

Modification

Tube Guitar Amplifier M15Mk1



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1 Output Transformer ATRA0427

The Output Transformer ATRA0427 from Jan Wüsten can be used alternatively to the Hammond 125E. It is an Push-Pull Output Transformer for 2x EL84 or 6V6 with the following data:

8x intersected windings

Raa = 9 Kiloohm

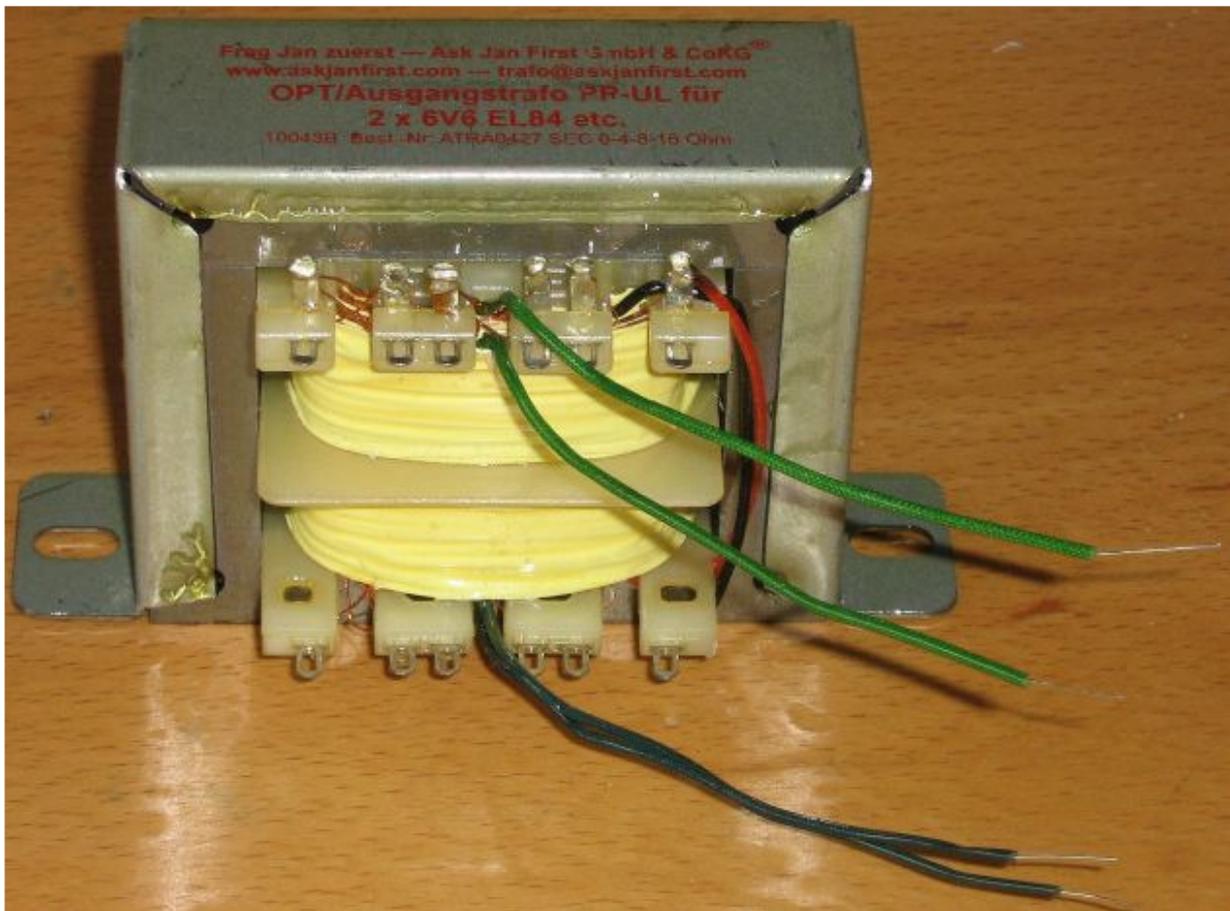
N = 10-15W

Connections for ultralinear operation

Connections for 4,8,16 Ohm secondary

1.1 Connectors

The ATRA0427 „out-of-the-box“ looks like this:



All connectors (besides the 16 Ohm secondary) are solder lugs.

