

Capacitors:

C1, C2, C7, C9, C11	100n
C3, C4, C13, C14	10uf
C5, C6	33n
C8, C10, C12, C15	1n

Resistors:

R1, R2	22R
R7	47R
R12, R13	100R
R33, R34, R35	470R
R48	1k
R6	1.5k
R28	2.2k
R25, R26, R27	2.7k
R16, R19, R22	4.7k
R8, R9, R10, R11, R30, R31, R32	10k
R4	68k
R3	100k
R5	150k
R17, R18, R20, R21, R23, R24, R36, R37, R38	270k
R29	3.3M

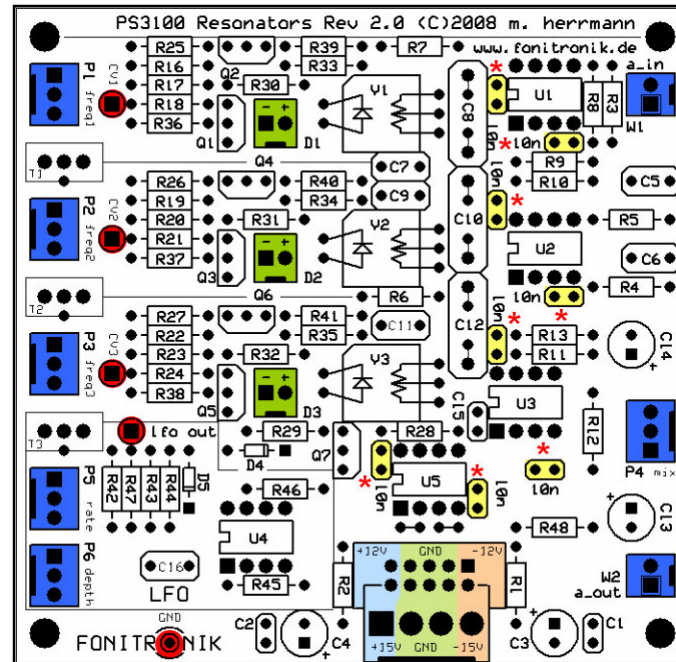
Semi's:

D4	1N4148
Q1, Q3, Q5, Q7	BC550c
Q2, Q4, Q6	BC560c
U1, U2, U3, U5	TL072, LM1458...
V1, V2, V3	VTL5C3/2

Potentiometer, Trimmer:

P1, P2, P3, P4	10k
T1, T2, T3	100k

PS3100 Resonators Rev 2.0



* Highlighted in yellow:
10n ceramic caps for decoupling
(not shown on schematic or BOM)

Connectors:

P1:	offset frequency resonator 1
P2:	offset frequency resonator 2
P3:	offset frequency resonator 3
P4:	mix (wet/dry)
P5 (optional):	LFO rate
P6 (optional):	LFO depth

CV1:	resonator 1 control voltage in
CV1:	resonator 1 control voltage in
CV1:	resonator 1 control voltage in
W1/a_in:	audio input
W2/a_out:	audio output
Lfo out (optional):	LFO output ☺

LED option

Semi's:

D1, D2, D3	Low current LED
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Resistors:

R39, R40, R41	1k
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LFO option

Capacitors:

C16 (speed)	220n-680n (poly)
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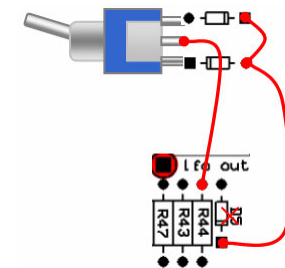
Resistors:

