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PC Board Modifications (Version 2.8) For Improved Audio Level Stability

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Introduction

Some RC210's suffer from changing audio levels when ports are linked and unlinked. This modification will correct this issue and can be accomplished in about 30 minutes.

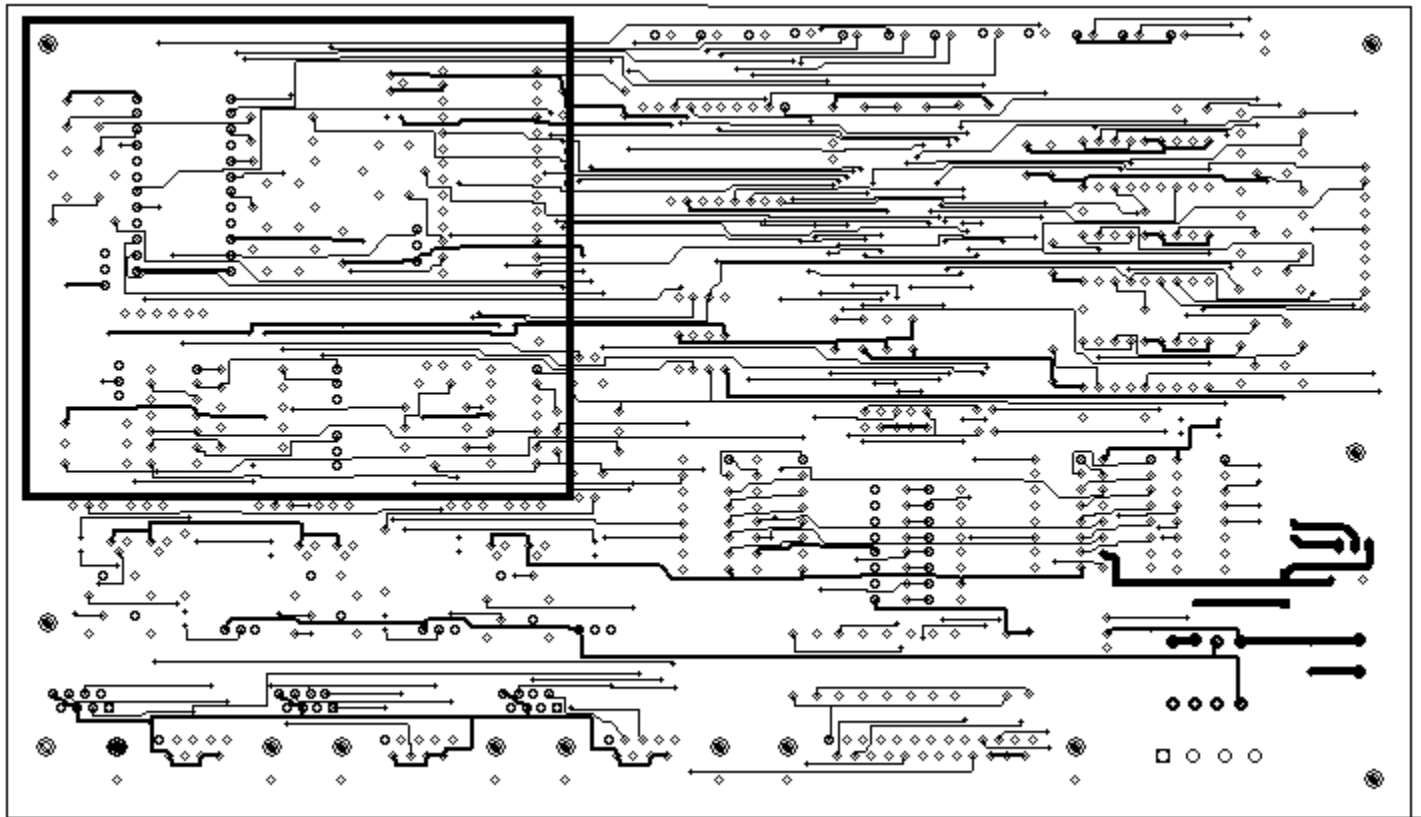
Step-By-Step Instructions

Remove the TL064 IC's (both are 14 pin) from positions U4 and U5. Also remove the MT8806 (the 24 pin IC) from position U6 . Temporarily store them in static proof foam.

