

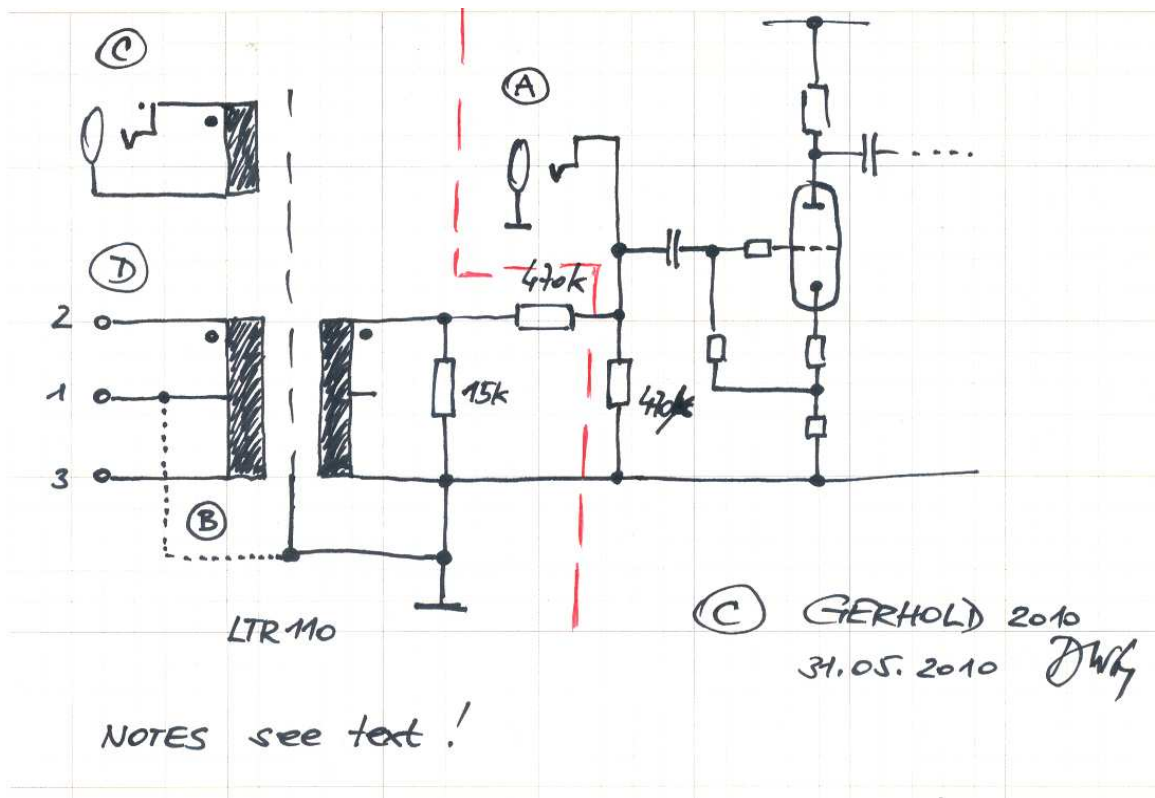
The Balanced or Symmetrical Input

By Barbara E. Gerhold; "TUBECLINIC"

If you encounter problems (e.g. hum) when you connect your tube power amp to your preamp, you should consider a balanced input. All you need is an Audio transformer to be connected in front of the power amp and the same item in the output of your preamp.

The preamp schematic can be seen in the article "[A general view at STC](#)", from the same website.

Have a look at the schematic: All parts right of the red line are already fitted within your MA 845 power amp.



Notes:

- A) Is the original cinch socket. You could leave it as it is.
- B) Is the ground link. It can be lifted or not. If your preamp is already grounded at this point, you should keep it lifted (disconnected). Best place for the ground link is at the input of the power amp. So you should better remove the ground connection in the preamp and connect ground via the power amp.
- C) Shows an isolated but not symmetrical input, which you also could combine with any preamps low impedance output. The intended Audio transformer has an additional winding, which can be used for this purpose. Needs insulated cinch sockets!
- D) Shows the intended symmetrical input. It leads to a XLR female 3-pole socket.

Parts needed:

- 2# LTR110 Audio transformer ([MONACOR GmbH](#))
- 2# insulated Cinch sockets (see note C)

If you have further questions, please contact me at support@tubeclinic.com.