Installation notes ROS-2000 Replacement Marshall JCM 20000 Board

Note : These instructions are intended for folks who have good experience working on valve/ tube based equipment. JCM2000 amps have high voltages and the capacitors can retain high voltage long after the amp is dis-connected from the mains power.
You should discharge all the power supply electrolyric capacitors before doing anything in the amp.

If you do not have experience working on amps, **DO NOT PROCEED** and find an experienced amp tech to do the installation.

We cannot support folks with no experience trying to install the board themselves. No soldering is required for this installation. A multi-meter is required to set up the bias on the EL34 output valves.

In these notes, the original Marshall JCM-2000 board will be referred to as the *Marshall board* and your new board will be referred to as the *ROS-2000 board*. The bent metal plate that Marshall used to mount the valve board will be referred to as the *board mounting panel.*

Retain all Marshall screws for reuse

1. Carefully remove the amp from cabinet
2. Remove all the valves
3. Unscrew the *board mounting panel* with 6 screws.
4. Disconnect all white 'CON' connectors at the *Marshall board* end. Leave the connections connected to the front panel and rear panel boards. As you disconnect each one, use a sharp permanent pen such as a sharpie to label all connections with their 'CON' number.
5. Disconnect all 'W' spade terminals and label with 'W' number.
6. Unscrew the Marshall board (6 screws). Do not unscrew the bias board.
7. Remove the 6 PCB spacers from the *Marshall board*.
8. Remove the protective tape covering the 9 pin preamp sockets from the *ROS-2000 board*.
9. Inspect the *ROS-2000 board*.
10. Fit 6 PCB spacers from the original unit to the *ROS-2000 board*
11. Align the Octal sockets with the *board mounting panel.* Marshall designed these as a tight fit, if necessary, carefully use a blunt tool in the central hole to manipulate the sockets.
12. Secure Octal sockets using the original screws (4x for DSL50, 8x for 100W variants). Do not overtighten.
13. Use a small flat blade screwdriver to align the PCB spacers with the holes in the board mounting panel.
14. Fit the PCB mounting screws from the board side. Note that as with the original Marshall board, the spacers and the octal sockets are not the same height, so there

is a slight bend to the board. This is an issue with the original design, not the ROS-2000 board.

15. Fit CON1 bias connector.
16. Fit spade terminals W1, W3, W4
17. Fit the board mounting panel using the 6 original screws.
18. Fit the remaining ‘CON’ connectors taking care to match with the original connectors
19. Fit the remaining ‘W’ connectors
20. Double and triple check that all connections are correct
21. Fit a new set of EL34 valves.
22. Fit preamp valves
23. Reassemble the amp
24. Bias the EL34s. Recommended bias reading is 60mV for 100W models and 30mV for 50W models.