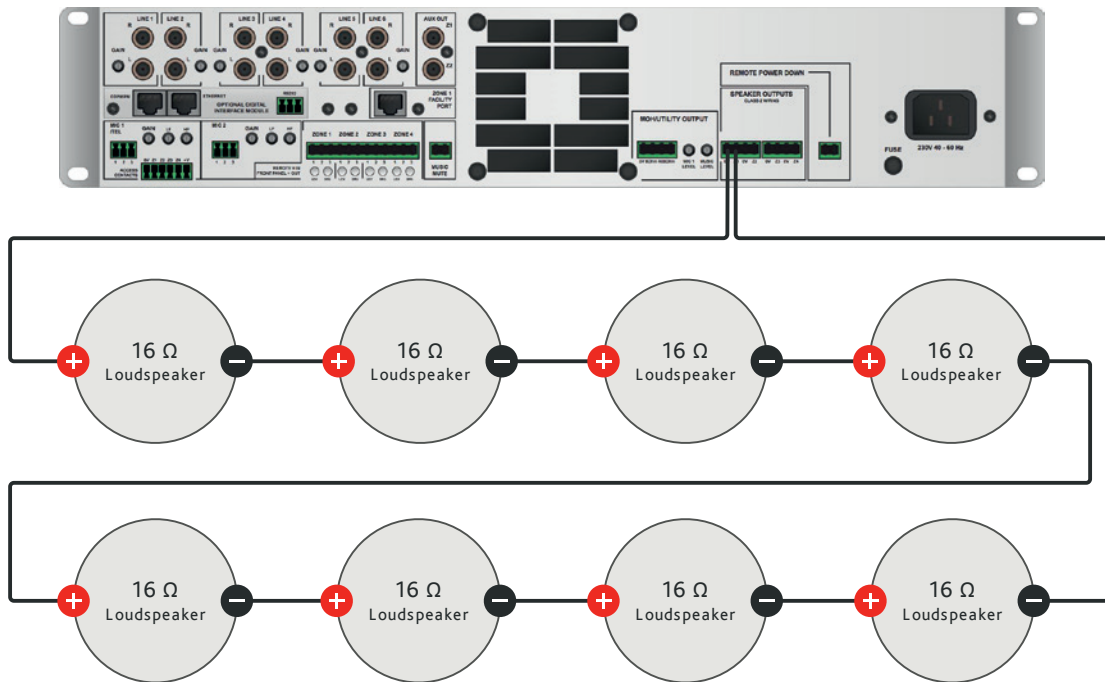


Series Loudspeaker wiring

Information:

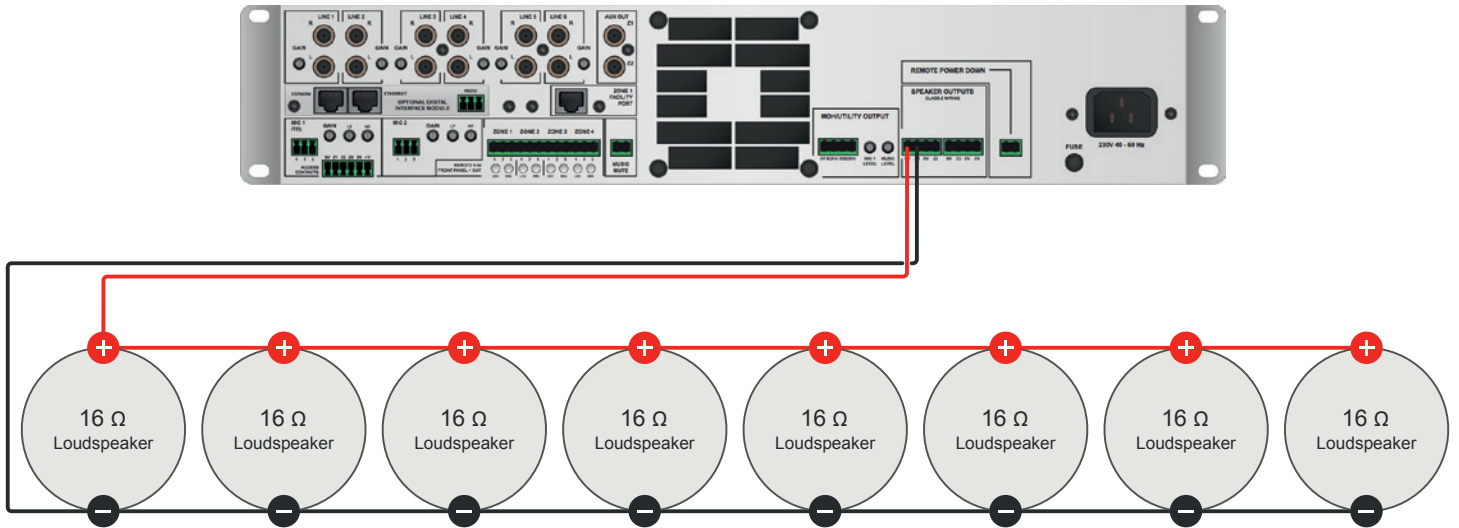
This approach is not good for Commercial Wiring and would put a very heavy load on the amplifier. By connecting each 16Ω speakers in Series the impedance is doubling each time, presents an 128Ω load to the amplifier. (16Ωx8 Speakers=128Ω at the amplifier).