R42	220R
R43	1M
R47	1k
R45	100k
R46	200k

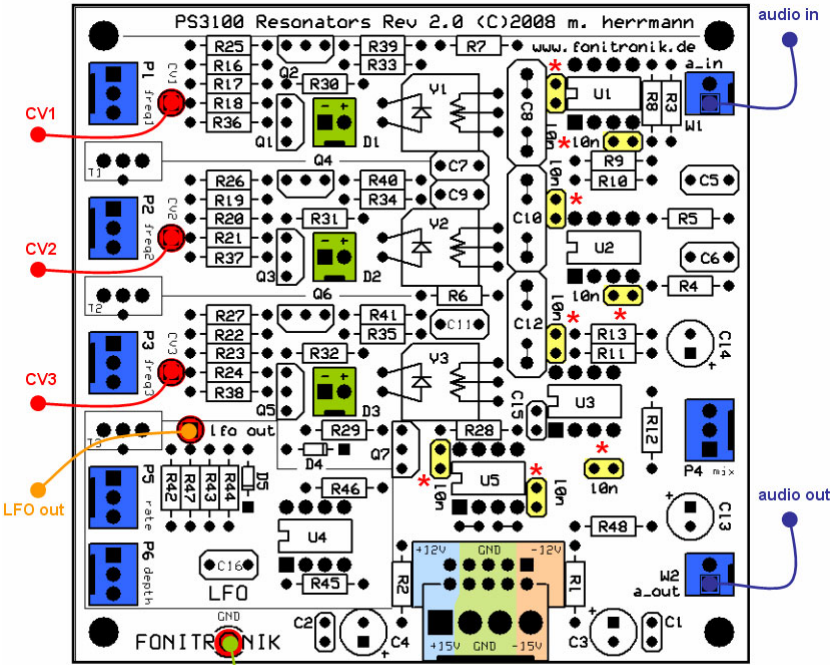
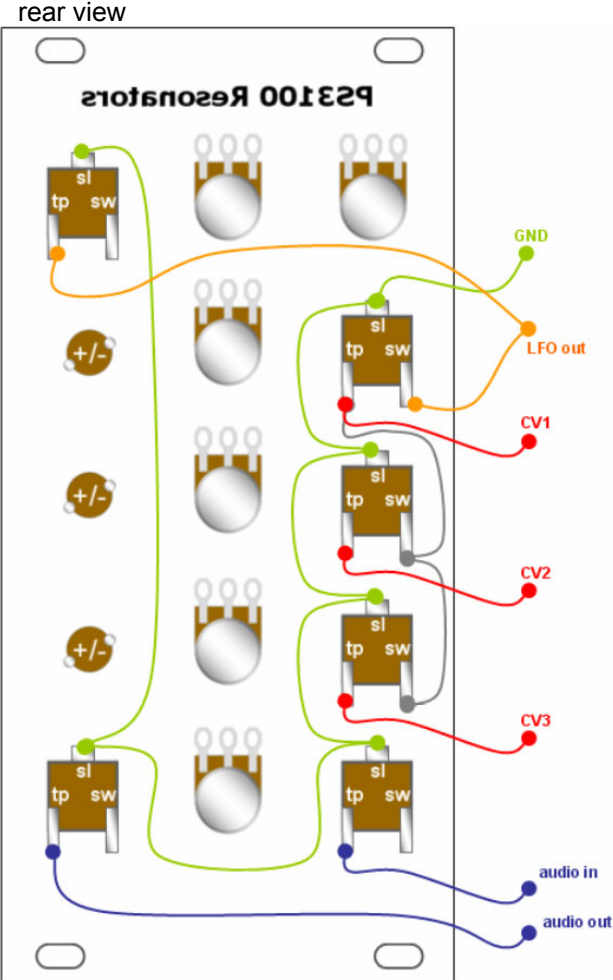
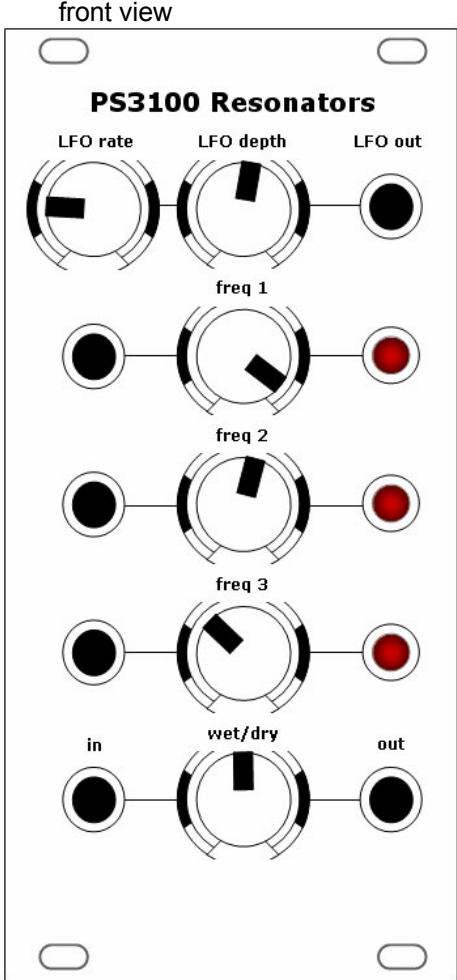
other:

