

Fig 1a. Conductors on the top layer of the circuit board have been eliminated in this view that shows phantom bottom traces. This illustration will be useful if you need to trace out the circuit.

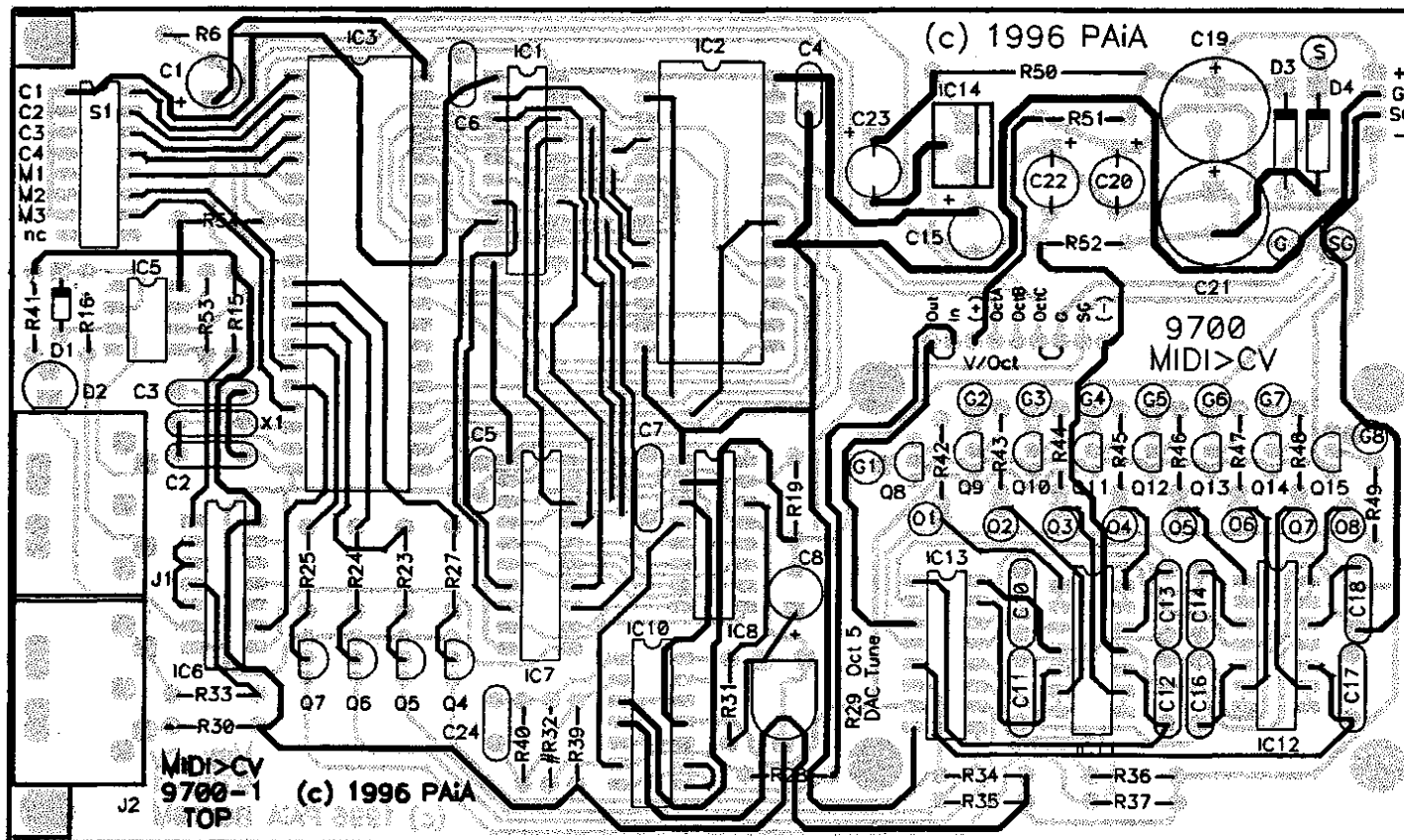


Fig 1b. Some of the traces on the top layer of the board disappear underneath ICs. Here's how these conductors, in bold, connect.

