ROUTING

The dual DSP engines in Synesthesia can be routed in 3 different ways :



This highly flexible ways of combining two modulation processing engines opens the door for sonic possibilities that are limited only by your imagination. Explore!

Note: Typically, the output of each DSP comprises *wet* (processed) + *dry* (unprocessed) signal. When using the Mixture routing the output signal composition becomes *wet* (X) + *wet* (Y) + 2 * *dry*. Depending of the algorithms running on X and Y this may leads to an imbalance in the wet/dry composition. Fortunately, most of the algorithms have a wet/dry mix control that goes from full dry to full wet, use it to get a higher wet/dry ratio, compensating for the imbalance caused by blending the two DSP outputs together.



DSP Routing can be set in **Options** (*Options -> DSP Routing*), and is specified on per-preset basis.



Split mode is usable only when using the both Left and Right outputs, and is meaningless when using mono output.

5. TAP TEMPO

There are two ways you can do tap tempo with Synesthesia :

1. Use an external tap tempo pedal.
2. Configure **footswitch B/X** to function as tap-tempo switch, this is done in **Globals** (*Globals -> Footswitch B/X*).

5.1 Tap Division

A set of tap-divide options are provided to make your life easier while working with tap tempo. Tap-Divide can be set in Options (*Options -> Tap.Div X*, and *Options -> Tap.Div Y*), and is specified on per preset-basis.

Tap-Divide options

Ignore Tap / Clk	4:1	2:1	1:1	1:2	1:3	1:4	3:4
No tempo change	4x slower	2x slower		2x faster	3x faster	4x faster	4/3x faster



When you start tapping the tap-divide values are displayed on the screen.

Tap-divide value of DSP-Y 1:1 Tdiv 4:1 Tap-divide value of DSP-X

1:1 Tdiv -

..... No value is shown if :
- Tap-divide is set to "Ignore Tap/Clk"
- The algorithm doesn't have a 'tempo'
(such as Octave , Envelope Filter, etc).

5.2 Tempo LED.

The tempo LED will start blinking only when the tempo of both X and Y are synchronized, and this occurs under two conditions :

1. When you do tap-tempo.
2. When Synesthesia is receiving a midi clock signal.

Also, at least one of the active algorithms must be *tapable* and the tap-divide value is not set to "Ignore Tap/Clk".