Table of Contents

Tempo LED

Parameter Controls [DSP-Y]

- *Speed / SP1*
- *Depth / SP2*
- *Tweak / SP3*
- *Algorithm*

SP = Secondary Parameter

Parameter Controls [DSP-X]

- *Speed / SP1*
- *Depth / SP2*
- *Tweak / SP3*
- *Algorithm*

Bank [1, 2, 3, 4] indicator LEDs

>>Melancholidy   \1
TRMOLO ++ UNIVBE

Footswitch A/Y

Footswitch B/X

LED A/Y

LED B/X

USB port for connection to computer

2.1mm DC power input Negative-center

MIDI Devices

MIDI Source

INPUT

Aux switch
Ctrl **V**oltage
Expression

USB

9VDC
240 mA

OUT-L

OUT-R /
SEND

▽ RETURN

Stereo Out → Pre/Post

MIDI THRU ⊢—⊣ MIDI IN

Multi-purpose external control input

Stereo Out / Pre-Post selector switch

Return < *Pre-Post mode* >

Right output < *Stereo Out mode* > / **Send** < *Pre-Post mode* >

Left (mono) output

👉 **Every knob is also a button**. The following operations can be done on each knob :

| TURN | PUSH or TAP | HOLD | TWIST (turn while holding down) |

Here's a summary of what each knob and each switch does, this is just a quick reference, more detailed explanation will be given in the next chapter.

- **Turn** - adjust primary parameters.
- **Push** - set ramping speed.
- **Hold** - map/unmap knob to expression pedal.
- **Twist** - Adjust secondary parameters.

- **Turn** - select algorithm.
- **Push** - turn selected algorithm on / off.
- **Hold X** - enter Options menu
     Y - enter Globals menu
- **Twist X** - scroll through the preset banks.

In Preset Mode

- **Push B/X** - Load patch B / Bypass.
     A/Y - Load Patch A / Bypass.
- **Hold B/X > 500 ms** - initiates DSP-X ramping.
     A/Y > 500 ms - initiates DSP-Y ramping.
- **Push A & B together** - Bank Up.
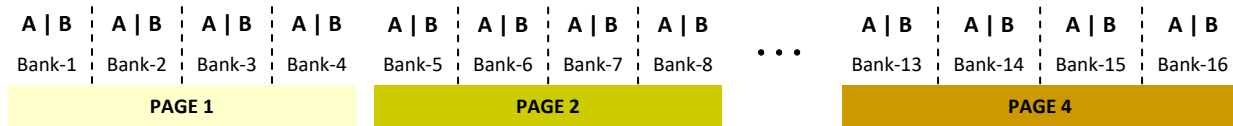- **Hold A & B together** - Switch to Stompbox mode.

In Stompbox Mode

- **Push B/X** - turn DSP-X on /off.
     A/Y - turn DSP-Y on /off.
- **Hold B/X > 500 ms** - initiates DSP-X ramping.
     A/Y > 500 ms - initiates DSP-Y ramping.
- **Push A & B together** - Bank Up.
- **Hold A & B together** - Switch to Preset mode.

G F I **S Y S T E M** ©

Chapter 1 - OPERATIONS

1.1 PRESET SYSTEM

SYNESTHESIA has 32 presets organized within 4 pages, where each page contains 4 banks, and each bank contains 2 patches (A & B).

A | B	A | B	A | B	A | B		A | B	A | B	A | B	A | B		A | B	A | B	A | B	A | B
Bank-1	Bank-2	Bank-3	Bank-4		Bank-5	Bank-6	Bank-7	Bank-8	• • •	Bank-13	Bank-14	Bank-15	Bank-16
	PAGE 1					PAGE 2					PAGE 4		

You may set the maximum number of *banks* or *pages* to access. For example, restricting the preset access to **two pages** gives you *2 pages* x *4 banks* x *2 patches* = 16 presets.
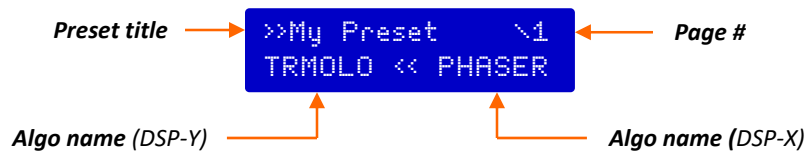
Such restriction is useful if you are not using MIDI controller for preset switching as it could get unwieldy to navigate too many preset locations in consequential manner.

☞ Page restriction can be set in **Global Settings** menu.

1.2 NAVIGATING THE PRESETS

■ **Load a Preset**

- Press **footswitch A/Y** to load patch A, or **footswitch B/X** to load patch B.

Preset title ⟶ `>>My Preset    \1` ⟵ Page #
`TRMOLO << PHASER`
Algo name (DSP-Y) ⟶   ⟶ *Algo name (DSP-X)*

■ **Load a preset in another Bank**

- Select the desired bank.
- Press **footswitch A/Y** to load patch A, or **footswitch B/X** to load patch B.

There are 2 ways to scroll through the banks :

Method 1 : Press **footswitch A/Y** and **B/X** simultaneously (do not hold).

