

TR-606 5U CLONE 1.0 BOM – JSI 2/18/2019

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Diodes

<u>QTY</u>	<u>RefDes</u>	<u>Value</u>	<u>Notes</u>
14	D26, D27, D28, D29, D30, D31, D32, D33, D34, D35, D36, D37, D301, D302	1n4148	

Resistors

<u>QTY</u>	<u>RefDes</u>	<u>Value</u>	<u>Notes</u>
1	R107*	50R	
16	R55, R103, R146, R151, R171, R179, R201, R216, R217, R321, R334, R352, R917, R*4, R*6, R56*	100R	
1	R323	180R	
5	R133, R140, R141, R*8, R58*	220R	
1	R153*	390R	
1	R318*	470R	
2	R222, R223	560R	
1	R115	680R	
1	R333	820R	
10	R64, R99, R100, R193, R210, R218, R310, R311, R*3, R*64	1k	
1	R337	2k2	
1	R*58	3k3	
3	R347, R350, R*1	4k7	
1	R204	5k6	
18	R52, R63, R98, R102, R109, R111, R139, R309, R312, R316, R322, R346, R348, R351, R*52, R*63, R174*, R203*	10k	
4	R66, R172, R*12, R*13	12k	
5	R121, R183, R184, R326, R327	15k	
2	R60, R104	18k	
21	R51, R108, R113, R117, R132, R138, R149, R154, R159, R166, R191, R197, R200, R211, R320, R328, R332, R340, R341, R342, R*51	22k	
2	R105, R120	27k	
11	R134, R168, R169, R170, R181, R185, R186, R190, R221, R339, R*10	33k	
9	R175, R176, R177, R178, R205, R206, R207, R208, R319	39k	
20	R57, R65, R114, R118, R189, R198, R219, R329, R330, R*11, R*15, R*17, R*18, R*21, R*23, R*27, R*29, R*30, R*57, R*65	47k	
2	R110, R165	68k	
2	R212, R220	82k	
30	R101, R106, R131, R136, R137, R152, R155, R187, R188, R192, R194, R195, R196, R209, R213, R214, R215, R313, R314, R315, R349, R*14, R*16, R*19, R*20, R*22, R*26, R*28, R*31, R167*	100k	

6	R227, R228, R229, R230, R231, R232	150k	
3	R135, R224, R226	330k	
4	R225, R246, R*7, R164*	470k	
3	R61, R244, R245	560k	
6	R59, R119, R148, R317, R331, R*59	680k	
1	R112	820k	
12	R116, R147, R150, R173, R180, R202, R324, R325, R335, R336, R338, R*2	1M	
1	TM3 (NOISE TRIMMER)	10k	Single turn, side adjust

Electrolytic Capacitors

<u>QTY</u>	<u>RefDes</u>	<u>Value</u>	<u>Notes</u>
6	C25, C31, C42, C46, C303, C*25	0,47uF	Use <9mm in height
20	C16, C22, C30, C45, C47, C49, C53, C55, C65, C66, C71, C74, C75, C82, C84, C85, C308, C309, C*22, C66-2	1uF	or bend horizontally when under connector pcb
6	C48, C56, C61, C83, C87, C89	2,2uF	
1	C35*	4,7uF	
2	C910, C*9	10uF	
1	C*3	33uF	
16	C17, C18, C28, C29, C54, C72, C81, C93, C302, C306, C318, C324, C911, C*1, C*2, C*18	47uF	

Ceramic Capacitors

<u>QTY</u>	<u>RefDes</u>	<u>Value</u>	<u>Notes</u>
1	C36	22pF	
2	C86, C88	220pF	
5	C63, C69, C70, C73, C96	1nF	
1	C38	1n5	
2	C52, C58	1n8	
9	C39, C43, C44, C59, C60, C62, C64, C67, C77	2n2	
5	C34, C78, C92, C94, C95	3n3	
1	C307	3n9	
1	C301	4n7	
2	C90, C91	6n8	
7	C21, C57, C79, C97, C98, C317, C*21	10nF	
2	C108, C109	12nF	
4	C23, C24, C99, C107	15nF	
3	C310, C311, C315	18nF	
4	C32, C33, C304, C305	27nF	
1	C314	39nF	
4	C51, C76, C312, C316	47nF	
6	C19, C20, C37, C41, C*19, C*20	56nF	
1	C313	68nF	
8	C*4, C*5, C*6, C*7, C*8, C*10, C*11, C*12	100nF	

