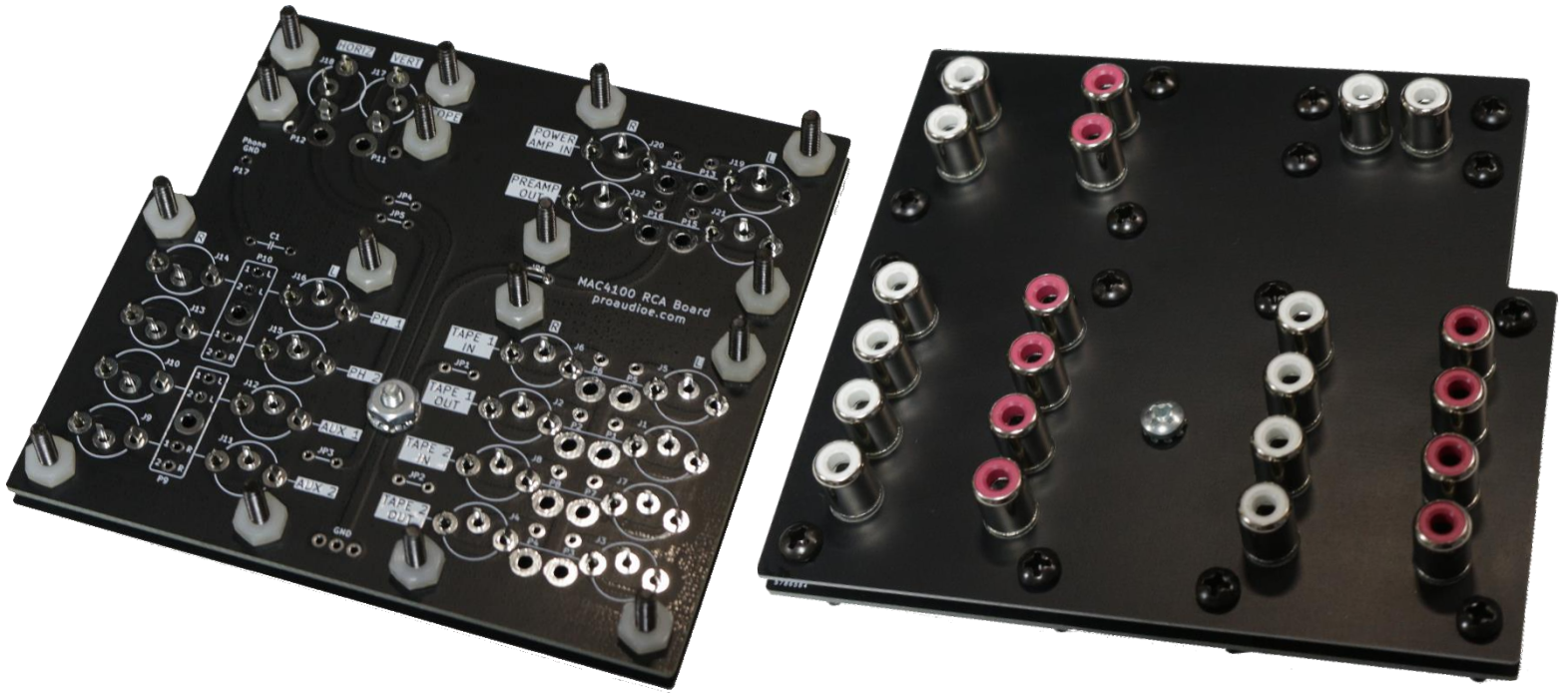


McIntosh MAC4100 RCA Jack Replacement Kit

www.proaudioe.com



Thank you for your order! This kit is designed to replace the original riveted RCA jacks used on the back of McIntosh MAC4100 receivers. A custom mounting board fits 22 new RCA jacks, provides plated holes for soldering the audio shielded cables, and mounts to the back using the holes that are left over after the original rivets are removed. A matte black cover plate is also included to replace the original black shrouds surrounding the original RCA jacks.

The star ground arrangement of the original wiring scheme is maintained by routing the shields of each group of RCA jacks to a central grounding screw via configurable wire jumpers. A footprint is also provided for the capacitor tying the phono shields to chassis ground (included in the kit).

