

Dual Attack/Release Envelope Generator V1.7

This module is designed to shape the rising and falling edges of an incoming gate signal, creating a smooth, adjustable envelope. It offers two envelope modes:

Fast/Short: Ideal for percussive sounds and rapid envelope changes.

Slow/Long: Perfect for sustained sounds and gradual envelope decays.

Key Features:

Adjustable Attack and Release Times: Four electrolytic capacitors (C1, C2, C3, C4) control the attack and release times.

Faster Attack: Increase the capacitance of C1 and C3.

Slower Release: Increase the capacitance of C2 and C4.

Gate-to-Trigger Converter: For shorter envelope generation, especially useful with sequencers lacking gate length adjustment.

Trigger out is connected to gate 1 input and gate 1 input is connected to gate 2 input via switched jack sockets. A single gate or trigger signal can trigger both envelope generators.

Flexible Input Configuration: Jack switches allow easy overwriting of internal connections with external gate or trigger signals.

Recommended Capacitor Values:

C1 and C3: 1uF (for faster attack)

C2 and C4: 22uF (for slower release)

Note: Experimentation with different capacitor values can yield a wide range of envelope shapes and timbres.



Bom

Qty		Part Number
2	3mm LED	LED1, LED2
1	16 Pin IDC Socket	EURORACK Power
3	1.5M	R1, R7, R14
2	100K	R9, R13
3	100nf	C5, C12, C13
2	10K	R10, R15
4	10k	R2, R3, R5, R6
2	10uf	C2, C4
1	1K	R12
1	1M	R8
3	1N4148	D1, D3, D6
3	1N4148	D2, D4, D5
2	2.2uf	C1, C3
2	20K	R4, R11
2	22uf	C10, C11
3	2N3904	T1, T2, T3
1	4.7K	R16
2	B100K - 9mm Vertical Pot.	DECAY1, DECAY2
2	B10K B100K - 9mm Vertical Pot.	ATTACK1, ATTACK2 / 9mm Vertical Potentiometer
2	SPDT-ON-ON	U\$1, U\$2
6	PJM398SM / Jack Socket	AR1, AR2, GATE1, GATE2, GATEIN, TRIGGEROUT
3	TL072	U1, U2, U3

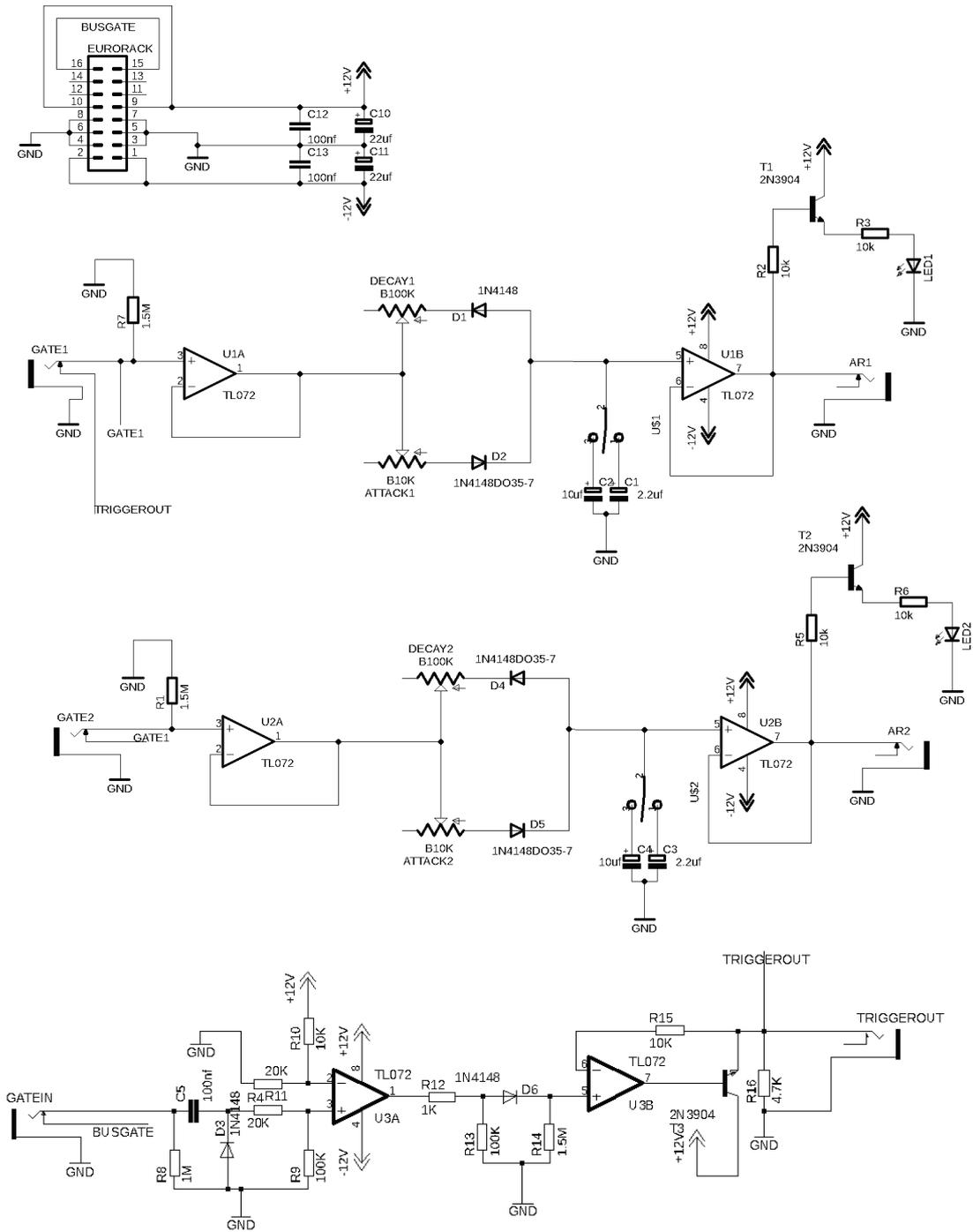
Use capacitors rated 25V or higher.

Use B100K potentiometer for Attack 1 and Attack 2.

Calibration

No Calibration is needed.

Schematic



Thanks you for choosinf Guru Gara Synth.
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