

120W Active Subwoofer Module

A subwoofer can add a new dimension to your listening pleasure. The inclusion of a sub-woofer will enhance any existing sound system and add a touch of realism to any home theatre system.

Explanation of controls on the A 2451

Phase Switch

If the subwoofer has been wired out of phase this will exhibit itself as a “hole” in the signal. The phase switch can correct this problem. To correct the problem set switch to 180°. If there is no “hole” in the signal leave the phase switch set to 0°

Crossover frequency.

The crossover frequency control is used to tune the subwoofer amplifier module to the frequency of the enclosure design. Some speakers have a very narrow operating range, while others can operate over a wider range. The frequency control acts like a tuneable crossover.

Volume

The volume control is used to adjust the volume of the sub-woofer to match the rest of the system.

Wiring the Sub-woofer into the amplifier

The only wiring required is connection to the subwoofer speaker. See Figure 1.

ON / OFF switch

The unit features an auto power up and auto power down. When switched on and in standby mode the power indicator will illuminate red. When a signal is present the power indicator will turn green to indicate the subwoofer is on. At a given input signal level (factory set) the subwoofer will switch on. When the input signal has been turned off, or the input source volume is set to a very low setting, the subwoofer will auto power off after about 10 minutes. When the input signal is again restored the unit will again auto power up.

Troubleshooting hum noise (Figure 2)

If a hum exists in your subwoofer after connection to your system we suggest that the mains power is connected to the same mains power outlet as the amplifier and input sources. If this is not possible we suggest a ground loop isolator such as an C 9555 is inserted in the signal line (ie RCA inputs) between the main amplifier and the subwoofer unit.

Specifications

Maximum power output:	180W
RMS power output (0.1% THD):	120W
Input impedance	50k ohm
Amplifier frequency response	20-200Hz
Input sensitivity – RCA's	160mV
Input sensitivity - binding posts.....	3.2V
Speaker size	200mm
SPL	87dB @ 1W, 1m

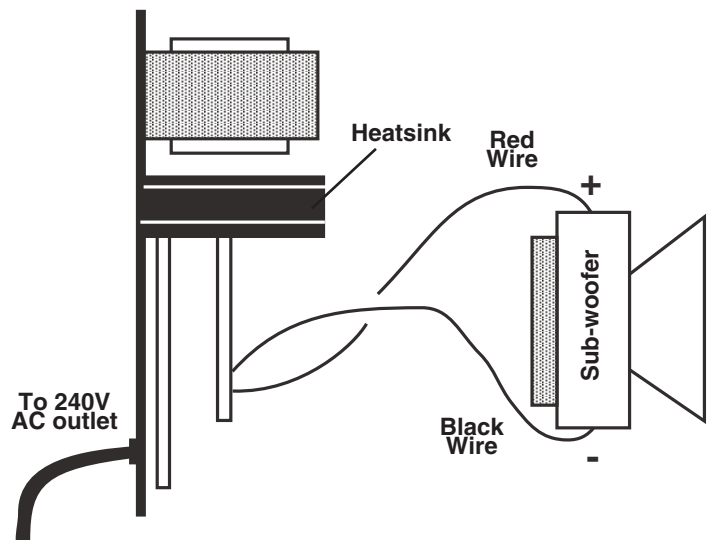


Figure 1 : A side view of the amplifier module. Use this diagram to wire the speaker to the amplifier module .

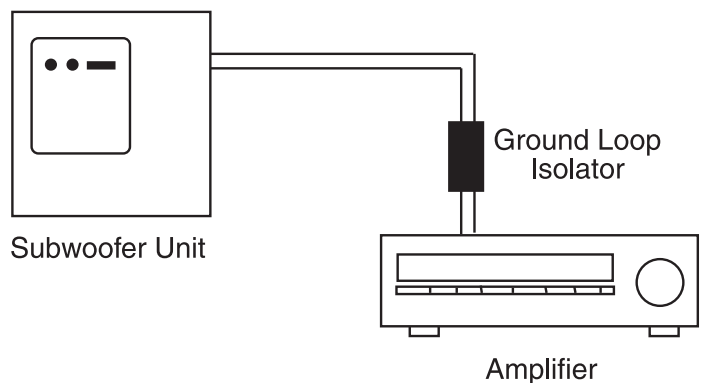


Figure 2 : In the event of hum in your signal, insert a ground loop isolator between the subwoofer and the amplifier.