P5 (rate), P6 (depth)	50k potentiometer
U4	TL072

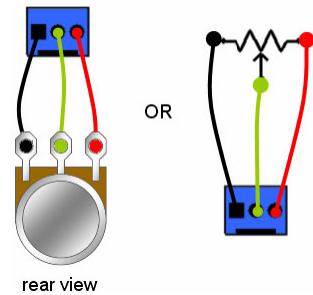
Omit R44 (1k) and D5 (1N4148) for a triangle wave LFO. These parts would mae a saw or eamp LFO, depending on the orientation of the diode. Or you may want to use an ON-OFF-ON switch to toggle between saw, tri, and ramp? Install R44 on the PCB, leave D5 off and wire the switch together with two 1N4148 diodes as shown below:



Front Panel and Wiring Suggestion

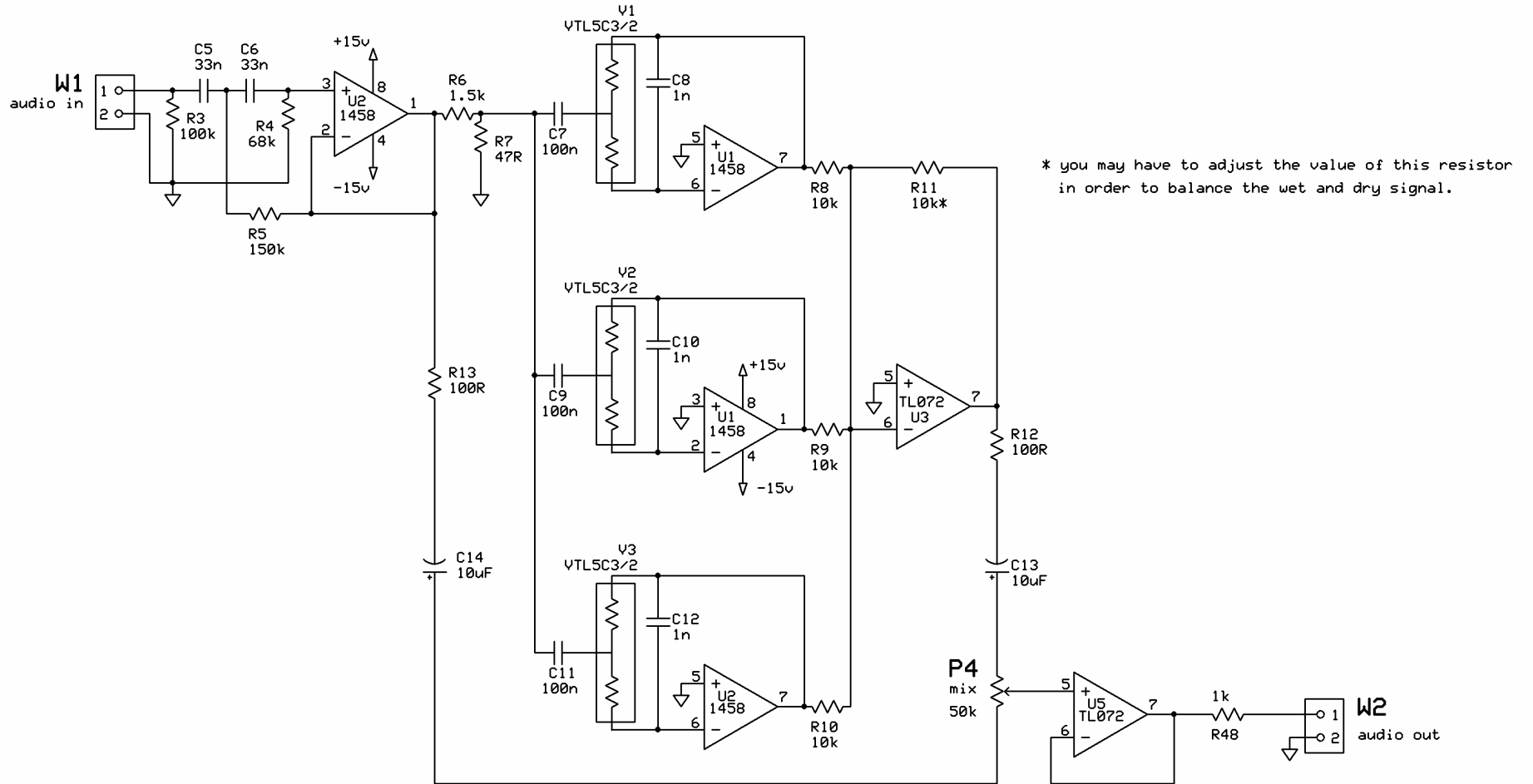


How to wire the potentiometers:



Pins 1, 2 & 3 of U5 are accessible via pads on the PCB. If you don't use this spare OpAmp you may want to solder bridges as depicted on the PCB's layout.

