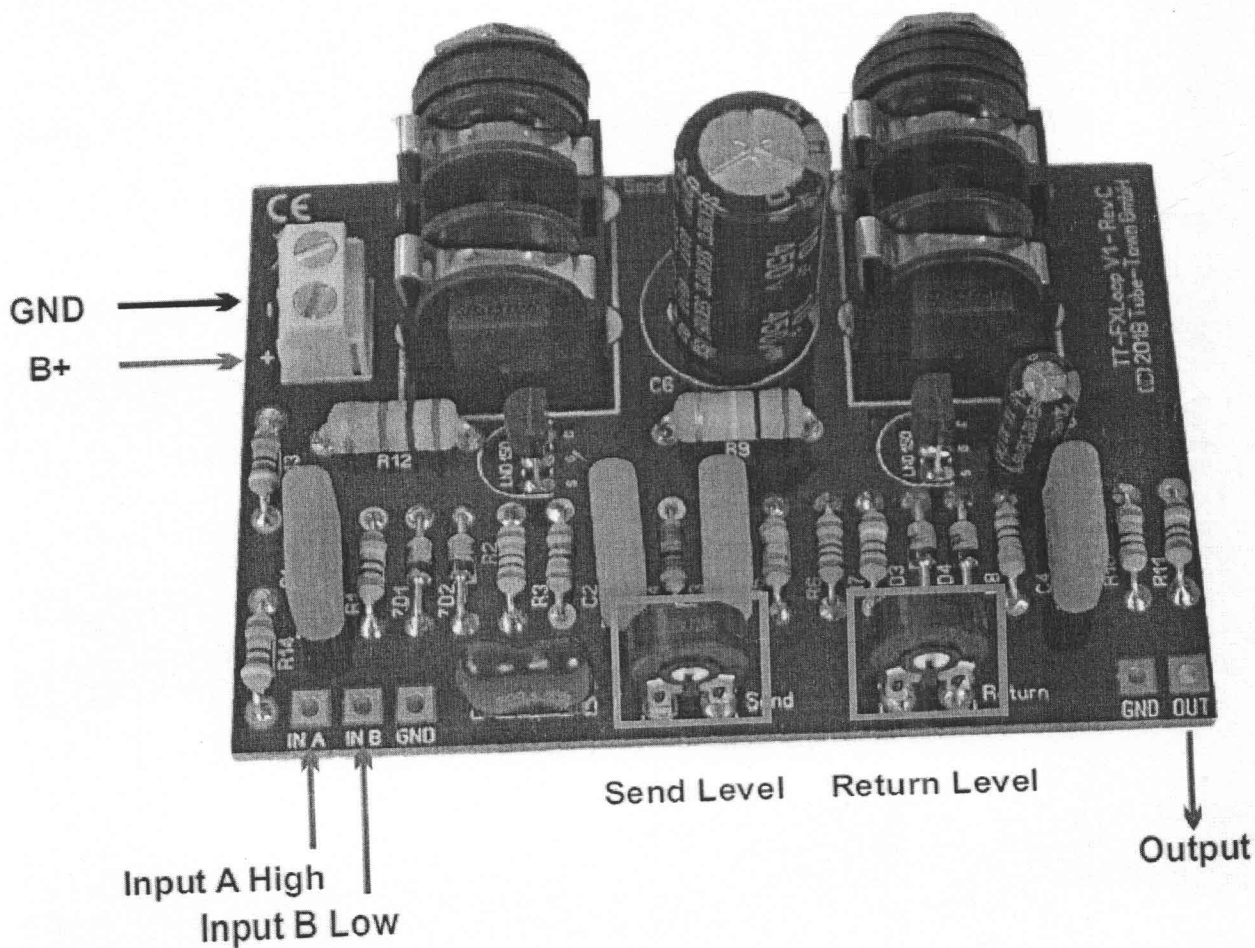


Specification

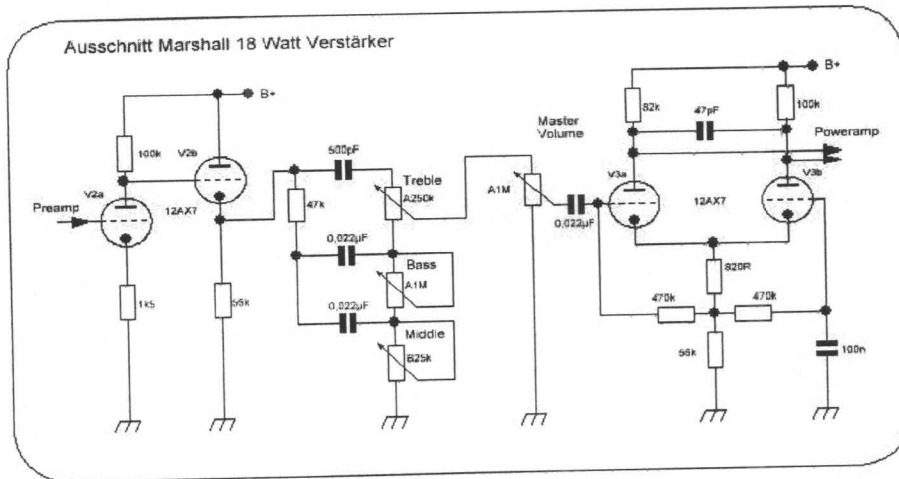
InB input signal level:	1 - 15 Vpp
InB maximum input:	20 Vpp
InA input signal level:	20 - 40 Vpp
InA maximum input:	40 Vpp
Supply voltage:	250 - 400 VDC

