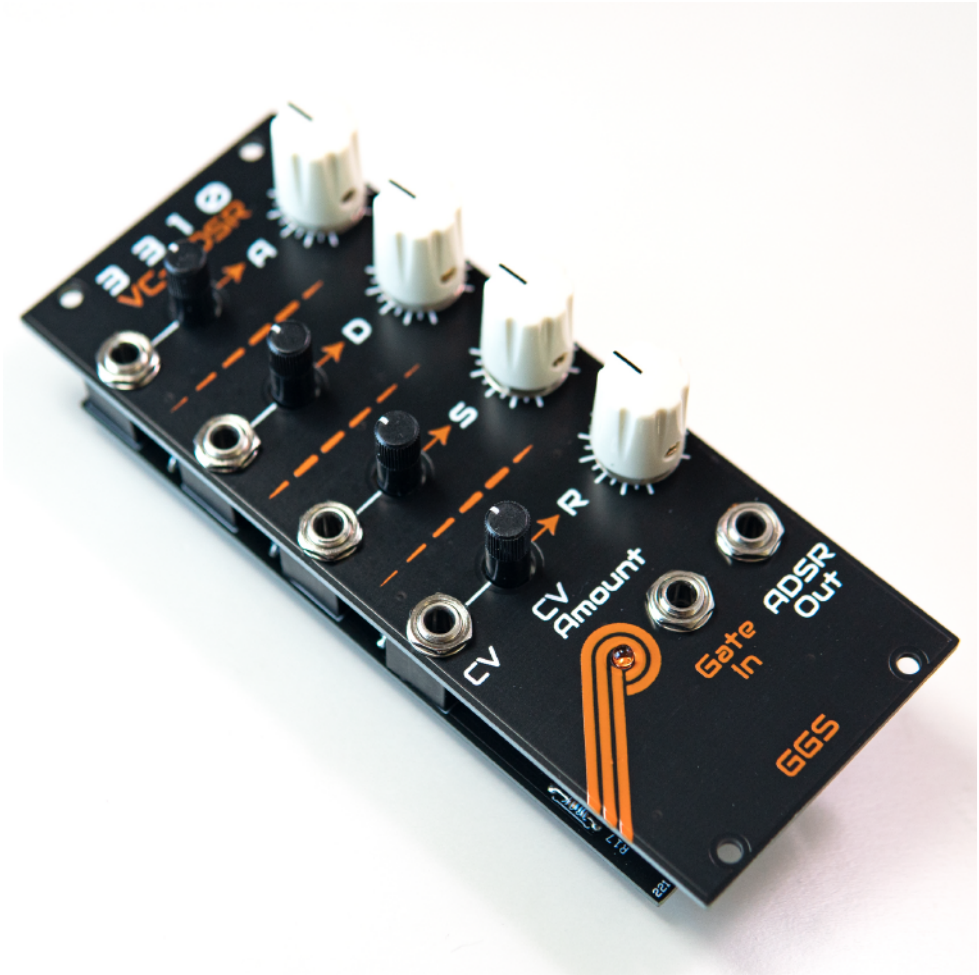
3310 VC-ADSR V5.1

The 3310 VC-ADSR Eurorack PCB and Front Panel Kit is a DIY voltage controlled envelope generator based on the reliable CEM3310 / AS3310 IC. Designed for Eurorack modular systems, this ADSR provides precise and flexible envelope shaping, suitable for both beginner and intermediate builders.

Key Features
Eurorack PCB and front panel kit
Based on the CEM3310 / AS3310 envelope generator IC
Classic ADSR envelope with Attack, Decay, Sustain, and Release controls
CV inputs with CV amount control for each envelope stage
LED envelope display for visual feedback
Gate input via power bus or external jack
10HP Eurorack format

