

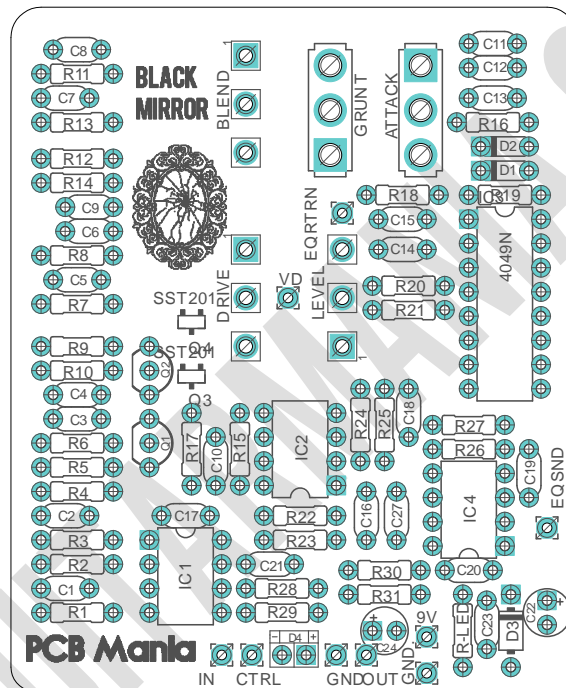
# Black Mirror

Based on Darkglass B3K

Bass Drive

By PCB Guitar mania Mania

[Project link](#)



The Black mirror is a defined and powerful bass overdrive, with intuitive format that contains brutality and clarity at the same time.

## Featuring

- Ready to be wired as true bypass.
- Attack Switch: Sets the amount of treble content to saturate.
- Grunt Switch: Sets the amount of low frequency content to saturate by selecting between three different bass boost levels before the clipping stage.
- Blend control: Mixes the clean input signal with the overdriven signal.
- EQ Loop, allows you to connect an external EQ before the blend knob.

## BOM

Resistors		Capacitors	
R1	1m	C1	100n
R2	1m	C2	1n
R3	10k	C3	220n
R4	100k	C4	22n
R5	1m	C5	22n
R6	3k3	C6	22n
R7	200k	C7	100n
R8	470k	C8	220pf
R9	1m	C9	22n
R10	1m	C10	22pf
R11	470k	C11	4n7
R12	6k8	C12	22n
R13	1m	C13	220n
R14	22k	C14	22pf
R15	330k	C15	1uf
R16	6k8	C16	680pf
R17	3k3	C17	22n
R18	470k	C18	2n2
R19	100r	C19	2n2
R20	10k	C20	1n
R21	1m	C21	1uf
R22	100k	C22	100uf
R23	33k	C23	330n
R24	10k	C24	100uf
R25	22k	C27	2n2
R26	22k		
R27	47k	Semiconductors	
R28	1k	IC1	TL072
R29	100k	IC2	TL072
R30	10k	IC3	4049N
R31	10k	IC4	TL072
R-LED	2k2-4k7	Q1*	J201
		Q2*	J201
Diodes		Q3*	J201 SMD
D1	1n4148	Q4*	J201 SMD
D2	1n4148		
D3	1n4001	Switches	
D4	led	GRUNT	SPDT ON-ON

	ATTACK	SPDT ON-OFF-ON
<b>Potentiometers</b>		
<b>DRIVE</b>	C100k	
<b>LEVEL</b>	A100k	
<b>BLEND</b>	B100k	

**Q1-Q4\*** This board allows you to choose in between using a pair of through hole J201 for Q1 and Q2, or the SMD J201 for Q3 and Q4. Choose either pair as you prefer.

#### **EQ LOOP**

This project allows you to add an external EQ through a Loop, similar in a way to how the B7K operates. If you'd like to include another board with an active EQ on the same enclosure you can supply the power through the pad "VD", that delivers 4.5v.

