

# Grant Fidelity Tube DAC-09 modification instructions

## **Purpose:**

The Grant Fidelity DAC-09 is factory preset for optimal performance as a tube DAC.

1. Only the headphone amplification is controlled by the volume potentiometer.
2. **Do not connect your DAC as a pre-amp unless you complete the following modification – otherwise you may damage your speakers!**

**Should you wish to use the DAC-09 as a preamp to control volume, please follow the instructions below to make the modification.** Once the modification is done:

1. Line output and headphone amplification are both controlled by the volume potentiometer.
2. When plugging in headphones, line output and headphone amplification both have output. You will need to turn off your amplifier to listen through headphones only.

## **How to modify the Tube DAC-09?**

Over years of selling this product, due to parts availability at times with factory, there are three versions of DAC-09 from Grant Fidelity with only minor difference inside.

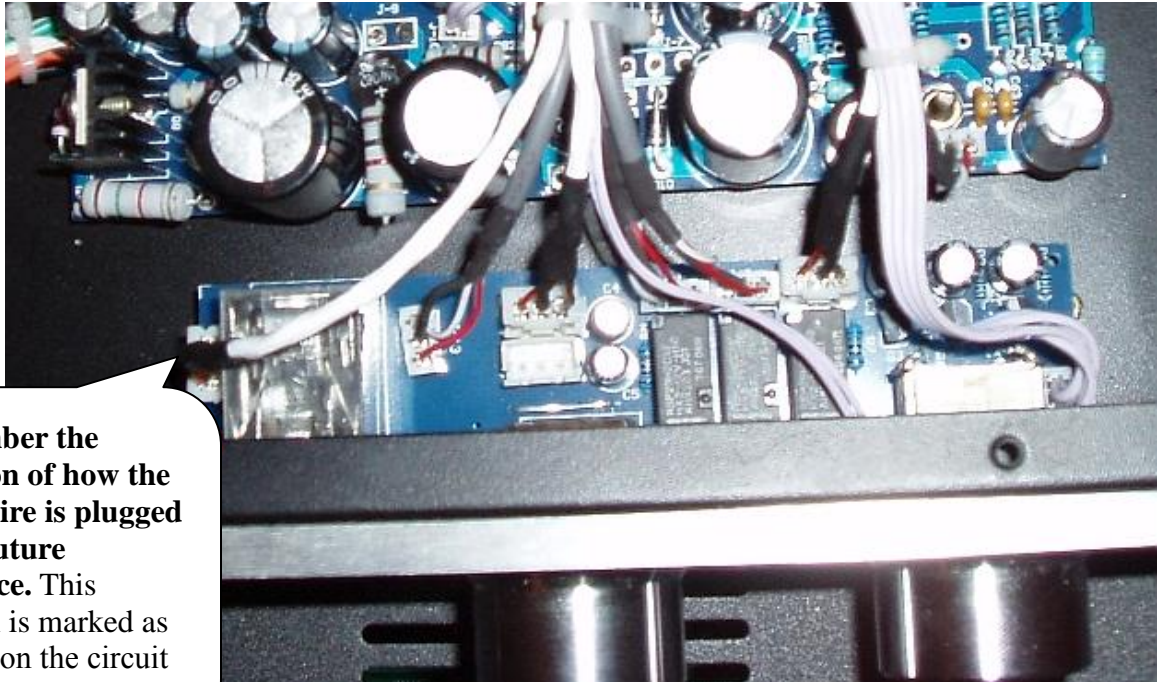
**Please check your unit carefully against the following pictures to see which procedure applies to your unit. This is very important.**

### **Version #1:**

Compare the picture of the small circuit board below to your DAC (the small circuit board is shown at bottom of the picture against the metal chassis), if your unit looks identical to the picture, please proceed with the following modification steps.