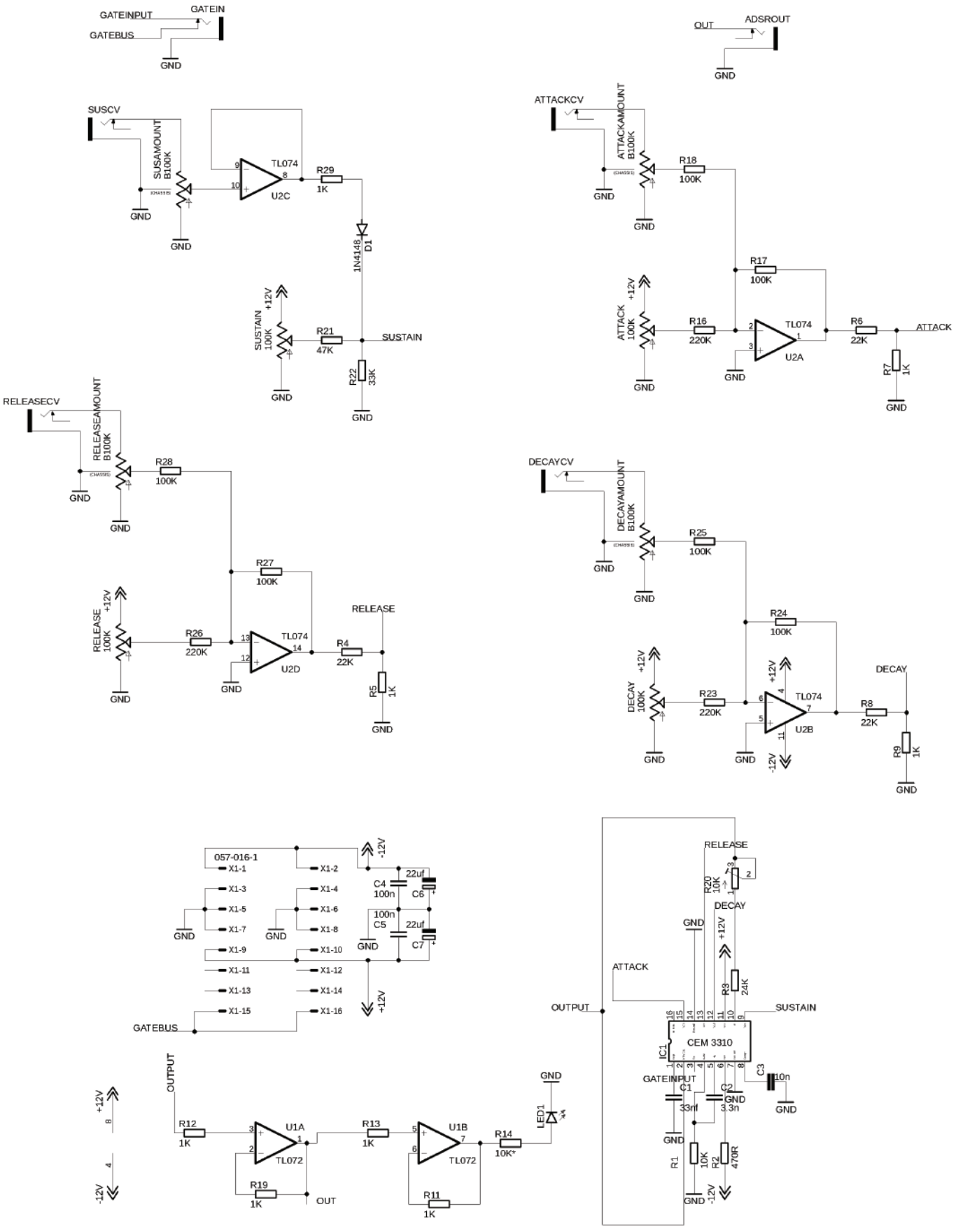


Bom

Qty	Value	Part Number
1		LED1
1	IDC Socket	X1
4	100K	ATTACK, DECAY, RELEASE, SUSTAIN
6	100K	R17, R18, R24, R25, R27, R28
2	100n	C4, C5
1	10K	R1
1	10K - Trimm resistor	R20
1	10K* (LED Brightness)	R14
1	10n	C3
8	1K	R5, R7, R9, R11, R12, R13, R19, R29
1	1N4148	D1
3	220K	R16, R23, R26
3	22K	R4, R6, R8
2	22uf	C6, C7
1	24K	R3
1	3.3n	C2
1	33K	R22
1	33nf	C1
1	470R	R2
1	47K	R21
1	AS3310	IC1
4	B100K / 9mm Potentiometer	ATTACKAMOUNT, DECAYAMOUNT,
		RELEASEAMOUNT, SUSAMOUNT
6	PJM398SM / Jack Socket	ADSROUT, ATTACKCV, DECAYCV,
		GATEIN, RELEASECV, SUSCV
1	TL072	U1
1	TL074	U2

Use capacitors rated 25V or higher.

Schematic


GATEINPUT
GATEIN
GATEBUS
GND
OUT
ADSROUT
SUSCV
SUSAMOUNT B100K
TL074
U2C
R29
1K
1N4148
D1
SUSTAIN
100K
+12V
R21
47K
SUSTAIN
R22
33K
ATTACKCV
ATTACKAMOUNT B100K
R18
100K
R17
100K
ATTACK
100K
R16
220K
TL074
U2A
R6
22K
ATTACK
R7
1K
RELEASECV
RELEASEAMOUNT B100K
R28
100K
R27
100K
RELEASE
100K
R26
220K
TL074
U2D
R4
22K
RELEASE
R5
1K
DECAYCV
DECAYAMOUNT B100K
R25
100K
R24
100K
DECAY
100K
R23
220K
TL074
U2B
R8
22K
DECAY
R9
1K
057-016-1
X1-1
X1-2
X1-3
X1-4
X1-5
X1-6
X1-7
X1-8
X1-9
X1-10
X1-11
X1-12
X1-13
X1-14
X1-15
X1-16
-12V
C4
100n
22uf
C6
C5
100n
22uf
C7
+12V
GATEBUS
OUTPUT
R12
1K
U1A
TL072
R13
1K
U1B
TL072
R14
10K*
LED1
R19
1K
OUT
R11
1K
RELEASE
R20
10K
DECAY
ATTACK
R3
24K
SUSTAIN
OUTPUT
IC1
CEM 3310
GATEINPUT
C1
33nf
C2
3.3n
C3
10n
R1
10K
R2
470R

Calibration

There is no definitive right or wrong method for calibrating this module. The trimmer is designed to fine-tune the timing of the 3310 IC. While the impact of the trimmer may be subtle, it can be observed on an oscilloscope or sensed in the attack section.

Thank you for choosing Guru Gara Synth.
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