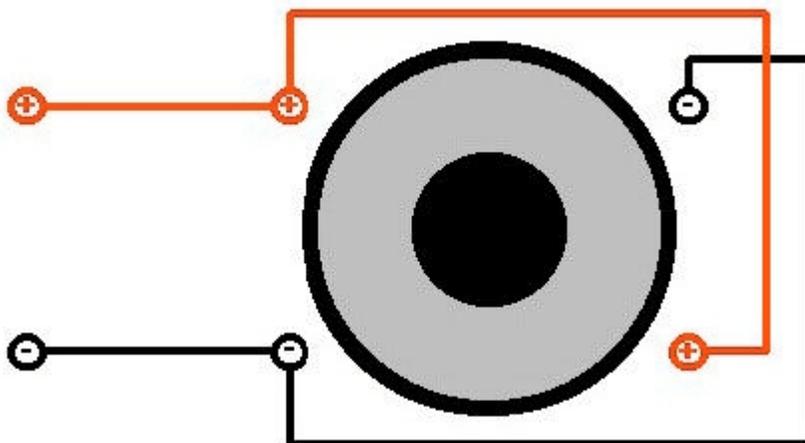


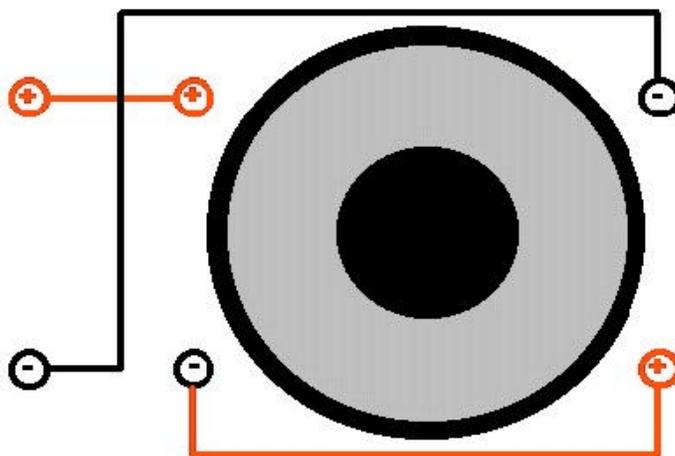


DUAL VOICE COIL WIRING

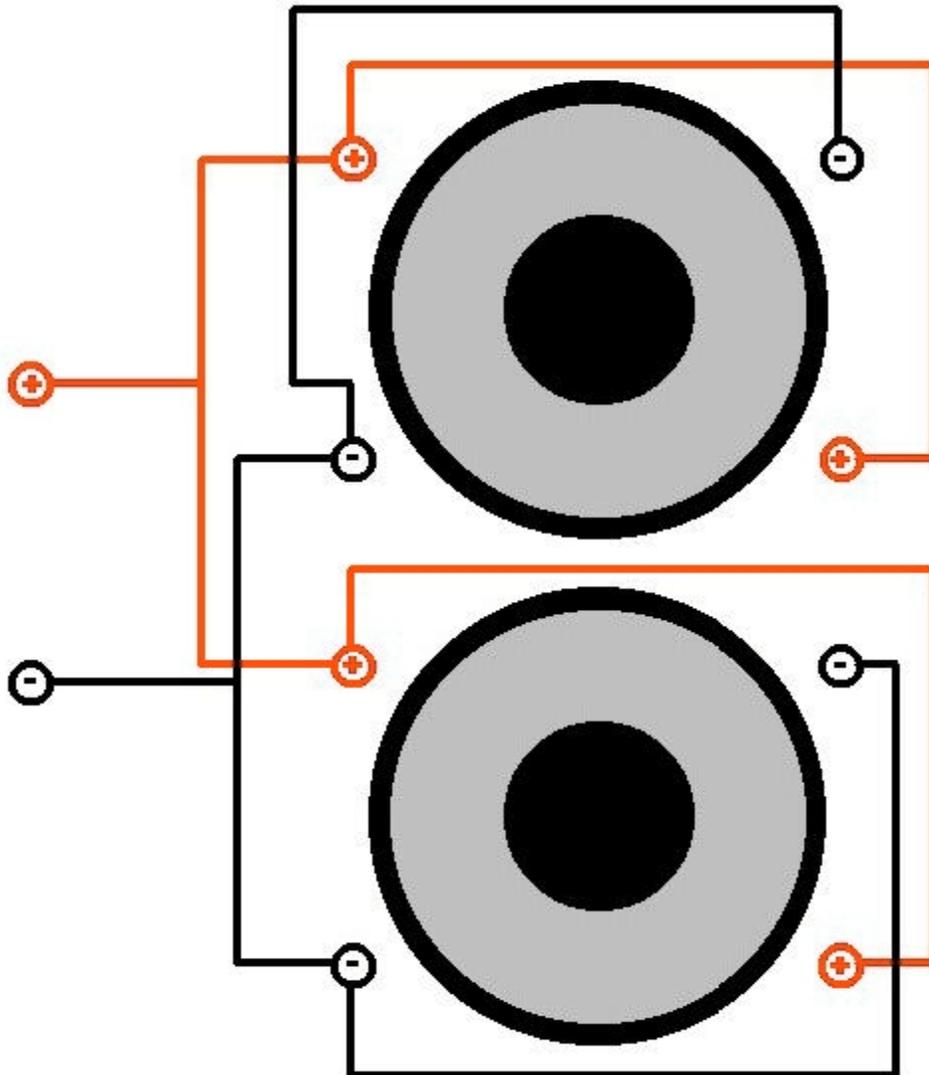
Wiring dual voice coil (DVC) drivers can often be confusing. With a single driver, you're dealing with 3 sets of connections. Two drivers, we're looking at 5 sets of connections! There are two basic means of connecting a DVC driver: parallel and series. When parallel connecting a driver, this means connecting both voice coils to the amp in the same way. All plus terminals connect, all minus terminals connect:



This method of wiring is the most common for DVC wiring. For our dual 8 ohm voice coil drivers, it results in a nominal 4 ohm load (parallel connecting voice coils of the same impedance results in half the impedance of either voice coil). This maximizes the output of our home plate amps, and also produces an impedance compatible with most car stereo equipment. The other method of connecting DVC drivers is to wire the voice coils in series. This means connecting from the amp to the input of one voice coil, from the output of that voice coil to the input of the other voice coil, then from the output of the second voice coil back to the amp:

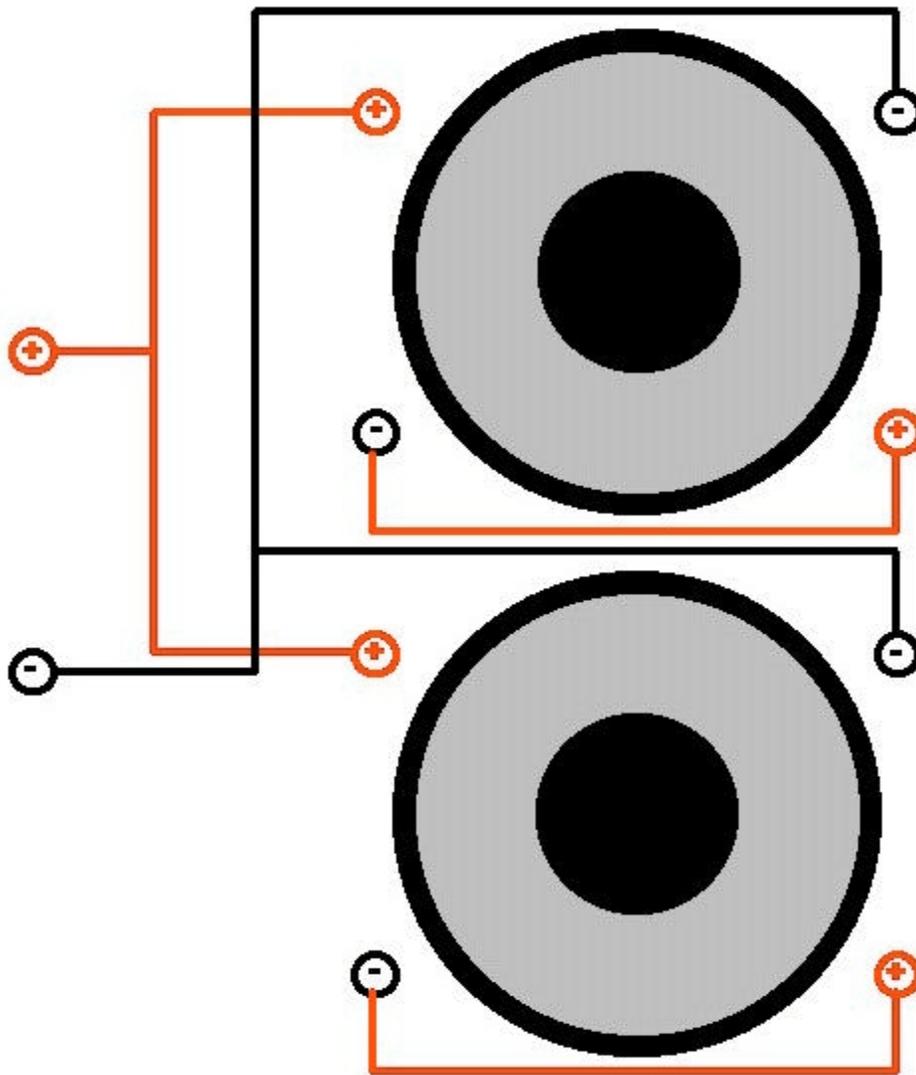


This method of wiring is not as widely used as the parallel case. For our dual 8 ohm voice coil drivers, it results in a nominal 16 ohm load (series connecting voice coils results in the sum of the impedances of all voice coils). This means of wiring is often used when wiring DVC drivers for use in large arrays, or in prosound applications (where 16 ohm loads are widely used). Combinations of drivers make things a bit more difficult. Wiring two drivers in parallel with voice coils in parallel is often used in car audio. With nominal 8 ohm voice coil drivers, you would end up with 2 ohms, which can maximize power output of many car audio amps:



Note that all the positive terminals are connected together, and all the negative terminals are connected together. The total load, assuming dual 8 ohm voice coil drivers, is 2 ohms.

For home audio arrays, it is often desirable to keep the impedance between 4 and 8 ohms. For DVC drivers with 8 ohm voice coils, it is typical to wire each driver in series, and parallel the drivers:



This results in a final 8 ohm load, assuming each driver has dual 8 ohm voice coils. While this may not "maximize" power output of an amp optimized for a 4 ohm load, it will result in more linear output for the same power input as a single driver. For additional driver connections, use combinations of the above wiring diagrams. For 4 DVC drivers (each with dual 8 ohm voice coils), wire all drivers in parallel together to create a nominal 1 ohm load. Using the same drivers, wiring each driver's voice coils in series and paralleling each driver will result in an effective 4 ohm load.