Semis

<u>QTY</u>	<u>RefDes</u>	<u>Value</u>	<u>Notes</u>
18	Q16, Q17, Q23, Q24, Q25, Q30, Q32, Q35, Q36, Q37, Q38, Q39, Q40, Q305, Q307, Q308, Q309, Q310	BC546B	Orig. 2SC945(P)
1	Q306	BC556B	Orig. 2SC733(P)
1	Q31 (NOISE TRANSISTOR OF CHOICE, NPN)	NPN	Orig. 2SC945(P)
2	U902, U*4	78L05	
7	U5, U*5, U9, U10, U12, U15, U16	TL072	Orig. JRC2904 (U15 uPC4558)
4	U*1, U*2, U*3, U16	CD40106	Orig. U16 HD14584BP

Potentiometers

<u>QTY</u>	<u>RefDes</u>	<u>Value</u>	<u>Notes</u>
3	HTTUNE, LTTUNE, SDTUNE	1k lin	Tayda: A-1841
1	BD1TUNE	10k log	Tayda: A-1856
1	SDSNAPPY	50k lin	Tayda: A-1858
12	BD1TONE, BD1VOL, BD2TONE, BD2VOL, CYTUNE, CYVOL, HHTUNE, HHVOL, MASTERVOL, N.FILTER, SDVOL, TOMVOL	50k log	Tayda: A-1660
1	SDDECAY	100k lin	Tayda: A-1848
1	OHDECAY	500k lin	Tayda: A-1849
4	BD2DECAY, CHDECAY, CYDECAY, TOMN.DECAY	1M lin	Tayda: A-1882

1/4" Jacks

<u>QTY</u>	<u>RefDes</u>	<u>Value</u>	<u>Notes</u>
16	J1, J2, J3, J4, J5, J6, J7, J8, J9, J10, J11, J12, J13, J14, J15, J16	1/4" jack	112BPCX / NYS234

Connectors

<u>QTY</u>	<u>RefDes</u>	<u>Value</u>	<u>Notes</u>
2	J19, J20	2x5	10-Pin Header Male
2	J19, J20	2x5	10-Pin Header Female
1	P1 (Power header)	1x4 / 1x6	4-Pin MTA156 (3,96mm) / 6 - P i n M T A 1 0 0 (2,54mm)

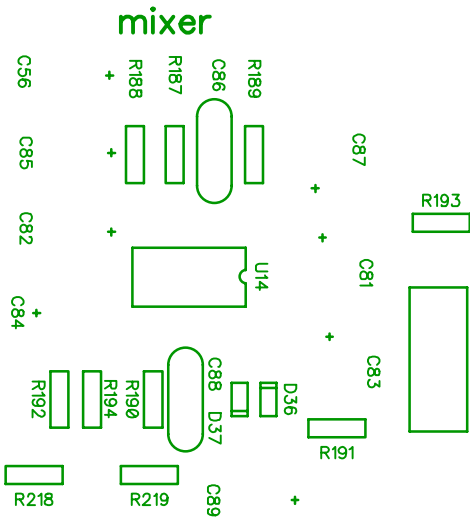
Notes

1) Only +15V used, no connection for -15V. Can also be powered with +12V without changes.
2) Gate to Trigger -shaper section can be omitted using the jumper lines on the connector pcb. For normal sound approx. 4ms trigger pulse is expected.
3) Output audio level is "line level", not "modular level".

- 4) RefDes numbering is the same as in original TR-606 schematic, except following: The asterisk (*) in RefDes indicates two things: a) when after the numbering (ie. R107*) = value change b) when before the numbering (ie. R*1) = not found in original schematic
- 5) 10-pin headers connecting PCB's should be approx. 12 mm in height when connected. Please mind el.caps height between pcb's!
- 6) There's also a 6-pin power header, use either. No reverse power protection, make it right!
- 7) Both pcb's are mounted with pots screws and jacks screws to the front panel, best practice: mount them before soldering!
- 8) Jacks J9, J10, J11, J12, J13, J14 need to be switched jacks, others can be non-switched. For mono out to work you need solder those switched jacks (or connect T->TS).
- 9) Noise transistor: recommended to buy extra 2SC945 and test them for suitable noise level (TP4 multimeter ac-mode 130mV) by using test pads (mind the pin order!!) and trimmer TM3. You only need Emitter and Base of the transistor, use alligator clips or just bend the legs and stick it in the pcb for measurement (do not solder yet). 2SC828/BC546B can work too. Cut the collector leg before soldering the "selected" transistor.