If you have any questions, concerns, or feedback, please feel free to send us a message:

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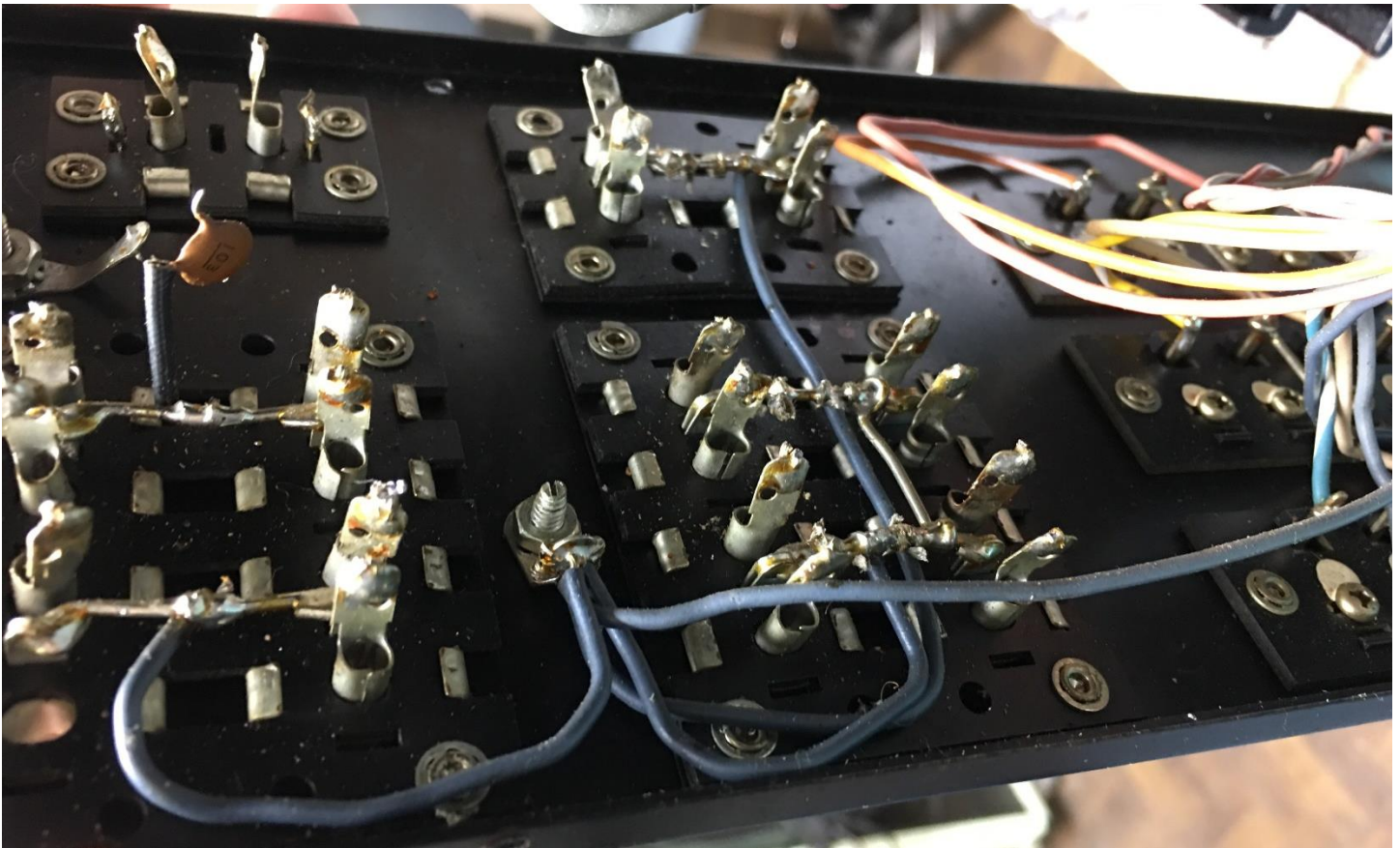
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Installation

