

Basic Speaker Installation - 70 Volt Systems and Applications

Figure 1.

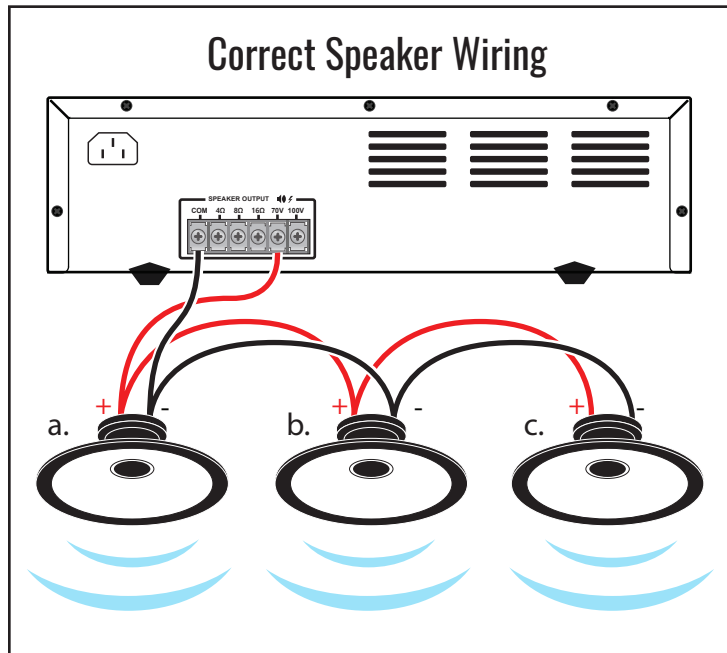
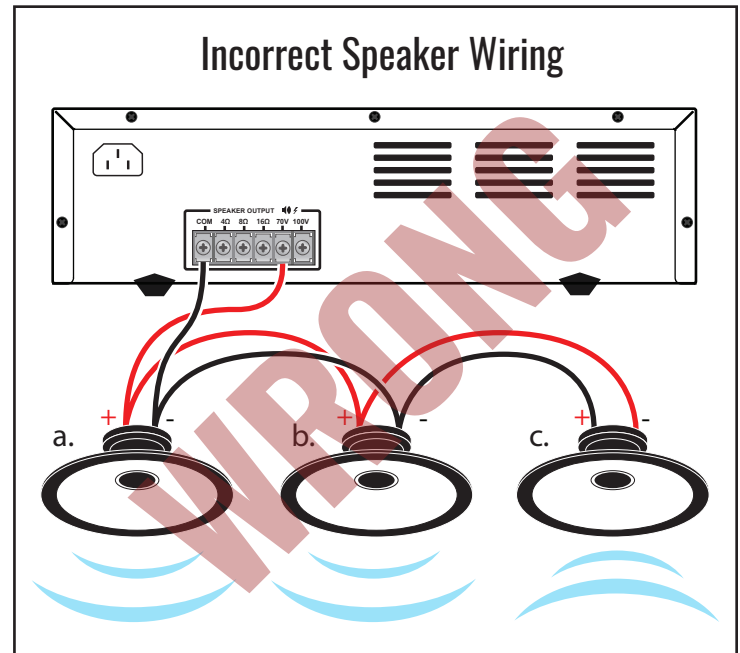


Figure 2.



Be careful not to cross wires when installing your speakers. Wiring should always be negative to negative and positive to positive (Figure 2. shows speaker c. incorrectly wired).

Basic Attenuator/Volume Control Installation

Figure 3.