Method 2 : Twist the **X encoder** (clockwise for Bank-Up or anti-clockwise for Bank-Down).

As you scroll through the banks the display will show the titles of both patch A and patch B that were stored in the bank, and also the page number.

Patch A title ⟶ `A>>Far Horizon    /`
Patch B title ⟶ `B>>Reflection    2` ⟵ *Page #*
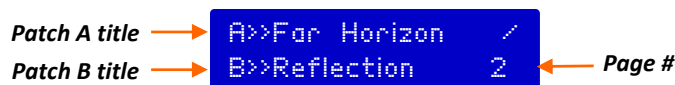
■ **Save a preset**
- Hold down **X** and **Y encoders** until a prompt appears on the screen. ──

```
where to save?
A    <push>    B
```
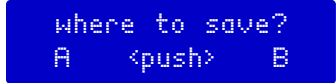
    < At this point, If you'd like to cancel saving to a preset : hold down the X and Y encoders again >

- Push **footswitch A** to save to patch A, or push **footswitch B** to save to patch B
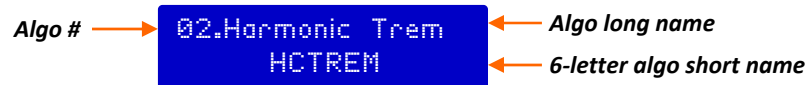
☞ After preset is saved, the preset's title can be changed in **Options** (*Options -> Title Editor*)

■ **Bypass the Pedal**
- Tap **footswitch A/Y** or **B/X**, whichever preset is currently active (corresponding LED is on).

1.3 NAVIGATING THE ALGORITHMS

Turn the **X Encoder** to select an algo to run on DSP-X, and turn the **Y Encoder** to select an algo to run on DSP-Y. Push the **X Encoder** to toggle DSP-X on and off, similiarly, push the **Y Encoder** to toggle DSP-Y on and off.

Algo # ──→
```
02.Harmonic Trem
       HCTREM
```
←── *Algo long name*
←── *6-letter algo short name*

For in-depth information on the algorithms please see a separate document that we have prepared :
Synesthesia Algorithms.pdf

1.4 MASTER VOLUME

A single control is provided to set the overall volume, from -3dB to +3dB.

```
VOLUME (dB)    +2
        PREV:+1
```
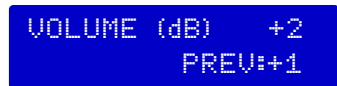
Twist the **Y encoder**, clockwise to increase volume, anti-clockwise to reduce volume.

☞ Master volume is specified on per-preset basis.

1.5 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* (*hold-turn*) the SPEED, DEPTH, or TWEAK knobs, these are the *Secondary* parameters.

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

1.6 GLOBALS & OPTIONS

■ **Globals**

The Global Setting menu is where you configure options that are *global*, as opposed to *per-preset basis*. These are mostly set-and-forget stuff. To enter the Globals menu :

- Hold down the *Y encoder* until the screen reads "GLOBAL SETTINGS".
- Use the *Y encoder* to navigate the Globals menu.
  < to leave the menu without making any changes : hold down the *Y encoder* again until screen returns to the main scene >

Globals:		
- Preset Pages.	- Aux TIP.
- Input Pad.	- Aux RING.
- MIDI Channel.	- Aux TIP + RING.
- Footswitch B/X alt. function.	- Favorite Preset
	- Tempo LED.

■ **Options**

The Options menu is where you configure options that are specified on *per-preset basis.*
To enter the Options menu :

- Hold down the *X encoder* until the pedal enters the Options menu.
- Use the *X encoder* to navigate the Options menu.
  < to leave the menu without making any changes : hold down the *X encoder* again until screen returns to the main scene >

| Options :		
- Pre / Post Configuration.	- Default Mode.
- DSP Routing.	- Preset Title Editor.
- Tap Division for DSP-X.	- Unmap Expression Pedal (on current preset).
- Tap Division for DSP-Y.	- Unmap Expression Pedal (on all presets).

1.7 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 :
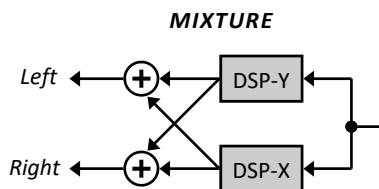

push X encoder and Y encoder simultaneously
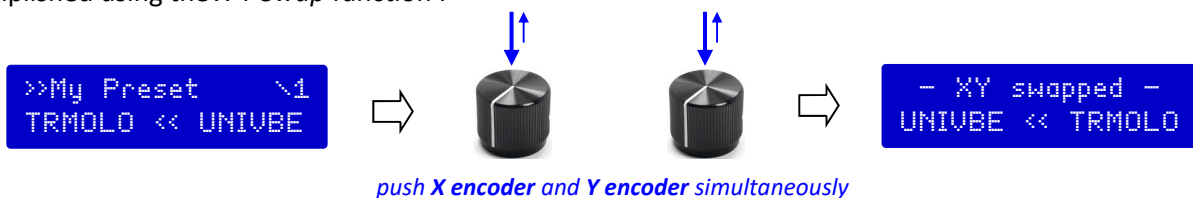
Both algorithms and parameters setting of each DSP are swapped, thereby preserving the complete state.
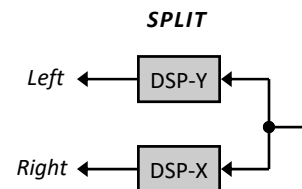
1.8 DSP ROUTING