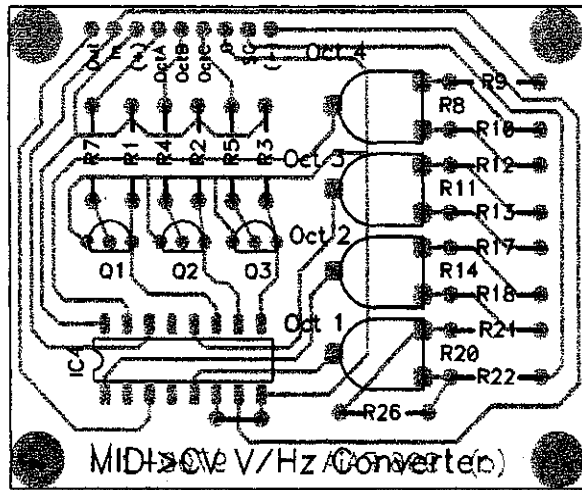


Fig 2. Detailing parts placement and phantom view of conductors of the V/Hz Adapter circuit board.

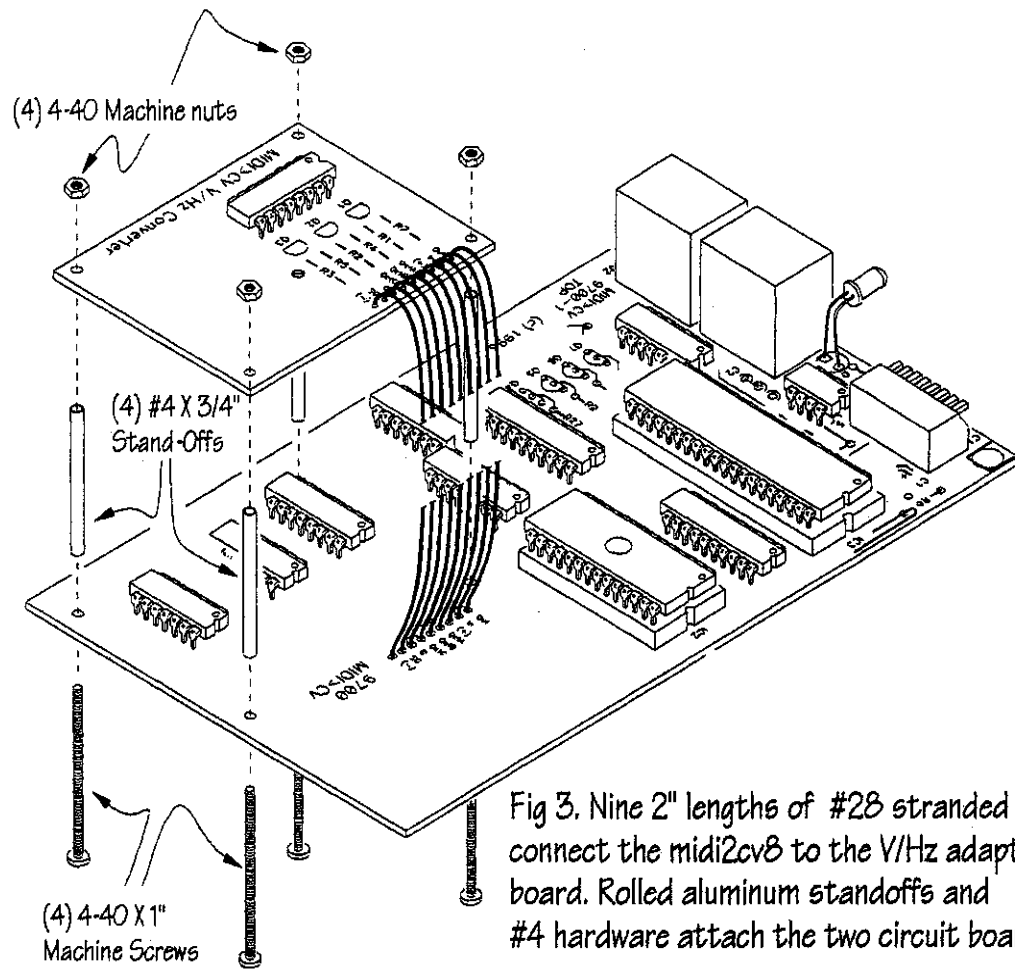


Fig 3. Nine 2" lengths of #28 stranded wire connect the midi2cv8 to the V/Hz adapter board. Rolled aluminum standoffs and #4 hardware attach the two circuit boards.