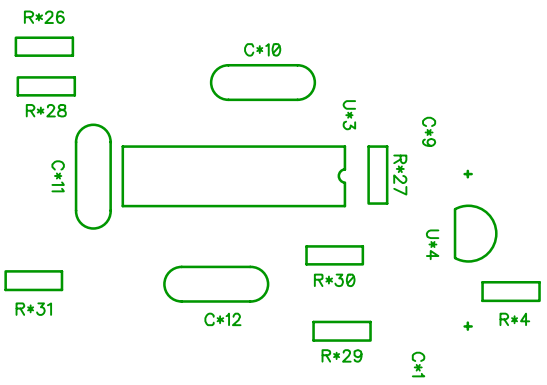
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J20
Mount header other side

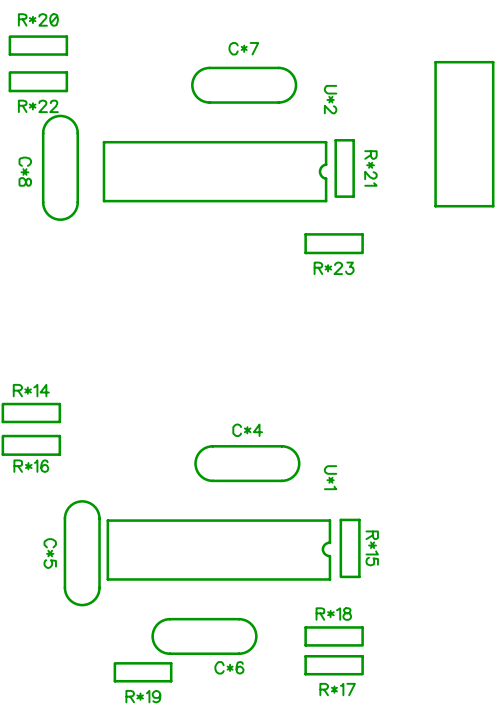


mixer

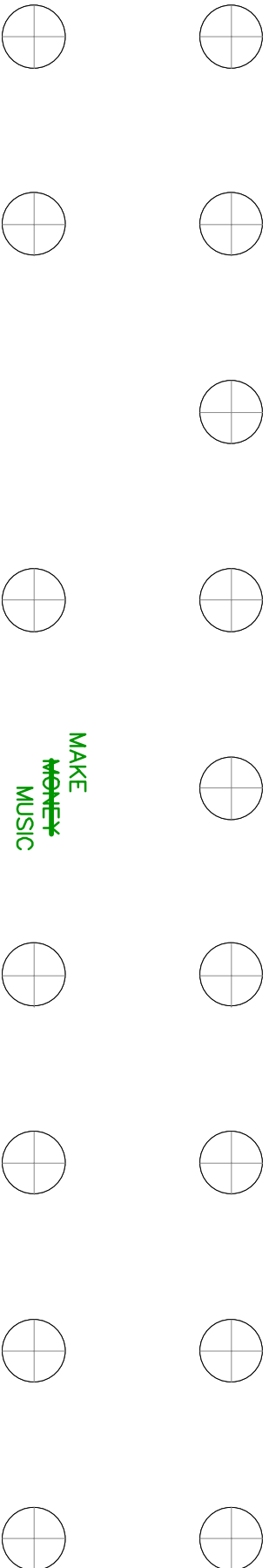
gate2trig (4ms) shapers



J19
Mount header other side



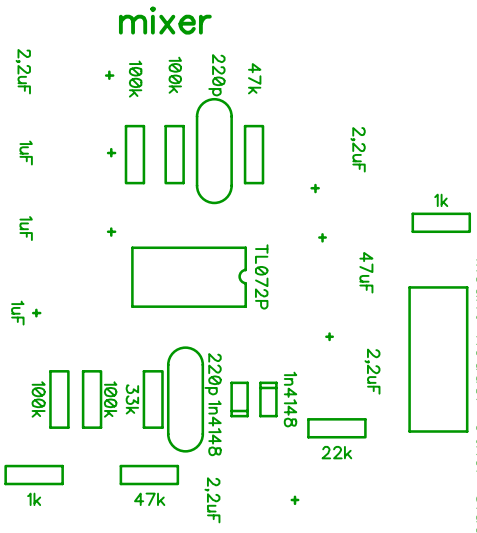
TR-606 CLONE 5U
CONNECTOR BOARD 1.0



MAKE
MONEY
MUSIC

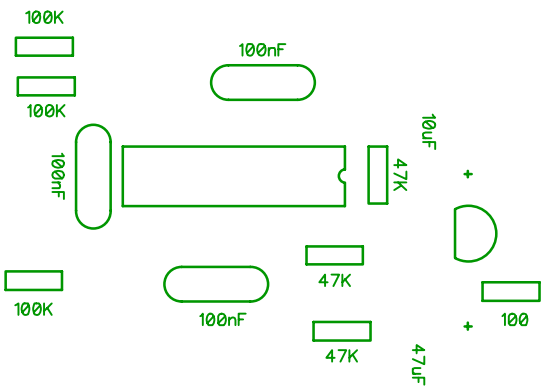
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Mount header other side