The dual DSP engines in Synesthesia can be routed in 3 different ways :
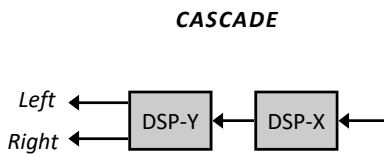
This highly flexible ways of combining two modulation processing engines opens the door for sonic possibilities that are limited only by your imagination. Explore!

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.

1.9 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.

■ **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.

■ **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. Furthermore, the foot-switches can now work as *momentary switches*, 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, till the bank LEDs blinks 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.

Auto Stompbox Mode (included in firmware update v.2.0.0)

The Stompbox Mode proves to be very popular and is often the operating mode of choice by many users, as is evident with the number of requests we've received asking to make it easier to access and use the Stompbox mode. Firmware v2.0.0 brings you the options to configure the presets such that the pedal automatically switches to Stompbox Mode after calling the preset. This option is available on per-preset basis.

On the pedal :

Options
  └─ 5. Default Mode
        └─ > Dfault: Preset
           > Dfault: Stmpbox

BANK-PATCH	PRESET TITLES (12 char max)	AUTO STOMPBOX MODE
P A G E - 1		
1 - A	Far Horizons	▮ S
B	Octolean	□ S
2 - A	Perfect Peak	□ S
B	Perfect Peak	□ S
3 - A	Shiverhowls	□ S
B	Reflections	□ S

In SymmLab editor :

Check the box to make Stompbox Mode the default mode for that particular preset.

Do this for every preset you wish to automatically load in Stompbox Mode.

1.10   PARAMETERS RAMPING.

Ramping feature allows you to automatically ramp up to 3 parameters simultaneously.

- Hold down *footswitch A/Y*, for approximately 0.5 seconds.
  < the selected DSP-Y parameters will start ramping from the current position of the knob up to the *end value*, and will hold on to this value for as long as you keep holding down the footswitch >
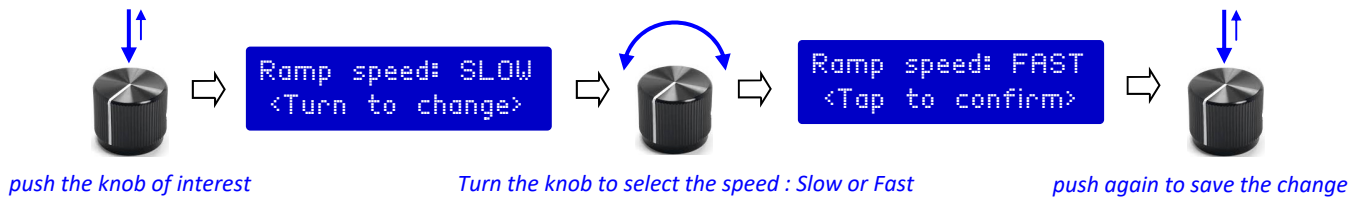- Release the footswitch to reverse the ramp, restoring the parameter to its starting value.

👉 Do the above steps with *footswitch B/X* to ramp DSP-X parameter.

👉 The parameters that you want to ramp must first be mapped for ramping function (see chapter 2.3). The mapping procedure also sets the *end* value of the ramping.

👉 An external aux switch or MIDI can be used to engage ramping instantly without any holding period.

■ **Ramping Speed**
The ramping speed may be set independently for each knob :


```
Ramp speed: SLOW
<Turn to change>
```

```
Ramp speed: FAST
<Tap to confirm>
```

push the knob of interest   *Turn the knob to select the speed : Slow or Fast*   *push again to save the change*

👉 To return to the main scene without saving any changes : turn any other knobs or push any buttons / switches.

Special treatment for Rotary Speaker algorithm.

Ramping function are applicable for all algorithms, <u>except</u> the HORN and DRUM algorithms. For these two algorithms the ramping function is re-purposed for toggling the rotor speed, switching the rotor speed from slow to fast, or fast to slow.

After the button is held down for half a second the rotor speed will be toggled and the screen will display this message below, and the button may be released.

```
ROTOR SPEED
slow <-> fast
```

👉 Rotor speed can also be toggled using aux Switch or MIDI.

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Chapter 2 - EXTERNAL CONTROL

Synesthesia provides a highly versatile system for external control. The ACE input jack accepts 3 types of external control :

- 1, 2, or 3 buttons Aux switches.
- Control Voltage.
- Expression pedal.

