

Spring Reverb V2.2: Assembly Manual

PCB1: (The smaller one)

Solder the next resistors:

Amm.	Value	Code	Name on PCB
2	2r2 OHM	Red, Red, Black, Gold	R14, R17
2	47 OHM	Yellow, Purple, Black, Gold	R54, R60
4	470 OHM	Yellow, Purple, Brown, Gold	R30, R32, R45, R46
2	560 OHM	Green, Blue, Brown, Gold	R56, R58
4	680 OHM	Blue, Grey, Brown, Gold	R31, R33, R40, R43
1	1k	Brown, Black, Red, Gold	R23
2	2k2	Brown, Red, Red, gold	R35, R47
1	7k32	Purple, Orange, Red, Brown, Brown	R36
15	10k	Brown, Black, Orange, Gold	R2, R3, R4, R9, R12, R13, R15, R18, R20, R21, R22, R24, R26, R37, R48
2	15k	Brown, Green, Black, Red, Brown	R41, R42
3	36k	Orange, blue, Orange, Gold	R10, R27, R28
3	47k	Yellow, Purple, Orange, Gold	R11, R29, R34
1	82k	Grey, red, orange, Gold	R25
10	100k	Brown,Black,Black,Orange,Brown	R1, R19, R38, R39, R49, R50, R52, R57, R59, R62
3	120k	Brown,red,Black,Orange,Brown	R6, R44, R51
1	150k	Brown,Green,Black,Orange,Brown	R7, R8
1	200k	Red,black,Black,Orange,Brown	R53
1	220k	Red,red,Black,Orange,Brown	R5
3	1M	Grey, red, black, Gold	R16, R55, R61

Interconnect both solder ponits marked with black circles (resistors R1, R4).

Solder the two ferrite beads (FERRITE+, FERRITE-)passing trough a recycled resistor leg.

Solder the diodes (D1,D2,D3,D4,D5) respecting polarity. Black line on the diode must be in the same place as white line on the diode PCB silkscreen.

Solder the next capacitors:

Amm.	Value	Code	Name on PCB
3	47p	47	C5, C14, C18
4	100p	101	C2, C10, C15, C19
1	330p	331	C3
1	1n	1n Poliester	C9
1	15n	15n Poliester	C11
12	100n	104	C4, C6, C7, C8, C12, C13, C16, C17, C20, C21, C23, C25
3	10µF	10µF	C1, C22, C24

Solder the transistors 2n3906 (T1, T2, T3, T4, Q1, Q2),2n3904 (Q3), BC516 (Q5) Y BC517 (Q4).Be sure they are on proper position (same as the silkscreen on the PCB)

Place the sockets (IC1, IC2, IC3, IC4, IC5) and solder them. Then place the ICs on them taking care of polarity. To do that the mark on front must match the mark on the socket. IC1=TL074, IC5=TL074, IC3=LM13700, IC4=LM13700, IC2=TL072.

Solder the power connector been sure the position is correct (as in the silkscreen)

Place and solder the RCA connectors (same as the silkscreen on the PCB).

Note:

RCA-OUT pcb ---> IN-Reverb.
RCA-IN pcb ---> OUT-Reverb.

Solder the four males pin headers (Circuit) by the short part and by the silkscreen side of the PCB. Ensure they are at 90° from the PCB.

PCB2:

Solder the next resistors:

Amm.	Value	Code	Name on PCB
2	1k	Brown, Black, Red, Gold	R100, R111
1	1k8	Brown, grey, Black, Brown, Brown	R107
1	2.7k	Red, Purple, Black, Brown, Brown	R112
3	10k	Brown, Black, Black, Red, Brown	R102, R108, R109
6	100k	Brown, Black, Black, Orange, Brown	R101, R103, R104, R105, R106, R110

Solder the diode (D100) respecting polarity. Black line on the diode must be in the same place as white line on the diode PCB silkscreen.

Solder the next capacitors:

Amm.	Value	Code	Name on PCB
1	680n	684	C101
1	10µF	10µF	C100

Place the sockets (IC100) and solder them. Then place the ICs on them taking care of polarity. To do that the mark on front must match the mark on the socket. IC100=LM3914N.

Place and solder the four Females Pin Headers (Panel To) by the opposite side of the faders, ensuring it is 90° from PCB.

Place the faders, ensure they are at 90° from the PCB. and then solder them.

Place the potentiometer HPF Y MIX-> iiCut the littel square shaped legs to avoid contact with IC 100.!! , don't solder it.

Place the minijack or the Banana (CV1, CV2, IN1, IN2, MIX_CV, OUT_MIX, WET), don't solder it.

Put LEDs on place: (LED01 Rojo), (LED02, LED03 Amarillo), (LED04, LED05, LED06, LED07 Verde), (Duo...led, positive-> long leg) respecting the polarity but don't solder it until you screw the front panel. This way is much more easy to solder it on the right position.

Put the spacer on the four holes by the male side and fix the with the four nuts.

Place the front panel, screw the minijacks or bananas, potentiometers and pceed to solder them.

Solder the LEDs on the right height.

Assembly PCB1 and PCB2. (PCB2 ---> power connector DOWN, RCA connectors UP).

Screw them with the four provided screws.