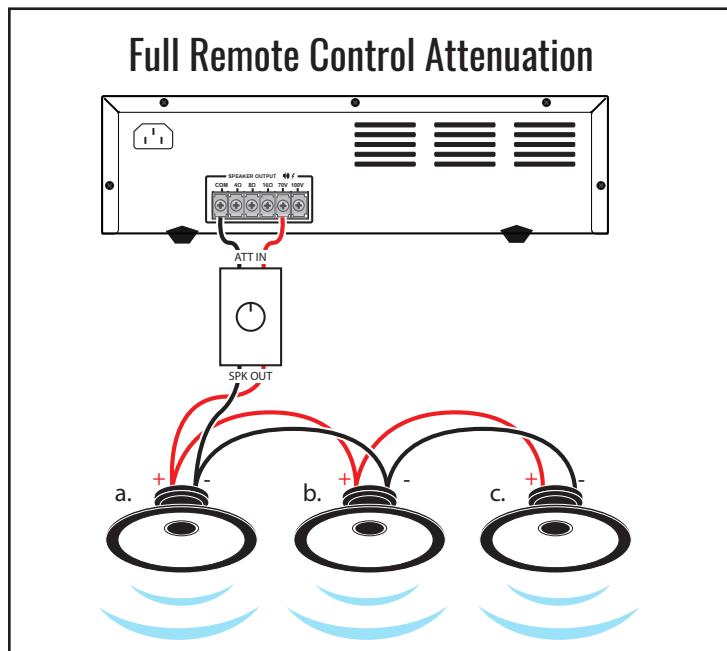
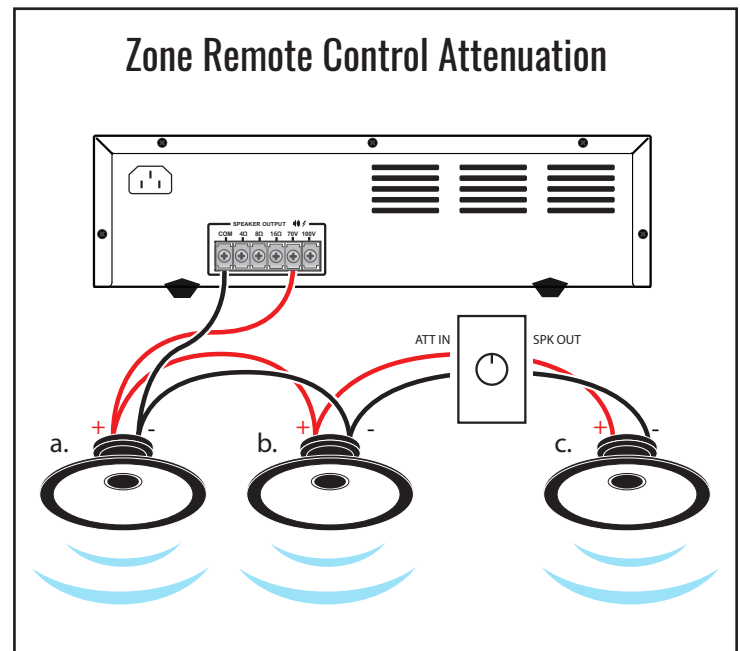


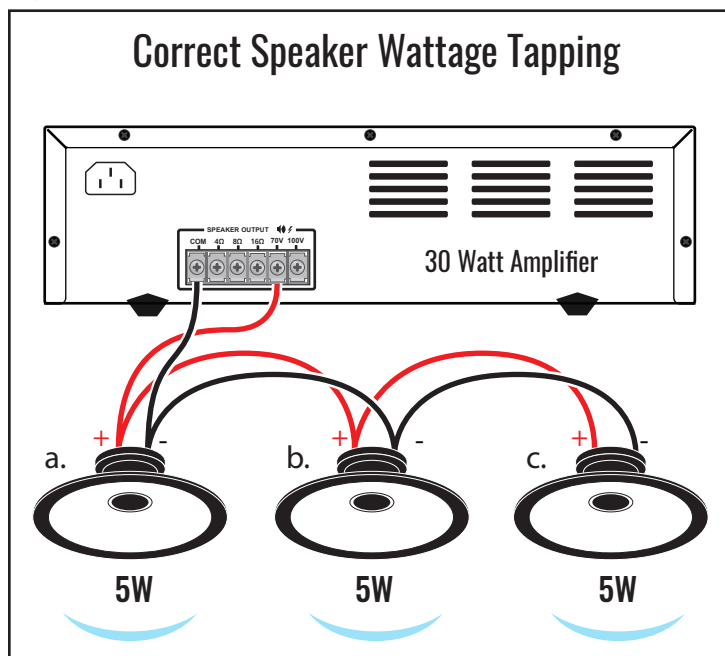
Figure 4.



Basic Speaker Wattage Tap Settings

When setting speaker taps, total combined speaker wattage should not exceed total wattage output of the amplifier minus 20% headroom buffer space. This allows the speakers to perform at full peak wattage without audio clipping*

Figure 5.