Upon power up, Synesthesia will sense the presence (or absence) of any of the 3 possible input sources and configure the internal processing accordingly. Once a source type is detected the pedal will hold that information until the next power up, thus if you are changing the source (say, from an aux switch to an expression pedal) you must power cycle the pedal, and let it sense and recognize the new source.
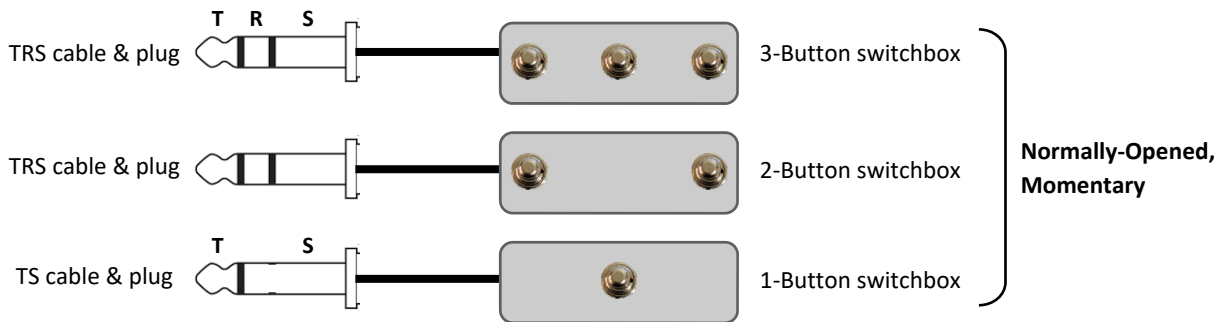
2.1 AUX SWITCHES

External switches are absolutely wonderful for unlocking the rich potential of user's control and access to the various features and functionalities. Here's the list of functions that you can assign to the switches :

- Bank Up
- Bank Down
- Page Up

- Load Patch-A
- Load Patch-B
- Tap Tempo

- Bypass / Engage
- Toggle Modes
- Tap Tempo

- DSP-X On/Off
- DSP-Y On/Off
- Instant Ramp-X

- Instant Ramp-Y
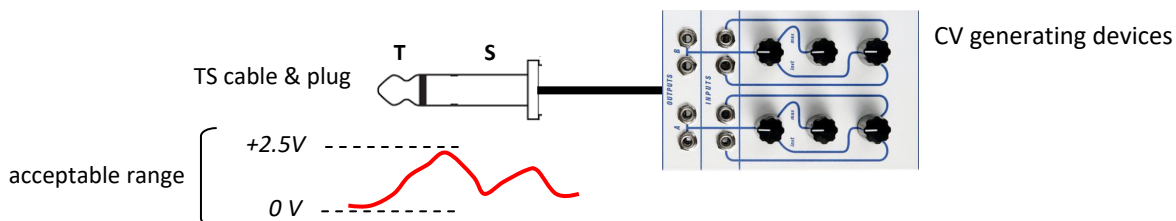- Reset Sequence

- Patch Up
- Patch Down

< added in 2.1.0 >

☞ Switch function assignment can be set in **Globals** (*Globals -> Aux TIP*
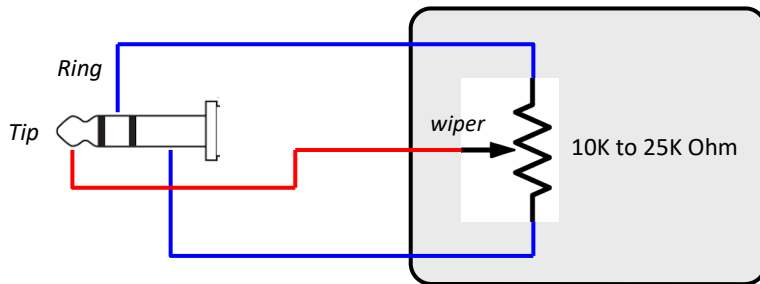*Globals -> Aux RING*
Globals -> Aux TIP+RING).

TRS cable & plug — 3-Button switchbox

TRS cable & plug — 2-Button switchbox

TS cable & plug — 1-Button switchbox

Normally-Opened, Momentary

2.2 CONTROL VOLTAGE (CV)

Connect a control voltage source (*synthesizers*, *sequencers*, etc) for direct control of the algorithm's parameters.

TS cable & plug

CV generating devices

acceptable range
+2.5V
0 V

2.3 EXPRESSION PEDAL.

Ring

Tip

wiper

10K to 25K Ohm

Expression Pedal

Some expression pedal on the market has its wiper connected to the Ring instead, this will not work with Synesthesia. Make sure you get the suitable type : Wiper-to-Tip.

■ **Setting up the *Heel* and *Toe* values for expression pedal (and ramping function).**

Suppose you want to map a parameter knob to the expression pedal or the ramping function :

- Turn the knob until you find the desired *Heel* value.
- Hold down the knob. After 2 seconds the screen will show the *Heel* / *Toe* information, keep holding the knob down.

```
Pedal -> Knob
Heel 25  / Toe 99
```

- Now turn the knob (while still holding it down) to find the desired *Toe* value. When you find it, release the knob.

The parameter is now mapped to the expression pedal and ramping function. Rocking the expression pedal will sweep the mapped parameter to any value within the range specified by *Heel* and *Toe* values.