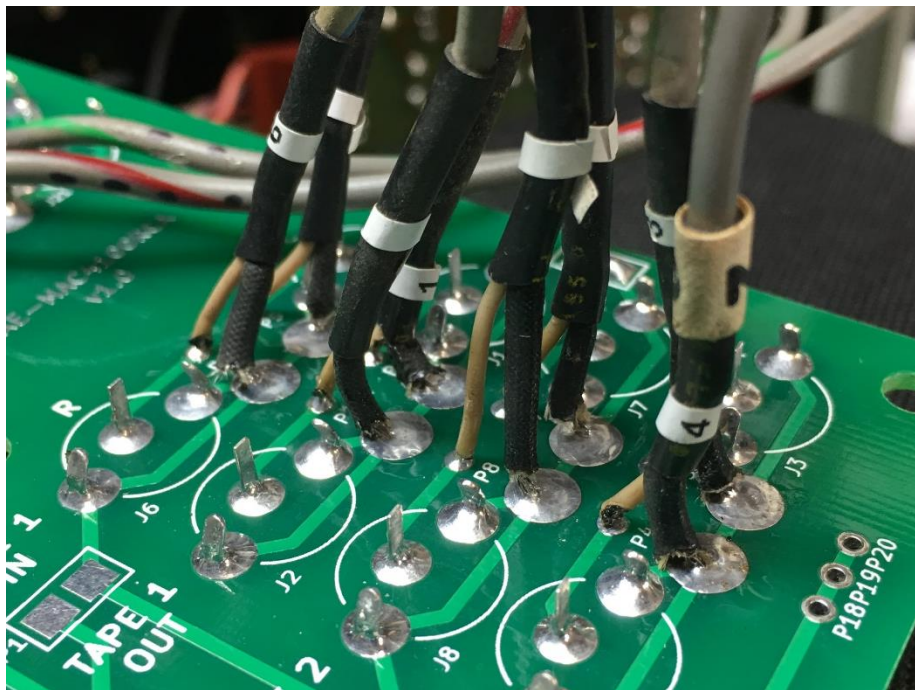
Installing this kit is a fairly complex process that will involve removing the original RCA jacks, drilling out all original mounting rivets, soldering the new RCA jacks to the mounting board, stripping and soldering all shielded cables to the mounting board, and mounting everything in place. We recommend testing your unit first to ensure that all inputs and outputs are working as expected, and then taking plenty of pictures throughout the installation process.

1. Remove the MAC4100 back panel so that the RCA jack wiring is easily accessible. Removing one of the power amplifier heat sink assemblies may help with this. When handling the back panel, be careful not to damage the AM bar antenna and any other wiring
2. Take pictures of the inside of the back panel from several different angles to serve as a reference when wiring up the new RCA board
3. Desolder each shielded cable from the original RCA jacks. Try to leave as much wire length as possible
4. Drill out all 16 original rivets holding the original RCA jacks in place
5. Make note of which jacks connect to the central star ground, as well as any additional wires from other parts of the unit that tie to it. Then, remove the star ground screw, all RCA jacks, and the ceramic capacitor that spans between the phono ground post and the phono input shields
6. Assemble the RCA jack mounting board:
 - a. Referring to the included schematic, add or remove wire jumpers from the mounting board to make it match the grounding scheme of your unit. Most units should not require any jumper changes. A picture is included showing the grounding scheme of a MAC4100 we serviced
 - b. Place all 17 new RCA jacks on the side of the mounting board with less text on it. Put the black cover plate over them to keep them aligned, then solder each jack in place
7. Carefully solder each shielded cable to its designated set of plated holes:
 - a. For the single coaxial cables, the shields solder to the larger holes and the center conductors solder to the smaller holes of the points labeled **P** that are not enclosed in rectangles
 - b. For the multi conductor shielded cables, the shields solder to the large central holes and the signal lines solder to the smaller holes of the points labeled **P** that are enclosed in rectangles. Each smaller hole is labeled, e.g. **1L** in the phono group indicates the *Phono 1 Left* input
 - c. **Triple check that you are soldering each cable in the appropriate spot, referring to the pictures you took of the original wiring scheme**
 - d. Solder a section of wire removed from the unit to the hole on the mounting board labeled **P17**. This will be connected to the phono ground post at the end
 - e. If your unit had additional wires from other parts of the unit attached to the star ground, these can be soldered to the three additional ground points at the bottom of the mounting board

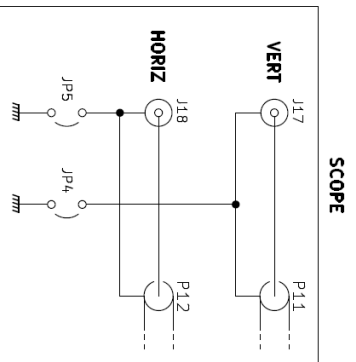
8. Insert 17 #6-32 x 1/2" machine screws in the holes where the rivets were. Use the silver screw with the captive tooth-lock washer in the central hole, as shown in the images on the first page. This is the star ground for the input and output RCA jacks
9. Place the included black cover plate over the screws from the inside of the back panel. Then, place the included nylon spacers over each screw
10. Place the assembled RCA mounting board over the screws and secure it in place with the included hex nuts. Use the nylon nuts on all black screws, and the silver nut with captive tooth-lock washer on the silver star ground screw
11. Solder the wire attached to **P17** to the phono ground post
12. Double check your work before powering on the unit. Note that RCA jumpers must be installed between the **Preamp Out** and **Power Amp In** jacks in order for signal to reach the power amp stage