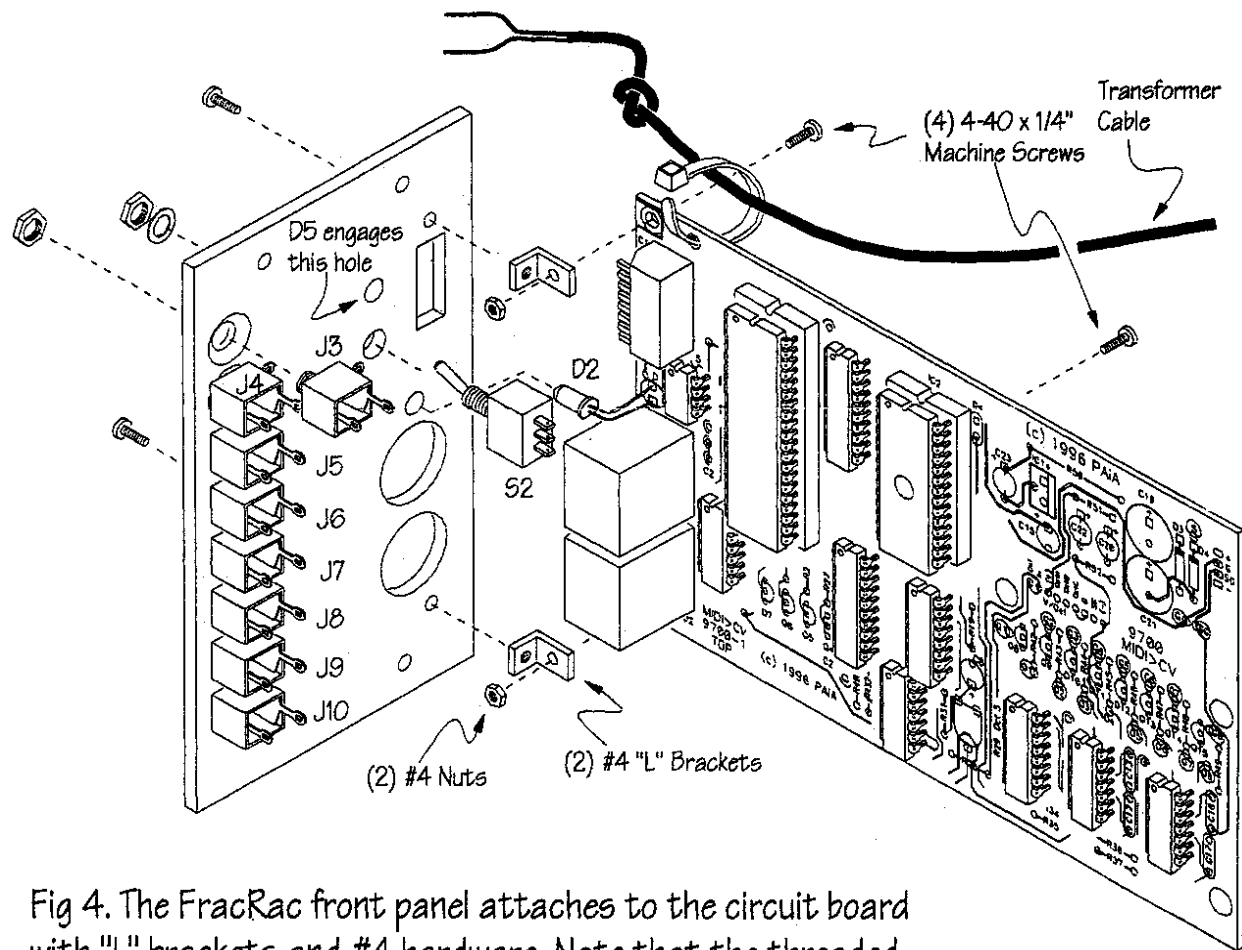


Fig 4. The FracRac front panel attaches to the circuit board with "L" brackets and #4 hardware. Note that the threaded holes are used to attach the brackets to the panel.

