JDS LABS

Custom O2+ODAC Soldering Instructions

Preparations

The following components should be omitted during basic assembly:

- R1, R2
- D2, D6
- BT2

The following components should be omitted based on required customization:

- J1 (Power jack)
- J2 (3.5mm input jack)
- J3 (3.5mm headphone jack)

When installing a 1/4" headphone jack, also note that special assembly is required for:

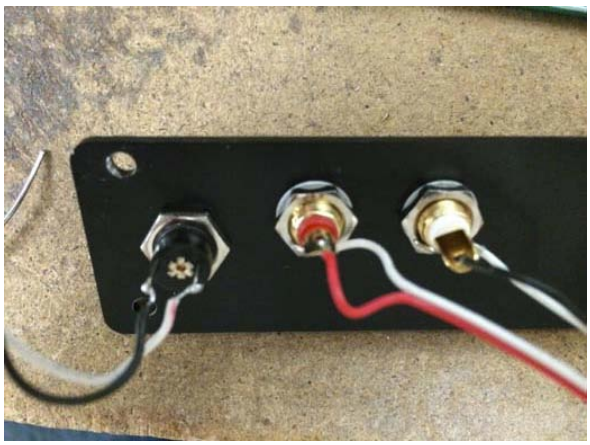
- R10, R11
- C8, C9

Front Power Jack

Install power jack at J1.

Rear Power Jack

1) Omit J1. Install an "isolated" power jack onto required rear plate. Connect black wire to longer lead, and white wire to shorter lead. Solder to J1 pins as shown:



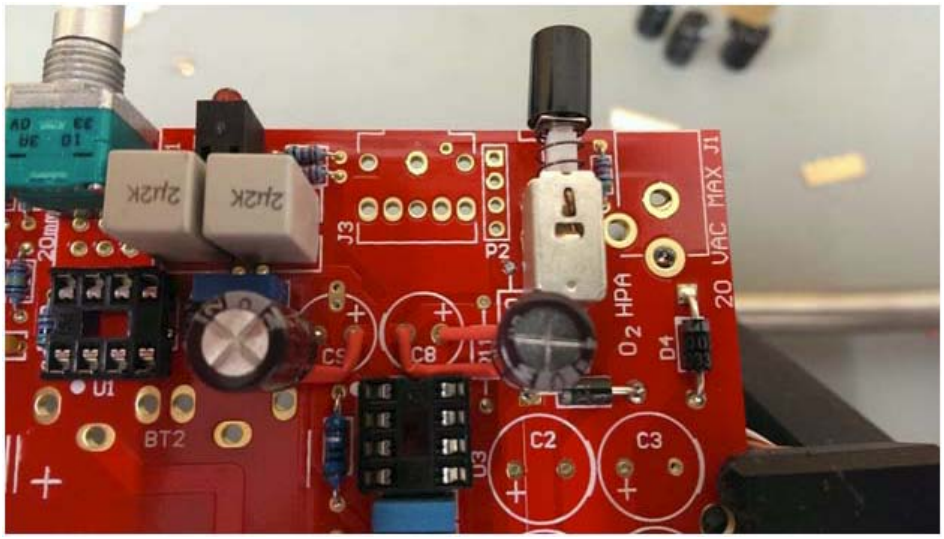
2) Apply hot glue to connectors as shown. Let glue dry before installing into case.

Standard Headphone Jack

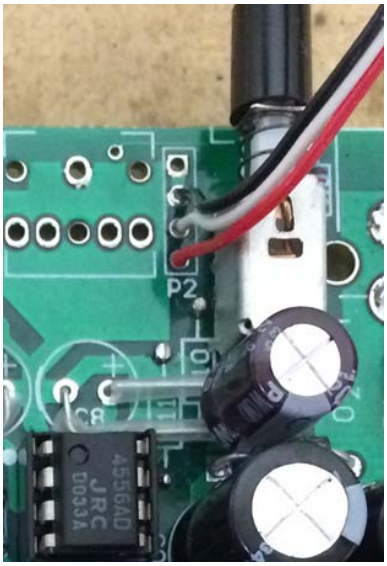
Install audio jack at J3.

