PARALLEL: When wiring in parallel, the resistance of the speakers decreases. Two 8 ohm speakers wired in (hooked-up) Parallel results in a 4 ohm load. It’s easy to calculate the effect of a resistive load when all the speakers are all the same resistance. It is really not suggested to wire different resistive load values in Parallel (8 and 4, 16 and 8 etc.) The formula for figuring the total impedance in Parallel is the multiplication of the two loads divided by the sum of the two loads - i.e. putting two 8 ohm speakers in Parallel results in a 4 ohm load. Connect the Positive side of Speaker A to the Positive side of Speaker B - Connect the Negative side of Speaker A to the Negative side of Speaker B.

COMBINATION OF SERIES & PARALLEL: This is really just two sets of Series wired speakers connected in Parallel. This is how you maintain a consistent load with multiple speakers. The importance of this is more evident when you have more than one cabinet to connect to your amplifier. This is when you need to figure out the loads and how to wire them up without applying too low of a resistance on the amplifier.

Simply connect the Positive side of Speaker A to the Positive side of Speaker C.

Connect the Negative side of Speaker A to the Positive side of Speaker B. Next, connect the Negative side of Speaker C to the Positive side of Speaker D.

And lastly, connect the Negative side of Speaker B to the Negative side of Speaker D.

4 Eight (8 ) Ohm speakers wired in Series Parallel = a Total Load of 8 Ohms.
WIRING SCHEMES...Amplifier to Speaker Cabinets

1. Partial back view of amplifier
   - 8 OHM
   - 8 Ohm Cabinet

2. Partial back view of amplifier
   - 4 OHM
   - 4 Ohm Cabinet

3. Partial back view of amplifier
   - 4 OHM
   - 8 OHM
   - 16 OHM
   - 8 Ohm Cabinet 
   - SAFE MISMATCH

4. Partial back view of amplifier
   - 4 OHM
   - 8 OHM
   - 16 OHM
   - 16 Ohm Cabinet

5. Partial back view of amplifier
   - 4 OHM
   - 8 OHM
   - 16 OHM
   - 16 Ohm Cabinet 
   - SAFE MISMATCH
WIRING SCHEMES... Amplifier to Speaker Cabinets

6. Partial back view of amplifier
   - 8 Ohm 4 Ohm 4 Ohm
   - 8 Ohm Cabinet 8 Ohm Cabinet
   - CORRECT MATCH

7. Partial back view of amplifier
   - 4 Ohm 4 Ohm 8 Ohm
   - 8 Ohm Cabinet 16 Ohm Cabinet
   - SAFE MISMATCH

8. Partial back view of amplifier
   - 8 Ohm 4 Ohm 4 Ohm
   - 8 Ohm Series Box
   - CORRECT MATCH

9. Partial back view of amplifier
   - 8 Ohm 4 Ohm 4 Ohm
   - 8 Ohm Parallel Box
   - CORRECT MATCH

SAFE MISMATCH:
- 8 Ohm Cabinet 16 Ohm Cabinet
- SERIES BOX
- CORRECT MATCH
- PARALLEL BOX
- CORRECT MATCH
WIRING SCHEMES...Amplifier to Speaker Cabinets

10
Partial back view of amplifier
4 OHM 4 OHM 8 OHM

16 Ohm
SERIES BOX
8 Ohm 8 Ohm

8 Ohm Cabinet 8 Ohm Cabinet 8 Ohm Cabinet
SAFE MISMATCH

11
Partial back view of amplifier
4 OHM 4 OHM 8 OHM

16 Ohm Cabinet 16 Ohm Cabinet
SAFE MISMATCH

12
CORRECT MATCH
Partial back view of amp
8 OHM 4 OHM 4 OHM

8 Ohm Cabinet

16 Ohm Cabinet 16 Ohm Cabinet
16 Ohm Cabinet 16 Ohm Cabinet
SAFE MISMATCH
WIRING SCHEMES...Amplifier to Speaker Cabinets

13

16 Ohm
SERIES BOX

Partial back view of amplifier –
4 OHM   4 OHM   8 OHM

8 Ohm   8 Ohm

8 Ohm Cabinet   8 Ohm Cabinet   16 Ohm Cabinet

SAFE MISMATCH

14

Partial back view of amplifier –
8 OHM   4 OHM   4 OHM

8 Ohm
PARALLEL BOX

16 Ohm   16 Ohm

16 Ohm Cabinet   16 Ohm Cabinet   16 Ohm Cabinet

SAFE MISMATCH