Assemble the O2 Desktop Kit
Thanks for your purchase at Head ‘n’ HiFi – Walter, here a short tutorial on how to get the Desktop kit fitted into your O2.

The Kit contains the following:

- Front Panel
- Back Panel
- Two pairs of RCA Sockets
- Power inlet
- 6.4mm (1/4") Headphone Socket

You need:

- some wires (CAT5 Ethernet cable works fine)
- heat shrink tube
- insulation tape
- sharp side cutters
- soldering iron
- sharp knife (X-acto or similar) or alternatively a small drill (1.5 – 2 mm)

I will describe the procedure on how to add the Desktop Kit building the amplifier from scratch, if you are modifying an already built version you will need to de-solder the parts that are described below.

Parts not needed in a new build: R1 and R2, D2 and D6, Battery clips, front power inlet and the 3.5mm headphone socket.
You can now stuff your board as you usually would, do NOT solder in R10, R11 and C8, C9 as of yet.

For an existing build the headphone socket, R10, R11, C8 and C9 need to be de-soldered.

The resistors R10 and 11 will be soldered in from the bottom side of the PCB.
You can see the wires for the power inlet connected in the previous picture as well. The next picture shows you the treatment of the capacitors C8 and C9, they are soldered in on long leads. You need to insulate the wires using shrink tube or similar to avoid shorts.
Now to the headphone socket, the socket provided is a switched one, so you can wire it up the way that the output signal is always present on the RCA jacks unless a Headphone will be plugged in.

The jack has 6 solder tabs on the back side and two little plastic pips.

First you need to identify GND (the contact closest to the inlet - it also contains the writing NJ-FD-V as seen beow). Cut of the switched solder lug as well as the two plastic pips on the back, pre tin the remaining five solder lugs.

Contacts as seen in the picture are: top GND, bottom side is right, and left is... left ;)

Now you need two pieces of twisted wire, three wires each. Length of the shorter one is about 6cm, the longer one 12cm (longer is better).
Pre-tin ends on one side and put a piece of heat shrink over the two wires representing ground (GND), they will both be soldered to the remaining GND solder lug.

Now solder the remaining wires, short ones to the headphone contacts, long ones to the switched ones that go to the RCA sockets, do not forget to put some heat shrink over the wire before soldering. End result should look similar to this:
Now bend the GND solder lug carefully up towards the right one and put a piece of insulation tape over the side where GND is.

The final result should look like this.

You can now solder the shorter wires in header P2 on the PCB, contacts as seen from PCB edge are GND, GND, Left, Right.
Now on to the input wiring, 3 twisted wires again, length 12cm+. They will be connected on the bottom side of the PCB like you would connect the ODAC in the switched version. The cable can be routed through the mounting hole to the top.

You need to cut the traces between the grounded via and the two inner pins as shown in the picture below. Alternatively you can use a small drill and drill out the top of the via marked in green - same result but easier.
All that is left now is to assemble the whole thing into the enclosure. It will be easiest to solder all wires to the back panel, slide the PCB into the enclosure from the back side and mount the back panel. Now mount the headphone jack to the front panel, side with the insulation tape (GND side) facing the PCB (that is important). Depending on how well you worked the front panel should screw on easily now, sometimes a little push is needed to align the screw holes properly.

There you have it, your O2 Desktop version ;)