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Subject: Crossover and compensation used with JBL 2226 and 2426

Posted by [Wayne Parham](#) on Sun, 03 Feb 2002 02:00:47 GMT

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midwoofer and tweeter. The 2226 used as a direct radiator begins to become directional in the midrange and its pattern is as narrow as the tweeter horn above 1kHz. Acoustic output on-axis is emphasized as a result of the collapsing directivity and this is compensated by adding series inductance. The coil isn't used for crossover as much as it is for response shaping. At 1.6kHz, the tweeter is brought in, and midwoofer rolloff happens pretty rapidly above this point. So while the tweeter crossover is electrical, the woofer crossover is largely mechanico-acoustical. The tweeter circuit is padded by a fixed voltage divider that provides a specific load to the crossover filter in front of it. The series portion of the voltage divider is bypassed with a capacitance which tends to give rising response to equalize the power response of the tweeter horn. The crossover load formed by the padding voltage divider is chosen so the circuit is slightly underdamped at the crossover point. What this does is to introduce a slight amount of peaking down low, just enough to make a flat portion in the response curve from crossover up a couple of octaves. Only after this point does the power response EQ start to take off. These are the two functions of the

Speakers schematics and component charts.