

SETTING UP YOUR AMPLIFIER - MATCHING THE HEADPHONES

As already mentioned, the HP4 has the ability to drive both high and low impedance headphones. In this context, 'high impedance' means 100ohms and above: 'low impedance' is below 100ohms. (Typically, high impedance headphones are 200ohms or 600ohms, while low impedance types are 32ohms.) A specification for impedance will normally be included in the instructions that came with the headphones, but if you are in doubt it is perfectly safe and easy to experiment and see what works best. Start by trying a low impedance ('Low Z') socket - it does not matter which one as they are connected together internally. Turn up the volume slowly while listening to a familiar recording. If the volume seems low, even at maximum volume, your headphones are probably high impedance. Turn the volume back down to near zero and reconnect the headphones to a high impedance ('Hi Z') socket. Turn the volume up slowly again and check that the volume is now satisfactory.

To sum up: high impedance headphones will clearly play louder when plugged into a high impedance socket. Low impedance headphones will play at about the same volume from either socket, or perhaps (depending on type) louder when plugged into a low impedance socket.

SETTING UP YOUR AMPLIFIER - LINE INPUTS AND OUTPUTS

The HP4 has two line inputs, balanced and unbalanced. The choice of which to use is determined by the preamplifier you use and personal choice. Simply plug in appropriate leads and set the switch on the rear panel to the input you have chosen. Whichever input you choose, the signal is routed through to both balanced and unbalanced line outputs.

Please note: the line outputs are disconnected when the front panel 'Power amp' switch is in the In (depressed) position. This useful feature allows you to select headphones only, or power amp plus headphones, without the replugging of leads often required in a system. The line output is not affected by the volume control on the HP4, so you effectively have completely independent control of headphone and loudspeaker listening.

Two problems may very occasionally occur. First, transformer coupling is not forgiving of source components which have a high level of DC (more than a few millivolts) present at their outputs. Such components can only be regarded as faulty and should be repaired at once, but such a fault may have gone undetected for some time and may look at first like a fault with the HP4. The most obvious symptom would be a serious lack of bass, due to saturation of the transformer core by the DC. If you suspect that one or more of your source components is producing a DC offset at its outputs, have the equipment checked by a qualified technician.