



ONLY 1/2 SHOWN. FILTERS ARE IDENTICAL.  
 I ADDED RESONANCE POT INSTEAD TRIMPOT.  
 VACTROL VT CELLS COULD BE SUBSTITUTED  
 WITH LED/PHOTORES PAIRS.

ORIGINAL VALUES (FOR 1/2):  
 D1 = 1N5228      D2 = 1N457  
 U1,4,5 = uA741      U2,3 = MC1456  
 Q1,2,3,4 = 2N3958      Q5,6 = 2N3666  
 VT1,2,3,4 = VACTREC VTL-2C3  
 +/-V = +/-15V      ALL IC'S PINS 7 TO +V, PINS 4 TO -V

NOTES WITH ORIGINAL DRAWING:

MAX NOISE = 1mV

i (BOTH SECTIONS)  
 i (+15V) = 30mA - 60mA (MAX)  
 i (-15V) = 30mA

HI Q GAIN VARIES +12dB - +24 dB

TRIM RESONANCE TRIMPOT FOR NO OSCILLATION AT  
 2kHz WITH 2kHz INPUT SIGNAL AND MIN BANDWIDTH.

SELECT Q3,4 FOR IDSS >> 3mA TO ELIMINATE  
 CLIPPING.

ADD 1K RES FROM (-) OPAMP TO GND OF U1 AND U3  
 AS NECESSARY TO SUPPRESS HI FREQ OSCILLATION.

# BUCHLA #291 DUAL BANDPASS VCF

1999. Drawn by Marjan Urekar