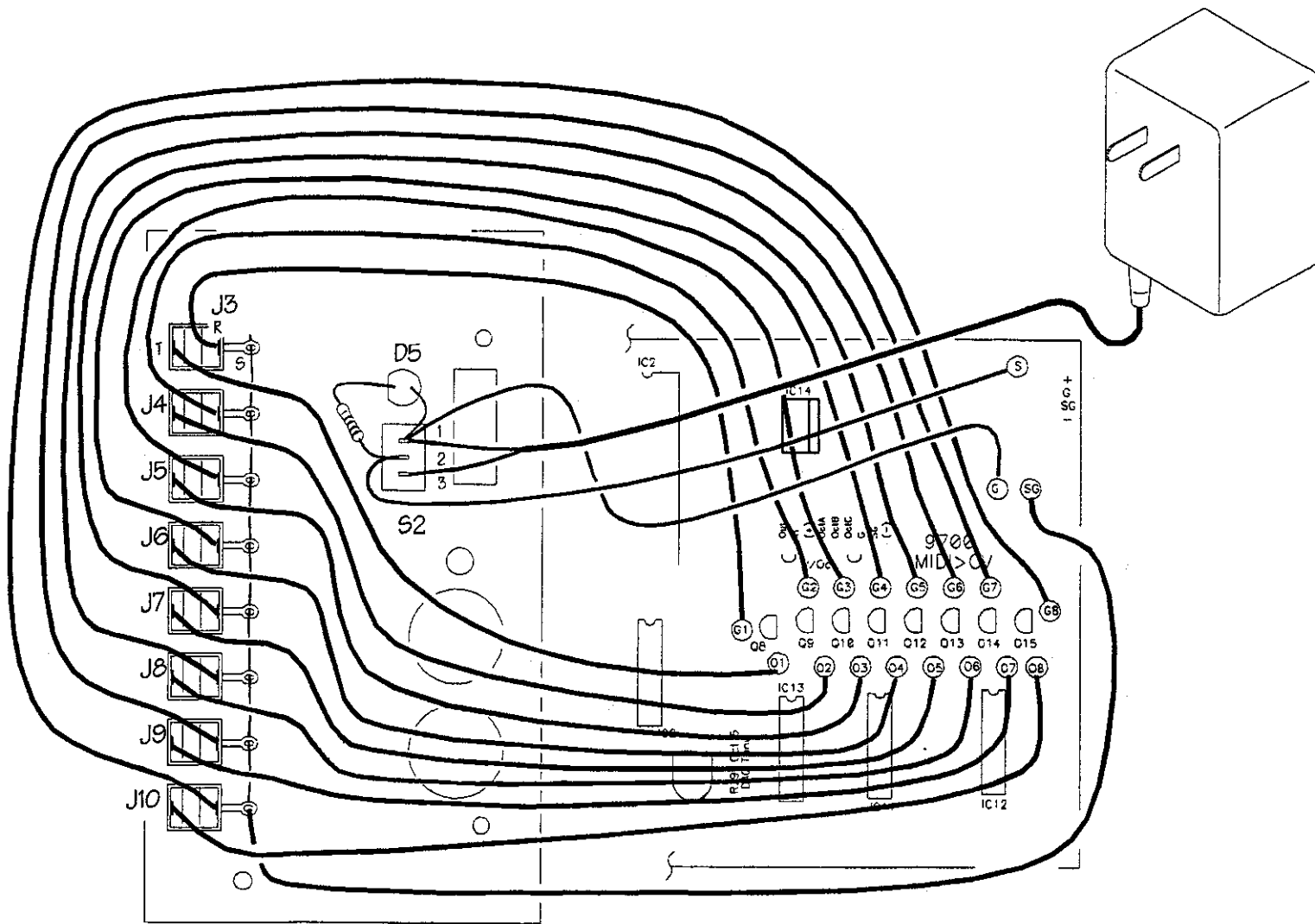


Fig 5. Stranded Insulated, Solid Insulated and Bare Wire are used to make the connections between the front panel jacks and power switch and the circuit board. The Power