***Heel* position**   ***Toe* position**

☞ The *Toe* value set using the above procedure will also be the "*end value*" for the Ramping function (chapter 1.10).

☞ Changes to the *Heel* and *Toe* values are automatically saved into the current preset.

☞ Up to 6 parameter knobs may be mapped. These are the 3 primary parameter (SPEED, DEPTH, and TWEAK) of DSP-X and DSP-Y. The mapped knobs' name will be displayed on the screen when the expression pedal (or ramping) is active.

■ **Unmapping a knob from the expression pedal (and ramping function).**

To unmap a knob from the expression pedal and ramping : use the same procedure as the above, but set the *Toe* value identical to the *Heel* value, the actual value does not matter.

```
- UNMAPPED -
Heel 25  / Toe 25
```

➡ Expression / ramping will no longer affect the parameter controlled by the knob.

☞ All the knobs can be quickly unmapped, affecting a single preset, in the **Options** menu (*Options -> Unmap EP*).

☞ All the knobs can be quickly unmapped, affecting ALL presets, in the **Options** menu (*Options -> Unmap EP [All]*).

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Chapter 3 - TAP TEMPO

There are two ways you can do tap tempo with Synesthesia :
1.   Use an external tap tempo pedal (see chapter 2.1).
2.   Configure **footswitch B/X** to function as tap-tempo switch.
     With this configuration you can no longer use footswitch B to call patch B, therefore the number of accessible presets is halved.

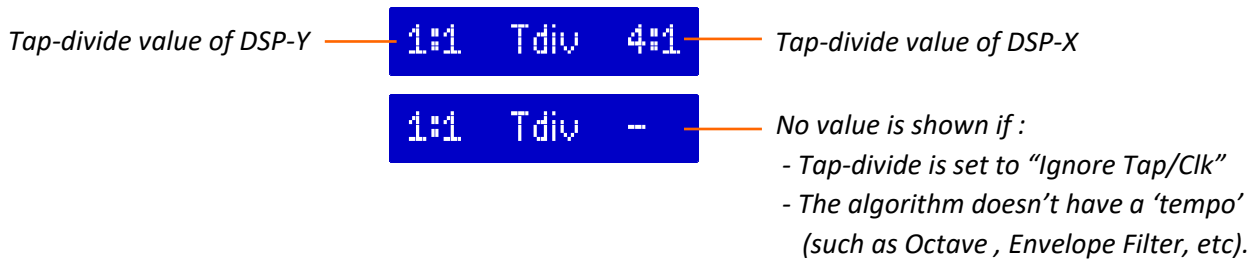☞ Footswitch B function can be configured in **Globals** (*Globals -> Footswitch B/X).*

3.1 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).

3.2 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".*
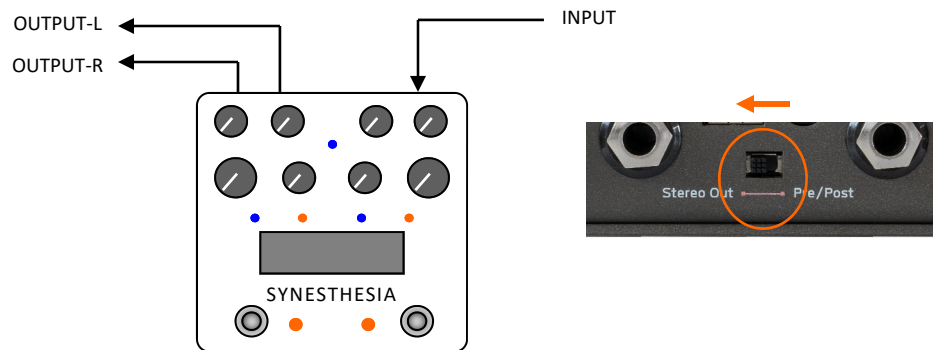
Tempo LED ———

GFI SYSTEM©

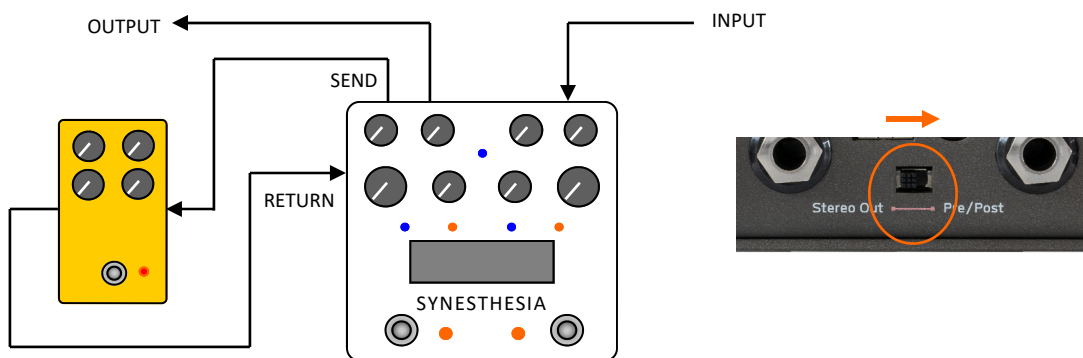**Chapter 4 - SETUPS : Stereo Out and Pre/Post**

There are two ways Synesthesia can be used :
1. **Stereo Out :** Synesthesia as a mono-in / stereo-out pedal.
   This is the basic configuration that is applicable to most usage scenarios.