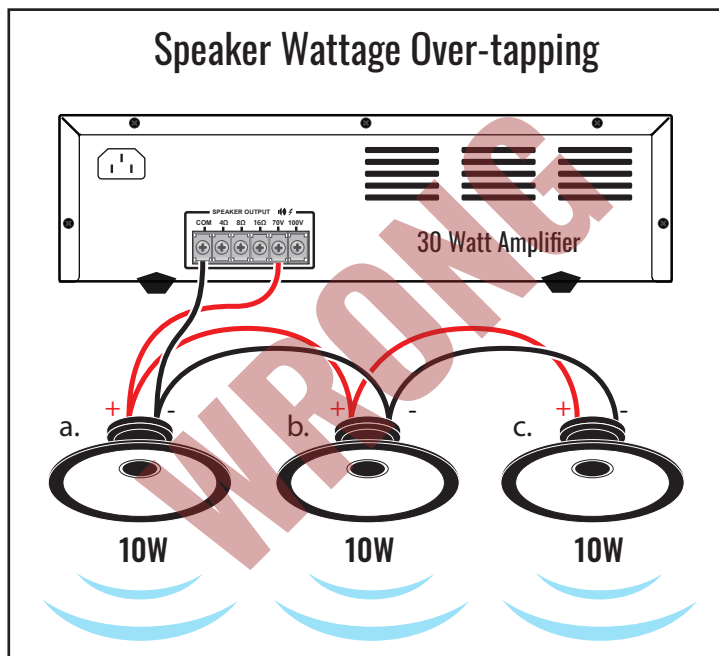


Example Shown (figure 5.)

30 watt maximum output - 20% headroom buffer	5 watt speaker tap x 3 total speakers
24 watt optimal wattage output	15 watt total speaker draw

24 watt optimal wattage output
- 15 watt speaker draw
9 watt extra
(6 watt headroom)

Figure 6.



Example Shown (figure 6.)

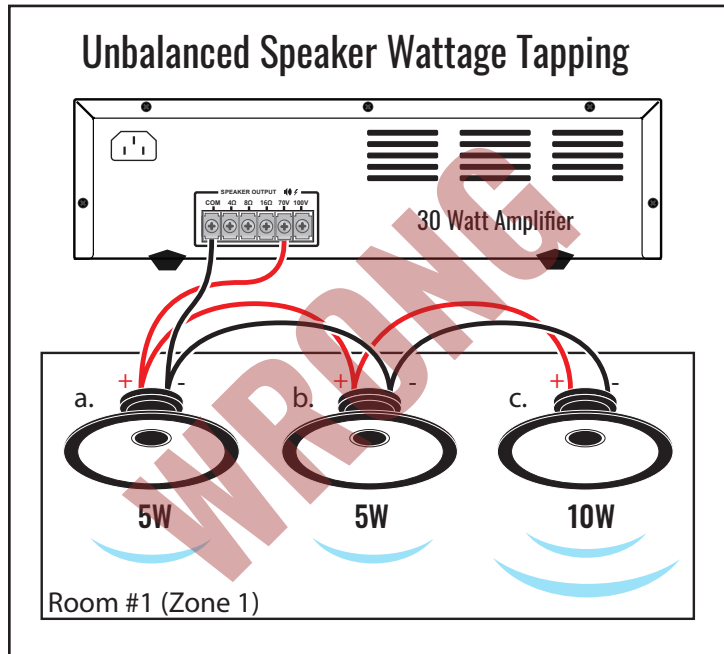
30 watt maximum output - 20% headroom buffer	10 watt speaker tap x 3 total speakers
24 watt optimal wattage output	30 watt total speaker draw

30 watt maximum output
- 30 watt speaker draw
0 watt extra
(0 watt headroom)

*Clipping is a form of waveform distortion that occurs when an amplifier is overdriven and attempts to deliver an output wattage beyond its maximum capability. Loss of audio will occur as a result of clipping.

Basic Speaker Wattage Tap Settings (cont.)

Figure 7.



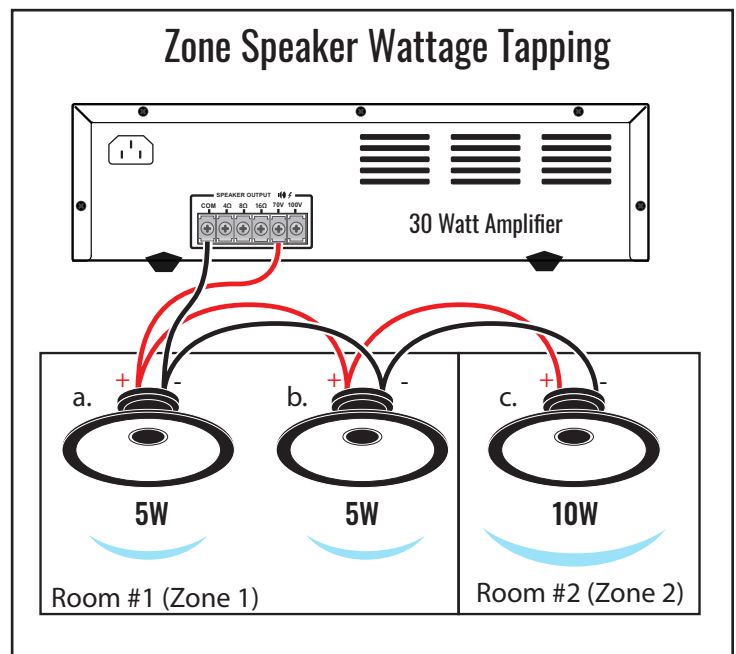
Speakers in the same room (zone) should always be tapped to the same wattage. When speakers are not tapped correctly, higher tapped speakers will produce a louder sound and can interfere with the audio of surrounding speakers.

