

Advantages of do-it-yourself audio projects

When building a piece of audio equipment by yourself you have several advantages over buying a commercial user-ready product in a shop.

One of the things which can be done “better” is the soldering and mounting of the components. A lot of commercial products suffer from wearing. One of the biggest surprises you may find in a faulty piece of equipment is a disfunctioning solder junction. The next causes of faults are bad contacts in switches, potentiometers and the wearing out of electrolytic capacitors.

But there’s also the design. Most current designs from well known manufacturers offer good sound quality. It may be not in the league of “High End Audio”, but nevertheless.

When considering to build something by yourself your first concern should be the design. Is the design engineer a good electronics engineer or is he specialized in (high quality) audio? Next thing, after you’re sure to be able to lay your hands on an above average design, is to have a look at the components which are offered in the kit or, if you’re trying to assemble something by yourself, are excellent components easily available?

Some kit manufacturers offer a kit where the circuit is well designed AND it is delivered with components of ultimate quality. To begin with the printed circuit board (PCB) should be made out of a solid material (glass enhanced epoxy for instance) at sufficient thickness and the copper traces should have a solid thickness as well. Switches and potentiometers suffer from wearing, so these should also be of the best possible quality.

A thing to consider is if there’s any warranty that you will end up with a functioning piece of equipment. And, for whatever reason, if necessary will the supplier deliver his services for free.

Last, but not least, there’s the price. Good products come at a price. But when buying a kit there are several factors in the commercial calculation, such as marketing, advertising and keeping up an international distribution network, which don’t play a role in the price construction of a kit. Another thing is that kits are manufactured in small quantities and the supplier cannot benefit from large scale production discounts. So a more realistic comparison has to be made between high end products and d-i-y kits. High End products also are manufactured at relative low quantities. When looking at those the advantages of putting some labour of yourself in the product is obvious.