Musical Paradise MP-701 MK4 Tube Preamplifier User Manual

1. Input Terminals

Input terminals are located on the upper rear panel, including 2 sets of RCA inputs (L1-R1, L2-R2) and 1 set of XLR input (L3-R3). Input impedance: 30KΩ.

2. Output Terminals

Output terminals are arranged on the lower rear panel, with 2 sets of RCA outputs and 1 set of XLR output. For optimal sound quality, the total input impedance of connected post-stage equipment should be ≥10KΩ. Example: Two devices with 100KΩ input impedance (power amplifier + active subwoofer) connected in parallel deliver a total impedance of 50KΩ, which meets the minimum impedance requirement.

3. Tube Replacement Guide

3.1 Rectifier Tubes & S2 Select Switch

Compatible Rectifier Tube Models

6Z5P, 6X5, 5T4, 274B, 5AR4, GZ34, GZ33, 5R4, 5U4G

Switch Position Rules

1. When using 6Z5P / 6X5: Toggle S2 to the "6X5" position
2. When using 5T4, 274B, 5AR4, GZ34, GZ33, 5R4, 5U4G: Toggle S2 to the "5AR4" position

3.2 Signal Tubes & S1 Filament Voltage Switch

Compatible Signal Tube Models

6922, 6H30Pi, 6DJ8, E88CC, 6N11, 6N1P, 6H1n, 6CG7, 6N23P, E80CC, 12AU7, 12BH7, 12SN7, 6SN7

Switch Position Rules

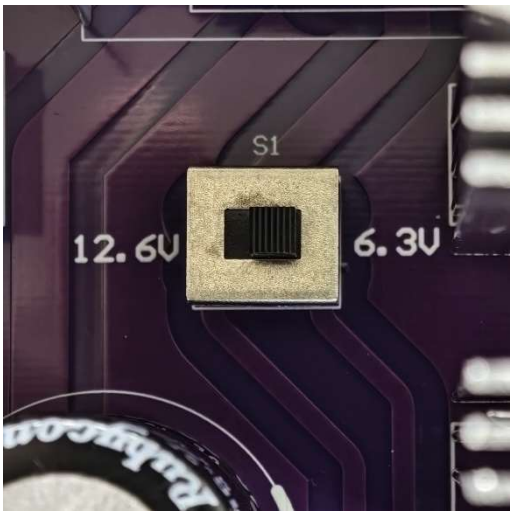
1. When using E80CC, 12AU7, 12BH7, 12SN7: Toggle S1 to the "12.6V" position
2. When using 6922, 6H30Pi, 6DJ8, E88CC, 6N11, 6N1P, 6H1n, 6CG7, 6N23P, 6SN7: Toggle S1 to the "6.3V" position

Special Installation Note

If using 6SN7 / 12SN7 tubes, you need 3 pieces of 6SN7-to-6922 adapters and remove the dust mesh on the top cover.

Mandatory Filament Voltage Rules

1. Tubes with different filament voltages cannot be mixed. All 3 signal tubes must share the same filament voltage rating.
2. Different tube models with identical filament voltage can be mixed. Example: V2 & V3 fitted with E88CC, V4 fitted with 6H1n.



3.3 Tube Gain & Sound Character Reference

1. Output gain from low to high: 6H30Pi < 12AU7 / 12BH7 / E80CC < 6SN7 / 12SN7 < 6922 / 6DJ8 / E88CC / 6N1P / 6N11
2. Sound Character Classification

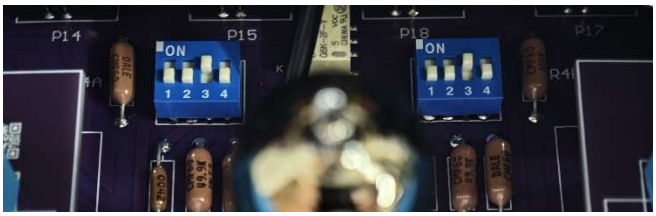
- Warm & mellow type: 12AU7, 12BH7, 12SN7, 6SN7, 6H1n — smooth sound with slower transient response
- Clear & high-resolution type: 6922, 6DJ8, E88CC, 6N11, 6H30Pi — crisp highs, fast transients, rich air sense

4. Output Gain DIP Switch Setting

Power amplifiers and active speakers from different brands have varying input sensitivity. Proper gain adjustment unlocks the unit's full sound performance. Independent DIP gain switches are provided for each channel.

1. Gain level (highest to lowest): Level 1 > Level 2 > Level 3 > Level 4. Switch ON = activated; Level 4 delivers minimum gain.
2. Operation Standard: Only turn ONE switch to ON, keep the other three switched OFF.
3. Tuning Guide by Listening Test

- Thin, dull sound: Increase gain
- Harsh, aggressive sound: Reduce gain

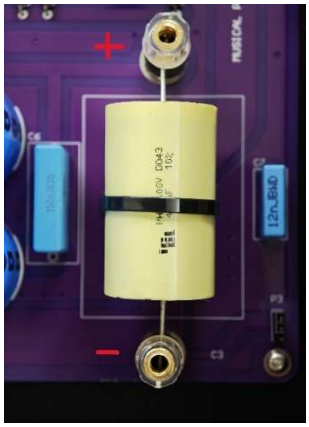


5. Capacitor Tuning Options

5.1 Filter Bypass Capacitor

This capacitor can be removed and replaced to fine-tune tonal performance.

1. Specification Requirement: 1μF ~ 10μF, rated voltage ≥350V; non-polar capacitors are recommended.
2. Polarity Reminder: If axial polarized electrolytic capacitors are used, follow the "+ / -" polarity marks as shown in the photo.
3. Safety Operation Rules ① Residual high voltage remains in capacitors after power-off. Do not touch both pins of a capacitor at the same time. ② Wear medical rubber gloves during replacement for safety. ③ Store removed old capacitors in a sealed plastic bag.



5.2 Output Coupling Capacitor

Replacing this capacitor creates a much more obvious tonal change compared with the filter bypass capacitor. The factory default component is RIFA PHE450 1000V 2.2μF audiophile-grade capacitor.

1. Capacity Selection Standard (rated voltage ≥350V for all options)

- Post-stage input impedance >30KΩ: Minimum 1μF acceptable
- Post-stage input impedance ≤30KΩ: 2.2μF recommended
- Ultra-low impedance post-stage (3KΩ ~ 5KΩ): 6.8μF ~ 8.2μF suggested

2. Safety Operation Rules: Identical to the filter bypass capacitor requirements above.

6. High Voltage Warning

1. High voltage exists inside the unit. Unplug the power cord before replacing any tubes or capacitors.
2. Do not touch internal circuit boards, component pins or uninsulated terminal lugs with bare hands.
3. Capacitors hold residual high voltage after power-off. Never touch both poles of a capacitor simultaneously.
4. Wear medical rubber gloves when servicing or replacing internal components.
5. Keep removed old capacitors stored inside a sealed plastic bag.