1/4in (6.35mm) Headphone Jack

1. Begin by installing resistors **R10** and **R11** on the bottom surface of the PCB.
2. Bend leads of capacitors C8 and C9 and cover with heat shrink as shown in *Figure 1*.
3. Install **C8 and C9**, then complete remaining assembly of O2+ODAC.
   Remember to omit J3.



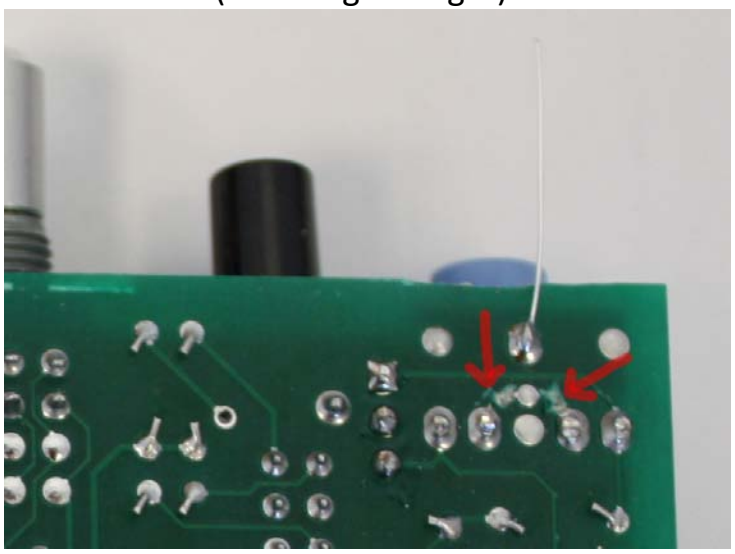
4. Connect about 3" of wire from Neutrik 1/4in headphone jack to P2. Wire as shown below (L = White, Red = Right, Black = Ground):



Attach headphone jack to front plate after completing all other assembly. Black nut is secured by a compression fit. With jack & nut installed on front plate, use table surface to apply pressure to nut. After nut snaps in place, gently rotate 1/4 turn clockwise.

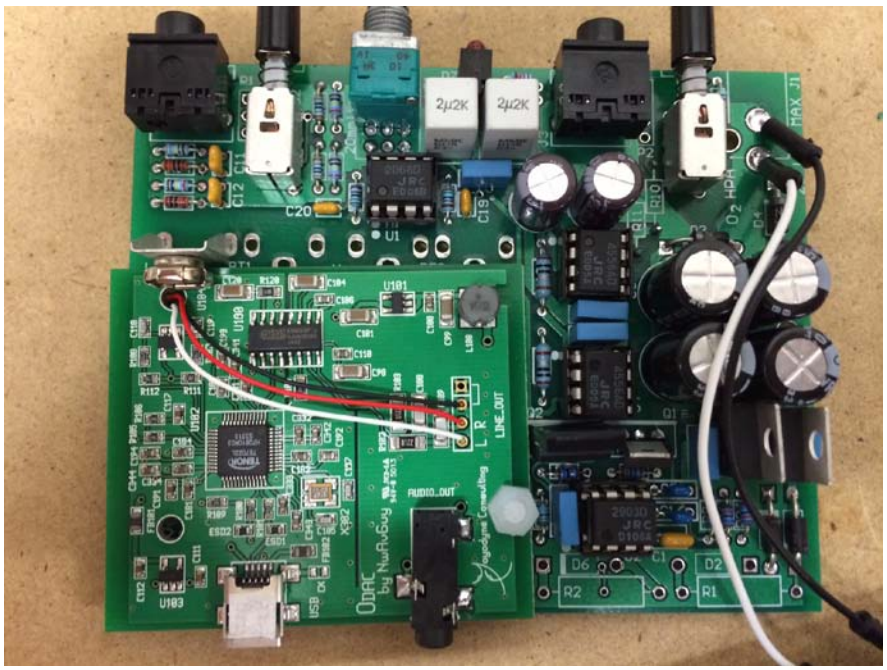
Standard - Shared with 3.5mm input

1. Install audio jack at J2.
2. Wire ODAC's LINE pins to P1 as shown.
3. Using an exacto knife, cut the inner traces beneath J2 (see image at right).



