3360 VCA V4.3

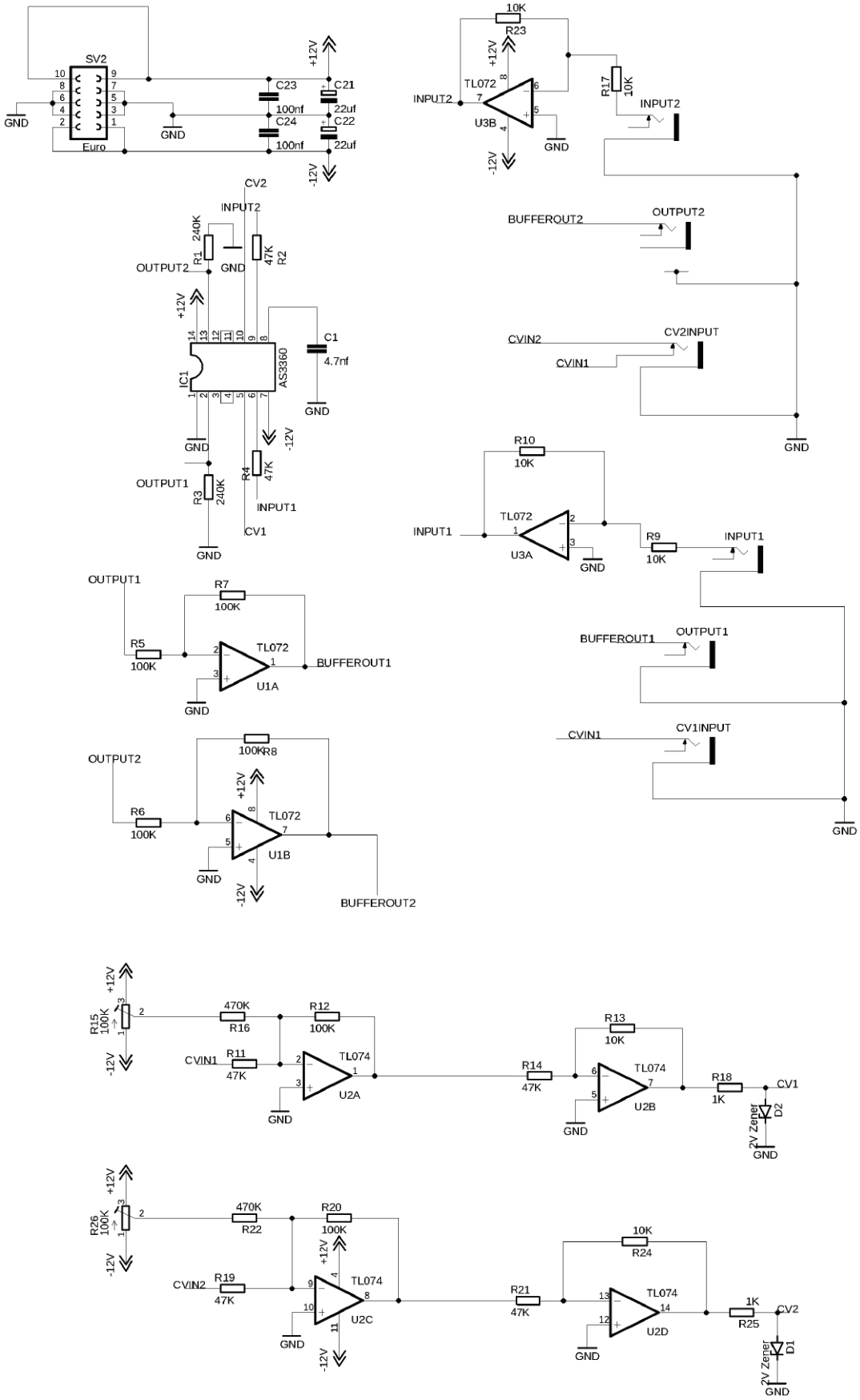
This dual voltage-controlled amplifier (VCA) is built using either the CEM3360 or AS3360 chip, making it an accessible DIY project for synthesizer enthusiasts. As a valuable tool for Eurorack setups, it offers precise control over your audio signals. Featuring two separate audio inputs and outputs (labeled 1 & 2) for independent processing, it also includes control voltage (CV) inputs. Each CV input allows you to control the amplification of its corresponding audio signal separately. However, if you only want to use one CV input for both channels, simply leave CV input 2 empty and the CV from input 1 will automatically be routed to both channels. To complete the package, the front panel is made from PCB material and features a unique, hand-printed design.

Bom

Qty	Value	Part Number
4	100K	R7, R8, R12, R20
2	100K	R5, R6
2	100K / Trimmer	R15, R26
2	100nf	C23, C24
2	10K	R13, R24
4	10K	R9, R10, R17, R23
2	1K	R18, R25
2	22uf	C21, C22
2	240K	R1, R3
2	2V Zener	D1, D2
1	4.7nf	C1
2	470K	R16, R22
6	47K	R2, R4, R11, R14, R19, R21
1	AS3360	IC1
1	Euro	SV2
6	THONKICONNOLD	CV1INPUT, CV2INPUT, INPUT1, INPUT2,
		OUTPUT1, OUTPUT2
2	TL072	U1, U3
1	TL074	U2

Use capacitors rated 25V or higher.

Schematic


SV2
Euro
GND
+12V
-12V
C23
100nf
C24
100nf
C21
22uf
C22
22uf
10K
R23
TL072
U3B
INPUT2
R17
10K
BUFFEROUT2
OUTPUT2
CVIN2
CV2INPUT
CVIN1
CV2
INPUT2
240K
R1
47K
R2
OUTPUT2
IC1
AS3360
C1
4.7nf
R4
47K
OUTPUT1
R3
240K
INPUT1
CV1
R10
10K
TL072
U3A
INPUT1
R9
10K
R7
100K
R5
100K
TL072
U1A
BUFFEROUT1
OUTPUT1
BUFFEROUT1
CVIN1
CV1INPUT
100K
R8
OUTPUT2
R6
100K
TL072
U1B
BUFFEROUT2
R15
100K
470K
R16
R12
100K
CVIN1
R11
47K
TL074
U2A
R13
10K
R14
47K
TL074
U2B
R18
1K
CV1
2V Zener
D2
R26
100K
470K
R22
R20
100K
CVIN2
R19
47K
TL074
U2C
10K
R24
R21
47K
TL074
U2D
1K
R25
CV2
2V Zener
D1

Calibration

- Measure the DC voltage at the junction of R18 and D2 for channel 1 and R25 and D1 for channel 2. You can use a multimeter set to the DC voltage range.

- Adjust the corresponding trimmers (R15 and R26) until the voltage reading is as close to 0V as possible, ideally a few millivolts below 0V.

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