Layout and Connections



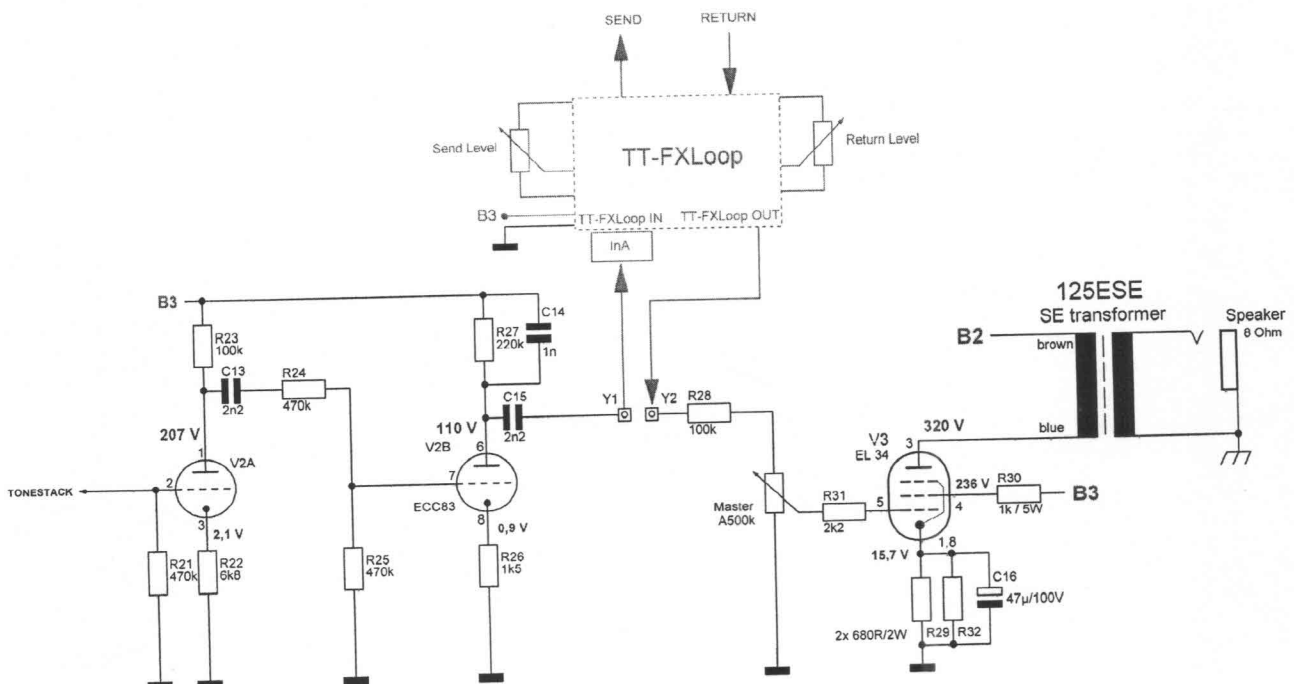
FX-Loop Module LND150

Schematic without loop as reference:



Insert Example II

FX-Loop before the master volume in a Jim HP amplifier. Other configurations are possible as long as the maximum signal level is not exceeded. We recommend a value of 1,5 MOhm - 2,2 MOhm for R14 on the loop pcb in this configuration.



General hints for integration

Depending on the circuit the loop is integrated in it may be necessary to adjust the input voltage divider (R13/R14). As a starting point a ratio of 1:10 is recommended for testing if the loop or the effects distort in an unpleasant way. If the signal level is too high the next higher resistor value for R14 can be tested.

Input Voltage Divider

The following table shows an overview of possible resistor combinations for the input voltage divider and the resulting ratio. The needed resistors for the listed combination are included in the kit (since batch 19.06.2019).

R14	R13	ratio
470 kOhm	100 kOhm	ca. 1:5
1 MOhm	100 kOhm	ca. 1:10
1,5 MOhm	100 kOhm	ca. 1:15
2,2 MOhm	100 kOhm	ca. 1:22

C7 is optional, if the loop sounds too bright in your configuration try removing this capacitor.

15 V_{max}

in B → 1 à 15 V_{PP}, avant le Master.
in A → 20 à 40 V_{PA}

Attn : 250 à 500 V_{cc}

List of Components

Component	Value	
✓ C1, C2, C3, C4	22 nF / 400V <i>isoprad</i>	
✓ C5	22 µF / 63V <i>aluf</i>	
✓ C6	10 µF / 450V <i>aluf</i>	
✓ C7	500 pF / 500V <i>Mica</i>	
Q1, Q2	LND150	
✓ R1, R7, R11	1 MOhm 1%	x 4
✓ R2, R10	100 kOhm 1%	x 3
✓ R3	1,5 kOhm 1%	
✓ R4	47 kOhm 1%	
✓ R5	2,2 MOhm	
✓ R6	10 kOhm 1%	
✓ R8	330 Ohm	✓
✓ R9	100 kOhm / 2W <i>rated</i>	
✓ R12	1 kOhm / 2W <i>rated</i>	✓
R13, R14	Depending on use*	
✓ ZD1 - ZD4	BZX85C18	
P1 (Send)	100 kOhm	
P2 (Return)	500 kOhm	

* see the following paragraph „input voltage divider“

470 k Ω

1 M

1,5 M 0,5 W 1%