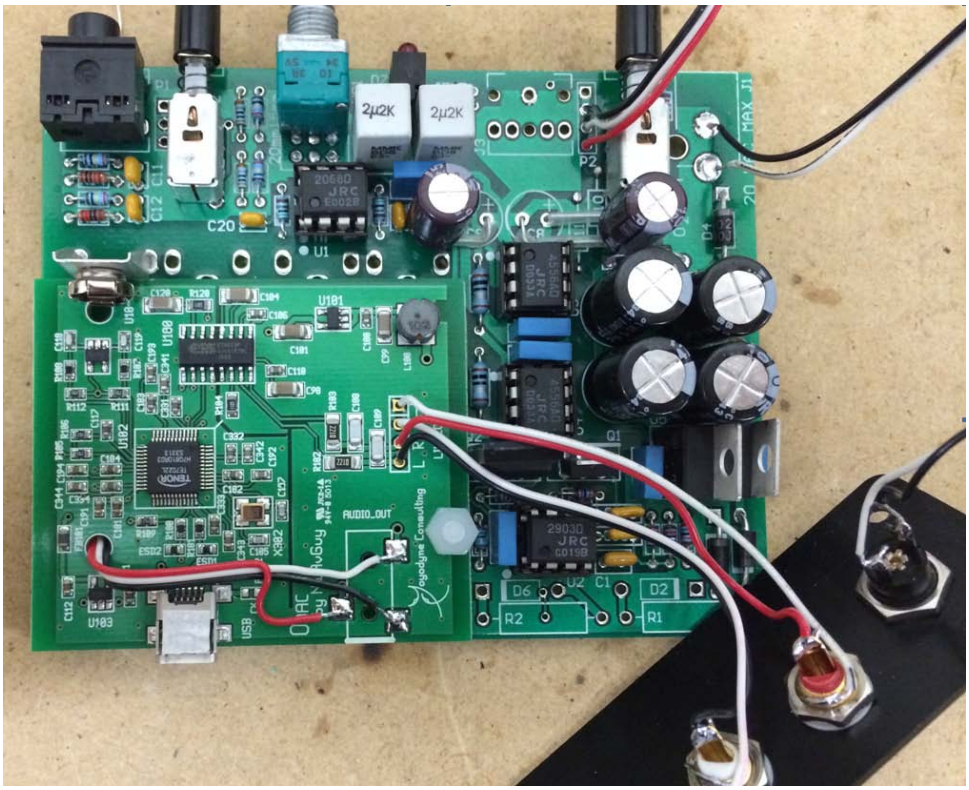
Dedicated 3.5mm DAC line-output

1. Install audio jack at J2.
2. Solder **J1** and **J2** on bottom of ODAC.
3. Solder 3.5mm jack to ODAC (like Standalone ODAC).
4. Cut inner traces beneath O2 input jack, J2. See page 2.
5. Solder Red/Black/White wire from bottom surface of J2.
   Pass wire through holes of O2 and ODAC to solder to LINE OUT. These pins are normally used for RCA jacks.



Dedicated RCA DAC line-output

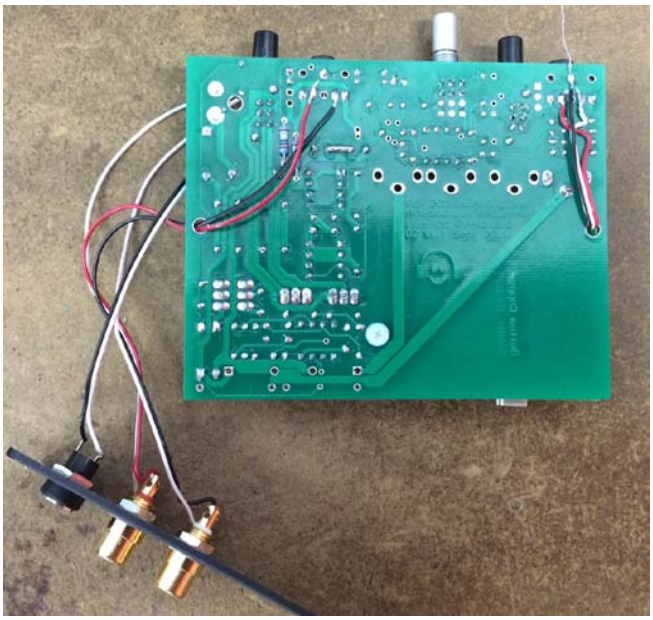
1. Install audio jack at J2.
2. Solder **J1** and **J2** on bottom of ODAC
3. Mount RCA jacks onto required rear plate using paper washers.
4. Solder about 4" of wire from RCA jacks to ODAC as shown below.
5. Cut inner traces beneath O2 input jack, J2. See page 3 for picture.
6. Solder Red/Black/White wire from bottom surface of J2. Pass wire through holes of O2 and ODAC to solder to AUDIO_OUT as shown:

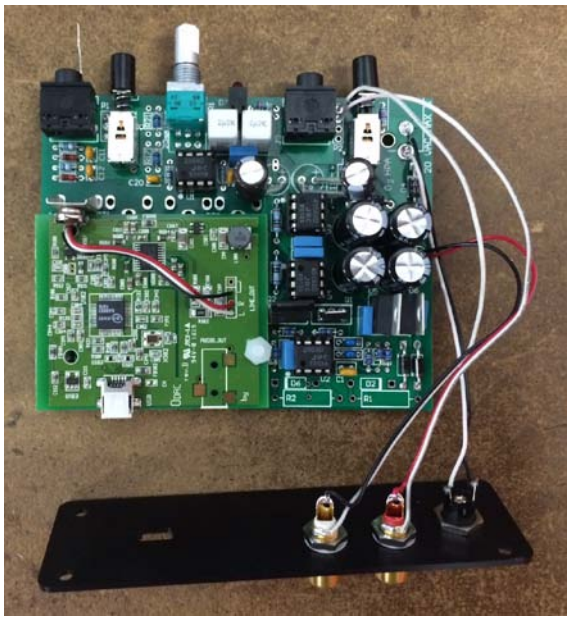


Switched RCA Amplified Output

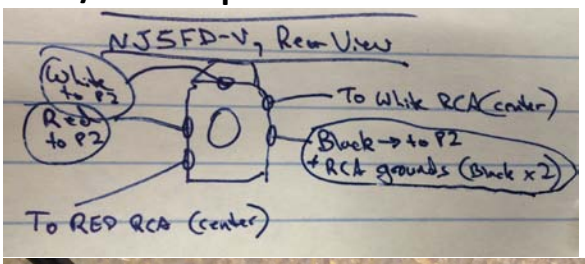
1. Install audio jack at J2 (on Objective2 input).
2. Mount RCA jacks onto required rear plate using paper washers.
3. Cut inner traces beneath O2 input jack, J2. See page 3 for picture.
4. Solder Red/Black/White wire from bottom surface of J2. Pass wire through holes of O2 and ODAC to solder to ODAC's L/R/GND holes:

