



SPEAKER DISTRIBUTION SYSTEM

Model: A 2380

*Operating
Instructions*

The A 2380 speaker distribution system enables you to connect up to ten pairs of speakers to the one stereo amplifier.

The output from the amplifier is wired directly to the A 2380. From there, wire is run to various speakers which may be located in the family room, the living room, the dining room, the pool area, the kitchen, and the master bedroom. Thus enabling you to listen to music from the one source throughout your home.

FEATURES:

- Connect up to ten speaker pairs at once.
- Autoformer Impedance matching designed for high quality audio distribution. Low power loss. Low heat generation.
- Heavy duty screw terminals can handle up to 8 gauge wire from the amplifier.
- Removable speaker terminals can handle up to 12 gauge wire.
- Separate left and right channel ground paths for compatibility with all amplifiers. (Even bridged)
- Power handling capability of 500 watts / channel (average music power)
- May be used with 6 or 8 Ohm speaker systems.
- Ideal for both home and commercial sound installations.

Installation considerations:

Type of speaker wire.

For most applications, we recommend you use 12 or 14 gauge, standard copper speaker wire for the A 2380 connections. For wiring runs longer than 24 metres (80 feet), 8 gauge wire is recommended.

Avoiding Interference

Speaker wires can act as an "antenna" for electrical noise. Locating speaker wire too close to a light dimmer or switch may cause a "buzzing" or "popping" sound to be heard throughout the speakers. If at all possible, try to route the speaker wires several feet away from the electrical wiring.

Amplifier Impedance load

As most pairs of speakers are connected in parallel to a receiver or amplifier, the overall system impedance becomes lower. For example, if two pairs of 8 Ohm speakers are connected in parallel, the impedance will be 4 Ohms. Two pairs of 4 Ohm speakers in parallel become 2 Ohms, and so on.

Most receivers or amplifiers are not rated for use below a 4 Ohm load. Most manufacturers do not recommend connecting more than two pairs of speakers without using some form of impedance correction. The A 2380 includes impedance correction circuitry, which protects your receiver or amplifier from low impedance loads. The circuitry assures that your receiver or amplifier will see a safe operating load, even when all speaker pairs are connected at the same time.

Impedance correction

This process insures that the impedance load shown to the receiver or amplifier never goes below the rated capabilities of the receiver or loads that will be presented to your amplifier. See the chart below for specific impedance loads that will be presented to your amplifier.

	Number of speaker pairs connected.										Impedance tap (Ω)
	1	2	3	4	5	6	7	8	9	10	
6 Ω Amplifier	6 Ω	X	X	X	X	X	X	X	X	X	1 (8.00 Ω)
	6 Ω	6 Ω	X	X	X	X	X	X	X	X	2 (3.00 Ω)
	6 Ω	6 Ω	6 Ω	X	X	X	X	X	X	X	3 (2.00 Ω)
	6 Ω	6 Ω	6 Ω	6 Ω	X	X	X	X	X	X	4 (1.50 Ω)
	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	X	X	X	X	X	5 (1.20 Ω)
	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	X	X	X	X	6 (1.00 Ω)
	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	X	X	X	7 (0.875 Ω)
	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	X	X	8 (0.75 Ω)
	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	X	9 (0.66 Ω)
	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	6 Ω	10 (0.60 Ω)

	Number of speaker pairs connected.										Impedance tap (Ω)
	1	2	3	4	5	6	7	8	9	10	
8 Ω Amplifier	8 Ω	X	X	X	X	X	X	X	X	X	1 (8.00 Ω)
	8 Ω	8 Ω	X	X	X	X	X	X	X	X	2 (3.00 Ω)
	8 Ω	8 Ω	8 Ω	X	X	X	X	X	X	X	2 (3.00 Ω)
	8 Ω	8 Ω	8 Ω	8 Ω	X	X	X	X	X	X	3 (2.00 Ω)
	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	X	X	X	X	X	4 (1.50 Ω)
	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	X	X	X	X	5 (1.20 Ω)
	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	X	X	X	5 (1.20 Ω)
	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	X	X	6 (1.00 Ω)
	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	X	7 (0.875 Ω)
	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	7 (0.875 Ω)

A 2380 REDBACK™ Speaker Distribution System

Installation Instructions.

1. Select a convenient mounting location for the A 2380.
2. Run all the necessary wiring to the A 2380. It is a good idea to label the wires for future reference.

To make the connections to the A 2380:

- a. Remove the speaker terminal blocks from the P.C. board.
 - b. Strip approximately 10mm of insulation from the end of each speaker wire.
 - c. Tightly twist the end of each wire.
 - d. Insert the speaker wires into the output terminal blocks (marked "speaker") and tighten the grub screws.
 - e. Insert the wires from the amplifier output into the A 2380 input (marked "amplifier") and tighten the grub screws.
 - f. Plug the speaker terminal blocks into the P.C. board.
4. Make sure that all connections between your amplifier and the A 2380 are "phase correct"
(Positive to positive and negative to negative)
 5. Make sure that all connections between the A 2380 and the speakers are "phase correct"
 6. Make sure the volume control on your amplifier is turned down to minimum.
 7. Turn amplifier on and slowly turn the volume control up to the desired level.

