

Co-axial power connectors

These are the circular plugs that are used to connect power supply units ('wall warts') to equipment. They come in a ridiculous range of sizes. The two dimensions you need are the outside diameter and the diameter of the hole for the central pin. The most common size is 5.5 x 2.5/2.2 mm.

This is what was needed for my oldest charger, which I use at home. I made up a lead to connect it to my 12 V power supply. The other day I was charging a battery and smelled burning. When I looked at the charger I could see a red glow and smoke. Thinking it was another lipo going up I grabbed it ready to throw it out of the window. But in fact it was a short that had melted the plastic of the plug.

I soldered up a new lead and all was well. It got me wondering whether there was a better way. A scan of eBay came up with this:



It is not a perfect solution as the wires might come out of the terminals but it's better than soldering thick wires to flimsy plugs even with heat shrink and a touch like a midwife (thanks for that to Blaster Bates). On eBay, look for something like '5.5 x 2.5 DC power plug'. They are about 50p each. Don't be tempted to buy the 5.5 x 2.1 size. These appear to be for video cameras and the like and won't fit normal devices. I know because I bought ten. Anyone want to buy them?