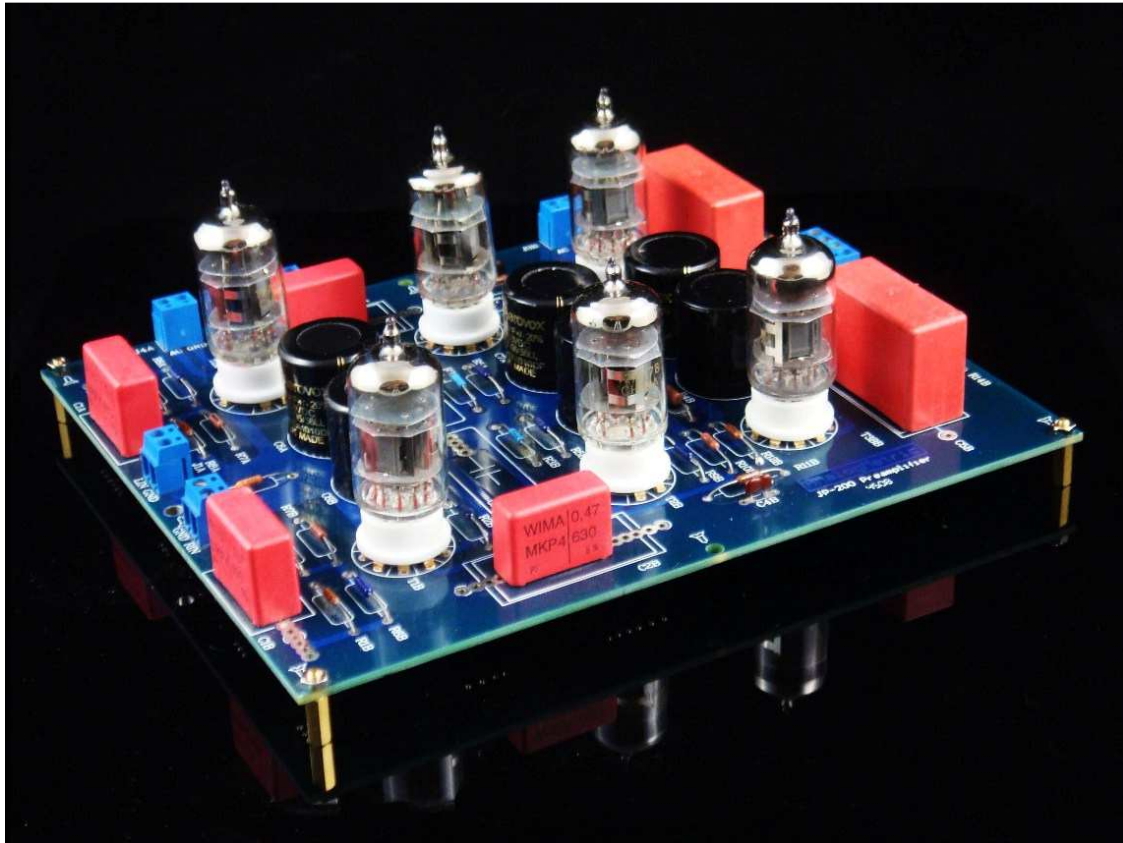


JP200 Vacuum Tube Preamplifier User Manual

Analog Metric



INTRODUCTION

The Circuit design is modified based on the classical Jadis preamplifier and the values are optimized. It produces sweet and detail sound. Fast metalized polypropylene capacitors in audio grade are used for AC signal coupling. To enhance the performance of the power supply unit, the lengths of power routing path and signal paths are minimized so as to minimize the total path impedances. The placements of the components are in symmetric between two channels. This preamplifier can be power by either tube voltage regulator or silicon voltage regulator.

FEATURES

- Six vacuum tubes 12AX7
- Two single-ended inputs and two single-end outputs for stereo
- Voltage gain: 20dB
- Dynamic range: output voltage max. 20Vrms
- S/N ration: >90dB
- Power requirements: one 260-400V DC (100mA) and one two 12.6V AC(1A)
- PCB dimension: 180mm (W) x 210mm (L)

- PCB thickness: 2.5mm, double layer, 2oz copper.

PRECAUTIONS

- Do not use finger or any body parts to touch the components or board! It is hazardous, since the high voltage capacitors may not be fully discharged after switched off the power supply.
- Turn off the power supply if the transformer is getting hot or some smoke is observed or strange buzz sound is heard.
- Fuse should be used either in power transformer or main socket to avoid accidentally large current drawing.
- Always contact technicians or experts to seek help.

PROCEDURES

1. Solder all the components according to the schematic, part list, and photo.
2. Unplug the vacuum tubes. Apply 260-400V DC to P1, 12.6 V DC to HA and HB. Try the lower voltage first before using higher voltage to ensure all components are correctly placed
3. Measure the voltage at P1, HA and HB without applying input signal. The voltage of P1 connector should be 260-400VAC for high voltage supply and HA and HB connector should be 12.6V AC for filament power supplies.
4. If the AC voltages at the P1, HA, and HB are corrected, then plug the tubes in the sockets and turn on the power supply.
5. Choose an optimum voltage (280V DC) for P1 to attain best sound performance.

If you have any problem in assembly, please contact us by email to tech@analogmetric.com