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Le Pacific JFET RIAA Phono Preamplifier

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Le Pacific JFET RIAA Phono Preamp

This is my DIY build of the Boozhound Laboratories JFET Phono Preampifier, but on a stripboard. The BHL preamp is based heavily on the Le Pacific RIAA phono preamplifier circuit shown below for reference.

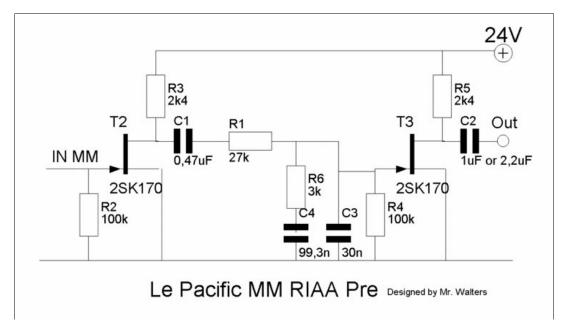
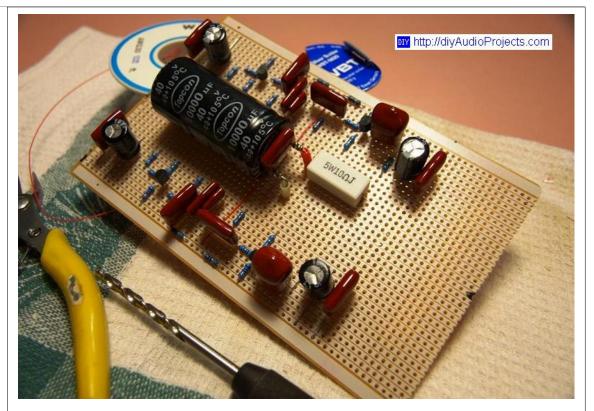


Figure 1: Le Pacific JFET Phono Preamplifier Schematic

This is a strip board construction using brown polypropylene caps from the local electronics store. The large electrolytic capacitor is 10,000uF fed by a 1 ohm resistor. Wire wrap wire is used as hook-up wire. Silver based solder, gold RCAs and all installed in an embossed gold chocolates box. Photographs 1 through 3.

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Photograph 1: DIY JFET Phono Preamp on Stripboard

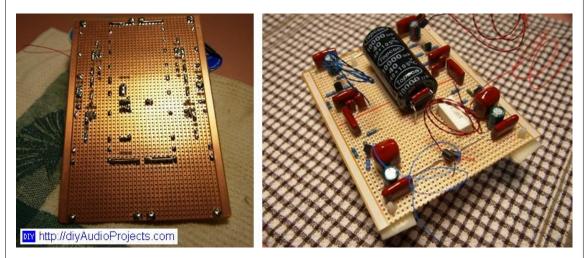




Photograph 2: DIY JFET Phono Preamp on Stripboard

Photograph 3: DIY JFET Phono Preamp in Chocolates Box

I've now built a number of these simple JFET phono preamplifiers. Photograph 4 below shows another of my DIY JFET RIAA Phono Preamp builds. The equalization circuit is also built on a stripboard and fit into a nice looking Hammond extruded aluminum chassis with a black anodized finish (Photograph 5).



Photograph 4: DIY JFET RIAA Preamp on Stripboard

Photograph 5: DIY JFET RIAA Preamp in Hammond Enclosure

Le Pacific PrePre for MC Cartridges

I also like to use Moving Coil (MC) cartridges with my turntable. MC cartridges have a much lower output compared to Moving Magnet (MM) cartridges. MC cartridges typically have an output of less than 1 mV, while the output level of MM cartridges is typically between 2.5 and 7 mV. Therefore you will need some additional gain if you would like to use an MC cartridge with the Le Pacific Boozhound Labs phono preamp kit. The additional gain can be achieved by using passive phono step-up transformers or you can use an active circuit like the Le Pacific PrePre for MC Cartridges shown below in Figure 2.

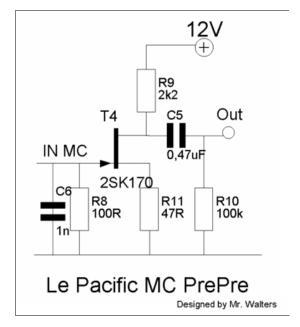
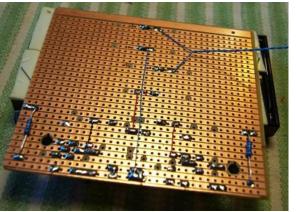


Figure 2: Le Pacific MC PrePre Schematic

The Le Pacific MC PrePre circuit is placed immediately before your phono preamplifier. The MC preamp circuit is ultra simple to construct and like the Le Pacific can be easily built onto a protoboard. I've built a number of the LePacific MC PrePre circuits and have used them in front of both the Le Pacific preamp and the Boozhound Labs phono preamp kit. The PrePre builds have been tested with a two different MC cartridges with an output of 0.35mV and the PrePre circuit works extremely well. The J-FETs are matched 2SK170BL and the output capacitors are NOS Russian military paper-in-oil (PIO) types.





Photograph 6: DIY Le Pacific MC PrePre on Protoboard





Photograph 7: DIY Le Pacific MC PrePre in Aluminum Enclosure

The Hammond cast aluminum enclosure case is painted using Sungold color paint. The MC pre-preamplifier is powered using 8 "AA" batteries to give a clean supply voltage of 12VDC. I made a slight modification to the circuit by adding a 220uF low ESR cap to sit across the 12V battery supply along with a 0.1uF snubber capacitor.

Photograph 8 below shows a Le Pacific MC PrePre circuit which I put in front of the Boozhound Laboratories JFET Phono Preampifier kit. With the addition of a small switch I can now use the phono preamp with both MM and MC cartridges.



Photograph 8: DIY Le Pacific MC PrePre with BHL Phono Preamp Kit

See my review of the Boozhound Laboratories JFET Phono Preampifier kit for additional information. If you have any questions about

these phono preamps, feel free to ask them on the forum in the Le Pacific J-FET Phono Preamp

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