This picture shows the original grounding scheme of an MAC4100 we serviced. All AUX, TAPE, PREAMP OUT, and POWER AMP IN jacks were tied to the star ground. This corresponds to installing jumpers JP1, JP2, JP3, and JP6. There was also an additional wire from another part of the unit tied to this ground

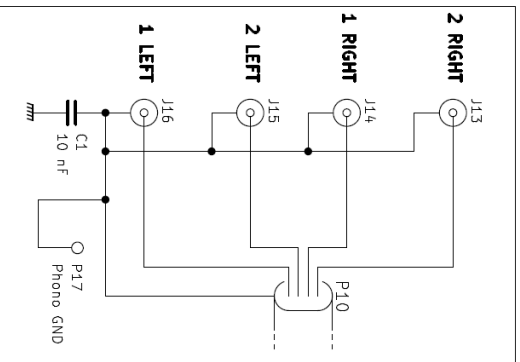


This picture (from an earlier revision of the mounting board) shows how the coaxial cables should be soldered to the board. Each cable corresponds to a set of plated holes labeled **P**, where the larger hole is the shield connection and the smaller hole is the center conductor connection. The multi-conductor shielded cables are attached in a similar manner

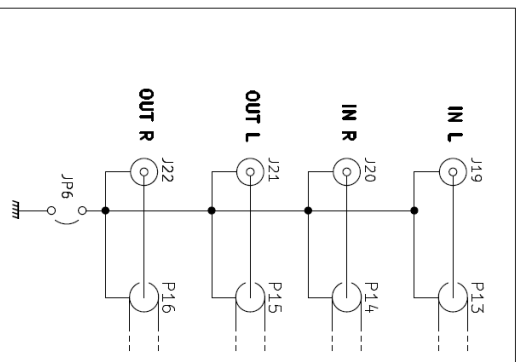


Additional
GND Tie Points

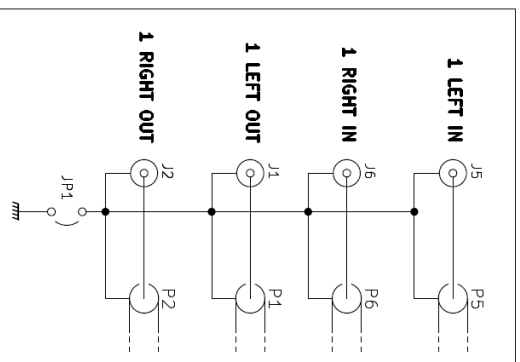
PHONO



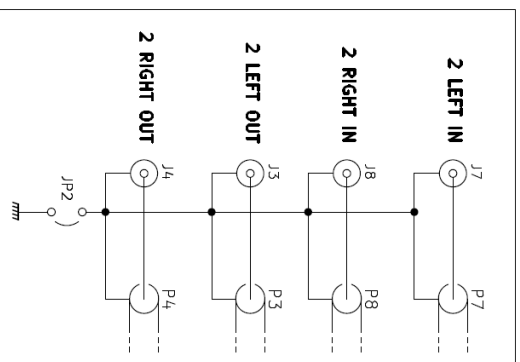
PREAMP OUT
POWER AMP IN



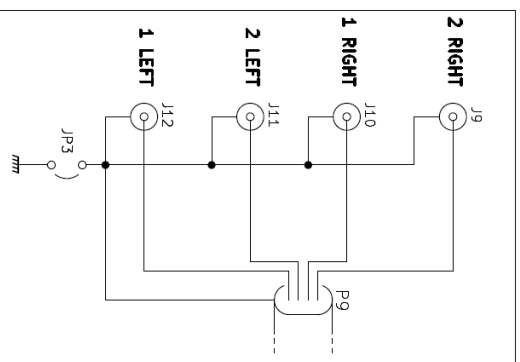
TAPE 1



TAPE 2



AUX IN



MAC4100 RCA Board

Notes:
 = Chassis star ground
 Typical Jumper configuration for MAC4100: Install JP1, JP2, JP3, JP6. Leave out JP4 and JP5 (Pre/Pwr In & Out, Tape 1/2 In & Out, and Aux jacks tied to star ground)

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