2. **Pre / Post** : Synesthesia as a mono-in / mono-out pedal, plus the ability to switch between *Pre* or *Post* configuration.


Some modulation effects sound best (subjectively!) when placed *before* OD/distortion, while some others may work best when placed *after* OD/distortion. The Pre/Post configuration allows you to instantly switch the order of Synesthesia with respect to the other pedals placed within Synesthesia's effects loop (*Send - Return*).

To use the Pre/Post setup :
1. Place the external pedal(s) in Synesthesia's effects loop.
2. Flip the switch at the top side to Pre/Post potition.
3. Select *Pre* or *Post* in **Options** menu (*Options -> Pre/Post).*

☞ Pre/Post setting is specified on *per-preset* basis.

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PRE

signal flow

SYNESTHESIA

POST

SYNESTHESIA

signal flow
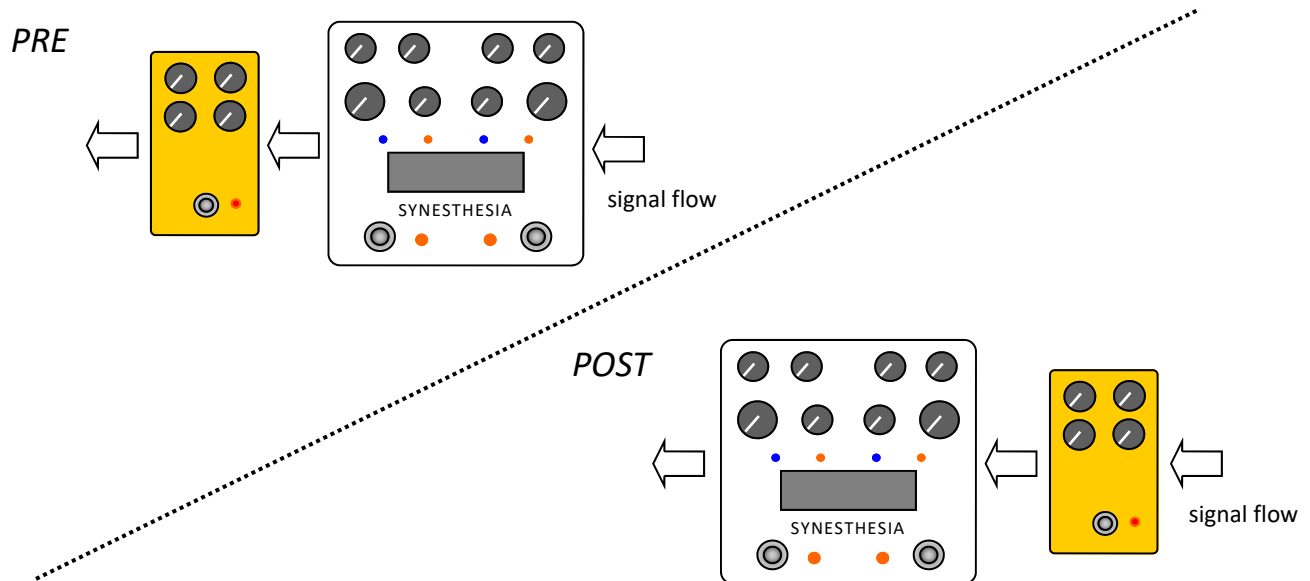
F.A.Q

Q : The pedal put in Synesthesia's effects loop, will it still be functional when Synesthesia is bypassed?

A : Yes it will still work.

Q : Can a drive pedal be put between the Y engine and the X engine?

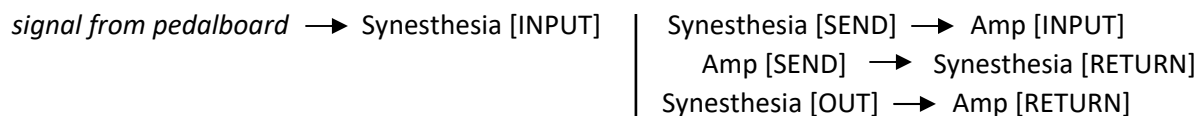**A** : No it doesn't work like that. It's either [X engine → Y engine] → Drive pedal

or

Drive pedal → [X engine → Y engine]

Q : Hey, I had my Synesthesia wired up with Pre/Post setup in my pedalboard. When I took the pedal out of the pedalboard this morning and just plugged my guitar into it and output went straight to the amp I don't hear any sound coming out of the pedal. What's going on?

A : When you use Synesthesia as a normal pedal (Guitar -> Pedal -> Amp) and not using its effect loop, you need to set the switch position back to 'Stereo Out' setting.

Q : Is it possible to use an amp in place of a drive pedal in Synesthesia's effects loop?

