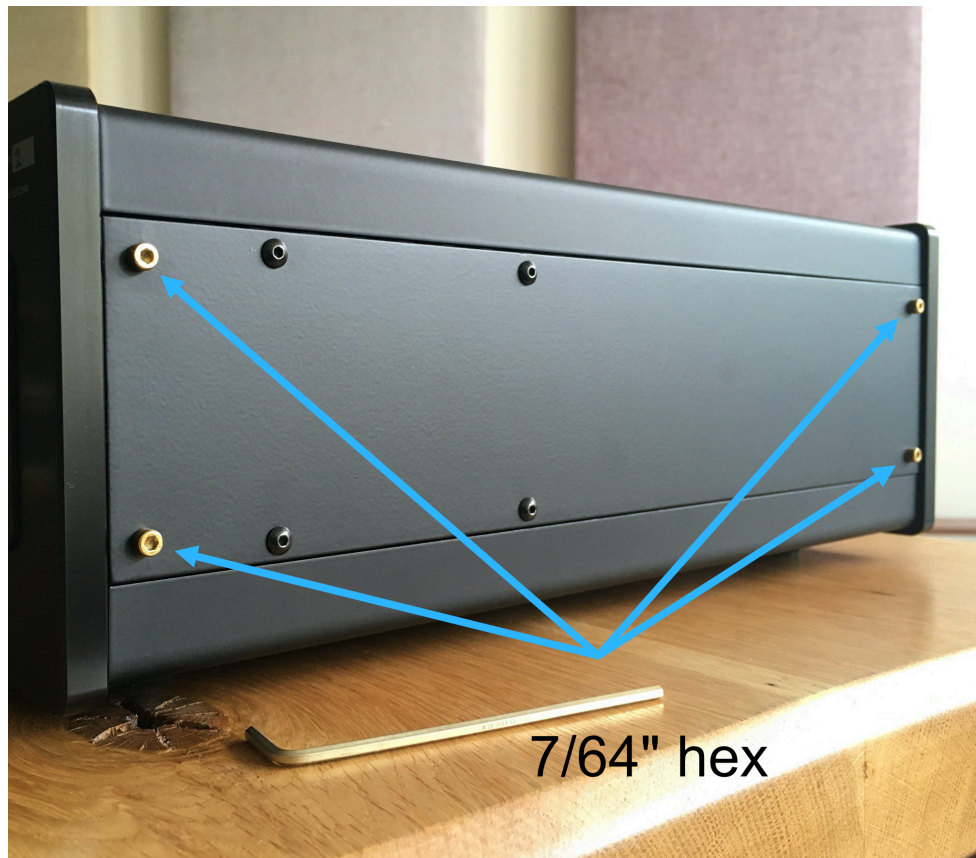


## LTA Integrated Phono Preamp Instructions

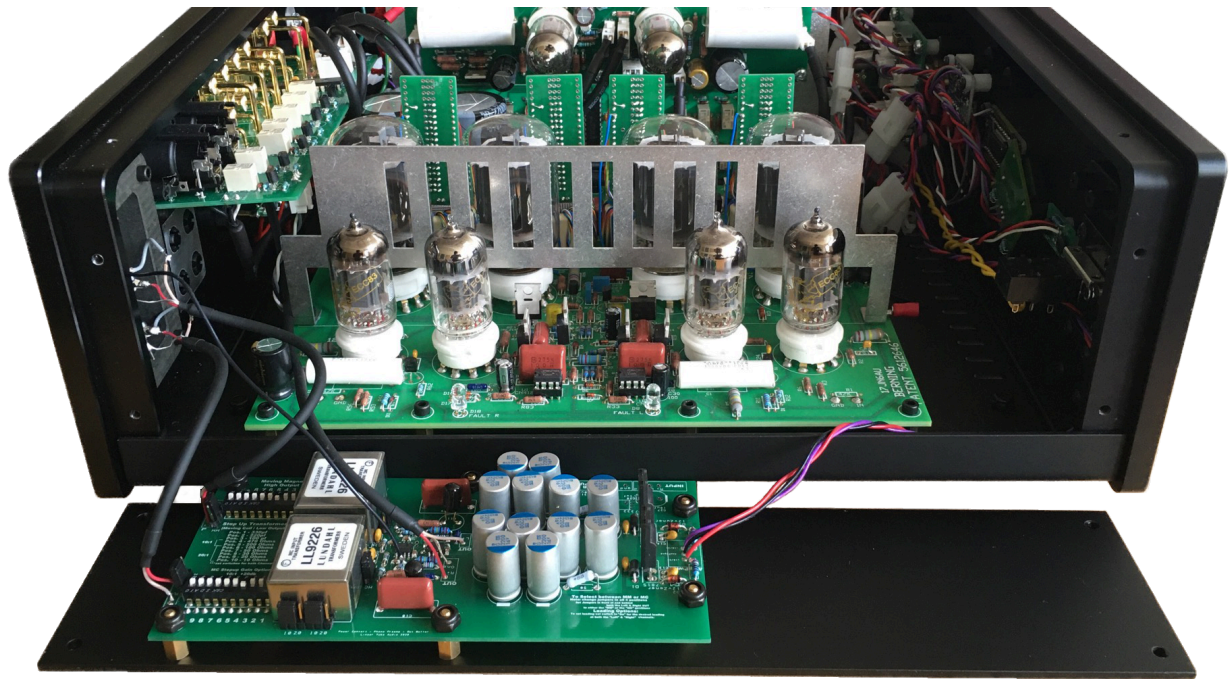
The phono preamp can be used with moving magnet or moving coil cartridges. Jumpers and DIP switches allow you to adjust the gain and loading for your moving coil cartridge.

