Dual Voice Coil (DVC) Wiring Tutorial

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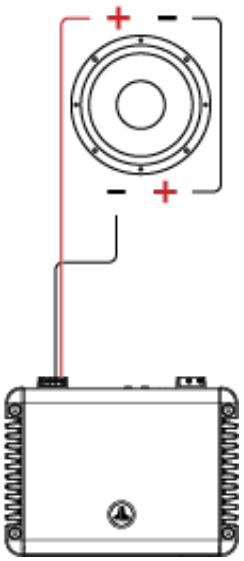
With multi-driver sub systems, which often feature dual voice coils (DVC) on each driver, the level of wiring complexity can be enough to turn-off even the most adventurous of car audio do-it-yourselfers. Fear not, though, for we have compiled wiring diagrams of several configurations for dual voice coil (DVC) drivers.

Please note that when wiring multiple drivers it is recommended that series connections between drivers be avoided at all costs. This does not include series connections made between voice coils on the same driver. For more information, please consult our Dual Voice Coil FAQs.

Additionally, if you have an idea for a wiring configuration and you do not see it here, chances are you should re-think its implementation (in other words, don't do it). You will more than likely find that the results will be less than optimal.

> Note: Amplifier depicted is for reference only - check the capability of your amplifier before making any connections

One DVC driver with Voice Coils in Series

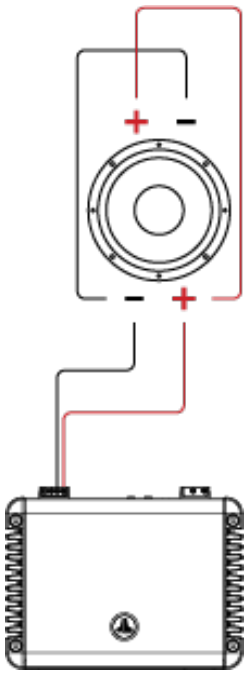


One Dual Voice Coil Speaker in Series

Connecting the two voice coils of the driver in series (+ to -) will result in the following impedances:

- Dual–8 Ohm Subwoofer: 16 Ohms
- Dual-6 Ohm Subwoofer: 12 Ohms
- Dual–4 Ohm Subwoofer: 8 Ohms
- Dual–2 Ohm Subwoofer: 4 Ohms
- Dual–1.5 Ohm Subwoofer: 3 Ohms

One DVC driver with Voice Coils in Parallel

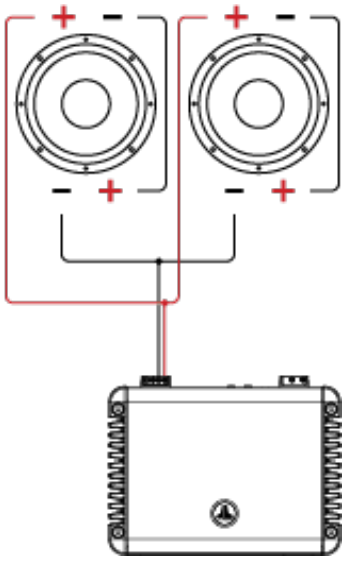


One Dual Voice Coil Speaker in Parallel

Connecting the two voice coils of the driver in parallel (+ to +, - to -) will result in the following impedances:

- Dual–8 Ohm Subwoofer: 4 Ohms
- Dual-6 Ohm Subwoofer: 3 Ohms
- Dual–4 Ohm Subwoofer: 2 Ohms
- Dual–2 Ohm Subwoofer: 1 Ohm
- Dual–1.5 Ohm Subwoofer: 0.75 Ohm

Two DVC drivers with Voice Coils in Series / Parallel

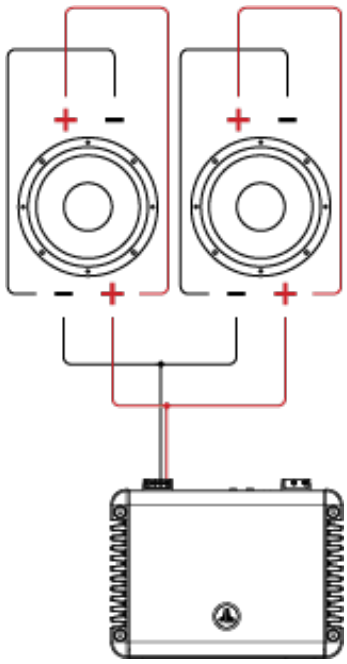


Two Dual Voice Coil Speakers in Series / Parallel

Connecting the two voice coils of each driver in series (+ to -) and the drivers themselves in parallel (+ to +, etc.) will result in the following impedances:

- Dual–8 Ohm Subwoofers: 8 Ohms
- Dual-6 Ohm Subwoofers: 6 Ohms
- Dual–4 Ohm Subwoofers: 4 Ohms
- Dual–2 Ohm Subwoofers: 2 Ohms
- Dual–1.5 Ohm Subwoofers: 1.5 Ohms

Two DVC drivers with Voice Coils in Parallel / Parallel

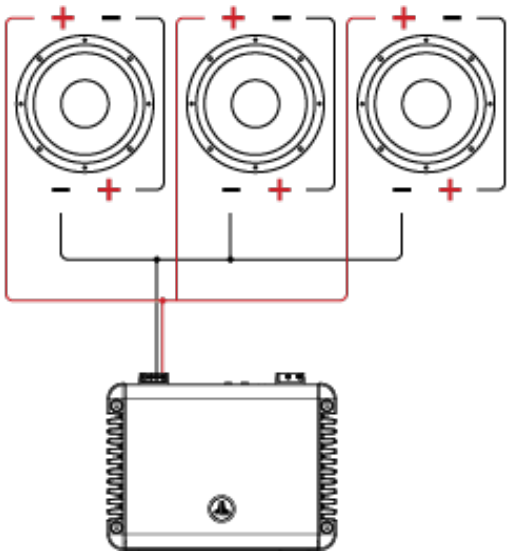


Two Dual Voice Coil Speakers in Parallel / Parallel

Connecting the voice coils of each driver in parallel (+ to +, - to -) and the drivers themselves in parallel (+ to +, etc.) will result in the following impedances:

- Dual–8 Ohm Subwoofers: 2 Ohms
- Dual-6 Ohm Subwoofers: 1.5 Ohms
- Dual–4 Ohm Subwoofers: 1 Ohm
- Dual–2 Ohm Subwoofers: 0.5 Ohm
- Dual–1.5 Ohm Subwoofer: 0.38 Ohm

Three DVC drivers with Voice Coils in Series / Parallel

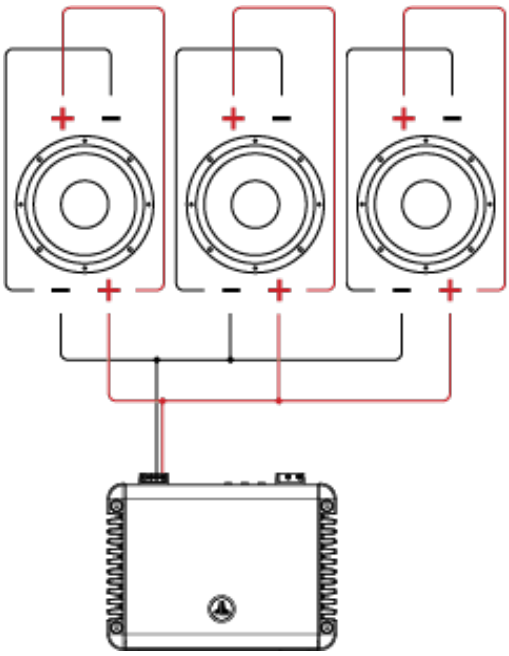


Three Dual Voice Coil Speakers in Series / Parallel

Connecting the two voice coils of each driver in series (+ to -) and the drivers themselves in parallel (+ to +, etc.) will result in the following impedances:

- Dual–8 Ohm Subwoofers: 5.33 Ohms
- Dual-6 Ohm Subwoofers: 4 Ohms
- Dual–4 Ohm Subwoofers: 2.67 Ohms
- Dual–2 Ohm Subwoofers: 1.33 Ohms
- Dual–1.5 Ohm Subwoofer: 1 Ohm

Three DVC drivers with Voice Coils in Parallel / Parallel

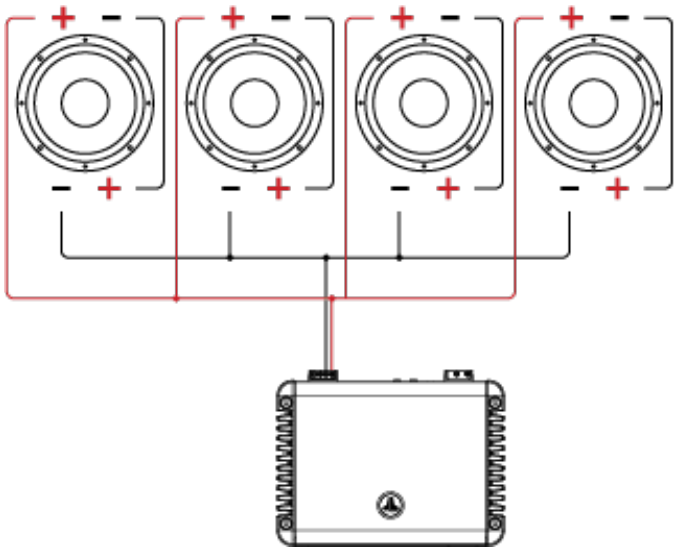


Three Dual Voice Coil Speakers in Parallel / Parallel

Connecting the two voice coils of each driver in parallel (+ to +, - to -) and the drivers themselves in parallel will result in the following impedances:

- Dual–8 Ohm Subwoofers: 1.33 Ohms
- Dual-6 Ohm Subwoofers: 1 Ohm
- Dual–4 Ohm Subwoofers: 0.67 Ohm
- Dual–2 Ohm Subwoofers: 0.33 Ohm
- Dual–1.5 Ohm Subwoofer: 0.25 Ohm

Four DVC drivers with Voice Coils in Series / Parallel

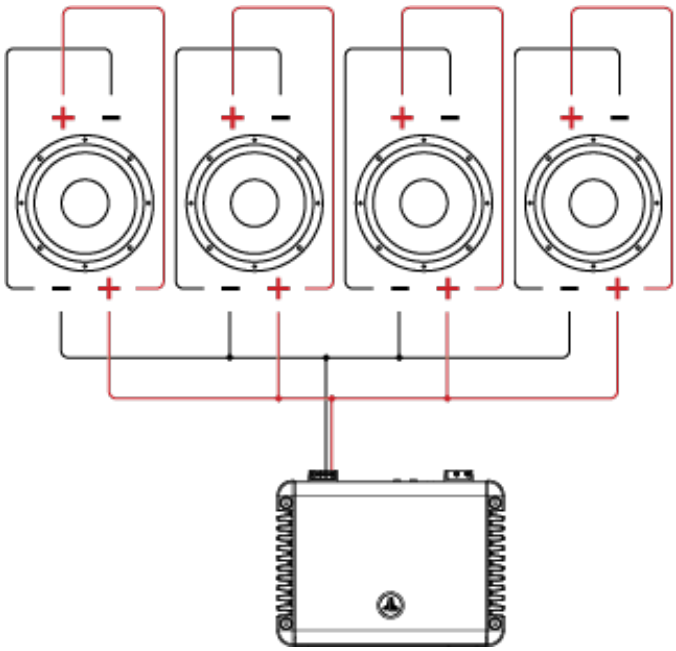


Four Dual Voice Coil Speakers in Series / Parallel

Connecting the two voice coils of each driver in series (+ to -) and the drivers themselves in parallel (+ to +, etc.) will result in the following impedances:

- Dual–8 Ohm Subwoofers: 4 Ohms
- Dual-6 Ohm Subwoofers: 3 Ohms
- Dual–4 Ohm Subwoofers: 2 Ohms
- Dual–2 Ohm Subwoofers: 1 Ohm
- Dual–1.5 Ohm Subwoofers: 0.75 Ohm

Four DVC drivers with Voice Coils in Parallel / Parallel

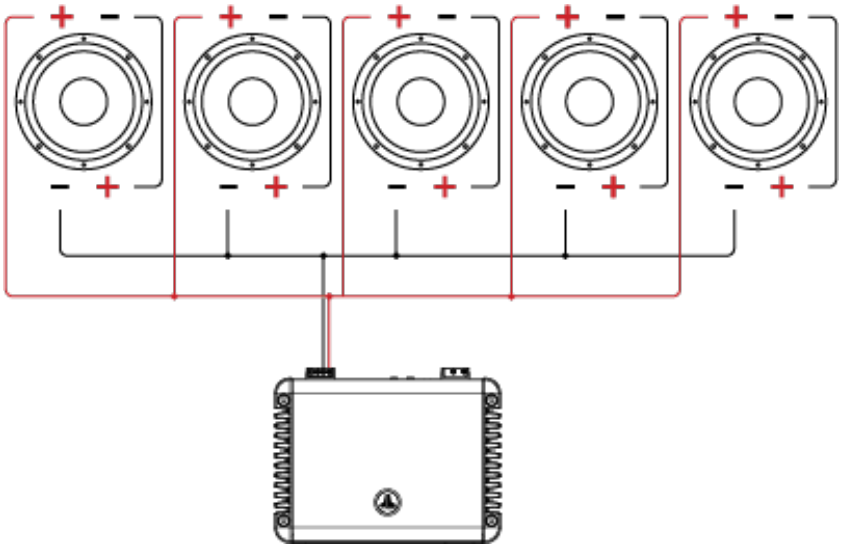


Four Dual Voice Coil Speakers in Parallel / Parallel

Connecting the two voice coils of each driver in parallel (+ to +, - to -) and the drivers themselves in parallel (+ to +, etc.) will result in the following impedances:

- Dual–8 Ohm Subwoofers: 1 Ohm
- Dual-6 Ohm Subwoofers: 0.75 Ohm
- Dual–4 Ohm Subwoofers: 0.5 Ohm
- Dual–2 Ohm Subwoofers: 0.25 Ohm
- Dual–1.5 Ohm Subwoofer: 0.19 Ohm

Five DVC drivers with Voice Coils in Series / Parallel

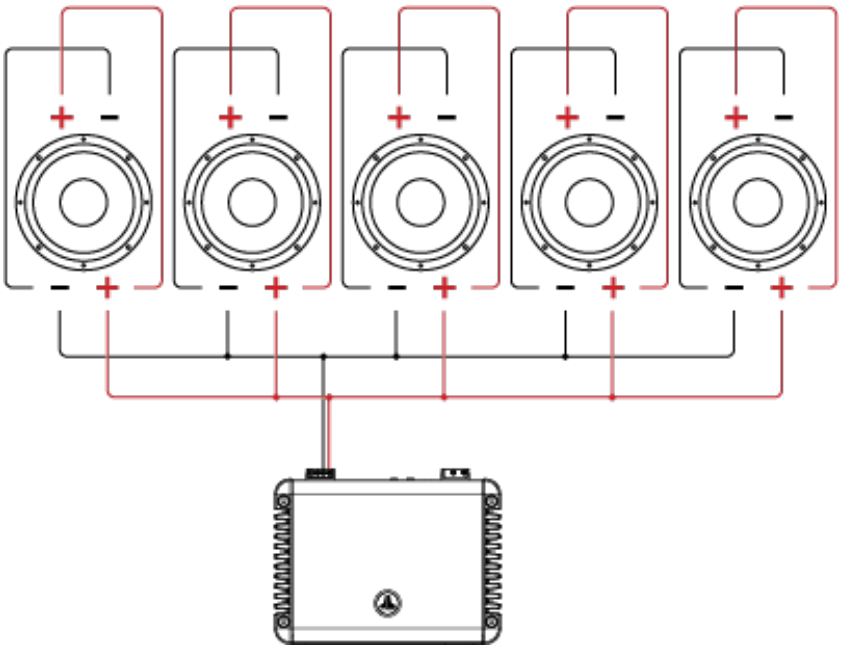


Five Dual Voice Coil Speakers in Series / Parallel

Connecting the two voice coils of each driver in series (+ to -) and the drivers themselves in parallel (+ to +, etc.) will result in the following impedances:

- Dual–8 Ohm Subwoofers: 3.2 Ohms
- Dual-6 Ohm Subwoofers: 2.4 Ohms
- Dual–4 Ohm Subwoofers: 1.6 Ohms
- Dual–2 Ohm Subwoofers: 0.8 Ohm
- Dual–1.5 Ohm Subwoofer: 0.6 Ohm

Five DVC drivers with Voice Coils in Parallel / Parallel

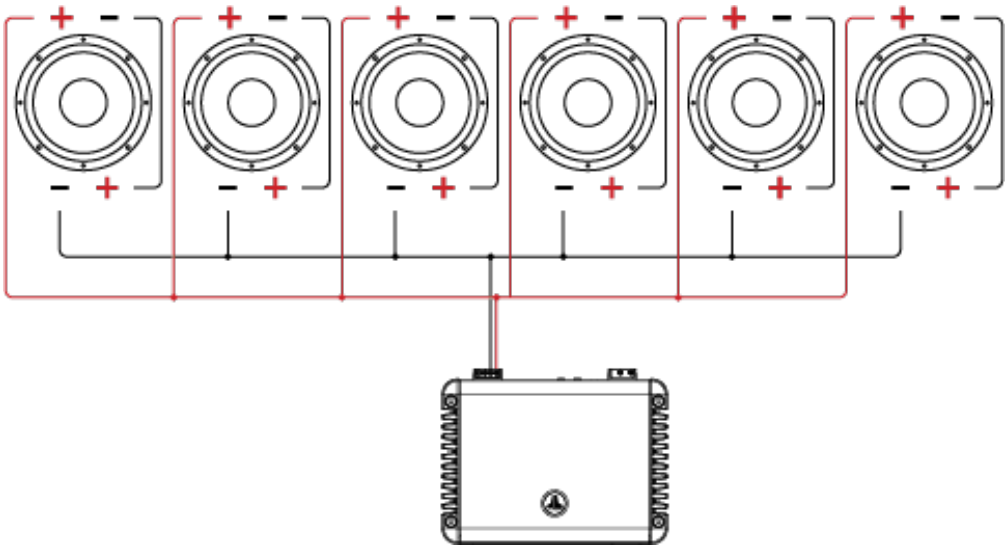


Five Dual Voice Coil Speakers in Parallel / Parallel

Connecting the two voice coils of each driver in parallel (+ to +, - to -) and the drivers themselves in parallel will result in the following impedances:

- Dual–8 Ohm Subwoofers: 0.8 Ohm
- Dual-6 Ohm Subwoofers: 0.6 Ohm
- Dual–4 Ohm Subwoofers: 0.4 Ohm
- Dual–2 Ohm Subwoofers: 0.2 Ohm
- Dual–1.5 Ohm Subwoofer: 0.15 Ohm

Six DVC drivers with Voice Coils in Series / Parallel

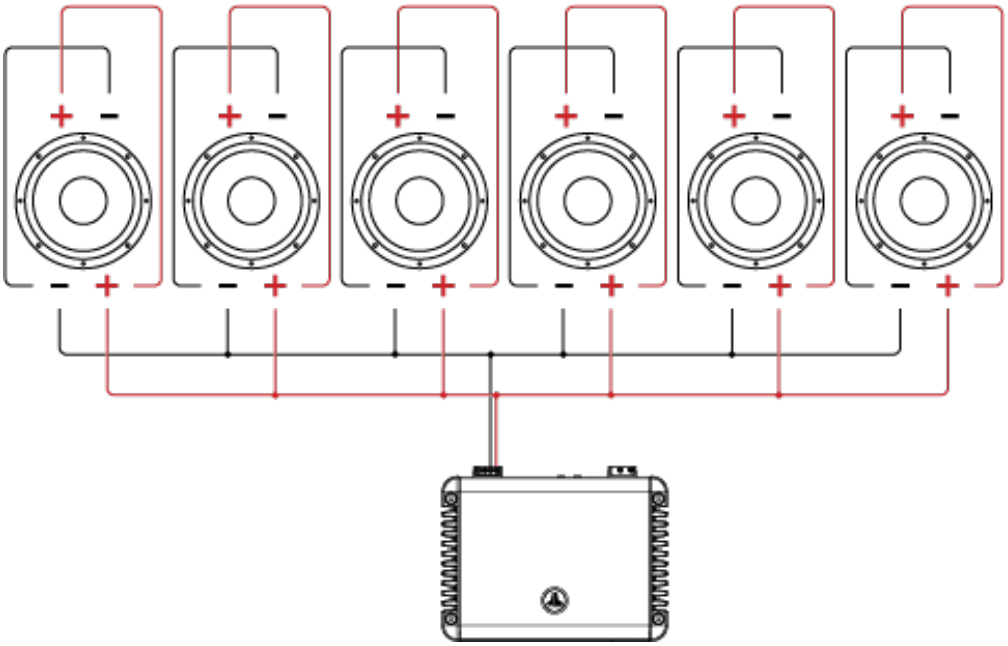


Six Dual Voice Coil Speakers in Series / Parallel

Connecting the two voice coils of each driver in series (+ to -) and the drivers themselves in parallel (+ to +, etc.) will result in the following impedances:

- Dual–8 Ohm Subwoofers: 2.67 Ohms
- Dual-6 Ohm Subwoofers: 2 Ohms
- Dual–4 Ohm Subwoofers: 1.3 Ohms
- Dual–2 Ohm Subwoofers: 0.7 Ohm
- Dual–1.5 Ohm Subwoofer: 0.5 Ohm

Six DVC drivers with Voice Coils in Parallel / Parallel



Six Dual Voice Coil Speakers in Parallel / Parallel

Connecting the two voice coils of each driver in parallel (+ to +, - to -) and the drivers themselves in parallel will result in the following impedances:

- Dual–8 Ohm Subwoofers: 0.67 Ohm
- Dual-6 Ohm Subwoofers: 0.5 Ohm
- Dual–4 Ohm Subwoofers: 0.33 Ohm
- Dual–2 Ohm Subwoofers: 0.167 Ohm
- Dual–1.5 Ohm Subwoofer: 0.125 Ohm