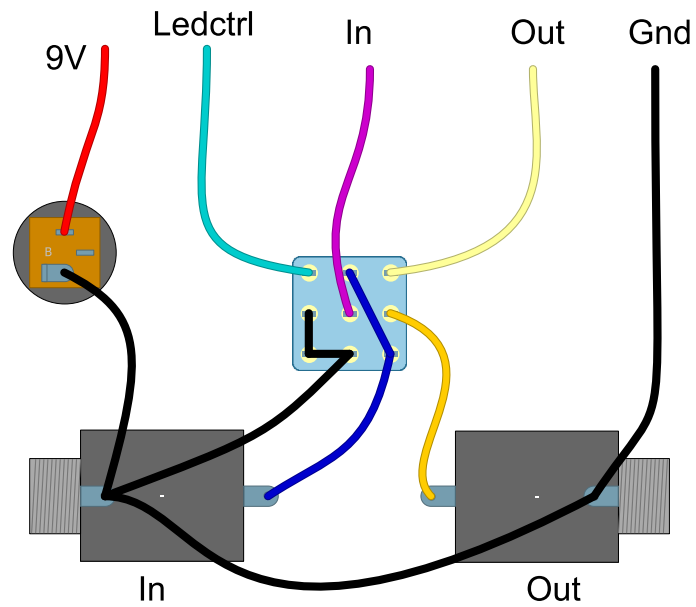
If you prefer to go straight for the original version of the B3K just wire a cable straight from the pads "EQSND" to "EQRETRN"

#### **General Building notes**

To populate the PCB it's recommended to follow this order.

1. Resistors & diodes
2. IC Sockets (set up the proper IC at last)
3. Capacitors, starting with the smaller ones and the ceramic ones.
4. Electrolytic capacitors (always check the polarity)
5. Transistors
6. Wires
7. Potentiometers
8. Off board wiring

## Off Board Wiring

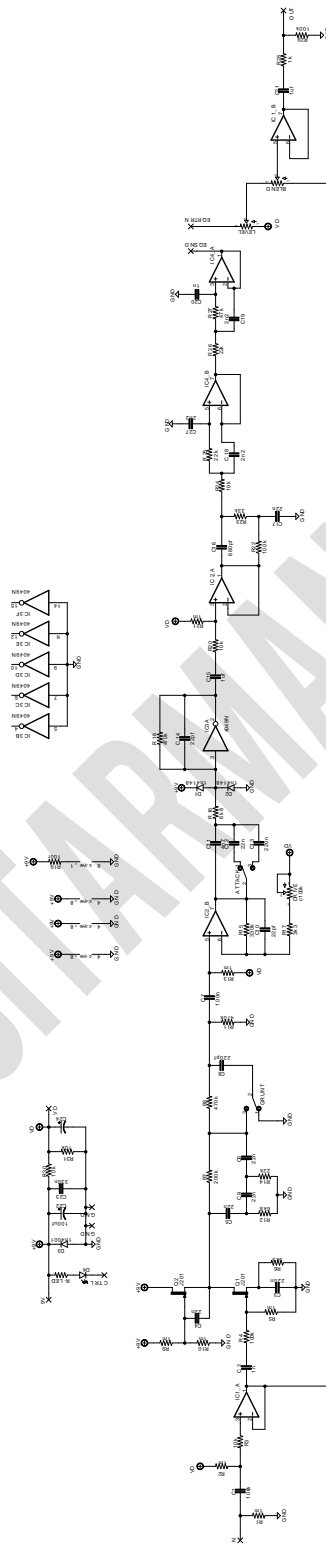


### Drilling the enclosure

This Project has been planned to fit into a 1590B enclosure type (122x67x35mm approx.)

Check the Attached "Drilling templates" to drill the box properly. The files are on Scale 1:1, ready to print in a A4 page.

# Schematic



Black Mirror Bass Drive  
By PCB Guitar Mania