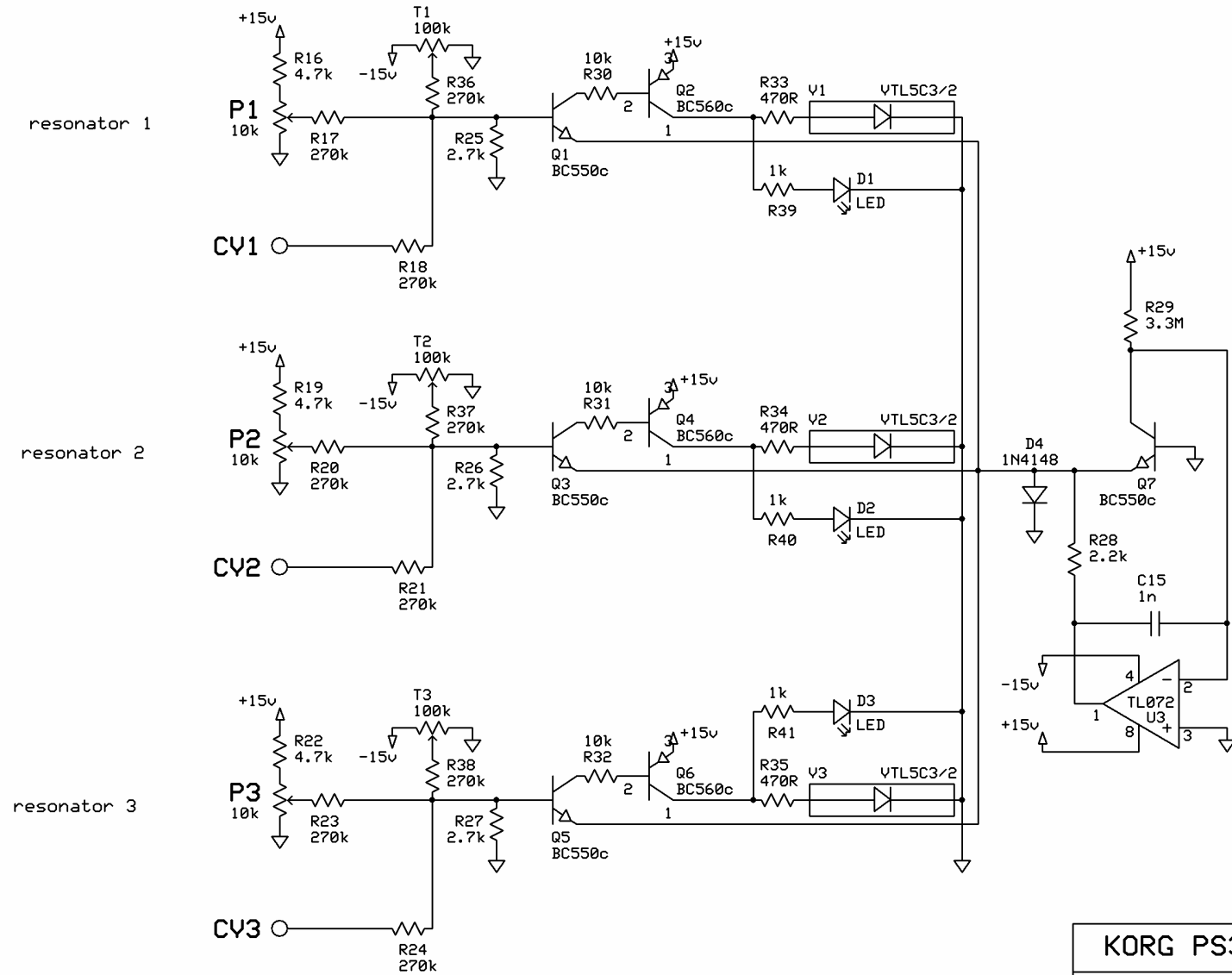
audio path



KORG PS3100 Resonators clone

based on original schematic and RJBs adaption.

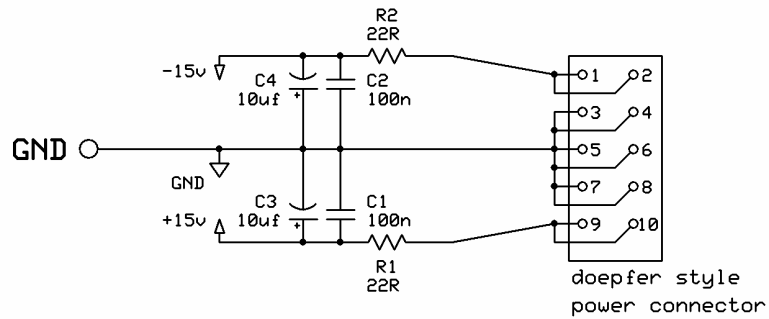
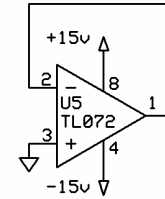
