9.5 Acceptable unbalanced setup

Having made sufficiently clear that there is, in fact, no reason why anyone should ever want to waste a perfectly good balanced input by putting the module in a box with RCA inputs, it is likely that some will persist. Two workable methods are given. The first uses differential wiring up to the rear panel to present a normal unbalanced input to the outside world, the second uses an unbalanced cable as a floating quasi-differential connection.

Acceptable unbalanced setup 1: floating chassis and bonded RCA inputs

The first working method is the simplest. Use class II construction and use a 2-prong mains inlet. Use **uninsulated** RCA connectors and wire it to the NC400 input using the supplied cable using the two-wire-plus-shield method previously used for the RCA-XLR adapter cable. For clarity, a stereo system is shown. Important: place the 2 RCA connectors close together (25mm or so) and once again, bond them solidly to the chassis. What this arrangement does is prevent circulating currents from getting out into the two connected audio cables. Inside the chassis those currents do no harm because they do not flow through the audio wires.

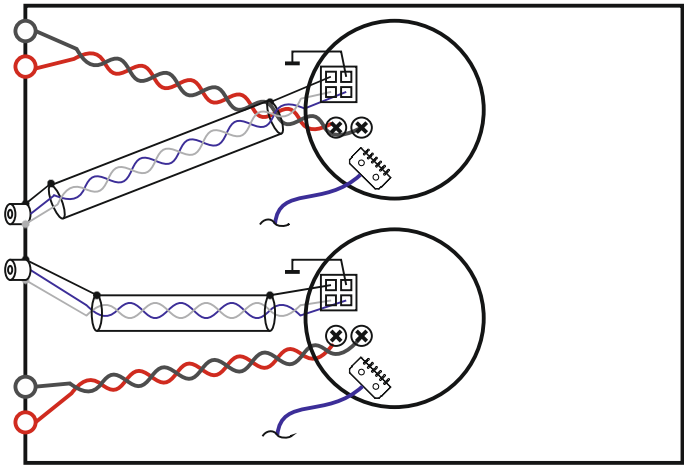

Figure 1: Unbalanced input with hard-bonded RCA's and no mains earth