WARNING

There are no user serviceable parts inside the unit. Do not open the unit. If the fuse blows, only replace with an equivalent 1.6A fast blow fuse.

A 2451 Active subwoofer module

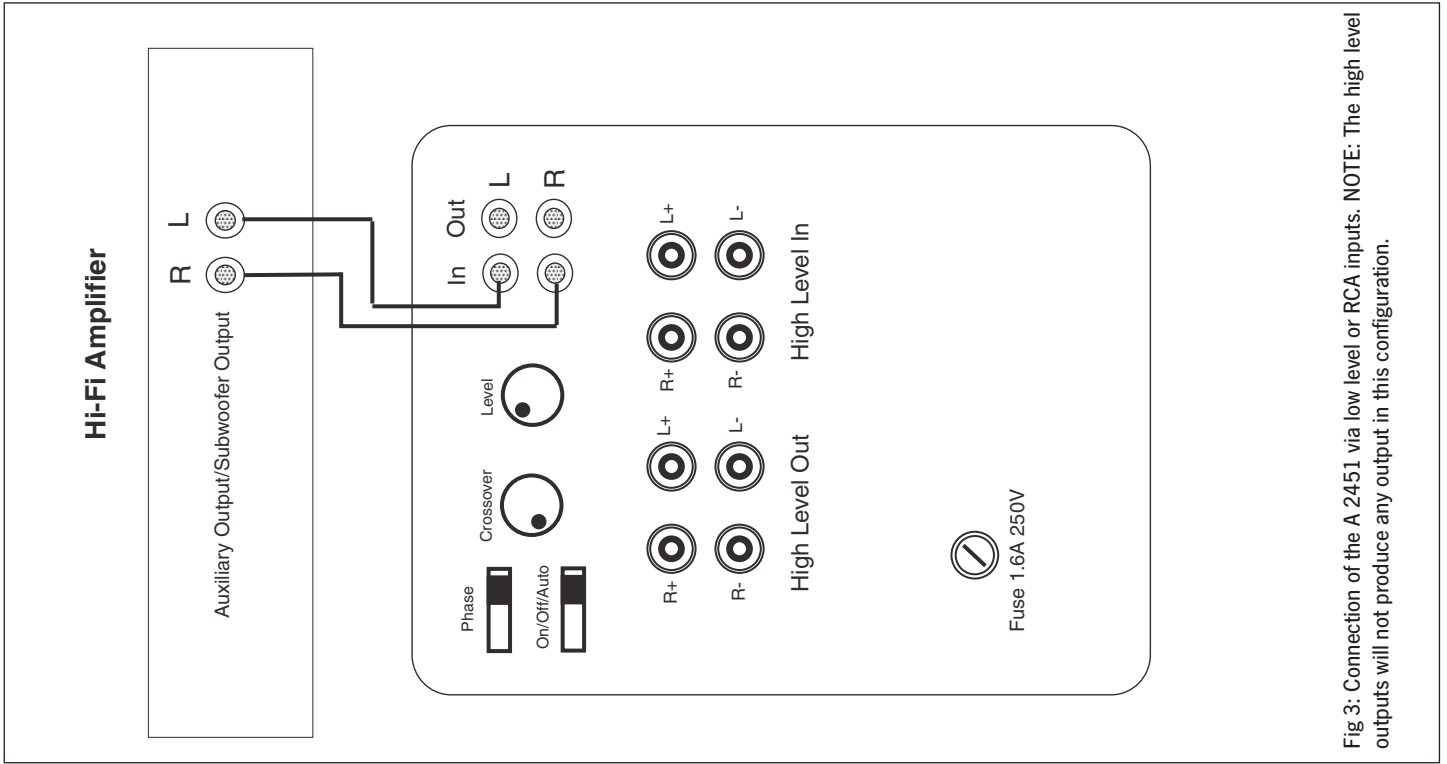


Fig 3: Connection of the A 2451 via low level or RCA inputs. NOTE: The high level outputs will not produce any output in this configuration.

