Orbit DAC DIY
Building instructions

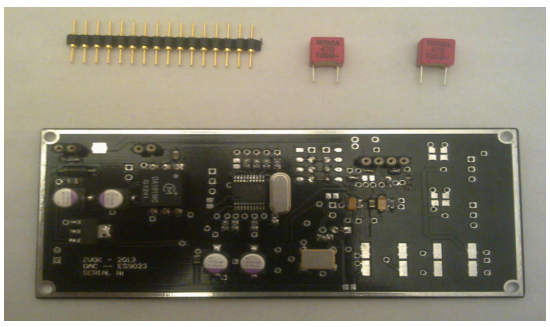
Dear Customer,
Thank you for buying our Orbit DAC OEM.

The kIt is preassembled and tested. If you are a handy person, this should be a very easy task for you. However, if you are new to soldering try to get help from a skilled friend or fell free to contact us in case advices are needed. You can always relay on our support.

Box content:
- ORBIT DAC DIY board
- 2 capacitors
- 100mil pins

You will requirer:
- short cables
- 3 RCA connectors
- Power supply connector

Before beginning, we have to remind you the following. For proper operation the power supply voltage must be between 6 and 12 Volts DC. The power consumption at 12V is about 60mA. Exceeding 12V supply will permanently damage the board.



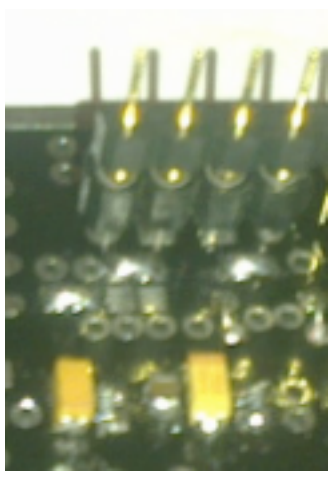
Kit content

Have a look at the wiring diagram on the next page and follow the instructions. In short time your DAC will be ready for use.

Fixing DAC in a vice

Shall we begin?

1. Prepare a working table with the tools you will need.
2. Fix the board into a vice. It will hold it for you while you solder.
3. Cut the 100mil gold pins in pieces of 2 pins, 2 pins and 4 pins.
4. Insert the pins into the slots for PS, SPDIF and Analog outputs.
   This will hold them steady while you solder and preventing them to melt.



Inserted pins

5. Cut the cables to your desired lenght and peal about 5mm of insulation on every side.
6. Apply a bit of tin on the cable ends.
7. Apply a bit of tin one the pins. Make sure you don't drop tin on the board!
9. Solder the cables onto the pins. Follow the wiring diagram on the next page!
10. Solder the connectors to the cables. Follow the wiring diagram on the next page!
11. Solder the capacitors on the audio RCA connectors between the signal and ground of every audio channel.

12. Move the board onto a stand or better in an enclosure. You can now always disconnect and reconnect the pins in order to facilitate the integration in the enclosure.

13. Power up the device and measure power consumption. In no case shall be higher than 70mA. Measure the voltage at the analog output. Channels might have few mV of offset. That is perfectly normal. Turn it off.

14. Connect the SPDIF input to an SPDIF source. Connect the audio outputs to a preamplifier or integrated amplifier. Caution: SPDIF has no volume control!
15. Power up the DAC and press play. Slowly increase the volume. Music should start playing immediately.

We wish you lots of fun in building this kit and hours of high quality fatigue free listening.

Best regards, ZVOK audio instruments