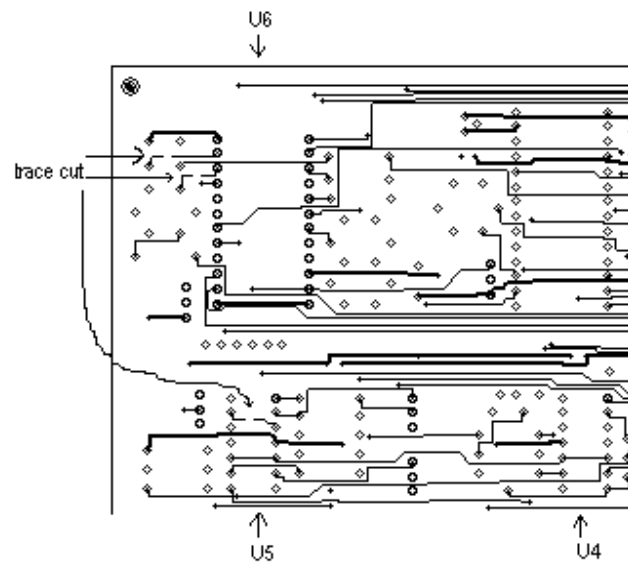
Remove resistors R24, R25,R26, R27, R31 and R37 (all 22K) and replace with wire jumpers. Resistors R39 and R40 are not removed (the other two 22K).

Using an Xacto type blade, CAREFULLY insert the blade under the IC socket at U5 between pins 13 and 14. Using great care, cut the trace that runs between these two pins (this trace is not visible but you can "feel" it). Do the same at IC socket U4 pins 13 & 14 and use great care not to cut the trace running along side the socket. Use an ohm meter to check that there is now no connection between pins 13 & 14 of both U4 and U5.

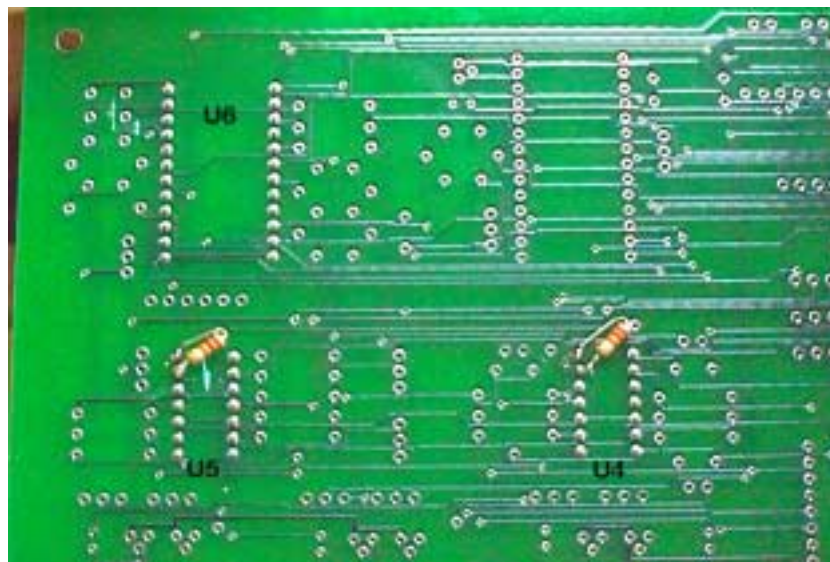
Turn the board over. The rectangular area shows where the modifications will be done:



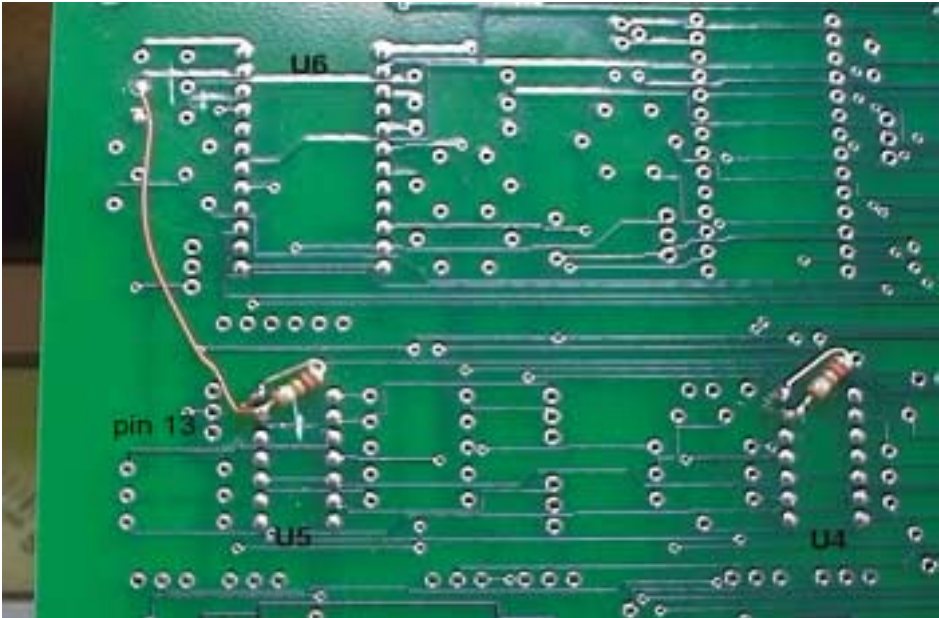
Carefully cut the traces on the board as shown:



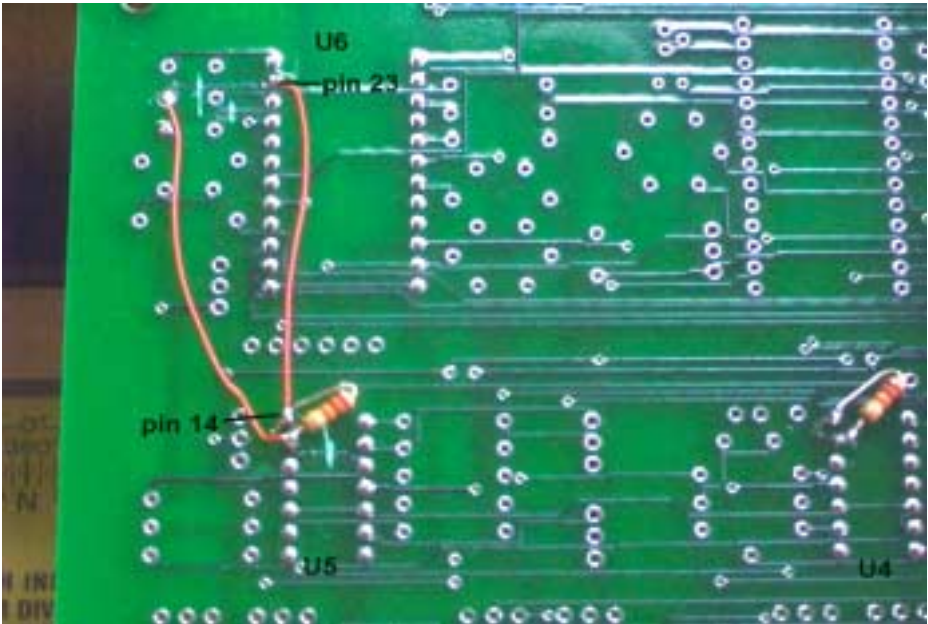
Install a 22K resistor between Pins 13 & 14 on U4 and U5 and position them as shown



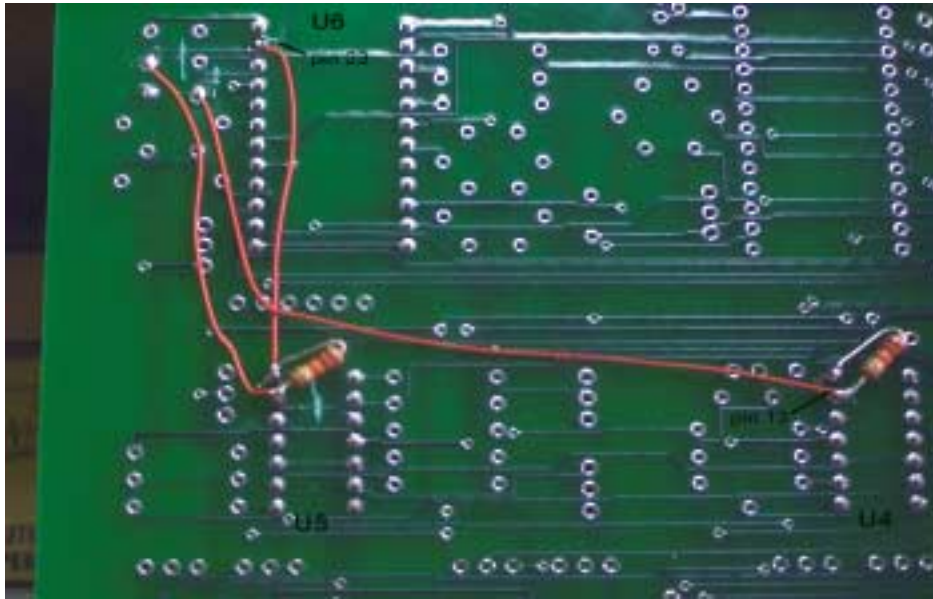
Now, connect a wire from the side of C33 that is connected to the cut trace to U5, Pin 13