Parallel Loudspeaker wiring

Information:

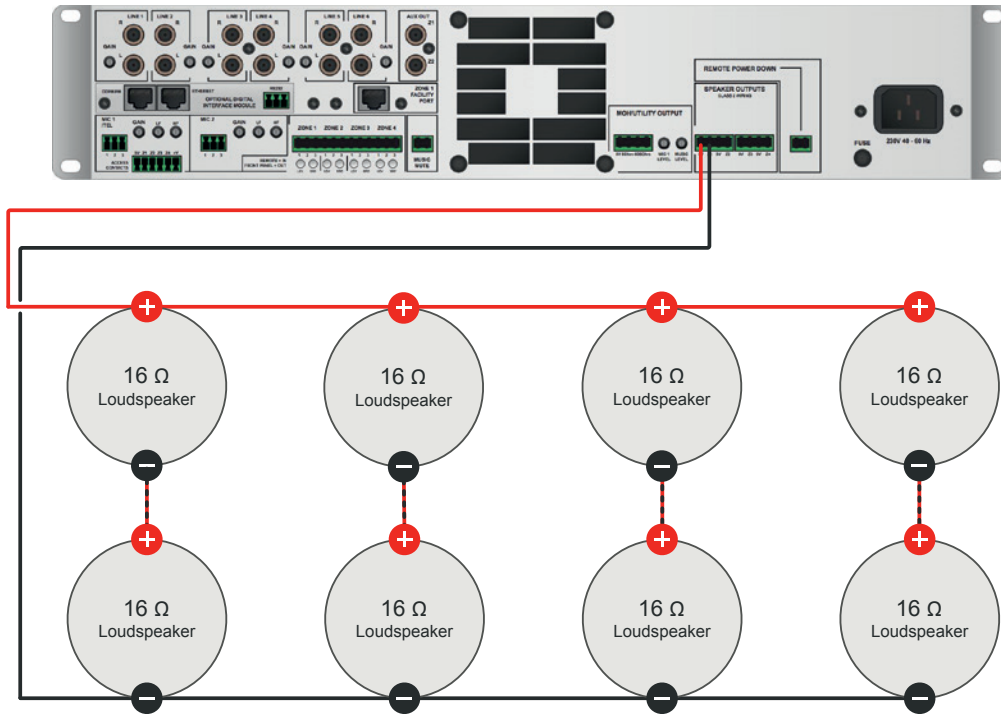
This approach is not good for Commercial Wiring and would put a very heavy load on the amplifier. By connecting each 16Ω speakers in Parallel the impedance is halved each time, presents a 2Ω load to the amplifier. ($16\Omega/8\text{ Speakers}=2\Omega$ at the amplifier).



Series Parallel Loudspeaker wiring

Information:

This speaker wiring design will allow for larger speaker coverage using Low-Impedance Speakers. By connecting each pair of 16Ω speakers in Series gives a 32Ω resistance; then connecting the 4 pairs in Parallel presents an 8Ω load to the amplifier. ($16\Omega \times 2 / 4 \text{ Pairs} = 8\Omega$ at the amplifier).



Constant Voltage Speakers

Information:

Constant-voltage speaker systems, also called high impedance or 70V/100V systems, refer to networks or loudspeakers equipped with line transfers connected to an audio amplifier with high impedance output. This approach offers several advantages such as:

- High voltage (70V or 100V) enables long cable runs between amp and speakers with reduced power loss: low level current allows smaller cable diameters.
- Speakers can be wired in parallel in large number, limited only by available amplifier power.
- Different speaker types with different power requirements can share the same speaker line simultaneously making the system wiring easier.
- Adding or removing a speaker is very quick and simple, it does not require re-wiring the system.