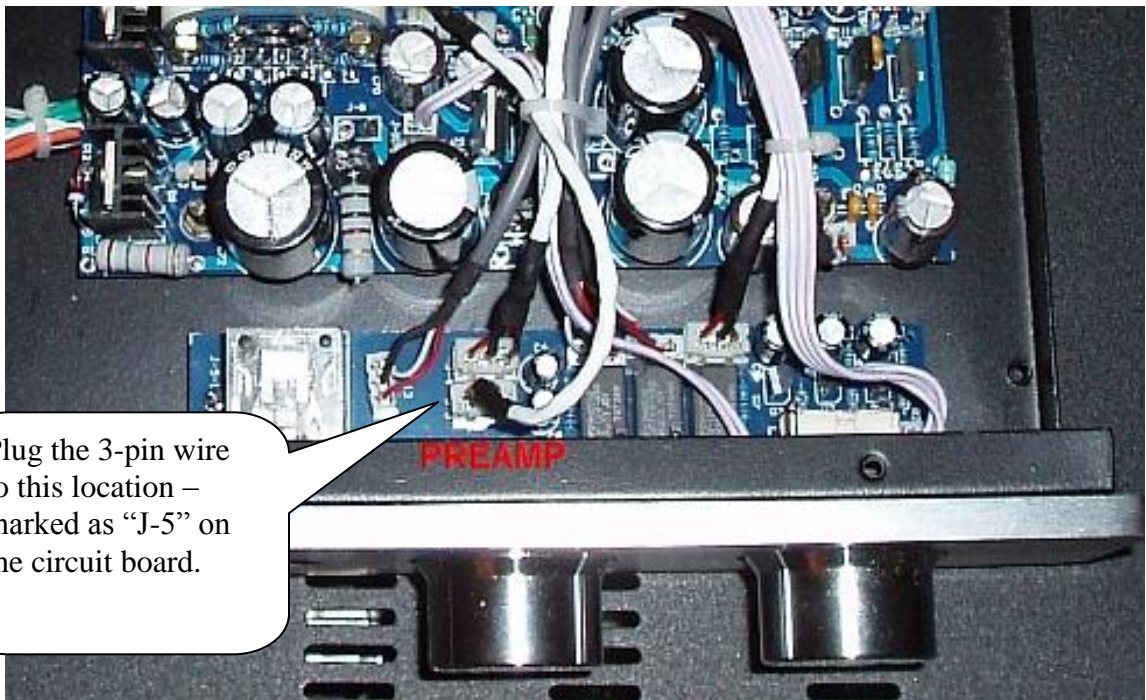
#### **Before:**

**Below is the factory default setup as a DAC.**



Remember the direction of how the 3-pin wire is plugged in for future reference. This location is marked as "J-5-1" on the circuit board.

**After: (modified settings for using as a preamp):**



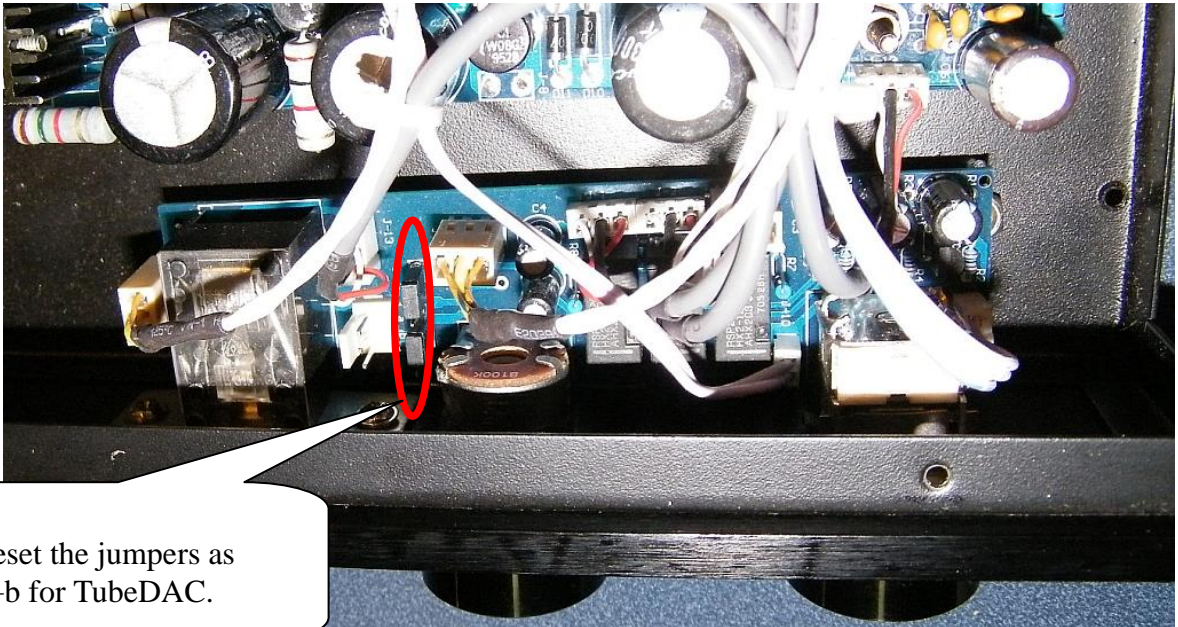
Plug the 3-pin wire to this location – marked as "J-5" on the circuit board.

**Version #2:**

Compare the picture below to your DAC, if yours have the red circled parts on the small circuit board against the metal chassis, please follow the instructions below to make your modification. **Version #1's instruction DOES NOT APPLY to your unit.**

**Before:**

As a DAC, the two black jumpers are connected at factory as 1+2 and a+b. If you cannot read the printing on the circuit board, use a magnifying glass – this is very important to connect the jumpers to the right place.



Factory preset the jumpers as 1+2 and a+b for TubeDAC.

**After: (using the unit as a pre-amplifier)**

Use a small tweezer to pull off the two black jumpers and connect one as **2+3 and the other one as b+c.**

This will allow the volume control to be included in the circuit to use the unit as a preamp. **Remember to set your volume to lowest before you turn it back on then adjust the volume gradually. If you leave the volume at full when turning it on, you may accidentally damage your speakers.**

**Version #3:**

This one is nearly identical to Version #2, except the above jumper connections are done at 1+2 and a+b by physical soldering at factory so there are no black jumpers to move around. (see picture below)



You will need to use a fine tip soldering iron to remove the existing connection wire between 1+2 and a+b. Then you can simply solder 2+3 and b+c together to complete the modification. You don't need to use a connection wire like the factory did – a very small amount of melted solder will connect the position properly. Make sure not to burn the wire around it when you are soldering.

Thank you for your business. We hope you enjoy your purchase and enjoy your music through this budget priced high performance device.

Grant Fidelity