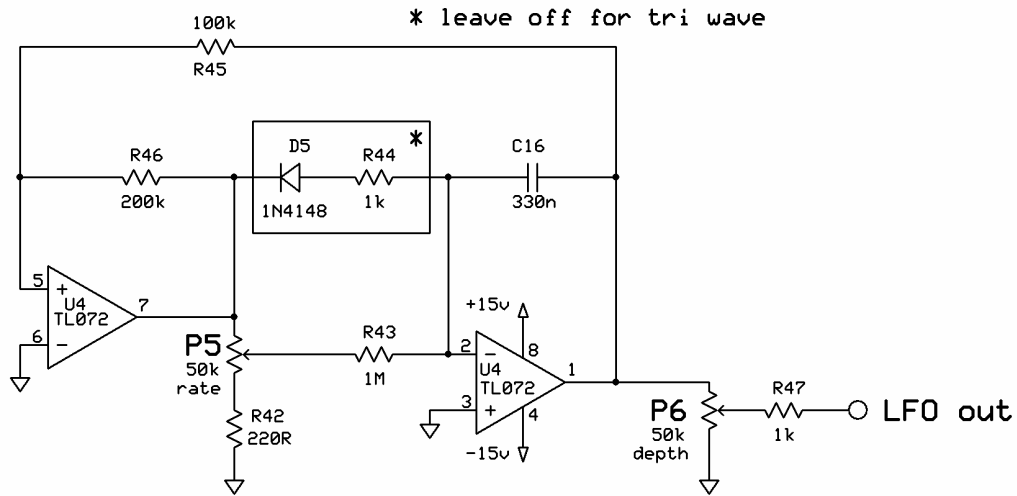
control voltages



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LFO & power



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