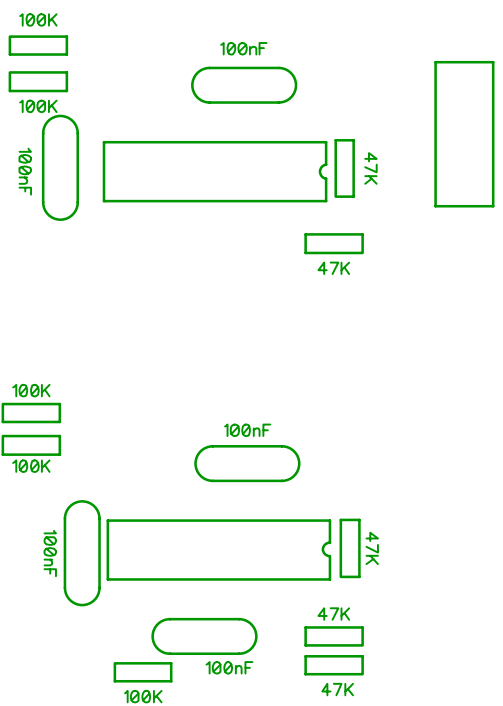


mixer

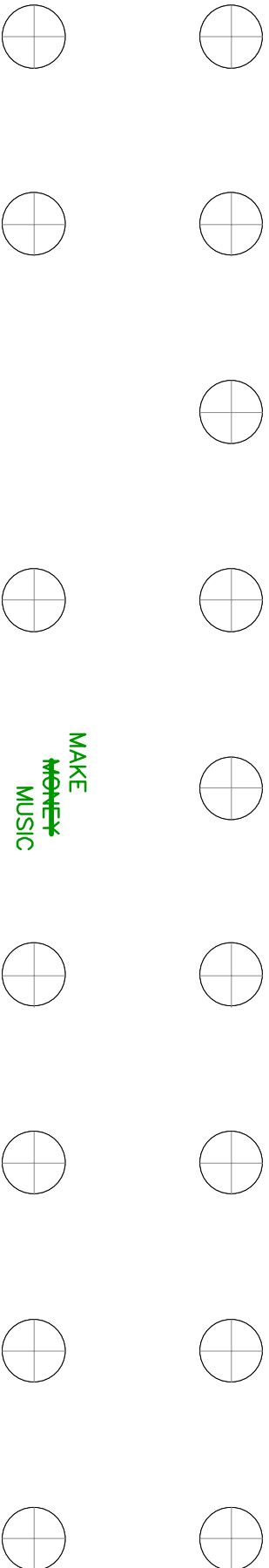
gate2trig (4ms) shapers



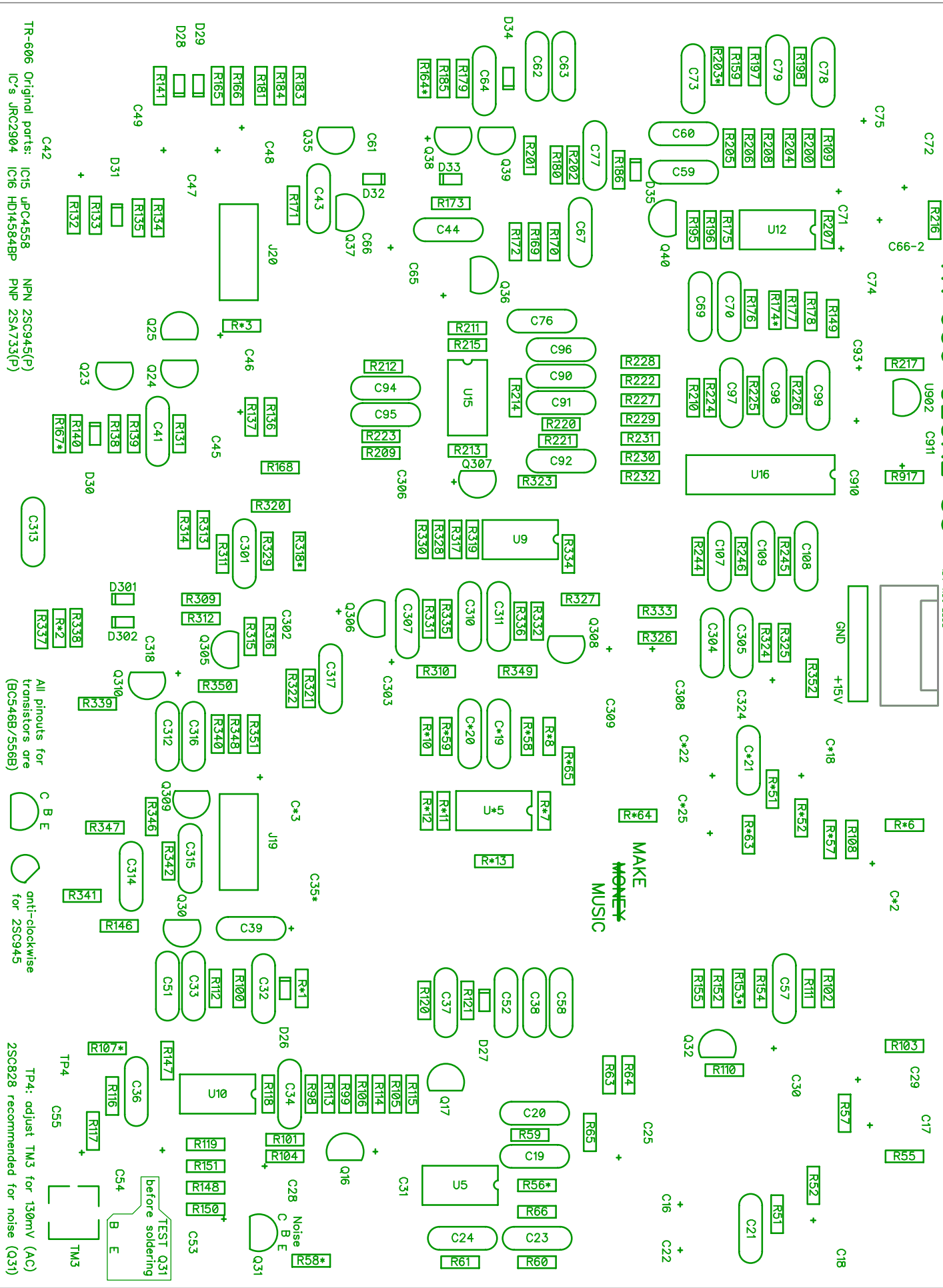
Mount header other side



TR-606 CLONE 5U CONNECTOR BOARD 1.0



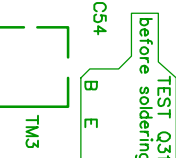
MAKE
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MUSIC



TR-606 Original parts: IC15 uPC4558 NPN 25C945(P)
 IC's JRC2904 IC16 HD14584BP PNP 25A733(P)

All pinouts for transistors are (BC546B/556B)

TP4: adjust TM3 for 130mV (AC)
 25C945 recommended for noise (Q31)



