

JENNY GREENTEETH VI.1

Weird Chorus / Putchbend / Ringmod

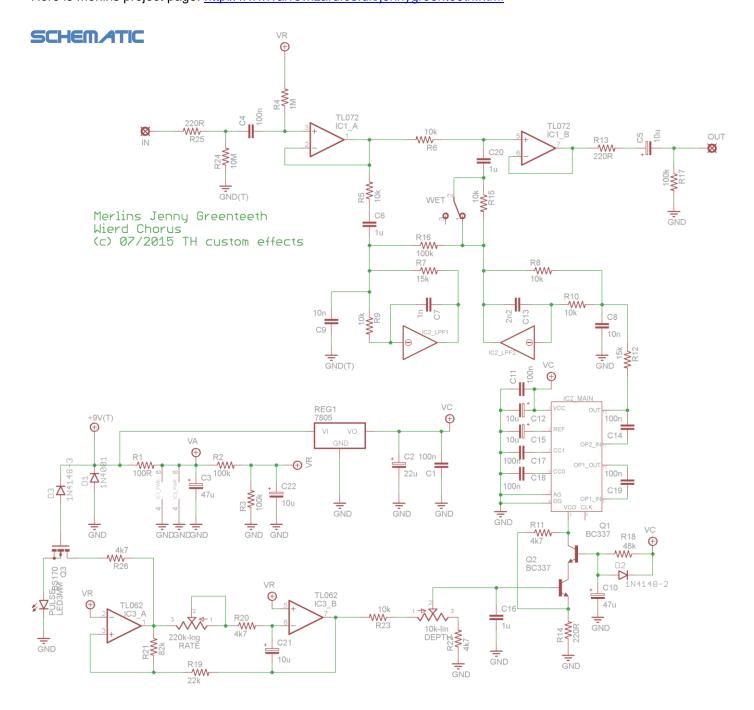
based on Merlin Blencowe's circuit

OVERVIEW

Merlin is famous for his knowledge about valve circuits. But from time to time he releases stompbox circuits after his own ideas. His site: http://www.valvewizard.co.uk/

GENER AL

Jenny G. is a slow chorus with a lot of weird sounds available. Please see Merlins detailed description on his website. Here is Merlins project page: http://www.valvewizard.co.uk/jennygreenteeth.html





BILL OF MATERIALS

Resistors R1 1 100R R2, R3, R16, R17 4 100k R4 1 1M R5, R6, R8, R9, R10, R15, R23 7 10k R7, R12 2 15k R11, R20, R22, R26, 4 4k7 R13, R14, R25, 3 220R R18 1 47k R19 1 22k R21 1 82k R24 1 10M Capacitors C1, C4, C11, C14, C17, C18, C19 7 100n box film C3, C10 2 22u polarized electro C5, C15 2 10u polarized electro C6, C16, C20 3 1u box film C7 1 1n box film C8, C9 2 10n box film C12 1 10u Tantalum C13 1 2n2 box film C21 1 10u non polarized electro (preferred)		Device#	Qty	Value	Comment
R4 1 1 1M R5, R6, R8, R9, R10, R15, R23 R7, R12 2 15k R11, R20, R22, R26, 4 4k7 R13, R14, R25, 3 220R R18 1 47k R19 1 22k R21 1 82k R24 1 10M Capacitors C1, C4, C11, C14, C17, C18, C19 C2, C22 2 22u polarized electro C3, C10 2 47u polarized electro C5, C15 2 10u polarized electro C6, C16, C20 3 1u box film C7 1 1n box film C7 C8, C9 2 10n box film C12 1 10u Tantalum C13 1 2n2 box film	Resistors	R1	1	100R	
R5, R6, R8, R9, R10, R15, R23 R7, R12 2 15k R11, R20, R22, R26, 4 4k7 R13, R14, R25, 3 220R R18 1 47k R19 1 22k R21 1 82k R24 1 10M Capacitors C1, C4, C11, C14, C17, 7 100n box film C18, C19 C2, C22 2 22u polarized electro C3, C10 2 47u polarized electro C5, C15 2 10u polarized electro C6, C16, C20 3 1u box film C7 1 1n box film C7 C8, C9 2 10n box film C12 1 10u Tantalum C13 1 2n2 box film		R2, R3, R16, R17	4	100k	
R15, R23 R7, R12 R11, R20, R22, R26, R13, R14, R25, R19 R21 R21 R24 R24 R24 R24 R24 R25 R24 R24 R25 R24 R24 R24 R24 R25 R24		R4	1	1M	
R7, R12			7	10k	
R13, R14, R25, 3 220R R18 1 47k R19 1 22k R21 1 82k R24 1 10M Capacitors C1, C4, C11, C14, C17, 7 100n box film C18, C19 C2, C22 2 2 22u polarized electro C3, C10 2 47u polarized electro C5, C15 2 10u polarized electro C6, C16, C20 3 1u box film C7 1 1n box film C7 2 10n box film C8, C9 2 10n box film C12 1 10u Tantalum C13 1 2n2 box film			2	15k	
R18		R11, R20, R22, R26,	4	4k7	
R19 1 22k R21 1 82k R24 1 10M Capacitors C1, C4, C11, C14, C17, 7 100n box film C18, C19 C2, C22 2 22u polarized electro C3, C10 2 47u polarized electro C5, C15 2 10u polarized electro C6, C16, C20 3 1u box film C7 1 1n box film C7 1 1n box film C8, C9 2 10n box film C12 1 10u Tantalum C13 1 2n2 box film		R13, R14, R25,	3	220R	
R21		R18	1	47k	
Capacitors C1, C4, C11, C14, C17, 7 100n box film C18, C19 C2, C22 2 22u polarized electro C3, C10 2 47u polarized electro C5, C15 2 10u polarized electro C6, C16, C20 3 1u box film C7 1 1n box film C8, C9 2 10n box film C12 1 10u Tantalum C13 1 2n2 box film		R19	1	22k	
Capacitors C1, C4, C11, C14, C17, C18, C19 7 100n box film C2, C22 2 22u polarized electro C3, C10 2 47u polarized electro C5, C15 2 10u polarized electro C6, C16, C20 3 1u box film C7 1 1n box film C8, C9 2 10n box film C12 1 10u Tantalum C13 1 2n2 box film		R21	1	82k	
C18, C19 C2, C22		R24	1	10M	
C2, C22 2 22u polarized electro C3, C10 2 47u polarized electro C5, C15 2 10u polarized electro C6, C16, C20 3 1u box film C7 1 1n box film C8, C9 2 10n box film C12 1 10u Tantalum C13 1 2n2 box film	Capacitors		7	100n	box film
C5, C15 2 10u polarized electro C6, C16, C20 3 1u box film C7 1 1n box film C8, C9 2 10n box film C12 1 10u Tantalum C13 1 2n2 box film			2	22u	polarized electro
C6, C16, C20 3 1u box film C7 1 1n box film C8, C9 2 10n box film C12 1 10u Tantalum C13 1 2n2 box film		C3, C10	2	47u	polarized electro
C7 1 1n box film C8, C9 2 10n box film C12 1 10u Tantalum C13 1 2n2 box film		C5, C15	2	10u	polarized electro
C8, C9 2 10n box film C12 1 10u Tantalum C13 1 2n2 box film		C6, C16, C20	3	1u	box film
C12 1 10u Tantalum C13 1 2n2 box film		C7	1	1n	box film
C13 1 2n2 box film		C8, C9	2	10n	box film
		C12	1	10u	Tantalum
C21 1 10u non polarized electro (preferred)		C13	1	2n2	box film
		C21	1	10u	non polarized electro (preferred)
Pots RATE 2 220k-log	Pots	RATE	2	220k-log	
DEPTH 2 10k-lin		DEPTH	2	10k-lin	
Diodes D1 1 1N4001	Diodes	D1	1	1N4001	
D2,D3 2 1N4148		D2,D3	2	1N4148	
PULSE 1 LED of your choice			1	LED	of your choice
Transistors Q1, Q2 2 BC337	Transistors	Q1, Q2	2	BC337	
Q3 1 BS170		Q3	1	BS170	
Switches WET 1 1PDT			1		
ICs IC1 1 TL072	ICs		1	TL072	
IC2 1 PT2399			1	PT2399	
IC3 1 TL062			1		
REG1 1 78L05		REG1	1	78L05	