A : Yes it's possible, to be precise: you can put the *preamp section* of an amp in Synesthesia's effects loop.

signal from pedalboard → Synesthesia [INPUT] | Synesthesia [SEND] → Amp [INPUT]
Amp [SEND] → Synesthesia [RETURN]
Synesthesia [OUT] → Amp [RETURN]

G F I **SYSTEM**©

Chapter 5 - PRESET TITLE EDITOR

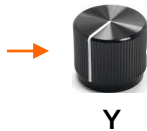To start editing the title of a preset :
- Load the desired preset
- Enter the **Options** menu by holding the *X encoder* down.
- Select *Preset Title*.

X

EDITING SCENE

Turn to change characters.
Push to toggle *Lower case <-> Upper case*.
   to toggle *Numbers <-> Symbols*.

Turn to scroll character's position.
Push to exit and confirm saving changes.

Y   **X**

```
CAPS        EXIT
My Title
```

12 characters max

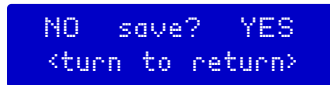a b c d e f g h I j k l m n o p q r s t u v w x y z   0 1 2 3 4 5 6 7 8 9

⇧

push Y encoder

⇩

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z   % - + / . ( ) & !

↑
space

SAVE CONFIRMATION SCENE

Y   **X**

```
NO  save?  YES
<turn to return>
```

Turn X or Y to return to editing scene

Chapter 6 - SYMMLAB EDITOR SOFTWARE

SymmLab is software that is designed as a support tool for Synesthesia. Though nearly everything can be done on the pedal itself, there are a few things that require the software, such as *firmware update*, *library update*, and *factory reset*. Here are some of the things you can do with SymmLab :

- Manage your presets (backup, restore, save offline presets in your computer, etc).
- Read the stored algorithms in your pedal and display them on screen.
- Make algorithm / parameter adjustments and audition the result in real time with your pedal.
- Factory reset, Library update, and Firmware update.

The software interface was designed to be as simple and intuitive as possible. Though the graphics has an outdated look, it gets the job done efficiently. Available for Windows and Mac, at :
https://www.gfisystem.com/downloads.html.
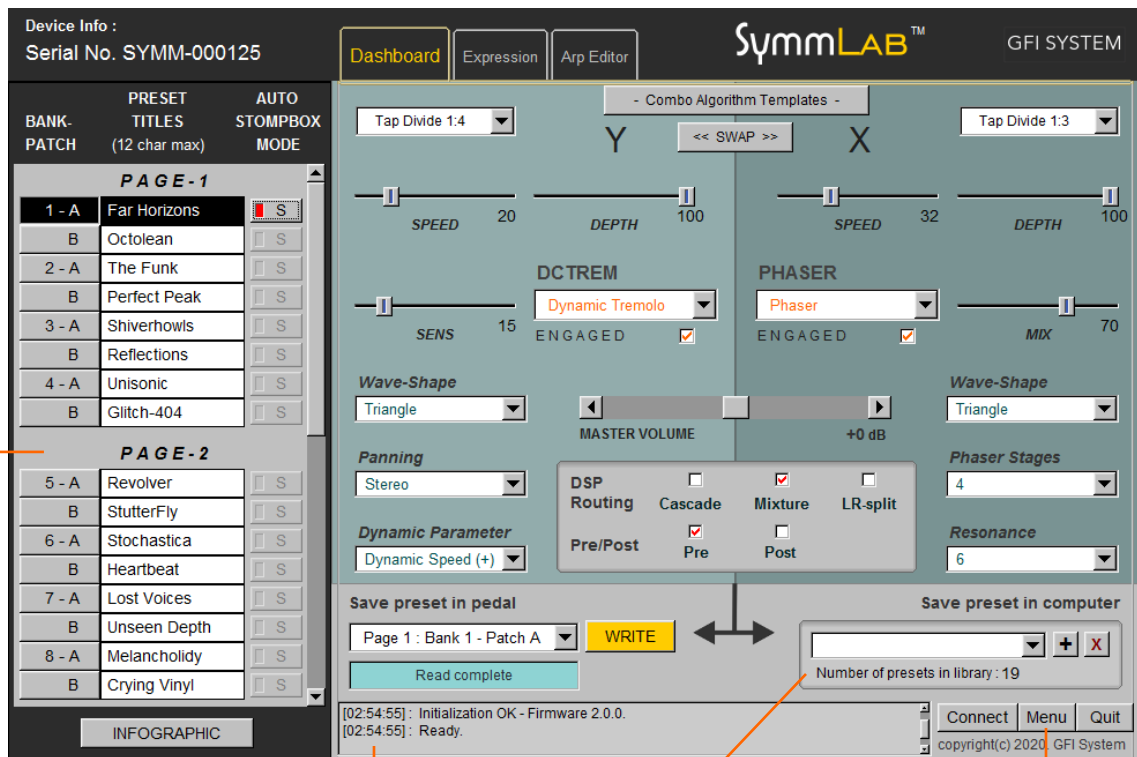
Preset access panel - read presets stored in your pedal, give them titles, etc.

Offline presets - save offline presets in your computer. See next page for detailed explanation.