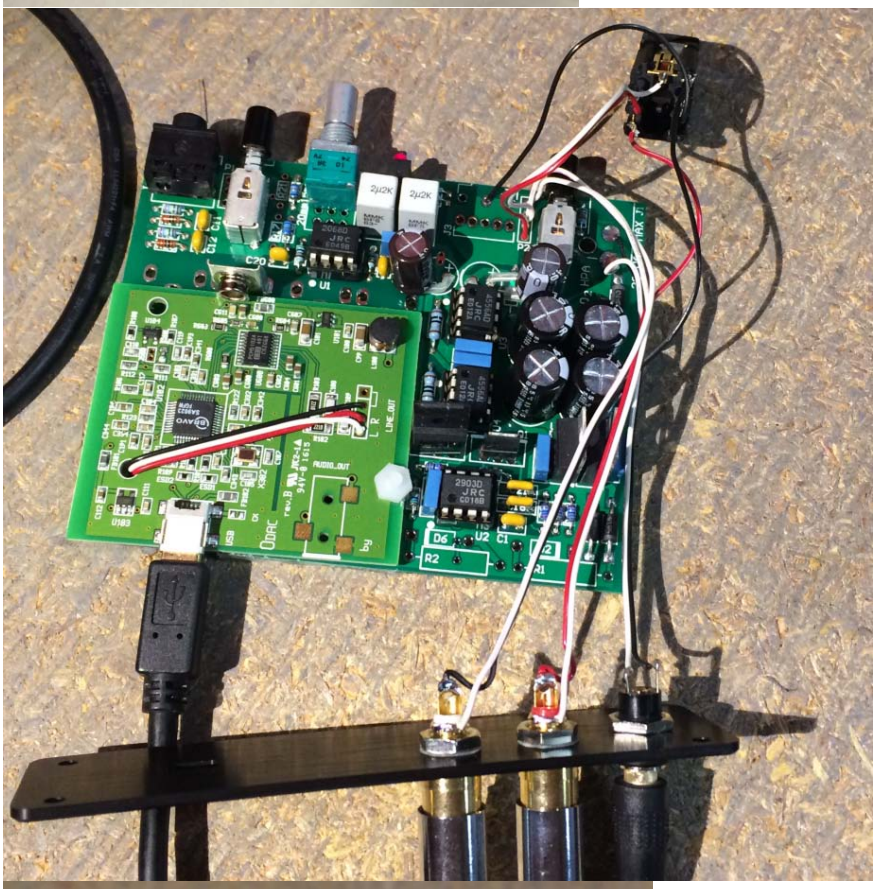
5. Wire RCA jacks directly to Headphone Jack
    a. For **3.5mm Headphone Jack**

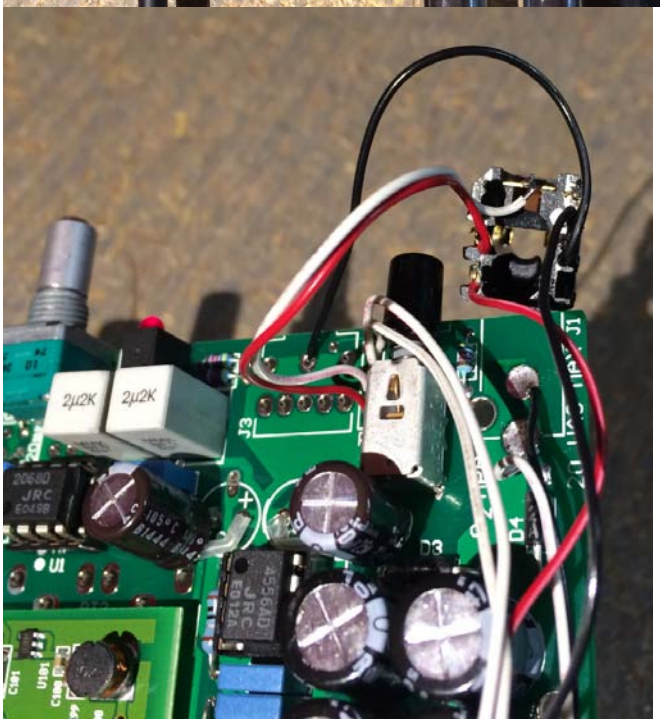




b. For **1/4" Headphone Jack** ** Must u**se Neutrik NJ5FD-V** **







Standard Gain

- R_{17} and R_{21} = Default = 1 kΩ
- R_{19} and R_{23} = Default = 274 Ω

Medium Gain, 1.0 and 3.3x

- R_{17} and R_{21} = NONE
- R_{19} and R_{23} = 634 Ω

Low Gain, 1.0 and 2.5x

- R_{17} and R_{21} = NONE
- R_{19} and R_{23} = 1 kΩ *(normally R_{17} and R_{21})*