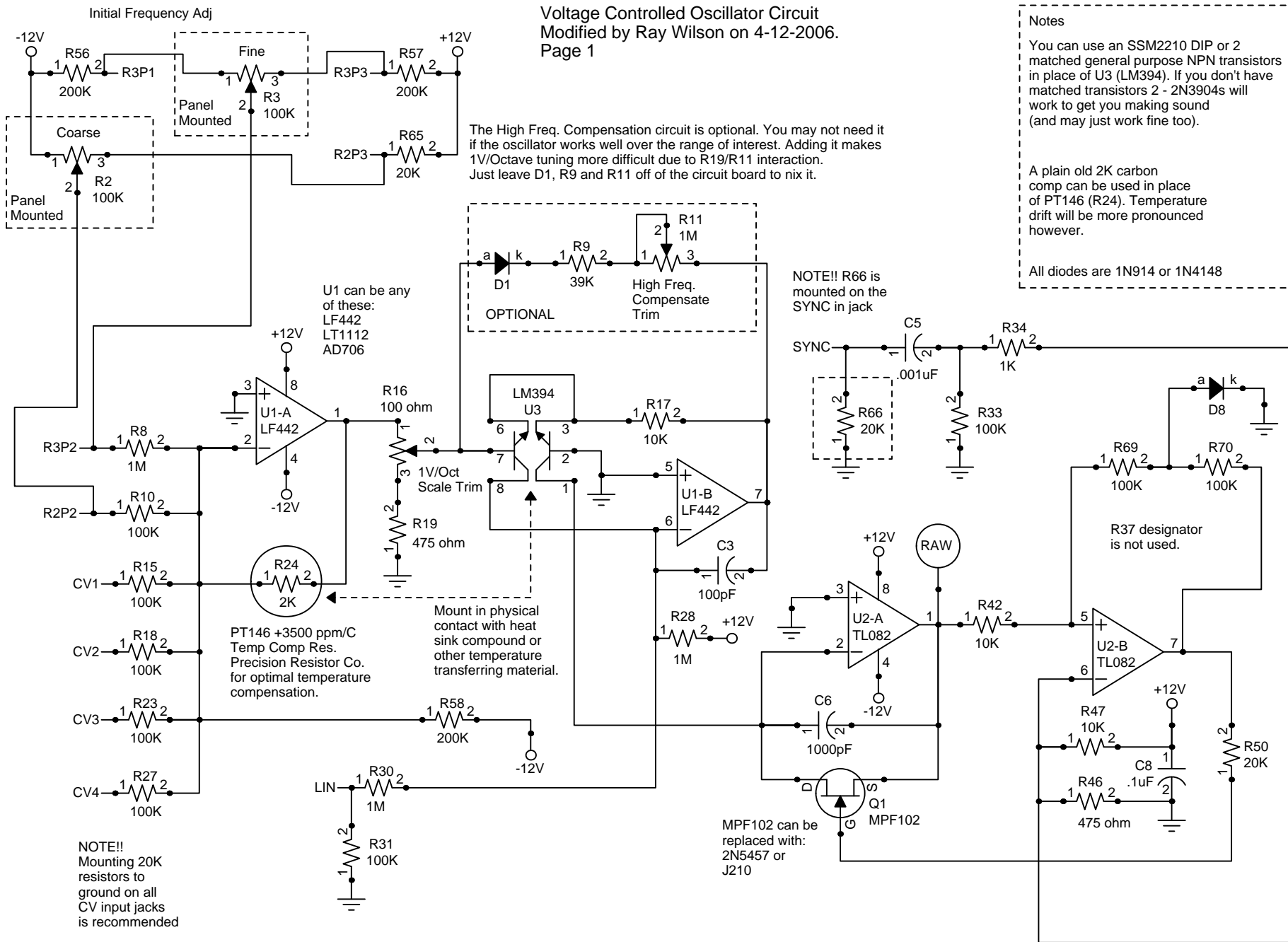


Voltage Controlled Oscillator Circuit Modified by Ray Wilson on 4-12-2006. Page 1



Notes

You can use an SSM2210 DIP or 2 matched general purpose NPN transistors in place of U3 (LM394). If you don't have matched transistors 2 - 2N3904s will work to get you making sound (and may just work fine too).

A plain old 2K carbon comp can be used in place of PT146 (R24). Temperature drift will be more pronounced however.

All diodes are 1N914 or 1N4148

The High Freq. Compensation circuit is optional. You may not need it if the oscillator works well over the range of interest. Adding it makes 1V/Octave tuning more difficult due to R19/R11 interaction. Just leave D1, R9 and R11 off of the circuit board to nix it.

NOTE!! R66 is mounted on the SYNC in jack

Mount in physical contact with heat sink compound or other temperature transferring material.

NOTE!!
Mounting 20K resistors to ground on all CV input jacks is recommended

R37 designator is not used.

MPF102 can be replaced with:
2N5457 or J210