VC ADSR: Assembly Manual

PCB1: (The smaller one)

Solder the resistors. Using a multimeter to doublecheck values is recommended.

Qty.	Value	Code	Name on PCB
6	100k	Brown, black, black, orange, brown	R1, R2, R9, R13, R15, R19, R25
2	10k	Brown, black, black, red, brown	R5, R22,
1	1k	Brown, Black, Red, Gold	R10
3	22k	Red, red, black, red, brown	R3, R6, R12
1	27k	Red, Purple, Orange, Gold	R11
1	2M	Red, Black, Green, Gold	R24
1	3k3	Orange, orange, black, brown, brown	R16
1	1M	Brown, Black, Verde, Gold	R20
1	33k	Orange, orange, black, red, brown	R4
1	43k	Yellow, orange, black, red, brown	R18
1	47k	Yellow, Purple, Orange, Gold	R7
1	56k	Green, Blue, Orange, Gold	R21
1	75k	Violet, green, black, red, brown	R14
1	220k	Red, red, black, orange, brown	R23
1	300 OHM	Orange, black, black, black, brown	R8
1	6k2	Blue, red, black, brown, brown	R17

Solder the capacitors:

Qty.	Value	Code	Name on PCB
11	100n	104	C1, C2, C5, C6, C7, C8, C9, C10, C12, C13, C14
2	10µF	10µF	C3, C4
1	100p	101	C11
1	330n	333	C15

Solder the diodes (D1, D2, D3, D4) watching polarity. Black line on the diode must be in the same place as white line on the diode PCB silkscreen.

Solder the two ferrite beads (FERRITE+, FERRITE-) passing trough a recycled resistor leg

Place the sockets (IC1, IC2, IC3, IC4, IC5) and solder them. Then place the ICs on them taking care of polarity. To do that the mark on front must match the mark on the socket. IC1=555, IC2=4013, IC3=4052, IC4=TL074, IC5=TL072.

Solder the transistors 2n3906 (T5, T6) and 2n3904 (T1, T2, T4, T7, T3). Be sure they are on proper position (same as the silkscreen on the PCB)

Solder the power connector been sure the position is correct (as in the silkscreen)

Solder the male pin header (Circuit) by the short part and by the silkscreen side of the PCB. Ensure they are at 90º from the PCB.

PCB2: (the big one)

Solder the resistors. Using a multimeter to doublecheck values is recommended.

Qty.	Value	Code	Name on PCB
1	100k	Brown, black, black, orange, brown	R119
8	30k	Orange, Black, Orange, Gold	R100, R101, R103, R107, R108, R109, R114, R115
2	10k	Brown, black, black, red, brown	R102, R110
3	1k	Brown, black, black, brown, brown	R104, R105, R106
1	27k	Red, violet, black, red, brown	R116
1	15k	Brown, green, black, red, brown	R117
1	20k	Red, black, black, red, brown	R113
1	68k	Blue, gray, black, red, brown	R112
1	8k2	Grey,Red,Red,Gold	R111
1	270 OHM	Red, Purple, Brown, Gold	R118

Place and solder the Female Pin Header (Panel To) by the opposite side of the faders, ensuring it is 90º from PCB.

Solder the toggle switch

Solder the faders (A, D, R, S), ensuring they are totally strait. If is not possible because they touch the back side of the pin header (Panel To) cut a little bit the header pins.

Put LED on place (LED01) respecting the polarity but don't solder it until you screw the front panel. This way is much more easy to solder it on the right position.

Solder the minijack or the Banana (ATTACK, DECCAY, GATE_IN, OUT, RELEASE, SUSTAIN, TRIGG_IN).

Put the spacer on the tree holes by the male side and fix the with the tree nuts

Put the push button on place but don't solder it yet.(Because the same reason as LEDs)

Place the front panel, screw the minijacks or bananas and the push button and poceed to solder them

Solder the LED on the right height

Assembly the PCB 1 on the PCB2 and screw them with the tree provided screws

Endless sustain Fix.

In order to improve sustain behavior, we will do a fix to control board (smallest one)
We will solder a 2N3906 transistor and a 1n4148 diode, both provided in a separate bag. See picture for reference.

Best way will be to solder the diode to the base of the transistor (center leg),bend it, and solder the other two legs in marked points, making sure labeling is facing you. Then solder the other end of the diode.
No need to say that making sure they do not touch other solder points is quite adviceable!