

RYO Altered States Dual SVVCF 1.0 Ijunggrenaudio.com**Bold part designation = PCB1**, not bold = PCB2

Qty	Value	Device	Parts	Comment
12	1N4148	Diode	D6, D7, D8, D9, D12, D13, D14, D15, D16, D17, D18, D19	Small signal diode
2	1N5818	Diode	D1, D2	Schottky rectifier diode. 1N5817-1N5819 or SB130
4	1N750 4.7V	Zener diode	D4, D5, D10, D11	Zener Diode 1N750 or other 4.7V
4	220p	Capacitor	C19, C21, C37, C39	C0G ceramic 1%, 2.5 or 5mm pin pitch
30	100n	Capacitor	C1, C2, C7, C8, C9, C10, C12, C13 , C14, C15, C17, C18, C25, C26 , C27, C29, C30, C31, C32, C43, C44, C45, C46, C47 , C48, C49, C50, C51 , C54, C55	X7R ceramic 2.5mm pin pitch
4	15p	Capacitor	C23, C34, C41, C53	Any ceramic 2.5mm pin pitch
8	560p	Capacitor	C16, C20, C22, C24, C36, C38, C40, C42	Any ceramic 2.5mm pin pitch
1	5x2 pin	Connector	POWER	POWER CONNECTOR
7	10u	Electrolytic	C3, C4, C11, C28, C33 , C35, C52	Electrolytic, 2mm pin pitch, 5mm dia, min 25V C33 and C52 max 9mm tall
2	100u	Electrolytic	C5, C6	Electrolytic, 2.5mm pin pitch, 6-6.3mm dia, min 25V
18	3.5mm	Jack	J1, J2, J3, J4, J5, J6, J7, J8, J9, J10, J11, J12, J13, J14, J15, J16, J17, J18	Thonkicon / Inline
2	Orange	LED 3mm	L1, L2	Low lumen
1	LM4040 5V	Volt ref diode	D3	
4	8x1 pin	Socket strip	PCB1-CON1, PCB1-CON2, PCB1-CON3, PCB1-CON4	8x1 socket strip
4	8x1 pin	Pin strip	PCB2-CON1, PCB2-CON2, PCB2-CON3, PCB2-CON4	8x1 pin strip
2	A100k	Potentiometer	POT1, POT7	Metal shaft 9mm snap in panel mount
6	B22k	Potentiometer	POT3, POT4, POT5, POT9, POT10, POT11	Metal shaft 9mm snap in panel mount, B20k – B25k
4	B100k	Potentiometer	POT2, POT6, POT8, POT12	Tall plastic shaft with indicator 9mm snap in
2	72V/0.25A	PPTC	F1, F2	Auto Resettable Fuse PPTC (Polyswitch)
36	100k	Resistor	R5, R8, R20, R21, R22, R34, R36, R37, R38, R39, R40, R42, R43, R49 , R56, R57, R62, R63, R67 , R70, R81, R82, R83, R95, R97, R98, R99, R100, R101, R103, R104, R108, R116, R117, R122, R123	Max 7mm 1% (usually 1/4W)
6	12k	Resistor	R26, R46, R51, R87, R105, R111	Max 7mm 1% (usually 1/4W)
6	15k	Resistor	R13, R48, R59, R74, R107, R119	Max 7mm 1% (usually 1/4W)
2	27k	Resistor	R14, R75	Max 7mm 1% (usually 1/4W)
14	1k	Resistor	R9, R15, R18, R52, R53, R58, R71, R76, R79, R112, R113, R118, R128, R130	Max 7mm 1% (usually 1/4W)
20	200k	Resistor	R7, R28, R29, R30, R41, R54, R55, R64, R65, R66, R69, R89, R90, R91, R102, R114, R115, R124, R125, R126	Max 7mm 1% (usually 1/4W)
3	249R	Resistor	R45, R50, R109	Max 7mm 1% (usually 1/4W); R45 240-270R; R50 and R109 LED brightness 220-270R
8	30k	Resistor	R10, R16, R27, R72, R77, R88, R131, R132	Max 7mm 1% (usually 1/4W)
2	390k	Resistor	R12, R110	Max 7mm 1% (usually 1/4W)
10	4.7k	Resistor	R1, R25, R33, R44, R47 , R86, R94, R106 , R127, R129	Max 7mm 1% (usually 1/4W)
8	470R	Resistor	R11, R17, R24, R35, R73, R78, R85, R96	Max 7mm 1% (usually 1/4W)
9	47k	Resistor	R2, R3, R4, R23, R31, R32, R84, R92, R93	Max 7mm 1% (usually 1/4W)
4	5.6k	Resistor	R60, R61, R120, R121	Max 7mm 1% (usually 1/4W)
4	680k	Resistor	R6, R19, R68, R80	Max 7mm 1% (usually 1/4W)
2	SPDT ON-ON	Toggle switch	S1, S2	SPDT ON-ON
1	DIP8	IC socket	IC1	8 pin IC socket
8	DIP14	IC socket	IC2, IC3, IC4, IC5, IC6, IC7, IC8, IC9	14 pin IC socket
3	DIP16	IC socket	IC10, IC11, IC12	16 pin IC socket
1	LM13700	OTA	IC12	
1	LM358	OpAmp	IC1	
2	V2164	VCA	IC10, IC11	Cool Audio
8	TL084	OpAmp	IC2, IC3, IC4, IC5, IC6, IC7, IC8, IC9	TL074 or TL084
1	100R	Trimmer	TRIM1	3296W compatible
4	10k	Trimmer	TRIM2, TRIM3, TRIM4, TRIM5	3296W compatible

1	PCB1
1	PCB2
1	Panel
8	Screws
4	spacers
4	nuts
6	cream knobs
2	red knobs