

Something else to consider.

First, pin 1 in a power cord is the ground wire, the 3rd prong of a power plug. See Fig. 1 below.

I don't know if this has been mentioned earlier or in another post, but when two or more components in a system have pin 1 connected to the same outlet "terminal", there is a connection between the signal ground of the components involved. See Pin1.jpg

In any case, musical information/signal current not only returns via both left and right interconnect shields, but also through the pin 1 power cord ground wires, from component to component signal grounds.

This mixes the channels together to some extent, and is frequency sensitive. There are all sorts of negative ramifications to the musical parameters, such as sound stage, dynamics, frequency response etc. (I know, the resistances and inductances seem small but I am testing 1 part per million in my speaker crossovers, so it does matter to some extent.)

As above, the mixing is non linear since we have two factors to consider, resistance and inductance of the interconnect cable(ic) shields and pin 1 power cord wires.

The ratio of the shield resistance to pin 1 resistance will not be the same as the ratio of the shield inductance to pin 1 wire inductance.

There are solutions, but please be careful if/when implementing them.

1. Only have one component with pin 1 connected to ground. This requires connecting all ics before plugging in any AC power plugs. I do not accept any responsibility. You perform this at your own risk of injury.
2. There is a second method, but I do not accept any responsibility. You perform this at your own risk of injury.

It is installing multiple resistors, each high power, very low ohmage between pin 1 and the component. The preamplifier is the logical choice since the AC current draw is low, the rated fuse is low.

(Amplifiers are higher current with higher amperage fuses, so I would not install any resistors in one. Do so at your own risk of injury.)

For instance, 3 twelve watt resistors in parallel, each resistor 4.5 ohms would result in 1.5 ohm total. The fuse should easily blow, the resistor combo will be 30 watts rated. Even if one or two resistors open, the fuse should easily blow first.

I cannot state this enough. Please be careful. I do not accept any responsibility for any accidents or injuries.

cheers

pos

File Attachments

- 1) [AC Plug Pin 1, Wire.pdf](#), downloaded 92 times
 - 2) [PIN1.jpg](#), downloaded 103 times
-