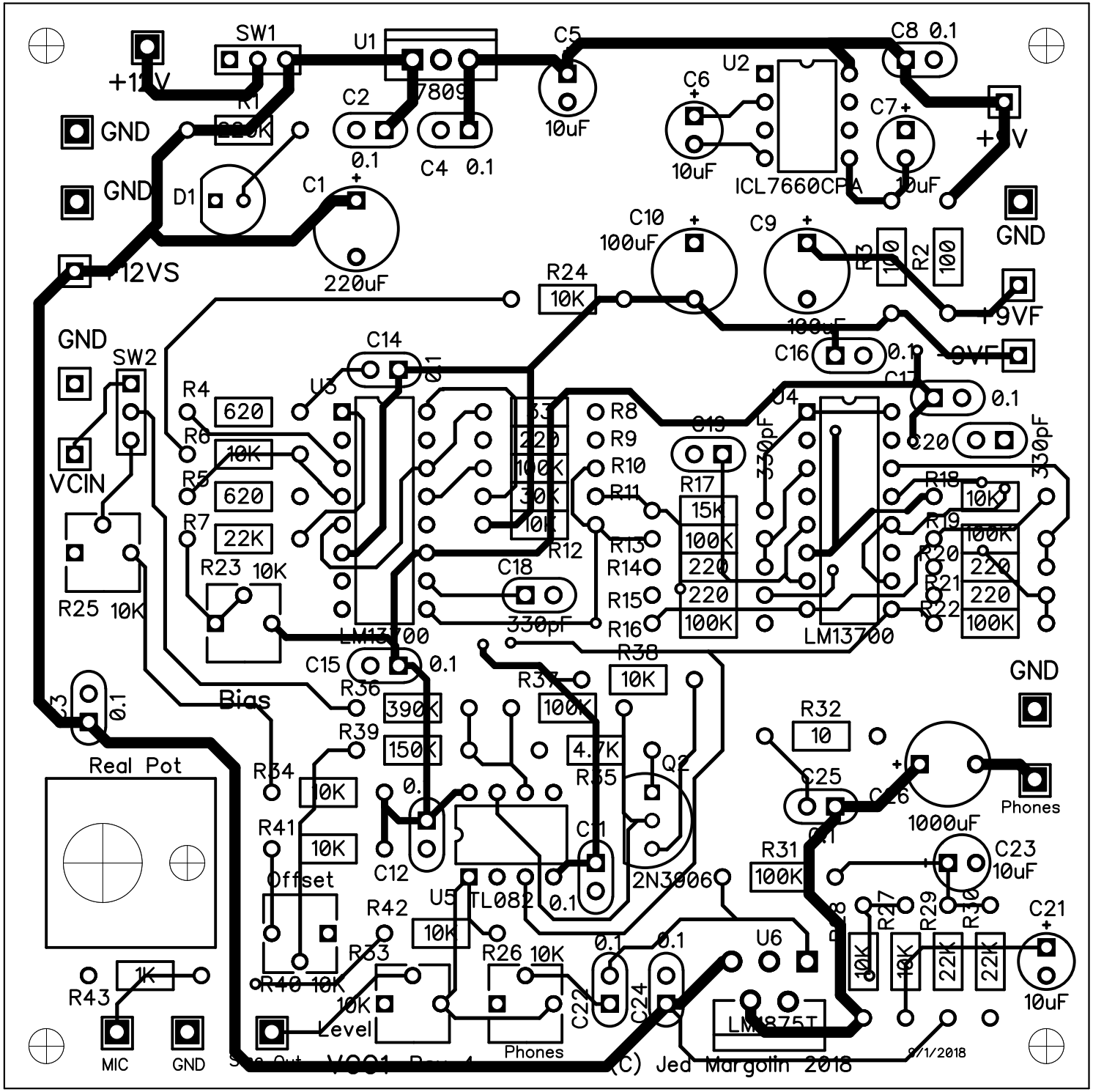

SW1
U1
7809
C5
10uF
C8 0.1
U2
ICL7660CPA
C6
10uF
C7
10uF
+12V
R1
220K
C2
0.1
C4 0.1
GND
GND
D1
C1
220uF
+12VS
C10
100uF
C9
100uF
R3
100
R2
100
GND
+9VF
-9VF
R24
10K
C16
0.1
C17
0.1
C20
330pF
GND
SW2
VCIN
R4
620
R6
10K
R5
620
R7
22K
R23
10K
R25
10K
C14
0.1
U3
LM13700
R8
R9
R10
R11
R12
R13
R14
R15
R16
C18
330pF
C19
330pF
R17
15K
100K
220
220
100K
U4
LM13700
R18
10K
R19
100K
R20
220
R21
220
R22
100K
C15
0.1
R36
390K
R39
150K
R37
100K
R38
10K
4.7K
R35
Q2
2N3906
C11
0.1
C12
0.1
Bias
Real Pot
R34
10K
R41
10K
Offset
R40
10K
R42
10K
U5
TL082
R33
10K
R26
10K
Level
Phones
C22
0.1
C24
0.1
U6
LM1875T
R32
10
C25
C26
1000uF
Phones
R31
100K
C23
10uF
R27
R29
R30
10K
10K
22K
22K
C21
10uF
R43
1K
MIC
GND
Sine Out
VCO1 Rev 4
(C) Jed Margolin 2018
9/1/2018