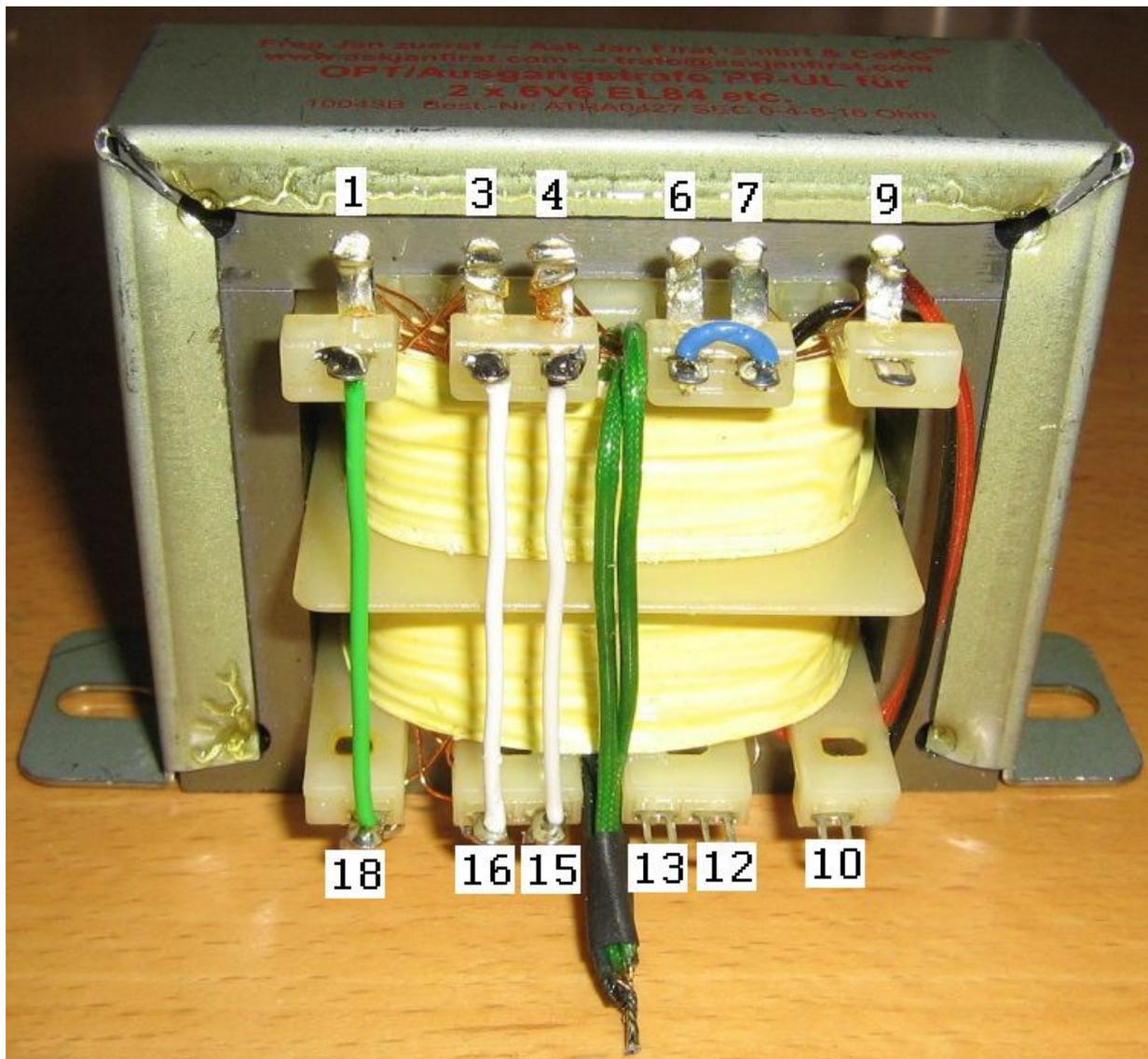


Caution, when lug 6/7 (plate voltage input) is connected to the power supply, there is full voltage at lugs 9,10,12,13!

1.2 Wiring

First the solder lugs and connecting wires have to be prepared according to this schema:

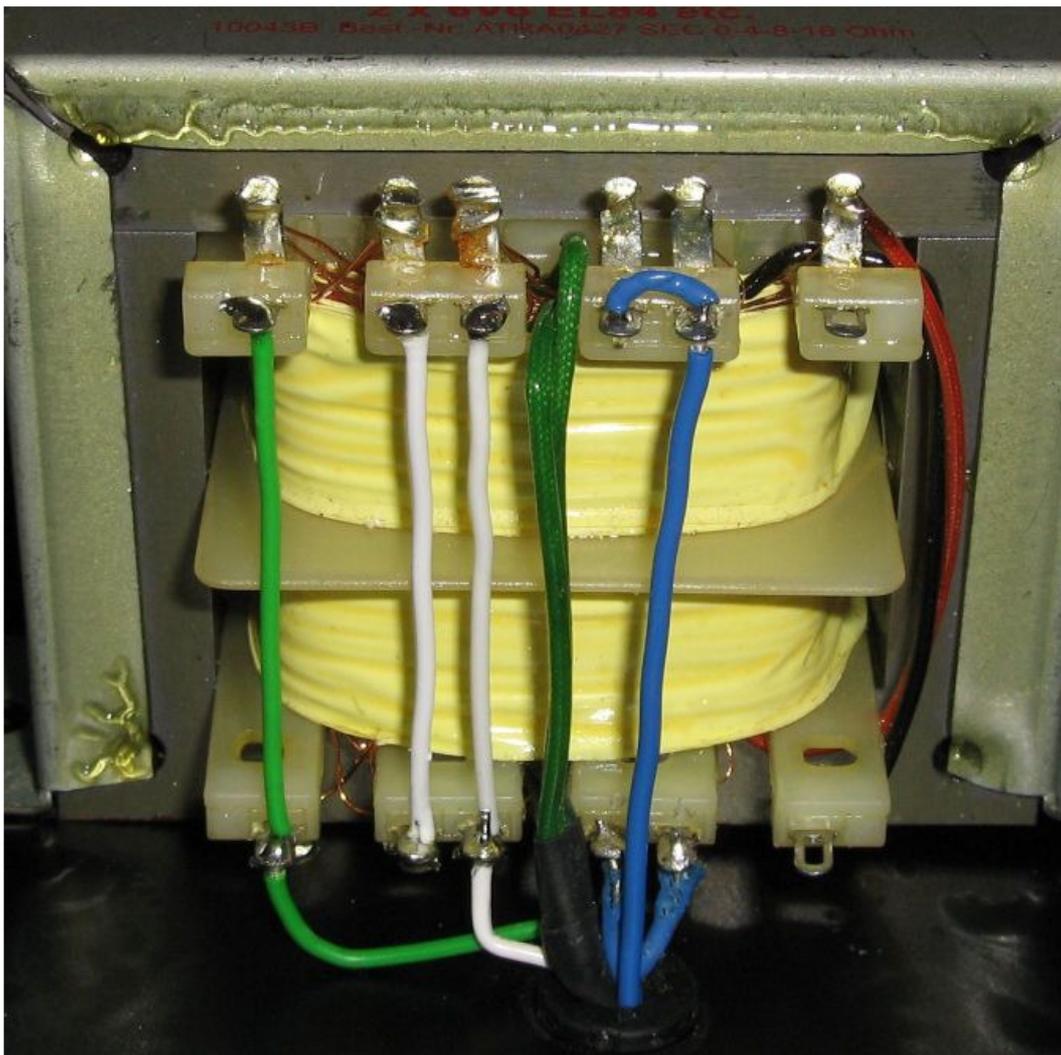
1. Connect lug 1 and lug 18 (signal ground) with green wire
2. Connect lug 3 and lug 16 (4 Ohm) with white wire
3. Connect lug 4 and lug 15 (8 Ohm) with white wire
4. Connect all 4 long wires (dark green and light green in the picture) to each other (16 Ohm) in direction to the bottom and tie them together with some heat shrinking tube
5. Connect lug 6 and lug 7 (Plate Voltage input) with blue wire



1.3 Assembly

Now assemble the output transformer to the chassis, use the left hole in the chassis (seen from the front of the amplifier) and drill a new hole for the right mounting hole of the OT. The Connectors of the OT must direct to the front of the amplifier. Now do the wiring of all connectors needed:

1. Signal Ground from the OT to the speaker plug sockets
2. Don't wire the 4 Ohm lug (if needed, please change the wiring like explained at the end of this chapter)
3. Connect the 8 Ohm lug to the 8 Ohm speaker plug socket
4. For the 16 Ohm output solder a white wire to the free green wire and isolate it with heat shrinking tube. Then connect it to the 16 Ohm speaker plug socket.
5. To connect the plate voltage input, solder a blue wire to lug 6/7 and connect it to pin 8 of V4
6. Connect lug 13 with blue wire to pin 7 of V5
7. Connect lug 12 with blue wire to pin 7 of V4



If not 8 or 16 Ohm speakers, but alternatively 4 Ohm speakers are to be used, simply use the 4 Ohm connector of the output transformer instead of the 8 or 16 Ohm connectors. Furthermore, if you replace one speaker plug socket with a triple switch and wire it accordingly, you can switch between 4/8/16 Ohm for maximum flexibility.