LED D5 and R38 mount on the lugs of the Power Switch.

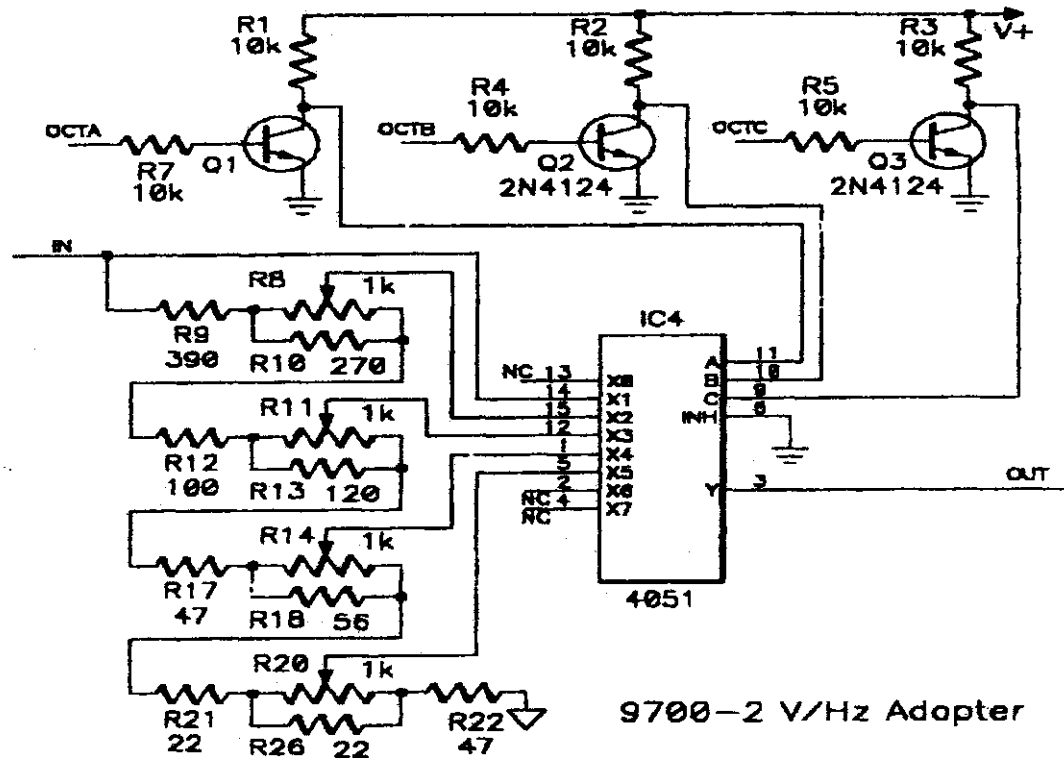


Fig 6. The V/Hz Adapter circuit is a voltage divider with taps at octave ratios of 1, 1/2, 1/4, 1/8 and 1/16