### Accessing the Phono Preamp

On the side of the amp there will be four brass socket head screws. These can be unscrewed with a  $7/64$ " hex key. Removing the top of the case is not required, but it can be done with a  $5/64$ " hex key and will allow you to better see what you're doing.



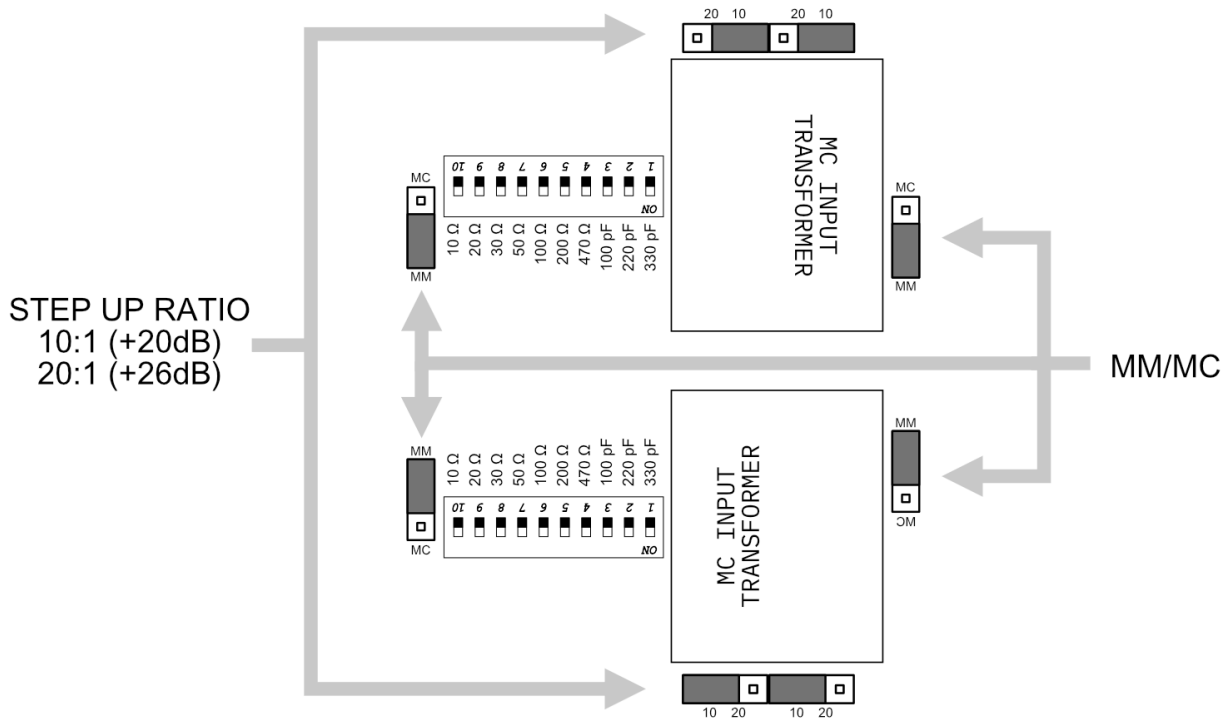
Unscrew the brass screws and **carefully lay the side panel down immediately next to the case**. The phono preamp is wired to other internal components, so avoid jerky or fast movements. As you remove the case, take note of how the wires are arranged in order to imitate them when you replace the panel.



Once you've set the preamp appropriately for your cartridge, carefully reattach the side panel. Move any wires away from the tubes.

