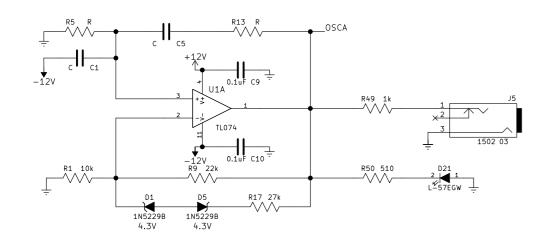
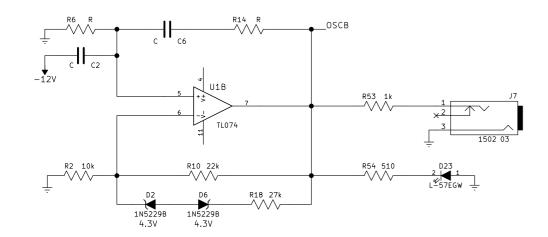
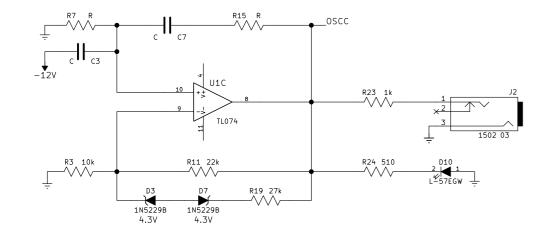
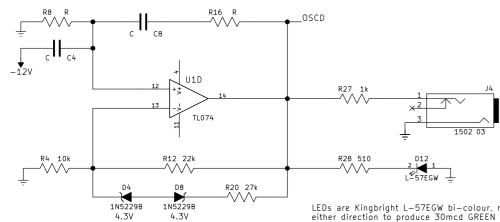
OSCILLATORS

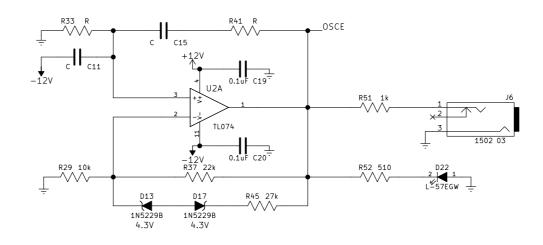


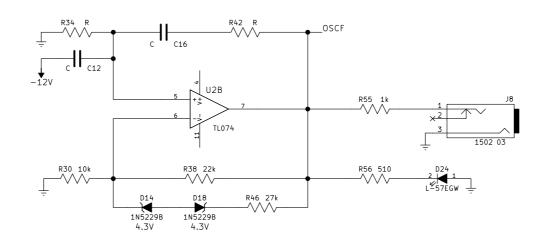


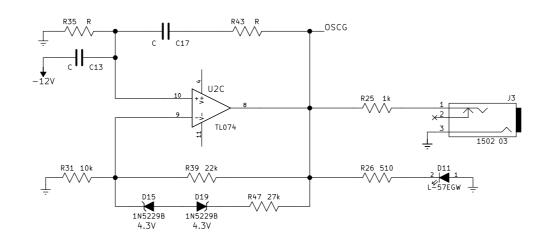


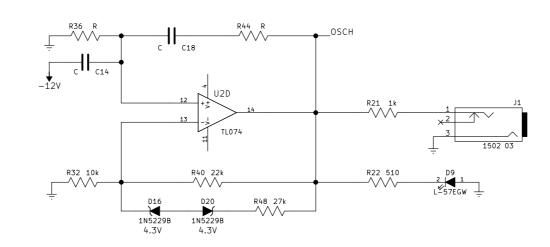


LEDs are Kingbright L-57EGW bi-colour, rated for up to 20mA in either direction to produce 30mcd GREEN light (when forward biased according to the circuit symbol) at 2.2V drop, or 14mcd RED (when reverse biased) at 2.0V drop. Current—limiting resistors are 510ohm, calculated to respect the current limit even if the op amp output goes to +-12V; at nominal output of +-5.5V, this gives 6.8mA estimated 4.8mcd RED, 6.5mA estimated 9.7mcd GREEN.



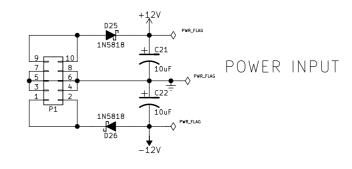


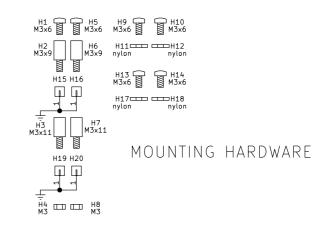




BOARD TO BOARD CONNECTORS

OSCH_	2 P6	J9 1 OSCH
÷ oscc_	3	3 OSCC -
OSCG_	4	4OSCG
OSCD_	5	5 OSCD
OSCA_	6	<u>6</u> 0SCA
OSCF_	7	7_OSCF
OSCB_	8	8OSCB
	9	9
÷ osce_	10	





Each oscillator's frequency is determined by two resistors (same value) and two capacitors (same value), shown as values "R" and "C" on the schematic. Frequency is given by the usual formula for RC frequency:

 $f = \frac{1}{2\pi RC}$