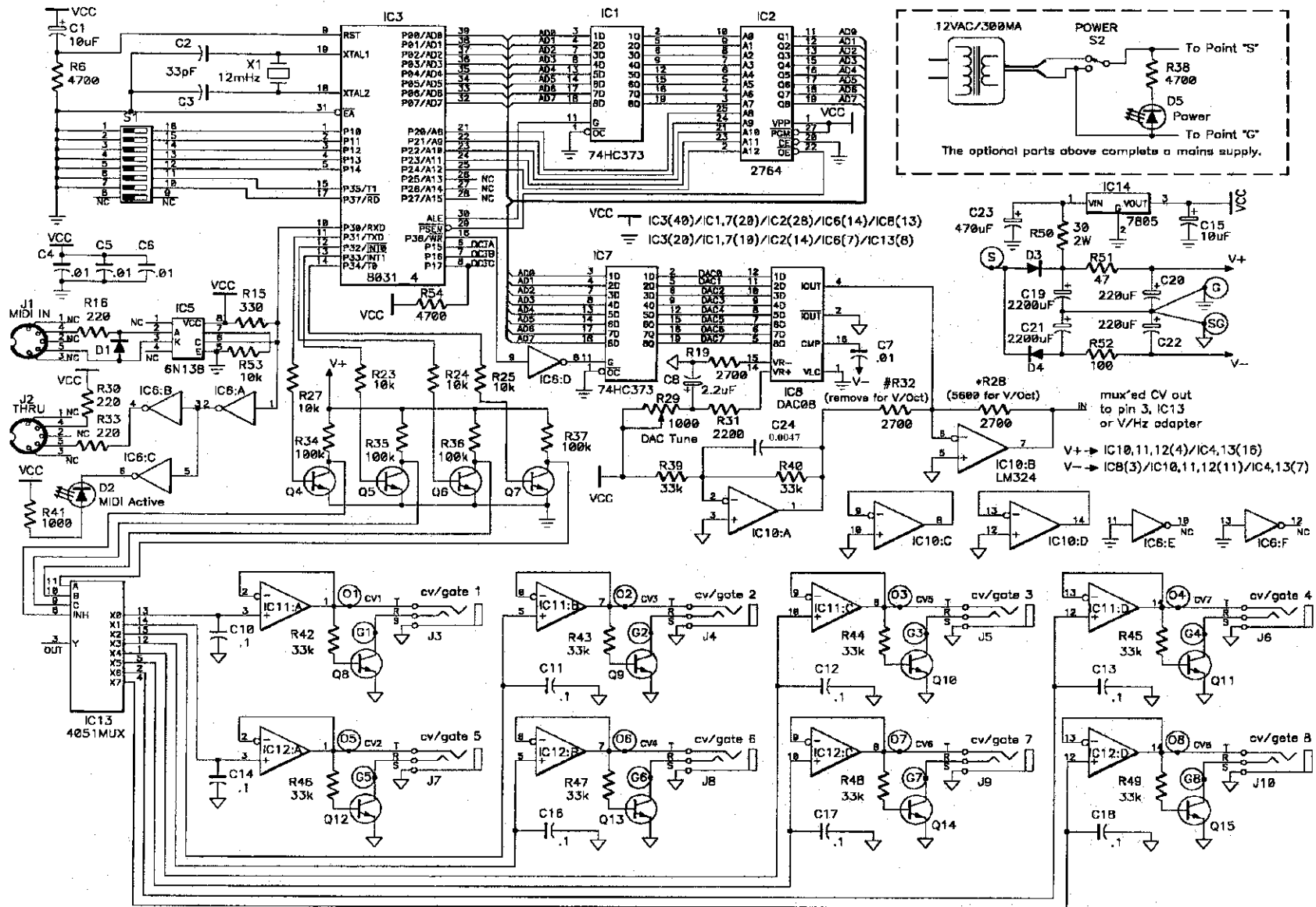


Fig 7. This schematic of the midi2cv8 is drawn assuming that the V/Hz adapter, which connects between the DAC output buffer IC10:B and the input of the MUX IC13, is being installed. Note that when a V/Hz adapter is not installed the value of *R2B changes and #R32 goes away entirely. P15-P17 of the processor are the octave select lines to the V/Hz Adapter.