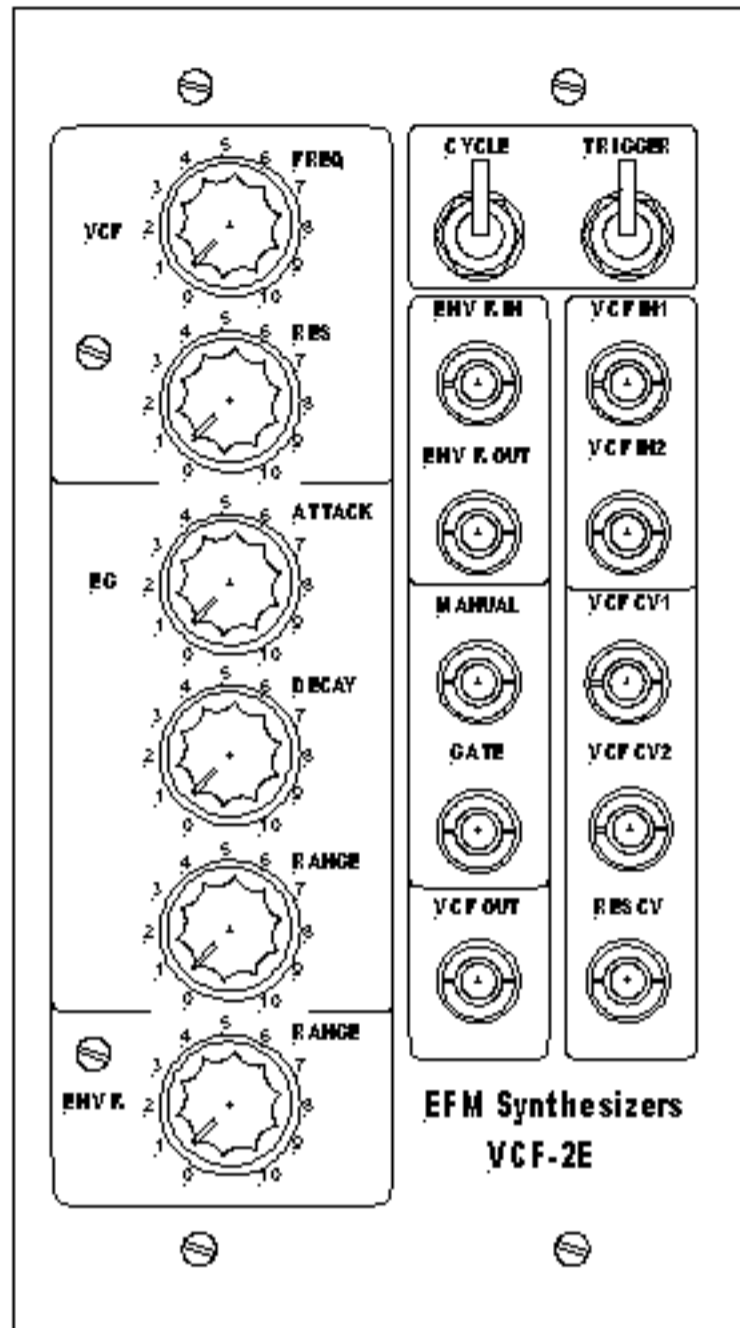
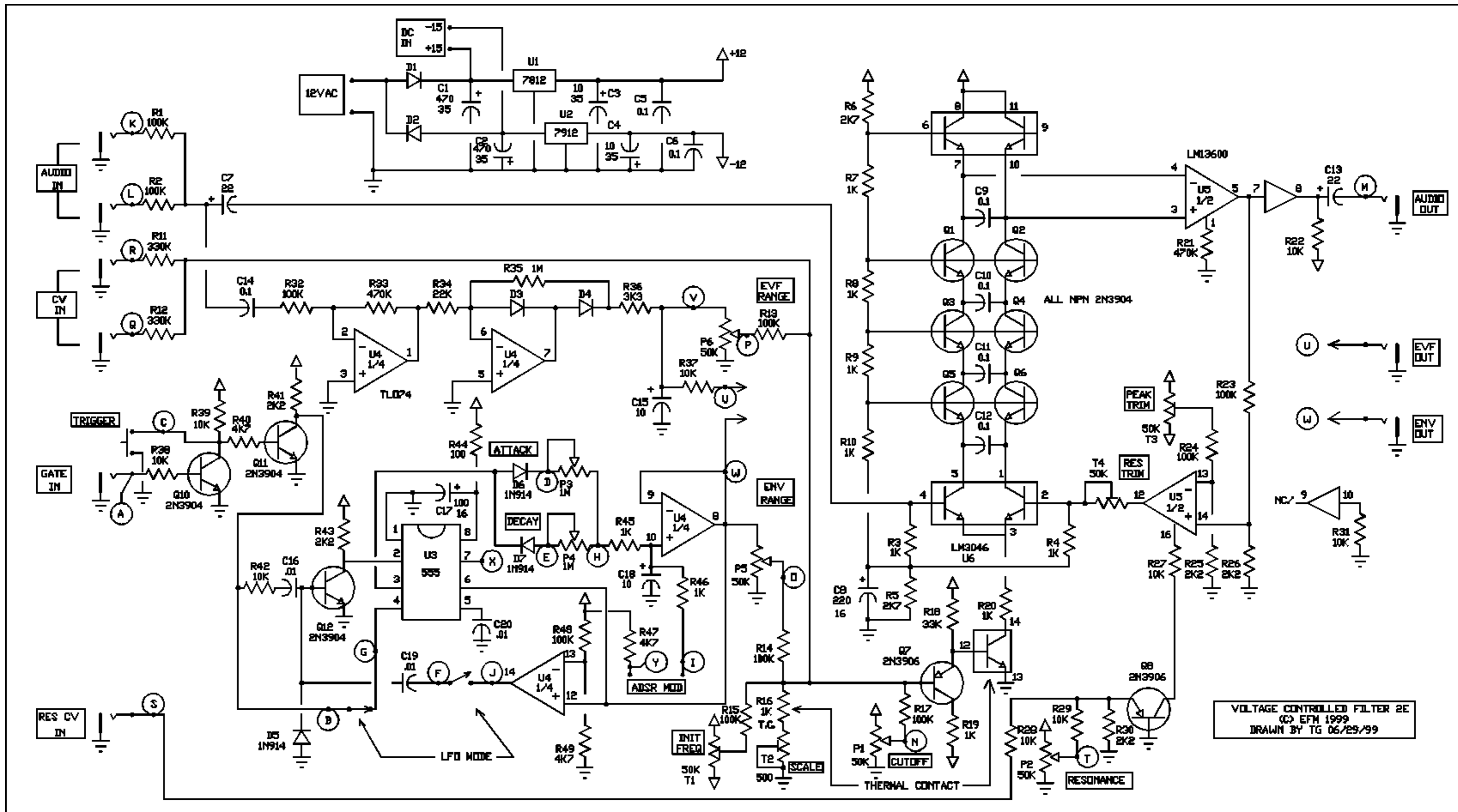