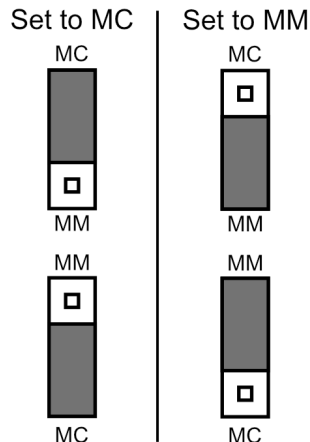
## Phono Preamp Settings

Each jumper consists of pins in a row and a jumper block that connects two pins together. Use a small set of pliers to move the jumper block. There are labels on the circuit board indicating where to place the jumper for each setting.



## Moving Magnet or Moving Coil

Two pairs of jumpers set Moving Magnet (MM) or Moving Coil (MC). When MM is selected, the MC load settings are bypassed.

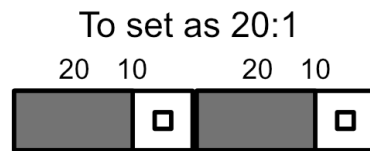
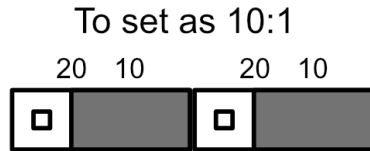


The MM/MC jumpers are mirrored. To configure for MC, the jumpers should connect the two pins closer to the side labeled “MC”. To configure for MM, the jumpers should connect the two pins closer to the side labeled “MM”.

## Gain Setting

**Note: using 20:1 gain with loads larger than 100 Ohms may overload the cartridge.**

Four jumpers—two on each side of the transformers—set the step up ratio to either 10:1 or 20:1.



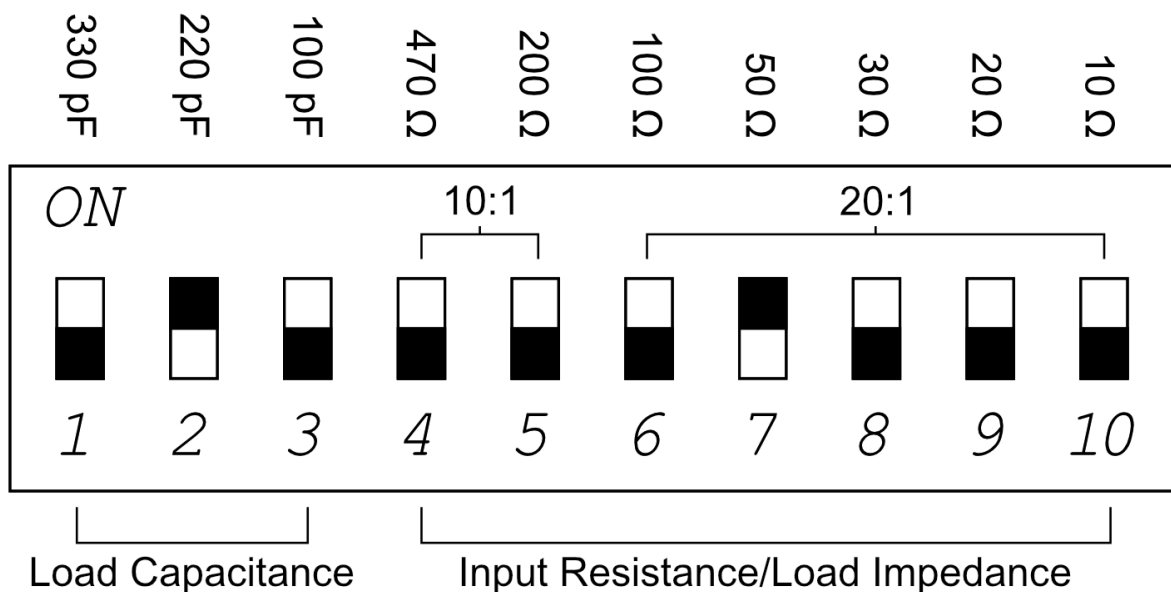
To set to either 10:1 or 20:1, place the jumper to connect the two pins that have the appropriate number centered between them. Be sure to set all four jumpers to the appropriate setting. Pay attention to the labels on the circuit board as the two pairs of jumpers are not identically oriented.

## Loading

The loading is adjusted with one set of DIP switches per channel. Be sure to set both channels the same.

Input capacitance has different options for different gain settings. Use 200 and 470 Ohms with 10:1 gain. 10, 20, 30, 50, and 100 Ohms are used with 20:1 gain.

Consult your cartridge manufacturer for loading recommendations.



Example: set to 220pF and 50 Ohms

**Specifications:**

Moving Magnet:

Input Impedance: 47K Ohms  
Gain: 46dB

Moving Coil:

Input Impedance: 10, 20, 30, 50, 100, 200, 470 Ohms, set with DIP switches  
Input Capacitance: 100pF, 220pF, 330pF, set with DIP switches  
Gain: +10dB (56dB total) / +20dB (66dB total), set by jumpers