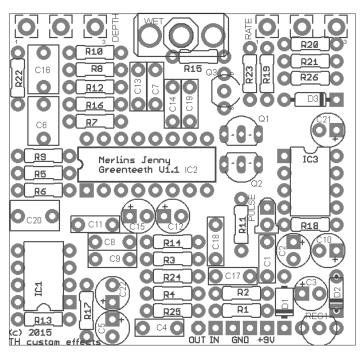


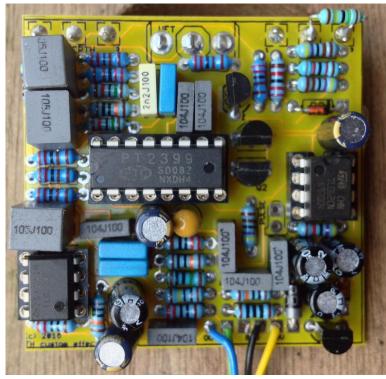
BUILDING

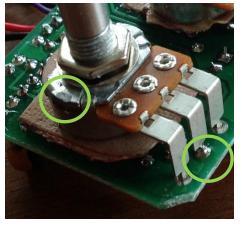
There are a lot of parts on relatively small space, so take your time and everything will work out well.

Start populating resistors and diodes first, then IC sockets. If you want to socket the transistors you put the sockets in now. Next do the capacitors, starting ceramic, box film and last 1u box film and pol. electros.

The rate pulse LED is not needed for the function of the circuit, so you could leave it off.







The board mounted pots need to go onto the other side of the board. Use some (double-sided) tape to make sure the pot cases do not shorten any pins that come through the board. As you solder them it is good practice to apply some solder to the middle pin first, then pull it back approx. 1mm and let it harden. Then solder the other pins. This will align the pot horizontally in a better way and avoid shortcuts of the wide pot pins and the board.

Don't forget to clip of the small bracket before you mount the circuit.

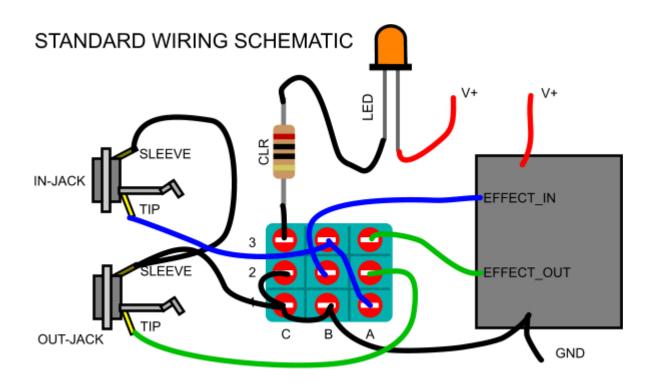
FIN ALLY

This circuit is a great addition for those who like special sounds. Have fun playing with it!

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