

Bipolar Linear FM Input  
Front panel knob does +/-5V

CV Inputs  
A440 Hz output for  
5V input

Use 0.1% matched resistors

J? MLXM5

LAW TRIMMER  
ADJUST FOR  
1V/OCTAVE

Rough Tune

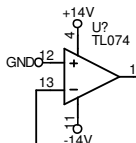
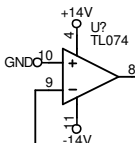
J? MLXM3

Front Panel Tune  
Approx Four Semitones Initial Tune Set

Unadjusted Operation Values

CV in (V) I<sub>L</sub> LM394 (uA) AP1 (mV)

10	1000	10000
9	500	5000
8	250	2500
7	125	1250
6	62.5	625
5	31.25	312.5
4	15.63	156.3
3	7.813	78.13
2	3.906	39.06
1	1.953	19.53
0	0.9766	9.766



TZQVCO = Through Zero Quadrature Voltage Controlled Oscillator

DESIGN	freq_shiftr03	NAME	Frequency Shifter 03
FILE	freq_shiftr03-02.sch	TITLE	TZQVCO
CREATED	02/03/03	MOD	10/06/2003
SHEET	2	OF	3
REV	1.0	SIZE	B
ICARUS 07748 766447			