

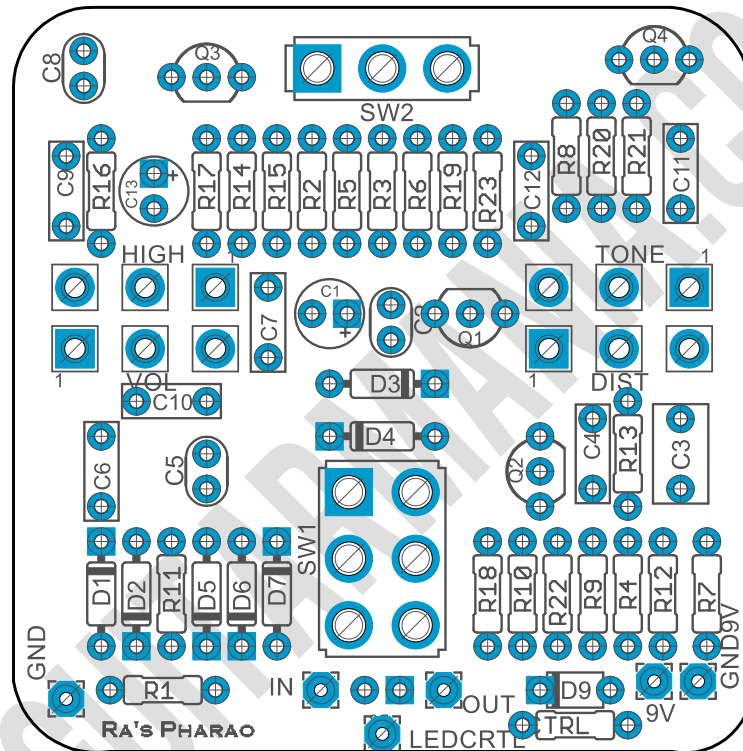
# Ra's Pharaoh

Based on Pharaoh Fuzz by Black arts toneworks

Fuzz

By PCB Guitar mania Mania

[Project link](#)



The Ra's Pharaoh has roots on the all-time classic big muff, with some interesting modifications to produce the most thick, warm, doomy sounds.

- Ready to be wired as True Bypass.
- Diode switch, choose in between the silicon diodes for a raspy distorted sound, diodes out for more volume /headroom and less clipping. Asymmetrical germanium clipping diodes give a warm, tubey old school sound.
- H/L switch, select in between to different input-gain presets.
- Tight design to fit in a 125B Enclosure with pots and switches on board.

## BOM

Resistors		Capacitors	
R1	2M	C1	10uf Tantalum
R2	39K	C2	470p
R3	390K	C3	470n
R4	470K	C4	47n
R5	100K	C5	470p
R6	1K	C6	47n
R7	10K	C7	47n
R8	1K	C8	470p
R9	6K2	C9	47n
R10	100K	C10	10n
R11	470K	C11	22n
R12	10K	C12	47n
R13	100r	C13	10uf Tantalum
R14	6K2		
R15	100K	Diodes	
R16	100r	D1	1N4148
R17	470K	D2	1N4148
R18	10K	D3	1n4001
R19	470K	D4	1n4001
R20	100K	D5	1n34A
R21	2K2	D6	1n34A
R22	10K	D7	1n34A
R23	470K	D8	LED3MM
CTRL	2k2-4k7	D9	1n4001
Pots		Transistors	
TONE	250KB	Q1	MPSA18
VOL	100KB	Q2	2N5089
DIST	100KB	Q3	2N5089
HIGH	25KB	Q4	2N5089
Switces			
SW1	DPDT ON-OFF-ON		
SW2	SPDT ON-ON		

## Shopping list

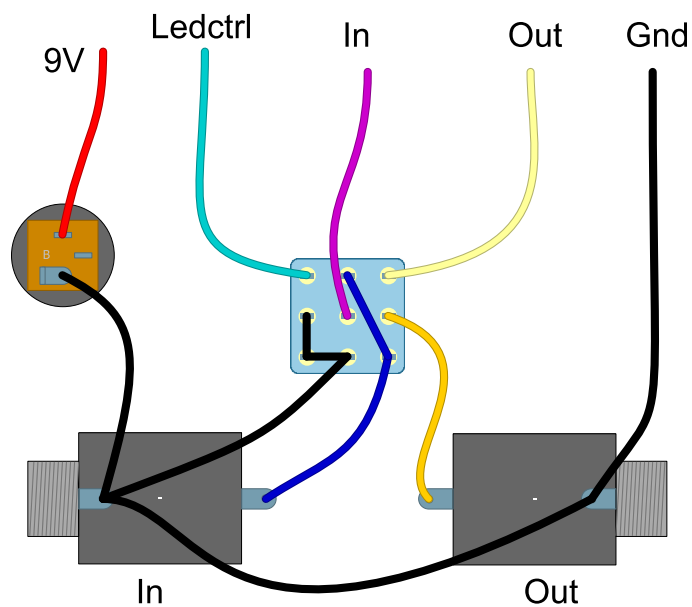
Resistors		
5	470K	R4, R11, R17, R19, R23
4	100K	R5, R10, R15, R20
2	1K	R6, R8
2	100r	R13, R16
4	10K	R7, R12, R18, R22
2	2K2	R21
1	2M	R1
1	390K	R3
1	39K	R2
2	6K2	R9, R14
Caps		
1	470n	C3
3	470p	C2, C5, C8
5	47n	C4, C6, C7, C9, C12
1	22n	C11
1	10n	C10
2	10uf Tantalum	C1, C13
Pots		
1	250KB	TONE
2	100KB	DIST, VOL
1	25KB	HIGH
Diodes		
2	1N4148	
3	1n4001	
3	1n34A	
1	LED3MM	
Transistors		
1	MPSA18	
3	2N5089	
Switches		
1	Spdt	
1	Dpdt on-off-on	

## 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 125B 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

