

The left column shows the labels from the PCB layout.
The right column shows the according labels from the
schematics Fig.55, Fig. 56, Fig. 58, Fig. 60 & Fig. 63 found in
Thomas Henry's VCO chip cookbook available from sMs
electronics:
<http://electro-music.com/forum/viewtopic.php?t=18625>

This layout utilizes a THAT320 matched transistor array for
the transistors and is distinct from Thomas' original schematic
I decided to have a switch to select between exponential and
linear FM modulation: one socket and attenuator is used for
both, exponential and linear FM. The destination is the
selected by the switch.

OSC A

TH VCO chip cookbook

Fig. 55	
J1	J1 (1v/oct)
J2	J2/J3 (FM in)
SW1 (FM exp./lin.)	
C5	C3
C6	C1
C7	C2
P1	R10
P2	R11
P3	R9/R12 (FM att.)
R3	R5
R4	R7
R5	R16
R6	R6
R7	R3 (tempco)
R8	R2
R9	R4
R10	R13
R11	R15
R12	R14
T1 (25t trimmer)	R1
T2 (25t trimmer)	R8
D1	D1
U1 (TL072)	IC2
U2 (THAT320 1-7)	Q1/Q2

Fig. 56

U4	IC1
R23	R17
R24	R18
R25	R20
R26	R19
C11	C4
C12	C5

Fig. 58

J5	J1
R33	R1
R31	R2
R32	R3
U6 (TL072 5-7)	IC1

Fig. 60

J6	J1
R37	R2
R38	R3
R39	R1
R40	R4
U6 (TL072 1-3)	IC1

Fig 63

J7	J1
R45	R6
R46	R8
R47	R4
R48	R2
U8 (TL071)	IC1a

PSU input/decoupling circuit

C1, C2, C15, C16	100n
C3, C4, C17, C18	10uf
R1, R2	22R

OSC B

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Fig. 55	
J3	J1 (1v/oct)
J4	J2/J3 (FM in)
SW2 (FM exp./lin.)	
C8	C3
C9	C1
C10	C2
P4	R10
P5	R11
P6	R9/R12 (FM att.)
R13	R5
R14	R7
R15	R16
R16	R6
R17	R3 (tempco)
R18	R2
R19	R4
R20	R13
R21	R15
R22	R14
T3 (25t trimmer)	R1
T4 (25t trimmer)	R8
D2	D1
U3 (TL072)	IC2
U2 (THAT320 8-14)	Q1/Q2

Fig. 56

U5	IC1
R27	R17
R28	R18
R29	R20
R30	R19
C13	C4
C14	C5

Fig. 58

J8	J1
R36	R1
R34	R2
R35	R3
U7 (TL072 5-7)	IC1

Fig. 60

J9	J1
R41	R2
R42	R3
R43	R1
R44	R4
U7 (TL072 1-3)	IC1

Fig 63

J10	J1
R49	R6
R50	R8
R51	R4
R52	R2
U9 (TL071)	IC1a

