

VCA 1.2.2 Build Guide karltrn.com/VCA November 2021				
step	Qty	Reference(s)	Value	note
1	4	C4, C5, C6, C7	100n	`0805
2	1	U1	TL074	SOIC-14
3	1	U2	LM13700	SOIC-16
4	2	Q1, Q2	MMBT3904	labeled '1am 5'
5	2	Q3, Q4	MMBT3906	labeled '2a z'
6	14	R1, R2, R4, R7, R10, R11, R14, R15, R23, R24, R29, R30, R32, R35	100K	`0805
7	5	R3, R6, R8, R9, R12	2K2	`0805
8	3	R5, R31, R36	470R	`0805
9	6	R13, R18, R19, R20, R21, R22	22K	`0805
10	2	R16, R17	33K	`0805
11	2	R25, R38	470K	`0805
12	2	R26, R39	47K	`0805
13	2	R27, R28	1M5	`0805
14	2	R33, R34	4K7	`0805
15	2	R37, R40	560R	outputs, might want to change value
16	1	J9	power 2x5	
17	2	D1, D2	1N5819	watch polarity. Reverse power prot is optional if youd rather jumper these
18	2	TRIM1, TRIM2	B100K	just a voltage div, so other values work
19	2	C1, C2	10u	fold over, neg line by filled color
20	1	C3	1u	additional power buffer, optional
Fit steps 21-22-23 to faceplate before soldering				
21	2	RV1, RV2	B100K	
22	2	SW1, SW2	SW_SPDT	on-on or on-off-on for a free mute setting
23	8	J1, J2, J3, J4, J5, J6, J7, J8	thonkiconn	or Tayda A-2563