

Musical Paradise MP-701 Preamp User Manual

Input

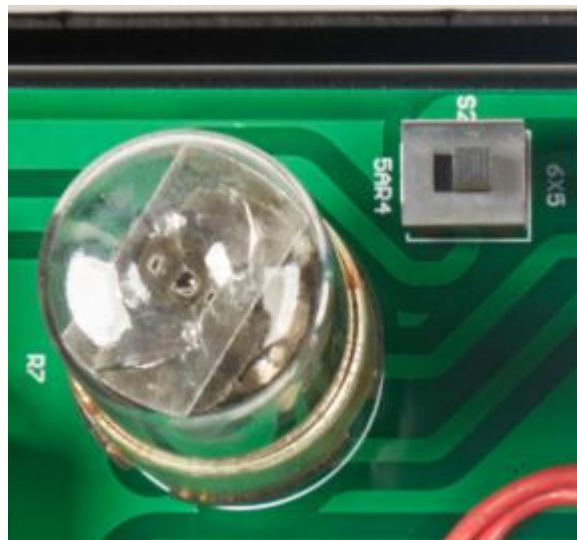
MP-701 MK2 provides three RCA inputs (IN1, IN2 and IN3) and one XLR input. XLR input shares with IN3 RCA input, so the user needs to choose either XLR or RCA cable connected to IN3. Cannot connect both at the same time to IN3. The input impedance of MP-701 MK2 is 100Kohm which is an easy load for all kinds of source devices.

Output

MP-701 MK2 provides two RCA outputs and one XLR output. They are connected in parallel and shares the same audio signal output from the tubes and coupling capacitor. For optimal result, the total impedance of the connected devices must be higher than 10Kohm. For example, the input impedance of a power amp is 100Kohm, and the impedance of an active sub-woofer is 100Kohm. The total impedance drops down to 50Kohm.

Tube Replacement Guide

MP-701 MK2 supports 6Z5P, 6X5, 5T4, 274B, 5AR4, GZ34, GZ33, 5R4, 5U4G rectifier tubes.



When using 6Z5P and 6X5 rectifier tubes, S2 switch must be set to 6X5 position. When using 5T4, 274B, 5AR4, GZ34, GZ33, 5R4, 5U4G rectifier tubes, S2 switch must be set to 5AR4 position.

MP-701 MK2 supports 6922, 6H30Pi, 6DJ8, E88CC, 6N11, 6N1P, 6N23P, E80CC, 12AU7, 12BH7, 12SN7 and 6SN7 preamp tubes.



When using E80CC, 12AU7, 12BH7 and 12SN7, S1 switch must be set to 12.6V position. When using 6922, 6H30Pi, 6DJ8, E88CC, 6N11, 6N1P, 6N23P tubes, S1 switch must be set to 6.3V position. When using 6SN7 and 12SN7 tubes, three 6SN7 to 6DJ8(6922) adapters are required. Please note 12.6V and 6.3V filament tubes cannot be mixed, so all three signal tubes must be the same filament voltage type. However, different tubes with same filament voltage can be mixed use. For example, V2 and V3 use 6922, V4 uses 6H30Pi.

Different preamp tubes provide a bit different output gain: 12AU7, 12BH7, E80CC < 6H30Pi < 6SN7, 12SN7 < 6922, 6DJ8, E88CC.

In general, 12AU7, 12BH7, 12SN7, 6SN7 are a bit slower, thicker, and softer sounding. 6922, 6DJ8, E88CC, 6N11, 6H30Pi are a bit clearer, faster, more liquid and airy sounding.

Proper Gain Settings

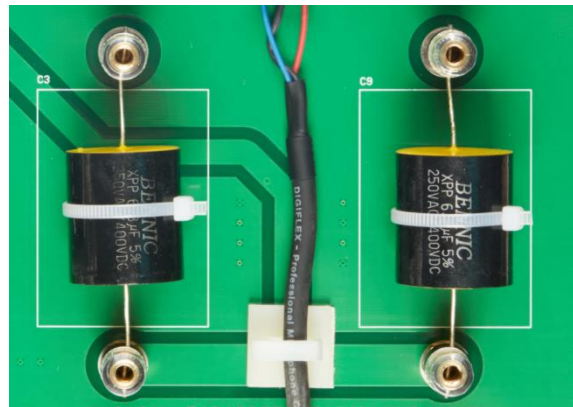
Different models of power amplifiers have different input sensitivity. A proper gain setting is important for optimal sound performance. MP-701 MK2 has built-in gain setting DIP switches for each channel. The default gain setting is 1 ON which provides the max output gain. The gain is 1 > 2 > 3 > 4. 4 ON is the lowest output gain setting. Please note only one switch can be turn on at a time. The rest of three should be turned off.



To find out the right gain, you need to try each gain setting and have a listen. In general, the volume set to 11-12 o'clock position to get a shaking loud volume. If 7-8 o'clock position already getting a shaking loud sound, then the gain is too high, try a lower gain setting.

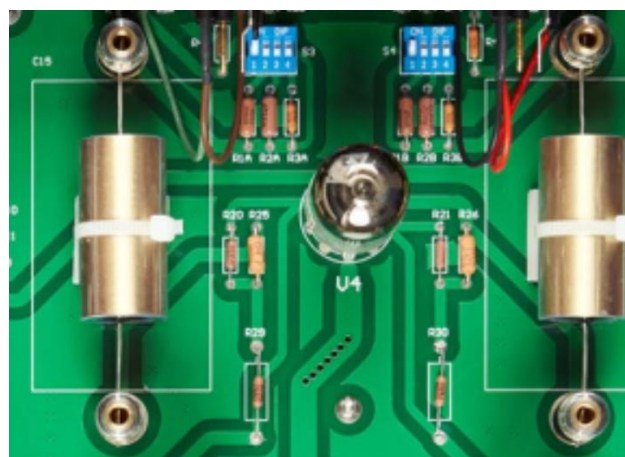
Power Filtering Bypassing Capacitors Replacement

These two capacitors can be removed or replaced with different types and capacitance of capacitors to achieve different sound characteristics by the user. Both don't need to be the same. For example, one is 4.7uf and another one is 0.1uf. The voltage of the capacitors must be 350V or higher. The value can be from 0.01uf to 10uf. If the user wants to use polarized electrolytic capacitors, make sure the positive lead connects to the front terminal. The back terminal is negative.



Coupling Capacitors Replacement

The coupling capacitors can be changed by the users to get different sound characteristics or improve sound quality. The stock capacitors are 630V 2.2uF. If the power amps + active subwoofer total impedance is higher than 47Kohm, minimum 1.5uF can be used. If it is lower than 47Kohm, need to use 2.2uF to 4.7uF. The voltage of the capacitors need to be 350V or higher.



Warning

High voltage inside. Always unplug power cord before changing tubes inside. Don't touch circuit traces, capacitor leads and resistor leads. Capacitors can still hold some electric charge after power off.