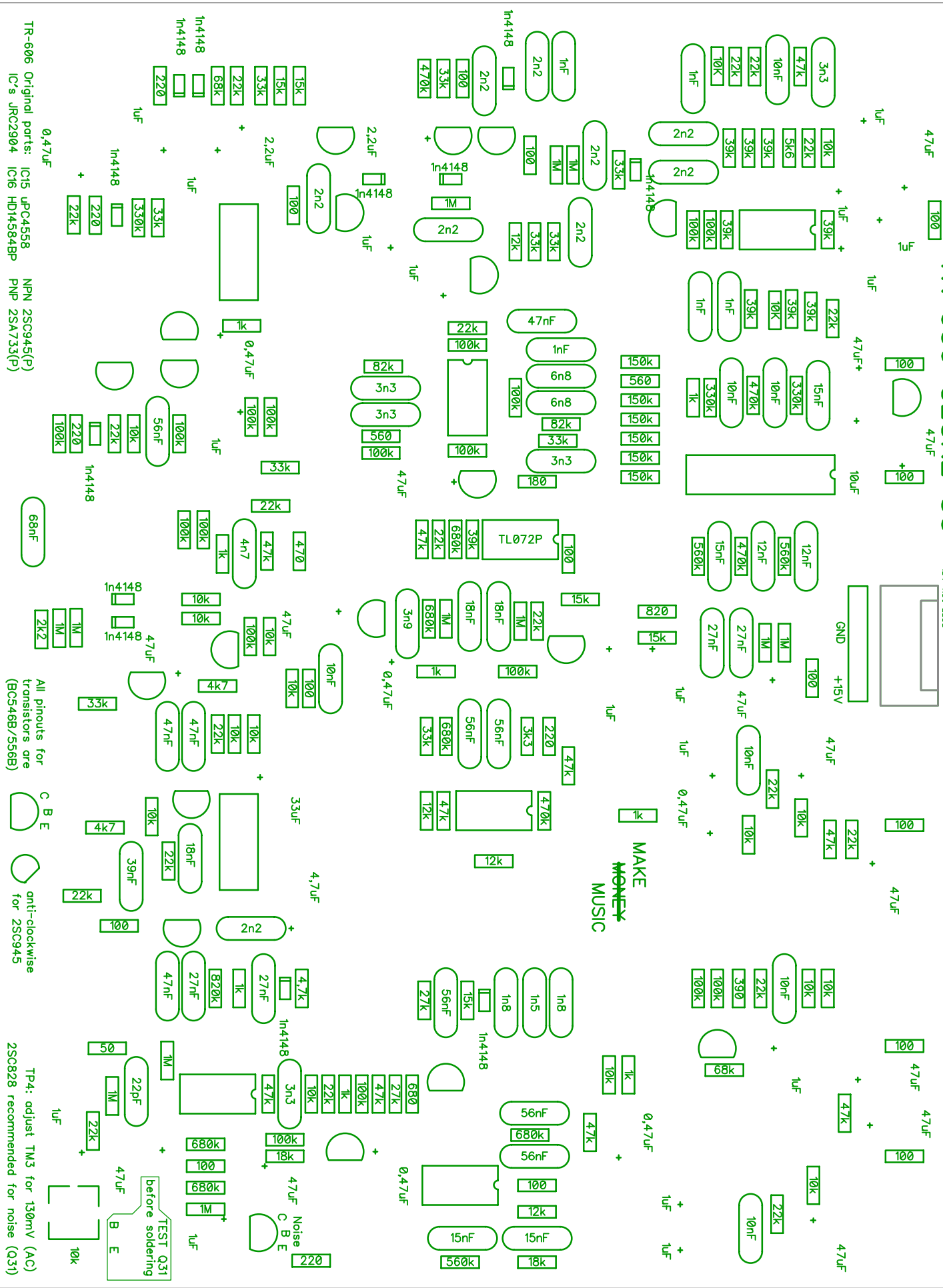
MAKE MONEY MUSIC

R/L/R L/R/L

TR-606 CLONE 5U

MAIN BOARD 1.0

JSI 2019



TR-606 Original parts: IC15 uPC4558 NPN 2SC945(P)
 IC's JRC2904 IC16 HD14584BP PNP 2SA733(P)

All pinouts for transistors are (BC546B/556B)

C B E anti-clockwise for 2SC945

TP4: adjust TM3 for 130mV (AC)
 2SC828 recommended for noise (Q31)

TEST Q31 before soldering

MAKE MONEY MUSIC