Voltage Controlled Filter 2E

Parts List

R1,2,13,14,15,17,23,24,32,48 - 100K (10)	C3,4,15,18 - 10/35 (3)
R3,4,7,8,9,10,19,20,45,46 - 1K (10)	C5,6,9,12,14,19 - 0.1 (8)
R5,6 - 2K7 (2)	C7,13 - 22/16 (2)
R11,12 - 330K (2)	C8 - 220/16 (1)
R18 - 33K (1)	C16,20 - .01 (2)
R21,33 - 470K (2)	C17 - 100/35 (1)
R22,27,29,30,31,37,38,39,42 - 10K(9)	U1 - 7812 (1)
R25,26,28,41,43 - 2.2K (5)	U2 - 7912 (1)
R34 - 22K (1)	U3 - 555 (1)
R35 - 1M (1)	U4 - TLO74 (1)
R36 - 3.3K (1)	U5 - LM13600 (1)
R40,47,49 - 4.7K (3)	U6 - LM3046 (1)
R44 - 100 (1)	Q1,2,3,4,5,6,9,10,11 - 2N3904 (9)
C1,2 - 470/35 (2)	Q7,8 - 2N3906 (2)

The Schematic Diagram



VOLTAGE CONTROLLED FILTER 2E
(C) EFM 1999
DRAWN BY TG 06/29/99

This shows the locations to cut and connect for standard Frac-Rack use.