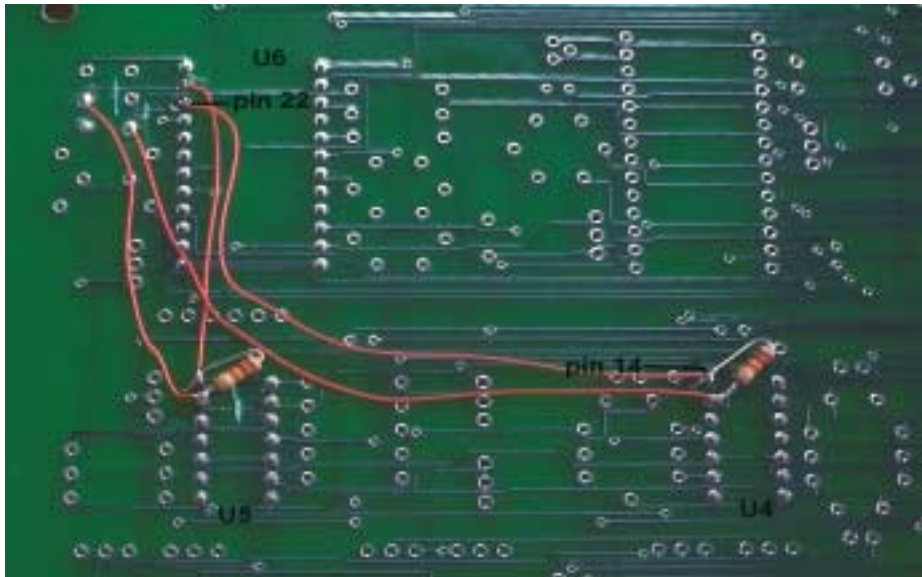
Connect a wire from U6, pin 23 to U5, pin 14



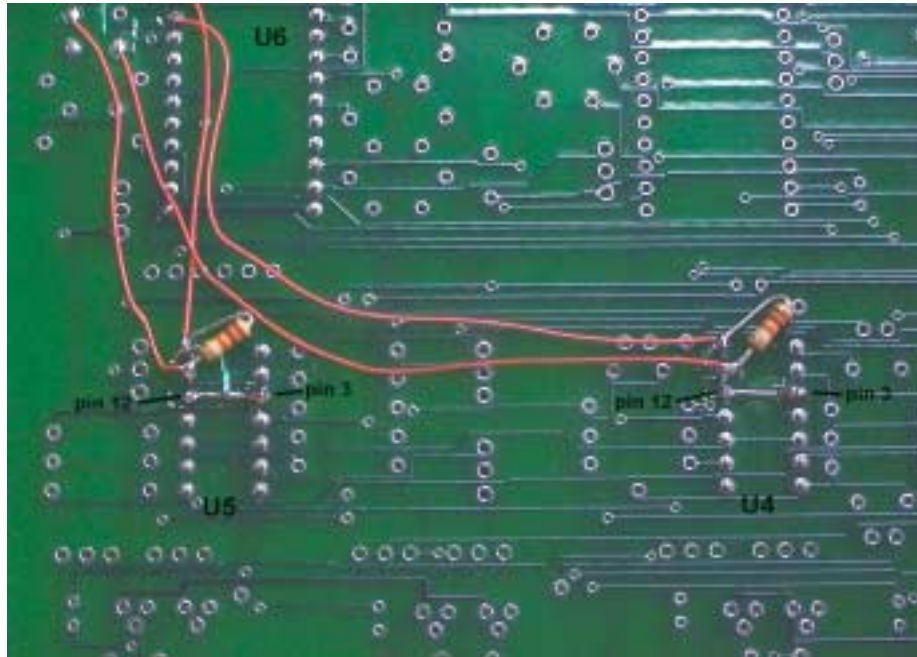
Connect a wire from the side of C34 that is connected to the cut trace to U4, Pin 13



Connect a wire from U6, pin 22 that is connected to the cut trace to U4, Pin 14



Finally, use clipped off leads from the 22K resistors and jumper U5, pin 12 to pin 3 and U4, pin 12 to pin 3



Double check your work, turn the board over and reinstall U4, U5 and U6. You may now power the controller and reset the various audio levels.