Status panel - displays the status of the software and everything that it does.

Menu - If you don't see anything that you were looking for, you will surely find it here.

■ **Offline Preset**
Offline presets are presets that you save in your computer. It's a very useful tool for managing presets. Your Synesthesia's preset capacity is 32, if you have more than 32 presets you may save them as offline presets in your computer for future use. One other powerful use is *presets sharing*. Here's how it works :

When you save an offline preset, a 'preset file' will is automatically created and stored in your computer. You can share these files with other Synesthesia's users, they will be able to load those files into their SymmLab and then save those presets into their Synesthesia.

The preset files resides in the following directory :

Windows : C:\GFI System\SymmLab\presets
Mac   : Documents\GFI System\SymmLab\presets

IMPORTANT!
- Do not manually delete, move, or rename files in the preset folder, doing so will break the preset database.
- Use the built-in 'preset deletion' function in SymmLab to remove any unwanted presets.
- Renaming existing preset files can be done as follows :
    1. Load the preset whose name you'd like to change.
    2. Save again, giving it a new name.
    3. Delete the preset with the old name.

■ **Backing Up Your Presets**
Use the Backup function to safeguard the presets that are stored in your pedal :
> *Menu >> Backup*

You can restore from the backup you've created anytime :
> *Menu >> Restore*

☞ The created back file resides in the same folder as the offline preset file.

■ **Uninstalling SymmLab**

Mac : simply move the SymmLab app icon from the Applications directory to the Trash.

Windows : *Start > All Programs > GFI System > SymmLab > Uninstall SymmLab*
> Or
> *Start > Control Panel > Programs > Uninstall a Program > select SymmLab*

G F I S Y S T E M®

## Chapter 7 - FACTORY RESET, FIRMWARE UPDATE, & LIBRARY UPDATE

7.1 Factory Reset

To revert the state of your pedal to factory setting :

1. Connect your pedal to a computer with SymmLab software installed.
2. Open SymmLab
3. *Menu >> Factory Reset*.

7.2 Firmware Update

1. Download the latest firmware updates at : www.gfisystem.com/downloads.html
   For Mac users, please use Chrome or Firefox browsers to download the file, Safari browser for some reason won't download the file correctly.

2. On power up, press and hold down both footswitches when "GFI SYSTEM" is displayed on the screen. Release when the display reads "FIRMWARE UPDATE"

3. Connect the pedal to your computer's USB port via the supplied USB cable, and open the SymmLab software. This window will pop up :
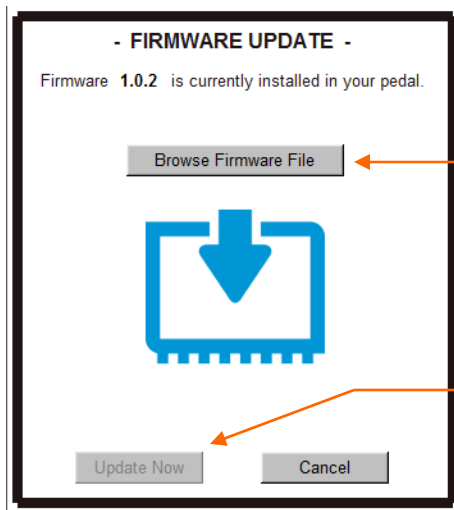
Click to browse and load the file you've just downloaded (file extension is *.fdt*).

After file is loaded, click this to start the update.

4. Reboot the pedal (this is optional but recommended).
   - DONE -

☞   Almost always, a firmware update release is accompanied by an update of the editor software SymmLab as well. Both firmware and software are pair-matched, so **make sure you get the latest version of the SymmLab software when you do a firmware update**.

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7.3 Library Update

Ocassionally a firmware or software update contains updated algorithms, in this case the algorithm library in the pedal needs to be updated as well. To perform a library update :

1. Connect your pedal to a computer with SymmLab software installed.
2. Open SymmLab
3. Menu >> Library Update.

We will clearly state whether a library update is required whenever a firmware/software update is released.

Specifications :

- Input impedance   : 1 MOhm.
- Output impedance : 500 Ohm.
- DAC / ADC resolution : 24 bits.
- Current consumption : ~240 mA.
- Weight : 0.8 Kg (1.6 lbs).
- Dimension : 12 (L) x 12 (W) x 5.5 (H) cm
- Power source : 9VDC (negative center).

Key Features :

- Dual-channel multi-modulation engines in a compact pedal.
- 32 presets.
- Up to 38 on-board algorithms.
- Flexible DSP routing : *Cascade*, *Mixtures*, and *LR-Split*.
- Flexible mode : *Preset Mode* and *Stompbox Mode*
- Flexible setup : *Stereo Output* or *Pre/Post*.
- Multi-Purpose A.C.E jack accepts Aux Switches, Control Voltage (CV), or Expression Pedal.
- MIDI In and MIDI Thru.
- Works with SymmLab® software for preset management, library update, firmware update, and factory reset.
- Bright LEDs and LCD display.

Visit the product page at our website for more demo videos, sound clips, FAQs, and updates.