

## STS minikit – additional information

### 1 Components NOT included in the mini-kit

The following components are not included in the mini-kit, you will need to supply them yourself.

	1	Case
	1	PSU +/- 15V
	1	ON/OFF switch
CN2L, CN2R	2	XLR socket 3pins female
CN3L, CN3R	2	XLR socket 3pins male
P1L, P1R	2	potentiometers 10K Linear taper + knobs
P2L, P2R	2	potentiometers 10K Audio taper (Logarithmic) + knobs
W2L, SW2R	2	DPDT switches (BYPASS)
SW1L, SW1R	2	DPDT switches (ON/OFF/ON) (Speeds) or rotary switch 3 positions / 4 circuits + knobs
	4	Vu-meter standoffs

### 2 Power supply

3 different power supplies are possible :

#### 2.1 Standard PSU

This is the PSU of the assembled product and full kit. It uses a DC/DC converter from 12V to +/-15V. The components needed for this PSU have an (a) suffix to their name.

CN1a	1	DC-IN Connector
L3a	1	Common mode inductor
L4a, L5a, L6a, L7a	4	22uH inductor
C39a, C40a	2	Ceramic capacitor
C41a	1	Electrolytic capacitor, low ESR, 105°, 470u-35V
C42a, C43a, C45a, C46a	4	Electrolytic capacitor, low ESR, 105°, 680u-35V
D5a	1	Rectifier diode
U5a	1	DV/DC converter 12V--> +/-15V CC6-1212DF-E
	1	External power adapter 12V-1A

#### 2.2 Linear PSU on board

The STS board has placeholders for 2 voltage regulators of type 7815 and 7915. If you want to use this PSU, you must install only the components with a (b) suffix.

CN5b	1	3 points PCB terminal blocks
BR1b	1	Rectifier bridge 200V - 1A
C48b, C49B	2	Electrolytic capacitor, low ESR, 105°, 1000u-35V
U6b	1	7815 positive voltage regulator
U7b	1	7915 negative voltage regulator
		Mains transformer 2 x 15V - 400mA

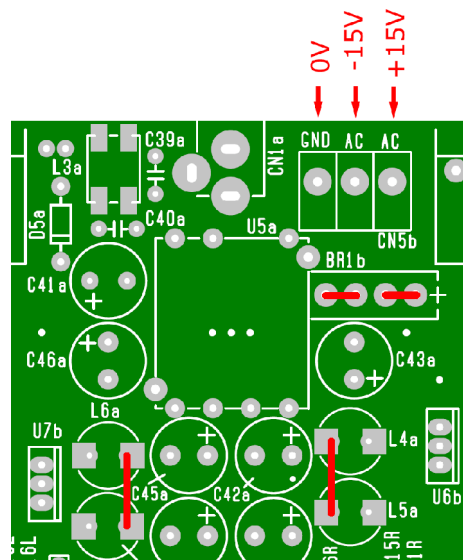
The transformer secondary must be connected to the CN5b terminal blocks.

The regulators need heat sinks.

*It is strongly discouraged to install the transformer near the STS board because the tape simulator coils are very sensitive to electromagnetic radiations.*

### 2.3 External PSU

It is finally possible to power the card directly from an external PSU able to supply +/-15V at 200mA. In this case you must wire none of the (a) or (b) suffixed components, except the terminal blocks CN5b. You just need to wire 4 copper links as shown below in red.



### 3 Panel components wiring

For the panel components wiring please refer to the document [sts-minikit-layout.pdf](#)

The SW1 switch can be either a DPDT switch (on/off/on) wired like SW2 or a rotary switch.