Bill Of Materials for JH. String Filter PCB 1 + PCB 2
(PCB mount components listed only.)
Errors excepted, subject to modifications.
Parts marked with *) required for on-board PSU only.

Quantity	Part name	Remarks
	Semiconductors	
47	TL072	
1	LM394	or SSM2210, or similar matched npn pair
1 *)	LM317 T	TO220 package; needs heat sink
1 *)	LM337 T	TO220 package; needs heat sink
3	BC550C	marked „n“ on component overlay
1	BC560C	or BC560B. marked “p” on component overlay
6 *)	1N4002	the big ones
4	1N4148	the small ones
1	Z-Diode 5.1V 500mW	marked as “Z” on component overlay. Experiment with other zener voltages.
1	VTL5C3	Vactrol. Optional: for limiter function only.
	Capacitors SMT	
60	100nF, 35V or higher, 0805	
	Capacitors, Electrolytic	Polarized – note orientation! Higher voltage than specified is ok, as long as fits into the PCB space!
2	1uF, 35V	
8	10uF, 35V	
2 *)	10uF, 25V (Tantal preferred)	near LM317 and LM337
5	22uF, 25V	
2	100uF, 6.3V	
2 *)	470uF, 35V	105 deg C version if available
	Capacitors, Polyester	Wima MKS, Siemens MKT, or similar. 7.5mm or 5mm spacing, unless noted otherwise.
2	1.5nF	
4	1.8nF	
2	2.2nF	
2	2.7nF	
2	3.3nF	
4	3.9nF	
2	4.7nF	
4	6.8nF	
4	8.2nF	
6	10nF	
4	15nF	
2	22nF	
4	27nF	
2	33nF	

2	39nF	
6	47nF	
4	68nF	
6	100nF	marked “u1”
6	150nF	marked “u15”
4	220nF	marked “u22”
6	330nF	marked “u33”
2	470nF	marked “u47”
2	220nF	must be 5mm spacing; marked “u22”
	Capacitors, Ceramic	
11	33pF	2.5mm
1	100pF	2.5mm (marked “n1”)
1	10nF	2.5mm
	SIL Resistor Arrays	
40	10k	You need 8-pin Arrays with 4 independent Resistors. (Don’t mix them up with 8-pin arrays that contain 7 resistors with a common connection !!) You can replace each array with 4 separate 1% resistors that are mounted vertivally.
	Trimpots, single turn	Rectangular Cermet version preferred. Check PCB layout to see what fits in.
2	100k	
	Trimpots, multi turn	Vertically mounted multiturn pots with set screw on top. Check PCB layout to see what fits in.
40	10k	
	Resistors, 1%	Metall film types.
2	220	220 Ohm
2 *)	240	...
8	470	
2	620	
2	1k	1 kOhm
2 *)	2k7	2.7 kOhm
1	3k	...
1	4k7	
3	5k1	
4	5k6	
3	6k2	
5	6k8	
4	7k5	
4	8k2	
4	9k1	

52	10k	10 kOhm
4	12k	...
3	13k	
8	15k	
1	18k	
1	22k	
1	24k	
3	39k	
2	43k	
1	47k	
9	51k	
1	68k	
2 *)	82k	
10	100k	
1	120k	
1	180k	
10	200k	
12	220k	
9	240k	
8	270k	
1	300k	
	Board Connectors	Of course you can solder the wires directly to the board, and then don't need any connectors! Here's what connectors I used (from Reichelt):
8	2-pin	PSS 254/2G (2pin, 2.54mm spacing)
9	3-pin	PSS 254/3G (3pin, 2.54mm spacing)
1 *)	5-pin	PSS 254/5G (5pin, 2.54mm spacing)
2	MOTM connector (optional)	