Each zone can be tapped according to desired wattages so long as they are tapped evenly within each zone and fall within the optimal wattage output.

Example Shown (figure 8.)

30 watt maximum output - 20% headroom buffer	5 watt + 5 watt = 10 watt (zone 1) + 10 watt (zone 2)
24 watt optimal wattage output	20 watt total speaker draw
24 watt optimal wattage output - 20 watt speaker draw	
4 watt extra (6 watt headroom)	

Figure 8.



Multi-Zone Attenuator/Volume Control Installation

Figure 9.

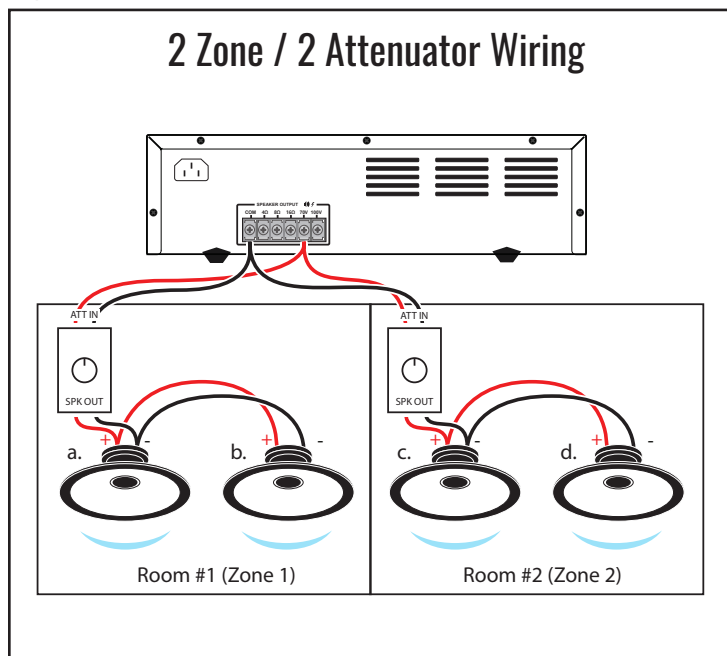
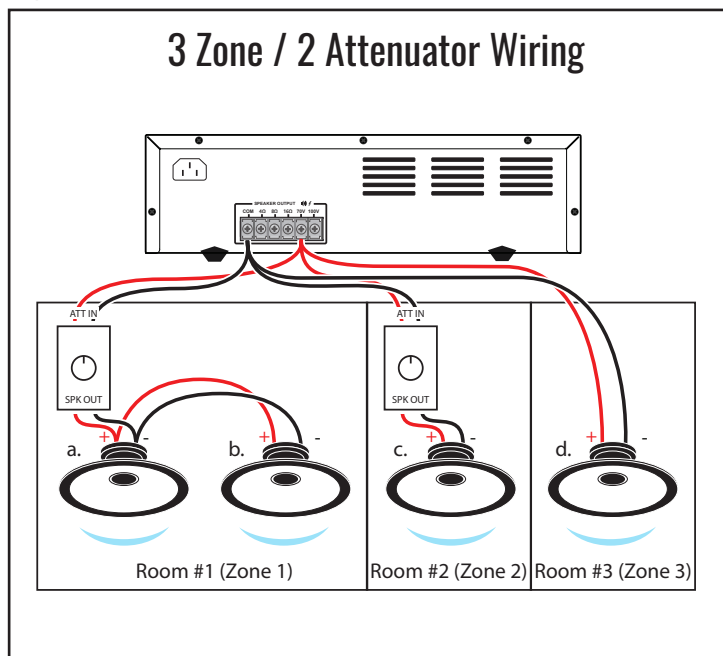


Figure 10.



Notes: