



## Stanford Research Systems

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### **SR830 and SR810 LINE AND 2X LINE NOTCH FILTER ADJUSTMENT**

Refer to schematic 830-A2 in the manual. The pots mentioned below are easily found on the back / top edge of the analog plug-in board in the shielded section of the lock-in.

- 1) If the unit is set to 50 Hz line operation and it is to be reset for 60 Hz operation, two jumpers must be installed in the positions provided on the board at locations JP221 and JP201, behind pots P221 and P201 respectively. If changing from 60 Hz to 50 Hz, the jumpers must be removed.
- 2) To tune the notch filters for 60 Hz, set the internal source to 60 Hz and set amplitude to 1 Volt. To tune for 50 Hz, set the internal source to 50 Hz. Connect the source output to the input of the SR830. Set the display to read R and Phase.
- 3) Adjust the Dept Adj. pot P222 so the reading of R is greater than 20 mV (approximately 23 mV is a good target number).
- 4) Adjust the Freq. Adj. pot P221 so that the phase is as close to 180 degrees or 0 degrees as possible.
- 5) Adjust Depth Adj. pot P222 for minimum reading of R (should be less than 1 millivolt, and preferably close to 100 microvolts).
- 6) Set the internal source to 120 Hz (or 100 Hz if the line frequency will be 50 Hz). Repeat steps 2,3,4 using the 2x Depth Adj. pot P202 and 2x Freq. Adj. pot P201.