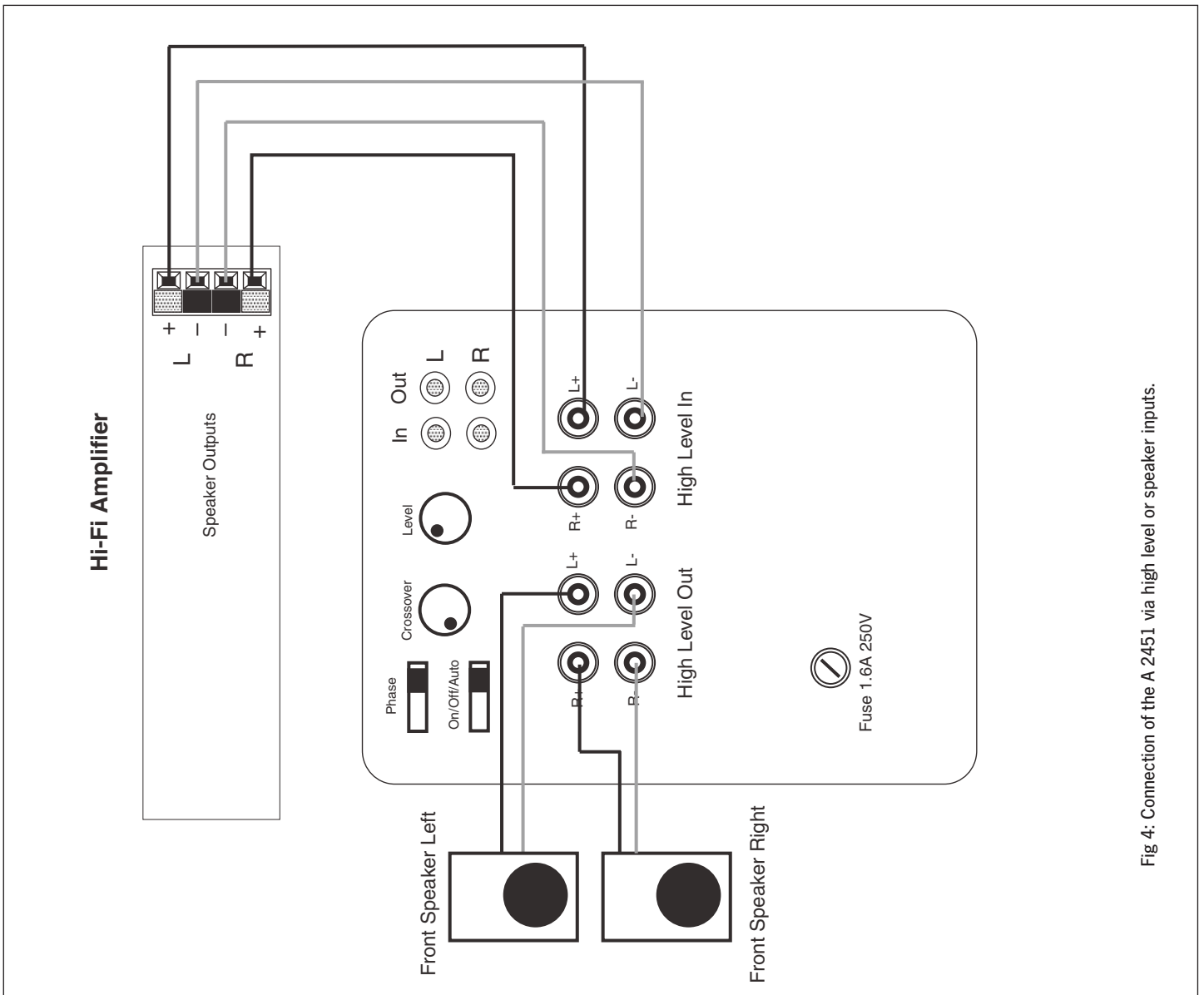


Fig 4: Connection of the A 2451 via high level or speaker inputs.